APPENDIX 1.0-1

CEQA Notices

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Santa Clara Unified School District Peterson Laurelwood Master Plan

Lead Agency: Santa Clara Unified School District | Contact Person: Michal Healy

Mailing Address: 1889 Lawrence Road | Phone: 408.423.2085

City: Santa Clara | Zip: 95051 | County: Santa Clara

Project Location: County: Santa Clara | City/Nearest Community: Sunnyvale/Santa Clarra

Cross Streets: Teal Drive and Dunford Way | Zip Code: 94087

Longitude/Latitude (degrees, minutes and seconds): ____° ____′ ____″ N / ____° ____′ ____″ W Total Acres: 79.35

Assessor's Parcel No.: 313-30-001; 313-10-004 | Section: ____ Twp.: ____ Range: ____ Base: ____

Within 2 Miles: State Hwy #: 280 | Waterways: Calabazas Creek, Saratoga Creek

Airports: N/A | Railways: N/A | Schools: Many

Document Type:

CEQA: ☒ NOP ☐ Draft EIR | NEPA: ☐ NOI | Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR | ☐ EA | ☐ Final Document
☐ Neg Dec (Prior SCH No.) ____ | ☐ Draft EIS | ☐ Other: ____
☐ Mit Neg Dec Other: ____ | ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☒ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☐ Other: ____

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees____
☐ Commercial: Sq.ft. ____ Acres ____ Employees____
☐ Industrial: Sq.ft. ____ Acres ____ Employees____
☒ Educational: K-12 Education
☐ Recreational: ____
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type ____
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Fiscal ☒ Recreation/Parks ☐ Vegetation
☒ Agricultural Land ☐ Flood Plain/Flooding ☐ Schools/Universities ☒ Water Quality
☒ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☒ Water Supply/Groundwater
☐ Archeological/Historical ☒ Geologic/Seismic ☐ Sewer Capacity ☐ Wetland/Riparian
☒ Biological Resources ☒ Minerals ☐ Soil Erosion/Compaction/Grading ☐ Growth Inducement
☐ Coastal Zone ☒ Noise ☐ Solid Waste ☒ Land Use
☐ Drainage/Absorption ☒ Population/Housing Balance ☐ Toxic/Hazardous ☒ Cumulative Effects
☐ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☐ Other: ____

Present Land Use/Zoning/General Plan Designation:

Public

Project Description: *(please use a separate page if necessary)*

The Proposed Master Plan consists of the entire Patrick Henry Campus, the Peterson Middle School Site, and the future use of the existing Laurelwood Elementary School Site. The District's Master Plan includes construction of the new Laurelwood Elementary School, Peterson fields, relocated District storage area, and yet to be determined uses on the closed Patrick Henry Middle School Site; improvements to Peterson Middle School including the new fields and a fieldhouse; relocation of the existing tennis courts; new vehicular and pedestrian access; expanded administration and media center, a new environmental education center, outdoor learning areas and amphitheater. Program improvements will be made to the SCUSD Farm and compost areas.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

_____ Air Resources Board
_____ Boating & Waterways, Department of
_____ California Emergency Management Agency
_____ California Highway Patrol
_____ Caltrans District # _____
_____ Caltrans Division of Aeronautics
_____ Caltrans Planning
_____ Central Valley Flood Protection Board
_____ Coachella Valley Mtns. Conservancy
_____ Coastal Commission
_____ Colorado River Board
_____ Conservation, Department of
_____ Corrections, Department of
_____ Delta Protection Commission
_____ Education, Department of
_____ Energy Commission
_____ Fish & Game Region # _____
_____ Food & Agriculture, Department of
_____ Forestry and Fire Protection, Department of
_____ General Services, Department of
_____ Health Services, Department of
_____ Housing & Community Development
_____ Native American Heritage Commission
_____ Office of Historic Preservation
_____ Office of Public School Construction
_____ Parks & Recreation, Department of
_____ Pesticide Regulation, Department of
_____ Public Utilities Commission
_____ Regional WQCB # _____
_____ Resources Agency
_____ Resources Recycling and Recovery, Department of
_____ S.F. Bay Conservation & Development Comm.
_____ San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
_____ San Joaquin River Conservancy
_____ Santa Monica Mtns. Conservancy
_____ State Lands Commission
_____ SWRCB: Clean Water Grants
_____ SWRCB: Water Quality
_____ SWRCB: Water Rights
_____ Tahoe Regional Planning Agency
_____ Toxic Substances Control, Department of
_____ Water Resources, Department of
_____ Other: _____
_____ Other: _____

Local Public Review Period (to be filled in by lead agency)

Starting Date June 27, 2022 Ending Date July 28, 2022

Lead Agency (Complete if applicable):

Consulting Firm: _____
Address: _____
City/State/Zip: _____
Contact: _____
Phone: _____

Applicant: _____
Address: _____
City/State/Zip: _____
Phone: _____

Signature of Lead Agency Representative: _____ **Date:** June 24, 2022

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Santa Clara Unified School District

SANTA CLARA UNIFIED SCHOOL DISTRICT
FACILITY DEVELOPMENT AND PLANNING

1889 Lawrence Road, Santa Clara, CA 95051
Main: (408) 423-2000 | Facility Development and Planning/ Department Homepage (santaclarausd.org)

Notice of Preparation
Draft Environmental Impact Report and
Public Scoping Meeting for the
Santa Clara Unified School District Peterson Laurelwood Master Plan

TO: Agencies, Organizations, and Interested Parties **DATE:** June 27, 2022

The Santa Clara Unified School District (School District) Facility Development and Planning, as the Lead Agency under the California Environmental Quality Act (CEQA), is preparing an Environmental Impact Report (EIR) for the proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus ("Proposed Master Plan"). The School District is requesting identification of environmental issues and information that you or your organization believes should be considered in the EIR. The Proposed Master Plan includes the development of a master plan for the Patrick Henry Campus, Peterson Site (fields, tennis courts, parking lots/drop-off areas, and the environmental center), SCUSD Farm, the new Laurelwood Elementary School and the future programs at the existing Laurelwood Elementary School Campus.

PROJECT LOCATION

The CEQA Plan Area includes the Patrick Henry Campus, Laurelwood Elementary School, SCUSD Farm, and portions of the Peterson Middle School, encapsulating 79.35 acres in the City of Sunnyvale and the City of Santa Clara as shown in **Figure 1, Regional Context**. The Plan Area boundaries include parking to the north of Peterson Middle School and the Farm to south, connected by Peterson fields. The Plan Area is bound to the south by Dunford Way, to the west by a block east of Norman Drive, to the north by Rosalia Avenue and Bryant Way, and to the east by Roadrunner Terrace – connected through Castleton Terrace and Teal Drive (see **Figure 2,** Peterson Laurelwood Master Plan Area). The Plan Area would serve a maximum capacity of 3,375 students.

The existing Laurelwood Elementary School serves grades K-5 and is located at 955 Teal Drive in the City of Santa Clara. The school site fronts on Teal Drive to the west and is bound by Kensington Avenue to the south, and residences to the north, east and along the southwestern corner of the site.

PROJECT DESCRIPTION

In 2018, SCUSD voters approved General Obligation Bond Measure BB which authorized $720 million to fund critically needed safety, modernization ,and new construction projects. Some of Measure BB bond funds will be used to design and build a new Laurelwood Elementary on a portion of the Patrick Henry Campus and new fields at the existing Peterson Middle School. In order to create a plan that encompasses all of the District's assets, the SCUSD is creating a Master Plan for the area within the plan's boundaries.

The Proposed Master Plan consists of the entire Patrick Henry Campus, the Peterson Middle School Site, and the future use of the existing Laurelwood Elementary School Site. The District's Master Plan includes construction of the new Laurelwood Elementary School, Peterson fields, relocated District storage area, and yet to be determined uses on the closed Patrick Henry Middle School Site; improvements to Peterson Middle School including the new fields and a fieldhouse; relocation of the existing tennis courts; new vehicular and pedestrian access; expanded administration and media center, a new environmental education center, outdoor learning areas and amphitheater. Program improvements will be made to the SCUSD Farm and compost areas. It also provides an opportunity for an additional school to be built on the property. The purpose of the Proposed Master Plan is to provide a long-term planning document that provides a visionary site plan to guide future expansion with enhanced student and community access to the sites.

Currently, funding is identified for only the new Laurelwood Elementary School and the Peterson track and field facility. The bleachers, baseball and multiuse fields, tennis courts, and other improvements are not currently funded. The other improvements identified in the Master Plan will be completed as funding is secured. Once the Master Plan is complete in summer 2022, the design of the new Laurelwood Elementary School and the Peterson field facility will begin.

ISSUES TO BE ADDRESSED IN THE EIR

Based on the project description and the Lead Agency's understanding of the environmental issues associated with the Proposed Master Plan, it is anticipated that implementation of the Proposed Master Plan has the potential to result in significant environmental effects associated with some or all of the following topics, consistent with Appendix G of the *CEQA Guidelines* and analyzed in detail in the EIR:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources

- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The EIR will analyze the reasonably foreseeable indirect physical changes to the environment in the above topic areas caused by the Proposed Master Plan. Pursuant to *CEQA Guidelines* Section 15060(d), no initial study was prepared.

Alternatives to be analyzed in the EIR are to be defined and analyzed consistent with the requirements of *CEQA Guidelines*, Section 15126.6. The alternatives to be evaluated in the EIR may include, but are not limited to, the "No Project" Alternative, as required by CEQA and alternative land use configurations.

NOTICE OF PUBLIC SCOPING MEETING

Pursuant to California Public Resources Code Sections 21083.9, 21092.2, and California Code of Regulations, Title 14 (*CEQA Guidelines*) Sections 15082 and 15083, the School District, as the Lead Agency, will conduct a Scoping Meeting for the purpose of soliciting oral and written comments from interested parties requesting notice; responsible agencies; agencies with jurisdiction by law; trustee agencies; and involved federal agencies, including transportation agencies, as to the appropriate scope and content of the EIR.

The Scoping Meeting will be virtual on July 19, 2022 at 6:00 P.M.

RESPONSIBLE AND TRUSTEE AGENCIES

The Santa Clara Unified School District requests your agency's views on the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the Proposed Master Plan, in accordance with *CEQA Guidelines* Section 15082(b). Your agency will need to use the EIR prepared by the School District when considering any permits or other project approvals that your agency must issue. As such, your responses to this Notice of Preparation (NOP), at a minimum, should identify: (1) significant environmental issues and reasonable alternatives and mitigation measures that your agency will need to have explored in the EIR.

REVIEW AND RESPONSE PERIOD

In accordance with *CEQA Guidelines* Section 15082, this NOP is being circulated for a 30-day comment period. Responses to this NOP must be provided during this response period as outlined below:

June 27 through July 28, 2022

DOCUMENT AVAILABILITY

The NOP can be viewed on the Santa Clara Unified School District, Facility Development and Planning website at https://www.santaclarausd.org/PetersonLaurelwoodmasterplan. A physical copy of the NOP will also be available at the School District's Facility Development and Planning Department at 3350 Brookdale Drive, Santa Clara, CA 95050. For more information about this EIR, please visit https://www.santaclarausd.org/PetersonLaurelwoodmasterplan.

If you have questions or would like to be added to the listserv for this project, please email PetersonLaurelwoodPlan@scusd.net. If you have previously requested to be on the listserv you will automatically receive all notifications related to the project.

SUBMITTAL OF WRITTEN COMMENTS

The Lead Agency solicits comments regarding the scope, content, and specifics of the EIR from all interested parties requesting notice, responsible agencies, agencies with jurisdiction by law, trustee agencies, and involved agencies. The Santa Clara Unified School District requests that written comment be provided at the earliest possible date, but **no later than July 28, 2022**.

Please submit comments electronically through the project website or send a hard copy via mail (including name and contact information) to the following:

Project Website: https://www.santaclarausd.org/PetersonLaurelwoodmasterplan

Mail: ATTN: Michal Healy - Facility Development and Planning Director
Santa Clara Unified School District, Facility Development and Planning
1889 Lawrence Road
Santa Clara, CA 95051

30-DAY NOP COMMENT PERIOD:	**SCOPING MEETING:**
June 27 through July 28, 2022	Tuesday, July 19, 2022 6:00 P.M. Link to meeting is on the Project website

Michal Healy - Facility Development and Planning Director

Santa Clara Unified School District

Attachments:

- Figure 1, Regional Context
- Figure 2, Peterson Laurelwood Master Plan Area

APPENDIX 1.0-2

Comment Letters

California Department of Transportation

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

July 27, 2022

SCH #: 2022060599
GTS #: 04-SCL-2022-01076
GTS ID: 26883
Co/Rt/Pm: SCL/82/14.88

Michal Healy
Director of Facility Development and Planning
Santa Clara Unified School District
1889 Lawrence Road
Santa Clara, CA 95051

Re: Santa Clara Unified School District Peterson Laurelwood Master Plan Notice of Preparation (NOP) for Draft Environmental Impact Report (DEIR)

Dear Michal Healy:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Peterson Laurelwood Master Plan Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the June 2022 NOP.

Project Understanding
The Proposed Master Plan consists of the entire Patrick Henry Campus, the Peterson Middle School Site, and the future use of the existing Laurelwood Elementary School Site. The District's Master Plan includes construction of the new Laurelwood Elementary School, Peterson fields, relocated District storage area, and yet to be determined uses on the closed Patrick Henry Middle School Site; improvements to Peterson Middle School including the new fields and a fieldhouse; relocation of the existing tennis courts; new vehicular and pedestrian access; expanded administration and media center, a new environmental education center, outdoor learning areas and amphitheater.

Travel Demand Analysis
With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses

Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide (*link*).

If the project meets the screening criteria established in the District's adopted Vehicle Miles Traveled (VMT) policy to be presumed to have a less-than-significant VMT impact and exempt from detailed VMT analysis, please provide justification to support the exempt status in alignment with the District's VMT policy. Projects that do not meet the screening criteria should include a detailed VMT analysis in the DEIR, which should include the following:

- VMT analysis pursuant to the District's guidelines. Projects that result in automobile VMT per capita above the threshold of significance for existing (i.e. baseline) city-wide or regional values for similar land use types may indicate a significant impact. If necessary, mitigation for increasing VMT should be identified. Mitigation should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the District.

- A schematic illustration of walking, biking and auto conditions at the project site and study area roadways. Potential traffic safety issues to the State Transportation Network (STN) may be assessed by Caltrans via the Interim Safety Guidance (*link*).

- The project's primary and secondary effects on pedestrians, bicycles, travelers with disabilities and transit performance should be evaluated, including countermeasures and trade-offs resulting from mitigating VMT increases. Access to pedestrians, bicycle, and transit facilities must be maintained.

- Clarification of the intensity of events/receptions to be held at the location and how the associated travel demand and VMT will be mitigated.

Transportation Impact Fees
Please identify project-generated travel demand and estimate the costs of transit and active transportation improvements necessitated by the proposed project; viable funding sources such as development and/or transportation impact fees should also be identified. We encourage a sufficient allocation of fair share contributions toward multi-modal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. We also strongly support measures to increase sustainable mode shares, thereby reducing VMT.

Construction-Related Impacts
Potential impacts to the State Right-of-Way (ROW) from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified. Project work that requires movement of

oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, visit: https://dot.ca.gov/programs/traffic-operations/transportation-permits. Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the STN.

Lead Agency
As the Lead Agency, the Santa Clara Unified School District is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Equitable Access
If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Encroachment Permit
Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' ROW requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating Caltrans' ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. Your application package may be emailed to D4Permits@dot.ca.gov.

Please note that Caltrans is in the process of implementing an online, automated, and milestone-based Caltrans Encroachment Permit System (CEPS) to replace the current permit application submittal process with a fully electronic system, including online payments. The new system is expected to be available during 2022. To obtain information about the most current encroachment permit process and to download the permit application, please visit https://dot.ca.gov/programs/traffic-operations/ep/applications.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,

Mark Leong

MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse

APPENDIX 2.0-1

SCUSD Board Resolution 22-39

Santa Clara Unified School District
Rendering Zoning Ordinances Inapplicable to the Construction of Building Projects Funded from General Obligation Bond Measure BB
Board Resolution #22-39

WHEREAS, Government Code sections 53094 authorizes the governing board of a school district, by a vote of two-thirds of its members, to render a city's zoning ordinances inapplicable to any proposed design and construction upon and use of property by a school district for classroom facilities if the facilities are physically located within the geographical jurisdiction of the school district; and

WHEREAS, the registered voters within the boundary of the Santa Clara Unified School District (District) approved General Obligation Bonds, Measure BB in 2018; and

WHEREAS, the properties ("Properties") are owned by District; and

WHEREAS, District intends to construct new buildings on District owned sites; and

WHEREAS, the Properties are located within the geographical jurisdiction of the City of Santa Clara, the City of Sunnyvale and the City of San Jose; and

WHEREAS, the District has a statutory right and power of exemption from local zoning ordinances applicable to the Properties for design, construction and operations of classroom facilities; and

WHEREAS, the Board of Trustees of the District deems it advisable to exercise the statutory right and power of exemption from local zoning ordinances applicable to the Properties for the expeditious construction of classroom facilities to better serve the students, staff and families who are part of the District.

NOW THEREFORE, BE IT RESOLVED, the Santa Clara Unified School District shall render zoning ordinances inapplicable from any and all zoning ordinances of the City of Santa Clara, the City of Sunnyvale and the City of San Jose in California otherwise applicable to the Property and the District's proposed construction of classroom facilities; and

BE IT FURTHER RESOLVED, the District shall notify the City of Santa Clara, the City of Sunnyvale and the City of San Jose in California of its resolution to render inapplicable the zoning ordinances for the purpose of school use at the Property within ten (10) days of this Resolution.

This Resolution was:

PASSED AND ADOPTED this 25th day of August 2022, by the following vote:

APPROVED
AUG 25 2022
SCUSD
BOARD OF EDUCATION

AYES: 7 ABSTENTIONS: Ø

NOES: Ø ABSENT: Ø

Jodi Mumhead
President of the Board of Education
Santa Clara Unified School District

Secretary to the Board of Education
Santa Clara Unified School District

APPENDIX 3.3-1

CalEEMod Files

SCUSD Peterson - Laurelwood Phase 1 Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SCUSD Peterson - Laurelwood Phase 1 Construction
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	32.8
Location	37.346298367190414, -122.00405893062481
County	Santa Clara
City	Sunnyvale
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1765
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Elementary School	800	Student	12.7	83,800	203,000	203,000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.62	41.1	11.8	16.2	0.03	0.50	0.50	0.91	0.46	0.12	0.56	—	3,309	3,309	0.13	0.09	2.40	3,342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.07	4.06	40.6	38.7	0.08	1.61	19.8	21.4	1.47	10.1	11.6	—	9,431	9,431	0.50	0.58	0.23	9,616
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.41	2.82	10.9	12.0	0.02	0.47	2.08	2.55	0.43	0.90	1.32	—	2,397	2,397	0.11	0.08	0.67	2,423
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26	0.52	1.99	2.18	< 0.005	0.09	0.38	0.46	0.08	0.16	0.24	—	397	397	0.02	0.01	0.11	401

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.61	1.34	11.8	14.9	0.03	0.50	0.39	0.89	0.46	0.09	0.56	—	3,082	3,082	0.13	0.09	2.30	3,113
2025	1.51	1.26	11.0	14.7	0.03	0.44	0.39	0.82	0.40	0.09	0.50	—	3,070	3,070	0.12	0.08	2.17	3,100

2026	1.62	41.1	11.3	16.2	0.03	0.41	0.50	0.91	0.37	0.12	0.50	—	3,309	3,309	0.13	0.09	2.40	3,342
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	5.07	4.06	40.6	38.7	0.08	1.61	19.8	21.4	1.47	10.1	11.6	—	9,431	9,431	0.50	0.58	0.23	9,616
2025	1.50	1.25	11.1	14.5	0.03	0.44	0.39	0.82	0.40	0.09	0.50	—	3,048	3,048	0.12	0.08	0.06	3,076
2026	1.42	1.18	10.4	14.3	0.03	0.38	0.39	0.77	0.35	0.09	0.45	—	3,036	3,036	0.12	0.08	0.05	3,064
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.41	1.17	10.9	12.0	0.02	0.47	2.08	2.55	0.43	0.90	1.32	—	2,397	2,397	0.11	0.08	0.67	2,423
2025	1.07	0.89	7.88	10.3	0.02	0.31	0.27	0.58	0.29	0.07	0.35	—	2,179	2,179	0.09	0.06	0.67	2,200
2026	0.52	2.82	3.74	5.17	0.01	0.14	0.14	0.28	0.13	0.03	0.16	—	1,091	1,091	0.04	0.03	0.31	1,101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.26	0.21	1.99	2.18	< 0.005	0.09	0.38	0.46	0.08	0.16	0.24	—	397	397	0.02	0.01	0.11	401
2025	0.19	0.16	1.44	1.89	< 0.005	0.06	0.05	0.11	0.05	0.01	0.06	—	361	361	0.01	0.01	0.11	364
2026	0.09	0.52	0.68	0.94	< 0.005	0.03	0.03	0.05	0.02	0.01	0.03	—	181	181	0.01	< 0.005	0.05	182

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	3.39	3.39	—	0.51	0.51	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.16	1.57	1.37	< 0.005	0.07	—	0.07	0.06	—	0.06	—	216	216	0.01	< 0.005	—	217
Demolition	—	—	—	—	—	—	0.21	0.21	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.7	35.7	< 0.005	< 0.005	—	35.9
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.57	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	121	121	< 0.005	0.01	0.01	123
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.29	0.06	3.78	1.72	0.02	0.05	0.20	0.26	0.03	0.07	0.10	—	2,825	2,825	0.23	0.45	0.16	2,967
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.74	7.74	< 0.005	< 0.005	0.02	7.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.23	0.11	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	178	178	0.01	0.03	0.17	187
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	29.5	29.5	< 0.005	< 0.005	0.03	31.0

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.08	0.99	< 0.005	0.05	—	0.05	0.04	—	0.04	—	160	160	0.01	< 0.005	—	160

Dust From Material Movement	—	—	—	—	—	—	0.59	0.59	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.4	26.4	< 0.005	< 0.005	—	26.5
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.66	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	142	142	< 0.005	0.01	0.02	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.32	4.32	< 0.005	< 0.005	0.01	4.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	2.15	2.22	< 0.005	0.10	—	0.10	0.09	—	0.09	—	349	349	0.01	< 0.005	—	350
Dust From Material Movement	—	—	—	—	—	—	0.83	0.83	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.40	< 0.005	0.02	—	0.02	0.02	—	0.02	—	57.7	57.7	< 0.005	< 0.005	—	57.9

Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.57	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	121	121	< 0.005	0.01	0.01	123
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	14.5	14.5	< 0.005	< 0.005	0.03	14.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.39	2.39	< 0.005	< 0.005	< 0.005	2.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.50	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.1	81.1	< 0.005	< 0.005	—	81.3
Dust From Material Movement	—	—	—	—	—	—	0.19	0.19	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.57	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	121	121	< 0.005	0.01	0.01	123
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.36	3.36	< 0.005	< 0.005	0.01	3.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.09	1.44	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	302	302	0.01	0.01	1.19	306
Vendor	0.04	0.01	0.48	0.23	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	371	371	0.02	0.05	0.98	388
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.11	1.23	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	279	279	0.01	0.01	0.03	283
Vendor	0.03	0.01	0.50	0.23	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	371	371	0.02	0.05	0.03	387
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.08	0.08	0.07	0.87	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	202	202	< 0.005	0.01	0.37	205
Vendor	0.02	0.01	0.35	0.17	< 0.005	< 0.005	0.01	0.02	< 0.005	0.01	0.01	—	265	265	0.01	0.04	0.30	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	33.4	33.4	< 0.005	< 0.005	0.06	33.9
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	43.8	43.8	< 0.005	0.01	0.05	45.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	3.49	4.59	0.01	0.13	—	0.13	0.12	—	0.12	—	849	849	0.03	0.01	—	852

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.64	0.84	< 0.005	0.02	—	0.02	0.02	—	0.02	—	141	141	0.01	< 0.005	—	141
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.07	1.34	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	296	296	0.01	0.01	1.08	301
Vendor	0.03	0.01	0.45	0.22	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	364	364	0.02	0.05	0.89	381
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.15	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	274	274	0.01	0.01	0.03	278
Vendor	0.03	0.01	0.48	0.22	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	364	364	0.02	0.05	0.02	381
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.40	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	98.2	98.2	< 0.005	< 0.005	0.17	99.6
Vendor	0.01	< 0.005	0.17	0.08	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	129	129	0.01	0.02	0.14	135
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	16.3	16.3	< 0.005	< 0.005	0.03	16.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	0.02	22.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	5.07	5.93	0.01	0.23	—	0.23	0.21	—	0.21	—	1,084	1,084	0.04	0.01	—	1,088
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.93	1.08	< 0.005	0.04	—	0.04	0.04	—	0.04	—	179	179	0.01	< 0.005	—	180
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.10	1.55	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	308	308	0.01	0.01	1.31	313
Vendor	0.04	0.01	0.50	0.24	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	377	377	0.02	0.06	0.99	395
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	1.33	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	285	285	0.01	0.01	0.03	289
Vendor	0.04	0.01	0.53	0.24	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	377	377	0.02	0.06	0.03	394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.59	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	130	130	< 0.005	0.01	0.25	132
Vendor	0.02	0.01	0.23	0.11	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	170	170	0.01	0.03	0.19	178
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	21.6	21.6	< 0.005	< 0.005	0.04	21.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	28.2	28.2	< 0.005	< 0.005	0.03	29.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	39.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.07
Architectural Coatings	—	2.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	—	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	118	118	< 0.005	< 0.005	0.43	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	6.68	6.68	< 0.005	< 0.005	0.01	6.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description

Demolition	Demolition	10/1/2024	10/31/2024	5.00	23.0	—
Peterson Track and Field - Site Preperation	Site Preparation	03/1/2024	3/15/2024	5.00	11.0	—
Grading	Grading	11/01/2024	12/31/2024	5.00	43.0	—
Peterson Track and Field - Grading	Grading	03/16/2024	03/31/2024	5.00	10.0	—
Building Construction	Building Construction	01/01/2025	6/30/2026	5.00	390	—
Peterson Track and Field - Building Construction	Building Construction	04/01/2024	11/15/2024	5.00	165	—
Architectural Coating	Architectural Coating	06/01/2026	06/30/2026	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Peterson Track and Field - Site Preperation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Peterson Track and Field - Site Preperation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Peterson Track and Field - Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Peterson Track and Field - Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Peterson Track and Field - Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Peterson Track and Field - Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Peterson Track and Field - Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Peterson Track and Field - Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Peterson Track and Field - Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Peterson Track and Field - Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Peterson Track and Field - Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	38.7	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	35.2	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	13.7	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	14.1	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Peterson Track and Field - Site Preperation	—	—	—	—
Peterson Track and Field - Site Preperation	Worker	17.5	11.7	LDA,LDT1,LDT2
Peterson Track and Field - Site Preperation	Vendor	—	8.40	HHDT,MHDT
Peterson Track and Field - Site Preperation	Hauling	0.00	20.0	HHDT

Peterson Track and Field - Site Preperation	Onsite truck	—	—	HHDT
Peterson Track and Field - Grading	—	—	—	—
Peterson Track and Field - Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Peterson Track and Field - Grading	Vendor	—	8.40	HHDT,MHDT
Peterson Track and Field - Grading	Hauling	0.00	20.0	HHDT
Peterson Track and Field - Grading	Onsite truck	—	—	HHDT
Peterson Track and Field - Building Construction	—	—	—	—
Peterson Track and Field - Building Construction	Worker	35.2	11.7	LDA,LDT1,LDT2
Peterson Track and Field - Building Construction	Vendor	13.7	8.40	HHDT,MHDT
Peterson Track and Field - Building Construction	Hauling	0.00	20.0	HHDT
Peterson Track and Field - Building Construction	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	125,700	41,900	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	77,325	—
Peterson Track and Field - Site Preperation	—	—	16.5	0.00	—
Grading	—	—	43.0	0.00	—
Peterson Track and Field - Grading	—	—	10.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Elementary School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	3.80	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	16.8
AQ-PM	16.8
AQ-DPM	51.0
Drinking Water	38.5
Lead Risk Housing	41.1
Pesticides	0.00
Toxic Releases	43.2
Traffic	82.5
Effect Indicators	—
CleanUp Sites	85.0
Groundwater	93.2
Haz Waste Facilities/Generators	46.4

Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	3.29
Cardio-vascular	7.22
Low Birth Weights	47.4
Socioeconomic Factor Indicators	—
Education	12.0
Housing	20.3
Linguistic	64.1
Poverty	1.43
Unemployment	26.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	90.86359553
Employed	87.36045169
Education	—
Bachelor's or higher	91.08174002
High school enrollment	100
Preschool enrollment	74.06646991
Transportation	—
Auto Access	62.47914795
Active commuting	50.58385731
Social	—

2-parent households	71.4744001
Voting	88.28435776
Neighborhood	—
Alcohol availability	41.28063647
Park access	53.36840755
Retail density	56.16578981
Supermarket access	76.37623508
Tree canopy	79.94353907
Housing	—
Homeownership	51.39227512
Housing habitability	84.79404594
Low-inc homeowner severe housing cost burden	95.56011805
Low-inc renter severe housing cost burden	77.50545361
Uncrowded housing	53.4838958
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	97.8
High Blood Pressure	91.8
Cancer (excluding skin)	57.8
Asthma	98.2
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	97.7
Diagnosed Diabetes	94.1
Life Expectancy at Birth	91.4
Cognitively Disabled	80.8
Physically Disabled	76.0

Heart Attack ER Admissions	93.8
Mental Health Not Good	97.3
Chronic Kidney Disease	95.6
Obesity	97.2
Pedestrian Injuries	59.5
Physical Health Not Good	98.0
Stroke	95.7
Health Risk Behaviors	—
Binge Drinking	75.2
Current Smoker	96.7
No Leisure Time for Physical Activity	91.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	39.7
English Speaking	44.1
Foreign-born	82.0
Outdoor Workers	86.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	50.7
Traffic Density	60.3
Traffic Access	58.3
Other Indices	—
Hardship	9.8
Other Decision Support	—
2016 Voting	89.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	16.0
Healthy Places Index Score for Project Location (b)	94.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Laurelwood Elementary lot acreage estimated at 12.7 acres. Track and Field acreage estimated at 6.3 acres. Total acreage is 19.0 acres. Building sq. ft. based on project description. Landscape areas include Laurelwood play area field (103,000 sq. ft.) and the Peterson track and field area (estimated 100,000 sq. ft.).
Construction: Construction Phases	Construction phase estimates based on project description.
Construction: Off-Road Equipment	Equipment list Peterson track and field site based on default equipment lists for a 6.3 acre site. Equipment list for Laurelwood site based on default equipment list for a 12.7 acre site.

SCUSD Peterson Laurelwood Phase 2 Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SCUSD Peterson Laurelwood Phase 2 Construction
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	37.349245031623326, -122.00789539133385
County	Santa Clara
City	Sunnyvale
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1765
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	87.8	1000sqft	10.7	0.00	0.00	0.00	—	—
Elementary School	9.75	1000sqft	0.22	9,750	159,250	159,250	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.25	19.0	9.45	13.1	0.02	0.34	0.12	0.38	0.31	0.03	0.32	—	2,472	2,472	0.10	0.03	0.37	2,483
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.68	3.10	28.0	28.8	0.06	1.17	19.8	21.0	1.08	10.1	11.2	—	6,751	6,751	0.27	0.06	0.01	6,776
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.21	1.44	9.05	11.2	0.02	0.34	1.34	1.69	0.32	0.59	0.90	—	2,227	2,227	0.09	0.02	0.08	2,236
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.22	0.26	1.65	2.04	< 0.005	0.06	0.25	0.31	0.06	0.11	0.16	—	369	369	0.01	< 0.005	0.01	370

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	1.25	1.04	9.45	13.1	0.02	0.34	0.05	0.38	0.31	0.01	0.32	—	2,472	2,472	0.10	0.03	0.20	2,483
2028	1.20	19.0	8.98	13.1	0.02	0.30	0.12	0.38	0.28	0.03	0.29	—	2,471	2,471	0.10	0.03	0.37	2,481
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.68	3.10	28.0	28.8	0.06	1.17	19.8	21.0	1.08	10.1	11.2	—	6,751	6,751	0.27	0.06	0.01	6,776
2028	1.20	1.00	8.99	13.1	0.02	0.30	0.05	0.35	0.28	0.01	0.29	—	2,469	2,469	0.10	0.03	< 0.005	2,479
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.21	1.02	9.05	11.2	0.02	0.34	1.34	1.69	0.32	0.59	0.90	—	2,227	2,227	0.09	0.02	0.08	2,236
2028	0.40	1.44	2.98	4.36	0.01	0.10	0.02	0.12	0.09	< 0.005	0.10	—	802	802	0.03	0.01	0.03	806
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.22	0.19	1.65	2.04	< 0.005	0.06	0.25	0.31	0.06	0.11	0.16	—	369	369	0.01	< 0.005	0.01	370
2028	0.07	0.26	0.54	0.80	< 0.005	0.02	< 0.005	0.02	0.02	< 0.005	0.02	—	133	133	0.01	< 0.005	0.01	133

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	0.77	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.53	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	134	134	< 0.005	0.01	0.01	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.71	3.71	< 0.005	< 0.005	0.01	3.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.10	2.24	0.01	0.09	—	0.09	0.08	—	0.08	—	542	542	0.02	< 0.005	—	544

Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.41	< 0.005	0.02	—	0.02	0.01	—	0.01	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.61	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	153	153	< 0.005	0.01	0.01	155
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	12.7	12.7	< 0.005	< 0.005	0.02	12.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.10	2.10	< 0.005	< 0.005	< 0.005	2.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.55	5.05	6.96	0.01	0.18	—	0.18	0.17	—	0.17	—	1,290	1,290	0.05	0.01	—	1,294
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.92	1.27	< 0.005	0.03	—	0.03	0.03	—	0.03	—	214	214	0.01	< 0.005	—	214
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	33.8	33.8	< 0.005	< 0.005	0.11	34.3
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	41.5	41.5	< 0.005	0.01	0.09	43.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	31.3	31.3	< 0.005	< 0.005	< 0.005	31.7
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	41.5	41.5	< 0.005	0.01	< 0.005	43.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	17.0	17.0	< 0.005	< 0.005	0.03	17.3
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	22.3	22.3	< 0.005	< 0.005	0.02	23.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.82	2.82	< 0.005	< 0.005	< 0.005	2.86
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.55	3.70	0.01	0.09	—	0.09	0.08	—	0.08	—	685	685	0.03	0.01	—	687
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.67	< 0.005	0.02	—	0.02	0.01	—	0.01	—	113	113	< 0.005	< 0.005	—	114
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	33.2	33.2	< 0.005	< 0.005	0.10	33.4
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	40.5	40.5	< 0.005	0.01	0.08	42.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	30.8	30.8	< 0.005	< 0.005	< 0.005	31.2

Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	40.5	40.5	< 0.005	0.01	< 0.005	42.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	8.89	8.89	< 0.005	< 0.005	0.01	9.02
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.6	11.6	< 0.005	< 0.005	0.01	12.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.47	1.47	< 0.005	< 0.005	< 0.005	1.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.92	1.92	< 0.005	< 0.005	< 0.005	2.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	1.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.04	0.36	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.50	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	122	122	< 0.005	< 0.005	0.37	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	6.24	6.24	< 0.005	< 0.005	0.01	6.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.03	1.03	< 0.005	< 0.005	< 0.005	1.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	6.64	6.64	< 0.005	< 0.005	0.02	6.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Demolition (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.64	2.21	19.9	18.6	0.03	0.80	—	0.80	0.73	—	0.73	—	3,427	3,427	0.14	0.03	—	3,439
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.09	1.02	< 0.005	0.04	—	0.04	0.04	—	0.04	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	6.35	6.35	< 0.005	< 0.005	0.01	6.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	2/2/2027	2/16/2027	5.00	10.0	—
Grading	Grading	2/17/2027	3/31/2027	5.00	30.0	—

Building Construction	Building Construction	4/1/2027	5/25/2028	5.00	300	—
Paving	Paving	5/26/2028	6/23/2028	5.00	20.0	—
Architectural Coating	Architectural Coating	6/24/2028	7/22/2028	5.00	20.0	—
Demolition	Demolition	1/4/2027	2/1/2027	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	4.09	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	1.60	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.82	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	35,619	11,873	27,992

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	90.0	0.00	—

Paving	0.00	0.00	0.00	0.00	10.7
Demolition	0.00	0.00	0.00	—	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Parking Lot	10.7	100%
Elementary School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	3.80	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	16.8
AQ-PM	16.8
AQ-DPM	51.0
Drinking Water	38.5
Lead Risk Housing	41.1
Pesticides	0.00
Toxic Releases	43.2
Traffic	82.5
Effect Indicators	—
CleanUp Sites	85.0
Groundwater	93.2
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	3.29
Cardio-vascular	7.22
Low Birth Weights	47.4
Socioeconomic Factor Indicators	—
Education	12.0
Housing	20.3

Linguistic	64.1
Poverty	1.43
Unemployment	26.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	90.86359553
Employed	87.36045169
Education	—
Bachelor's or higher	91.08174002
High school enrollment	100
Preschool enrollment	74.06646991
Transportation	—
Auto Access	62.47914795
Active commuting	50.58385731
Social	—
2-parent households	71.4744001
Voting	88.28435776
Neighborhood	—
Alcohol availability	41.28063647
Park access	53.36840755
Retail density	56.16578981
Supermarket access	76.37623508
Tree canopy	79.94353907
Housing	—

Homeownership	51.39227512
Housing habitability	84.79404594
Low-inc homeowner severe housing cost burden	95.56011805
Low-inc renter severe housing cost burden	77.50545361
Uncrowded housing	53.4838958
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	97.8
High Blood Pressure	91.8
Cancer (excluding skin)	57.8
Asthma	98.2
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	97.7
Diagnosed Diabetes	94.1
Life Expectancy at Birth	91.4
Cognitively Disabled	80.8
Physically Disabled	76.0
Heart Attack ER Admissions	93.8
Mental Health Not Good	97.3
Chronic Kidney Disease	95.6
Obesity	97.2
Pedestrian Injuries	59.5
Physical Health Not Good	98.0
Stroke	95.7
Health Risk Behaviors	—
Binge Drinking	75.2

Current Smoker	96.7
No Leisure Time for Physical Activity	91.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	39.7
English Speaking	44.1
Foreign-born	82.0
Outdoor Workers	86.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	50.7
Traffic Density	60.3
Traffic Access	58.3
Other Indices	—
Hardship	9.8
Other Decision Support	—
2016 Voting	89.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	16.0
Healthy Places Index Score for Project Location (b)	94.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Estimate of Phase 2 lot area.
Construction: Construction Phases	Conceptual construction schedule for Phase 2.

SCUSD Peterson Laurelwood Construction Phase 3 Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SCUSD Peterson Laurelwood Construction Phase 3
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	37.349208508337384, -122.00798000565118
County	Santa Clara
City	Sunnyvale
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1765
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Elementary School	7.35	1000sqft	0.33	7,350	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.58	0.49	4.60	7.03	0.01	0.17	0.03	0.20	0.15	0.01	0.16	—	1,361	1,361	0.06	0.02	0.15	1,367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.20	3.93	8.72	9.79	0.02	0.39	5.37	5.77	0.36	2.58	2.94	—	1,772	1,772	0.07	0.02	0.01	1,779
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	0.58	3.50	5.18	0.01	0.13	0.24	0.37	0.12	0.11	0.23	—	994	994	0.04	0.01	0.05	999
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.11	0.64	0.95	< 0.005	0.02	0.04	0.07	0.02	0.02	0.04	—	165	165	0.01	< 0.005	0.01	165

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.58	0.49	4.60	7.03	0.01	0.17	0.03	0.20	0.15	0.01	0.16	—	1,361	1,361	0.06	0.02	0.15	1,367

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.20	3.93	8.72	9.79	0.02	0.39	5.37	5.77	0.36	2.58	2.94	—	1,772	1,772	0.07	0.02	0.01	1,779
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.45	0.58	3.50	5.18	0.01	0.13	0.24	0.37	0.12	0.11	0.23	—	994	994	0.04	0.01	0.05	999
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.08	0.11	0.64	0.95	< 0.005	0.02	0.04	0.07	0.02	0.02	0.04	—	165	165	0.01	< 0.005	0.01	165

3. Construction Emissions Details

3.1. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.70	9.56	0.02	0.39	—	0.39	0.36	—	0.36	—	1,715	1,715	0.07	0.01	—	1,720
Dust From Material Movement	—	—	—	—	—	—	5.31	5.31	—	2.57	2.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.04	0.36	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	70.5	70.5	< 0.005	< 0.005	—	70.7
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.7	11.7	< 0.005	< 0.005	—	11.7
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	57.4	57.4	< 0.005	< 0.005	0.01	58.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.38	2.38	< 0.005	< 0.005	< 0.005	2.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.39	0.39	< 0.005	< 0.005	< 0.005	0.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.06	4.63	0.01	0.11	—	0.11	0.10	—	0.10	—	876	876	0.04	0.01	—	879
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.85	< 0.005	0.02	—	0.02	0.02	—	0.02	—	145	145	0.01	< 0.005	—	145

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	25.5	25.5	< 0.005	< 0.005	0.09	25.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.3	31.3	< 0.005	< 0.005	0.07	32.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	23.6	23.6	< 0.005	< 0.005	< 0.005	23.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.3	31.3	< 0.005	< 0.005	< 0.005	32.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	16.0	16.0	< 0.005	< 0.005	0.02	16.3
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	21.0	21.0	< 0.005	< 0.005	0.02	22.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.48	3.48	< 0.005	< 0.005	< 0.005	3.64
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44
Architectural Coatings	—	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.39	1.39	< 0.005	< 0.005	—	1.40
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.72	4.72	< 0.005	< 0.005	< 0.005	4.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	1/4/2027	1/23/2027	5.00	15.0	—
Building Construction	Building Construction	1/24/2027	12/31/2027	5.00	245	—
Architectural Coating	Architectural Coating	12/1/2027	12/31/2027	5.00	23.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—

Grading	Worker	7.50	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3.09	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	1.20	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.62	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	11,025	3,675	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	—	—	11.3	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Elementary School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	3.80	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	16.8
AQ-PM	16.8
AQ-DPM	51.0
Drinking Water	38.5
Lead Risk Housing	41.1
Pesticides	0.00
Toxic Releases	43.2
Traffic	82.5
Effect Indicators	—
CleanUp Sites	85.0
Groundwater	93.2
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	3.29
Cardio-vascular	7.22
Low Birth Weights	47.4
Socioeconomic Factor Indicators	—
Education	12.0
Housing	20.3

Linguistic	64.1
Poverty	1.43
Unemployment	26.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	90.86359553
Employed	87.36045169
Education	—
Bachelor's or higher	91.08174002
High school enrollment	100
Preschool enrollment	74.06646991
Transportation	—
Auto Access	62.47914795
Active commuting	50.58385731
Social	—
2-parent households	71.4744001
Voting	88.28435776
Neighborhood	—
Alcohol availability	41.28063647
Park access	53.36840755
Retail density	56.16578981
Supermarket access	76.37623508
Tree canopy	79.94353907
Housing	—

Homeownership	51.39227512
Housing habitability	84.79404594
Low-inc homeowner severe housing cost burden	95.56011805
Low-inc renter severe housing cost burden	77.50545361
Uncrowded housing	53.4838958
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	97.8
High Blood Pressure	91.8
Cancer (excluding skin)	57.8
Asthma	98.2
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	97.7
Diagnosed Diabetes	94.1
Life Expectancy at Birth	91.4
Cognitively Disabled	80.8
Physically Disabled	76.0
Heart Attack ER Admissions	93.8
Mental Health Not Good	97.3
Chronic Kidney Disease	95.6
Obesity	97.2
Pedestrian Injuries	59.5
Physical Health Not Good	98.0
Stroke	95.7
Health Risk Behaviors	—
Binge Drinking	75.2

Current Smoker	96.7
No Leisure Time for Physical Activity	91.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	39.7
English Speaking	44.1
Foreign-born	82.0
Outdoor Workers	86.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	50.7
Traffic Density	60.3
Traffic Access	58.3
Other Indices	—
Hardship	9.8
Other Decision Support	—
2016 Voting	89.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	16.0
Healthy Places Index Score for Project Location (b)	94.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Estimated phase 3 lot size.
Construction: Construction Phases	Conceptual construction schedule for Phase 3.

SCUSD Peterson Laurelwood Phase 4 Construction Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SCUSD Peterson Laurelwood Phase 4 Construction
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	37.347688949699545, -122.00781490418058
County	Santa Clara
City	Sunnyvale
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1765
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Elementary School	19.1	1000sqft	0.44	19,080	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.19	9.64	8.49	13.1	0.02	0.30	0.23	0.54	0.28	0.06	0.34	—	2,414	2,414	0.09	0.03	0.79	2,426
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.20	1.01	8.72	9.79	0.02	0.39	5.37	5.77	0.36	2.58	2.94	—	1,772	1,772	0.07	0.03	0.01	1,779
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	0.74	3.39	5.12	0.01	0.13	0.22	0.34	0.12	0.09	0.20	—	1,019	1,019	0.04	0.02	0.12	1,026
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.14	0.62	0.94	< 0.005	0.02	0.04	0.06	0.02	0.02	0.04	—	169	169	0.01	< 0.005	0.02	170

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.60	0.50	4.67	7.23	0.01	0.17	0.09	0.26	0.15	0.02	0.18	—	1,452	1,452	0.06	0.03	0.40	1,461
2028	1.19	9.64	8.49	13.1	0.02	0.30	0.23	0.54	0.28	0.06	0.34	—	2,414	2,414	0.09	0.03	0.79	2,426

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.20	1.01	8.72	9.79	0.02	0.39	5.37	5.77	0.36	2.58	2.94	—	1,772	1,772	0.07	0.03	0.01	1,779
2028	0.58	0.48	4.42	7.18	0.01	0.15	0.09	0.24	0.14	0.02	0.16	—	1,444	1,444	0.06	0.02	0.01	1,453
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.44	0.37	3.39	5.12	0.01	0.13	0.22	0.34	0.12	0.09	0.20	—	1,019	1,019	0.04	0.02	0.12	1,026
2028	0.24	0.74	1.77	2.83	< 0.005	0.06	0.04	0.10	0.05	0.01	0.06	—	557	557	0.02	0.01	0.06	561
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.08	0.07	0.62	0.94	< 0.005	0.02	0.04	0.06	0.02	0.02	0.04	—	169	169	0.01	< 0.005	0.02	170
2028	0.04	0.14	0.32	0.52	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	92.3	92.3	< 0.005	< 0.005	0.01	92.8

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.90	3.90	< 0.005	< 0.005	—	3.91
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	38.2	38.2	< 0.005	< 0.005	< 0.005	38.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.70	9.56	0.02	0.39	—	0.39	0.36	—	0.36	—	1,715	1,715	0.07	0.01	—	1,720
Dust From Material Movement	—	—	—	—	—	—	5.31	5.31	—	2.57	2.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.1

Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.78	7.78	< 0.005	< 0.005	—	7.80
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	57.4	57.4	< 0.005	< 0.005	0.01	58.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.59	1.59	< 0.005	< 0.005	< 0.005	1.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.98	4.51	0.01	0.11	—	0.11	0.10	—	0.10	—	853	853	0.03	0.01	—	855
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.82	< 0.005	0.02	—	0.02	0.02	—	0.02	—	141	141	0.01	< 0.005	—	142
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.29	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	66.1	66.1	< 0.005	< 0.005	0.22	67.2
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	81.2	81.2	< 0.005	0.01	0.18	85.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	61.3	61.3	< 0.005	< 0.005	0.01	62.1
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	81.3	81.3	< 0.005	0.01	< 0.005	85.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.16	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	40.5	40.5	< 0.005	< 0.005	0.06	41.1
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	53.1	53.1	< 0.005	0.01	0.05	55.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	6.70	6.70	< 0.005	< 0.005	0.01	6.80
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.79	8.79	< 0.005	< 0.005	0.01	9.20
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.55	0.46	4.30	6.91	0.01	0.15	—	0.15	0.14	—	0.14	—	1,305	1,305	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.30	6.91	0.01	0.15	—	0.15	0.14	—	0.14	—	1,305	1,305	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.53	2.46	< 0.005	0.05	—	0.05	0.05	—	0.05	—	465	465	0.02	< 0.005	—	466
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.9	76.9	< 0.005	< 0.005	—	77.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.27	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	65.0	65.0	< 0.005	< 0.005	0.20	65.4
Vendor	0.01	< 0.005	0.09	0.05	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	79.2	79.2	< 0.005	0.01	0.16	82.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	60.2	60.2	< 0.005	< 0.005	0.01	61.0

Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	79.3	79.3	< 0.005	0.01	< 0.005	82.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	21.7	21.7	< 0.005	< 0.005	0.03	22.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	28.2	28.2	< 0.005	< 0.005	0.02	29.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.59	3.59	< 0.005	< 0.005	0.01	3.64
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.67	4.67	< 0.005	< 0.005	< 0.005	4.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.05	5.31	0.01	0.15	—	0.15	0.14	—	0.14	—	823	823	0.03	0.01	—	826
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.14	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.3	29.3	< 0.005	< 0.005	—	29.4
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.85	4.85	< 0.005	< 0.005	—	4.87
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.59	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	142	142	< 0.005	< 0.005	0.44	143
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.74	4.74	< 0.005	< 0.005	0.01	4.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	—	0.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	13.0	13.0	< 0.005	< 0.005	0.04	13.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/4/2027	1/15/2027	5.00	10.0	—
Grading	Grading	1/18/2027	1/31/2027	5.00	10.0	—
Building Construction	Building Construction	2/1/2027	6/30/2028	5.00	370	—
Paving	Paving	5/15/2028	5/31/2028	5.00	13.0	—
Architectural Coating	Architectural Coating	06/01/2028	06/30/2028	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20

Building Construction	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Paving	Tractors/Loaders/Backh oes	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	8.01	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	3.13	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.60	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	17.5	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	28,620	9,540	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	5.00	0.00	—
Grading	—	—	7.50	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Elementary School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	—	annual days of extreme heat
Extreme Precipitation	—	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	—	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	16.8
AQ-PM	16.8
AQ-DPM	51.0
Drinking Water	38.5
Lead Risk Housing	41.1
Pesticides	0.00
Toxic Releases	43.2
Traffic	82.5
Effect Indicators	—
CleanUp Sites	85.0
Groundwater	93.2
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	3.29
Cardio-vascular	7.22
Low Birth Weights	47.4
Socioeconomic Factor Indicators	—
Education	12.0
Housing	20.3
Linguistic	64.1
Poverty	1.43

Unemployment	26.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—

Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	—
Asthma ER Admissions	—
High Blood Pressure	—
Cancer (excluding skin)	—
Asthma	—
Coronary Heart Disease	—
Chronic Obstructive Pulmonary Disease	—
Diagnosed Diabetes	—
Life Expectancy at Birth	—
Cognitively Disabled	—
Physically Disabled	—
Heart Attack ER Admissions	—
Mental Health Not Good	—
Chronic Kidney Disease	—
Obesity	—
Pedestrian Injuries	—
Physical Health Not Good	—
Stroke	—
Health Risk Behaviors	—
Binge Drinking	—
Current Smoker	—
No Leisure Time for Physical Activity	—

Climate Change Exposures	—
Wildfire Risk	—
SLR Inundation Area	—
Children	—
Elderly	—
English Speaking	—
Foreign-born	—
Outdoor Workers	—
Climate Change Adaptive Capacity	—
Impervious Surface Cover	—
Traffic Density	—
Traffic Access	—
Other Indices	—
Hardship	—
Other Decision Support	—
2016 Voting	—

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	16.0
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Conceptual construction schedule for Phase 4

SCUSD Peterson Laurelwood Phase 5 Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SCUSD Peterson Laurelwood Phase 5 Construction
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	32.8
Location	37.34809526090453, -122.00348968791664
County	Santa Clara
City	Sunnyvale
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1765
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
High School	300	Student	6.02	39,798	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.11	20.0	15.8	24.0	0.04	0.56	0.31	0.87	0.51	0.07	0.59	—	4,331	4,331	0.17	0.06	1.12	4,354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.68	3.10	28.0	28.8	0.05	1.17	19.8	21.0	1.08	10.1	11.2	—	5,432	5,432	0.22	0.05	0.02	5,452
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02	1.54	7.61	10.3	0.02	0.28	1.07	1.35	0.26	0.50	0.76	—	2,009	2,009	0.08	0.03	0.24	2,021
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.28	1.39	1.87	< 0.005	0.05	0.20	0.25	0.05	0.09	0.14	—	333	333	0.01	0.01	0.04	335

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.30	1.08	9.63	13.6	0.02	0.34	0.18	0.52	0.31	0.05	0.36	—	2,704	2,704	0.11	0.05	0.84	2,723
2028	2.11	20.0	15.8	24.0	0.04	0.56	0.31	0.87	0.51	0.07	0.59	—	4,331	4,331	0.17	0.06	1.12	4,354

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.68	3.10	28.0	28.8	0.05	1.17	19.8	21.0	1.08	10.1	11.2	—	5,432	5,432	0.22	0.05	0.02	5,452
2028	1.25	1.04	9.17	13.5	0.02	0.30	0.18	0.49	0.28	0.05	0.32	—	2,688	2,688	0.11	0.05	0.02	2,706
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.02	0.85	7.61	10.3	0.02	0.28	1.07	1.35	0.26	0.50	0.76	—	2,009	2,009	0.08	0.03	0.24	2,021
2028	0.48	1.54	3.55	5.25	0.01	0.12	0.07	0.19	0.11	0.02	0.13	—	1,025	1,025	0.04	0.02	0.12	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.19	0.16	1.39	1.87	< 0.005	0.05	0.20	0.25	0.05	0.09	0.14	—	333	333	0.01	0.01	0.04	335
2028	0.09	0.28	0.65	0.96	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	170	170	0.01	< 0.005	0.02	171

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	0.77	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.53	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	134	134	< 0.005	0.01	0.01	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.71	3.71	< 0.005	< 0.005	0.01	3.76

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.89	1.59	14.2	17.3	0.03	0.60	—	0.60	0.55	—	0.55	—	2,960	2,960	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.82	0.99	< 0.005	0.03	—	0.03	0.03	—	0.03	—	170	170	0.01	< 0.005	—	171

Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.2	28.2	< 0.005	< 0.005	—	28.3
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	6.67	6.67	< 0.005	< 0.005	0.01	6.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	5.86	8.08	0.01	0.21	—	0.21	0.19	—	0.19	—	1,496	1,496	0.06	0.01	—	1,502
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.07	1.47	< 0.005	0.04	—	0.04	0.04	—	0.04	—	248	248	0.01	< 0.005	—	249
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.60	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	138	138	< 0.005	0.01	0.46	140
Vendor	0.02	0.01	0.21	0.10	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	169	169	0.01	0.03	0.37	178
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.51	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	128	128	< 0.005	0.01	0.01	130
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	170	170	0.01	0.03	0.01	177
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	80.7	80.7	< 0.005	< 0.005	0.12	81.8
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	106	106	0.01	0.02	0.10	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	13.4	13.4	< 0.005	< 0.005	0.02	13.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	0.02	18.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.18	4.61	0.01	0.11	—	0.11	0.10	—	0.10	—	854	854	0.03	0.01	—	857
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.58	0.84	< 0.005	0.02	—	0.02	0.02	—	0.02	—	141	141	0.01	< 0.005	—	142
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.56	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	136	136	< 0.005	< 0.005	0.42	136
Vendor	0.01	0.01	0.19	0.10	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	165	165	0.01	0.02	0.33	173
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.48	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	126	126	< 0.005	0.01	0.01	127

Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	165	165	0.01	0.02	0.01	173
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	45.2	45.2	< 0.005	< 0.005	0.06	45.9
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	58.9	58.9	< 0.005	0.01	0.05	61.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.49	7.49	< 0.005	< 0.005	0.01	7.60
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.75	9.75	< 0.005	< 0.005	0.01	10.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.24	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.8	53.8	< 0.005	< 0.005	—	54.0
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.91	8.91	< 0.005	< 0.005	—	8.94
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.50	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	122	122	< 0.005	< 0.005	0.37	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.06	4.06	< 0.005	< 0.005	0.01	4.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	—	1.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	—	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	27.1	27.1	< 0.005	< 0.005	0.08	27.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.53	1.53	< 0.005	< 0.005	< 0.005	1.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/4/2027	1/17/2027	5.00	10.0	—
Grading	Grading	1/18/2027	2/15/2027	5.00	21.0	—
Building Construction	Building Construction	2/16/2027	6/30/2028	5.00	359	—
Paving	Paving	5/15/2028	5/31/2028	5.00	13.0	—
Architectural Coating	Architectural Coating	6/1/2028	6/30/2028	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	16.7	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	6.52	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.34	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	59,697	19,899	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	21.0	0.00	—

Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
High School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	3.80	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	16.8
AQ-PM	16.8
AQ-DPM	51.0
Drinking Water	38.5
Lead Risk Housing	41.1
Pesticides	0.00
Toxic Releases	43.2
Traffic	82.5
Effect Indicators	—
CleanUp Sites	85.0
Groundwater	93.2
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	3.29
Cardio-vascular	7.22
Low Birth Weights	47.4
Socioeconomic Factor Indicators	—
Education	12.0
Housing	20.3

Linguistic	64.1
Poverty	1.43
Unemployment	26.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	90.86359553
Employed	87.36045169
Education	—
Bachelor's or higher	91.08174002
High school enrollment	100
Preschool enrollment	74.06646991
Transportation	—
Auto Access	62.47914795
Active commuting	50.58385731
Social	—
2-parent households	71.4744001
Voting	88.28435776
Neighborhood	—
Alcohol availability	41.28063647
Park access	53.36840755
Retail density	56.16578981
Supermarket access	76.37623508
Tree canopy	79.94353907
Housing	—

Homeownership	51.39227512
Housing habitability	84.79404594
Low-inc homeowner severe housing cost burden	95.56011805
Low-inc renter severe housing cost burden	77.50545361
Uncrowded housing	53.4838958
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	97.8
High Blood Pressure	91.8
Cancer (excluding skin)	57.8
Asthma	98.2
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	97.7
Diagnosed Diabetes	94.1
Life Expectancy at Birth	91.4
Cognitively Disabled	80.8
Physically Disabled	76.0
Heart Attack ER Admissions	93.8
Mental Health Not Good	97.3
Chronic Kidney Disease	95.6
Obesity	97.2
Pedestrian Injuries	59.5
Physical Health Not Good	98.0
Stroke	95.7
Health Risk Behaviors	—
Binge Drinking	75.2

Current Smoker	96.7
No Leisure Time for Physical Activity	91.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	39.7
English Speaking	44.1
Foreign-born	82.0
Outdoor Workers	86.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	50.7
Traffic Density	60.3
Traffic Access	58.3
Other Indices	—
Hardship	9.8
Other Decision Support	—
2016 Voting	89.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	16.0
Healthy Places Index Score for Project Location (b)	94.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Estimated lot acreage for Phase 5
Construction: Construction Phases	Conceptual construction schedule for Phase 5

Peterson Laurelwood Operational Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Peterson Laurelwood Operational
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	32.8
Location	37.34766877734154, -122.00652529047407
County	Santa Clara
City	Sunnyvale
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1765
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Elementary School	800	Student	71.5	133,980	0.00	1,000,000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.5	14.8	8.90	90.2	0.21	0.24	7.27	7.51	0.24	1.28	1.52	82.4	22,365	22,448	9.30	0.81	72.5	22,995
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.0	13.3	10.1	79.4	0.20	0.24	7.27	7.50	0.23	1.28	1.51	82.4	21,134	21,216	9.41	0.89	2.38	21,719
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.31	10.9	7.31	58.3	0.14	0.21	5.19	5.40	0.20	0.91	1.11	82.4	15,836	15,918	9.10	0.62	22.7	16,353
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.52	1.98	1.33	10.6	0.03	0.04	0.95	0.98	0.04	0.17	0.20	13.6	2,622	2,635	1.51	0.10	3.76	2,707

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.3	10.5	7.37	83.1	0.20	0.12	7.27	7.39	0.12	1.28	1.39	—	20,203	20,203	0.84	0.79	72.0	20,531
Area	1.04	4.21	0.05	5.83	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.7

Energy	0.16	0.08	1.48	1.24	0.01	0.11	—	0.11	0.11	—	0.11	—	2,095	2,095	0.21	0.01	—	2,104
Water	—	—	—	—	—	—	—	—	—	—	—	3.72	43.0	46.8	0.39	0.01	—	59.4
Waste	—	—	—	—	—	—	—	—	—	—	—	78.7	0.00	78.7	7.86	0.00	—	275
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	12.5	14.8	8.90	90.2	0.21	0.24	7.27	7.51	0.24	1.28	1.52	82.4	22,365	22,448	9.30	0.81	72.5	22,995
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.8	9.98	8.64	78.2	0.19	0.12	7.27	7.39	0.12	1.28	1.39	—	18,995	18,995	0.95	0.87	1.87	19,280
Area	—	3.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.16	0.08	1.48	1.24	0.01	0.11	—	0.11	0.11	—	0.11	—	2,095	2,095	0.21	0.01	—	2,104
Water	—	—	—	—	—	—	—	—	—	—	—	3.72	43.0	46.8	0.39	0.01	—	59.4
Waste	—	—	—	—	—	—	—	—	—	—	—	78.7	0.00	78.7	7.86	0.00	—	275
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	11.0	13.3	10.1	79.4	0.20	0.24	7.27	7.50	0.23	1.28	1.51	82.4	21,134	21,216	9.41	0.89	2.38	21,719
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.64	7.05	5.81	54.1	0.13	0.09	5.19	5.28	0.08	0.91	1.00	—	13,686	13,686	0.64	0.60	22.2	13,902
Area	0.51	3.72	0.02	2.87	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	—	11.8	11.8	< 0.005	< 0.005	—	12.2
Energy	0.16	0.08	1.48	1.24	0.01	0.11	—	0.11	0.11	—	0.11	—	2,095	2,095	0.21	0.01	—	2,104
Water	—	—	—	—	—	—	—	—	—	—	—	3.72	43.0	46.8	0.39	0.01	—	59.4
Waste	—	—	—	—	—	—	—	—	—	—	—	78.7	0.00	78.7	7.86	0.00	—	275
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	8.31	10.9	7.31	58.3	0.14	0.21	5.19	5.40	0.20	0.91	1.11	82.4	15,836	15,918	9.10	0.62	22.7	16,353
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39	1.29	1.06	9.88	0.02	0.02	0.95	0.96	0.02	0.17	0.18	—	2,266	2,266	0.11	0.10	3.68	2,302
Area	0.09	0.68	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.96	1.96	< 0.005	< 0.005	—	2.01
Energy	0.03	0.01	0.27	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	—	347	347	0.03	< 0.005	—	348
Water	—	—	—	—	—	—	—	—	—	—	—	0.62	7.13	7.74	0.06	< 0.005	—	9.84

Waste	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	1.52	1.98	1.33	10.6	0.03	0.04	0.95	0.98	0.04	0.17	0.20	13.6	2,622	2,635	1.51	0.10	3.76	2,707

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	11.3	10.5	7.37	83.1	0.20	0.12	1.13	1.26	0.12	0.35	0.47	—	20,203	20,203	0.84	0.79	72.0	20,531
Total	11.3	10.5	7.37	83.1	0.20	0.12	1.13	1.26	0.12	0.35	0.47	—	20,203	20,203	0.84	0.79	72.0	20,531
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	10.8	9.98	8.64	78.2	0.19	0.12	1.13	1.26	0.12	0.35	0.47	—	18,995	18,995	0.95	0.87	1.87	19,280
Total	10.8	9.98	8.64	78.2	0.19	0.12	1.13	1.26	0.12	0.35	0.47	—	18,995	18,995	0.95	0.87	1.87	19,280
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	1.39	1.29	1.06	9.88	0.02	0.02	0.15	0.16	0.02	0.05	0.06	—	2,266	2,266	0.11	0.10	3.68	2,302
Total	1.39	1.29	1.06	9.88	0.02	0.02	0.15	0.16	0.02	0.05	0.06	—	2,266	2,266	0.11	0.10	3.68	2,302

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	332	332	0.05	0.01	—	336
Total	—	—	—	—	—	—	—	—	—	—	—	—	332	332	0.05	0.01	—	336
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	332	332	0.05	0.01	—	336
Total	—	—	—	—	—	—	—	—	—	—	—	—	332	332	0.05	0.01	—	336
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	55.0	55.0	0.01	< 0.005	—	55.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	55.0	55.0	0.01	< 0.005	—	55.6

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.16	0.08	1.48	1.24	0.01	0.11	—	0.11	0.11	—	0.11	—	1,763	1,763	0.16	< 0.005	—	1,768
Total	0.16	0.08	1.48	1.24	0.01	0.11	—	0.11	0.11	—	0.11	—	1,763	1,763	0.16	< 0.005	—	1,768
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.16	0.08	1.48	1.24	0.01	0.11	—	0.11	0.11	—	0.11	—	1,763	1,763	0.16	< 0.005	—	1,768
Total	0.16	0.08	1.48	1.24	0.01	0.11	—	0.11	0.11	—	0.11	—	1,763	1,763	0.16	< 0.005	—	1,768
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.03	0.01	0.27	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	—	292	292	0.03	< 0.005	—	293
Total	0.03	0.01	0.27	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	—	292	292	0.03	< 0.005	—	293

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.04	0.96	0.05	5.83	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.7
Total	1.04	4.21	0.05	5.83	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	3.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.09	0.09	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.96	1.96	< 0.005	< 0.005	—	2.01
Total	0.09	0.68	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.96	1.96	< 0.005	< 0.005	—	2.01

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	3.72	43.0	46.8	0.39	0.01	—	59.4
Total	—	—	—	—	—	—	—	—	—	—	—	3.72	43.0	46.8	0.39	0.01	—	59.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	3.72	43.0	46.8	0.39	0.01	—	59.4
Total	—	—	—	—	—	—	—	—	—	—	—	3.72	43.0	46.8	0.39	0.01	—	59.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.62	7.13	7.74	0.06	< 0.005	—	9.84
Total	—	—	—	—	—	—	—	—	—	—	—	0.62	7.13	7.74	0.06	< 0.005	—	9.84

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elementary	—	—	—	—	—	—	—	—	—	—	—	78.7	0.00	78.7	7.86	0.00	—	275
Total	—	—	—	—	—	—	—	—	—	—	—	78.7	0.00	78.7	7.86	0.00	—	275
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	78.7	0.00	78.7	7.86	0.00	—	275
Total	—	—	—	—	—	—	—	—	—	—	—	78.7	0.00	78.7	7.86	0.00	—	275
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.6
Total	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elementary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Elementary School	3,288	0.00	0.00	857,229	26,449	0.00	0.00	6,895,547

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	200,970	66,990	—

5.10.3. Landscape Equipment

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Elementary School	594,527	204	0.0330	0.0040	5,501,335

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	1,939,392	13,066,079

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Elementary School	146	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	3.80	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	16.8
AQ-PM	16.8
AQ-DPM	51.0
Drinking Water	38.5
Lead Risk Housing	41.1
Pesticides	0.00
Toxic Releases	43.2
Traffic	82.5
Effect Indicators	—
CleanUp Sites	85.0
Groundwater	93.2

Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	3.29
Cardio-vascular	7.22
Low Birth Weights	47.4
Socioeconomic Factor Indicators	—
Education	12.0
Housing	20.3
Linguistic	64.1
Poverty	1.43
Unemployment	26.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	90.86359553
Employed	87.36045169
Education	—
Bachelor's or higher	91.08174002
High school enrollment	100
Preschool enrollment	74.06646991
Transportation	—
Auto Access	62.47914795
Active commuting	50.58385731

Social	—
2-parent households	71.4744001
Voting	88.28435776
Neighborhood	—
Alcohol availability	41.28063647
Park access	53.36840755
Retail density	56.16578981
Supermarket access	76.37623508
Tree canopy	79.94353907
Housing	—
Homeownership	51.39227512
Housing habitability	84.79404594
Low-inc homeowner severe housing cost burden	95.56011805
Low-inc renter severe housing cost burden	77.50545361
Uncrowded housing	53.4838958
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	97.8
High Blood Pressure	91.8
Cancer (excluding skin)	57.8
Asthma	98.2
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	97.7
Diagnosed Diabetes	94.1
Life Expectancy at Birth	91.4
Cognitively Disabled	80.8

Physically Disabled	76.0
Heart Attack ER Admissions	93.8
Mental Health Not Good	97.3
Chronic Kidney Disease	95.6
Obesity	97.2
Pedestrian Injuries	59.5
Physical Health Not Good	98.0
Stroke	95.7
Health Risk Behaviors	—
Binge Drinking	75.2
Current Smoker	96.7
No Leisure Time for Physical Activity	91.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	39.7
English Speaking	44.1
Foreign-born	82.0
Outdoor Workers	86.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	50.7
Traffic Density	60.3
Traffic Access	58.3
Other Indices	—
Hardship	9.8
Other Decision Support	—

2016 Voting	89.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	16.0
Healthy Places Index Score for Project Location (b)	94.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Total estimated building square footage of 130,980 s.f.
Operations: Vehicle Data	Trip rate per project traffic memo.

APPENDIX 3.5-1

Cultural Resources Inventory and Architectural Resource Evaluation

Cultural Resource Inventory and Architectural Resource Evaluation

for the Santa Clara Unified School District

Peterson Laurelwood Master Plan

Santa Clara County, California

Prepared for Impact Sciences, Inc.

ALBION

NOVEMBER 2022 FINAL

Cultural Resource Inventory and Architectural Resource Evaluation for the Santa Clara Unified School District Peterson Laurelwood Master Plan, Santa Clara County, California

November 2022 FINAL
J2021-053.01
Photo Credit: Marian A. Peterson and Patrick Henry schools, Santa Clara County, 1968. Source: University of California, Santa Barbara, Library Geospatial Collection, Aerial Photographic Collection. Available on FrameFinder (ucsb.edu).

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Executive Summary

In November 2021, Impact Sciences, Inc. (Impact Sciences) on behalf of the Santa Clara Unified School District (SCUSD) contracted with Albion Environmental, Inc. (Albion) and Dogtrot Historical Consulting, LLC (Dogtrot) to conduct a cultural resources inventory and architectural resources evaluation for the proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Project, encapsulating 79.35 acres in the City of Sunnyvale and the City of Santa Clara (Proposed Master Plan). The Proposed Master Plan includes the development of a master plan for the Patrick Henry Campus, Marian A. Peterson Site, SCUSD Farm, new Laurelwood Elementary School, and future programs at the existing Laurelwood Elementary School Campus. In order to create a plan that encompasses all of the District's assets, the SCUSD is creating a master plan for the area within the plan's boundaries. At the time of the current study, details about proposed construction elements or the maximum depth of disturbance is unknown and anticipated to vary among Project elements.

Albion's and Dogtrot's study was conducted to comply with requirements under the California Environmental Quality Act (CEQA) (Public Resources Code 21000 et seq.). This study included: (1) archival and background research; (2) a search of records at the Northwest Information Center (NWIC); (3) an archaeological pedestrian survey of the proposed Project Area; (4) an architectural survey of buildings, structures, circulation systems, and landscaping within the proposed Project Area; and (5) a report of findings and recommendations.

A search of records at the NWIC indicated that no cultural resource studies have been conducted within the Project Area, and five cultural resource studies have been conducted within a $^1/_4$-mile radius of the Project Area. Additionally, the record search indicated that no cultural resources have been recorded within the Project Area or within a $^1/_4$-mile radius of the Project Area. Historic aerial photography and archival research illustrates that the Project Area was a part of Mexican Rancho landscapes and by the early to mid-20th century consisted of orchards that were owned and operated by Italian immigrant families. The property was sold in segments to the Jefferson School District in 1955 and 1960 and developed into the Patrick Henry Campus and Marian A. Peterson Middle School. After reviewing the records search results, Albion and Dogtrot conducted a full-coverage, intensive pedestrian survey of the Project Area, on January 17, 2022. Constraints during the survey included poor surface visibility due to dense grasses and vegetation, pavement, and standing architecture obscuring approximately 50% of the Project Area. The archaeological pedestrian survey yielded positive results, as one historic-era isolated cultural resource was observed on the surface (Iso 1). The architectural survey consisted of photographing buildings, structures, circulation systems, and landscaping and taking field notes of observations.

It is our assessment that there is a moderate-high potential for buried precolonial archaeological resources to be located within the Project Area. The soils are hypothesized to be from the Holocene, and these soils are located in a flat alluvial fan with slopes less than 9 degrees and are less than 200 meters (656 feet) from a water course (Byrd et al. 2017; Meyer et al. 2010; Rosenthal and Meyer 2004). Our visual inspection of the Project Area ground surface determined that soils encountered

are consistent with what is mapped in the area with no evidence of culturally produced stratigraphy, and we did not identify any evidence of in-tact precolonial archaeological deposits. However, due to the moderate-high potential of the Project Area to contain precolonial archaeological deposits, Albion recommends that, once the Project elements and depths of impact have been designed, an additional archaeological subsurface study be conducted within the areas and to the depth of Project impacts, to further test for the presence or absence of precolonial archaeological resources. This is especially important for Project elements that extend further than 2 feet below ground surface, as the first two feet of soil is likely disturbed by the modern environment.

In addition, it is our professional opinion that there is a low potential for any buried historic-era archaeological resources to be located within the Project Area. The first documented historic-era development of the project consisted of agricultural fields during the 20th century. Further, our visual inspection of the Project Area ground surface did not identify any evidence of in-tact historic-era archaeological deposits. Therefore, it is our assessment that the proposed Project is not likely to impact any subsurface historic-era cultural resources.

The Marian A. Peterson Middle School campus and the Patrick Henry Intermediate School campus were evaluated for eligibility for listing on the California Register of Historical Resources (CRHR), using the criteria outlined in California PRC section 5024.1. It has been determined that neither property is associated with events that have made a significant contribution to the broad patterns of history; is associated with the lives of persons important to history; or embodies the distinctive characteristics of a type, period, region, or method of construction. Furthermore, neither is likely to yield important information about architectural design or construction. Because neither is eligible for the CRHR, neither is a historical resource for the purposes of CEQA. No further action is required.

Additionally, since many important cultural resources, such as tribal cultural resources/traditional cultural properties, do not necessarily leave an archaeological footprint or have physically identifiable manifestations, it is vital to seek out information regarding the possible presence of these important resources and their locations through consultation with local tribal members. Under the authority of Assembly Bill 52, the District, is responsible for collecting and incorporating Tribal information into the environmental review process.

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Introduction 1

PROJECT LOCATION

The proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Project (Proposed Master Plan), encapsulates 79.35 acres in the City of Sunnyvale and the City of Santa Clara (Appendix A: Figures A-1 and A-2). The Project Area consists of three school sites: the Patrick Henry Campus and a portion of the Marian A. Peterson Middle School Site in the Northwest, and the Laurelwood Elementary School Site in the Southeast. The Patrick Henry Campus and Peterson Middle School Site is bound on the north by Bryant Way, on the east by Teal Drive, on the south by Dunford Way, and on the west by residential housing. The Laurelwood Elementary School Site is bound on the north and east by residential housing, on the south by Kensington Avenue, and on the west by Teal Drive. The entirety of the Project Area is owned and developed by the Santa Clara Unified School District (SCUSD) as the Patrick Henry Campus, Peterson Middle School Campus, the SCUSD Farm, and existing Laurelwood Elementary School Campus.

PROJECT DESCRIPTION

The Proposed Master Plan includes the development of a master plan for the Patrick Henry Campus, Peterson Middle School, SCUSD Farm, and new Laurelwood Elementary School, and future programs as the existing Laurelwood Elementary School Campus. The SCUSD proposes to build a new Laurelwood Elementary on a portion of the Patrick Henry Campus, relocate District storage areas, yet to be determined uses of the closed Patrick Henry Middle School, program improvements at the SCUSD Farm and compost areas, and improvements at the existing Peterson Middle School. Developments at the existing Peterson Middle School include new fields and a fieldhouse, relocation of the existing tennis courts, new vehicular and pedestrian access, expanded administration and media center, a new environmental education center, outdoor learning areas, and an amphitheater. The SCUSD also may build a new school on the property. In order to create a plan that encompasses all of the District's assets, the SCUSD is creating a master plan for the area within the plan's boundaries. At the time of the current study, details about proposed construction elements or the maximum depth of disturbance is unknown and anticipated to vary among Project elements.

REGULATORY FRAMEWORK

Section 15064.5(a)(2-3) of the California Environmental Quality Act (CEQA) Guidelines require that state and local public agencies evaluate the potential for historical resources to be impacted by discretionary activities, using the criteria outlined in California Public Resources Code (PRC) section 5024.1. PRC 5042.1 established the California Register of Historical Resources (CRHR). The CRHR is an authoritative guide in California to be used by state and local agencies, private groups, and citizens

to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from the substantial adverse change.

Cultural resources are defined as any tangible evidence of past human activity, regardless of significance, found in association with a geographic location. Cultural resources include tangible properties possessing intangible cultural values. Five classes of cultural resources are generally recognized including buildings, structures, objects, sites, and districts. Classes encompass a range of resource types including prehistoric archaeological sites, historic archaeological sites, the built environment, and Traditional Cultural Properties.

In accordance with CEQA, cultural resources encountered during the Project shall be evaluated to determine if the resource is a historical resource, meeting the criteria for inclusion in the CRHR (CEQA Guidelines, Section 15064.5 [a]). Sites determined not eligible are further assessed to determine if they meet the definition of a "Unique Archaeological Resource" under Section 21083.2 of the Public Resources Code. Cultural resource evaluations then assess potential Project impacts on these resources.

Cultural resources included in or eligible for the California Register of Historical Resources (CRHR) are considered significant and are thus referred to as historical resources (CEQA). California PRC 5020.1(j) defines a "historical resource" as including, but not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or architecturally significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California. California PRC 5020.1(h) defines a "historic district" as a definable unified geographic entity that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Evaluation of archaeological and historic resources is based on the criteria set forth in Section 15064.5 (a) (3) of the CEQA Guidelines. This statute states that a site is eligible for listing in the California Register of Historical Resources if the resource retains enough of its historic character or integrity, and meets one or more of the following criteria:

1) is associated with events that have made a significant contribution to broad patterns of California's history and cultural heritage;
2) is associated with the lives of persons significant in our past;
3) embodies the distinctive characteristic of a type, period, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
4) has, or may be likely to yield, important information in prehistory or history.

Integrity is the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Historical resources eligible for listing in the CRHR must meet at least one of the criteria of significance described above and retain sufficient historic integrity to convey the reasons for their significance. The following seven aspects define historic integrity:

1) Location. The place where the historic property was constructed or the place where the historic event occurred.

2) Design. The combination of elements that create the form, plan, space, structure, and style of a property.
3) Setting. The physical environment of a historic property.
4) Materials. The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
5) Workmanship. The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
6) Feeling. A property's expression of the aesthetic or historic sense of a particular period of time.
7) Association. The direct link between an important historic event or person and a historic property.

To retain historic integrity, a resource should possess several of the above-mentioned aspects. The retention of specific aspects of integrity is essential for a resource to convey its significance. Comparisons with similar properties are considered when evaluating integrity as it may be important in deciding what physical features are essential to reflect the significance of a historic context. If a property is determined to not be eligible or individual listing on the CRHR, then it will not be evaluated for historic integrity.

If the resource is considered not significant (not a historical resource under CEQA), the effects of the Project on that resource will not be considered significant and the resource need not be considered further in the CEQA process.

If the resource is considered significant (a historical resource under CEQA), and it is determined that the Project will cause a substantial adverse change in the significance of a resource, it will be necessary to develop mitigation measures to render impacts to less than significant (CEQA Guidelines, Section 15064.5 [c]). Under CEQA, avoidance is the preferred mitigation for archaeological sites. Other mitigation measures are provided in the Guidelines (Section 15126.4[b][3]). When data recovery excavation is the only prudent and feasible alternative, excavations should be carried out in accordance with methods outlined in a project specific excavation plan or Treatment Plan.

Sources Consulted

2

RECORDS SEARCH

Jessica Akmenkalns, Researcher for the NWIC, provided the results of a records search for cultural resources and studies within a $^1/_4$-mile radius of the Project Area on November 16, 2021 (Appendix B). In addition to official maps and records, the following sources of information were consulted as part of the records search:

- Built Environment Resources Directory (BERD), which includes:
  - National Register of Historic Places (NRHP)
  - California Historical Landmarks
  - Office of Historic Preservation Historic Properties Directory
- Office of Historic Preservation Archaeological Determinations of Eligibility
- California Inventory of Historical Resources
- Special Research Collections at the UCSC and UCSB Libraries (aerial images and historic maps)

BERD

No properties are listed on the Directory within a $^1/_4$-mile radius of the Project Area.

OFFICE OF HISTORIC PRESERVATION ARCHAEOLOGICAL DETERMINATIONS OF ELIGIBILITY

No properties are listed on the Archaeological Determinations of Eligibility Directory within a $^1/_4$-mile radius of the Project Area.

CALIFORNIA INVENTORY OF HISTORICAL RESOURCES

No properties are listed on the Directory within a $^1/_4$-mile radius of the Project Area.

PREVIOUSLY CONDUCTED CULTURAL RESOURCE STUDIES

According to the NWIC, no cultural resource studies have been conducted within the Project Area and five cultural resource studies have been conducted within a $^1/_4$-mile radius of the Project Area

and consisted of field studies for both archaeological resources and historic properties. The previous studies are listed in Table 1 below.

Table 1. Cultural Resource Studies Conducted Within a $^1/_4$-Mile Radius of the Project Area.

Report No.	Citation Title	Authors	Citation Year
S-04183	An Archaeological Reconnaissance of Calabazas Creek (from Lawrence Expressway to Wolfe Road), for the Santa Clara Valley Water District	R. Edwards	1974
S-07390	A Cultural Resources Survey of the Proposed Lawrence Expressway High Occupancy Vehicle Lanes Project, Located in the Cities of Sunnyvale, Santa Clara, and San Jose, Santa Clara County, California	R. L. Anastasio et al.	1985
S-09368	Cultural Resource Evaluation of the Calabazas Creek Flood Control Project in the Cities of Cupertino and Santa Clara, County of Santa Clara	R. Cartier	1987
S-23631	Cultural Resource Overview for the AT&T San Jose Build, Cities of Redwood City and San Jose, San Mateo and Santa Clara Counties	M. Peak and A. Peak	2000
S-24944	Historic Property Survey Report - Negative Findings, Wolfe Road Widening Project, City of Sunnyvale, Santa Clara County, California	Basin Research Associates, Inc.	2000

PREVIOUSLY RECORDED CULTURAL RESOURCES

The records search identified no cultural resources located within the Project Area nor within a $^1/_4$-mile radius of the Project Area.

HISTORICAL IMAGERY

Albion conducted an online search of historic maps and aerials and found information pertinent to the Project Area from the following:

- 1864 rancho map
- 1876 plat map
- 1889 plat map
- 1939 aerial photograph
- 1956 aerial photograph
- 1965 aerial photograph

ARCHIVES

Online catalogs of the Sunnyvale Public Library, San José Public Library/Dr. Martin Luther King, Jr. Library's California Room, and History San José were examined for this Project. Appointments with the three repositories and on-location research was conducted on January 16, 17, and 18. In addition, SCUSD provided copies of the original architectural plans and property deeds for the two subject properties.

Other resources that were used include, but are not limited to, the following:

- Santa Clara County Archives
- California State Library, Witkin State Law Library
- California State Library, California History Room
- Internet Archives (archive.org)
- Ancestry.com
- HistoricAerials.com
- Online Archive of California
- Society of Architectural Historians online archives
- Digitized San Jose Mercury News
- Digitized San Jose Evening News
- California Department of Education website
- Santa Clara County Office of Education

Background

3

NATURAL ENVIRONMENT

Geomorphologically, Santa Clara Valley is a structural basin within the Coast Ranges Geomorphic Province. It forms a relatively level flood plain at the southern end of San Francisco Bay and is oriented in a roughly northwest-southeast orientation. The valley runs for a length of approximately 100 kilometers (62 miles) from north to south, eventually terminating near the city of Hollister in San Benito County. It is approximately 20 kilometers (15 miles) in width and encompasses approximately 1,312 square miles. The northern part of the valley, which forms the southern end of San Francisco Bay, is a complex network of marshes, wetlands, sloughs, and creeks, and ranges in elevation to just above mean sea level (msl). The southern part of the valley, by contrast, is generally a broad and level-to-sloping plain, with an elevation of over 200 feet. The valley is drained by the Guadalupe River and a number of streams, creeks, and tributaries (e.g., Coyote, Los Gatos, Stevens, and Alimitos). Dominant landforms include the northwest-trending Diablo Range to the east and the Santa Cruz Mountains to the west. The Diablo Range is part of the Franciscan Complex and was formed during the Upper Jurassic-Cretaceous. The Santa Cruz Mountains are also part of the Franciscan Complex but contain later Pliocene sedimentary deposits. Between these ranges, the main habitat types are valley oak savanna, grasslands, and riparian corridors. The two former habitat types often form a single habitat, dominated by an overstory of scattered valley oaks (*Quercus lobata*) and an understory of bunch grasses, spear grass, needle grass, and forbs. Flora dominating riparian corridors includes California bay laurel, willow, sycamore, cottonwood, and a number of smaller hydrophytic plants. The valley is geologically active with three major faults, including San Andreas, Hayward, and Calaveras, running roughly north-to-south.

By the late 18th century, the Santa Clara Valley was made up of a mosaic of different ecological communities, including tidal marshlands, uplands, grassland prairie, oak-grassland savanna, and riparian corridors. The first of these, tidal marshlands, were especially prevalent around the margins of the San Francisco Bay. Freshwater from a multitude of rivers, creeks, and streams met with the saltwater of the Bay, creating a vast, brackish tidal marshland, which was a haven for various fish, waterfowl, marine mammals, and invertebrates. Floral communities consisted of dense perennial grasses in the inter-tidal sand and mud flats just above mean high-water level. The most common species included Tule reeds (*Schoenoplectus acutus*), eelgrass (*Zostera marina*), saltgrass (*Distichlis spicata*), pickleweed (*Salicornia sarcocornia*), and cordgrass (*Spartina* spp.). The high productivity of the sloughs attracted a diversity of marine and estuarine creatures, including leopard sharks (*Triakis semifasciata*), bat rays (*Myliobatus californica*), Pacific herring (*Clupea harengus*), Pacific sardine (*Sardinops sagax*), sturgeon (*Acipenser* spp.), salmon (*Oncorhynchus* spp.), among numerous other taxa. Shorebirds common to this area included gulls (*Larus* spp.), rails (Rallidae), egrets (*Ardea* spp.), herons (*Ardea* spp.), cormorants (*Phalacrocorax* spp.), pelicans (*Pelecanus* spp.), and a host of ducks (Anatidae), geese (*Anser*, *Branta*, *Chen* spp.), and various other waterfowl. This region also attracted

mammals, such as sea otters (*Enhydra lutris*), harbor seals (*Phoca vitulina*), and elk (*Cervus elaphus nannodes*), which waded into the shallows to feed on marsh grasses. Invertebrates common to this habitat included California horn snail (*Cerithidea californica*), bay mussel (*Mytilus edulis*), oyster (*Ostrea lurida*), bent-nosed clam (*Macoma nasuta*), and Pismo clam (*Tivela stultorum*).

Surrounding the marshes was extensive grassland prairie, which during pre-European times, would have consisted of tall, perennial bunch grasses and forbs. Prairie grasses included oatgrass (*Danthonia californica*), red fescue (*Festuca rubra*), Pacific reedgrass (*Calamagrostis nutkaensis*), tufted hairgrass (*Deschampsia cespitosa*), soaproot (*Chlorogalum pomeridianum*), *broadiaea*, and iris (Iridaceae), among other taxa. Interspersed within this community was a dense scrub community consisting primarily of evergreen shrubs, vines, and forbs. In the margin between the marshes and grassland, willows (*Salix* spp.) grew in abundance. The area's native inhabitants periodically burned the grassland prairie to facilitate the growth of new shoots, and hence increase the abundance of browsing animals. Mammals common to this community included Tule elk (*Cervus elaphus nannodes*), badger (*Taxidea taxus*), black-tailed jackrabbit (*Lepus californicus*), pocket gopher (*Thomomys bottae*), and California vole (*Microtus californicus*). A number of raptors were found in this habitat, including northern harrier (*Circus cyaneus*) and Swainson's hawk (*Buteo swainsonii*).

Upland habitats include the Santa Cruz Mountains to the west and Diablo Range to the east. The Santa Cruz Mountains separate the valley from the Pacific Ocean to the west and rise to an elevation of approximately 1,154 meters (3,786 feet) at Loma Prieta Peak. Other prominent peaks in the range include Mount Umunhum at 1,063 meters (3,486 feet) and Bielawski at 985 meters (3,231 feet). These mountains form a rain-shadow effect for regions to the east, diverting the moisture of eastward-moving Pacific storms. Consequently, the floral communities, especially those on west-facing slopes, contain mesic-adapted trees, shrubs, and other plants that are able to tolerate cooler and wetter conditions. Coast redwood (*Sequoia sempervirens*) and Douglas-fir (*Pseudotsuga menziesii*) dominate the overstory, but coast live oak (*Quercus agrifolia*), Pacific madrone (*Arbutus menziesii*), and big leaf maple (*Acer macrophyllum*) also occur. At lower elevations, chaparral communities are dominant, with manzanita, California scrub oak, and chamise the predominant taxa. The mountains are a region of high biological diversity and include a host of animals including black-tailed deer (*Odocoileus hemionus*), raccoon (*Procyon lotor*), mountain lion (*Puma concolor*), coyote (*Canis latrans*), skunk (*Mephitis mephitis*), and Western gray squirrel (*Sciurus griseus*). Occasionally, black bears (*Ursus americanus*) are sighted, though they are typically rare.

The Diablo Range extends from the Carquinez Strait in the north to Orchard Peak in the south, near Cholame. The range is mostly rolling grassland, plateaus, and canyons, punctuated by sudden peaks. Most of these range in elevation around 910 meters (3,000 feet), though the highest peak, Mount San Benito, rises to a height of 1,605 meters (5,267 feet). The dominant floral community is California oak woodland, with coast live oak and blue oak (*Quercus douglasii*) the most prevalent. California buckeye (*Aesculus californica*), black oak (*Quercus kelloggii*), and Coulter pine (*Pinus coulteri*) are also found in the range. Chaparral communities, also prevalent in this range, provide habitat for bobcat (*Lynx rufus*) and gray fox (*Urocyon cinereoargenteus*), as well as numerous rodents. Raptors, such as red-tailed hawk (*Buteo jamaicensis*) and golden eagle (*Aquila chrysaetos*), are found in the range. Pronghorn antelope (*Antilocapra americana*) and grizzly bear (*Ursus arctos*) were once abundant in this range, along with Tule elk, but have now been extirpated from the region.

Much of the Santa Clara Valley, especially the relatively flat, level ground, is composed of oak-grassland savanna. This community, as its name implies, contains groves of widely spaced, tall valley oak (*Quercus lobata*), which is the largest oak tree in California. This species can attain heights of 30 meters or more. Its bark is hard and thick and its leaves exhibit a characteristic lobed shape. Other oak species include blue oak and coast live oak. The earliest Spanish explorers called the Santa Clara Valley *Llano de los Robles*, or "valley of the oaks" on account of the numerous communities of this tree. The understory is composed of bunch grasses, forbs, and shrubs. Oaks provide food, nesting habitat, and/or shelter for a variety of birds, including acorn woodpecker (*Melanerpes formicivorus*), western scrub jay (*Aphelocoma californica*), and yellow-billed magpie (*Pica nuttalli*), among other taxa. Deer, bobcats, coyotes, and rabbits (both cottontail rabbit [*Sylvilagus nuttallii*] and brush rabbit [*Sylvilagus bachmanii*]) are plentiful. Like the grassland prairie, the region's native inhabitants periodically burned this habitat in order to facilitate the growth of new grasses and shrubs.

A number of riparian corridors, sometimes called riparian woodlands, are found throughout the Santa Clara Valley. These are especially productive habitats (Schoenherr 1992:153), and home to a wide variety of plants and animals. Two taxa of plants especially common to riparian woodlands in California are willows and poplars (*Populus* spp.). There are two main willow species in Santa Clara lowland habitats; these are yellow willow (*Salix lasiandra*) and arroyo willow (*Salix lasiolepis*). The Fremont cottonwood (*Populus fremontii*) also commonly occurs in this habitat. Mammals frequently encountered in riparian settings are the same that typically inhabit the oak woodland savanna, such as deer, rabbits, hares, coyotes, and rodents; however, a number of additional creatures that were important resources for aboriginal Californians are found in riparian settings. These include Pacific pond turtles (*Clemmys marmorata*), brackish water crabs (*Rhithropanopeus harrisi*), fresh water clams and mussels (*Anodonta* spp. and *Margaritifera margaritifera*), and, during the spawning season, numerous anadromous fishes, such as steelhead (*Oncorhynchos mykiss*). However, birds are the most conspicuous animals of riparian woodlands (Schoenherr 1992:163), and include a whole host of different species, including flycatchers, vireos, goldfinches, warblers, and sparrows, among numerous others.

PRECOLONIAL CONTEXT

CHRONOLOGY

Precolonial history of the southern San Francisco Bay area is complex due to the dramatic increase in human populations from middle to late Holocene times (Milliken et al. 2007). Cultural chronology is quite variable spatially but is generally framed within a tripartite sequence that is commonly used in central California—Early, Middle, and Late (Hylkema 2002; Milliken et al. 2007). These temporal periods are preceded by early to middle Holocene occupation, often characterized as the Millingstone Period (Hylkema 2002; Milliken et al. 2007).

The Millingstone Period (9000–5500 years BP) is characterized by small groups who travelled widely and practiced broad spectrum foraging of easily acquired plant and animal resources. Artifacts common to this time period are handstones and millingstones. Flaked stone implements, such as projectile points, are much less common than grinding and battering tools (Fitzgerald 2000). Common foods are thought to have included a variety of small seeds, shellfish, and small mammals.

The Early Period ranges from approximately 5500–2500 BP and encompasses an era where people are thought to still have practiced wide-ranging residential mobility but placed a greater emphasis on hunting larger game. Large pinnipeds, such as northern fur seal, are common to coastal archaeological sites during this time. Several styles of large projectile points correspond to this general time frame, which also marks the initial use of mortar and pestle technology.

The Middle Period dates from 2500–1000 BP and appears to represent a time when people were somewhat more residentially stable and practiced more logistical (short-term) mobility (Milliken et al. 2007:106). By this time, people went on extended resource acquisition forays for the purpose of bringing subsistence or trade items back to residential base camps. Large, terrestrial mammals were hunted more often during this time and grinding implements become more common (Milliken et al. 2007:107).

The Late Period begins at 1000 BP and extends to ca. 1550 BP (Hylkema 2002:33), or perhaps more recently. The Late Period is characterized by increased sociopolitical complexity and settlement centralization. Large village sites in the northern Santa Clara Valley are often found in the valley center along perennial streams (Bergthold 1982; Milliken et al. 2007). There is continued prevalence of mortar and pestle technology, thought to signify a greater reliance on acorn than in earlier times. Other labor-intensive foods were also used with greater frequency during this latest time period (Hylkema 2002). For example, sea otter and harbor seal were exploited more heavily. These animals are thought to be more labor-intensive to capture compared to other pinnipeds and large mammals, which were more commonly hunted in earlier time. Bow and arrow technology is also believed to have been adopted by aboriginal hunters during this latest precolonial interval (Milliken et al. 2007:117).

LOCAL PRECOLONIAL CONTEXT

Archaeological studies indicate that the Santa Clara Valley was occupied as early as 10,000 years ago. A research design proposed by King and Hickman (1973) for the region has identified broad periods of occupation between 7000 and 400 BP.

The earliest period, the Millingstone Horizon (7000–4000 BP), was thought to represent the first aboriginal groups in the Valley. King and Hickman proposed that these populations were the result of overpopulation in the coastal areas of southern California. As population pressures increased in these regions, pioneering groups are thought to have moved into previously unoccupied territories. Archaeological evidence for this period is scant; occupation components reveal low artifact counts, few radiocarbon dates, and poor depositional integrity (Hildebrandt and Mikkelsen 1993:34). Tool assemblages from a cluster of sites located near Coyote Creek just north of Morgan Hill (CA-SCL-178, -237, and -167) reveal a preponderance of small, informal flake tools, handstones and milling slabs, and an absence of beads and ornaments (Hildebrandt 1983). Radiocarbon assays from one site (CA-SCL-178) range from 10,000 to 8500 BP, indicating earlier occupation of the Valley than proposed by King and Hickman.

The next period identified by King and Hickman is the Middle Horizon (4000–1500 BP). Aboriginal settlements during this interval are thought be more permanent than during the Millingstone Horizon. They also propose that population densities increased during this time stimulating dependence on a stored food economy with an emphasis on acorn processing. Continued population growth is thought to have resulted in tremendous economic stress and an increase in

warfare. King and Hickman hypothesize that native populations attempted to alleviate this stress in a number of ways including population control and adjustments in settlement strategy.

The last period of occupation, the Protohistoric Period (1500–400 BP), is characterized by a return to a settlement system marked by highly dispersed populations and an increase in temporary habitation sites.

Archaeological evidence indicates that acorn processing did indeed grow in importance sometime between 4000 and 2750 BP. This is seen in an increase in the number of mortars and pestles recovered from sites dating to this time (Hildebrandt and Mikkelsen 1993:34). Evidence does not, however, appear to substantiate King and Hickman's claim for permanent settlements during the Middle Horizon. In fact, artifact collections dating to this time are very similar to the previous interval. Flake tools continue to dominate assemblages, and there is continued absence of bone tools, beads, and ornaments. Further, investigations of components dating between 2700 and 1450 BP actually indicate a decline in artifact density and assemblage diversity at a time when King and Hickman predict a peak in large, permanent settlements. Finally, King and Hickman's depiction of precontact aboriginal groups as highly dispersed mobile populations is not at all supported by ethnographic accounts at the time of contact with the first Europeans.

ETHNOGRAPHIC CONTEXT

By the time the Spanish began extensively exploring Alta California in the 18th century, a substantial Native American population occupied the Santa Clara Valley. This population, originally called Costanoan but now known as the Ohlone, occupied a large area in north-central California, from the San Francisco Peninsula and the East Bay, south to the Santa Clara Valley down to Monterey, and inland south to San Juan Bautista. This area encompassed a mosaic of different habitat types, including grasslands, woodlands, chaparral, redwood forests, coastal shrub, estuaries, and tidal marshes. Miwok tribelets were to the north and northeast of their Ohlone neighbors. Yokuts tribelets were to the east. Immediate neighbors to the south of the Ohlone included the Hokan-speaking Esselen and Salinan.

OHLONE

The Ohlone spoke a Costanoan language, which belongs to the Utian family of the larger Penutian language stock. Speakers of Penutian inhabited north central California and included tribal groups such as the Maidu, Wintu, Miwok, and Yokuts. Anthropologists have traditionally divided the Costanoan language into eight different dialects, which Levy (1978) characterized as "different from one another as Spanish is to French." According to Levy (1978:485), the Ohlone inhabitants of the Santa Clara Valley spoke a Costanoan dialect known as "Tamyen" or "Tamien."

The original name for the Ohlone, Costanoan, is a derivation of the Spanish term "costeños" or "costaños," which means "coast dwellers." In the early part of the 20th century, many anthropologists used the term "Costanoan" in reference to native peoples who once occupied the Bay Area. In 1902, C. Hart Merriam (in Heizer 1967) referred to Bay Area languages as "Olhonean," a term derived from the name of a tribelet located on the coast between San Francisco and Santa Cruz that was spelled variously as "Alchone," "Olchone," "Oljon," or "Olhon" (Heizer 1974; Levy 1978). More recently, modern descendants of Costanoan peoples have identified themselves as "Ohlone"

(Bean 1994), a derivation of Olhone, and that is the term that will be used here, except in reference to the language family.

Researchers have hypothesized from linguistic evidence that the Ohlone were late entrants into the area. Anthropologists argue that the ancestors of the Ohlone originally migrated into the San Francisco and Monterey Bay areas from the San Joaquin-Sacramento River system sometime around AD 500 (linguistic and archaeological evidence summarized by Levy 1978:486; Bean 1994:xxi). This migration represented movement of several Penutian-speaking peoples westward into areas formerly inhabited by Hokan-speakers. Other researchers have posited a much earlier time for the movement of Penutian-speakers into the area. For example, Whistler (1977) suggests that Penutian-speakers (e.g., Miwok and Ohlone) settled in the area around 3000 BC. Whenever the migration actually occurred, and indeed if such a migration took place, the ancestors of the ethnohistoric Ohlone were fully ensconced in the area by the Late Holocene.

Estimates of total Ohlone population during the time of European contact are varied. Kroeber (1925) suggested an estimate of 7,000 people, while Cook (1943) posited a total of about 11,000 at the beginning of the Mission Period, and Heizer (1974) and Levy (1978) estimated about 10,000. Based on Mission records, Milliken (1995:25) estimated a population density of about 2.5 people per square mile. In the San Francisco peninsula area, Milliken (1995:19) claimed that the earliest explorers usually encountered native villages every "three to five miles," and noted that their descriptions suggested village populations numbering from 60 to 90 persons. Elsewhere in Ohlone territory, estimates of village sizes range from 200 to 400 people. Milliken (1995:19) reported that the largest village, near Carquinez Strait, had a population of some 400 people. Other large villages were located on San Francisquito Creek (250 inhabitants), and on the coast at Point Año Nuevo (no estimate given).

According to Milliken (1995:256), Tamien speakers occupied much of what today is the flat Santa Clara Valley, from the Guadalupe River westward to Stevens Creek, near the present-day city of Cupertino. From north to south, this region encompassed the area from present-day Agnews down to modern downtown San Jose. Within a four-mile radius of the Santa Clara Mission site there were three large villages of over 120 inhabitants and two very small hamlets (Milliken 1995:66). Although the native names for these three villages have been lost, the missionaries gave them Spanish designations. The village of San Francisco Solano was located near the mouth of the Guadalupe River, while the village of Santa Ysabel was situated farther east, along the lower Coyote River. The third large village, called San Jose Cupertino, was three miles southwest of the Santa Clara Mission site. One of the small hamlets was located very near the site of the original Santa Clara church, while the second hamlet was approximately one mile upstream on the Guadalupe River.

Ethnographers (Bean 1994; Broadbent 1972; Kroeber 1925; Levy 1978; Milliken 1995) have been able to piece together a generalized picture of traditional Ohlone culture using oral history, archaeological investigations, and 18th century Spanish letters, diaries, and accounts. The Ohlone lived in approximately 50 autonomous villages that Kroeber called tribelets (Levy 1978). The tribelet defined the basic unit of Ohlone political organization. Tribelet chiefs might be either men or women. The office was inherited patrilineally, usually passing from father to son (Levy 1978:487). Each tribelet occupied a permanent primary habitation site, in addition to many smaller resource procurement camps. Each village within the tribelet was occupied for several months each year, with groups of families moving between different locations as food resources became seasonally available. Groups of families coalesced during winter, in part to make use of shared food stores but

also to engage in annual ceremonial activities. Many Spanish diaries also note that warfare was common between Ohlone groups, normally consisting of small-scale battles resulting from arguments over land rights, or in defense of the honor of some individual or family in a tribelet (Broadbent 1972; Margolin 1978; Milliken 1995).

Early Spanish chroniclers, like Father Juan Crespi, describe the Ohlone as "graceful and well-formed" (Heizer 1974:15). Diaries and ethnographic reports indicate that Ohlone men and boys generally went naked, but covered themselves in mud during chill mornings. They wore necklaces of *Olivella* shells and abalone pendants, and many had pierced ears and nasal septums, which they adorned with various ornaments. Unlike most native Californians, some Ohlone men did not pluck out their beards but allowed the hair to grow on their chins (Levy 1978:493; Milliken 1995:18). Men with long hair either braided it or tied it on top of their head with a buckskin thong. Women wore skirts of braided plant fiber in the front and sea otter or deerskin rear aprons. Women commonly sported tattooed chins, which consisted of lines and rows of dots. Both sexes wore robes in cold weather. These consisted of woven animal skins such as rabbit or sea otter fur. During ritual occasions, ceremonial dances, and warfare, men frequently applied various plant dyes to their body and adorned themselves with feathers and other finery.

The Ohlone were hunters and gatherers who supported themselves largely or entirely by the exploitation of natural plants and animals. They followed a seasonal round of resource availability. Life varied with the seasons, requiring dispersed family groups to move over the tribelet territory during seasons of abundance when a heavy labor effort was required; resources were stored for the lean winter and early spring when the tribelet tended to congregate together (Levy 1978).

Although the Ohlone consumed a variety of different foods, most references to ethnographic subsistence practices indicate that they relied on the acorn as a staple food (Beechey 1968; Bickel 1981; Broadbent 1972; King 1974; Milliken 1995:17). The preferred acorns came from Tanbark oak (*Lithocarpus densiflorus*), valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), and California black oak (*Quercus kelloggii*). Readying the acorns for consumption was an involved process. Acorns were usually collected in fall and ground into flour using stone pestles in either portable stone or bedrock mortars. The flour was leached in freshwater streams to remove the tannic acid. Acorn meal was consumed during winter as mush or cakes (Broadbent 1972:61). In addition to acorns, other important plant resources were Buckeye (the nuts of which were leached and made into a mush), and the seeds of dock, gray pine, and tarweed, all of which were roasted in baskets with hot coals before eating. Berries gathered by the Ohlone included gooseberries, blackberries, madrone, and wild grapes. Roots were also gathered; these included wild onion, cattail, and wild carrot. For coastal groups, kelp was a common food, which was sun-dried and roasted (Broadbent 1972).

Shell mounds attest to the importance of shellfish in the Ohlone diet, particularly for coastal populations. Indeed, there are many references to shellfish collection and consumption in the diaries of Spanish explorers, indicating that this resource was of significance to Contact-Period diets. Shellfish resources of primary importance included mussels (*Mytilus* spp.), abalone, (*Haliotis* spp.), and various clam, oyster, and scallop species. Mussels, clams, and other species were collected year-round but primarily during winter, being taken by hand or with prying bars or sticks. Clams were dug from beds within tidal flats, and a variety of fish (salmon, sturgeon, steelhead, and numerous other marine species native to California waters) were captured with spears or nets from riverine or coastal habitats (Broadbent 1972; Levy 1978). In addition, sea lions, seals, and sea otters were taken,

by clubbing them on the beaches (Baumhoff 1963:17). The meat of beached whales was also occasionally consumed after being roasted in earth ovens. Some Ohlone groups also used small "balsas," or rafts made from Tule reeds, not only to exploit marine fishes but also to obtain lakeside waterfowl, such as ducks and geese.

Various land animals were also important to Ohlone subsistence. Large terrestrial game mammals such as deer, pronghorn, and tule elk (Baumhoff 1963:17) were key sources of protein. In order to facilitate the hunting of deer, the Ohlone, like many other Californian groups, periodically practiced controlled burning of chaparral-bearing grasslands and woodlands. These fires cleared lands of dense vegetation cover and increased the productivity of grasses and stimulated re-growth of tender shoots that attracted browsing deer. Rabbits were also taken. These were hunted in large, communal drives and snared in nets, where they were summarily clubbed to death. Ohlone hunted other small game as well, such as squirrel, ground squirrel, woodrat, and even mouse and mole (Levy 1978:491). Insects such as caterpillars and grasshoppers were also collected and eaten.

Little is known about Ohlone mythology and cosmology, although ethnographers agree that their beliefs were similar to their Yokuts and Salinan neighbors to the east and south (Kroeber 1925:470-473; Levy 1978:489-490). The sun was one of several principal deities; prayers were directed to the sun through offerings of smoke, seeds, tobacco, and shell beads (Broadbent 1972; Levy 1978). Other prominent deities included Coyote, who was reputed to have taught the Ohlone the arts of subsistence. Shamans held prominent places in Ohlone culture. They wielded magical powers and maintained contact with the spirit realm. They were also healers who cured disease and could diagnose ailments through ritual singing and dancing. Shamans could also control the weather and assure an abundant crop of acorns or a successful hunt (Levy 1978:489).

According to ethnographers (Baumhoff 1980; Kroeber 1925; Loeb 1933; Milliken 1995), it is likely that Ohlone peoples practiced elements of the Kuksu religious cult. This cult was prominent among a number of indigenous northern and central California groups during the period just before and during European contact (e.g., Pomo, Patwin, Maidu, and Miwok). The Kuksu religion involved ceremonial dances, ritual, and specific regalia, such as elaborate headgear made of tule and decorated with sticks to which feathers were attached. Although the purpose of the cult has been debated and speculated upon for decades, it appears that it might have been practiced for the purpose of ensuring productive hunting, fertility, bountiful harvests, good weather, and good health.

HISTORIC CONTEXT

SPANISH MISSION PERIOD (1769–1834)

The Ohlone first came into contact with Europeans in 1602–03 during the voyage of Sebastian Vizcaino, who briefly described the Ohlone inhabitants of Monterey (known as the Rumsen). This contact was brief and it was not until nearly 170 years later that the Spanish again made contact with the Ohlone. In 1769, Gaspar de Portolá, traveling north by land along the Pacific Ocean from San Diego in order to establish a settlement in Monterey, was the first European to sight San Francisco Bay. As he journeyed through Ohlone territory, Portolá gave brief descriptions of the Indians he encountered. Shortly thereafter, in 1770, Lieutenant Pedro Fages led a small expedition inland from Monterey. One of the expedition's chroniclers, Juan Crespí, made extensive notes on

the aboriginal inhabitants of the area. As they traversed the Santa Clara Valley, Crespí made the following remarks:

> There is a positive maze of very large freshwater lakes with a great deal of swamp and bulrush patches in this hollow, and I know not how many large running streams, and two or three very large heathen villages. Our captain told me that when they explored here last year, there was a village close to the lakes, some of which we saw from afar off, and they had several Tule-rush floats with oars, with which they fished in the lakes. We saw four heathens running far off at a trot, obviously going to give warning to the other village that was said to be farther up along the route we were following. (Crespí [1772] in Brown 1994:9)

In 1777, the first Mission in Santa Clara was established in what would later be known as the Santa Clara Valley, though at the time was called *Llano de Los Robles* (or "Plain of the Oaks") by the Spanish (Garcia 1997:5). The valley formed a broad, grassy plain that was dotted with oaks and well-watered by creeks and streams. Numerous Native villages also occupied the region, an important reason the Spanish decided to establish a Mission in the area. The reason for colonization in California was to protect the Spanish-owned, northern Mexico silver mines and other New World investments from Russians encroaching from the north (Archibald 1978:xi; Webb 1982[1952]:3). Establishing missions, presidios, and pueblos was seen as an inexpensive way of protecting northern Mexico, while simultaneously attempting to spread Spanish culture and Christian faith. Interactions between Franciscan priests, diverse soldiers of the Crown, and local and non-local indigenous peoples took place under this economic and political regime for nearly sixty years, and under Spanish and later Mexican governments.

The Indigenous Population

Movement of indigenous peoples to the Spanish Missions was one response to the many ways the Spanish and Mexican governments, and their supporters, disrupted local communities. After baptism, indigenous peoples found themselves forging a new community with others who spoke different Indian languages, claimed various tribal territories, and affiliated themselves with dissimilar lineage lines, all the while, interacting with a colonial presence that sought to transform them into "productive citizens" of the colony (Senkewicz 2002:23).

The Spanish policy of *reducción* affected local communities. M. Hylkema (1995:28) addresses the intent of the Missionaries for bringing Native Americans into the Mission system:

> Spain's goal to colonize California depended entirely on the ability of the missionary priests to reorganize the Native populations into an agrarian work force. At the time of the Spanish explorations the indigenous people within the Ohlonean cultural sphere were organized into over fifty political units, or tribelets, with variations of language, custom and appearance. ...The large populations and their complexity of cultures were generally of little interest to the Spaniards who were intent upon breaking down traditional Indian ways to facilitate their reorganization (redución). Europeans of the 18th century cultivated a perception of moral superiority over non-Christian people, which of course served to justify the management of other cultures to attain their goals….

Franciscan priests reproduced the common Spanish colonial practice of moving Native peoples into mission centers, strategically disassociating them from their homelands and the mythical landscapes, graves of their ancestors, and the named rocks and landmarks contained therein

(Lightfoot 2005:65; Margolin 1989:33). The historical record tells us this practice created mission populations composed of peoples from variable ethnolinguistic groups and very distant polities. During several population spikes, more than 1,400 Native Americans lived at Mission Santa Clara. Mission Santa Clara's historic documents indicate a steady influx of Ohlone, Northern Valley Yokuts, and Miwok populations from diverse villages within those ethnolinguistic territories.

Thus the Indian village at Mission Santa Clara is best viewed as a growing and changing amalgam of indigenous peoples drawn at first from the San Francisco Bay region and later as far away as the San Joaquin Valley and the foothills of the Sierra Nevada. The population represented dozens of formerly autonomous tribelets of no more than a few hundred people, some closely related culturally and linguistically, others from vastly different traditions. The community or perhaps communities within the village were adjusting to both the Spanish Colonial regime and to day-to-day relationships with people with whom they had little or no contact prior to the advent of the Mission.

MEXICAN PERIOD (1821–1848)

After the Mexican War of Independence ended in 1822, the secularization of Mission lands began. This involved the confiscation of Mission lands and properties by Mexican civil authorities, and the transfer of these to Mexican citizens. Many Mexican Californians strongly supported the transfer of "landed wealth" from the church to the citizens (Senkewicz 2002:24). The Mexican government carved out and granted large ranches to Mexican citizens, who used the land to graze cattle. These ranchos and herds allowed the Californios to engage in trade with ships visiting the coast, exchanging hides and tallow for manufactured goods. Many ranchos were established around Mission Santa Clara, including Rancho Pastoria de Las Borregas, Rancho Quito, Rancho de los Coches, and Rancho Posolmi (Yñigo). Most of the former 80,000 acres of Mission Santa Clara lands were divided among loyal Mexican subjects (Hall 1871:57-81). For example, Rancho Pastoria de Las Borregas was granted to Francisco Estrada in 1842.

The neophyte population generally scattered away from the mission centers after secularization (1834). However, some mission Indians may have chosen to continue living at Mission Santa Clara. For example, in the diary of a Santa Clara Student, John Brown Jr., the author describes an "old Indian [who] now has a cane, his exact age cannot be determined; some say 120, others only 100" (Giacomini and McKevitt 2000). The few neophytes who chose to remain in their ancestral territory did not have legal ownership of their homelands, although some did petition the Mexican government for land grants. Some mission neophytes were successful in their petition. For example, Luis Yñigo, an Ohlone Indian from the region the priests called "San Bernardino," was granted 800 acres, the Posolmi Rancho (CL1501) (Milliken 2009). In addition, Rancho Ulistac was granted to two California Indians, Marcello (CL1360) and Cristobal, in 1845 (Milliken 2009). Some indigenous peoples were given jobs as manual laborers or domestic servants on these Mexican Ranchos, which often were later purchased by American settlers and became American cattle ranches. By 1850, the Native American population in the Santa Clara Valley was estimated at approximately 1,000, divided "between rancherias on the Judson place, the Marvin Murphy ranch [formerly Rancho Pastoria de las Borregas], and the Inigo reservation" (James and McMurray 1933). Others California indigenous peoples lived near one of the pueblos, where work was easier to find as foreign settlers began to pour into the region. Others still migrated to the interior hoping to join kin already there or establish new sociopolitical connections.

After the secularization of the Missions (1834), the many Mexican Californio and recent Mexican immigrant residents who were not granted rancho land often clustered near the former missions, reusing former mission adobe structures and constructing new adobes as well. Squatting in abandoned mission buildings was widely practiced, especially in northern California (Hughes 1975). These squatters may have taken up occupations as farmers, merchants, craftsmen, or campistas (individuals who used their property to grow crops and raise livestock) (Gonzalez 2009).

AMERICAN PERIOD (1841–PRESENT)

The various cities that make up what is present-day Santa Clara County all stemmed from the establishment of Mission Santa Clara de Asis in 1777. The development of these towns can be attributed to the influx of immigrants and settlers in this area during the American Period. When Americans began moving into the Santa Clara area, around 1841, *Californios* here "experienced a decline in economic status, political power, and social influence" (Hughes 1975). This was a harbinger of events to come, as small adobe buildings to house individual families were constructed or adapted from former Mission buildings. Following trends seen elsewhere in North America, an American system of land law, which imposed artificial but ordered grids over a landscape, was later established. Consequently, legal contests led to most *Californios* loosing most of their land to Americans (Senkewicz 2002). For example, in 1842, a portion of the Mission Santa Clara sheep pasturage was granted to Francisco and Inez Estrada who used the land for their Rancho Pastoria de Los Borregas. Less than a decade later, half of this Rancho (4,800 acres) was purchased by Martin Murphy Jr., whose family was among the earliest Anglo settlers in the Santa Clara Valley, and this purchased land would eventually become the City of Sunnyvale. Murphy's contributions to the development of Sunnyvale were significant due to the impacts on the subsequent fruit and canning industries.

In 1846, members of the first large overland immigration reached the Santa Clara Valley. The "Great Migration" of 1846 consisted of entire families, a completely different type of American immigrant than had arrived before. Many of the immigrant families who sought to relocate to California did so based on descriptions in eastern newspapers that encouraged Americans to come and settle the area. The families were informed by Fremont and the *Californios* that they could shelter during the rainy season at a number of mostly unoccupied Missions, including Mission Santa Clara, furthering the appeal to settle in the Santa Clara Valley (City of Sunnyvale 2012; Garcia 2000-2001). Following patterns of squatting witnessed during the Mexican Period, a group of 175 settlers from Sutter's Fort temporarily inhabited some of the abandoned Mission Santa Clara buildings in 1846 (Garcia 2002:96).

Among the immigrant families that had arrived in the Great Migration was the Murphy family, who first settled in Sacramento and later made their way to Santa Clara. In contrast to the immigrant families that occupied the Missions by squatting, the Murphy family was privileged enough to have purchased a portion of former Mission Santa Clara sheep pasturage that through land grants and land disputes had come into the possession of Mariano Castro, San Jose's former Alcalde (City of Sunnyvale 2012). It was this purchase in 1850 that paved the way for the development of the City of Sunnyvale.

Gold Rush Immigration and Land Disputes

On January 24, 1848, nine days prior to the signing of the Treaty of Guadalupe Hidalgo, James Marshall found gold at Coloma. The discovery of gold and the subsequent rush to the gold fields resulted in an exodus of anyone in California who could leave home. The Santa Clara Valley was no exception. Even Father Real joined the many gold seekers (Garcia 1997:37). The Santa Clara/San José area was nearly depopulated. By the end of the year, some returned and found the price of provisions had risen dramatically because crops had not been harvested. In addition to those returning from the gold fields, many newcomers also arrived in the area, further expanding the population.

While immigrants entering the area prior to 1848 had caused problems by squatting on Mission and Rancho lands, these were minor compared to the impacts caused by the onslaught of people entering the area following the discovery of gold. Many newcomers settled on the land to make their fortunes, finding that agriculture was more lucrative than mining. With the influx of people now greater than the outflow, the area looked like a half-military and half-civil settlement with numerous white tents dotting the open areas (Hall 1871:197). As fresh produce became valuable for residents and miners, Santa Clara's Mission pear orchard became of major economic importance (McKevitt 1979:33). Typical of the litigation over land ownership and/or possession in the area, the ensuing fight over possession and ownership of the pear orchard would not be settled until 1855.

While disputes over land ownership were ongoing, the use of land itself was undergoing change. Before 1846, little American style agriculture existed in the Santa Clara area. The agricultural products needed for sustenance were provided by crops raised at the Mission and individual family plots. Following the arrival of the early American immigrants, wheat farming had quickly become the dominant crop. By the early 1850s, farmers had begun planting small orchards and vineyards; some experimenting with these crops on their grain farms. The productivity of the Mission's orchards had impressed the many agricultural entrepreneurs who settled here after the Gold Rush. Their interest in Santa Clara Valley land inspired this area's earliest development and cultivation of fruit products.

The Murphy family had a large impact on the early development of orchards specific to the town of Sunnyvale, in fact Murphy is credited with having planted some of the first orchards in the Santa Clara Valley and his early use of farm machinery was also noted in historical documents (City of Sunnyvale 2012). Furthermore, the land that Murphy attained in 1850 became more than just the City of Sunnyvale. Murphy's Bayview Farm was integral for some of the social and political developments of Sunnyvale, and he gave the Southern Pacific Railroad permission to pass through his land which contributed to the growing development and industries in the broader region (City of Sunnyvale 2012).

Incorporation

The development of the San Francisco and San Jose Railroad passing through Murphy's Bayview Farm in 1864 led to the establishment of Murphy Station, which would become Sunnyvale, as well as the later established Lawrence Station in Santa Clara (City of Sunnyvale 2012). This became important for the fruit agriculture and canning industries that flourished in the following years and the railroad was also a key contribution to the future expansion of Sunnyvale. Upon his death in 1884, Murphy's land was divided and became smaller farms that were self-sufficient for a while, but were eventually impacted by the nationwide depression in the 1890s. The portion of Murphy's land

that was Bayview Farm ended up in the possession of his son Patrick Murphy, who leased 200 acres to Antone Vargas, an immigrant Portuguese farmer. These 200 acres were subsequently purchased by Walter E. Crossman; it was Crossman who first planned the town of Sunnyvale with the potential for future growth in mind. Crossman is also credited with having come up with the name Sunnyvale ("City of Destiny") which was adopted by the community in 1901. Sunnyvale began rapidly developing in the years that followed. However, broader events contributed to the impacts on economic growth in Sunnyvale in the early 1900s.

The San Francisco earthquake in 1906 was one of these events. After the San Francisco earthquake, a nationwide depression that began in 1907 slowed down some of the progress that Sunnyvale had been making. Nevertheless, the city boundaries were able to continue to expand and by 1912 Sunnyvale's population had reached 1,200. In 1912, the economic growth in Sunnyvale continued to be agricultural based, and this remained the case until the 1930s, though this is not to say that significant industrial economic growth had not occurred. Other significant economic impacts during the first few decades of the 1900s in this area included World War I, which resulted in more industrial development, settlers, and military presence in the Santa Clara region as well as in Sunnyvale specifically.

The Expansion of the Fruit Industry

By 1900, the fruit industry business had started expanding. During the last quarter of the 19th century, agriculture had become the primary industry in the Santa Clara Valley. Grain had given way to orchards, vast seed farms, and vineyards. James and Eloise Dawson established the first cannery in Santa Clara County in 1871. "Fruit orcharding and the canning industry grew up virtually side by side, establishing a symbiotic relationship which lasted until the next century when orchards and fruit production were eliminated by residential and industrial land development (City of Sunnyvale 2012). In 1890, Charles Morse leased 1,400 acres on what used to be Murphy ranch for seed-growing, and in 1898 Morse Avenue was established on this property.

Military impacts and the strength of the fruit agriculture industries in Sunnyvale allowed for the city and most of its settlers to thrive during times when many other communities were negatively impacted. While other communities experienced hardships during the 1930s depression, Sunnyvale's canning and fruit industry, which had grown as industries benefitting from one another, were booming. The subsequent construction of what is now Moffett Field paved the way for more military related economic growth and by the time World War II happened, Sunnyvale was in a position to accommodate the influx of business and building that resulted from this. The war shifted the main industry in Sunnyvale from agriculture to industrial development and the population in Sunnyvale continued to grow.

Transportation

Whether for moving people or goods, the development of early adequate transportation systems played a major role in the growth of the Santa Clara Valley. By the mid-1860s, the main road to San Francisco, which ran up The Alameda, had considerable traffic with stagecoaches and horseback riders traveling between San Francisco and San Jose. Prior to 1864, horse-drawn wagons transported fruit produce from the orchards along this roadway on the way to the port of Alviso for shipment to San Francisco and Oakland.

While it had become easier and quicker for people to travel, the high costs and inefficiency of the Alviso shipping network affected industrial growth (Garcia 1997:67). Construction of a railroad had been discussed off and on during the 1850s. On August 18, 1860, the San Francisco and San Jose Railroad (S.F. & S.J. R.R. Co) was incorporated (Harrison 1981:5).

In September 1863, Charles McLaughlin, who owned the land east of the Santa Clara Mission, deeded the right-of-way across his property for the construction of the S.F. & S.J. R.R. Co. The railroad depot for Santa Clara was constructed on the east side of the tracks. On January 17, 1864, regular service between San Jose and San Francisco started, with two trains running each way on Sundays and one round-trip on weekdays. Within a month, the railroad had two trains each way daily. Additional service was offered on the freight train, which had passenger cars attached to the rear. The journey took three and one-half hours with a fare of only $2.50 (Garcia 1994:28) and freight charge of $2.00 (Rood 1865).

In the mid-1880s, the old San Jose and Santa Clara trolley was replaced by a new electric cable system. In March 1888, the first cars were run on the S.J. & S.C. RR's new electrified line. The new electrified line proved to be less than satisfactory as the underground electrical system shorted out time and time again. By 1890, the line was converted to an overhead electrical system. In 1892, when the Alum Rock line was incorporated into the system, a picnic-bound Santa Clara group could board a San Jose and Santa Clara trolley car at Jefferson and Franklin Streets (the turntable was located on Franklin and Lincoln Streets) and ride electric all the way to the Alum Rock Park terminal.

During the first decades of the 20th century the trolley system continued to expand. Through several incorporations and consolidation, it grew and prospered until by 1926, there was a total of 126.71 miles of electric line in Santa Clara County. However, by the mid-1930s, it had become obvious that the trolley system was facing serious issues. As Malcolm R. Gaddis (Gaddis 1992:4) described it in a presentation he made in June 1992 to the American Public Transit Association in Los Angeles:

> The San Jose Railroad was faced with declining ridership, competition from automobiles and the great depression. A number of steps were taken to try to keep the trolley line in operation. Birney cars were purchased, faster schedules were established, and older cars were converted for one-man operation. Some cars were sold and busses were purchased, much of the rail was badly worn and there were continuous arguments about street maintenance.

On April 10, 1938, the last clanging of the trolley bells was heard in the Santa Clara Valley. The rails on the trolley line were removed and covered with asphalt, and the trolley itself replaced by still newer technology, the gas-powered bus.

Immigration

European

The fruit and canning industries that thrived during Sunnyvale's developmental history were the products of a landscape that was dense with orchards. These developments cannot be recognized without shining light on the immigrants that contributed to the growth of these industries in the late 1800s. European immigrants created and maintained this landscape. In the 1890s, Italian and Portuguese immigrants were among the Europeans that settled in Sunnyvale and contributed their agricultural knowledge brought from their homelands in order to take up the work of tenant

farming; they also worked in canneries seasonally. Notable contributions to the landscape and canning industries by immigrants included Antone Vargas, who had purchased a portion of the Bay View land from Crossman, planting two redwood saplings that are now local historical landmarks as well as some apricot trees. During the same decade, Rudolph and Charlotta Muender, a German couple, settled in the area and purchased land. They contributed to the landscape by planting prunes, cherries, and peaches.

More and more Europeans were attracted to the region as agricultural production expanded and manufacturing enterprises grew during the first decade of the 20th century. For example, Italians came to the Santa Clara Valley from all regions of Italy, including Sicily, Calabria, Basilicata, Tuscany, and Piedmont. Beginning in the 1880s, the Eden of the World beckoned Italian immigrants as farmers, ranchers, orchardists, vegetable growers, and winemakers (Marrazzo 2007). Because so many Italians moved to the Santa Clara Valley, the local historian Marrazzo (2007) published an entire volume of photographs and stories that highlight their story.

Many other groups came into the Santa Clara region during development of the Late American Period. Settlers of Anglo (English) origin, both men and women, had a decided effect on the local community. Garcia et al. (2002) document many Anglo-American names that gained local recognition during the latter half of the 19th century. The stories of James Alexander Forbes, Dr. Henry Warburton, Dr. Arthur Wellesley, Mrs. Mary Judson Saxe, James Monroe Kenyon, Dr. Benjamin Franklin Headen, Mary Bennett, and William Fitts (who married into the locally prominent Pinedo family) are amongst those highlighted in the document. The Spanish and Portuguese immigrants in large part settled in other areas of the town where the earlier arrivals from Spain and Portugal were already established.

Chinese

Immigrants in the settled lands that would become Sunnyvale did not all have access to the same resources and due to racist colonial ventures, they did not all attain the same privileges that allowed some immigrants to thrive. Chinese and Japanese immigrants had very different experiences than that of European immigrants. California's Gold Rush period impacted the population, making Chinese immigrants the largest minority at the time in California, and this also resulted in Chinese immigrants dominating the labor force population and contributing massively to the development and growth in areas like Santa Clara County (Chang 1997:2).

Garcia et al. (2002:61) describes Santa Clara's Chinese immigrant population:

> A few Chinese had appeared in the Santa Clara area after the Gold Rush, such as Sing Kee, a cook, laundryman and weather prognosticator employed by Dr. Saxe in 1860. It wasn't until 1863–1864 that the first group of Chinese immigrants arrived, entering Santa Clara Valley as workers on the construction of the San Francisco and San Jose Railroad. While most early Chinese immigrants were employed by the railroad and as land clearers or domestics, many soon found work as farm laborers, working harder for less money than comparable Caucasian help. Despite hostility expressed towards them, the Chinese remained dominant in agricultural field work until the turn of the century…

The Chinese Exclusion Act in 1884 had stated that, "All Chinese laborers that came in after November 17, 1880 were to be deported [and that] all the Chinese that were in the U.S. before this date were [to be] registered and given certificates that had their names, age, occupation, physical

markings on their bodies and more" (Garcia n.d.:20-21, 56). This Act was very popular among the political and business interests. After its passage, Santa Clara's Chinese population came under attack, mostly over the use of Chinese laborers, leading to vigilante acts. Opposition to their presence grew over the following decade until in January 1903, the Commercial League, who was promoting the town as "Progressive Santa Clara...where health and plenty are the portion of her people," took steps to have them completely removed.

Chinese immigrants were viewed and treated as a source of cheap labor and were not given the right to own land. By 1900, Japanese immigrants had become the replacement for the dwindling Chinese populations. In contrast to European immigrants, Japanese immigrants were not arriving with families, but rather were mostly men who likely had left their families back in their homelands. Though they were also denied the resources that were given to European immigrants, they did not allow themselves to be subjugated as a source of labor, resulting in the formation of groups of resistance and solidarity that allowed them to become independent agriculturalists (City of Sunnyvale 2012).

Suburban Housing

The Late American Period was also marked by the subdivision of parcels and the construction of homes. Housing development in Sunnyvale grew substantially as a result of war impacts. World War I caused a large workforce influx to require accommodation, causing more homes to be built as the population grew. This growth continued during World War II with the onslaught of war production and military presence resulting in military housing tracts. Housing production increased overall during the war, and the landscape by the 1950s reflected a plethora of new permanent housing developments that military subdivisions had become the catalyst for. This time period began and shaped the suburban developments that continued in the 20th century. The housing subdivisions that came thereafter were due to Joseph Eichler, a prominent housing developer, who was responsible for the development of the housing tracts Sunnyvale Manor, Sunnymount Gardens, and Sunnyvale Manor Addition No.1. These three single family residential subdivisions built between 1948 and 1950 were part of the Early Eichler Developments, though he continued building small tracts of custom homes until the 1974 (City of Sunnyvale 2012).

HISTORY OF THE PROJECT AREA

The Project Site locations are associated with Rancho Quito and Rancho Pastoria de Los Borregas (Appendix A: Figures A-3 and A-4). Rancho Pastoria de Los Borregas is associated with Sunnyvale and Rancho Quito is associated more closely with the modern surrounding areas in Santa Clara County of Cupertino, Campbell, and Saratoga. Rancho Quito was granted to Jose Noriega and his father-in-law Jose Zenon Fernandez in 1842 by Mexican governor Juan Alvarado. In 1844, Noriego sold his portion of Rancho Quito to Jose Manuel Alviso, who then sold the Rancho to Jose Ramon Arguello in 1859. A Plat Map from 1864 indicates the Project Area is within the boundaries of what used to be the *Quito Rancho* (Appendix A: Figure A-4).

Plat Maps from 1876 and 1889 both depict the Project Area on plots of land under the care of W. Wilcox and A. Patterson; these appear to be in an area marked as belonging to the Milliken Family (Appendix A: Figures A-5 and A-6). A plat map from 1867 indicates the northwest portion of the property upon which the Project Area is located was once owned by W. Wilcox and the southeast portion of the Project Area was owned by J.W. Johnson (Appendix A: Figure A-5). The 1889 plat map

indicates that W. Wilcox continued to own portions of the Project Area, but new property owners at this time included Mrs. R.S. Burns and A.J. Landrum (Appendix A: Figure A-6).

Aerial photography from 1939 and 1956 shows the Project Area on an orchard (Appendix A: Figures A-7 and A-8) The neighboring plots have similar cultivation areas suggesting farming activities were predominant is this part of Sunnyvale. These aerial photos depict one historic-era structure in the Project Area. This structure first appears in aerial photographs in 1939 (Appendix A: Figure A-7) and continues to be present in an aerial photo from 1956 (Appendix A: Figure A-8).

Property deeds provided by the SCUSD indicate that the Jefferson School District purchased the western 47.26 acres of the 71-acre subject parcel from Ignazio and Rosalia Castello in 1955. That acreage was part of a larger farming property that the Castellos subdivided in 1949 for building restricted single-family homes. The remaining 23.8 acres to the east was two parcels when it was sold to the Jefferson School District in 1960. 13.518 acres were owned by Dominic, Lena, Salvatore Jr., and Rosie Cirrincione and the remaining 11.817 acres were owned by Frank L., Pearl, Salvatore, and Pauline Teresi. A 1956 aerial photograph shows the entire 71 acres planted in fruit trees (Appendix A: Figure A-7). A 1959 topographic survey shows the approximately 23 combined acres as orchards of prune, apricot and cherry trees.

The US Census of 1940 indicates all were farming families or "orchardists." Ignazio and Rosalia Castello were Italian immigrants and were living on Reed Lane, in the Santa Clara Township, according to the 1940 census. The 1940 census identifies the four Cirrinciones named on the deed as California natives. Salvatore Cirrinciones Sr. and his wife Katie, who were born in Italy, lived on Wolf Road Homestead, Santa Clara Township, with Dominic, Lena, Salvatore Jr., and Rosie Cirrincione. Salvatore Sr. and Katie Cirrinciones were likely Dominic's and Salvatore Jr.'s parents. The 1940 census shows Frank Teresi as the son of Sicilian-born Salvatore and Sarah Teresi. The 1950 census indicates Frank and Salvatore Teresi were brothers and lived together on a farm on the south side of El Camino Real with their wives, Pearl and Pauline.

Research has not resulted in any additional information about these Italian immigrants and first-generation California-born farming families. The Italian-born senior members of the families were likely part of the significant influx of Italians into the area during the late 19th and early 20th century, attracted by rich agricultural land and associated opportunities. They appear to have been typical farming families that subdivided and sold their property as Santa Clara County's post-war population grew rapidly and suburban communities developed.

A 1965 aerial photograph shows the current school sites, which public records indicate were constructed in 1964 (Appendix A: Figure A-9). As the aerial shows, most of the neighboring parcels by the 1960s were no longer farmlands but had been developed into residential plots.

ARCHITECTURAL CONTEXT

SANTA CLARA UNIFIED SCHOOL DISTRICT HISTORIC CONTEXT

The Santa Clara Unified School District (SCUSD) includes neighborhoods in the cities of Sunnyvale, San José, Cupertino, and Santa Clara; it comprises approximately 56 square miles of 1,290-square-mile Santa Clara County (Santa Clara Unified School District 2022a; United States Census Bureau

2022) (Appendix A: Figure A-10). The district, which educates over 15,300 K-12 students and an additional 6,000 students in preschool through adult school, is made up of 18 elementary school sites, one K-8 school site, four middle-school sites, three high-school sites, three alternative high-school sites, and four leased sites Santa Clara Unified School District (Santa Clara Unified School District 2022a, 2022b). SCUSD is one of 32 elementary, high school and unified school districts in Santa Clara County, not counting the Community College District, charter, or court schools (Santa Clara County Office of Education 2022a). Unified school districts are districts that teach both elementary and secondary levels of education.

19th Century Public Education in Santa Clara County

On April 11, 1850, the California State Legislature passed an act providing for the election of a superintendent of public education, as directed by the Constitution of the State of California. John G. Marvin was elected that year on October 7 to serve as the state's first public school superintendent (San Jose Mercury News 1951:181). Despite this, the first schools in Santa Clara County were private schools generally operated by religious entities or informal schools organized by residents (Laffey and Detlefs 1995:51). In 1852 the Legislature authorized a state school tax of five cents per $100 and a county school tax of no more than two cents per $100 to initiate funding of the state's public education system (Santa Clara County Office of Education 2022b). It also allotted three school commissioners to each township and included the duties of a County Superintendent of Schools as among the responsibilities of the County Assessor (San Jose Mercury News 1951:181). The first Santa Clara County Assessor was J.H. Morgan, elected in 1853; consequently he also become the county's first Superintendent of Schools (Laffey and Detlefs 1995:51).

One year earlier, in the fall of 1852, the Santa Clara County Commissioners designated eight townships as school districts: Gilroy, Burnett, New Almaden, San José, Santa Clara, Fremont, Alviso, and Washington (now part of Alameda County). On March 15, 1853, the Santa Clara Register printed a notification that a school had opened in San José, signed by the San José Commissioners of Common Schools; the parents were expected to pay any costs that exceeded the school funds provided by the State. By May the school, located in a Baptist church, had ten pupils registered but insufficient funds to pay the teacher. The 1853 Legislature amended the State's school law to allow the Common Council to levy taxes on real or personal property to support city schools (San Jose Mercury News 1951:181). By 1866 Santa Clara County Schools were some of the best funded in California (Laffey and Detlefs 1995:51).

The State Legislature revised the County Assessor's duties in 1855 to no longer include that of Superintendent of Schools. Freeman Gates, a San José teacher, became Santa Clara County's first elected Superintendent of Schools (Santa Clara County Office of Education 2022b). In October 1855 Santa Clara County redistricted itself into eight townships and 16 school districts. School districts in the townships of Fremont, Santa Clara and Redwood numbered six; San José, Alviso, Burnett, Almaden and Gilroy had ten. Within a month, district designations were revised again, and four separate school districts were established in the Santa Clara township (Munro-Fraser 1881:137). By the end of 1859 there were 710 students enrolled county wide (Laffey and Detlefs 1995:51).

The 1860s marked significant expansion of Santa Clara County schools, with the erection of over two dozen schoolhouses. These included schools in the Cambrian, Encinal, Jefferson, Laguna, Mt. Pleasant, Pala, Summit, Hester, and Willow Glen districts. What was once the Jefferson School

District is now within the boundaries of the SCUSD (Appendix A: Figure A-11). The first high school in the county was opened in San José in 1860 (San Jose Mercury News 1951:181).

Santa Clara County's rural school districts constructed generally small wood-framed one- or two-room schoolhouses between 1850 and 1880 (Appendix A: Figure A-12). These early schools appear to have been of consistent design with schoolhouses throughout the country (San Jose Mercury News 1951:181). Located along existing roads and intersections, these schoolhouses were exposed to noise and dust, poorly lit, had poor ventilation and heating, and often had no wells, washbasins or toilet facilities (Englehardt Jr. 1942:172). The typical classroom layout was rectangular, with the teacher's desk in front of rows of students' desks, emphasizing his or her authority (Ogata 2008:563) (Appendix A: Figure A-13). The Mayfield School in Fremont township was described as being of common construction and type. An early California State Superintendent of Schools who visited it in 1855 referred to it as a "herring box" (San Jose Mercury News 1951:181). Schools also found accommodations in existing buildings, such as Mr. Dunphy's school on the second floor of a two-story rented building in San José; Red Mac's Saloon occupied the first floor. Some schools shared buildings with other entities like churches or meeting halls (San Jose Mercury News 1951:183).

The rapid increase of population on the West Coast that followed the completion of the Transcontinental Railroad in 1869 resulted in a shortage of school funding and space (Laffey and Detlefs 1995:52). According to the Census Bureau, the population in Santa Clara County grew from 11,912 in 1860 to 26,246 in 1870, a more than 120% increase (Bay Area Census 2022). At least four, and possibly six, new districts were established in the 1870s. These included Eagle, Uvas, Llagas, and Midway (Appendix A: Figure A-14). Fifteen new school districts were formed in the 1880s, among them were Mount Hamilton, Halls Valley, Huyck, Campbell, Burrell, Lakeside, and Austin. Similarly, in the following decade, another thirteen districts were created, two in the new towns of Morgan Hill and Palo Alto (San Jose Mercury News 1951:183). Most districts consisted of only one or two schools.

Despite the rapid establishment of new school districts, they were not always able to keep up with the educational needs of their growing communities. Although state funds covered much of the cost, parents had to purchase their children's books and cover other expenses; some poor families simply could not afford to send their children to school. Lack of adequate funding also resulted in deferred maintenance and inattention to advancement in school design to better serve the student body. In the 1873 Santa Clara School District's annual report, the School Superintendent accused the city of allowing the schools to become dilapidated. He stated that "the Cheap-John system which seems to pervade all the departments of our town governments admonishes us out of the necessity of studying economy, even to the degree of meanness" (San Jose Mercury News 1951:183).

Another challenge the public educators faced was poor attendance. In 1860 the Santa Clara County Superintendent of Schools stated that "the principal cause of non-attendance by the children is the indifference with which many parents in the county districts treat all things connected with school discipline." "Discipline" in this instance was not referring to behavior but to regular attendance, particularly in the rural districts where farming and ranching families were dependent on children helping at critical times such as harvest or planting (Laffey and Detlefs 1995:51-52). In 1874, California made education for children from eight to 14 years of age compulsory and guaranteed state aid for each school based on the number of children in each district. High schools would not receive state funding until 1902. In 1911, the state stopped providing aid for each child in a given district but based the funding on attendance (California Department of Education 1961).

Despite the State's intervention, these challenges continued even as the number of school districts increased. By 1875 Santa Clara County boasted 53 school districts, 83 school buildings and 105 teachers. The average daily attendance was recorded as 4,892, not counting San José school attendance. This number indicated that only half of school-age children regularly attended school. By 1881 there were 62 districts county-wide, and by 1900 there were a total of 97 schools in 84 districts, and 562 teachers educating 14,320 students (Laffey and Detlefs 1995:52). The majority of these schools were in rural communities and small towns, with the basic one- or two-room wood-framed schoolhouse still the most commonly built school type.

Late 19th and Early 20th Century: Continued Growth, New Approaches to Education and School Design

As the county's population increased and towns became more urbanized in the 1880s and 1890s, the basic schoolhouse was gradually replaced by larger, yet still modestly scaled schools that often-expressed contemporary Victorian architectural styles. Nation-wide attitudes toward the importance of lower education were changing. With the close of the 19th century, school building design began to trend toward a more monumental and unified plan with architectural revival-style embellishments and elaborate approaches and entrances to celebrate the public's civic pride and devotion to education (Englehardt Jr. 1942:174) (Appendix A: Figure A-15). These schools typically had a central entrance, symmetrically planned classrooms on either side of a long corridor, and a large auditorium (Appendix A: Figure A-16). The classroom plan was rectangular with blackboards on one or two walls, rows of windows on one side, and the desks in rows to emphasize order, desk work, and the teacher's authority (Ogata 2008:563). The unreinforced masonry San José High School that opened in 1898 was a relatively grand civic building with classical styling, and a symmetrical design composition (San Jose Mercury News 1951:181).

Architects and engineers introduced improved technologies and stronger materials that allowed school buildings to be two to three stories in height. They designed schools with improved ventilation and exposure to natural light and enhanced safety by using fireproof materials (Yates 2013:1). These advancements in architectural design and the need for larger school buildings established a new era of school construction (Englehardt Jr. 1942:173). However local school designers apparently did not plan for potential seismic events, and the 1906 earthquake destroyed the new San José High School (San Jose Mercury News 1951:181) and damaged the newly built Santa Clara High School (Appendix A: Figure A-17). California would not mandate earthquake-resistant building construction for schools until after the 1933 Long Beach earthquake (Seismic Safety Commission n.d.).

As stated earlier, attitudes toward education began to evolve in the late 19th century. The influential progressive education movement would lead to significant changes in school and campus design over the next several decades. The movement was a reaction against the existing formalism and authoritarian teaching practices of traditional education and inspired a broad restructuring of educational methods in the United States. Guided by the theories of educators and philosophers such as John Dewey of the Columbia University Teachers College, the movement emphasized more hands-on, child-centered methods and curricula, individual achievement, and differentiation of children's abilities (Sapphos Environmental 2014:39). The progressive education movement also brought a new emphasis on student health and physical activity as essential for proper childhood and adolescent mental and physical development (Yates 2013:2). The notion that such development

took place in stages led to the creation of the 6-3-3-year division of elementary schools, junior high schools, and high schools during this period (Yates 2013:1-2).

As the progressive education movement gradually took hold in the first two decades of the 20th century, new school design incorporated features to support the health and well-being of the children (Yates 2013:1-2). The 1906-built Santa Clara High School building was designed with traditional classroom layouts, but also included boys and girls "play rooms" and showers, a robust ventilation system, and landscaped grounds and tennis courts (Evening News 1906:2) (Appendix A: Figure A-18).

In 1909 the Santa Clara County Board of Education, which consisted of the elected county superintendent of schools and four members appointed by the board of supervisors, amended an 1880 political code to provide that a majority of appointed members be experienced teachers who held at least a grammar school teaching certificate. The board of education was now authorized to qualify and hire teachers and set the standards for graduation (Laffey and Detlefs 1995:52). Superintendent D.T. Bateman established the Teachers' Institute of the Santa Clara County Office of Education in 1911 to offer professional development to teachers. Teacher round tables included topics such as "How to Make Mathematical Work More Nearly Meet the Needs of Daily Life" and "Teaching Peace by Means of History" (Santa Clara County Office of Education 2022b). The supervision of attendance and child welfare was added to the duties of the county superintendent in 1918 (Santa Clara County Office of Education 2022c). These actions further reflect the gaining influence of the progressive education movement and the county's adoption of its theories.

The creation of new school districts in Santa Clara County continued and by 1912 there were at least 102 districts, not counting high schools, outside of the city of San José's corporate limits. Prior to the turn of the 20th century, there was a high school in San José, one in Santa Clara, one in Gilroy, and one in Palo Alto. By 1951 the communities of Santa Clara, Morgan Hill, Los Gatos, Campbell, Mountain View, Fremont, and East Side had high schools. All, except for Palo Alto and San José, served large rural areas and were classified as union high schools (San Jose Mercury News 1951:183). For example, graduates from Jefferson, Santa Clara, and Alviso elementary school districts matriculated to the Santa Clara Union High School District's high school (Evening News 1959:15).

On April 30, 1926, voters in the Jefferson, Agnew, Braly and Milliken elementary school districts elected to consolidate the districts into the Jefferson Union School District. Each of these school districts was comprised of a single school. Both the Milliken and the Braly schools were two-story Mission Revival buildings; the Jefferson school, a simple board and batten single-gabled building located on Kifer Road (formerly unincorporated) constructed in 1857, was said to be the oldest school building in continuous use in the state at the time (See Appendix A: Figure A-12 and A-19) (San Jose Mercury Herald 1926a:7; 1926b:10). Irvin Pomeroy, trustee of the Milliken school, appealed to the voters, saying that, "the need of better schooling for our children is becoming acute. In the Milliken school children are so crowded for room that classes are held on the stage of the assembly. With these four districts consolidated we will have enough pupils for a separate classroom for each grade and special instruction in such subjects as domestic science and trades" (San Jose Mercury Herald 1926b:10).

The new district quickly applied for and received a $100,000 bond to construct a new Jefferson Grammar School at Lawrence Road and Reed Lane (San Jose Mercury Herald 1926a:7). The new Mission revival style building, designed by architects Wolfe and Higgins, was constructed of

reinforced concrete and contained thirteen rooms that included classrooms, manual training and domestic science departments, offices, a library, and an assembly room capable of seating 600. Joseph Hancock, county superintendent of schools, stated that the Jefferson Union School District was the wealthiest in the county, with an assessed value of $3,000,000 (Evening News 1927:6) (Appendix A: Figure A-20 and A-21).

Santa Clara County Public Education and School Development Post 1930

The 1933 Long Beach earthquake destroyed 70 schools and resulted in significant damage to another 120 schools in Southern California. The California Legislature enacted the Field Act on April 10, 1933, one month after the earthquake, to protect children and staff from death and injury in public schools grades K-14 and protect the public's investment in school buildings during and after earthquakes (Seismic Safety Commission n.d.). The requirements of the act included maintaining one-story massing for new elementary schools and no more than two stories for junior and high schools. These requirements were in line with school design trends already in being adopted in California and beyond (Sapphos Environmental 2014:21).

As Santa Clara County developed from primarily agriculture prior to World War II to industry during the war years, the rural school districts grew and organized union districts for either elementary or high school purposes. Under this system two or more contiguous districts united. District superintendents focused on establishing a centrally located school and provided transportation for students. By 1950 there were eight union school districts in Santa Clara County: Cupertino, Jefferson, Los Gatos, Campbell, Saratoga, Almaden, Alum Rock and Berryessa, and Loma Prieta and Ausaymus (San Jose Mercury News 1951:183). Midway School District was annexed to the Jefferson School District in 1949 (San Jose Mercury Herald 1949b:16). The 1927-built Jefferson school was expanded in 1946 and 1948, with the construction of ten new classrooms and a cafeteria-music building. Enrollment increased an average of 20% each year between 1944 and 1949 (San Jose Mercury Herald 1949a:11). In 1949 the Jefferson Unified School District encompassed the area from Sunnyvale city limits on the west to Coyote River on the east, and from a mid-way point between Stevens Creek and Homestead Roads on the south to Alameda County line on the north. The current SCUSD boundary appears to be wholly within the 1949 Jefferson Unified School District boundary. By 1950 the Santa Clara County school system included 39 elementary school districts, eight high-school districts and two unified school districts, totaling 109 schools with a combined enrollment of 51,797 (San Jose Mercury News 1951:183).

The 1960s and 1970s brought a major change to the area as Santa Clara County grew rapidly and urban development overtook most remaining rural areas (Santa Clara County Office of Education 2022b). Population in Santa Clara County continued to grow as technology-based industries established during the war year expanded. A 1961 San Jose Mercury News article titled, "High Schools Bulge: Educators Grope for More Space As War Babies Swamp Ninth Grade", stated that enrollment for each grade was slightly larger than the next one above. This steady climb was illustrated by comparing 1960 first grade enrollment to 12th grade enrollment: County wide 16,533 first graders were registered that year compared to only 6,990 12th grade students (San Jose Mercury News 1961:26-27). This large increase in attendance occurred primarily in the former rural areas of the county. Young families of newcomers moved into newly built housing tracts of mostly modest ranch and minimal-traditional style homes that replaced the county's orchards and farmlands. That year the Santa Clara High School District was already constructing its third high school, Adrian Wilcox, scheduled to open in September. Concurrently, the district was planning a

second phase to accommodate the expected high school student body increase of around 600 per year (San Jose Mercury News 1961:26-27). In September 1965, Santa Clara, Jefferson, and Alviso Elementary School Districts joined the Santa Clara High School District to form the Santa Clara Unified School District (Appendix A: Figure A-22) (San Jose Mercury News 1965:56). The Patrick Henry Campus, built 1960–1962 to accommodate 1,000 6th, 7th, and 8th grade students (Evening News 1960:9), was originally built as part of the Jefferson School District (Goudie 1960); phase 1 of the Marian A. Peterson High School was designed in 1964 as part of the Santa Clara High School District (Richards 1964).

SANTA CLARA UNIFIED SCHOOL DISTRICT CAMPUS PLAN TYPOLOGY

Of the 33 school campuses that make up today's SCUSD, all but six were initially designed and/or constructed prior to the establishment of the district in 1965, primarily in the 1950s and early 1960s. The six campuses built after the unification of the district are of modern construction, built in 1995 or later. Buchser Middle School, the only extant pre-World War II-built school in the district, was initially constructed in 1937 (Santa Clara Unified School District 2022b). The Buchser campus has been significantly expanded and no longer resembles a pre-war educational institution. In the years after the district's unification SCUSD built out or added to many of these campuses, and further addressed the shortage of classrooms by the introduction of portable or temporary classrooms district wide, particularly in the 1990s.

Functional School Campus Site Plans, 1940s–1970s

Despite the infill and alterations implemented by SCUSD throughout the years, two standard campus designs, the "finger plan" and the "cluster plan", are easily recognizable district wide. A sub-design of the cluster plan is the open-space plan, where the buildings in the cluster-plan campuses had greater interior flexibility – open-space shells so that team teaching could be accommodated in a variety of patterns. School architects applied these two distinctive functional campus plans throughout California and the nation, with the finger plan beginning in the late 1930s and refined into the 1950s, followed by the cluster plan in the 1960s and 1970s. The open-space plan proved to be problematic and short lived; it was quickly modified to recapture the visual and sound separation of the self-contained classroom (California Department of Education 2000).

Architects interpreted these basic campus plan concepts and tailored them to the size of the student body, campus location – rural, suburban, or urban settings – climate, and topography. In the 1940s and 1950s school districts in California used a rule-of-thumb approach to determine school site size. Elementary schools were to have a minimum site of five acres plus an additional acre for each 100 pupils of predicted ultimate enrollment. For middle schools the basic size was 15 acres and high schools 15–20 acres plus the same additional acre per 100 students of predicted enrollment. By the mid-1960s, with land becoming scarce and expensive, school planners began to apply more precise methods to determine school size to support the functions or activities of the proposed educational program (California Department of Education 2000).

Combinations of these two basic campus design forms were applied as the finger plan transitioned into the cluster plan with this more site- and function-specific approach to school design. Both plans share the basic architectural principles that reflected those of midcentury modern design with their use of steel framing, plate glass, and low-rise horizontal massing to reflect the relationship between modern architectural forms and progressive teaching methods (Ogata 2008:562-563).

The Marian A. Peterson Middle School, originally Marian A. Peterson High School initially designed in 1964 for the Santa Clara Union High School District, is a hybrid of the finger plan and cluster plan campus; the Patrick Henry campus, was designed as the Patrick Henry Intermediate School for the Jefferson Union School District in 1960 in the cluster-plan style.

The Finger Plan

Just prior to the U.S. entering World War II European-trained architects working in the U.S. began to design schools and campuses that were radically different from the period-revival monumental school buildings that contained all school functions. One-story schools with expansive windows and immediate access to outdoor space just beyond the classrooms were introduced by master architect Richard Neutra in 1939 (Appendix A: Figure A-23). He designed single-story experimental schools in Los Angeles with large sliding glass doors that led to adjacent gardens or courtyards modeled on contemporary ideas about students' need for access to air and light, and that were well suited to the mild California climate (Ogata 2008:564).

The experimental school design evolved into the finger-plan campus concept with architects Franklin & Kump's design of the Acalanes Union High School in Lafayette, California (1939–1940). Franklin & Kump also designed San José High School in 1952, further refining the finger plan. *Architectural Forum 91* (October 1949) called the plan type the "western finger plan" and that the finger-plan school resembled "a tree plan, based on a trunk corridor with side branches. It rests on radical standardization of classrooms; on absolute insistence that all classrooms share the best (north) orientation to sun and air; daylight for all of them from the open-corridor side as well as the main window side. This plan is not only flexible… but extensible indefinitely outward like a tree, by growing at branch-ends and by sprouting new branches" (Sapphos Environmental 2014:92).

Architectural Forum further described Acalanes as "the first large-scale school which could serve as a complete demonstration of principles which amounted to a schoolhouse revolution – the revolution of the thirties. Since then, the Acalanes type of school, with its wide ranging, one-story classrooms arranged according to the 'finger' plan, has swept the West Coast, is sweeping rapidly across the Midwest on its way to the East Coast" (Sapphos Environmental 2014:92).

Consistent with contemporary design principals, the finger-plan became the most common school building type in the 1940s and 1950s in California (Appendix A: Figure A-24). This campus design also satisfied the construction requirements of the 1933 Field Act. These finger-plan schools were multi-structure residential-scale campuses with individual purpose-built buildings with minimal ornamentation or only modest application of modern architectural elements (California Department of Education 2000). Administration buildings, auditoriums and gymnasiums, separate classroom, shop, and specialty wings, and cafeterias were designed to connect to the outdoors with patio spaces and covered open corridors linking buildings. Natural light and ventilation were provided by bands of windows, including multilight sashes, casements, and clerestories (Sapphos Environmental 2014:21). These school buildings reflected a more intimate and better integrated element of the community compared to the earlier period-revival monumental buildings. This newer campus style was a workplace and recreation center, sited in a manner that was more intimately associated with community living. This type of arrangement was flexible and eliminated much of the institutional atmosphere of the earlier large, compact buildings (Englehardt Jr. 1942:175).

In addition to the site plans' suitability for housing progressive education methods, these schools were considered safer for evacuation. Along with the age-old threats of earthquake and fire, residual anxieties of the war and subsequent Cold War added to the appeal of this style of school campus. Other practical aspects of these single-story schools were low-cost materials, swift constructability, and flexibility. With the baby boom in full swing, these rigid-frame schools could be quickly built and easily expanded as needed, with war-industry-made prefabricated materials and steel, and continuous fenestration (Ogata 2008:568). Instead of an auditorium, these post-war flexible school campuses included a multi-purpose building for school assembly, cafeteria, and meetings (Ogata 2008:569).

All of SCUSD's elementary schools built in the 1950s were designed in the finger plan and share the same midcentury modern design principles and type of structural materials. These schools, significantly more modest in scale compared to Acalanes Union High School and San José High School, include Bowers, Bracher, Briarwood, Central Park, Haman, Mayne, Millikin, Pomeroy, Scott Lane, Washington, and Westwood elementary schools (Appendix A: Figures A-25 through A-28).

Cluster Plan

The Architects Collaborative (TAC), a firm founded by master architect Walter Gropius, designed a prototype school in 1954 that could be quickly and economically constructed and easily expanded (Appendix A: Figure A-29). The design included a cluster of individual one-story buildings grouped around a central administration building. Small square classrooms were arranged in a grid that created outdoor "classrooms" or common areas interspersed between the buildings. Residential in scale, these buildings evoked the feeling of post-war suburban houses with the ubiquitous picture windows looking out onto landscaped spaces.

Contemporaneous with TAC's publishing their prototype cluster-plan campus design, the finger plan began to lose popularity. In addition to the large tracts of land required to accommodate a finger-plan campus, the spread-out buildings meant long cross-campus walk times and restricted communication. Classrooms oriented to maximize access to natural light proved to be costly. The variability of natural light throughout the day resulted in periods of excessive heat and glare followed by the need to augment daylight with electrical lighting. A desire for greater flexibility, domesticity and economy influenced a shift in campus design away from the finger plan to the more compact cluster plan. (Sapphos Environmental 2014:97; Ogata 2008:572).

The cluster plan retained the low massing, generally single-story layout of the finger-plan, and architects still designed classrooms with indoor-outdoor access and views. But rather than extending wings along an axis, the site plan transitioned to grouping individual modular buildings and structures around a central landscaped courtyard. The views from the classrooms were now oriented toward the courtyard and other classrooms, resulting in a more communal setting and informal environment (Sapphos Environmental 2014:99).

Although school designers continued to construct finger-plan campuses, the cluster-plan approach began to be widely adopted in the 1960s. The later finger-plan campuses were usually condensed or used for elementary schools and smaller upper-level schools, particularly in California where there was still ample space (Sapphos Environmental 2014:98). By 1965, according to *California School Buildings, 1960-1965,* "The 'Cluster Plan' has replaced the 'Finger Plan' concept for elementary schools. Arrangement of classrooms around a core area encourages cooperation between teachers

by giving them opportunities to share multi-use areas, resource centers and teacher prep areas all adjacent to their classrooms. Better acoustical control and better lighting is evident, and technology is employing these comfort factors to be coordinated with flexible interiors" (Gibson and Eatough 1966:viii).

The Marian A. Peterson High School (now middle school), while primarily a cluster-plan campus, includes some residual design elements of the finger-plan campus, as can be seen in the original plot plan drawn in 1964 by architect L.F. Richards (Appendix A: Figures A-30 through A-32). Phase 1 of the campus plan had the academic buildings, library, administration building, multi-purpose building, gymnasium and locker rooms clustered around a large central courtyard. The planned siting of three long, parallel future academic buildings on the west side of the campus partially connected by a covered breezeway reflects the spatial arrangement of a finger plan; the northwest-most "future academic" building was added to the campus by 1969.

Patrick Henry Intermediate School, designed in 1960 by architect Clyde D. Goudie, and expanded in 1962 with a design by the architectural firm Goudie & Griffin, is a cluster-plan campus with four L-shaped classroom buildings, the administration building, and the multi-purpose building spatially arranged around a large central courtyard (Appendix A: Figures A-33 and A-34). The classroom buildings are also arranged to create two secondary courtyards between two sets of the buildings. While the campus layout closely follows the cluster plan, the classrooms' fenestration is limited to bands of clerestory windows on the outward facing building façades; no classrooms have views looking onto the courtyards.

Open-Plan Design

A sub-design of the cluster plan is the open-space plan. While retaining the core campus arrangement and building orientation of the cluster plan, beginning in the mid- to late-1960s campus buildings were designed to have greater interior flexibility (California Department of Education 2000: 7). The objective was to have classrooms with adaptable interiors with moveable walls to accommodate changes in group size and/or activities. To accomplish this school architects designed buildings with large interior spaces separated by non-load-bearing walls, long and high roof spans, and steel structural systems. A relative lack of windows further accommodated this flexibility. This was made possible by modern air conditioning systems. Massing increased and exterior corridors moved inside since the buildings by necessity took up a greater area of the campus site. Some open-plan schools were designed in circular plan, with hexagonal or circular classrooms clustered around a common area (Sapphos Environmental 2014:104-105). SCUSD's Cabrillo Middle School, built in 1961, appears to be an example of a circular-design open-plan campus that followed the principle of the cluster plan. Survey of this campus is beyond the scope of this study (Appendix A: Figure A-35).

The open plan was not widely accepted and was short-lived. By the 1980s there was a return to the visual and sound separation provided by the self-contained classroom. However, the structural flexibility associated with the open-space plans continued to be used for common spaces, such as gyms, auditoriums, and cafeterias, most of which used moveable walls and space-function adjacency design to improve flow between the functional spaces (California Department of Education 2000:8).

Campus Typology Eligibility Standards

The following are California Register of Historical Resources eligibility standards, character-defining features, and integrity considerations by which to assess the potential significance of the overall design and layout of a school campus based on post World War II campus typology. These standards were adapted from the 2014 *Los Angeles Unified School District Historic Context Statement, 1870-1969.*

Table 2. Santa Clara Unified School District Campus Eligibility Standards

Property Type:	Institutional/Educational
Property Subtypes:	Elementary, Middle, and High Schools
Period of Significance:	1950–1969
Location:	Santa Clara Unified School District, Santa Clara County, California
Area of Significance:	Criterion A, associated with events that have made a significant contribution to broad patterns of local or regional history, or cultural heritage of California or the United States

This criterion applies primarily to the consideration of a campus as a historic district. Individual buildings may have specific architectural/design significance that would be evaluated under criterion 3, as the embodiment of the distinctive characteristics of a type, period, or method of construction, as an example of the work of a master architect, or for high artistic value.

Eligibility Standards:

- Clearly defines the characteristics of a postwar modern finger-plan or cluster-plan school campus
- Displays a unified, functional site design, with buildings extending across the site and oriented in relation to outdoor spaces such as courtyards, patios or outdoor play areas
- One-story massing
- Classrooms clearly express their function, with axial, finger-like wings, plentiful fenestration, and connections to the outdoors
- Retains most of the associative and character-defining features from the period of significance

Character-Defining Features, Buildings/Structures:

- Modular design, with a rhythmic, asymmetrical but balanced composition
- A modern design idiom, usually regional mid-century modernist or International style

- Differential window locations, sizes, and configurations in response to the location of the sun to maximize natural interior light or to create cross-lit classrooms
- Generous expanses of windows, including steel- and wood-framed multilight windows, in awning and hopper casements, clerestories and fixed panes
- Flat roof or broken-plane roof used for lighting and acoustics

Character-Defining Features, Campus:

- Unified campus design includes most or all of the following attributes:
    - Lack of formality and monumentality
    - Low massing – usually one-story classrooms and up to two stories for auditoriums/multipurpose rooms
    - Strong geometric ordering of buildings and outdoor spaces
    - Decentralized pavilion-like layout
    - Rational, function-driven site design
    - Buildings extend across the site
    - Buildings are oriented to outdoor spaces
    - Purposeful indoor-outdoor integration
- Building plans and site design clearly express their function; classroom wings are often one-story finger-like wings organized in parallel (finger plan) or around a central axis point (cluster plan)
- Indoor-outdoor spaces. Classrooms connected by patios, courtyards, and outdoor canopied corridors
- One-story massing, particularly for elementary schools; up to two to three stories for middle and high schools
- Building types and plans expressive of postwar ideals in education and school design
    - Finger plan, generally 1950s
    - Cluster plan, late 1950s into 1960s
    - Combination of the two plans that clearly express informality and indoor-outdoor connections
- Automobile traffic and drop-off areas separated from campus, linked to the interior by extended canopied corridors
- Buildings sited inward toward green spaces and courtyards
- Outdoor corridors sheltered beneath simple canopies that form links between the campus buildings
- Classrooms are a series of axial, modular units
- An informal, domestic scale for the buildings and campus, particularly for elementary schools

- Patios, terraces, and plantings adjacent to and alternating with buildings
- Associated with post World War II suburbanization and growth near major employment centers
- Built in residential neighborhoods on large expanses of land, with space devoted to landscape, play yards, and, particularly for high schools, athletic fields, stadiums, and tennis courts

Integrity Considerations:

- Retains most of the essential physical features from the period of significance
- School expansion and new construction over the years, in particular in the postwar period, may have resulted in the addition of in-fill buildings and structures in areas originally designed for outdoor spaces
- School may have been designed to be expanded as enrollment increased
    - Original site design and building types should be readily discernable
    - Additions should follow original build-out plans
    - Additions beyond those in an original build-out plan should be compatible with and visually subordinate to the original campus buildings and structures
- Materials may have been removed or replaced
- Modern lighting and fencing are unlikely to significantly affect integrity
- Overall campus and individual buildings should retain integrity of location, setting, materials, design, workmanship, feeling, association from its period of significance
- Additions of portable or permanent buildings after the period of significance is acceptable provided the original campus design is intact and the additions are on the periphery of the original campus on secondary elevations

Table 3. Santa Clara Unified School Sites.

	Address	City	Constructed – Buildings	Constructed – Portables	Architectural Type
Elementary School Sites					
Agnew Elementary	3534 Zanker Road	San Jose	2018-2021	N/A	New construction
Bowers Elementary	2755 Barkley Avenue	Santa Clara	1956-1958	1992-2010	Finger Plan
Bracher Elementary	2700 Chromite Drive	Santa Clara	1958-1959	1990-1998	Finger Plan
Braly Elementary	675 Gail Avenue	Sunnyvale	1964-1980	1997-1999	Cluster Plan
Briarwood Elementary	1930 Townsend Avenue	Santa Clara	1954-1956	1971-1998	Finger Plan

	Address	City	Constructed – Buildings	Constructed – Portables	Architectural Type
Central Park Elementary	2720 Sonoma Place	Santa Clara	1955-2017	1997-1998,	Finger Plan
Haman Elementary	865 Los Padres Blvd.	Santa Clara	1952-2003	1997-2011	Finger Plan
Hughes Elementary	4949 Calle De Escuela	Santa Clara	1962-1983	1997-1998	Cluster plan
Laurelwood Elementary	955 Teal Avenue	Santa Clara	1964-1980	1997-2016	Cluster plan
Mayne Elementary	5030 N. 1st Street	Alviso	1955-1958, 2003 (YAC)	1997-2011	Finger plan
Millikin Elementary	615 Hobart Terrace	Santa Clara	1955-1959, 2013 (Admin)	2012-2016	Finger plan
Montague Elementary	750 Laurie Avenue	Santa Clara	1961-1967	1980-2003	Cluster plan
Pomeroy Elementary	1250 Pomeroy Avenue	Santa Clara	1951-1963	1991-1998	Finger plan
Ponderosa Elementary	804 Ponderosa Avenue	Sunnyvale	1964-1967	1997-2013	Cluster plan
Scott Lane Elementary	1925 Scott Blvd.	Santa Clara	1952-1958	1990-1997, 2007, 2010	Finger plan
Sutter Elementary	3200 Forbes Avenue	Santa Clara	1960-1963	1957-1997	Cluster/transitional Finger plan
K-8 School Sites					
Don Callejon	4176 Lick Mill Blvd.	Santa Clara	2006	2015	New construction
Middle School Sites					
Buchser Middle	111 Bellomy Street	Santa Clara	1937-1969, 2015 (MPB)	2004	One building and track extant from 1937. Cluster demolished 1968 and replaced with current buildings between 1968 and 1980.
Cabrillo Middle	2550 Cabrillo Avenue	Santa Clara	1961, 2020 (Locker Building)	2001-2010	Cluster. Buildings in round configuration.
Peterson Middle	1380 Rosalia Avenue	Sunnyvale	1964-1969, 2011 (Library, Admin), 2021 (Aquatics Center)	N/A	Cluster
Huerta Middle	3556 Zanker Road	San Jose	2018-2021	N/A	New construction

	Address	City	Constructed – Buildings	Constructed – Portables	Architectural Type
High School Sites					
Santa Clara High	3000 Benton Street	Santa Clara	1957-1998, 2006 (Office)	2014-2017	Finger/cluster transition.
MacDonald High	3500 Zanker Road	San Jose	2018-2022	N/A	New construction
Wilcox High	3250 Monroe Street	Santa Clara	1960-1977, 2011 (3 story building)	1997-2017	Cluster with modern infill
Alternative High School Sites					
New Valley High	1875 Lawrence Road	Santa Clara	N/A	1987-2001	Appears to be all portables.
Wilson High	1840 Benton Street	Santa Clara	1954-1960, 2016 (office)	1991-2009	Finger with cluster portions.
Santa Clara Community Day	3450 Brookdale Drive	Santa Clara	N/A	2008	Appears to be all portables.
Leased Sites					
Monticello Campus	3421 Monroe Street	Santa Clara	1960-1964	N/A	Small cluster
Patrick Henry Campus	1095 Dunford Way	Sunnyvale	1960-1962	N/A	Cluster
Curtis Campus	890 Pomeroy Avenue	Santa Clara	1957-1963	N/A	Finger plan
Martinson Campus	1350 Hope Drive	Santa Clara	1995	N/A	New construction

ARCHITECTURAL TYPOLOGY

Modern and Modernist architecture spanned the late 1920s through the 1970s and included several distinctive styles of architecture. Regional expressions of Modernism can be found throughout California and the United States. Key characteristics of Modern buildings is the lack of historical ornament and references, and an emphasis on a new architectural vocabulary. In the San Francisco Bay Area Streamline Modern, International Style, Second Bay Tradition, Mid-Century Modern, International Style, Brutalism, and Contractor Modern populate the cities and suburbs. New materials and building technologies stimulated the rapid post World War II promulgation of these architectural styles, with the mass-production of building products that were distinct from earlier products. These included materials that were often factory finished, such as plate glass, structural glass, spandrel glass, acoustical board, asphalt tile, vinyl asbestos tile, aluminum, concrete, ceramic, terrazzo, vinyl fabric, gypsum board and plaster, rubber topset, plywood, clear wire glass, and plastic laminate.

The historic-period post-war SCUSD campuses, built between 1951 and 1969, share the basic design principles and express simple application of Mid-Century Modern design elements regardless of campus plan. “Mid-Century Modern” is not an academically accepted architectural style term but was generated by the public. It describes a wide range of design elements incorporated into buildings during the 1940s through the 1960s. Mid-Century Modern was influenced by the more formal machine-age aesthetic of the International style. Mid-Century Modern expresses the architectural features of International style in a more relaxed, generally scaled down and regional style and sometimes adopts architectural elements from other Modernist styles. It is characterized by honest expression of structure and function with little applied ornament. The style can be found in postwar institutional buildings, commercial buildings, as well as residences.

Mid-Century Modern style is characterized by balanced, rhythmic composition with an emphasis on simple, geometric forms. Footprints are generally square or long rectangular; buildings are seldom more than two stories in height and are predominately horizontal in massing. This composition is achieved by modular post-and-beam construction that allows for large expansions of open floor plans. The rooflines are low-shed, low-gabled or flat, with wide eaves and cantilevered canopies supported on posts or spider-legs. Windows are generally flush-mounted with metal frames that may act as infill panels or extend to the gable. Ribbons of clerestory windows are also commonly found on Mid-Century Modern buildings.

Character-Defining Features

- Horizontal design composition and massing, generally only one to two stories in height
- Simple geometric volumes and strong right angles
- Flat, shed, or low-pitch gable roofs often with wide cantilevered overhangs
- Projected eaves and exposed rafters
- Projected vertical elements
- Exterior material of stucco, brick, concrete, or corrugated metal
- Stacked Roman brick or stone as accent materials
- Terrazzo paving
- Articulated primary façades
- Angled or deeply recessed vestibules
- Frequent use of sheltered exterior corridors with flat or slightly sloped roofs supported by posts, piers, or pipe columns
- Atrium or courtyard entryways
- Modular design
- Simply treated materials
- Visually expressed structural systems, generally of wood or steel post-and-beam
- Lack of historical design elements or ornamentation
- Generous expanses of fenestration, often in bands of grouped multi-light windows, generally steel or wood framed

- Canted windows
- Spandrel glass

Figures A-36 through A-39 in Appendix A are examples of SCUSD Mid-Century Modern schools. Figures A-40 through A-42 in Appendix A are some examples of National Register of Historic Places listed Mid-Century Modern Architecture in California.

Archaeological Field Methods, Results, and Assessment

4

METHODS

On January 17, 2022, Albion Archaeologist Brenda Arjona conducted a pedestrian survey for the Project. The Archaeological Survey Area included Marian A. Peterson Middle School site, Patrick Henry Elementary School site (no longer open), and Laurelwood Elementary School site (Appendix A: Figure A-43).

Marian A. Peterson Middle School and Patrick Henry Elementary School are adjacent to one another. The portion of the Project Area containing these two schools can be subdivided into the following significant areas: Two sports field areas, an athletic track, the Farm, and the paved parking lots pertaining to each school site. The Project Area is about 50% paved over and 40% ground surface with poor visibility due to dense grass, vegetation, and trees (Appendix A: Figure A-44).

Laurelwood Elementary, the smaller surveyed project area contains a large grass field area as well as a smaller patch of grass surrounded by classroom buildings. The rest of the property is paved over as features of the school, which is still in operation. This portion of the Project Area is about 40% ground surface with poor visibility due to dense grass and about 60% paved over (Appendix A: Figure A-45).

Albion's pedestrian survey was conducted using 3-meter-wide transects while closely inspecting the ground surface across all project areas. Ground surface visibility at both Project Area locations was poor due to the features of the schools, such as athletic fields and playgrounds. Dense grass and vegetation cover about 40% of the ground surface at both locations, since these areas contain fields in-use for both community sports and extracurricular activities associated with the schools. Paved surfaces covered about 50% of the Project Area, as these areas include parking lots, classrooms and administrative structures associated with the schools, playground adjacent areas, paved paths, and areas for physical activities.

SURVEY RESULTS

CULTURAL RESOURCES

Albion's pedestrian survey efforts yielded one isolated find within the Marian A. Peterson Middle School and Patrick Henry School portion of the Project Area (Appendix A: Figure A-46). This isolate, a historic-era porcelain transfer print fragment, was observed in the southwest quadrant of the northwest Project Area, along the east side of the field track behind the bleachers and adjacent to the grass field in the upper southwest quadrant (Isolated Resource 001) (See Appendix C). Aside

from this, no other precolonial or historic-era cultural resources or features were observed during the surface investigation of the Project Area.

SENSITIVITY ASSESSMENT

PRECOLONIAL ARCHAEOLOGICAL SENSITIVITY

Using a model, the potential for buried archaeological sites can be conceptualized as a set of factors that either encouraged or discouraged human use or occupation of certain landforms (e.g., aspect, extent, setting, slope), combined with those that affected the subsequent preservation (i.e., erosion or burial) of those landforms (Meyer et al. 2010; Rosenthal and Meyer 2004). Using this model, landforms can be ranked as being more or less sensitive based on demonstrated relationships between environmental variables and known precolonial site locations.

For example, the contact between depositional and non-depositional (e.g., eroded or older) landforms can also be a factor because these often mark environmental ecotones, or spatial transitions between different ecosystems, habitats, and/or plant and animal communities (Rosenthal and Meyer 2004; Meyer et. al 2010). In California, precolonial sites are commonly identified at or along ecotones, and are frequently located near the contact between younger and older geomorphic surfaces, such as fans or terraces that are higher than the floodplain (Rosenthal and Meyer 2004; Meyer et. al 2010). For this reason, areas in which both landforms occur in close proximity have a higher potential for containing buried archaeological resources than broad, level depositional landforms that lack elevated surfaces. Additionally, a study of GIS data indicates that archaeological site densities are greatest at distances of 200 meters (~656 feet) or less from a known watercourse (Rosenthal and Meyer 2004; Meyer et. al 2010). Consequently, it is expected that previously unidentified buried sites will be located relatively close to present springs and water courses, as well as former ones.

In summary, using this model, the potential for buried archaeological deposits can be conceived as follows:

- Very Low — pre-latest Pleistocene deposits regardless of the combination of other factors,
- Low — Latest Pleistocene or Holocene deposits with slopes greater than 9 degrees located more than 200 meters (656 feet) from a water source and/or geomorphic contact,
- Moderate — Holocene deposits with slopes less than 9 degrees located less than 200 meters (656 feet) geomorphic contact, located more than 200 meters (656 feet) from a water source,
- High — Holocene deposits with slopes less than 9 degrees located less than 200 meters (656 feet) geomorphic contact, AND less than 200 meters (656 feet) from a water source,
- Very High — Holocene deposits with slopes less than 9 degrees located less than 200 meters (656 feet) from a geomorphic contact, water source, and confluence of two or more watercourses, AND/OR contains previously identified buried site.

The Project Area contains soils hypothesized to be from the Pleistocene to the Holocene (Appendix A: Figure A-47) (Byrd et al. 2017). These soils are located in a flat alluvial fan with slopes less than 9 degrees and less than 200 meters (656 feet) from a water course. Additionally, Far Western

Anthropological Group completed a buried site assessment for Caltrans District 4 of the San Francisco Bay-Delta and immediate vicinity (Byrd et al 2017). This study included the current Project Area and assessed the buried site sensitivity to be moderate-high. We draw from Byrd et al. and have reviewed the current Project Area and confirm it holds a moderate-high sensitivity to contain buried precolonial resources. Based on this model and the Caltrans District 4 buried site assessment, the sensitivity for the Project Area to contain buried archaeological sites is moderate to high.

HISTORIC ARCHAEOLOGICAL SENSITIVITY

It is our professional opinion that there is a low potential for any buried historic-era archaeological resources to be located within the Project Area. The first documented historic-era development of the project consisted of agricultural fields during the 20th century. Further, our visual inspection of the Project Area ground surface did not identify any evidence of in-tact historic-era archaeological deposits. Therefore, it is our assessment that the proposed Project is not likely to impact any subsurface historic-era cultural resources.

Architectural Field Methods, Results, and Evaluation

5

METHODS

On January 17, 2022, architectural historian Meg Scantlebury surveyed Marian A. Peterson Middle School and Patrick Henry Intermediate School campuses; the Laurelwood Elementary School Site was not included in the architectural study (Appendix A: Figure A-48). SCUSD staff provided access to the campuses. Although the Project footprint does not include all of the Peterson campus, Ms. Scantlebury surveyed the entirety of each of the two campuses. Large properties that include buildings and structures designed together by plan or historic period have the potential to be historic districts; all associated, potentially contributing resources of this kind of property need to be included in an intensive architectural resources survey to adequately assess its eligibility as a district. The survey consisted of photographing buildings, structures, circulation systems, and landscaping and taking field notes of her observations. Prior to the survey, Ms. Scantlebury researched the online catalogs of the Sunnyvale Public Library, San José Public Library/Dr. Martin Luther King, Jr. Library's California Room, and History San José. She also made appointments with the three repositories and conducted on-location research on January 16, 17, and 18, 2022. SCUSD provided Ms. Scantlebury with copies of the original architectural plans and property deeds for the two subject properties.

RESULTS

PATRICK HENRY CAMPUS PROPERTY DESCRIPTION

Patrick Henry Intermediate School is located on the southeast portion of the subject parcel APN 313-10-004 (See Appendix A: Figure A-48). Its primary entrance is on Dunford Way to the south; Teal Drive demarcates the eastern boundary of the campus. North of the campus is a large informal grassy field the full width of the campus. To the west of the campus is a large oval running track surrounding a grass-covered soccer pitch/football field, beyond the play field is the Santa Clara Unified School District Farm. North of the Farm is the Bryan Osborne Nature Center, and the Marian A. Peterson Middle School campus. The 71.08-acre property is surrounded by subdivisions of primarily modestly scaled single-family homes and multi-family units built in the 1950s–1970s. A private school, a Sunnyvale city park, and a church are south of the property.

The school was designed and built in two phases. The original campus, designed by Jefferson School District architect Clyde D. Goudie in 1960, included the overall campus design, building siting, exterior open spaces and courtyards, parking, pedestrian, automobile and bus circulation, classroom buildings, and the administration building. Architects Goudie & Griffin designed the two additional

buildings, multipurpose building, and locker building in 1962. The 1960 campus layout plan included the siting of these two future buildings.

Table 4. Patrick Henry School Description.

Address:	1095 Dunford Way, Sunnyvale, California 94087
Assessor's Parcel Number (APN):	313-10-004. Includes Patrick Henry School Campus, Marian A. Peterson Middle School, Santa Clara Unified School District Farm, and Bryan Osborne Nature Center
Total Acreage of Parcel:	71.08 acres
Developed Acreage of the Patrick Henry School:	Approximately 13.8 acres
Owner:	Santa Clara Unified School District
Architects:	Clyde D. Goudie (1960), Goudie & (Dewitt J.) Griffin (1962)
Structural Engineers:	Paquette & Maurer (1960), Ackerman and Aronoff (1960)

Campus Description

The Patrick Henry Intermediate School was designed in the "cluster plan", following the prototype 1954 school design by The Architects Collaborative, in which classrooms are inwardly sited, clustered around courtyards and centrally located administration and multipurpose buildings (see Appendix A: Figures A-48 and A-49). In the center of the campus is the largest of three courtyards. The administration building and multipurpose building face north onto the south side of the central courtyard. One narrow façade of each of the four L-shaped classroom buildings flank the east, north, and west sides of the central courtyard. Exterior covered corridors surround the central courtyard and connect the four classroom buildings, the multipurpose building, and the administration building. These walkways are sheltered by flat roofs cantilevered off the façades of each classroom building, supported by exposed steel rafters and steel columns forming an upside-down L-shape. Classroom buildings A and D are sited in a sort of yin/yang pattern to create a secondary courtyard northwest of the central courtyard; classroom buildings B and C are also sited similarly to create another secondary courtyard, northeast of the central courtyard. The courtyards are simple and informal, paved with concrete slabs and dotted with occasional trees, some planting beds, and benches.

The entrance to the campus is on the south side of the property, on Dunford Way, through a flat-roof-covered walkway between the administration building to the east and the multipurpose building to the west. The roof of this north-south arcade is cantilevered off the west façade of the administration building and is supported on the east by a series of concrete vertical slabs. The walkway opens onto the central courtyard. A horse-shoe shaped asphalt parking lot, student drop-off area, and bus driveway is west of the multipurpose building, facing Dunford Way; a slightly larger rectangular asphalt parking lot is east of the administration building, also facing Dunford Way. A

grassy area with some trees is planted between the southern façade of the multipurpose building and Dunford Way, with a flagpole near the entrance arcade. There is also a small lawn area between the rectangular parking lot and classroom building B.

Between classroom building B and Teal Drive to the east is an informally landscaped area with patches of grass and scattered trees and bushes. An asphalt pathway leads from Teal Drive through the grounds and passes along the south side of classroom building B toward the central courtyard. Other paved pathways wind through the landscaped area north of this pathway identified on Google Earth as Lochinvar Avenue.

A large asphalt parking lot is sited north and west of classroom building D, accessed from Dunford Way between classroom building A and the locker building to the west. West of the parking lot and locker building are Santa Clara Unified School District vehicles and portable metal storage units. An asphalt-paved play area is east of the large parking lot, behind classroom building C, with two half-court basketball courts, three four-square courts, a dodge-ball circle, and two tether-ball circles painted on the surface, along with other surface playground markings.

Chain-link fencing surrounds much of the campus proper.

Buildings

The campus is comprised of seven buildings. Four classroom buildings, buildings A, B, C, and D, are L-shaped of similar size and footprint, each oriented differently (see Appendix A: Figure A-38 and Figures A-49 through A-52). Building A, C, and D have almost identical footprints, with one wing of the L significantly narrower than the other wing; the two wings of building B that make up the L are of similar width. (The plans originally refer to these buildings as units A, C, D, and E; the administration building was referred to as unit B.) While the classroom buildings were designed using the same architectural features, each classroom building was functionally designed to accommodate specific intended uses, such as shop, science, art, sewing, etc. The administration building is a small rectangle. The multipurpose building (referred to as unit F in the plans), is irregularly shaped, with the center of the primary façade that faces the interior large courtyard bowed outwardly and flanked by two small wings. The locker building (referred to in the plans as unit G), is primarily rectangular, with symmetrical bays extending out from both the north and the south façades. It is sited west of the main cluster of campus buildings. All buildings are in poor to fair condition.

The buildings are built on concrete slab foundations atop engineered fill. The sills are redwood and the framing is steel and redwood. The roofing material appears to be rolled asphalt. The roofs of each classroom are a series of very low gables.

The five buildings built in 1960 share the same simple architectural design features and are of similar low horizontal massing. Common exterior wall design features include panels of two basic wall styles repeated in irregular patterns across each building's façade. Large flat plain panels average between 10' and 12' wide between expansion joints, are 12' tall, with a flat parapet topped with a narrow metal cap and are sheathed in cement plaster painted a warm cream color.

The second panel type is a slightly shorter in height 4'-wide design of 4' x 8' plywood topped with a transom window, all articulated within a three-part metal frame. Most transom windows are

hopper-style windows. Interspersed between these plywood panels are occasional panels with inset plate-glass or Aklo-glass, a type of glass developed in 1939 to absorb heat and filter daylight. The plywood panels are painted the same warm cream color. A stepped-down horizontal roof eave with vertical rib-patterned or corrugated blue facia extends slightly out from the wall plane above these panels. This shallow eave is supported by occasional 4" x 4" metal tube columns.

Typical main entrances contain double metal doors hung symmetrically, flanked by metal-framed sidelights; all doors are blue with simple metal frames, and topped with transom lights. These recessed doorways range from 9'6" to 12' in width and are covered with the same cantilevered roofing detail and facia as the tri-part panels. Other doors are single, blue, not recessed, and are plain metal with simple metal trim.

Classroom Building A (1960)

Building A is the western-most classroom building. Like all four classroom buildings, it is L-shaped. The broader leg of the L is oriented east-west and contains two rows of classrooms with a central interior hallway; the portion of the L that extends north of the east-west portion of the classroom building has no interior hallway. The building was designed to contain five classrooms, a metal shop and wood shop, restrooms, a mechanical room and a supply room.

The east façade (east elevation 1) facing the central courtyard is fully recessed behind the continuous covered walkway that surrounds the courtyard. A parapet on the same plane as the building façade extends above the walkway roof. The cantilevered walkway roof is flat, supported by six simple rectangular steel tubes that extend out below the walkway roof horizontally to its edge. Matching steel tubes provide vertical support at the edge of the cantilevered overhang. The walkway extends beyond the northwest and southwest corners of this building's façade. Blue double solid metal doors are recessed in the center of the elevation, flanked by a piece of plywood on one side and a plate-glass panel on the other side. Each side panel is topped with a glass transom. Blue corrugated metal roof facia is visible over the doors, above the walkway roof, and is the width of the recessed doors and side lights. The exterior wall is articulated by four plain unglazed panels on each side of the central entrance, two panels within each bay of the walkway supports. The façade is 72'-wide.

The south façade, behind which are four classrooms, faces the bus driveway. There is no covered walkway. The wall is articulated by a series of cream-colored plywood panels within metal frames with transoms atop each panel. Four of the panels are dark plate glass, specified on the plans as "Aklo" glass. There are two single solid metal doors painted blue and four small air conditioners protrude out of the flat façade. The very shallow eave is covered by a wide facia panel of blue vertically corrugated metal; it is supported by a series of columns a few inches away from the wall. Four trees are planted along this elevation, which is 128'6" wide.

The west façade is the widest at 167'6" (Appendix A: Figure A-53). The southern-most section of the façade has no openings in the wall of the southwestern-most classroom. North of this portion of the wall is a recessed double metal door entrance into the building's interior hallway which is parallel to and closely resembles the east façade entrance onto the central courtyard, with a cantilevered blue roof over the entrance. North of this entrance are the classrooms designed to be shops; this portion of the west elevation is visually divided into five sections. Immediately north of the entrance is a narrow plain cream-colored panel with a flat parapet that is taller than the cantilevered roof over

the entrance. Moving north, there is a series of the typical plywood panels under a lower blue metal roof that extends slightly beyond the plane of the façade. The eave is supported by four irregularly placed metal posts. Under the first extended eave panel are eight plywood metal-framed panels that differ slightly from the typical in that each are topped with two transoms, the lower row of glazing is of the standard narrow width, and the upper row is taller. Two panels are between the first and second steel columns supporting the shallow eave, while four panels are articulated between the second and third columns. The last two panels are between the third column and the last column, which marks the transition away from the typical plywood panel to a taller flat parapeted portion of the elevation. This expanse is narrower than the two eave-sheltered sections on either side of it and contains a single blue metal door with a small vertical light and a double aluminum-framed window in the center. The second eave-sheltered section of the elevation is identical to the first and also contains four air conditioners jutting out of the wall panels. North of the eave-covered section is another taller flat parapeted wall with a double unglazed blue metal door and a single unglazed blue metal door. The rest of the wall is solid, plastered, and painted cream.

The north façade facing the western end of building B is 37'6" wide and contains the entrance to the boys' restroom. The cantilevered roof walkway that protects the entrance is identical to that of the covered walkway along the two eastern façades of the building.

The east elevation that faces the secondary courtyard is 95' in length and is similar in design to the other east façade, with a series of plastered plywood panels within metal frames. The length of the elevation is covered with an identical cantilever-roofed walkway with a flat parapet following the plane of the building façade extended above. The entrance to the girls' restroom is on this elevation as is another single blue solid metal door.

The 93'-wide north elevation that faces the secondary courtyard is similar in design to the southern elevation, with two classrooms rather than four. A double blue solid metal door with side lights and transoms identical to the door on the east façade is located at the 90-degree angle of the L and opens northward into the secondary northwestern courtyard. Plain cream-colored panels with taller parapets are immediately to the east of the entrance, followed by a series of the typical metal-framed cream-colored transomed panels below a slightly extended eave with blue metal facia.

Classroom Building B (1960)

Classroom building B is the eastern-most classroom building (Appendix A: Figure A-54). L-shaped like the other three classroom buildings, one west façade faces the main courtyard, the south façade faces some landscaping and a parking lot, the east façade faces another expanse of landscaping, and its secondary north façade and secondary west façade face the eastern secondary courtyard. The building was designed to house twelve classrooms, a music room, a mechanical room, a boys' restroom and a girls' restroom.

The 72'-wide west façade that faces the central courtyard mirrors that of the east elevation of building A. The only differences are that the plate glass is intact in both side lights flanking the double doors and four squares of louvers venting the mechanical room are inset into the cream-colored cement-plastered panels south of the centrally located entrance.

The 137'-wide south elevation is mostly symmetrical, with thirty panels of metal framed plywood or Aklo glass all with transom windows above, flanked at either end with wider, taller flat cream-colored cement-plastered panels. Of the thirty panels, four are inset with Aklo glass. The line of thirty metal-framed panels is topped with the same slightly extended eave beyond the plane of the panels, and blue facia. The extended eave is supported by seven steel tube columns in a manner identical to the south façade of building A.

The east elevation is 168'-wide and uses the same architectural design details in the following pattern, from south to north: Three wide, flat panels with a taller parapet coated with cream-colored cement-plaster, recessed blue metal double doors flanked by side lights all topped with transoms below a stepped down cantilevered roof with shallow eaves, a wider, taller cement plaster-coated panel, six narrower plywood/transom panels, one Aklo-glass/transom panel, seven plywood/transom panels, one Aklo-glass/transom panel, seven plywood/transom panels, an Aklo-glass/transom panel, five plywood/transom panels, and finally a wider and taller flat cement-plastered cream-colored panel. The roof design is typical for all of the plywood and glass panels.

The north elevation is 72' wide and is identical to the building's west elevation 1.

The secondary west elevation faces the eastern secondary courtyard and is 96' wide. Architectural treatments are typical; from north to south they consist of one wide taller cement-plaster coated panel, followed by four narrower plywood panels inset in metal frames, topped with transoms, a single metal unglazed door in a space consistent in width to the plywood panels, one plywood/transom panel, one Aklo-glazed/transom panel, five plywood/transom panels, a second door identical to the first, one plywood/transom panel, one Aklo-glazed/transom panel, four plywood/transom panels, and a third identical metal door. The series of narrow panels and doors are topped with the same slightly stepped down and slightly extended eave with blue metal facia supported by five steel tube columns.

The secondary north elevation faces the eastern secondary courtyard. From east to west, the design begins with two narrow rows of floor-to-ceiling awning windows, an architectural feature not found in any other campus building. Following the awning windows is a single blue metal door, followed by an Aklo-glazed/transom panel, five plywood/transom panels, another identical single metal door, then one plywood/transom panel. The elevation ends on the west end with two large, flat taller cream-colored cement-plaster coated panels. The same stepped-down eave with blue metal facia extends from the awning windows to the beginning of the tall cement-plaster panels, supported by one steel tube column.

Classroom Building C (1960)

Classroom building C is the northeastern-most classroom building (Appendix A: Figure A-55). L-shaped like the other three classroom buildings, one south façade faces the main courtyard, the west façade faces a wide asphalt-paved uncovered walkway leading from the large northern parking lot to the central courtyard and the east façade of building D. The north elevation faces the student drop-off section of the large parking lot to the north, a dirt, fenced play area that appears to have some empty raised garden beds and, further north, the paved play area described earlier. The secondary south elevation and east elevation face the eastern secondary courtyard and classroom building B. The secondary east elevation also faces a dirt play area with some play structures, raised beds and occasional trees. The building was designed to contain a homemaking room, a sewing

room, boys' and girls' restrooms, storage, a boiler room, five classrooms, a men's room, a women's room, janitor's room and supply room.

The 72'-wide south façade faces the central courtyard and is consistent in design with the other three classroom buildings' main courtyard-facing elevations, with four plain cream-colored plaster coated taller panels on either side of a typical double-door recessed entrance into the central hall of the building's classroom wing.

The east façade facing the secondary courtyard, 96' in width, is also made up of the two typical wall designs, beginning on the south end with a taller cream-colored cement-plastered plain panel followed by one typical plywood/transom panel, a single flush-hung door, four plywood/transom panels, a frosted Aklo glass/transom panel, five plywood/transom panels, a second flush-hung door, one frosted Aklo glass/transom panels, a third typical door, another plywood/transom panel, a taller cement-plastered panel followed by a typical recessed double-door entrance. The transoms are a mix of fixed pane and hopper windows.

The secondary 73'-wide south-facing façade has no fenestration. It consists of a series of the typical taller cream-colored plain cement-plaster covered panels with three typical single metal doors placed irregularly along the wall expanse plus an additional brown-colored door not in the original plans. Approximately half of the width of the elevation has the typical covered walkway which is fenced off with a combination of cyclone fencing and T-111 plywood.

The secondary east-facing façade is only 30' wide and has no fenestration or entrances. It consists of three typical plain cream-colored plaster-coated taller panels with a metal cap.

The north elevation is the widest at 145'. The majority of the architectural wall treatments are typical except for the wall expanse where the entrances to the boys' and girls' restrooms are located. From east to west, the wall panels begin with one wider taller cream-colored plaster-coated plain section followed by seven plywood/transom panels, then a single narrower plain panel, followed by eight plywood/transom panels. Most transoms contain hopper windows. This series is followed by a larger, taller plain panel with a metal cap. To the west are two open doorways into the girls' restroom, a plain door into a storage room, followed by a double-wide opening into what was the boys' restroom which is now infilled with T-111 plywood painted the same cream color. The wall expanse containing these openings is plain, cement-plastered topped with the blue corrugated stepped down roof detail. This is followed by two typical taller plain plastered panels.

The west elevation is 136' wide and is comprised of the typical design features arranged in the following pattern: From north to south the façade begins with two wide taller plain panels with large ventilation louvers and a central plain flush double door into the boiler room, a typical recessed double door, a single plain panel, six plywood/transom panels, a single frosted Aklo/transom panel, seven more plywood/transom panels followed by six taller plain panels with the third panel containing a simple single metal door.

Classroom Building D (1960)

Classroom building D is the northwestern-most classroom building (Appendix A: Figure A-56). L-shaped like the other three classroom buildings, one south façade faces the main courtyard, the narrow west façade faces a small yard with a few trees then the parking lot/driveway that leads to

the large parking lot to the north. The other south and west elevations face the secondary western courtyard. The east elevation faces building C and the wide walkway between the two buildings leading to the central courtyard. The north elevation faces the large parking lot. The building was designed to contain three classrooms, two larger art rooms divided by a mechanical room and a vented drying room, and four science rooms grouped together in twos with shared workrooms, separated by north/south corridor.

The southern-most elevation is consistent with the other classrooms' elevations that open onto the central courtyard – 72' wide, plain wall panels flanking a typical central recessed double door. The covered walkway is directly in front of this elevation.

The 126' east elevation also contains typical architectural wall features. From south to north, it begins with a single plain taller panel followed by a lower blue roof eave panel with a single blue door, then five plywood/transom panels, an Aklo glass/transom panel, two taller plain panels, another Aklo glass/transom panel, five plywood/transom panels, another plain single door, one taller cement-plastered panel, then a typical recessed double entry door with side lights and transoms. The façade ends with four larger plain panels.

The widest elevation is the north façade at 178'; it is comprised of long expanses of typical repeated wall treatments. From east to west, there is a single large plain panel, five plywood/transom panels, a plain door inset in a lower, blue-roofed panel, a wide taller plain panel with louvers and a wide plain blue door into the mechanical room, another single door inset into a lower, blue-roofed panel, followed by a series of 25 plywood/transom and 4 Aklo-glass/transom panels, irregularly placed. The façade ends with a single plain taller panel.

The secondary west elevation is only 30' wide and has no openings. The wall treatment is limited to taller plain panels of the cream-colored cement-plaster coated material.

The secondary 106'-wide south elevation that opens onto the secondary courtyard has no windows and is comprised of fifteen typical plain taller cream-colored panels, three of which contain a single plain blue metal door. Most of this elevation is sheltered by the typical covered walkway.

The west elevation is 96' wide and is also made up of the typical architectural wall treatments. From north to south, it begins with a typical recessed double door/sidelight/transom entrance followed by a taller plain panel, then a plain metal door under the typical lower blue eave which continues above a series of five plywood/transom panels. Two Aklo-glass/transom panels flank a taller wider plain panel, followed by six lower panels consisting of five plywood/transom panels and one panels containing a simple metal door. The façade ends with a single taller plain panel.

Administration Building (1960)

The rectangular administration building is significantly smaller than the four classroom buildings at 64'6" x 56'. It was designed to contain the library, attendance center, nurse's office, clerks' office, reception room, offices for counselors, the vice principal, and the principal, a work room, speech therapy room, and a mechanical systems room. It and its neighboring building to the west, the multipurpose building, are the southern-most buildings on the campus. The broad central covered walkway entrance is immediately to the west of the building; the walkway roof is cantilevered off the subject building's west elevation (Appendix A: Figure A-57).

The south elevation has no entrances. The façade is divided into the two typical architectural design elements. East of the covered entrance are a series of eleven panels set in metal frames. The first two panels are Aklo glass, followed by five panels of cream-colored plywood, two more Aklo glass panels, then finally two additional plywood panels. Each panel includes a transom of Aklo glass. The typical blue corrugated metal facia that covers the shallow roof eave found on the southern elevation of building A spans the cantilevered walkway roof and continues across all articulated panels. The second design element is a flat expanse of cement-plastered cream-colored wall with the higher, flat parapet topped with a metal cap. This expanse is approximately the width of the covered campus entrance to the west of the building.

The east elevation begins, south to north, with a narrow, flat, cream-colored plaster-covered panel with a taller flat parapet followed by two panels of plywood set in metal frames with transoms above them. The shallow blue roof eave and facia slightly extends outward above the transoms. The rest of the façade is made up of six wide panels with flat taller parapets. Each panel is coated with cement plaster painted in the cream color. One panel contains a solid metal door and one panel contains louvers for mechanical ventilation.

The north elevation contains the same architectural details in a slightly different arrangement. Moving from east to west, the façade starts with a wide cream-colored cement plastered panel with a single plain, solid metal door painted blue. It is followed by the typical plywood panels in metal frames with transoms between the plywood and the blue corrugated metal roof facia, followed by the plain, flat cement-plastered panels with taller flat parapets. One single metal door pierces the flat panel. This elevation faces the central courtyard and the covered walkway.

The west elevation abuts the wide covered main campus entrance between the subject building and the multipurpose building to the west. The architectural design elements are consistent with those on the other elevations and the other campus buildings. A single cream-colored cement plaster panel is followed by a metal-framed plate-glass panel then a metal-framed plywood panel, each topped with a transom. These are followed by three broader, flat cement-plaster panels, one with a door piercing it. These panels are then followed by three metal-framed plywood panels with transoms and two Aklo glass panels with transoms, ending with a panel containing a second door.

Multipurpose Building (1962)

The multipurpose building is a mostly symmetrical, essentially pentagonal-shaped building that contains a narrower central symmetrical pentagonal-shaped room that is flanked to the east and west by smaller rooms. The central room was designed accommodate student assembly, with a raised platform on the south elevation for performances or lectures, as well as be used as a cafeteria. Rooms to the west of the assembly room/cafeteria were designed to contain a kitchen and instrument room; rooms to the east were designed to house a vocal music room, a teachers' work room, and men's and women's restrooms.

The building is sited on the south side of the campus with its primary façade facing north onto the central courtyard. Between the building and the courtyard is a typical, free-standing covered walkway. Its placement is awkward, blocking the full view of the building's taller fenestrated façade. South of the building is a lawn (Appendix A: Figure A-58). To the east is the covered main entry to the campus and the administration building, and to the west is a parking lot/student drop off area.

The design borrows from the 1960 design with its use of tall plain panels of cream-colored cement-plastered metal-capped walls and some of the lower blue corrugated roof elements and blue doors. It is consistent with the earlier buildings' horizonal massing and rhythmic use of vertical elements.

The center of the north façade is taller than the two lower wings on either side and extends north toward the courtyard, creating two planes resulting in a shallow point in the middle. The point is sheathed in tall, plain cream-colored cement-plastered wall panels. The point elevations each contain five 11'7"-tall columns of five 3'7"-wide sets of aluminum-framed windows. Each column consists of three 1'8"-tall hopper windows separated by a fixed 3'-tall window and a fixed 3'7" window. The parapet is flat and metal capped. Moving away from the central point, on the other side of the windows, are sets of blue plain metal double doors. The lower wings project out, north of the doors; the angles of the façades of each wing match the angle of the two center planes of the north elevation.

The planes and heights of the east elevation are varied. Beginning south and moving north, the first section shares the roof line with the auditorium. The plane is angled and contains three rhythmically placed slightly recessed approximately 2'-wide ground-to-roof-cap inverted columns (Appendix A: Figure A-59). Within each recess is a tall, tripart window with two 1' 8"-tall hopper windows divided by a 4'5"-tall fixed light. The rest of the 30'-wide section is comprised of flat metal-capped cream-colored wall panels. The wall makes a 90 degree turn west; this short 5'-wide wall contains a single, plain blue metal door. The wall again makes a short 90 degree turn north; this 9'3"-wide wall contains a wide tripart vertical window. The wall again turns 90 degrees west; the 6'6"-wide wall expanse houses another plain door. Again, the wall plane zigzags north and the roof height is lowered. Within this 32'9"-wide portion of the east façade are five columns of tripart windows, similar in pattern and dimension to the plywood/transom panel architectural wall treatment found on the classroom building exteriors. These columns are fully glazed with three panes of tinted glass. The characteristic blue corrugated metal cantilevered roof extends out from the elevation that contains this set of windows. The elevation continues north for 14' and is plain cream-colored siding with one double set of inset hopper windows.

The south elevation has three planes, with the 34'-wide center portion inset and the symmetrical flanking 34'-wide elevations angled southward as they move away from the façade's center (Appendix A: Figure A-60). The center is sheathed in plain cream-colored, tall metal capped walls. The two flanking planes are mirrors of each other and contain a flush-mounted blue double metal door and three evenly spaced columnar windows identical to those found on the southern-most section of the east elevation.

Like the east elevation, the west elevation is made up of several planes and heights but does not exactly mirror the east elevation (Appendix A: Figure A-61). The first plane on the west is 39' wide and contains three evenly spaced columnar windows identical to those found on the south façade. Several feet north of the third window is a plain blue metal door, followed by several feet of the plain, cement-plastered cream-colored tall wall panel. The wall makes a 90 degree turn eastward. The space contains the kitchen and its mechanical systems. Typical architectural details are used, including several plain blue metal doors, cream-colored walls, and the blue corrugated lower roof detail.

Locker Building (1962)

The locker building is a mostly symmetrical, rectangular east-west oriented building with central bays extending off the north and the south elevations (Appendix A: Figure A-62). It was designed to house the girls' and boys' locker rooms and showers; it appears it was not designed to also accommodate any indoor sports or activities. The building is equally divided in two, with the western half mirroring the eastern half. The south bay was designed to house the mechanical systems and the north bay to contain the restrooms. It has been repurposed by the school district as storage and a print shop.

The building is sited on the southwest side of the campus with its primary entrances facing north onto an asphalt surfaced parking lot and large grassy field. An aboveground PG&E power facility surrounded by a chain-link fence is just north of the building. School district maintenance vehicles and storage containers mark the western edge of the campus. Farther west is the Peterson Middle School oval track, to the east is the main campus, and to the south is an informally landscaped area with trees and bushes and Dunford Way.

The design borrows from the 1960 design with its use of tall plain panels of cream-colored cement-plastered metal capped walls and blue doors. Fenestration is limited and, what there is, is not consistent with the other campus buildings' windows.

The eastern half and the western half of the 100'-wide north elevation generally mirror each other, each with a double plain blue metal set of doors, a single blue metal door, and a tri-part vertical window. The central bay contains two sets of two hopper windows, placed high on the façade. The single-door entrances to the boys' and girls' restrooms are on the east and west facing walls of the bay. There is a second plain metal door on one side of the bay. The double doors on the west half of the north elevation are sheltered by a green canvas awning with the words "PRINT SHOP" in white on its face.

The east elevation and the west elevation are each 49' wide. The west elevation was not visible. The east elevation contains a band of four rectangular windows. One is painted cream and one is above a single metal blue door protected by a green canvas awning.

The south elevation is made up of a series of plain cream-colored cement plastered panels. The east and west walls of the mechanical system bay contain ventilation louvers.

MARIAN A. PETERSON MIDDLE SCHOOL PROPERTY DESCRIPTION

Marian A. Peterson Middle School is located on the northwest portion of the subject parcel APN 313-10-004 (See Appendix A: Figure A-48). Its primary access is on Rosalia Avenue and Poplar Way to the north; the northern boundary of the northeast parking lot is Bryant Way. The eastern boundary is Roadrunner Terrace. The western boundary abuts residences. South of the main campus is the football field and track, the Bryan Osborne Nature Center, and the Santa Clara Unified School District Farm; southeast of the campus is the Patrick Henry field and, further south, the Patrick Henry campus. The SCUSD's 71.08 acre-property is surrounded by subdivisions of primarily modestly scaled single-family homes and multi-family units built in the 1950s–1970s (Appendix A: Figure A-63).

Table 5. Marian A. Peterson Middle School Description.

Name:	Marian A. Peterson Middle School, built as Marian A. Peterson High School
Address:	1380 Rosalia Avenue, Sunnyvale, California 94087
Assessor's Parcel Number (APN):	313-10-004. Includes Patrick Henry School Campus, Marian A. Peterson Middle School, Santa Clara Unified School District Farm, and Bryan Osborne Nature Center
Total Acreage of Parcel:	71.08 acres
Developed Acreage of the Peterson School:	Approximately 25 acres
Owner:	Santa Clara Unified School District
Architect:	L.F. Richards (all historic-period phases that are extant)
Structural Engineers:	Carl W. Zeppenfeld (1964), O.B. Christensen (1966), Kirk C. McFarland, Jr. (1969)

The school was designed and built in three phases in the historic period, 1972 or earlier (Appendix A: Figures A-64 through A-66). All historic-era buildings were designed by architect L.F. Richards. The first phase, designed in 1964, included the administration building (demolished), library (demolished), multipurpose building, most of the gymnasium, a locker building (demolished), home economics building "C", science building "D", classroom buildings "A" and "B", and half of shop building "E". The second phase was built in 1966 and included classroom building "F" and building "H" (demolished). The remainder of building "E", classroom building "G", and a small addition to the gymnasium were built in 1969. Extant buildings that were built after the historic period include the current library, administration building, locker room and additional athletic facilities, swimming pool, and the replacement of building "H", as well as the large landscaped area south of the gymnasium and new basketball courts where the original locker room once was. The tennis courts were built between 1968 and 1980. The bleachers for the football field were built in 1969; the identity of the designer is unknown.

Campus Description

Marian A. Peterson High School was originally designed as a hybrid "finger plan" and "cluster plan" campus. The campus is generally arranged in two parts: The western half serves the school's academics and administration while the eastern half contains buildings, structures and spaces associated with the school's athletic programs. Classroom buildings are clustered around the library and administration building, but their arrangement more closely resembles that of the finger plan. While the original library and administration building are no longer extant, their replacements are similarly sited on the campus, in relation to the historic period classroom buildings. The multipurpose building is sited inward toward a landscaped communal area. The gymnasium is sited

on an open, landscaped area that replaced a large locker room building that was recently demolished. The main entrance into the gymnasium does not face inward but faces away from the campus toward the large parking lot to its north.

The school has two parking lots. The smaller lot is sited on the northwest corner of the campus and includes a curved drop-off area and serves as the primary approach to the campus. The larger lot is on the northeast corner of the school, north of the gymnasium, tennis courts and the other athletic facilities. The main entrance to the campus is the modern administration building (Appendix A: Figure A-67). The library, a modern replacement, occupies the back of the administration building. A small, landscaped area north of the administration building marks the entrance to the campus with a sign and flagpole. A modern concrete walkway leading to the administration building is adjacent to a series of trees surrounded by benches that separate the walkway from the parking lot.

The administration/library building is flanked on each side by two east-west oriented long parallel classroom buildings, buildings A, B, F, and G, from the historic period. The space between these parallel buildings is a narrow, paved area shaded by the buildings' deep cantilevered overhangs (Appendix A: Figure A-68). Building H, a modern replacement building, is directly south of the administration/ library building. South of building H is building D, the science building, built in 1964. To the east of building D is a small building, building C, built in 1964 as the home economics building. South of building D is building E. Building E, originally a shop, was built in two phases in the 1960s. The building marks the southwest boundary of the campus, is parallel to, but longer than the other historic-period classroom buildings. Between classroom building G and classroom building E is a landscaped area, with grass, a Y-shaped pathway, and trees. East of classroom E is the Bryan Osborne Nature Center, outside of the project area.

North of classroom building A, separated by a large concrete courtyard with occasional trees and outdoor seating, is the multipurpose building, built in 1964 (Appendix A: Figure A-69). Directly east of the multipurpose building is the gymnasium also built in 1964, with two additions constructed on the building's east end in 1969. Between the east ends of classroom buildings A and B and the newly planted grassy field south of the gym, separated by a fence, is an informal landscaped area on a slight rise, with mature trees, grass and concrete paths (Appendix A: Figure A-70). South of the gym are the new athletic buildings, structures, the swimming pool, basketball courts, and fixed workout equipment. East of the new buildings and pool are the tennis courts which were built prior to 1980. South of the tennis courts is the football field and bleachers, built in the 1960s.

Chain-link fencing and iron fencing surrounds much of the campus proper as well as functional areas within the campus.

Buildings

The campus is comprised of nine historic-period buildings: Seven classroom buildings, the multipurpose building, and the gymnasium. Four of the classroom buildings, buildings A, B, F, and G have identical footprints and are oriented east-west; buildings A and B were built in 1964 during Phase 1 of the campus's construction, and buildings F and G were indicated on the Phase 1 plan sheets as "future academic". Buildings C and D are smaller rectangles, oriented north-south. Classroom E, built in two phases is similar in footprint and orientation to A, B, F, and G, but significantly longer. The multipurpose building and the gymnasium are significantly taller and, while they are similar to the classrooms in their horizontal massing, their overall scale and architectural

features are comparatively grander. All are topped with what appears to be rolled asphalt roofing material. Overall, the historic-era buildings are in good condition. The following discussion only describes the historic-period campus buildings.

Classroom Buildings A, B, F, G

Classroom buildings A, B, F, and G have virtually identical footprints, however each building was purpose-built to accommodate some specific classroom functions, so the floor plans vary. The northwest corner of A and B buildings house men's and women's restrooms with entrances on the west elevation. Building F (identified in the plans as building C) only has a girls' restroom and building G (identified in the plans as building D) only has a boys' restroom. In addition to multiple stall restrooms, in buildings A and B, a single men's room and single women's room is centered between the two larger facilities. Building A contains a large storage room and a mechanical systems room, both accessed from the west end; the west end of building B was designed to house a darkroom, an identical mechanical systems room, and a smaller storage room. Buildings A and B include small teachers' rooms. Building A has eight classrooms; five are a standard square size of 28' x 28', two are larger at 28' x 42', designed to accommodate a driver education class and a mechanical drawing class. The eighth and largest classroom is 28' x 84', designed to house a typing class. Classroom building B contains eleven standard 28' x 28' classrooms. Classroom building F was designed to contain a large arts and crafts room, two standard sized special education rooms and two L-shaped team-teaching rooms. Classroom building G was designed with ten standard-sized classrooms, a larger 28' x 42' drama room, and a smaller 14' x 28' room. There are no interior corridors and all classrooms' entrances are on the north or south elevation.

The exteriors of the west ends of all buildings are identical and clearly express the structural system (Appendix A: Figure A-71). A three-part concrete bent with legs 28' apart that is consistent with the width of the classrooms is visible and frames the exterior flat cement-plastered solid walls. The ends of the bents cantilever 12' beyond the ends of the walls. The roof is a very low side-gable and extends slightly beyond the wall; the facia on the east and west elevations is cream-colored porcelain enameled metal with spaced shallow vertical detailing. The facia on the north and south elevations is covered by rain gutters. The walls are cream colored and the exposed bent is butter yellow (Appendix A: Figure A-72).

The exterior of each north and south elevation is virtually identical, with rhythmic placement of architectural elements (Appendix A: Figure A-73). A series of parallel concrete bents with the two outer legs partially exposed every 14' run the length of the buildings, creating a series of bays, and cantilever 12' beyond the vertical plane of the building. The cantilever beam supports an overhang the length of the building, are fin-like and gradually narrows to 8" wide and extends about 1' beyond the roof of the overhang. The walls between the exposed butter-colored bents are cream-colored cement plaster. Several bands of square windows are just below the roof eaves between the exposed bents. Doors are metal framed and painted blue. Most have a single full-width metal-framed side panels, with the top half glazed and the bottom half enamel coated. The entrances are topped with two transom lights. Single or double rows of metal lockers run the length of the buildings.

The east elevations contain the entrances to the boys', girls', women's and men's rooms, mechanical systems rooms, and building B's darkroom. Louvers vent the mechanical system rooms.

Building C

The 1964 plans identify this building as the Home Economics Building. It is the smallest of all the classroom buildings at 56' square, and doesn't have the long horizontal mass common to classroom buildings A, B, E, F, and G. It was designed to house a sewing studio and a cooking lab, with a small dining room, fitting room, laundry, and storage.

The east elevation is consistent with the west elevation of the classroom buildings A, B, F, and G, but with a single metal door hung in one bay (Appendix A: Figure A-74). The west elevation includes the main entrance and exhibits a variation of the bent design. Rather than the three-leg bent, this façade exposes a four-leg bent, with the center two bents slightly less than 10' apart and containing a metal framed double plate-glass door.

The north and south elevation almost mirror each other and are consistent in design with the other classroom buildings, but with just four of the 14'-wide bays punctuated by five exposed bents. One bay on each of these elevations contains a row of metal lockers and one has a single metal door. Three of the four bays on the south elevation have the band of six windows just below the eave; all four of the bays on the north side have the same window treatment. The low-gable roof and covered cantilevered walkways are identical to those of the other classroom buildings; the facia is similar in style but blue, as are the gutters. A colorful mural is on the north façade of the building.

Building D

Identified on the 1964 plans as the Science Building, this is the only classroom building that does not follow the standardized structural unit sizes of 14' or multiples thereof on all elevations (Appendix A: Figure A-75). This rectangular building is oriented north-south and was designed to accommodate two biology labs, two chemistry labs, a research lab, and an art studio. The building is 72' x 126'. The east and west façades are a series of nine of the standard bays, with the typical exposed bent system, cantilevered walkway overhang, roof style, cream, butter, and blue colors, and wall finish. The facia is blue, unlike that on buildings A, B, F, and G. Most bays contain a row of metal lockers, some include single metal doors in metal frames; all the bays on the east façade contain a band of six window just under the roof eave. Six of the nine bays on the west elevation contain the window treatment, with the three central bays windowless. Two bays have additional roof treatment inconsistent with other buildings in that the eaves of the third and sixth bay project out slightly resulting in a stepped effect. One bay contains three ventilation louver panels.

The north and south elevations are similar to the east elevation of building C in that the exposed bent structural system has four legs rather than the typical three-leg 56'-wide bent. This results in two wide expanses of plain cement-plastered walls with a narrow central plain wall on the north elevation and a single metal framed glass door flanked by two fixed lights of wire glass, all topped with three glass transoms on the south elevation.

Building E

Building E, identified in the original plans as a "shop" was designed and built in two phases in 1964 and 1969. The structural system and exterior design of the 1964 portion of the building is generally similar to the classroom buildings, however the horizontal footprint is longer, and the building is taller. The facia detail and low gable roof match that of the other classrooms. It was designed to

contain a metal shop, a wood shop, offices, drying rooms, tool rooms, and finishing rooms. The east elevation, while taller, matches the west elevation of the classroom buildings with plain cream-colored walls inset within a three-part bent that cantilevers out to create a covered walkway on the north and south elevations.

The north elevation of the 1964 portion of the building is divided into six equal bays of 14' with the same exposed bents and cantilevers as found in the classroom buildings, plus a narrower 7'-wide bay. Moving east to west, the first three bays contain rows of lockers. Taller bands of six windows in each bay begin at approximately the same height as those in the classroom buildings and extend up to the roofline. The fourth bay also contains lockers, a low panel of louvers and a single metal door, but no windows. The fifth bay only contains lockers and a panel of louvers. The sixth bay mirrors the fourth bay; the seventh and eighth bay are identical to the first three. The final half bay of the 1964 building contains lockers and a louvered panel.

The north elevation of the addition is consistent in design, massing, and architectural features with the original 1964 building. It was designed to contain a power mechanics classroom, two drafting rooms, an electronics classroom, a carpentry shop, offices, a lecture room, and an addition to the metal shop. The addition is made up of fourteen bays that match those of the original building, each bay containing either lockers, doors, and/or vents. Four of the bays include upper bands of six windows.

The south elevation of the 1964 construction generally mirrors that of the north elevation, with its structural system clearly expressed by the exposed bents and cantilevers. There are no lockers on this façade. Moving east to west, the first bay is a plain cement-plastered wall with a six-light band of tall windows at the roof line. The second and third bay are hidden behind a taller simple rectangular, flat-roofed structure that extends above the roofline. The fourth bay contains double metal doors with three tall windows above it; the rest of the wall has the typical plastered cream-colored finish. The fifth bay is plain wall, the sixth is a mirror of the fourth bay. The remaining bays are plain and plastered, with no openings.

The south elevation of the 1969 addition also has no lockers. The fourteen bays are mostly plain, with no openings. The two bays on the west end of the elevation each contain large roll-up service doors. Two bays contain double metal man doors, and two contain a narrow band of window just below the roof.

Multipurpose Building

The multipurpose building was designed and built as part of Phase 1 in 1964. It is oriented east-west. The kitchen is on the west side of the building, and on the east is a stage, behind which are music/chorale classrooms and storage. The center section of the building is a large, open, versatile space designed to be used as a cafeteria or for assemblies.

The central portion of the north façade opens onto Rosalia Avenue. The three separate functional components of the building are expressed with the different use of materials, heights and architectural elements. The west portion that houses the kitchen and mechanical systems is an 84'-wide, low building of three flat-topped, stepped-back north-facing planes, the first of which projects slightly north of the façade of the central portion of the building. The space resulting from the step backs is enclosed by a low off-white tilt-up concrete wall, creating an enclosed courtyard that allows

access to the mechanical systems located in the first two stepped building sections. The wall is heavily textured with a flat-topped parapet. The first two planes of the building are concrete tilt-up walls with access doors. They are coated in rough gray concrete embedded with large, coarse tan, brown, and white irregularly sized rocks (Appendix A: Figure A-76). The third plane has low horizontal metal-framed windows presumably to allow natural light into the working kitchen; the unglazed portion is also covered with the decorative rock. The joints of each tilt-up panel and 90-degree angles are indicated by vertical flat cream-colored concrete columns, accentuating the stepped design. The rock-faced wall extends 4' north of the central, main building's façade.

The architectural elements and finishes of the central portion of the building, the "multipurpose" section, are significantly different from either west or east wing (Appendix A: Figures A-77 to A-79). At over 22' tall, with strong vertical architectural features and smooth lighter-colored wall finishes, this wider portion of the building appears significantly taller than the low, horizontal wings due to strong vertical architectural features. The façade is divided into nine mostly butter-colored 14'-wide bays, each divided by either a cream-colored engaged rectangular column or, in the case of two, deep buttress slabs. Flanking all but two eastern-most, and one western most columns/buttresses are a series of narrow vertical flat brushed-aluminum-framed lights. The six-part lights abut the engaged columns and buttress columns and begin inches above the ground with a tall light that matches the door height, followed by four small square lights, topped with a door-height light that stops only a few feet from the roof soffit. There are three bays between the two buttress columns. The center bay is plain butter-colored concrete-plaster with no openings other than the previously described narrow glazing abutting the columns. The other two bays are identical, with central steel-framed double glass doors and with the lower, approximately two-thirds of the wall coated in a cream-colored concrete plaster. Embedded in the cream-colored portion are horizontal aluminum bands that continue the lines of the muntins of the glazed bands of windows. These visually reinforce the horizontality of the roof line. The two buttress columns are horizontally scored in two locations, at the same height as two of the window muntins. A concrete cantilever beam with a vertical notch in the end extends off the top of the columns, supporting the roof. The soffit is slightly stepped back from the end of the cantilever beam. The blue facia covers the edge of the roof that slightly juts out. The facia is a continual pattern of long raised-edge rectangles, further emphasizing the building's horizontality. The strong horizonal lines and vertical members make the building feel larger than it is.

A concrete patio with an octagonal planting bed in the center is in front of the three bays flanked by the buttress columns. Grass, low landscaping, and a few small trees are in front of the east portion of the building. The west portion has a concrete sidewalk, planning beds and a large Ponderosa pine tree.

The eastern portion of the building is the same height as the western wing and also extends about 4' north of the façade of the central portion of the building (Appendix A: Figure A-80). It encloses most of the eastern-most bay of the central section. Like the western wing, it is sheathed in rough gray concrete, embedded with the same rock, and the tilt-ups are indicated by flush flat cream-colored concrete columns. However, the plane is flat, not stepped like the western wing. Also, unlike the western wing, the wall of this wing is topped with a blue metal cap.

The west elevation is 70' wide (Appendix A: Figure A-81). The stepped portions of this elevation are sheathed in the rough concrete and decorative stone; the western-most wall consists of two panels of butter-colored cement-plaster walls divided and flanked by cream-colored smooth flush concrete

columns. Above these walls the 66'-wide west wall of the central, taller portion of the building is visible. It is divided into three bays separated by columns with cantilever beams at the top supporting the roof eaves. The facia is consistent in design with that found on the north façade of the central portion of the building.

The east elevation is wider, at 78' in width (Appendix A: Figure A-82). It is divided into three bays, each covered in the same decorative rock and divided by flat cream-colored flush concrete columns, topped with a narrow blue metal cap. There are metal doors in each bay – two single and one double. As with the western façade, the central portion of the building is visible above the east wing and is identical to that seen above the west wing.

The southern elevation faces onto a large concrete area with some tall Ponderosa pines, brick planters, modular metal picnic tables/benches and benches (Appendix A: Figures A-83 and A-84). A long, free-standing butterfly awning covers a walkway that extends across the central portion of the building and another shelters the west wing. Two lower shelters flank the taller shelter in front of the multipurpose portion of the building.

The roofline of the western wing of the south elevation of the building, as previously stated, is lower than that of the central portion of the building. The front vertical plane of the west wing is consistent with that of the central section. It consists of four bays, three of which are 14' wide, flanked by cream-colored flush concrete columns. The third is the width of three bays. The western-most bay is a plain, butter-colored cement-plastered wall with a single blue metal door, as are the third and fourth bays. The second bay, the 42'-wide bay, is mostly glazed and contains the entrance to the snack bar. The unglazed portion is covered by a colorful mural. A central metal-framed glass double door is flanked by eight long aluminum-framed horizontal windows arranged in two columns of four lights. To the east and west of these windows are single metal framed glass doors.

The façade of the central portion of the building largely mirrors that of the north elevation. The primary difference is the location of the entrances, additional aluminum-framed fenestration that is consistent in geometry with the entrance doors, and the lack of buttressed columns (Appendix A: Figure A-85). The recessed aluminum bands that mirror the muntins in the tall vertical window bands cross five of the bays on the south façade, rather than just three. From west to east, the first bay has no openings other than one band of the vertical lights; the second and sixth bay contain the entrance doors; the center of the third, fourth and fifth bays contain the four-part double door sized windows; and the last three bays are plain except for the vertical bands of glazing on either side of the engaged rectangular columns.

The south façade of the east wing, like the west wing, is at the same spatial plane as the central building except for a 12' panel at the eastern end that protrudes south (Appendix A: Figure A-86). The wing is comprised of five panels of butter-colored plain walls divided into 14' bays divided by cream colored flush concrete columns. One bay has a plain double metal blue door.

Gymnasium

The gymnasium is also part of the original Phase 1 campus design and construction. During the initial design a future addition on the east elevation was indicated on the plans. During the 1969 Phase 3 design the addition, plus a "new auxiliary gym addition" were designed. The building is 110' x 150', plus the eastern "auxiliary" addition of 50' x 55'. The gymnasium was designed as an open floorplan;

the northern entry was designed to contain a lobby, men's and women's restrooms, storage, and a janitor room.

The gym is surrounded on the north and east by an asphalt parking lot and former asphalt-surfaced basketball courts. The north elevation contains the public entrance, planting beds, and a concrete sidewalk. The southern elevation, which opens onto a new concrete-surfaced open space with a low zig-zag concrete seating wall, a free-standing long canopy the width of the building, and a large lawn; it faces the other, newer athletic facilities. The multipurpose building is immediately to the west.

The north façade, the public entrance, is consistent in overall design with the central portion of the multipurpose building, however the bays are wider at 16'8" (Appendix A: Figure A-87). Engaged rectangular concrete columns and cantilevered beams separate the bays. The roof design and detail match that of the multipurpose building. The wall surface between the columns, however, is finished with a more textured material. The long, deep, approximately half-height horizontal sheltered entrance crosses the first six bays starting on the western end of the building. It is enclosed on both ends. The central three sets of double metal framed doors are further sheltered by narrower concrete vertical panels. These panels and the inside of the outer panels are coated with a smooth concrete butter-colored plaster. The north facing planes within the shelter are sheathed in the same rough stone embedded in concrete as can be found on the east and west wings of the multipurpose building, however they have been covered over with a colorful mural. The walls of the building above the shelter are also painted with a school spirit mural that includes the words "ENTERING PIRATE TERRITORY" (Appendix A: Figure A-88). The seventh bay is also painted with the mural; the eighth and ninth bay are plain, textured, and painted the butter color. The outer faces of the shelter walls are unpainted decorative rock.

The east façade is of the main gym consists of six bays separated in the typical manner with the same palate, a very low gable roof, and materials as found in the multipurpose building except that the bays are wider, and the surface is more textured. In the north half of this elevation is a double blue metal door in the central bay. The smaller addition is attached to the southern portion of the larger gym; the roofline of the main building extends slightly above the flat roof of the eastern-most addition. The north, east, and south walls of the addition are divided into three bays each, within the typical engaged concrete rectangular columns. There are no cantilevered beams; the roof is flat, and the facia is at the same plane as the engaged columns with simple blue facia. There is a single blue door on each of these facades (Appendix A: Figure A-89).

The southern elevation of the main gymnasium is also articulated by nine bays between ten engaged rectangular columns with cantilevered beams at the top, under the extended roofline (Appendix A: Figure A-90). The blue facia is peeling. All walls are textured and butter colored, and the columns and cantilever beams are smooth and cream colored. Two bays contain double blue metal doors; both are sheltered by flat horizontal awnings supported by two cables. The door in the southern façade of the smaller addition is also sheltered by the same style of awning.

The west elevation is a mirror of the east elevation without the smaller addition. It has the typical, but wider than those found on the other buildings, six bays articulated by seven engaged concrete rectangular columns with the same finish and roof detail found on the other elevations of the building. The first and sixth bays each have a double blue metal door immediately adjacent to the exterior columns.

EVALUATION

PATRICK HENRY INTERMEDIATE SCHOOL

Criterion 1

Under CRHR criterion 1, the Patrick Henry Intermediate School does not qualify as a historical resource that has made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. Constructed in 1960 and 1962, it was one of many schools built during the post WWII era of rapid suburbanization and population growth in Santa Clara County, California, and throughout the United States. It is also one of hundreds of schools in Santa Clara County associated with the common trend of establishing and unifying school districts during the 1950s and 1960s. It is a commonplace example of these local and national trends and development patterns.

Criterion 2

Under CRHR criterion 2, the Patrick Henry Intermediate School does not qualify as a historical resource associated with any individual whose activities are demonstrably important within local, California, or national history. For the school to be of significance under this criterion, it would have to be able to illustrate the person's important achievements in the field of education. At the time it was built Lawrence Curtis was the Jefferson School District Superintendent and George Boyko was the principal. While both men likely contributed to the continued growth and progress achieved by the Jefferson School District, what would become the Santa Clara Unified School District in 1965, research has not found that either man has made any specific contributions of demonstrable historic importance that would qualify the school as a historical resource under criterion 2.

The school district purchased the land from the Castello family, the Cirrincione family, and the Teresi family. Research has not resulted in any noteworthy additional information about these Italian immigrants and first-generation California-born farming families. The Italian-born senior members of the families were likely part of the significant influx of Italians into the area during the late 19th and early 20th century, attracted by rich agricultural land and associated opportunities. They appear to have been typical farming families that subdivided and sold their property as Santa Clara County's post-war population grew rapidly and suburban communities developed. Furthermore, other than having once owned the subject land, none appear to have had any association with the current school facilities.

Criterion 3

Under CRHR criterion 3, the Patrick Henry Intermediate School does not qualify as a historical resource that embodies the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic value. Under this criterion, there are three contexts that must be considered: Architectural style of the overall campus and the multipurpose building individually, functional school style as an example of a cluster-plan campus, and the potential for its architects, Clyde D. Goudie and Dewitt J. Griffin, to be considered master

architects. The campus's potential to be a district of a significant concentration of buildings and structures united aesthetically by plan or physical development is also considered.

Architectural Design

The architectural design of the campus classroom buildings is modest Mid-Century Modern style. The designer applied the expected rhythmic composition, low horizontal massing, simple geometric volumes and strong right angles, low-pitched gable roofs with wide cantilevered overhangs, courtyard entryways, simply treated materials, and lack of historical design elements. While the buildings are characteristically Mid-Century Modern, they are not distinctively characteristic of the style and are not significant representatives of the style.

The locker building is primarily utilitarian, with only a few Mid-Century Modern elements applied, like strong right angles and lack of historical design elements; it is therefore not distinctive in its design.

The multipurpose building design is also generally Mid-Century Modern, but introduces some elements not found in the classroom buildings, most specifically its irregular footprint, large expanses of glass on the north elevation, and a series of tall columnar inset windows on the other three elevations that are vaguely classical and somewhat reminiscent of PWA Moderne architectural style with their shallow relief panels. The building uses the same materials and palettes as the other campus buildings, is generally horizontal in its massing, and, other than the slight classical reference, lacks historical design elements or ornamentation. While it is generally overall characteristic of Mid-Century Modern architecture, it, like the rest of the campus buildings is not a distinctive example of the style.

Campus Design

Patrick Henry Intermediate School campus is generally designed in the cluster-plan style; the locker building is not part of the cluster of buildings. The campus is not a distinctive example of this style. While the buildings are oriented inward, facing courtyards, as is typical of this type of campus organization, most of the classroom buildings have a mix of exterior and interior corridors, and classroom fenestration is minimal and too high to bring in enough natural light and air characteristic of the cluster plan. Patrick Henry Intermediate School is not significant under criterion 3 as a distinctive example of the cluster plan campus.

Master Architect

Clyde D. Goudie independently designed the 1960-built campus. He partnered with Dewitt J. Griffin to design the 1962 multipurpose building and locker building. Clyde Goudie was the architect for the Jefferson School District in the 1950s and early 1960s and designed many of the extant elementary schools in what is now the SCUSD. While locally fairly prolific, neither are recognized as being masters in the field of school architecture or architecture in general. Additionally, for a work to be considered significant for being designed by a master, it would need to express a particular phase in the development of the master's career. The Patrick Henry Intermediate School campus is not eligible under criterion 3 because it is not a significant example of the work of a master architect.

District

The Patrick Henry Campus is not a significant historic district. Historic districts usually also meet the significance criteria of criterion 1 for its important association with a trend, and/or criterion 3, having high artistic values. While the campus composition is that of a concentration of buildings, structures, and landscape features that reflect one functional activity, it is an aesthetically commonplace example of a Mid-Century Modern 1960s school, broadly associated with the post WWII commonplace trend of suburban school construction.

Criterion 4

Under CRHR criterion 4, the Patrick Henry Campus is not significant as a source (or likely source) of important information regarding architectural history. This property type is common and does not have any likelihood of yielding important information about historic construction materials or technologies. This evaluation makes no determination regarding the potential for the discovery of significant archaeological resources on the property.

MARIAN A. PETERSON MIDDLE SCHOOL

Criterion 1

Under CRHR criterion 1, the Marian A. Peterson Middle School does not qualify as a historical resource that has made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. Originally constructed in three phases between 1964 and 1969, it was one of many schools built during the post WWII era of rapid suburbanization and population growth in Santa Clara County, California, and throughout the United States. It is also one of hundreds of schools in Santa Clara County associated with the common trend of establishing and unifying school districts during the 1950s and 1960s. It is a commonplace example of these local and national trends and development patterns.

Criterion 2

Under CRHR criterion 2, the Marian A. Peterson Middle School does not qualify as a historical resource associated with any individual whose activities are demonstrably important within local, California, or national history. For the school to be of significance under this criterion, it would have to be able to illustrate the person's important achievements in the field of education. At the time it was built Wendell Huxtable was the superintendent of the Santa Clara High School District and Louis Martini was the principal. While both men likely contributed to the continued growth and progress achieved by the Santa Clara High School District, what would become the Santa Clara Unified School District in 1965, research has not found that either man has made any specific contributions of demonstrable historic importance that would qualify the school as a historical resource under criterion B. Marian A. Peterson, for whom the school is named, was a former teacher and trustee of the Santa Clara High School District. The naming of the school was honorary; Mrs. Peterson does not appear to have any stronger association with the school.

The school district purchased the land from the Castello family, the Cirrincione family, and the Teresi family. Research has not resulted in any important additional information about these Italian

immigrants and first-generation California-born farming families. The Italian-born senior members of the families were likely part of the significant influx of Italians into the area during the late 19th and early 20th century, attracted by rich agricultural land and associated opportunities. They appear to have been typical farming families that subdivided and sold their property as Santa Clara County's post-war population grew rapidly and suburban communities developed. Furthermore, other than having once owned the subject land, none have any association with the current school facilities.

Criterion 3

Under CRHR criterion 3, the Marian A. Peterson Middle School does not qualify as a historical resource that embodies the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic value. Under this criterion, there are three contexts that must be considered: Architectural style of the overall campus and the multipurpose building and gymnasium individually, functional school style as an example of a hybrid finger- and cluster-plan campus, and the potential for its architect, L. F. Richards to be considered a master architect. The campus's potential to be a district of a significant concentration of buildings and structures united aesthetically by plan or physical development is also considered.

Architectural Design

The architectural design of the campus classroom buildings is modest Mid-Century Modern style. The designer applied the expected rhythmic composition, low horizontal massing, simple geometric volumes and strong right angles, low-pitched gable roofs with wide cantilevered overhangs, courtyard entryways, visually expressed structural systems, simply treated materials, and lack of historical design elements. While the buildings are characteristically Mid-Century Modern, they are not distinctively characteristic of the style and are not pure representatives of the style.

The multipurpose building includes several features that are considered characteristic of Mid-Century Modern architecture, such as simple geometric volumes and strong right angles, a low-pitch gable roof with wide cantilevered overhangs and articulated primary façades. However, the composition, with its distinctively differently designed west and east wings, results in an unbalanced design in both proportion and material. While many significant examples of Mid-Century Modern are symmetrical, it is not essential for the style. The National Register of Historic Places- listed Research House by master architect Richard Neutra is not symmetrical, but a well-balanced composition of vertical and horizontal planes and columns. The multipurpose building also has some elements of New Formalism on the north and south façades of the central portion. New Formalism, which was a rejection to rigid Modernism, includes references to Classical building proportion and scale, columns, and stylized entablatures. The overall design of the building is inconsistent and not a significant example of a Mid-Century Modern or New Formalist building; it does not clearly express either architectural design type.

The gymnasium also includes several features that are characteristic of Mid-Century Modern architecture, such as simple geometric volumes and strong right angles, a low-pitch gable roof with wide cantilevered overhangs and articulated façades. The most architecturally distinctive elevation is the north entrance, with its deep, wide shelter across much of the façade. The placement of the entry shelter, beginning at the west end does not span the entire elevation which results in an unbalanced composition. Overall, the building is only a simple expression of Mid-Century Modern. Its function as a gymnasium prevents the use of fenestration, an important characteristic of Mid-

Century Modern architecture. The building is not a significant example of a Mid-Century Modern architecture; it does not represent an important expression of the style.

Campus Design

Marian A. Peterson Middle School campus is a hybrid of the finger-plan campus and cluster-plan campus. Consequently, it is not a distinctive example of either type of campus design.

Master Architect

L. F. "Fred" Richards designed the first three phases of Peterson Middle School in the 1960s. He received his Bachelor of Architecture in 1934 from the University of Southern California. Prior to WWII he was an in-house architect for Pasetta Construction, which brought him to the Bay Area. During WWII he worked for Kaiser Permanente, returning to Pasetta Construction near the end of the war. When Pasetta retired Richards opened his own business. He served as president of the Santa Clara Valley chapter of the American Institute of Architects (AIASCV) then California Council of the American Institute of Architects (CCAIA). He was elected to Fellowship (FAIA) in 1962. After closing his office, he worked part time for Dennis Burrow, AIA.

Richards designed schools for the Santa Clara, San Jose, San Martin, and Gilroy school districts, as well as the Santa Clara International Swim Center, which he considered his most significant project. While locally fairly prolific, he is not recognized as being a master in the field of school architecture or architecture in general. Additionally, for a work to be considered significant for being designed by a master, it would need to express a particular phase in the development of the master's career. The Marian A. Peterson Middle School campus is not eligible under criterion 3 because it is not a significant example of the work of a master architect.

District

The Marian A. Peterson Middle School Campus is not a significant historic district. Historic districts usually also meet the significance criteria of criterion 1 for its important association with a trend, and/or criterion 3, having high artistic values. While the campus composition is that of a concentration of buildings, structures, and landscape features that reflect one functional activity, it is an aesthetically commonplace example of a Mid-Century Modern 1960s school, broadly associated with the commonplace trend of suburban school construction. Additionally, the campus lacks continuity due to the demolition and replacement of several important buildings and, therefore cannot clearly express the plan and physical development of a 1960s school campus.

Criterion 4

Under CRHR criterion 4, the Marian A. Peterson Middle School Campus is not significant as a source (or likely source) of important information regarding architectural history. This property type is common and does not have any likelihood of yielding important information about historic construction materials or technologies. This evaluation makes no determination regarding the potential for the discovery of significant archaeological resources.

Summary of Findings

6

ARCHAEOLOGICAL RESOURCES

BACKGROUND RESEARCH

A search of records at the NWIC indicated that no cultural resource studies have been conducted within the Project Area, and five cultural resource studies have been conducted within a $^1/_4$-mile radius of the Project Area. Additionally, the record search indicated that no cultural resources have been recorded within the Project Area or within a $^1/_4$-mile radius of the Project Area.

Historic aerial photography and archival research illustrates that the Project Area was a part of Rancho Quito and Rancho Pastoria de Los Borregas. By the late 19th century the Project Area was under the care of W. Wilcox and A. Patterson, in an area marked as belonging to the Milliken Family and later by Mrs. R. S. Burns and A. J. Landrum. By the early to mid-20th century the Project Area consisted of orchards that were owned and operated by Italian immigrant families, including Ignazio and Rosalia Castello. The Castello's sold some of their property to the Jefferson School District in 1955 and more later in 1960. At this time, the property was developed into the Patrick Henry Campus and Marian A. Peterson Middle School.

SURVEY RESULTS

Constraints during the survey included poor surface visibility due to dense grasses and vegetation, pavement, and standing architecture obscuring approximately 90% of the Project Area. The archaeological pedestrian survey yielded positive results, as one historic-era isolated cultural resource was observed on the surface (Iso 1).

PRECOLONIAL RESOURCES ASSESSMENT

Based on buried site sensitivity models, it is our assessment that there is a moderate-high potential for buried precolonial archaeological resources to be located within the Project Area (Byrd 2017; Meyer et al. 2010; Rosenthal and Meyer 2004). The soils within the Project Area are hypothesized to be from the Holocene, and these soils are located in a flat alluvial fan with slopes less than 9 degrees and are less than 200 meters (656 feet) from a water course (Byrd 2017; Meyer et al. 2010; Rosenthal and Meyer 2004). Therefore, there is a moderate-high potential for buried precolonial resources to be found within the Project Area. While the Project Site has been developed in modern times, precolonial sites within such sensitive land formations are often preserved in between or below the modern built environment. Our visual inspection of the Project Area ground surface determined that soils encountered are consistent with what is mapped in the area with no evidence

of culturally produced stratigraphy, and we did not identify any evidence of in-tact precolonial archaeological deposits.

HISTORIC-ERA RESOURCES ASSESSMENT

It is our professional opinion that there is a low potential for any buried historic-era archaeological resources to be located within the Project Area. The first documented historic-era development of the project consisted of agricultural fields during the 20th century. Further, our visual inspection of the Project Area ground surface did not identify any evidence of in-tact historic-era archaeological deposits. Therefore, it is our assessment that the proposed Project is not likely to impact any subsurface historic-era cultural resources.

ARCHITECTURAL RESOURCES

Section 15064.5(a)(2-3) of the CEQA guidelines require that state and local public agencies evaluate the potential for historical resources to be impacted by discretionary activities, using the criteria outlined in California public resources code (PRC) section 5024.1. The Marian A. Peterson Middle School campus and the Patrick Henry Intermediate School campus were evaluated for eligibility for listing on the California Register of Historical Resources (CRHR), using the criteria outlined in California PRC section 5024.1. It has been determined that neither property is associated with events that have made a significant contribution to the broad patterns of history; is associated with the lives of persons important to history; or embodies the distinctive characteristics of a type, period, region or method of construction. Furthermore, neither is likely to yield important information about architectural design or construction. Because neither is eligible for the CRHR, neither is a historical resource for the purposes of CEQA. No further action is required.

RECOMMENDATIONS

Due to the moderate to high potential of the Project Area to contain precolonial archaeological deposits, Albion recommends that, once the Project elements and depths of impact have been designed, an additional archaeological subsurface study be conducted within the areas and to the depth of Project impacts, to further test for the presence or absence of precolonial archaeological resources. This is especially important for Project elements that extend further than 2 feet below ground surface, as the first two feet of soil is likely disturbed by the modern environment. It is Albion's professional opinion that additional archaeological subsurface testing is necessary to determine if the current Project will have an impact on precolonial cultural resources (CEQA Section 15064.5(a)(2-3)).

Additionally, since many important cultural resources, such as tribal cultural resources/traditional cultural properties, do not necessarily leave an archaeological footprint or have physically identifiable manifestations, it is vital to seek out information regarding the possible presence of these important resources and their locations through consultation with local tribal members. Under the authority of Assembly Bill 52, the District is responsible for collecting and incorporating Tribal information into the environmental review process.

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Appendix A

Figures

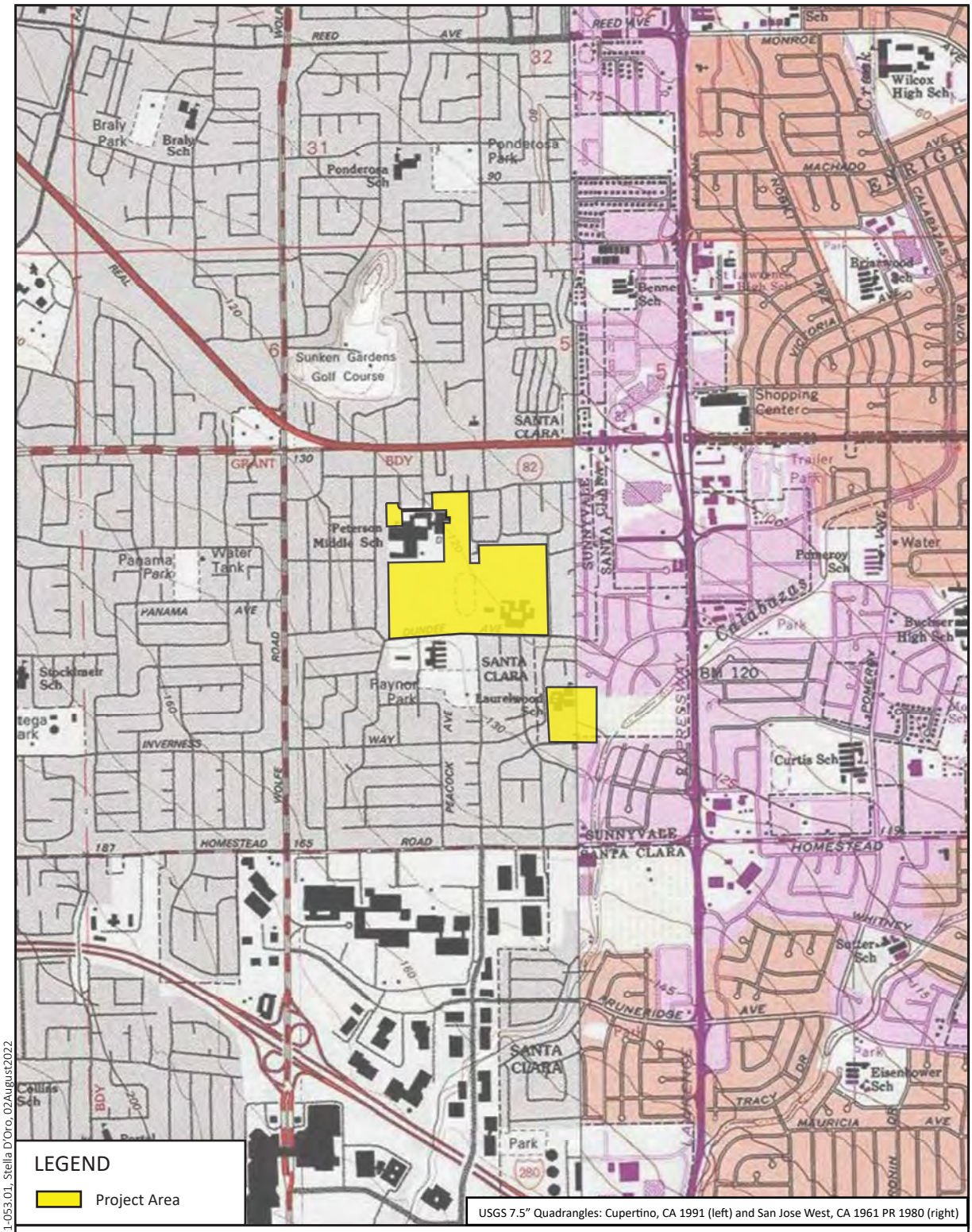
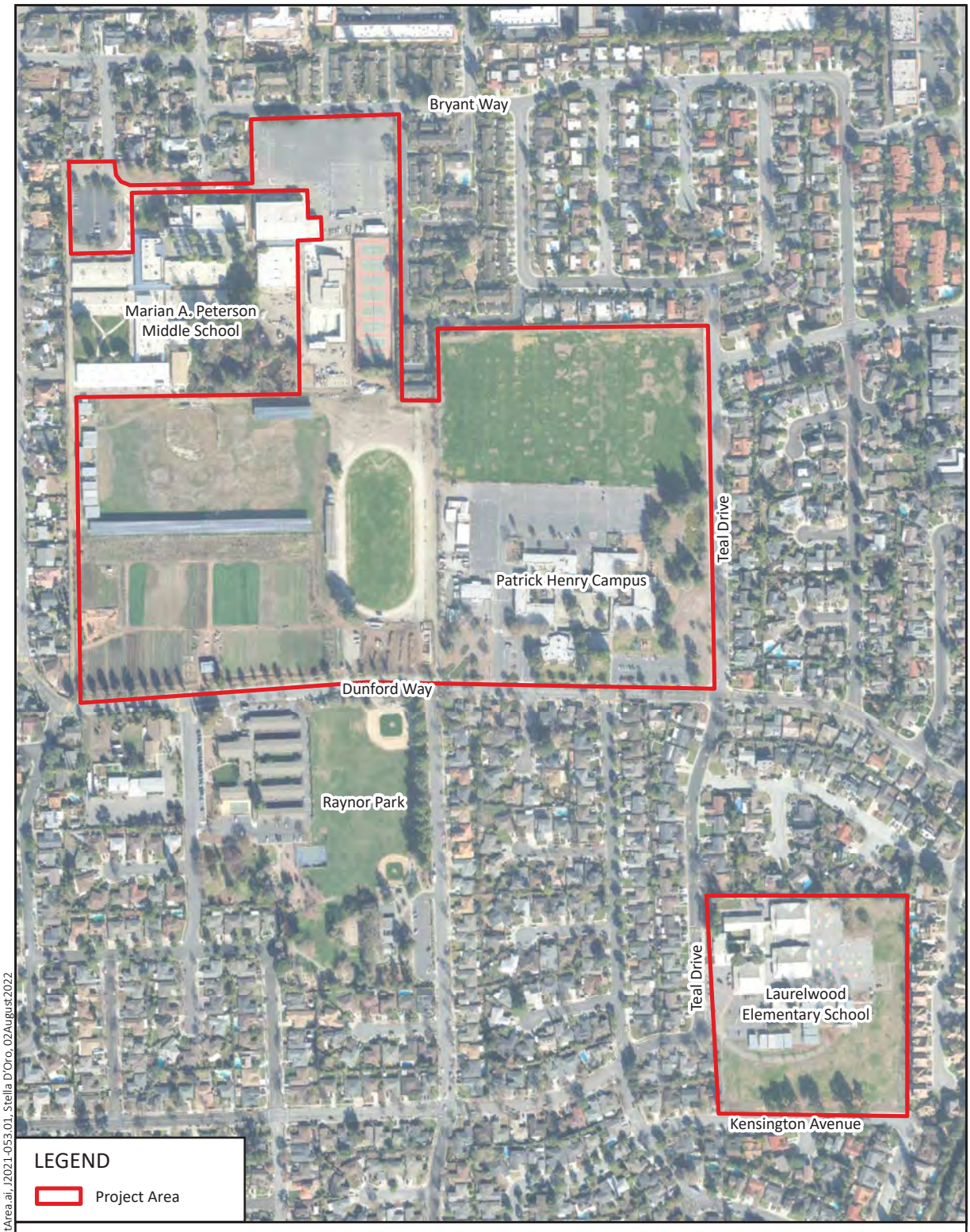


Figure A-1. Project location.



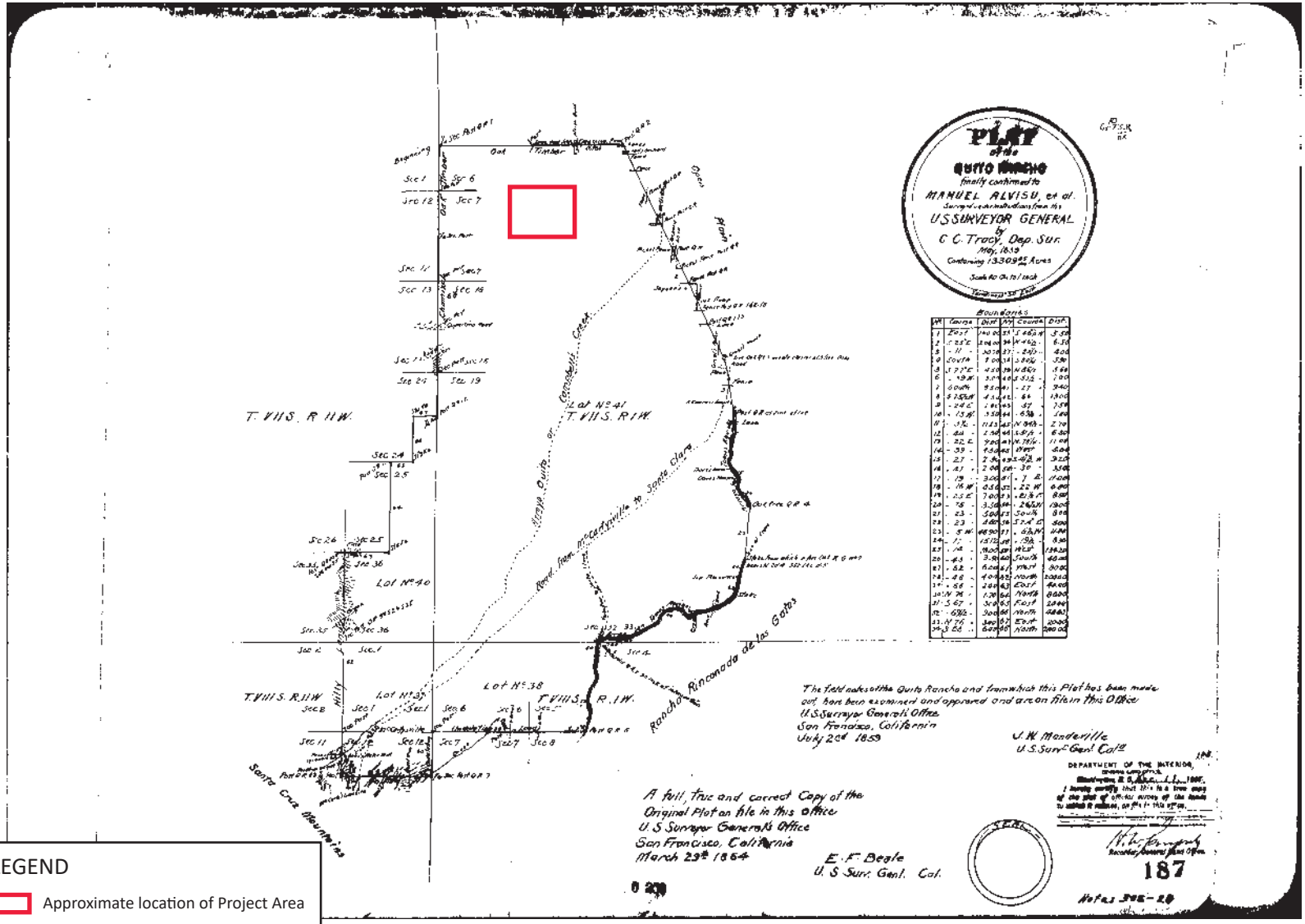
File name: Figure_A2_ProjectArea.ai, J2021-053.01, Stella D'Oro, 02August2022

Figure A-2. Project area.

File name: Figure_A3_RanchoMap.ai, J2021-053.01, Stella D'Oro, 02August2022

Figure A-3. Map of ranchos in Santa Clara County.

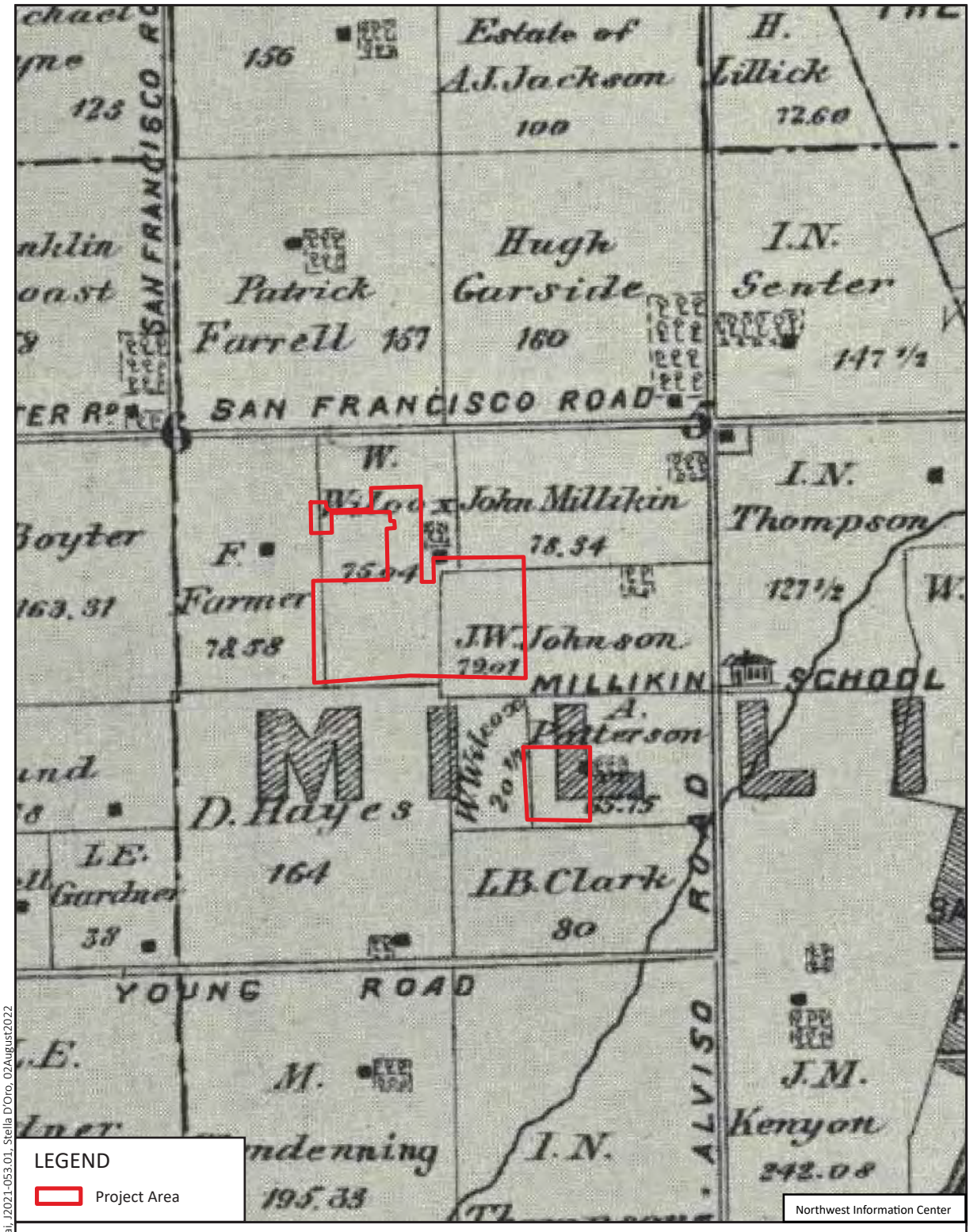
File name: Figure_A4_1864.ai, J2021-053.01, Stella D'Oro, 02August2022



LEGEND

Approximate location of Project Area

Figure A-4. 1864 map of Rancho Quito.



File name: Figure_A5_1876.ai, J2021-053.01, Stella D'Oro, 02August2022

Figure A-5. Detail of an 1876 plat map of Santa Clara County with the Project Area.

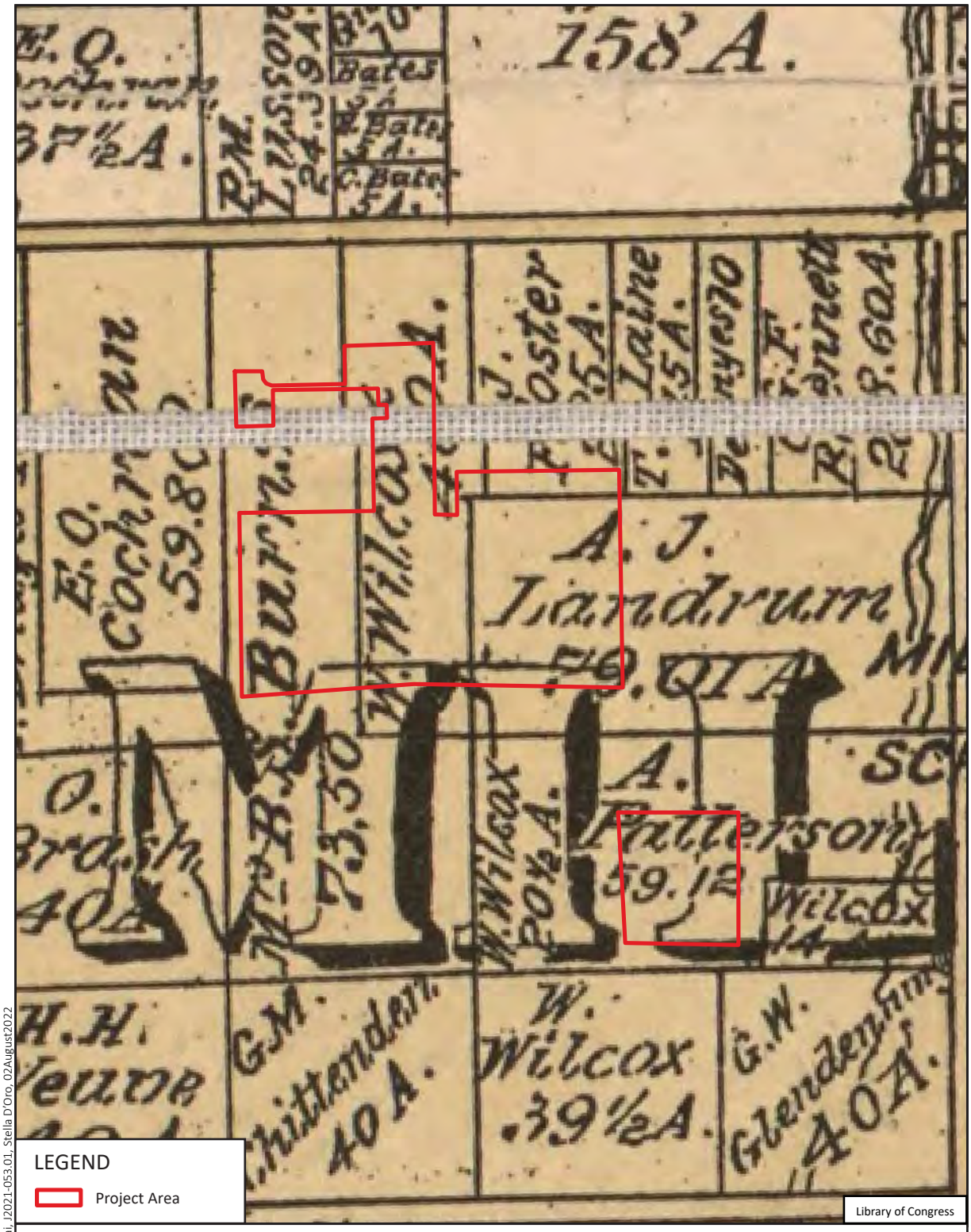


Figure A-6. Detail of an 1889 plat map of Santa Clara County with the Project Area.

File name: Figure_A6_1889.ai, J2021-053.01, Stella D'Oro, 02August2022

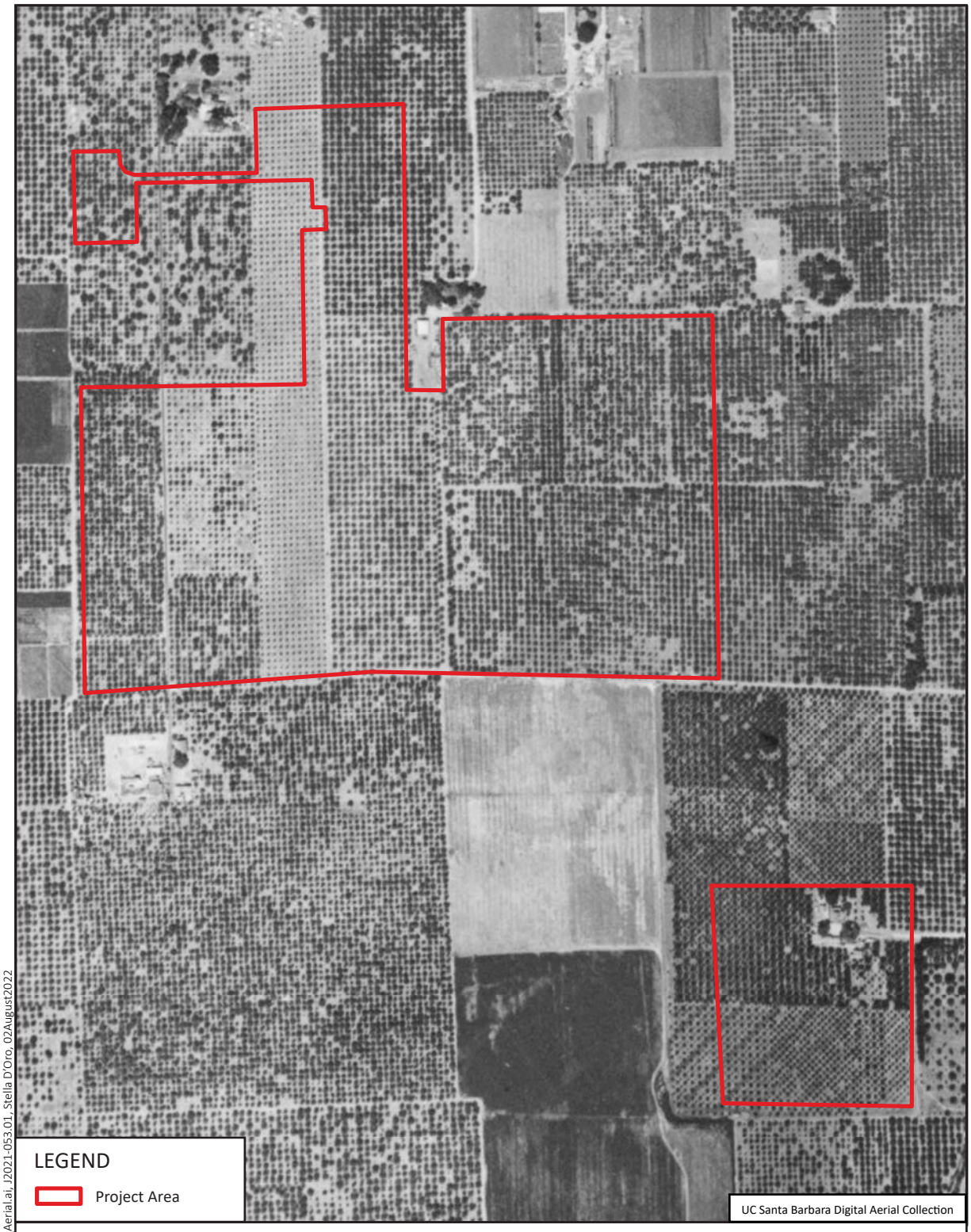


Figure A-7. Detail of a 1939 aerial photograph with the Project Area.

File name: Figure_A7_1939_Aerial.ai, J2021-053.01, Stella D'Oro, 02August2022

File name: Figure_A8_1956Aerial.ai; J2021-053.01; Stella D'Oro; 02August2022

Figure A-8. Detail of a 1956 aerial photograph with the Project Area.

File name: Figure_A9_1965Aerial.ai; J2021-053.01; Stella D'Oro; 02August2022

Figure A-9. Detail of a 1965 aerial photograph with the Project Area.

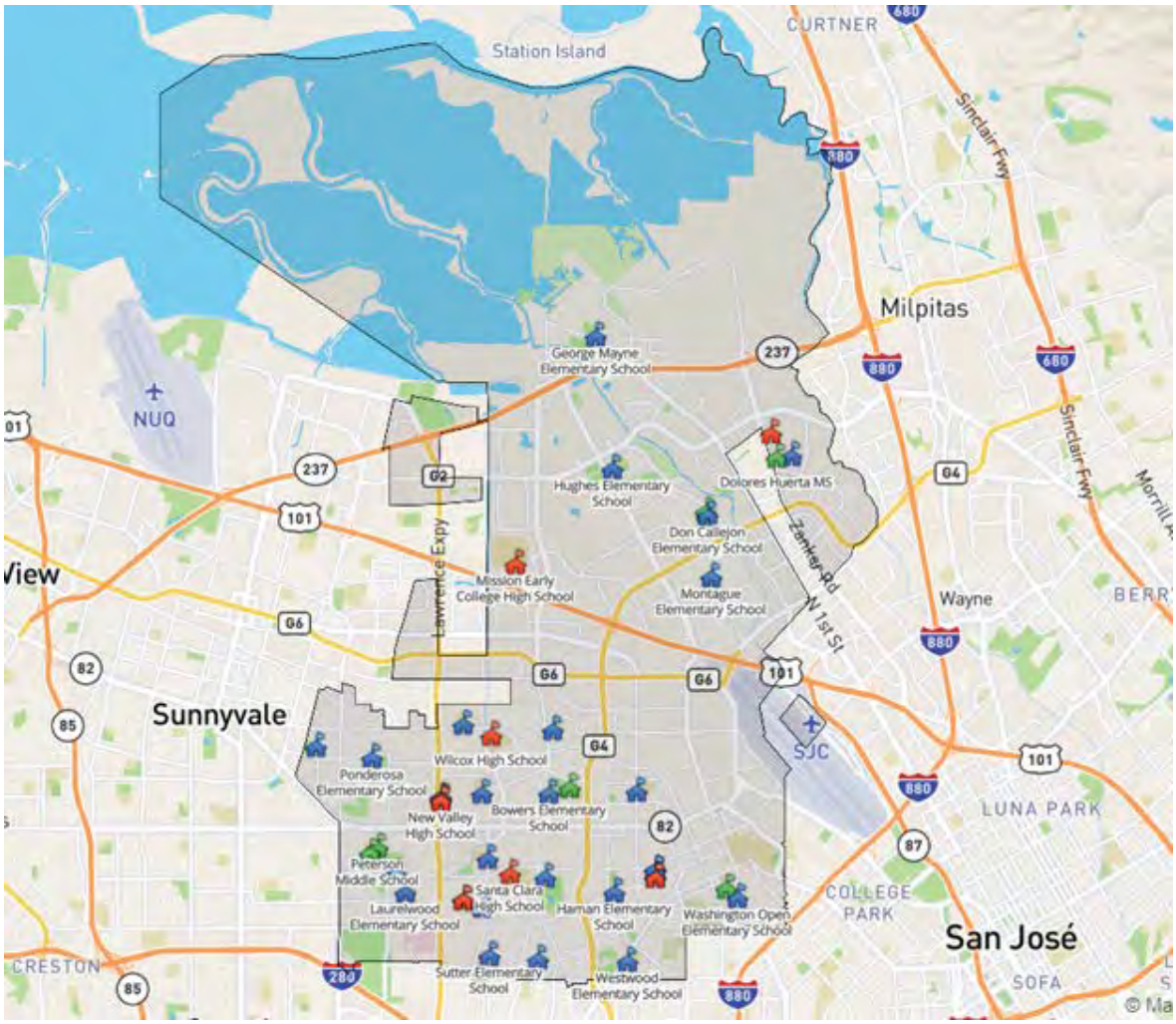


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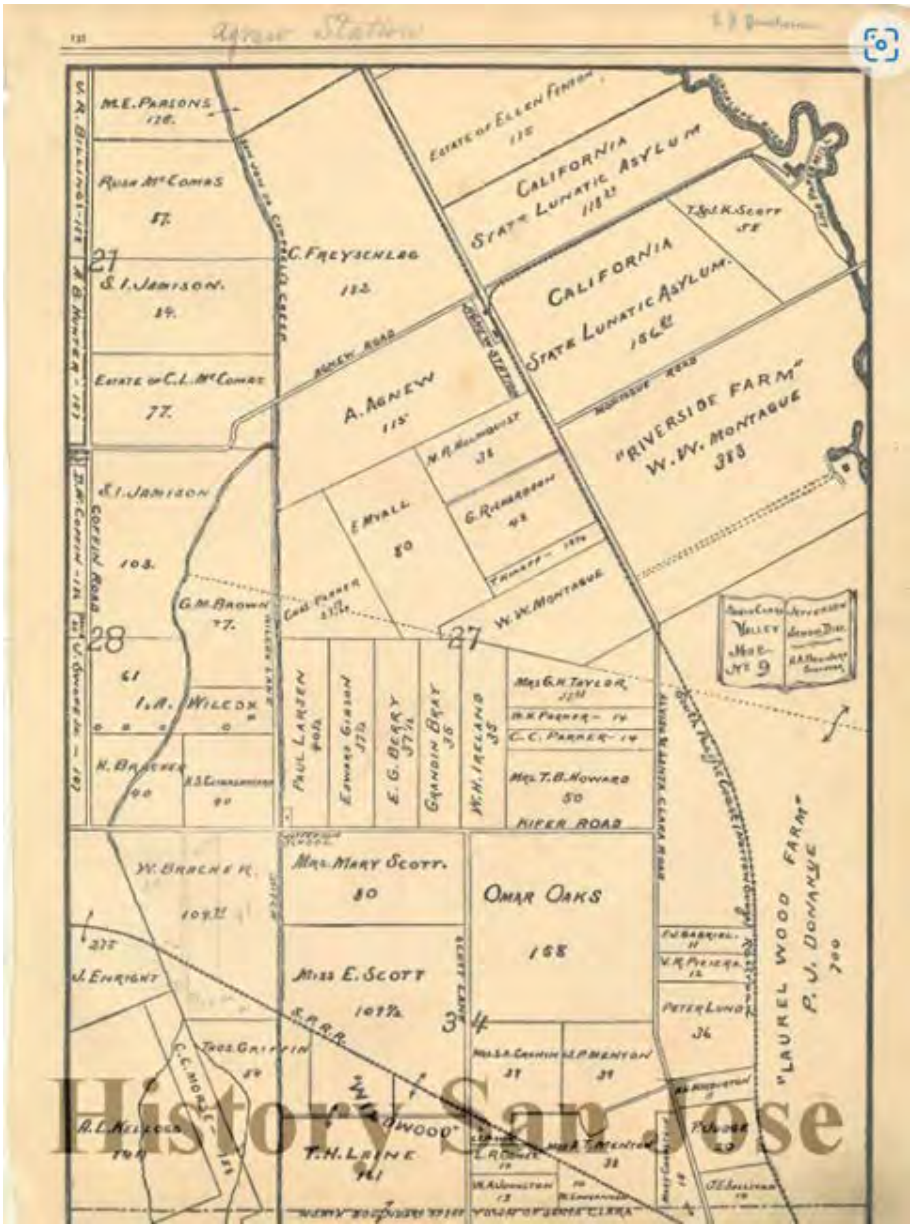
Figure A-10. Map of boundaries of the Santa Clara Unified School District.

File name: Figure_A10_DistrictBoundary.ai, J2021-053.01, Stella D'Oro, 02August2022



History San José Master Catalog Collection, object ID 1997-216-1270. Available: 1997-216-1270 - San José Master Catalog | History San José (pastperfectonline.com). Accessed July 5, 2022

Figure A-11. Map of Jefferson School District, November 1885. Brainard Agricultural Atlas, Map no. 9.

File name: Figure_A11_1885District.ai, J2021-053.01, Stella D'Oro, 02August2022

History San José Photographic Collection, Catalog Number 1997-224-122. Available: 1997-224 - History San José Photographic Collection | History San José (pastperfectonline.com). Accessed July 5, 2022.

Figure A-12. Jefferson School students with teacher, c1912.

File name: Figure_A12_1885JeffersonStudents.ai; J2021-053.01; Stella D'Oro; 02August2022

History San José Photographic Collection, Catalog Number 1997-224-122. Available: 1997-224 - History San José Photographic Collection | History San José (pastperfectonline.com). Accessed July 5, 2022.

Figure A-13. History San José Photographic Collection, Catalog Number 1997-290-18. Available: 1997-290 - History San José.

File name: Figure_A13_1890Interiorai, J2021-053.01, Stella D'Oro, 02August2022

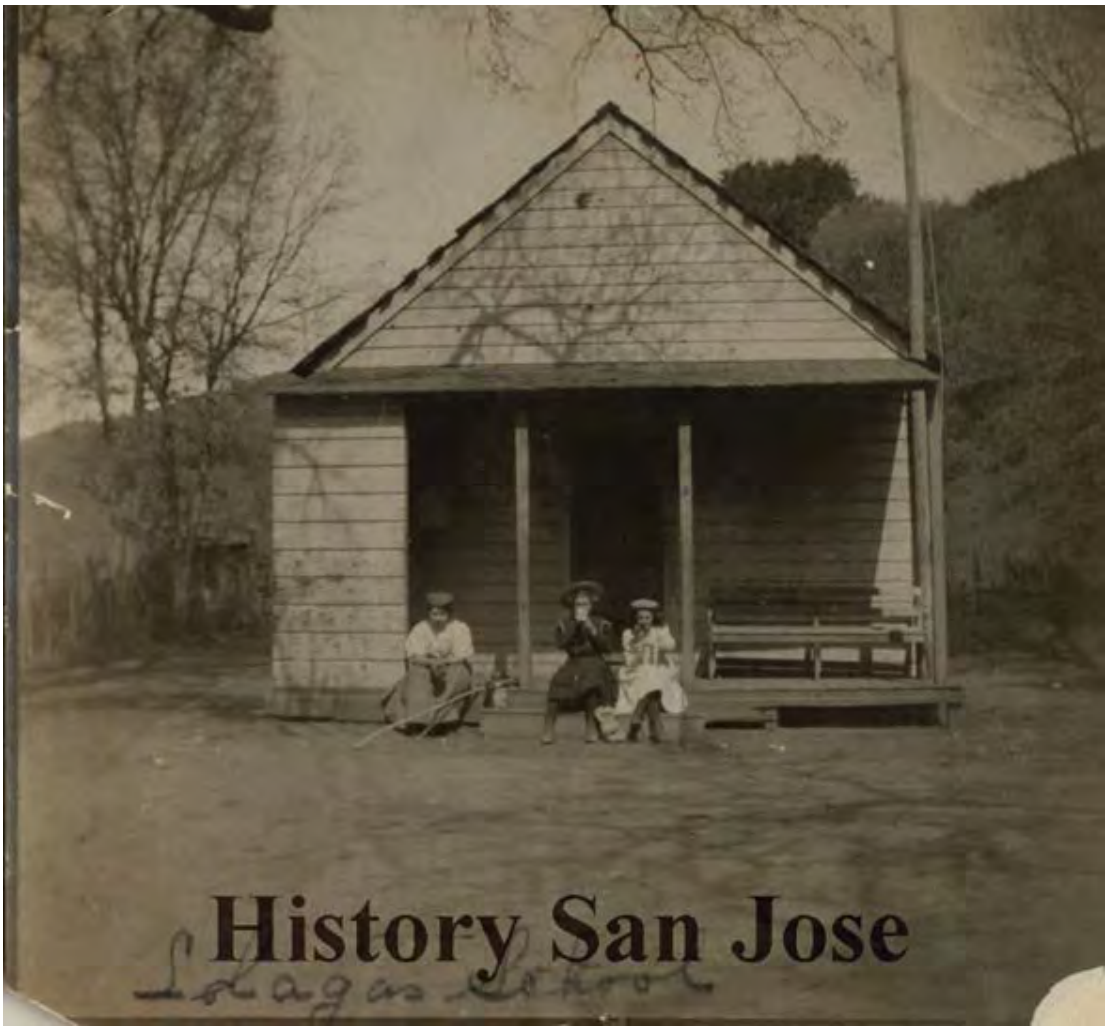


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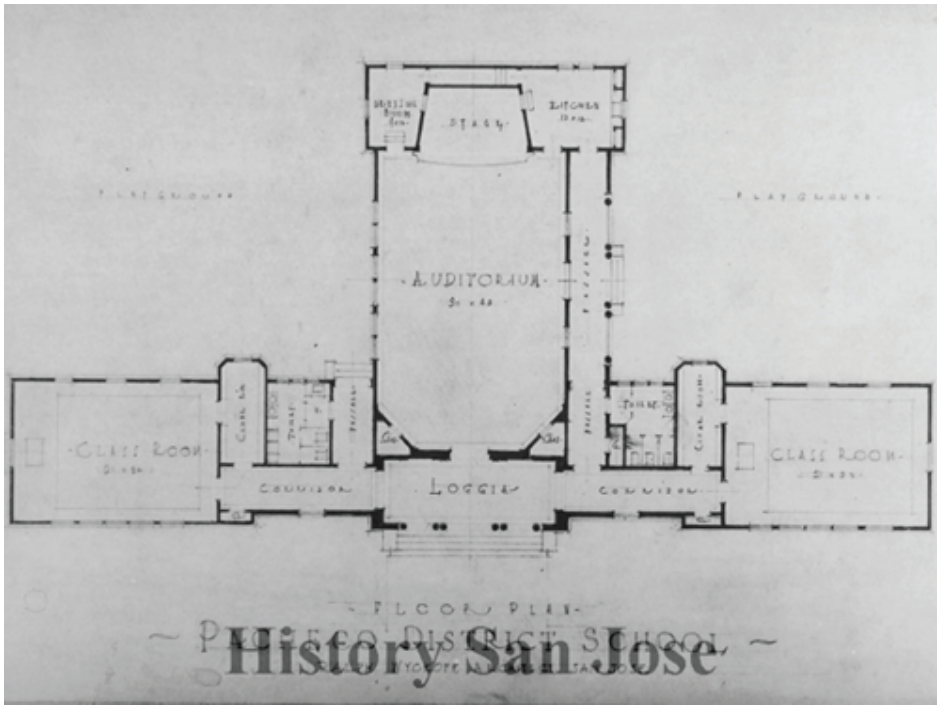
Figure A-14. Llagas School, c. 1900-1920.

File name: Figure_A14_LlagasSchool.ai, J2021-053.01, Stella D'Oro, 02August2022

History San José, Blanchard Photograph Album. Catalog Number 1997-300-3405. Available: 1997-300 - Blanchard Photograph Album | History San José (pastperfectonline.com). Accessed July 5, 2022.

Figure A-15. Santa Clara High School, 1905. Construction date is unknown, but references to it first appear in local newspapers in 1884; the school was replaced with a large masonry school in January, 1906.

File name: Figure_A15_SCHigh1905.ai, J2021-053.01, Stella D'Oro, 02August2022



History San José, Wuss/Wyckoff Architecture Collection. Catalog Number 1989-187-170. Source: 1989-187 - Wuss/Wyckoff Architecture Collection | History San José (pastperfectonline.com). Accessed July 5, 2022.

Figure A-16. Pacheco District School floor plan, c1920-1930. The symmetrical floor plan of this small school is consistent with the trend toward having a grand central entrance flanked by classrooms, with a large auditorium.

File name: Figure_A16_PachecoDistrict.ai; J2021-053.01; Stella D'Oro, 02August2022

History San José, Jessie Juliet Knox Collection. Catalog Number 1978-122-34. Available: 1978-122 - Jessie Juliet Knox Collection | History San José (pastperfectonline.com).

Figure A-17. San José High School, after the 1906 earthquake.

File name: Figure_A-17_SJHigh1906.ai; J2021-053.01, Stella D'Oro, 02August2022

One of State's Handsomest High Schools To Be Dedicated At Santa Clara

THE NEW SANTA CLARA HIGH SCHOOL BUILDING —Santa Clara Journal.

The new Santa Clara High School, one of the finest and handsomest educational edifices in the State, will be dedicated at Santa Clara next Friday.

Ever since Professor L. R. Smith assumed the leadership of high school affairs at Santa Clara, the attendance has been increasing with rapid strides, and it was some time ago that the need of a new high school was felt. The present building will not accommodate the enlarged attendance.

When passing the new High School building on Washington street in Santa Clara, one has little idea of the convenience, grandeur and extensiveness of the interior, says the Santa Clara Journal.

The exterior is plain, free from frills and furbelows, but the appearance is one that wears well and does not become tiresome. Upon approaching it you are startled at the size rather than the beauty, but soon become convinced that it is peculiar for its elegance, the materials used in its construction being the very best obtainable.

Upon entering the stone steps we find the entrance done in brilliant green with ceilings of somber red, huge brass chandeliers and woodwork of natural wood. The corridors on both the second and third floors are finished with sand wall and ceilings, and here too is this handsome natural woodwork. Benches of antique design are on the second floor between the doors leading to the auditorium. The principal's (Professor L. R. Smith) room is to your left on entering the floor and here is stationed the Burrell Program Clock, of which so much has been said. The new invention can be set to ring the class bells at any time and does so automatically, thus insuring prompt and accurate calls. On this floor are five class rooms and a study hall library, the teachers' dressing rooms, and auditorium.

THE AUDITORIUM

The auditorium is a dream and appeals to the most fastidious. It has a seating capacity of 600 and contains a lower floor and overhanging balcony. Here too are those beautiful colors, red and green, characteristic of the lobby. It is well lighted, having innumerable stud lights and four immense chandeliers. The stage has the regular theater footlights and overhanging lights and several sets of scenery. There are three dressing rooms equipped with all modern conveniences. Above the stage is gilt frescoing, noticeable for its simplicity.

We then ascend to the third floor. Here are situated the majority of the class rooms, the vice principal's room and the teachers' dressing room. On this floor is the entrance to the balcony of the auditorium. The same finish of walls, ceilings and woodwork prevails here as on the second floor.

BASEMENT OR FIRST FLOOR

The basement or first floor contains the boys' and girls' play rooms, janitor's office and bicycle rooms. The botany rooms, of which Miss Mackay will have charge, has an adjoining room for specimens fitted with cabinets and tables of the most modern make. The lecture room and chemistry and physics rooms are here too. Professor Offield will have charge of these. The experiment rooms are equipped with two tables that will accommodate sixteen pupils. There is also a dark room for photography. In the chemistry room there is an automatic fan for carrying the fumes from the laboratory. The training room has five shower baths to be used by the athletic students.

HEATING APPARATUS

Perhaps the most modern and wonderful part of the building is the heating apparatus. There are three huge furnaces, an electric fan, air pump, etc. The system is known as the Johnson System of Temperature Regulation, and is being installed by L. P. Lee of San Francisco. The thermostatic system works automatically and regulates the temperature not more than one degree either way than the temperature desired. With this system the air is said to be changed six times every hour thus insuring a healthy atmospherical condition of every room.

The grounds of the new school will be set to lawn and flowers and improvements on the tennis courts have already been begun. The courts have been enlarged ten feet, new wire put on and the fence is to be painted. Parquet grounds will also be made.

FORMAL OPENING

The formal opening of the school will be held on Friday afternoon of February 2d, when the public is cordially invited to inspect the building. In the evening there will be a musical and literary entertainment, at which time Benjamin Ide Wheeler of the University of California will deliver an address. As the program has not been completed it is impossible to publish it in detail.

In conclusion, unlimited praise and credit is due to Architect William Binder, the contractors, Morrison Bros., and the entire school board for their untiring, unceasing and strenuous efforts in securing the best and most for the money allotted them.

The new High school building is a great credit to the town and one of which we are justly proud.

Full Page, Evening News (published as The Evening News), January 31, 1906, p2 (newsbank.com). Accessed July 5, 2022.

Figure A-18. The New Santa Clara High School Building. Evening News, January 31, 1906. The new high school sustained damage from the 1906 earthquake less than three months later.

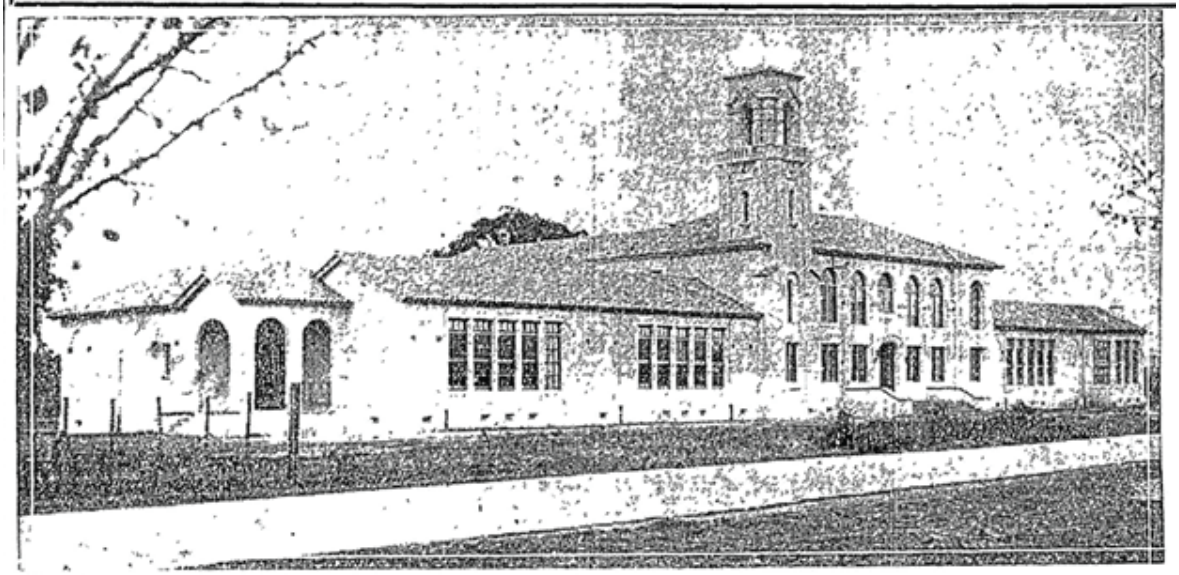
File name: Figure_A18_EveningNews1906.ai; J2021-053.01; Stella D'Oro, 02August2022

History San José, Mary Nascimento Simas Papers. Catalog Number 1986-213-30. Available: 1986-213 - Mary Nascimento Simas Papers | History San José (pastperfectonline.com). Accessed July 5, 2022.

Figure A-19. Braly School, 1919.

File name: Figure_A19_BralySchool1919.ai, J2021-053.01, Stella D'Oro, 02August2022

$110,000 Pride of County Education



Taking the place of the old Jefferson School, built in 1857, is th is new and modern structure of reinforced concrete, the new $110,000 Jefferson Grammar School at Lawrence Station, w est of Santa Clara. Following the new county school policy of rural school consolidations, the school takes the place of th e Milliken, Brawley, Agnew and old Jefferson Schools.

News Article, Evening News (published as SAN JOSÉ EVENING NEWS), November 19, 1927, p6 (newsbank.com). Accessed May 22, 2022.

Figure A-20. The new Jefferson grammar school.

File name: Figure_A20_EveningNews1927.ai, J2021-053.01, Stella D'Oro, 02August2022

File name: Figure_A21_FramedPhotos.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph of exhibit taken with permission on January 18, 2022.

Figure A-21. Framed photographs on display at the Sunnyvale Heritage Park Museum.

News Article, San José Mercury News (published as San José Mercury), September 30, 1965, p52 (newsbank.com). Accessed May 22, 2022.

Figure A-22. Celebrating the unification of the Santa Clara Unified School District, San José Mercury News, September 30, 1965, page 56.

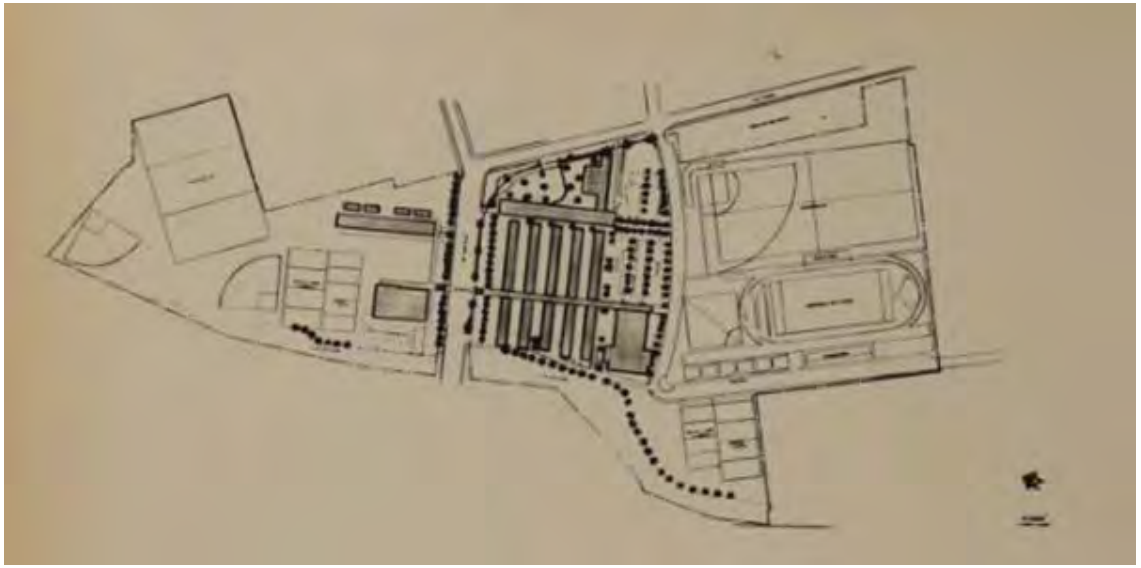
File name: Figure_A22_EveningNews1965.ai, J2021-053.01, Stella D'Oro, 02August2022

File name: Figure_A30_KesterAveSchool.ai, J2021-053.01, Stella D'Oro, 02August2022

Julius Shulman Photography Archive, 1936-1997. Series II. ©J. Paul Getty Trust. Getty Research Institute, Los Angeles (2004.R.10), Available: Job 1035: Kester Avenue Elementary School (Los Angeles, Calif.), 1951 (getty.edu). Accessed July 5, 2022

Figure A-23. Richard Joseph Neutra, Architect Job 1035: Kester Avenue Elementary School (Los Angeles, CA).

File name: Figure_A24_SJHigh1952.ai, J2021-053.01, Stella D'Oro, 02August2022



Built in USA: Post-war Architecture. Edited by Henry-Russell Hitchcock and Arthur Drexler, page 79. The Museum of Modern Art. Distributed by Simon & Schuster, nd. Available: Built in USA: post-war architecture : Museum of Modern Art (New York, N.Y.) : Free Download, Borrow, and Streaming : Internet Archive

Figure A-24. San José High School, 1952. Designed by Ernest J. Kump.

GoogleEarth Pro. Accessed 5/18/2022. Image date 9/4/2020.

Figure A-25. Briarwood Elementary School, Santa Clara. Built 1954-1956.

File name: Figure_A25_Briarwood2022Aerial.ai, J2021-053.01, Stella D'Oro, 02August2022

University of California, Santa Barbara, Library Geospatial Collection, Aerial Photographic Collection. Available: FrameFinder (ucsb.edu). Accessed July 5, 2022

Figure A-26. Briarwood Elementary School, Santa Clara County, 1965.

File name: Figure_A26_Briarwood1965Aerial.ai, J2021-053.01, Stella D'Oro, 02August2022

Google Earth Pro. Accessed 5/18/2022. Image date 9/4/2020.

Figure A-27. Bracher Elementary School, Santa Clara.
Constructed 1958-1959.

File name: Figure_A27_Bracher2020Aerial.ai, J2021-053.01, Stella D'Oro, 02August2022

University of California, Santa Barbara, Library Geospatial Collection, Aerial Photographic Collection. Available: FrameFinder (ucsb.edu). Accessed July 5, 2022.

Figure A-28. Bracher Elementary School, Santa Clara County, 1965.

File name: Figure_A28_Bracher1965Aerial.ai, J2021-053.01, Stella D'Oro, 02August2022

Building for Learning in Postwar American Elementary Schools, Journal of the Society of Architectural Historians, Volume 67. December 2008

Figure A-29. The Architects Collaborative, plan of a model school, appeared in Collier's magazine, April 30, 1954.

File name: Figure_A29_ModelSchool.ai, J2021-053.01, Stella D'Oro, 02August2022

University of California, Santa Barbara, Library Geospatial Collection, Aerial Photographic Collection. Available: FrameFinder (ucsb.edu). Accessed July 5, 2022.

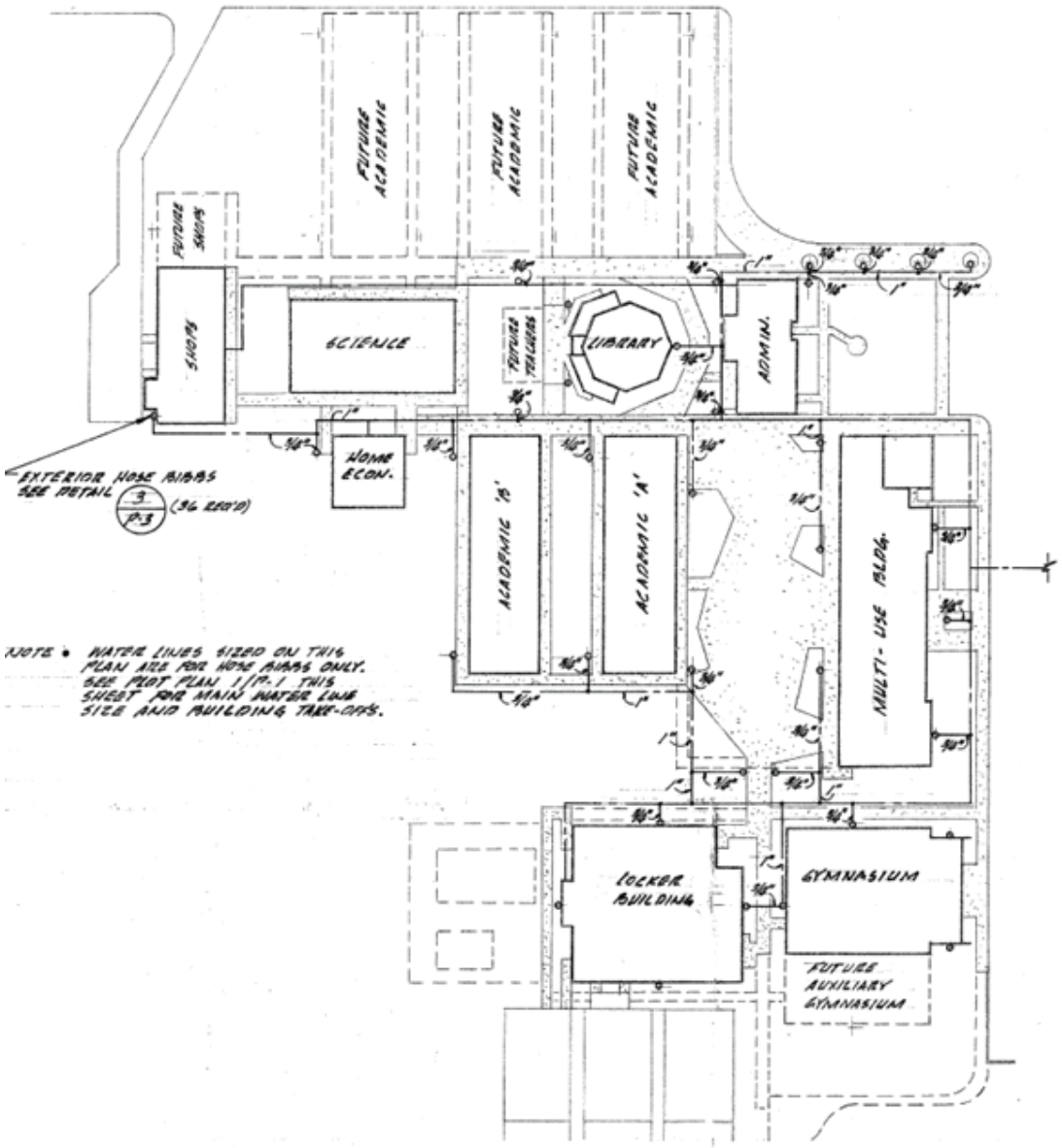
Figure A-30. Marian A. Peterson and Patrick Henry schools, Santa Clara County, 1968.

File name: Figure_A30_PetersonSchool.ai; J2021-053.01; Stella D'Oro, 02August2022

Google Earth Pro. Accessed 5/18/2022. Image date 1/2022.

Figure A-31. Marian A. Peterson Middle School, Santa Clara.

File name: Figure_A31_PetersonSchool2022.ai; J2021-053.01; Stella D'Oro, 02August2022



Plan sheets provided by SCUSD.

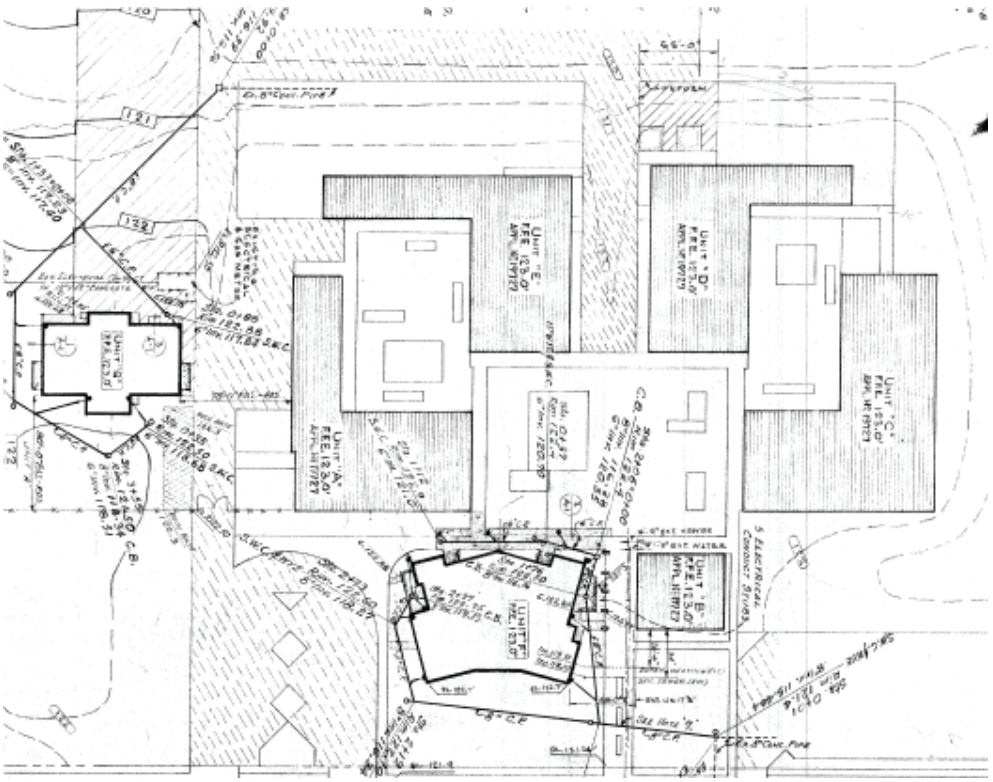
Figure A-32. Phase One design, section of plan sheet P-1, of Marian A. Peterson High School, 1964, by architect L.F. Richards.

File name: Figure_A32_PetersonSchoolPl.ai, J2021-053.01, Stella D'Oro, 02August2022

Google Earth Pro. Accessed 5/18/2022. Image date 9/27/2021

Figure A-33. Patrick Henry campus, constructed 1960 and expanded in 1962.

File name: Figure_A33_PatrickHenry2021.ai; J2021-053.01; Stella D'Oro, 02August2022



Plan sheets provided by SCUSD.

Figure A-34. Patrick Henry Intermediate School, additions, a section of plan sheet A-1, 1962, by architectural firm Goudie & Griffin.

File name: Figure_A34_PatrickHenryAdditions.ai; J2021-053.01, Stella D'Oro, 02August2022

Google Earth Pro. Accessed 5/18/2022. Image date 9/27/2021.

Figure A-35. Cabrillo Middle School. Original campus constructed in 1961 in the cluster style..

File name: Figure_A35_CabrilloMiddleSchool.ai, J2021-053.01, Stella D'Oro, 02August2022

File name: Figure_A36_BriarwoodSchool.ai, J2021-053.01, Stella D'Oro, 02August2022

Constructed 1954-1956. Low gabled roofs, extended eaves, and generous expanses of fenestration are characteristic of Mid-Century Modern architecture. Likely designed by Clyde D. Goudie, Jefferson School District Architect

GoogleEarth Pro. Accessed 5/18/2022. Image date 5/2022. Camera facing south.

Figure A-36. Briarwood Elementary School, Santa Clara County.

File name: Figure_A37_BracherSchool.ai, J2021-053.01, Stella D'Oro, 02August2022

Built 1958-1959. Low gabled roofs, low horizontal rectangular footprint, an articulated façade, and generous expanses of fenestration are characteristic of Mid-Century Modern architecture. Likely designed by Clyde D. Goudie, Jefferson School District Architect.

GoogleEarth Pro. Accessed 5/18/2022. Image date 5/2022. Camera facing southeast.

Figure A-37. Bracher Elementary School, Santa Clara, California.

File name: Figure_A38_PatrickHenrySchool.ai, J2021-053.01, Stella D'Oro, 02August2022

Built 1960-1962. Flat roof, low horizontal rectangular footprint, and an articulated façade, are characteristic of Mid-Century Modern architecture. By 1960 roof planes were becoming flattened rather than a low gable. Architect Clyde D. Goudie was the Jefferson School District Architect.

Photo taken 1/17/2022. Camera facing west.

Figure A-38. Patrick Henry Campus, Sunnyvale, California.

File name: Figure_A39_PetersonSchool.ai, J2021-053.01, Stella D'Oro, 02August2022

Built 1964-1969, 2011. Flat roof, low horizontal rectangular footprint, an articulated façade, clearly expressed post-and-beam construction, and a sheltered walkway are characteristic of Mid-Century Modern architecture. By 1960 roof planes were becoming flattened rather than a low gable. L. F. Richards, architect.

Photo taken 1/17/2022. Camera facing north.

Figure A-39. Marian A. Peterson Middle School Multi-Purpose Building, Sunnyvale, California.

File name: Figure_A40_ResearchHouse.ai, J2021-053.01, Stella D'Oro, 02August2022

Listed on the National Register of Historic Places 2009, NR#03000774.

California SP Neutra, Richard and Dion, VDL Research House II (archives.gov). Accessed 7/12/2022.

Figure A-40. VDL II Research House, Architects Richard and Dion Neutra, built 1966, Los Angeles, California.

Listed on the National Register of Historic Places 2012, NR#123860521.

California SP Steel Development House Number 2 (archives.gov). Accessed 7/12/2022.

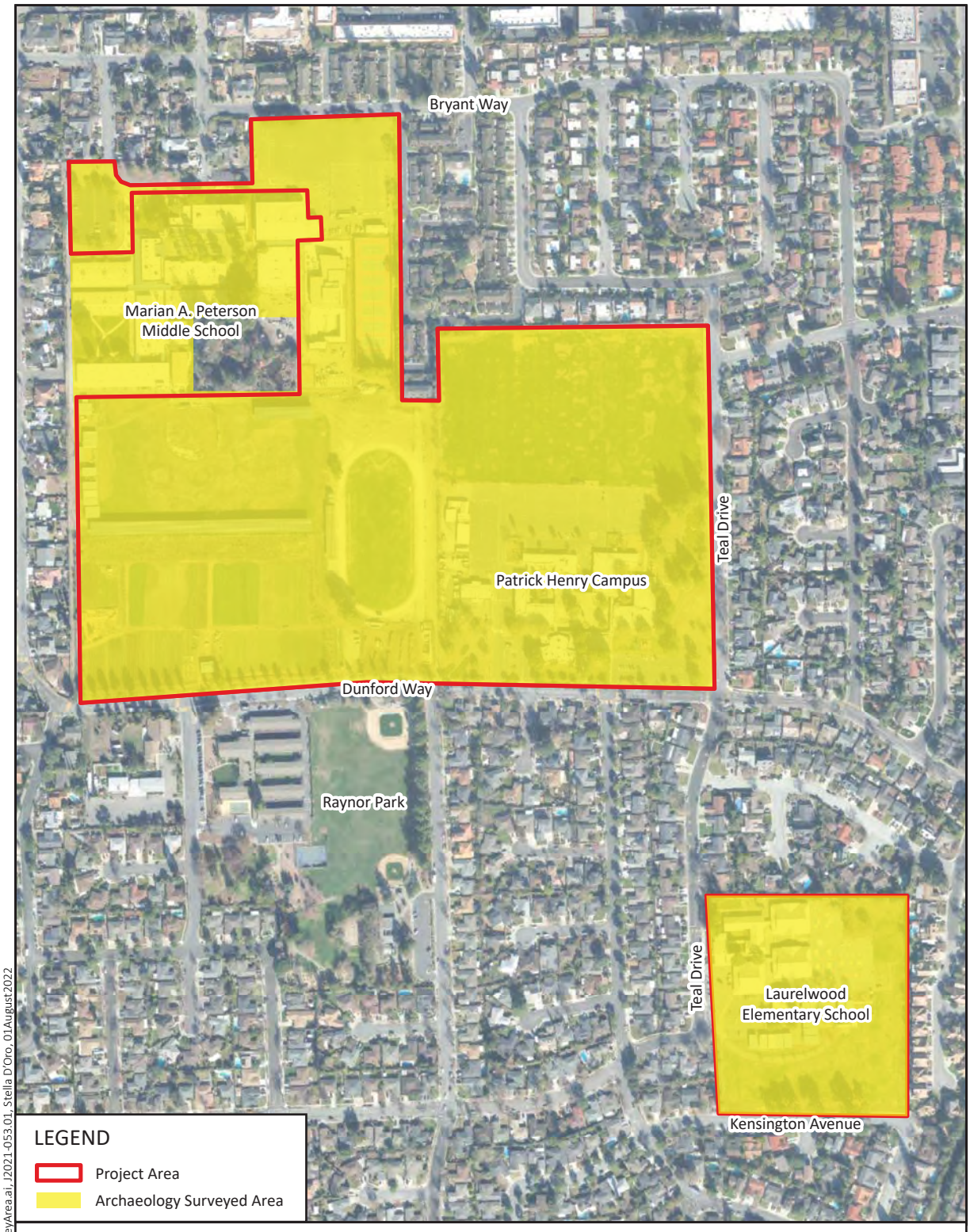
Figure A-41. California SP Steel Development House Number 2, Architects Donald Wexler and Ric Harrison, built 1962, Palm Springs, California.

File name: Figure_A42_HollywoodHigh.ai, J2021-053.01, Stella D'Oro, 02August2022

Contributor to the National Register listed Hollywood High School District, NR#123859204.

California SP Hollywood High School Historic District (archives.gov). Accessed 7/12/2022.

Figure A-42. Mid-Century Modern 1956 remodel of the 1924 Hollywood High School auditorium, architects Marston and Weston.



File name: Figure_A43_SurveyArea.ai; J2021-053.01; Stella D'Oro, 01August2022

Figure A-43. Archaeological survey map.

Photograph 1. SCUSD farm in southwest quadrant, facing southwest.

Photograph 2. Track and field area of Peterson Middle School, facing northwest.

Photograph 3. Overview of grassy field between Peterson Middle and Farm, facing southeast.

Photograph 4. Peterson Middle School, facing east.

Photograph 5. Patrick Henry Elementary east perimeter, facing north.

Photograph 6. Fields of Patrick Henry, facing east.

Figure A-44. Overview of Peterson Middle School and Patrick Henry Elementary School sites, illustrating visibility.

File name: Figure_A44_1889.ai; J2021-053.01, Stella D'Oro, 02August2022

Photograph 1. Laurelwood Elementary overview, facing west.

Photograph 2. Laurelwood Elementary overview, facing east.

Photograph 3. Laurelwood Elementary overview, facing south.

Photograph 4. Laurelwood Elementary overview, facing north.

Photograph 5. Laurelwood Elementary overview, facing south.

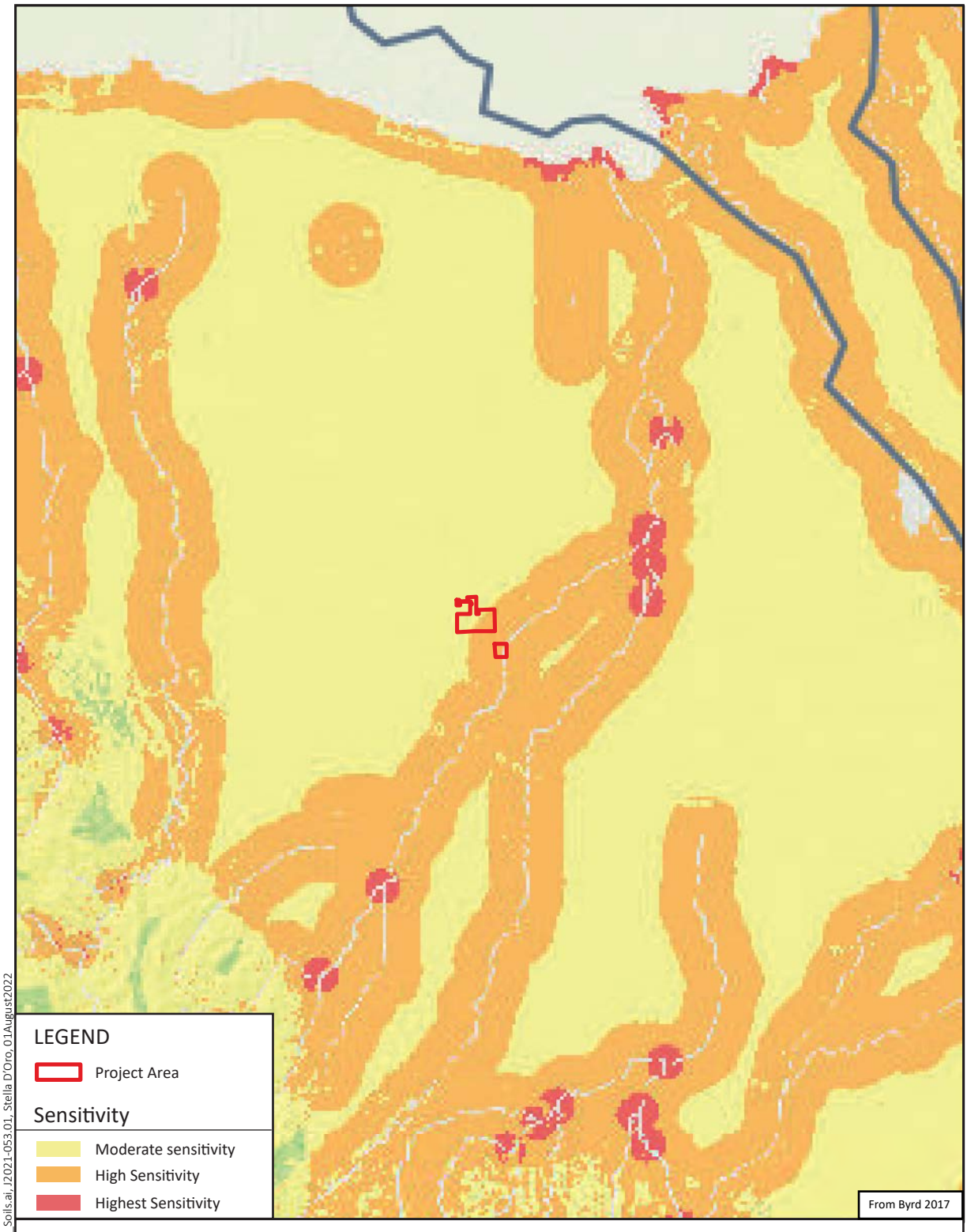
Photograph 6. Laurelwood Elementary overview, facing north.

Figure A-45. Overview of Laurelwood Elementary School site, illustrating visibility.

File name: Figure_A45_LaurelwoodPhotos.ai, J2021-053.01, Stella D'Oro, 01August2022

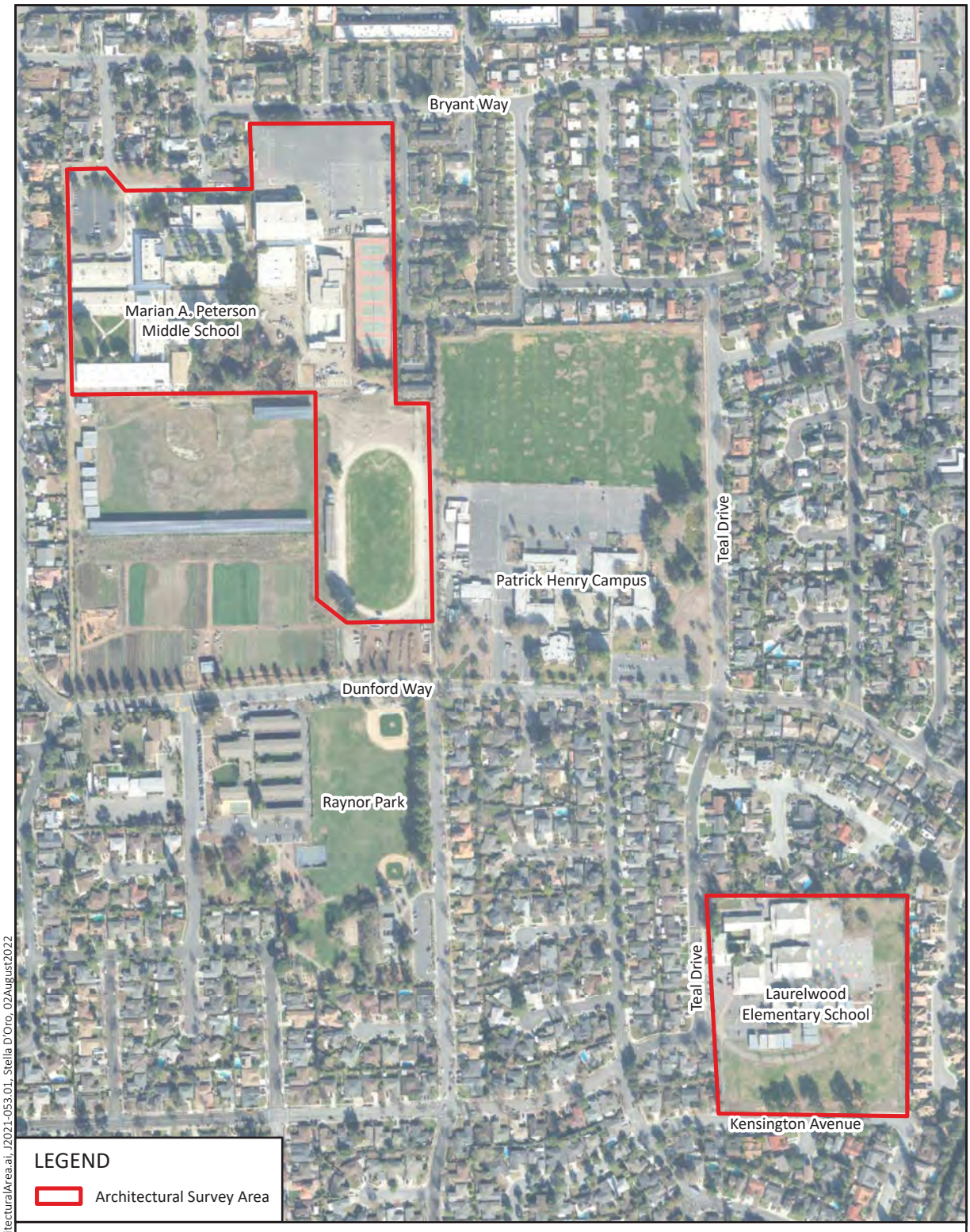
Figure A-46. Isolate identified during pedestrian survey.

File name: Figure_A46_Isolate.ai; J2021-053.01; Stella D'Oro, 02August2022



File name: Figure_A47_Geo_Soils.ai, J2021-053.01, Stella D'Oro, 01August2022

Figure A-47. Surface Sensitivity Mapping for Archaeological Sites in the South Bay, with Project Area (Byrd 2017:Figure 26).



File name: Figure_A48_ArchitecturalArea.ai; J2021-053.01; Stella D'Oro; 02August2022

Figure A-48. Architectural Survey Area for Patrick Henry Campus and Marian A. Peterson Middle School.

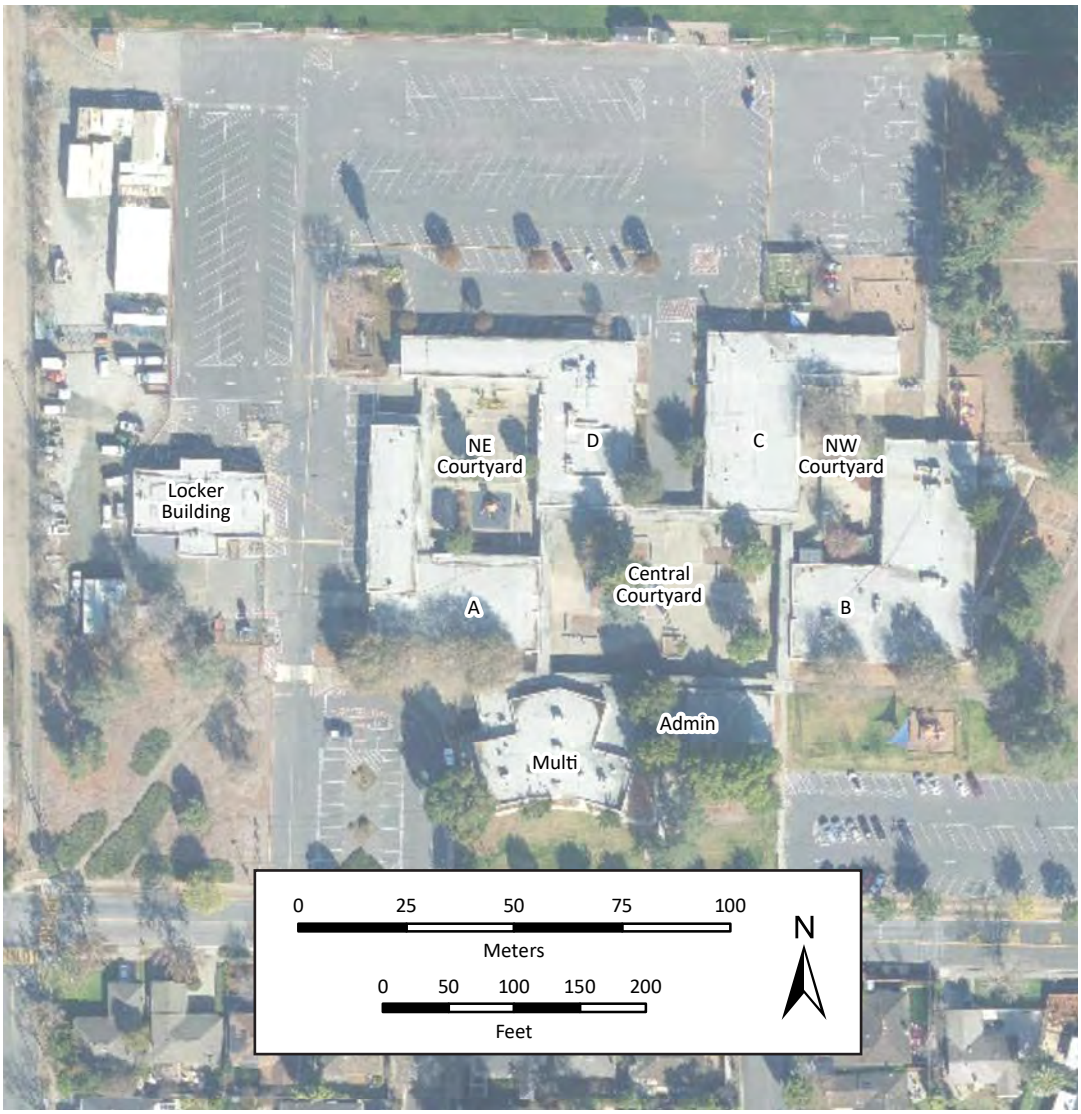
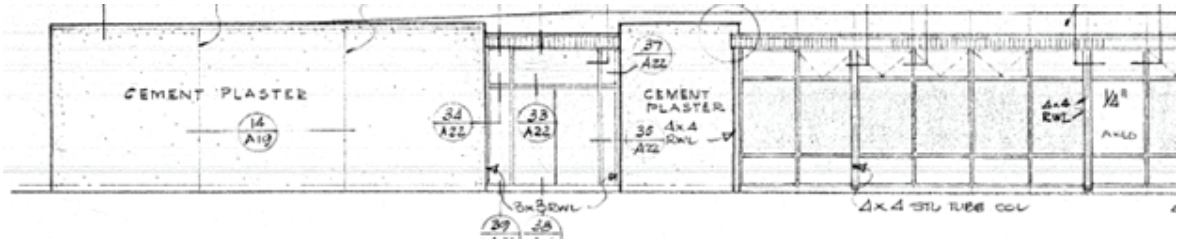


Figure A-49. Patrick Henry Campus, with buildings and architectural features labeled.

File name: Figure_A49_PHenryLabeledFeatures.ai, J2021-053.01, Stella D'Oro, 02August2022

File name: Figure_A50_PlanSetA10.ai, J2021-053.01, Stella D'Oro, 02August2022



The drawing shows the two typical wall types, a glazed panel, and a typical primary entrance.

Plans provided by SCUSD.

Figure A-50. Plan set page A-10, a portion of the east elevation of unit C, now referred to as classroom building B.

File name: Figure_A51_EastElevBuildingA.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph shows typical plain wall type, typical recessed entry with roof detail, and the covered walkway design.

Photograph taken 1/17/2022.

Figure A-51. East elevation of building A on the west side of the central courtyard.

File name: Figure_A52_CourtyardWalkway.ai, J2021-053.01, Stella D'Oro, 02August2022

Camera facing west.

Photograph taken 1/17/2022.

Figure A-52. Central courtyard and covered walkway.

File name: Figure_A53_WestElevBuildingA.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

Figure A-53. West elevation of building A.

File name: Figure_A54_WestEndBuildingB.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

Figure A-54. The west end of the south façade of classroom building B.

File name: Figure_A55_NortheastCourtyard.ai, J2021-053.01, Stella D'Oro, 02August2022

Camera facing north.

Photograph taken 1/17/2022.

Figure A-55. Northeast secondary courtyard.
Building C.

File name: Figure_A56_NorthElevBuildingD.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

Figure A-56. North elevation of classroom building D.

File name: Figure_A57_Walkway.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

Figure A-57. Walkway between the administrative building (left) and multipurpose building.

File name: Figure_A58_NorthMultipurpose.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

Figure A-58. North façade of the multipurpose building.

File name: Figure_A59_SoutheastMultipurpose.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

Figure A-59. Southeast corner of the multipurpose building.

File name: Figure_A60_SouthAdmin.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

Figure A-60. South façade of the administration building.

File name: Figure_A61_WestMultipurpose.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

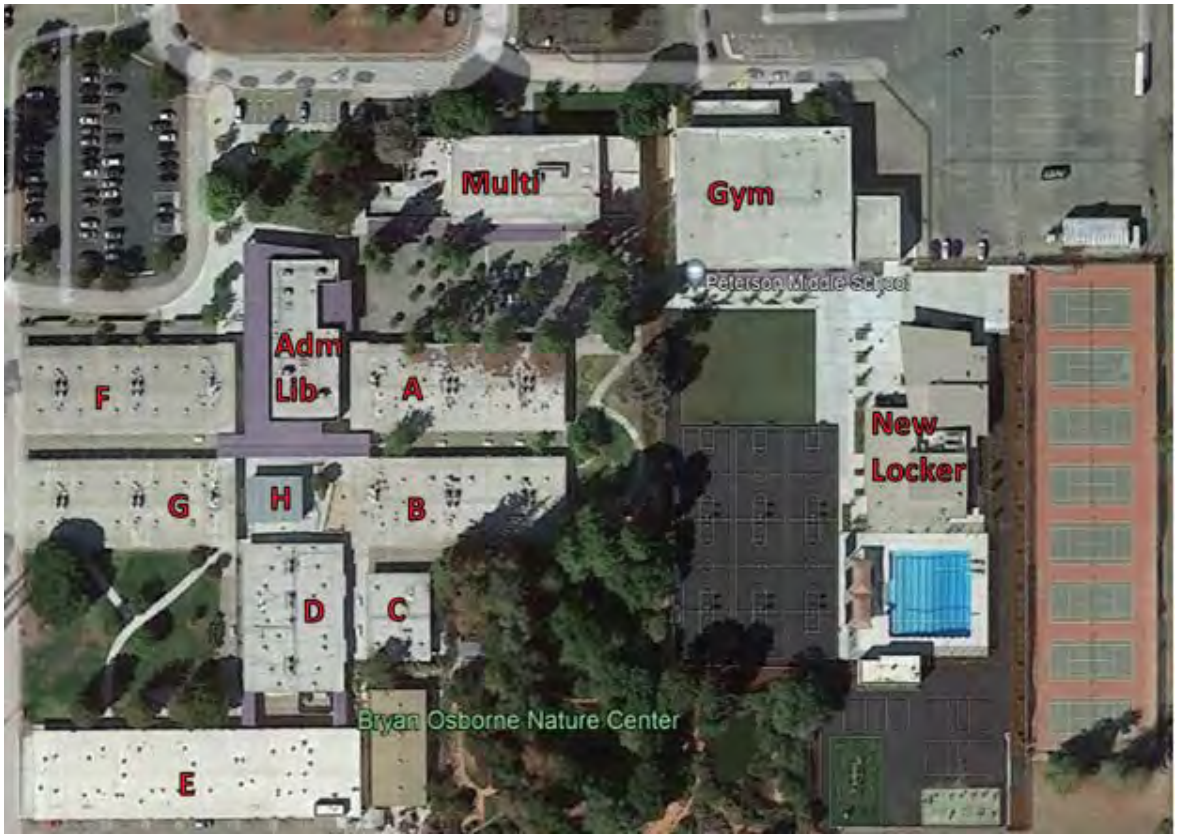
Figure A-61. West façade of the multipurpose building.

File name: Figure_A62_NorthGym.ai, J2021-053.01, Stella D'Oro, 02August2022

Photograph taken 1/17/2022.

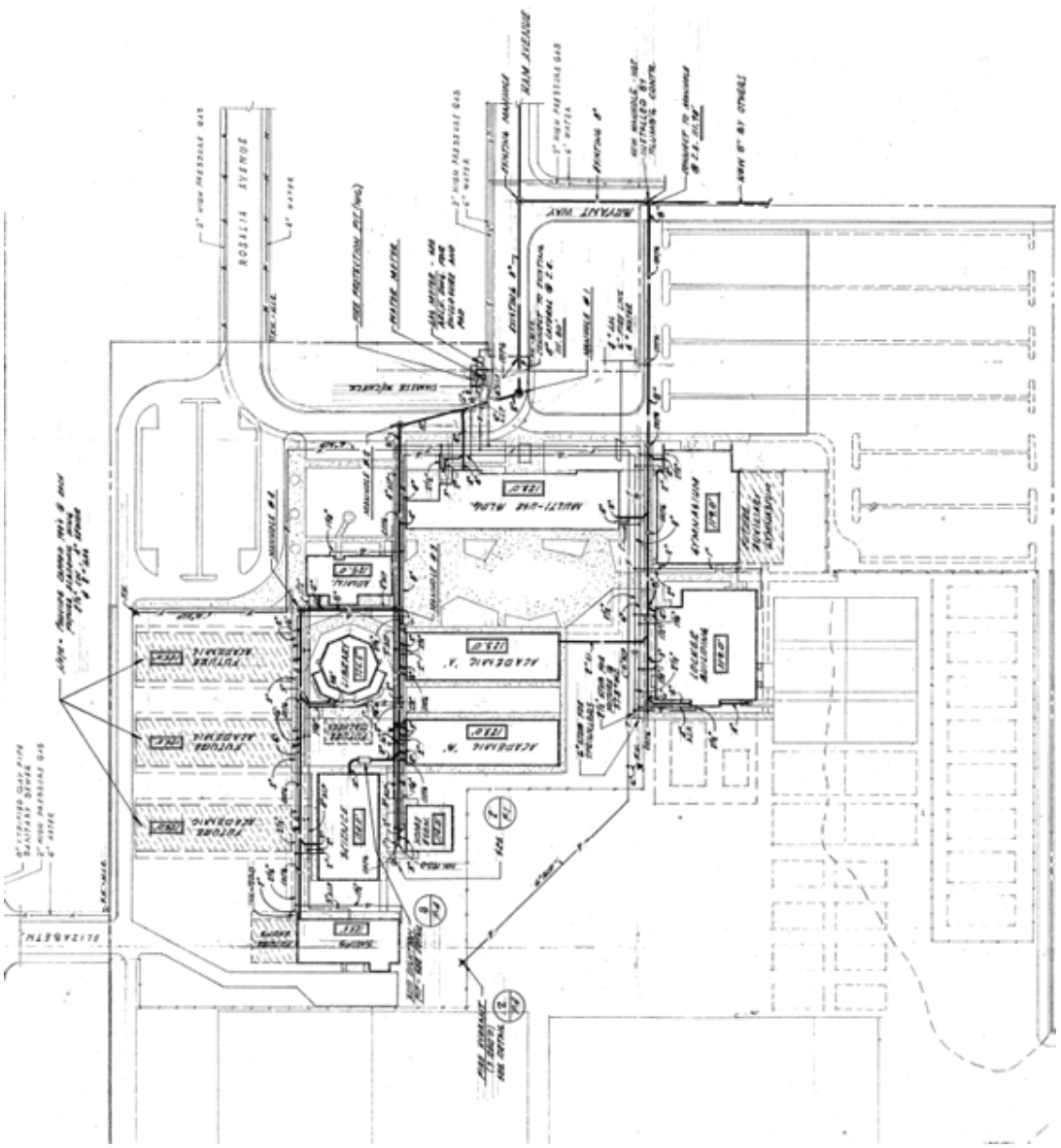
Figure A-62. North façade of the locker building.

File name: Figure_A63_PetersonCampus.ai, J2021-053.01, Stella D'Oro, 29July2022



GoogleEarth Pro. Accessed 5/18/2022. Image date 9/27/2021.

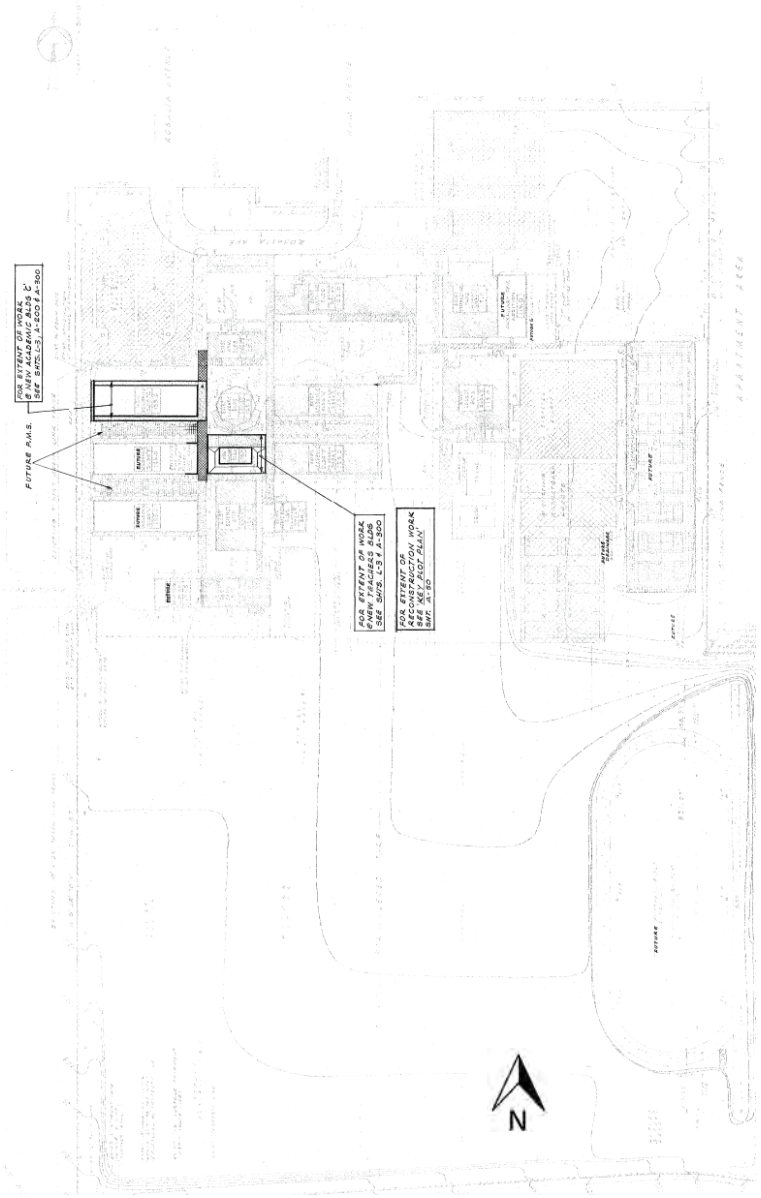
Figure A-63. Marian A. Peterson Middle School Campus.



Plans provided by SCUSD.

Figure A-64. Partial plot plan, Phase 1.
Plan set page P-1. 1964.

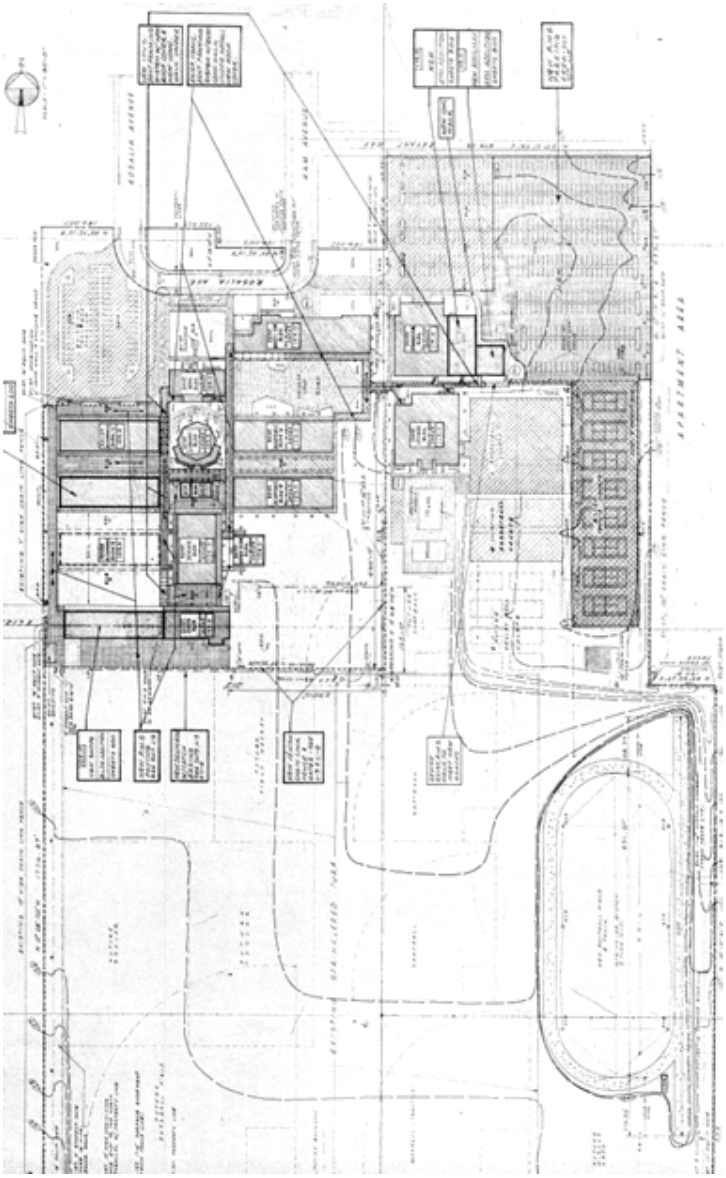
File name: Figure_A64_PartialPlanPl.ai, J2021-053.01, Stella D'Oro, 29July2022



Plans provided by SCUSD.

Figure A-65. Plot Plan, Phase 2 (revised).
Plan set page L-1. 1966.

File name: Figure_A65_PlotPlanP2.ai, J2021-053.01, Stella D'Oro, 29July2022



Plans provided by SCUSD.

Figure A-66. Plot Plan, Phase 3.
Plan set page L-1, 1969.

File name: Figure_A66_PlotPlanP3.ai, J2021-053.01, Stella D'Oro, 29July2022

File name: Figure_A67_PetersonEntrance.ai, J2021-053.01, Stella D'Oro, 29July2022

Camera facing south-southeast.

Photograph taken 1/17/2022.

Figure A-67. Entrance to the campus off Rosalia Avenue.

Camera facing west.

Photograph taken 1/17/2022.

Figure A-68. Outdoor space between classrooms A and B.

File name: Figure_A69_OpenArea.ai, J2021-053.01, Stella D'Oro, 01August2022

Camera facing northeast.

Photograph taken 1/17/2022.

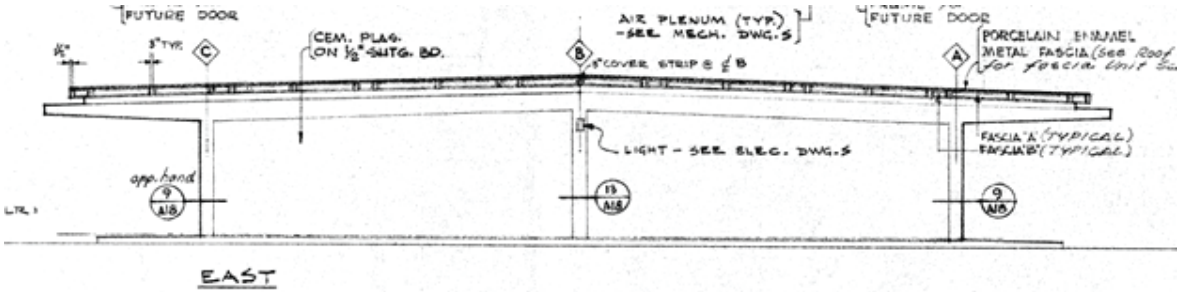
Figure A-69. Open area between classroom building A and the multipurpose building.

File name: Figure_A70_LandscapedArea.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-70. Landscaped area east of classroom buildings A and B, looking northeast toward the gymnasium.

File name: Figure_A71_1964PlanSheet.ai, J2021-053.01, Stella D'Oro, 01August2022



Plans provided by SCUSC.

Figure A-71. 1964 Plan sheet showing the bent detail.

Camera facing west.

Photograph taken 1/17/2022.

Figure A-72. Classroom buildings F and G.

File name: Figure_A73_SouthElevBuildingB.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-73. South elevation of classroom building B.

File name: Figure_A74_EastElevBuildingC.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-74. East elevation of classroom building C.

File name: Figure_A75_ClassroomsCandD.ai, J2021-053.01, Stella D'Oro, 01August2022

Camera facing south.

Photograph taken 1/17/2022.

Figure A-75. Classroom buildings C and D and the open courtyard between them. Building E is visible to the south.

Photograph taken 1/17/2022.

Figure A-76. North façade of the west wing of the multipurpose building.

File name: Figure_A77NorthEntranceMultipurpose.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-77. North entrance to the multipurpose building.

Photograph taken 1/17/2022.

Figure A-78. Detail of one of the entrances on the north elevation of the multipurpose building. Note the horizontal aluminum bands embedded in the wall and the scoring on the buttress.

File name: Figure_A78_EntranceDetail.ai, J2021-053.01, Stella D'Oro, 01August2022

File name: Figure_A79_Buttresses.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph shows the scale of the buttresses and the exaggeration of the height of the building from the engaged columns buttresses. The façade of the east elevation can also be seen on the left. Camera facing west

Photograph taken 1/17/2022.

Figure A-79. North façade of the multipurpose building.

File name: Figure_A80_EastWing.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-80. North façade of the east wing of the multipurpose building.

File name: Figure_A81_WestElevMultipurpose.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-81. West elevation of the multipurpose building.

File name: Figure_A82_EastElevMultipurpose.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-82. East elevation of the multipurpose building.

File name: Figure_A83_SouthElevMultipurpose.ai, J2021-053.01, Stella D'Oro, 01August2022

The central portion is sheltered by a free-standing butterfly canopy.

Photograph taken 1/17/2022.

Figure A-83. South elevation of the multipurpose building.

File name: Figure_A84_SouthWWingMultipurpose.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-84. South façade of the west wing of the multipurpose building.

File name: Figure_A85_Fenestration.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-85. Detail of the multipurpose building fenestration and one of the doors, south elevation.

File name: Figure_A86_EWingMultipurpose.ai, J2021-053.01, Stella D'Oro, 01August2022

The west façade of the gymnasium is on the right of the photograph. Camera facing northeast.

Photograph taken 1/17/2022.

Figure A-86. South façade of the east wing of the multipurpose building.

File name: Figure_A87_NorthGym.ai, J2021-053.01, Stella D'Oro, 01August2022

Photograph taken 1/17/2022.

Figure A-87. A portion of the north façade of the gymnasium showing the entrance.

File name: Figure_A88_NorthGymEntrance.ai, J2021-053.01, Stella D'Oro, 01August2022

Camera facing southeast.

Photograph taken 1/17/2022.

Figure A-88. The northern entrance.

File name: Figure_A89_EastElevGym.ai, J2021-053.01, Stella D'Oro, 01August2022

Camera facing southwest.

Photograph taken 1/17/2022.

Figure A-89. East elevation of the gymnasium with the addition.

File name: Figure_A90_SouthGym.ai, J2021-053.01, Stella D'Oro, 01August2022

Camera facing northeast.

Photograph taken 1/17/2022.

Figure A-90. Southern façade of the gymnasium and additions.

Appendix B

Records Search Results

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://nwic.sonoma.edu

11/16/2021 NWIC File No.: 21-0735

Stella D'Oro
Albion Environmental, Inc.
1414 Soquel Avenue, Suite 203
Santa Cruz, CA 95062

Re: Sunnyvale Schools

The Northwest Information Center received your record search request for the project area referenced above, located on the Cupertino and San Jose West USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a one-quarter mile radius:

Resources within project area:	None
Resources within ¼-mile radius:	None
Reports within project area:	None
Reports within ¼-mile radius:	S-04183, S-07390, S-09368, S-23631, S-24944

Resource Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☐ not requested	☒ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☐ not requested	☒ nothing listed
Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☒ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☒ enclosed	☐ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☒ enclosed	☐ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Jessika Akmenkalns, Ph.D.
Researcher

Appendix C

DPR Forms

State of California - Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date:

*Resource Name or #: ISOLATE 1

P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***a. County:** Santa Clara

***b. USGS 7.5' Quad:** Cupertino, CA **Date:** 2022 **T** 7S **R** 1W **B.M.** Mt. Diablo

c. Address: 1380 Rosalia Ave **City:** Sunnyvale

d. UTM: 587,981 mE / 4,133,831 mN

e. Other Locational Data:

Located west of the bleachers and track and north of the farm, about four meters to the west from the bottom of the bleachers and from the north end

***P3a. Description:**

The isolate is one ceramic sherd, likely historical painted porcelain based on brief consultation with Albion analyst. No context or features associated with the isolate encountered during pedestrian survey.

***P3b. Resource Attributes:** AH16 Other: Historic Isolate

***P4. Resources Present:** ☐ Building ☐ Structure ☒ Object ☐ Site ☐ District ☐ Element of District ☒ Other (Isolates, etc.)

P5a. Photo:

P5b. Description of Photo:

Plan view, white and blue ceramic sherd on ground surface

***P6. Date Constructed/Age and Sources:** ☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**

SCUSD
1380 Rosalia Ave
Sunnyvale, CA 94087

***P8. Recorded by:**

Sarah Peelo, PhD
Brenda Arjona, MA

***P9. Date Recorded:**

1/17/2022

***P10. Survey Type:**

Pedestrian Survey

***P11. Report Citation:**

Peelo, Sarah et al., 2022. *Cultural Resource Inventory and Architectural Resource Evaluation for the Santa Clara Unified School District Peterson Laurelwood Master Plan, Santa Clara County, California.*

***Attachments:** ☐ NONE ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List):

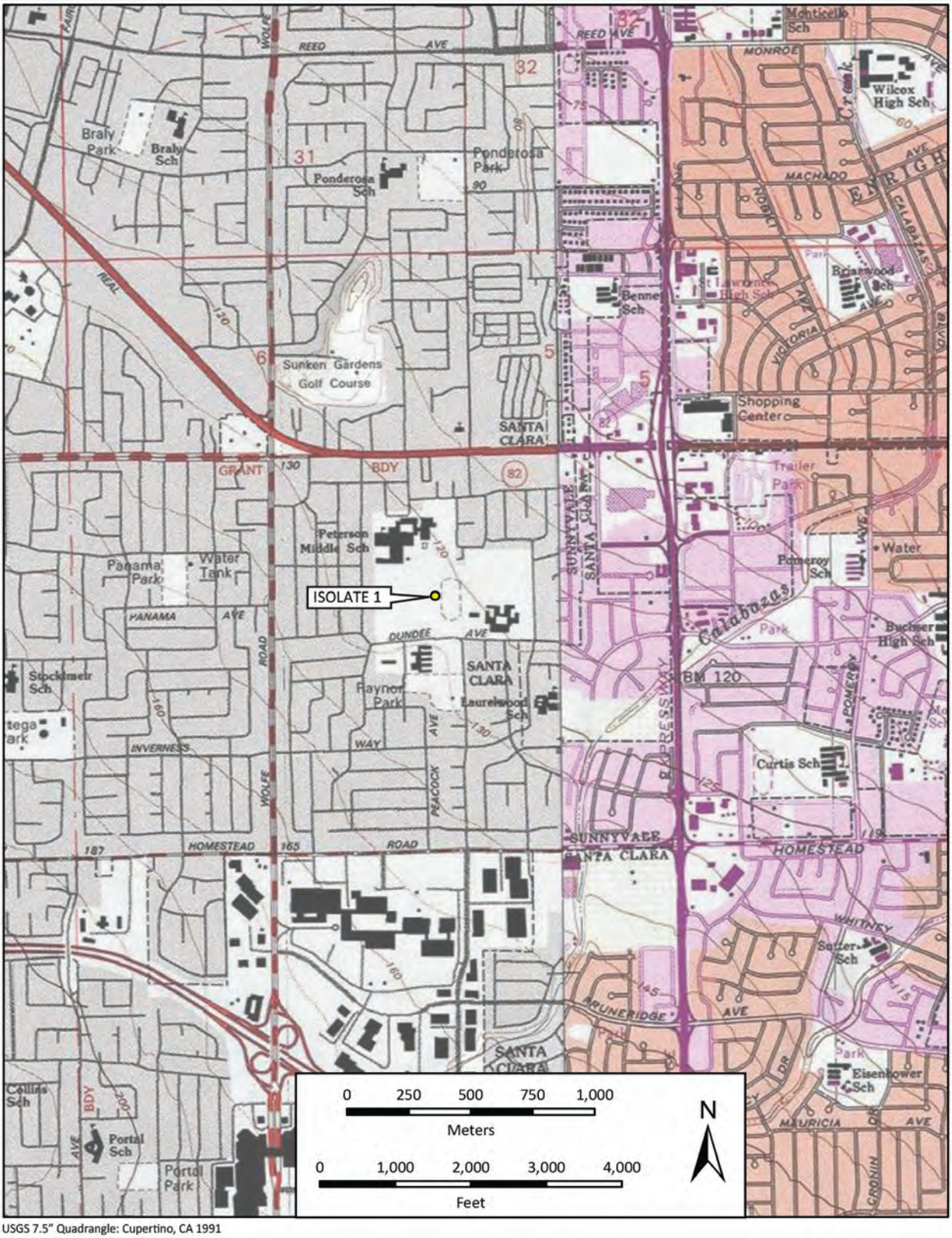
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #:** ISOLATE 1

***Map Name:** Cupertino, CA ***Scale:** 1:24,000 ***Date of Map:** 1991



USGS 7.5" Quadrangle: Cupertino, CA 1991

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** Patrick Henry Campus

P1. Other Identifier: Patrick Henry Intermediate School

***P2. Location:** ☐ **Not for Publication** x **Unrestricted** ***a. County:** Santa Clara

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** **Date:** **T** ; **R** ; **¼ of** **¼ of Sec** ; M.D. **B.M.**

c. Address: 1095 Dunford Way City: Sunnyvale Zip: 94087

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: APN # 313-10-004 (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Patrick Henry Campus is located on the southeast portion of the subject parcel APN 313-10-004. Its primary entrance is on Dunford Way to the south; Teal Drive demarcates the eastern boundary of the campus. North of the campus is a large informal grassy field the full width of the campus. To the west of the campus is a large oval running track surrounding a grass-covered soccer pitch/football field, beyond the play field is the Santa Clara Unified School District Farm. North of the farm is the Bryan Osborne Nature Center, and the Marian A. Peterson Middle School campus. The 71.08 acre-property is surrounded by subdivisions of primarily modestly scaled single-family homes and multi-family units built in the 1950s-1970s. A private school and a church are south of the property.

See continuation sheet beginning page 3.

***P3b. Resource Attributes:** (List attributes and codes)

***P4. Resources Present:** xBuilding xStructure ☐Object ☐Site xDistrict ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

See continuation sheets beginning page 28.

P5b. Description of Photo: (View, date, accession #)

***P6. Date Constructed/Age and Sources:** xHistoric
☐Prehistoric ☐Both
1962, 1964

***P7. Owner and Address:**
Santa Clara Unified School District
1889 Lawrence Road
Santa Clara, CA 95051

***P8. Recorded by:** (Name, affiliation, and address)
Meg Scantlebury
Dogtrot Historicl Consulting
1070 Perkins Way
Sacramento, CA 95818

***P9. Date Recorded:** January 2022

***P10. Survey Type:** Intensive

***P11. Report Citation:** Cultural Resources Inventory of the Patrick Henry Campus and Peterson Middle School Campus, Impact Sciences

***Attachments:** ☐NONE xLocation Map xSketch Map xContinuation Sheet xBuilding, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**

***Resource Name or #** (Assigned by recorder) Patrick Henry Campus

B1. Historic Name: Patrick Henry Intermediate School
B2. Common Name: Patrick Henry Campus
B3. Original Use: Intermediate School B4. Present Use: Unoccupied
***B5. Architectural Style:** Midcentury Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations)
1962: Classroom buildings and administration building; 1964: Multipurpose building and gymnasium
***B7. Moved?** xNo ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:** none
B9a. Architect: Clyde D. Goudie (1960), Goudie & (Dewitt J.) Griffin (1962)b. Builder: Vance Brown and Sons
***B10. Significance: Theme:** n/a **Area:** n/a
Period of Significance: n/a **Property Type:** n/a **Applicable Criteria:** n/a
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The intensive survey and evaluation finds that the Patrick Henry Intermediate School campus as a whole, and individual buildings are not eligible for the California Register of Historical Resources because of lack of historical or architectural significance.

Please see continuation sheets starting page 11 for the three contexts that were prepared for the evaluation: History of the Santa Clara Unified School District; public school campus design types; Mid-Century Modern architecture. See continuation sheet page 22 for evaluation.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:** See continuation sheet starting page 39.

B13. Remarks:

***B14. Evaluator:** Meg Scantlebury, Dogtrot Historical Consulting

***Date of Evaluation:** July 2022

(Sketch Map with north arrow required.)

See continuation sheet pages 29-30.

(This space reserved for official comments.)

The school was designed and built in two phases. The original campus, designed by Jefferson School District architect Clyde D. Goudie in 1960, included the overall campus design, building siting, exterior open spaces and courtyards, parking, pedestrian, automobile and bus circulation, classroom buildings, and the administration building. Architects Goudie & Griffin designed the two additional buildings, multipurpose building and gymnasium in 1962. The 1960 campus layout plan included the siting of these two future buildings.

The Patrick Henry Intermediate School was designed in the "cluster plan", following the prototype 1954 school design by The Architects Collaborative, in which classrooms are inwardly sited, clustered around courtyards and centrally located administration and multipurpose buildings. In the center of the campus is the largest of three courtyards. The administration building and multipurpose building face north onto the south side of the central courtyard. One narrow façade of each of the four L-shaped classroom buildings flank the east, north, and west sides of the central courtyard. Exterior covered corridors surround the central courtyard and connect the four classroom buildings, the multipurpose building, and the administration building. These walkways are sheltered by flat roofs cantilevered off the façades of each classroom building, supported by exposed steel rafters and steel columns forming an upside-down L-shape. Classroom buildings A and D are sited in a sort of yin/yang pattern to create a secondary courtyard northwest of the central courtyard; classroom buildings B and C are also sited similarly to create another secondary courtyard, northeast of the central courtyard. The courtyards are simple and informal, paved with concrete slabs and dotted with occasional trees, some planting beds, and benches.

The entrance to the campus is on the south side of the property, on Dunford Way, through a flat-roof-covered walkway between the administration building to the east and the multipurpose building to the west. The roof of this north/south arcade is cantilevered off the west façade of the administration building and is supported on the east by a series of concrete vertical slabs. The walkway opens onto the central courtyard. A horse-shoe shaped asphalt parking lot, student drop-off area, and bus driveway is west of the multipurpose building, facing Dunford Way; a slightly larger rectangular asphalt parking lot is east of the administration building, also facing Dunford Way. A grassy area with some trees is planted between the southern façade of the multipurpose building and Dunford Way, with a flagpole near the entrance arcade. There is also a small lawn area between the rectangular parking lot and classroom building B.

Between classroom building B and Teal Drive to the east is an informally landscaped area with patches of grass and scattered trees and bushes. An asphalt pathway leads from Teal Drive through the grounds and passes along the south side of classroom building B toward the central courtyard. Other paved pathways wind through the landscaped area north of this pathway identified on GoogleEarth as Lochinvar Avenue.

A large asphalt parking lot is sited north and west of classroom building D, accessed from Dunford Way between classroom building A and the gymnasium to the west. West of the parking lot and gymnasium are Santa Clara Unified School District vehicles and portable metal storage units. An asphalt-paved play

area is east of the large parking lot, behind classroom building C, with two half-court basketball courts, three four-square courts, a dodge-ball circle, and two tether-ball circles painted on the surface, along with other surface playground markings.

Chain-link fencing surrounds much of the campus proper.

Buildings

The campus is comprised of seven buildings. Four classroom buildings, buildings A, B, C, and D, are L-shaped of similar size and footprint, each oriented differently. Building A, C, and D have almost identical footprints, with one wing of the L significantly narrower than the other wing; the two wings of building B that make up the L are of similar width. (The plans originally refer to these buildings as units A, C, D, and E; the administration building was referred to as unit B.) While the classroom buildings were designed using the same architectural features, each classroom building was functionally designed to accommodate specific intended uses, such as shop, science, art, sewing, etc. The administration building is a small rectangle. The multipurpose building (referred to as unit F in the plans), is irregularly shaped, with the center of the primary façade that faces the interior large courtyard bowed outwardly and flanked by two small wings. The gymnasium (referred to in the plans as unit G), is primarily rectangular, with symmetrical bays extending out from both the north and the south façades. It is sited west of the main cluster of campus buildings. All buildings are in poor to fair condition.

The buildings are built on concrete slab foundations atop engineered fill. The sills are redwood and the framing is steel and redwood. The roofing material appears to be rolled asphalt. The roofs of each classroom are a series of very low gables.

The five buildings built in 1960 share the same simple architectural design features and are of similar low horizontal massing. Common exterior wall design features include panels of two basic wall styles repeated in irregular patterns across each building's façade. Large flat plain panels average between 10' and 12'-wide between expansion joints, are 12' tall, with a flat parapet topped with a narrow metal cap and are sheathed in cement plaster painted a warm cream color.

The second panel type is a slightly shorter in height 4'-wide design of 4'x8' plywood topped with a transom window, all articulated within a three-part metal frame. Most transom windows are hopper-style windows. Interspersed between these plywood panels are occasional panels with inset plate-glass or Aklo-glass, a type of glass developed in 1939 to absorb heat and filter daylight. The plywood panels are painted the same warm cream color. A stepped-down horizontal roof eave with vertical rib-patterned or corrugated blue facia extends slightly out from the wall plane above these panels. This shallow eave is supported by occasional 4"x4" metal tube columns.

Typical main entrances contain double metal doors hung symmetrically, flanked by metal-framed sidelights; all doors are blue with simple metal frames, and topped with transom lights. These recessed

doorways range from 9'6" to 12' in width and are covered with the same cantilevered roofing detail and facia as the tri-part panels. Other doors are single, blue, not recessed, and are plain metal with simple metal trim.

Classroom Building A (1960)

Building A is the western-most classroom building. Like all four classroom buildings, it is L-shaped. The broader leg of the L is oriented east-west and contains two rows of classrooms with a central interior hallway; the portion of the L that extends north of the east-west portion of the classroom building has no interior hallway. The building was designed to contain five classrooms, a metal shop and wood shop, restrooms, a mechanical room and a supply room.

The east façade (east elevation 1) facing the central courtyard is fully recessed behind the continuous covered walkway that surrounds the courtyard. A parapet on the same plane as the building façade extends above the walkway roof. The cantilevered walkway roof is flat, supported by six simple rectangular steel tubes that extend out below the walkway roof horizontally to its edge. Matching steel tubes provide vertical support at the edge of the cantilevered overhang. The walkway extends beyond the northwest and southwest corners of this building's façade. Blue double solid metal doors are recessed in the center of the elevation, flanked by a piece of plywood on one side and a plate-glass panel on the other side. Each side panel is topped with a glass transom. Blue corrugated metal roof facia is visible over the doors, above the walkway roof, and is the width of the recessed doors and side lights. The exterior wall is articulated by four plain unglazed panels on each side of the central entrance, two panels within each bay of the walkway supports. The façade is 72'-wide.

The south façade, behind which are four classrooms, faces the bus driveway. There is no covered walkway. The wall is articulated by a series of cream-colored plywood panels within metal frames with transoms atop each panel. Four of the panels are dark plate glass, specified on the plans as Aklo glass. There are two single solid metal doors painted blue, and four small air conditioners protrude out of the flat façade. The very shallow eave is covered by a wide facia panel of blue vertically corrugated metal; it is supported by a series of columns a few inches away from the wall. Four trees are planted along this elevation, which is 128' 6"-wide.

The west façade is the widest at 167' 6". The southern-most section of the façade has no openings in the wall of the southwestern-most classroom. North of this portion of the wall is a recessed double metal door entrance into the building's interior hallway which is parallel to and closely resembles the east façade entrance onto the central courtyard, with a cantilevered blue roof over the entrance. North of this entrance are the classrooms designed to be shops; this portion of the west elevation is visually divided into five sections. Immediately north of the entrance is a narrow plain cream-colored panel with a flat parapet that is taller than the cantilevered roof over the entrance. Moving north, there is a series of the typical plywood panels under a lower blue metal roof that extends slightly beyond the plane of the façade. The eave is supported by four irregularly placed metal posts. Under the first extended eave

panel are eight plywood metal-framed panels that differ slightly from the typical in that each are topped with two transoms, the lower row of glazing is of the standard narrow width, and the upper row is taller. Two panels are between the first and second steel columns supporting the shallow eave, while four panels are articulated between the second and third columns. The last two panels are between the third column and the last column, which marks the transition away from the typical plywood panel to a taller flat parapeted portion of the elevation. This expanse is narrower than the two eave-sheltered sections on either side of it and contains a single blue metal door with a small vertical light and a double aluminum-framed window in the center. The second eave-sheltered section of the elevation is identical to the first and also contains four air conditioners jutting out of the wall panels. North of the eave-covered section is another taller flat parapeted wall with a double unglazed blue metal door and a single unglazed blue metal door. The rest of the wall is solid, plastered, and painted cream.

The north façade facing the western end of building B is 37’ 6”-wide and contains the entrance to the boys’ restroom. The cantilevered roof walkway that protects the entrance is identical to that of the covered walkway along the two eastern façades of the building.

The east elevation that faces the secondary courtyard is 95’ in length and is similar in design to the other east façade, with a series of plastered plywood panels within metal frames. The length of the elevation is covered with an identical cantilever-roofed walkway with a flat parapet following the plane of the building façade extended above. The entrance to the girls’ restroom is on this elevation as is another single blue solid metal door.

The 93’-wide north elevation that faces the secondary courtyard is similar in design to the southern elevation, with two classrooms rather than four. A double blue solid metal door with side lights and transoms identical to the door on the east façade is located at the 90-degree angle of the L and opens northward into the secondary northwestern courtyard. Plain cream-colored panels with taller parapets are immediately to the east of the entrance, followed by a series of the typical metal-framed cream-colored transomed panels below a slightly extended eave with blue metal facia.

Classroom Building B (1960)

Classroom building B is the eastern-most classroom building. L-shaped like the other three classroom buildings, one west façade faces the main courtyard, the south façade faces some landscaping and a parking lot, the east façade faces another expanse of landscaping, and its secondary north façade and secondary west façade face the eastern secondary courtyard. The building was designed to house twelve classrooms, a music room, a mechanical room, a boys’ restroom and a girls’ restroom.

The 72’-wide west façade that faces the central courtyard mirrors that of the east elevation of building A. The only differences are that the plate glass is intact in both side lights flanking the double doors and

four squares of louvers venting the mechanical room are inset into the cream-colored cement-plastered panels south of the centrally located entrance.

The 137'-wide south elevation is mostly symmetrical, with thirty panels of metal framed plywood or Aklo glass all with transom windows above, flanked at either end with wider, taller flat cream-colored cement-plastered panels. Of the thirty panels, four are inset with Aklo glass. The line of thirty metal-framed panels is topped with the same slightly extended eave beyond the plane of the panels, and blue facia. The extended eave is supported by seven steel tube columns in a manner identical to the south façade of building A.

The east elevation is 168'-wide and uses the same architectural design details in the following pattern, from south to north: Three wide, flat panels with a taller parapet coated with cream-colored cement-plaster, recessed blue metal double doors flanked by side lights all topped with transoms below a stepped down cantilevered roof with shallow eaves, a wider, taller cement plaster-coated panel, six narrower plywood/transom panels, one Aklo-glass/transom panel, seven plywood/transom panels, one Aklo-glass/transom panel, seven plywood/transom panels, an Aklo-glass/transom panel, five plywood/transom panels, and finally a wider and taller flat cement-plastered cream-colored panel. The roof design is typical for all of the plywood and glass panels.

The north elevation is 72'-wide and is identical to the building's west elevation.

The secondary west elevation faces the eastern secondary courtyard and is 96'-wide. Architectural treatments are typical; from north to south they consist of one wide taller cement-plaster coated panel, followed by four narrower plywood panels inset in metal frames, topped with transoms, a single metal unglazed door in a space consistent in width to the plywood panels, one plywood/transom panel, one Aklo-glazed/transom panel, five plywood/transom panels, a second door identical to the first, one plywood/transom panel, one Aklo-glazed/transom panel, four plywood/transom panels, and a third identical metal door. The series of narrow panels and doors are topped with the same slightly stepped down and slightly extended eave with blue metal facia supported by five steel tube columns.

The secondary north elevation faces the eastern secondary courtyard. From east to west, the design begins with two narrow rows of floor-to-ceiling awning windows, an architectural feature not found in any other campus building. Following the awning windows is a single blue metal door, followed by an Aklo-glazed/transom panel, five plywood/transom panels, another identical single metal door, then one plywood/transom panel. The elevation ends on the west end with two large, flat taller cream-colored cement-plaster coated panels. The same stepped-down eave with blue metal facia extends from the awning windows to the beginning of the tall cement-plaster panels, supported by one steel tube column.

Classroom Building C (1960)

Classroom building C is the northeastern-most classroom building. L-shaped like the other three classroom buildings, one south façade faces the main courtyard, the west façade faces a wide asphalt-paved uncovered walkway leading from the large northern parking lot to the central courtyard and the east façade of building D. The north elevation faces the student drop-off section of the large parking lot to the north, a dirt, fenced play area that appears to have some empty raised garden beds and, further north, the paved play area described earlier. The secondary south elevation and east elevation face the eastern secondary courtyard and classroom building B. The secondary east elevation also faces a dirt play area with some play structures, raised beds and occasional trees. The building was designed to contain a homemaking room, a sewing room, boys' and girls' restrooms, storage, a boiler room, five classrooms, a men's room, a women's room, janitor's room and supply room.

The 72'-wide south façade faces the central courtyard and is consistent in design with the other three classroom buildings' main courtyard-facing elevations, with four plain cream-colored plaster coated taller panels on either side of a typical double-door recessed entrance into the central hall of the building's classroom wing.

The east façade facing the secondary courtyard, 96' in width, is also made up of the two typical wall designs, beginning on the south end with a taller cream-colored cement-plastered plain panel followed by one typical plywood/transom panel, a single flush-hung door, four plywood/transom panels, a frosted Aklo glass/transom panel, five plywood/transom panels, a second flush-hung door, one frosted Aklo glass/transom panels, a third typical door, another plywood/transom panel, a taller cement-plastered panel followed by a typical recessed double-door entrance. The transoms are a mix of fixed pane and hopper windows.

The secondary 73'-wide south-facing façade has no fenestration. It consists of a series of the typical taller cream-colored plain cement-plaster covered panels with three typical single metal doors placed irregularly along the wall expanse plus an additional brown-colored door not in the original plans. Approximately half of the width of the elevation has the typical covered walkway which is fenced off with a combination of cyclone fencing and T-111 plywood.

The secondary east-facing façade is only 30'-wide and has no fenestration or entrances. It consists of three typical plain cream-colored plaster-coated taller panels with a metal cap.

The north elevation is the widest at 145'. The majority of the architectural wall treatments are typical except for the wall expanse where the entrances to the boys' and girls' restrooms are located. From east to west, the wall panels begin with one wider taller cream-colored plaster-coated plain section followed by seven plywood/transom panels, then a single narrower plain panel, followed by eight plywood/transom panels. Most transoms contain hopper windows. This series is followed by a larger, taller plain panel with a metal cap. To the west are two open doorways into the girls' restroom, a plain door into a storage room, followed by a double-wide opening into what was the boys' restroom which is

now infilled with T-111 plywood painted the same cream color. The wall expanse containing these openings is plain, cement-plastered topped with the blue corrugated stepped down roof detail. This is followed by two typical taller plain plastered panels.

The west elevation is 136'-wide and is comprised of the typical design features arranged in the following pattern: From north to south the façade begins with two wide taller plain panels with large ventilation louvers and a central plain flush double door into the boiler room, a typical recessed double door, a single plain panel, six plywood/transom panels, a single frosted Aklo/transom panel, seven more plywood/transom panels followed by six taller plain panels with the third panel containing a simple single metal door.

Classroom Building D (1960)

Classroom building D is the northwestern-most classroom building. L-shaped like the other three classroom buildings, one south façade faces the main courtyard, the narrow west façade faces a small yard with a few trees then the parking lot/driveway that leads to the large parking lot to the north. The other south and west elevations face the secondary western courtyard. The east elevation faces building C and the wide walkway between the two buildings leading to the central courtyard. The north elevation faces the large parking lot. The building was designed to contain three classrooms, two larger art rooms divided by a mechanical room and a vented drying room, and four science rooms grouped together in twos with shared workrooms, separated by north/south corridor.

The southern-most elevation is consistent with the other classrooms' elevations that open onto the central courtyard – 72'-wide, plain wall panels flanking a typical central recessed double door. The covered walkway is directly in front of this elevation.

The 126' east elevation also contains typical architectural wall features. From south to north, it begins with a single plain taller panel followed by a lower blue roof eave panel with a single blue door, then five plywood/transom panels, an Aklo glass/transom panel, two taller plain panels, another Aklo glass/transom panel, five plywood/transom panels, another plain single door, one taller cement-plastered panel, then a typical recessed double entry door with side lights and transoms. The façade ends with four larger plain panels.

The widest elevation is the north façade at 178'; it is comprised of long expanses of typical repeated wall treatments. From east to west, there is a single large plain panel, five plywood/transom panels, a plain door inset in a lower, blue-roofed panel, a wide taller plain panel with louvers and a wide plain blue door into the mechanical room, another single door inset into a lower, blue-roofed panel, followed by a series of 25 plywood/transom and 4 Aklo-glass/transom panels, irregularly placed. The façade ends with a single plain taller panel.

The secondary west elevation is only 30'-wide and has no openings. The wall treatment is limited to taller plain panels of the cream-colored cement-plaster coated material.

The secondary 106'-wide south elevation that opens onto the secondary courtyard has no windows and is comprised of fifteen typical plain taller cream-colored panels, three of which contain a single plain blue metal door. Most of this elevation is sheltered by the typical covered walkway.

The west elevation is 96'-wide and is also made up of the typical architectural wall treatments. From north to south, it begins with a typical recessed double door/sidelight/transom entrance followed by a taller plain panel, then a plain metal door under the typical lower blue eave which continues above a series of five plywood/transom panels. Two Aklo-glass/transom panels flank a taller wider plain panel, followed by six lower panels consisting of five plywood/transom panels and one panels containing a simple metal door. The façade ends with a single taller plain panel.

Administration Building (1960)

The rectangular administration building is significantly smaller than the four classroom buildings at 64' 6" x 56'. It was designed to contain the library, attendance center, nurse's office, clerks' office, reception room, offices for counselors, the vice principal, and the principal, a work room, speech therapy room, and a mechanical systems room. It and its neighboring building to the west, the multipurpose building, are the southern-most buildings on the campus. The broad central covered walkway campus entrance is immediately to the west of the building; the walkway roof is cantilevered off the subject building's west elevation.

The south elevation has no entrances. The façade is divided into the two typical architectural design elements. East of the covered entrance are a series of eleven panels set in metal frames. The first two panels are Aklo glass, followed by five panels of cream-colored plywood, two more Aklo glass panels, then finally two additional plywood panels. Each panel includes a transom of Aklo glass. The typical blue corrugated metal facia that covers the shallow roof eave found on the southern elevation of building A spans the cantilevered walkway roof and continues across all articulated panels. The second design element is a flat expanse of cement-plastered cream-colored wall with the higher, flat parapet topped with a metal cap. This expanse is approximately the width of the covered campus entrance to the west of the building.

The east elevation begins, south to north, with a narrow, flat, cream-colored plaster-covered panel with a taller flat parapet followed by two panels of plywood set in metal frames with transoms above them. The shallow blue roof eave and facia slightly extends outward above the transoms. The rest of the façade is made up of six wide panels with flat taller parapets. Each panel is coated with cement plaster painted in the cream color. One panel contains a solid metal door and one panel contains louvers for mechanical ventilation.

The north elevation contains the same architectural details in a slightly different arrangement. Moving from east to west, the façade starts with a wide cream-colored cement plastered panel with a single plain, solid metal door painted blue. It is followed by the typical plywood panels in metal frames with transoms between the plywood and the blue corrugated metal roof facia, followed by the plain, flat cement-plastered panels with taller flat parapets. One single metal door pierces the flat panel. This elevation faces the central courtyard and the covered walkway.

The west elevation abuts the wide covered main campus entrance between the subject building and the multipurpose building to the west. The architectural design elements are consistent with those on the other elevations and the other campus buildings. A single cream-colored cement plaster panel is followed by a metal-framed plate-glass panel then a metal-framed plywood panel, each topped with a transom. These are followed by three broader, flat cement-plaster panels, one with a door piercing it. These panels are then followed by three metal-framed plywood panels with transoms and two Aklo glass panels with transoms, ending with a panel containing a second door.

Multipurpose Building (1962)

The multipurpose building is a mostly symmetrical, essentially pentagonal-shaped building that contains a narrower central symmetrical pentagonal-shaped room that is flanked to the east and west by smaller rooms. The central room was designed accommodate student assembly, with a raised platform on the south elevation for performances or lectures, as well as be used as a cafeteria. Rooms to the west of the assembly room/cafeteria were designed to contain a kitchen and instrument room; rooms to the east were designed to house a vocal music room, a teachers' work room, and men's and women's restrooms.

The building is sited on the south side of the campus with its primary façade facing north onto the central courtyard. Between the building and the courtyard is a typical, free-standing covered walkway. Its placement is awkward, blocking the full view of the building's taller fenestrated façade. South of the building is a lawn. To the east is the covered main entry to the campus and the administration building, and to the west is a parking lot/student drop off area.

The design borrows from the 1960 design with its use of tall plain panels of cream-colored cement-plastered metal-capped walls and some of the lower blue corrugated roof elements and blue doors. It is consistent with the earlier buildings' horizonal massing and rhythmic use of vertical elements.

The center of the north façade is taller than the two lower wings on either side and extends north toward the courtyard, creating two planes resulting in a shallow point in the middle. The point is sheathed in tall, plain cream-colored cement-plastered wall panels. The point elevations each contain five 11'7"-tall columns of five 3'7"-wide sets of aluminum-framed windows. Each column consists of three 1'8"-tall hopper windows separated by a fixed 3' tall window and a fixed 3'7" window. The parapet is flat and metal capped. Moving away from the central point, on the other side of the windows,

are sets of blue plain metal double doors. The lower wings project out, north of the doors; the angles of the façades of each wing match the angle of the two center planes of the north elevation.

The planes and heights of the east elevation are varied. Beginning south and moving north, the first section shares the roof line with the auditorium. The plane is angled and contains three rhythmically placed slightly recessed approximately 2'-wide ground-to-roof-cap inverted columns. Within each recess is a tall, tripart window with two 1' 8"-tall hopper windows divided by a 4'5"-tall, fixed light. The rest of the 30'-wide section is comprised of flat metal-capped cream-colored wall panels. The wall makes a 90 degree turn west; this short 5'-wide wall contains a single, plain blue metal door. The wall again makes a short 90 degree turn north; this 9'3"-wide wall contains a wide tripart vertical window. The wall again turns 90 degrees west; the 6'6"-wide wall expanse houses another plain door. Again, the wall plane zigzags north and the roof height is lowered. Within this 32'9"-wide portion of the east façade are five columns of tripart windows, similar in pattern and dimension to the plywood/transom panel architectural wall treatment found on the classroom building exteriors. These columns are fully glazed with three panes of tinted glass. The characteristic blue corrugated metal cantilevered roof extends out from the elevation that contains this set of windows. The elevation continues north for 14' and is plain cream-colored siding with one double set of inset hopper windows.

The south elevation has three planes, with the 34'-wide center portion inset and the symmetrical flanking 34'-wide elevations angled southward as they move away from the façade's center. The center is sheathed in plain cream-colored, tall metal capped walls. The two flanking planes are mirrors of each other and contain a flush-mounted blue double metal door and three evenly spaced columnar windows identical to those found on the southern-most section of the east elevation.

Like the east elevation, the west elevation is made up of several planes and heights but does not exactly mirror the east elevation. The first plane on the west is 39'-wide and contains three evenly spaced columnar windows identical to those found on the south façade. Several feet north of the third window is a plain blue metal door, followed by several feet of the plain, cement-plastered cream-colored tall wall panel. The wall makes a 90 degree turn eastward. The space contains the kitchen and its mechanical systems. Typical architectural details are used, including several plain blue metal doors, cream-colored walls, and the blue corrugated lower roof detail.

Locker Building (1962)

The locker building building is a mostly symmetrical, rectangular east-west oriented building with central bays extending off the north and the south elevations. It was designed to house the girls' and boys' locker rooms and showers; it appears it was not designed to also accommodate any indoor sports or activities. The building is equally divided in two, with the western half mirroring the eastern half. The south bay was designed to house the mechanical systems and the north bay to contain the restrooms. It has been repurposed by the school district as storage and a print shop.

The building is sited on the southwest side of the campus with its primary entrances facing north onto an asphalt surfaced parking lot and large grassy field. An aboveground PG&E power facility surrounded by a chain-link fence is just north of the building. School district maintenance vehicles and storage containers mark the western edge of the campus. Farther west is the Peterson Middle School oval track, to the east is the main campus, and to the south is an informally landscaped area with trees and bushes and Dunford Way.

The design borrows from the 1960 design with its use of tall plain panels of cream-colored cement-plastered metal capped walls and blue doors. Fenestration is limited and, what there is, is not consistent with the other campus buildings' windows.

The eastern half and the western half of the 100'-wide north elevation generally mirror each other, each with a double plain blue metal set of doors, a single blue metal door, and a tri-part vertical window. The central bay contains two sets of two hopper windows, placed high on the façade. The single-door entrances to the boys' and girls' restrooms are on the east and west facing walls of the bay. There is a second plain metal door on one side of the bay. The double doors on the west half of the north elevation are sheltered by a green canvas awning with the words "PRINT SHOP" in white on its face.

The east elevation and the west elevation are each 49'-wide. The west elevation was not visible. The east elevation contains a band of four rectangular windows. One is painted cream and one is above a single metal blue door protected by a green canvas awning.

The south elevation is made up of a series of plain cream-colored cement plastered panels. The east and west walls of the mechanical system bay contain ventilation louvers.

Historic Contexts:

Santa Clara Unified School District Historic Context

The Santa Clara Unified School District (SCUSD) includes neighborhoods in the cities of Sunnyvale, San José, Cupertino, and Santa Clara; it comprises approximately 56 square miles of 1,290-square-mile Santa Clara County (SCUSD 2022a; U.S. Census Bureau 2022). The district, which educates over 15,300 K-12 students and an additional 6,000 students in preschool through adult school, is made up of 18 elementary school sites, one K-8 school site, four middle-school sites, three high-school sites, three alternative high-school sites, and four leased sites (SCUSD 2022a, 2022b). SCUSD is one of 32 elementary, high school and unified school districts in Santa Clara County, not counting the Community College District, charter, or court schools (Santa Clara County Office of Education 2022a). Unified school districts are districts that teach both elementary and secondary levels of education.

19th-Century Public Education in Santa Clara County

On April 11, 1850, the California State Legislature passed an act providing for the election of a superintendent of public education, as directed by the Constitution of the State of California. John G. Marvin was elected that year on October 7 to serve as the state's first public school superintendent (San José Mercury News 1951: 181). Despite this, the first schools in Santa Clara County were private schools generally operated by religious entities or informal schools organized by residents (Laffey 1995: 51). In 1852 the Legislature authorized a state school tax of five cents per $100 and a county school tax of no more than two cents per $100 to initiate funding of the state's public education system (Santa Clara County Office of Education 2022b). It also allotted three school commissioners to each township and included the duties of a County Superintendent of Schools as among the responsibilities of the County Assessor (San José Mercury News 1951: 181). The first Santa Clara County Assessor was J.H. Morgan, elected in 1853; consequently he also become the county's first Superintendent of Schools (Laffey 1995: 51).

One year earlier, in the fall of 1852, the Santa Clara County Commissioners designated eight townships as school districts: Gilroy, Burnett, New Almaden, San José, Santa Clara, Fremont, Alviso, and Washington (now part of Alameda County). On March 15, 1853, the Santa Clara Register printed a notification that a school had opened in San José, signed by the San José Commissioners of Common Schools; the parents were expected to pay any costs that exceeded the school funds provided by the State. By May the school, located in a Baptist church, had ten pupils registered but insufficient funds to pay the teacher. The 1853 Legislature amended the State's school law to allow the Common Council to levy taxes on real or personal property to support city schools (San José Mercury News 1951: 181). By 1866 Santa Clara County Schools were some of the best funded in California (Laffey 1995: 51).

The State Legislature revised the County Assessor's duties in 1855 to no longer include that of Superintendent of Schools. Freeman Gates, a San José teacher, became Santa Clara County's first elected Superintendent of Schools (Santa Clara County Office of Education 2022b). In October 1855 Santa Clara County redistricted itself into eight townships and 16 school districts. School districts in the townships of Fremont, Santa Clara and Redwood numbered six; San José, Alviso, Burnett, Almaden and Gilroy had ten. Within a month, district designations were revised again, and four separate school districts were established in the Santa Clara township (Munro-Fraser 1881: 137). By the end of 1859 there were 710 students enrolled county wide (Laffey 1995: 51).

The 1860s marked significant expansion of Santa Clara County schools, with the erection of over two dozen schoolhouses. These included schools in the Cambrian, Encinal, Jefferson, Laguna, Mt. Pleasant, Pala, Summit, Hester, and Willow Glen districts. What was once the Jefferson School District is now within the boundaries of the SCUSD. The first high school in the county was opened in San José in 1860 (San José Mercury News 1951: 181).

Santa Clara County's rural school districts constructed generally small wood-framed one- or two-room schoolhouses between 1850 and 1880. These early schools appear to have been of consistent design with schoolhouses throughout the country (San José Mercury News 1951: 181). Located along existing roads and intersections, these schoolhouses were exposed to noise and dust, poorly lit, had poor ventilation and heating, and often had no wells, washbasins or toilet facilities (Englehardt 1942: 172). The typical classroom layout was rectangular, with the teacher's desk in front of rows of students' desks, emphasizing his or her authority (Ogata 2008: 563). The Mayfield School in Fremont township was described as being of common construction and type. An early California State Superintendent of Schools who visited it in 1855 referred to it as a "herring box" (San José Mercury News 1951: 181). Schools also found accommodations in existing buildings, such as Mr. Dunphy's school on the second floor of a two-story rented building in San José; Red Mac's Saloon occupied the first floor. Some schools shared buildings with other entities like churches or meeting halls (San José Mercury News 1951:183).

The rapid increase of population on the West Coast that followed the completion of the Transcontinental Railroad in 1869 resulted in a shortage of school funding and space (Laffey 1995: 52). According to the Census Bureau, the population in Santa Clara County grew from 11,912 in 1860 to 26,246 in 1870, a more than 120% increase (Bay Area Census 2022). At least four, and possibly six, new districts were established in the 1870s. These included Eagle, Uvas, Llagas, and Midway. Fifteen new school districts were formed in the 1880s, among them were Mount Hamilton, Halls Valley, Huyck, Campbell, Burrell, Lakeside, and Austin. Similarly, in the following decade, another thirteen districts were created, two in the new towns of Morgan Hill and Palo Alto (San José Mercury News 1951: 183). Most districts consisted of only one or two schools.

Despite the rapid establishment of new school districts, they were not always able to keep up with the educational needs of their growing communities. Although state funds covered much of the cost, parents had to purchase their children's books and cover other expenses; some poor families simply could not afford to send their children to school. Lack of adequate funding also resulted in deferred maintenance and inattention to advancement in school design to better serve the student body. In the 1873 Santa Clara School District's annual report, the School Superintendent accused the city of allowing the schools to become dilapidated. He stated that "the Cheap-John system which seems to pervade all the departments of our town governments admonishes us out of the necessity of studying economy, even to the degree of meanness (San José Mercury News 1951: 183)."

Another challenge the public educators faced was poor attendance. In 1860 the Santa Clara County Superintendent of Schools stated that "the principle cause of non-attendance by the children is the indifference with which many parents in the county districts treat all things connected with school discipline." "Discipline" in this instance was not referring to behavior but to regular attendance, particularly in the rural districts where farming and ranching families were dependent on children helping at critical times such as harvest or planting (Laffey 1995: 51-52). In 1874, California made education for children from eight to 14 years of age compulsory and guaranteed state aid for each

school based on the number of children in each district. High schools would not receive state funding until 1902. In 1911, the state stopped providing aid for each child in a given district but based the funding on attendance (California Department of Education 1961).

Despite the State's intervention, these challenges continued even as the number of school districts increased. By 1875 Santa Clara County boasted 53 school districts, 83 school buildings and 105 teachers. The average daily attendance was recorded as 4,892, not counting San José school attendance. This number indicated that only half of school-age children regularly attended school. By 1881 there were 62 districts county-wide, and by 1900 there were a total of 97 schools in 84 districts, and 562 teachers educating 14,320 students (Laffey 1995: 52). The majority of these schools were in rural communities and small towns, with the basic one- or two-room wood-framed schoolhouse still the most commonly built school type.

Late 19th and Early 20th Century: Continued Growth, New Approaches to Education and School Design

As the county's population increased and towns became more urbanized in the 1880s and 1890s, the basic schoolhouse was gradually replaced by larger, yet still modestly scaled schools that often expressed contemporary Victorian architectural styles. Nation-wide attitudes toward the importance of lower education were changing. With the close of the 19th century, school building design began to trend toward a more monumental and unified plan with architectural revival-style embellishments and elaborate approaches and entrances to celebrate the public's civic pride and devotion to education (American Educational Research Association 1942: 174). These schools typically had a central entrance, symmetrically planned classrooms on either side of a long corridor, and a large auditorium. The classroom plan was rectangular with blackboards on one or two walls, rows of windows on one side, and the desks in rows to emphasize order, desk work, and the teacher's authority (Ogata 2008: 563). The unreinforced masonry San José High School that opened in 1898 was a relatively grand civic building with classical styling, and a symmetrical design composition (San José Mercury News 1951: 181).

Architects and engineers introduced improved technologies and stronger materials that allowed school buildings to be two to three stories in height. They designed schools with improved ventilation and exposure to natural light and enhanced safety by using fireproof materials (Yates 2013: 1). These advancements in architectural design and the need for larger school buildings established a new era of school construction (American Educational Research Association 1942: 173). However local school designers apparently did not plan for potential seismic events, and the 1906 earthquake destroyed the new San José High School (San José Mercury News 1951: 181) and damaged the newly built Santa Clara High School. California would not mandate earthquake-resistant building construction for schools until after the 1933 Long Beach earthquake (Seismic Safety Commission n.d.).

As stated earlier, attitudes toward education began to evolve in the late 19th century. The influential progressive education movement would lead to significant changes in school and campus design over

the next several decades. The movement was a reaction against the existing formalism and authoritarian teaching practices of traditional education and inspired a broad restructuring of educational methods in the United States. Guided by the theories of educators and philosophers such as John Dewey of the Columbia University Teachers College, the movement emphasized more hands-on, child-centered methods and curricula, individual achievement, and differentiation of children's abilities (Sapphos Environmental 2014: 39). The progressive education movement also brought a new emphasis on student health and physical activity as essential for proper childhood and adolescent mental and physical development (Yates 2013: 2). The notion that such development took place in stages led to the creation of the 6-3-3-year division of elementary schools, junior high schools, and high schools during this period (Yates 2013: 1-2).

As the progressive education movement gradually took hold in the first two decades of the 20th century, new school design incorporated features to support the health and well-being of the children (Yates 2013: 1-2). The 1906-built Santa Clara High School building was designed with traditional classroom layouts, but also included boys and girls "play rooms" and showers, a robust ventilation system, and landscaped grounds and tennis courts (Evening News 1906: 2).

In 1909 the Santa Clara County Board of Education, which consisted of the elected county superintendent of schools and four members appointed by the board of supervisors, amended an 1880 political code to provide that a majority of appointed members be experienced teachers who held at least a grammar school teaching certificate. The board of education was now authorized to qualify and hire teachers and set the standards for graduation (Laffey 1995: 52). Superintendent D.T. Bateman established the Teachers' Institute of the Santa Clara County Office of Education in 1911 to offer professional development to teachers. Teacher round tables included topics such as "How to Make Mathematical Work More Nearly Meet the Needs of Daily Life" and "Teaching Peace by Means of History" (Santa Clara County Office of Education 2022b). The supervision of attendance and child welfare was added to the duties of the county superintendent in 1918 (Santa Clara County Office of Education 2022c). These actions further reflect the gaining influence of the progressive education movement and the county's adoption of its theories.

The creation of new school districts in Santa Clara County continued and by 1912 there were at least 102 districts, not counting high schools, outside of the city of San José's corporate limits. Prior to the turn of the twentieth century, there was a high school in San José, one in Santa Clara, one in Gilroy, and one in Palo Alto. By 1951 the communities of Santa Clara, Morgan Hill, Los Gatos, Campbell, Mountain View, Fremont, and East Side had high schools. All, except for Palo Alto and San José, served large rural areas and were classified as union high schools (San José Mercury News 1951: 183). For example, graduates from Jefferson, Santa Clara, and Alviso elementary school districts matriculated to the Santa Clara Union High School District's high school (Evening News 1959: 15).

On April 30, 1926, voters in the Jefferson, Agnew, Braly and Milliken elementary school districts elected to consolidate the districts into the Jefferson Union School District. Each of these school districts was

comprised of a single school. Both the Milliken and the Braly schools were two-story Mission Revival buildings; the Jefferson school, a simple board and batten single-gabled building located on Kifer Road (formerly unincorporated) constructed in 1857, was said to be the oldest school building in continuous use in the state at the time (San José Mercury Herald 1926a: 10; 1926b: 7). Irvin Pomeroy, trustee of the Milliken school, appealed to the voters, saying that, "the need of better schooling for our children is becoming acute. In the Milliken school children are so crowded for room that classes are held on the stage of the assembly. With these four districts consolidated we will have enough pupils for a separate classroom for each grade and special instruction in such subjects as domestic science and trades." (San José Mercury Herold 1926a: 10)

The new district quickly applied for and received a $100,000 bond to construct a new Jefferson Grammar School at Lawrence Road and Reed Lane (San José Mercury Herold 1926b: 7). The new Mission revival style building, designed by architects Wolfe and Higgins, was constructed of reinforced concrete and contained thirteen rooms that included classrooms, manual training and domestic science departments, offices, a library, and an assembly room capable of seating 600. Joseph Hancock, county superintendent of schools, stated that the Jefferson Union School District was the wealthiest in the county, with an assessed value of $3,000,000 (Evening News 1927: 6).

Santa Clara County Public Education and School Development Post 1930

The 1933 Long Beach earthquake destroyed 70 schools and resulted in significant damage to another 120 schools in Southern California. The California Legislature enacted the Field Act on April 10, 1933, one month after the earthquake, to protect children and staff from death and injury in public schools grades K-14 and protect the public's investment in school buildings during and after earthquakes (Seismic Safety Commission n.d.). The requirements of the act included maintaining one-story massing for new elementary schools and no more than two stories for junior and high schools. These requirements were in line with school design trends already in being adopted in California and beyond (Sapphos Environmental 2014: 21).

As Santa Clara County developed from primarily agriculture prior to World War II to industry during the war years, the rural school districts grew and organized union districts for either elementary or high school purposes. Under this system two or more contiguous districts united. District superintendents focused on establishing a centrally located school and provided transportation for students. By 1950 there were eight union school districts in Santa Clara County: Cupertino, Jefferson, Los Gatos, Campbell, Saratoga, Almaden, Alum Rock and Berryessa, and Loma Prieta and Ausaymus (San José Mercury News 1951: 183). Midway School District was annexed to the Jefferson School District in 1949 (San José Mercury Herold 1949a: 16). The 1927-built Jefferson school was expanded in 1946 and 1948, with the construction of ten new classrooms and a cafeteria-music building. Enrollment increased an average of 20% each year between 1944 and 1949 (San José Mercury Herold 1949b: 11). In 1949 the Jefferson

Unified School District encompassed the area from Sunnyvale city limits on the west to Coyote River on the east, and from a mid-way point between Stevens Creek and Homestead Roads on the south to Alameda County line on the north. The current SCUSD boundary appears to be wholly within the 1949 Jefferson Unified School District boundary. By 1950 the Santa Clara County school system included 39 elementary school districts, eight high-school districts and two unified school districts, totaling 109 schools with a combined enrollment of 51,797 (San José Mercury News 1951: 183).

The 1960s and 1970s brought a major change to the area as Santa Clara County grew rapidly and urban development overtook most remaining rural areas (Santa Clara County Office of Education 2022b). Population in Santa Clara County continued to grow as technology-based industries established during the war year expanded. A 1961 San José Mercury News article titled, "High Schools Bulge: Educators Grope for More Space As War Babies Swamp Ninth Grade", stated that enrollment for each grade was slightly larger than the next one above. This steady climb was illustrated by comparing 1960 first grade enrollment to 12th grade enrollment: County wide 16,533 first graders were registered that year compared to only 6,990 12th grade students (San José Mercury News 1961: 26-27). This large increase in attendance occurred primarily in the former rural areas of the county. Young families of newcomers moved into newly built housing tracts of mostly modest ranch and minimal-traditional style homes that replaced the county's orchards and farmlands. That year the Santa Clara High School District was already constructing its third high school, Adrian Wilcox, scheduled to open in September. Concurrently the district was planning a second phase to accommodate the expected high school student body increase of around 600 per year (San José Mercury News 1961: 26-27). In September 1965, Santa Clara, Jefferson, and Alviso Elementary School Districts joined the Santa Clara High School District to form the Santa Clara Unified School District (San José Mercury News 1965: 56). The Patrick Henry Campus, built 1960-1962 to accommodate 1,000 6th, 7th, and 8th grade students (Evening News 1960: 9), was originally built as part of the Jefferson School District (SCUSD 1960); phase 1 of the Marian A. Peterson High School was designed in 1964 as part of the Santa Clara High School District (SCUSD 1964).

Santa Clara Unified School District Campus Plan Typology

Of the 33 school campuses that make up today's SCUSD, all but six were initially designed and/or constructed prior to the establishment of the district in 1965, primarily in the 1950s and early 1960s. The six campuses built after the unification of the district are of modern construction, built in 1995 or later. Buchser Middle School, the only extant pre-World War II-built school in the district, was initially constructed in 1937 (SCUSD 2022b). The Buchser campus has been significantly expanded and no longer resembles a pre-war educational institution. In the years after the district's unification SCUSD built out or added to many of these campuses, and further addressed the shortage of classrooms by the introduction of portable or temporary classrooms district wide, particularly in the 1990s.

Functional School Campus Site Plans, 1940s – 1970s

Despite the infill and alterations implemented by SCUSD throughout the years, two standard campus designs, the "finger plan" and the "cluster plan", are easily recognizable district wide. A sub-design of the cluster plan is the open-space plan, where the buildings in the cluster-plan campuses had greater interior flexibility – open-space shells so that team teaching could be accommodated in a variety of patterns. School architects applied these two distinctive functional campus plans throughout California and the nation, with the finger plan beginning in the late 1930s and refined into the 1950s, followed by the cluster plan in the 1960s and 1970s. The open-space plan proved to be problematic and short lived; it was quickly modified to recapture the visual and sound separation of the self-contained classroom (California Department of Education 2000).

Architects interpreted these basic campus plan concepts and tailored them to the size of the student body, campus location - rural, suburban, or urban settings - climate, and topography. In the 1940s and 1950s school districts in California used a rule-of-thumb approach to determine school site size. Elementary schools were to have a minimum site of five acres plus an additional acre for each 100 pupils of predicted ultimate enrollment. For middle schools the basic size was 15 acres and high schools 15-20 acres plus the same additional acre per 100 students of predicted enrollment. By the mid-1960s, with land becoming scarce and expensive, school planners began to apply more precise methods to determine school size to support the functions or activities of the proposed educational program (California Department of Education 2000).

Combinations of these two basic campus design forms were applied as the finger plan transitioned into the cluster plan with this more site- and function-specific approach to school design. Both plans typically share the basic architectural principles that reflected those of midcentury modern design with their use of steel framing, plate glass, and low-rise horizontal massing to reflect the relationship between modern architectural forms and progressive teaching methods (Ogata 2008: 562-563).

The Marian A. Peterson Middle School, originally Marian A. Peterson High School, initially designed in 1964 for the Santa Clara Union High School District, is a hybrid of the finger plan and cluster plan campus; the Patrick Henry campus, was designed as the Patrick Henry Intermediate School for the Jefferson Union School District in 1960 in the cluster-plan style.

The Finger Plan

Just prior to the U.S. entering World War II European-trained architects working in the U.S. began to design schools and campuses that were radically different from the period-revival monumental school buildings that contained all school functions. One-story schools with expansive windows and immediate access to outdoor space just beyond the classrooms were introduced by master architect Richard Neutra in 1939. He designed single-story experimental schools in Los Angeles with large sliding glass doors that

led to adjacent gardens or courtyards modeled on contemporary ideas about students' need for access to air and light, and that were well suited to the mild California climate (Ogata 2008: 564).

The experimental school design evolved into the finger-plan campus concept with architects Franklin & Kump's design of the Acalanes Union High School in Lafayette, California (1939-1940). Franklin & Kump also designed San José High School in 1952, further refining the finger plan. *Architectural Forum 91* (October 1949) called the plan type the "western finger plan" and that the finger-plan school resembled "a tree plan, based on a trunk corridor with side branches. It rests on radical standardization of classrooms; on absolute insistence that all classrooms share the best (north) orientation to sun and air; daylight for all of them from the open-corridor side as well as the main window side. This plan is not only flexible… but extensible indefinitely outward like a tree, by growing at branch-ends and by sprouting new branches." (Sapphos Environmental 2014: 92)

Architectural Forum further described Acalanes as "the first large-scale school which could serve as a complete demonstration of principles which amounted to a schoolhouse revolution – the revolution of the thirties. Since then, the Acalanes type of school, with its wide ranging, one-story classrooms arranged according to the 'finger' plan, has swept the West Coast, is sweeping rapidly across the Midwest on its way to the East Coast." (Sapphos Environmental 2014: 92)

Consistent with contemporary design principals, the finger-plan became the most common school building type in the 1940s and 1950s in California. This campus design also satisfied the construction requirements of the 1933 Field Act. These finger-plan schools were multi-structure residential-scale campuses with individual purpose-built buildings with minimal ornamentation or only modest application of modern architectural elements (California Department of Education 2000). Administration buildings, auditoriums and gymnasiums, separate classroom, shop, and specialty wings, and cafeterias were designed to connect to the outdoors with patio spaces and covered open corridors linking buildings. Natural light and ventilation were provided by bands of windows, including multilight sashes, casements, and clerestories (Sapphos 2014: 21). These school buildings reflected a more intimate and better integrated element of the community compared to the earlier period-revival monumental buildings. This newer campus style was a workplace and recreation center, sited in a manner that was more intimately associated with community living. This type of arrangement was flexible and eliminated much of the institutional atmosphere of the earlier large, compact buildings (American Educational Research Association 1942: 175).

In addition to the site plans' suitability for housing progressive education methods, these schools were considered safer for evacuation. Along with the age-old threats of earthquake and fire, residual anxieties of the war and subsequent Cold War added to the appeal of this style of school campus. Other practical aspects of these single-story schools were low-cost materials, swift constructability, and flexibility. With the baby boom in full swing, these rigid-frame schools could be quickly built and easily expanded as needed, with war-industry-made prefabricated materials and steel, and continuous fenestration (Ogata

2008: 568). Instead of an auditorium, these post-war flexible school campuses included a multi-purpose building for school assembly, cafeteria, and meetings (Ogata 2008: 569).

All of SCUSD's elementary schools built in the 1950s were designed in the finger plan and share the same midcentury modern design principles and type of structural materials. These schools, significantly more modest in scale compared to Acalanes Union High School and San José High School, include Bowers, Bracher, Briarwood, Central Park, Haman, Mayne, Millikin, Pomeroy, Scott Lane, Washington, and Westwood elementary schools.

Cluster Plan

The Architects Collaborative (TAC), a firm founded by master architect Walter Gropius, designed a prototype school in 1954 that could be quickly and economically constructed and easily expanded. The design included a cluster of individual one-story buildings grouped around a central administration building. Small square classrooms were arranged in a grid that created outdoor "classrooms" or common areas interspersed between the buildings. Residential in scale, these building evoked the feeling of post-war suburban houses with the ubiquitous picture windows looking out onto landscaped spaces.

Contemporaneous with TAC's publishing their prototype cluster-plan campus design, the finger plan began to lose popularity. In addition to the large tracts of land required to accommodate a finger-plan campus, the spread-out buildings meant long cross-campus walk times and restricted communication. Classrooms oriented to maximize access to natural light proved to be costly. The variability of natural light throughout the day resulted in periods of excessive heat and glare followed by the need to augment daylight with electrical lighting. A desire for greater flexibility, domesticity and economy influenced a shift in campus design away from the finger plan to the more compact cluster plan. (Sapphos Environmental 2014: 97, Ogata 2008: 572).

The cluster plan retained the low massing, generally single-story layout of the finger-plan, and architects still designed classrooms with indoor-outdoor access and views. But rather than extending wings along an axis, the site plan transitioned to grouping individual modular buildings and structures around a central landscaped courtyard. The views from the classrooms were now oriented toward the courtyard and other classrooms, resulting in a more communal setting and informal environment (Sapphos Environmental 2014: 99).

Although school designers continued to construct finger-plan campuses, the cluster-plan approach began to be widely adopted in the 1960s. The later finger-plan campuses were usually condensed or used for elementary schools and smaller upper-level schools, particularly in California where there was still ample space (Sapphos 2014: 98). By 1965, according to *California School Buildings, 1960-1965,* "The 'Cluster Plan' has replaced the 'Finger Plan' concept for elementary schools. Arrangement of classrooms

around a core area encourages cooperation between teachers by giving them opportunities to share multi-use areas, resource centers and teacher prep areas all adjacent to their classrooms. Better acoustical control and better lighting is evident, and technology is employing these comfort factors to be coordinated with flexible interiors" (Gibson 1966: viii).

The Marian A. Peterson High School (now middle school), while primarily a cluster-plan campus, includes some residual design elements of the finger-plan campus, as can be seen in the original plot plan drawn in 1964 by architect L.F. Richards. Phase 1 of the campus plan had the academic buildings, library, administration building, multi-purpose building, gymnasium and locker rooms clustered around a large central courtyard. The planned siting of three long, parallel future academic buildings on the west side of the campus partially connected by a covered breezeway reflects the spatial arrangement of a finger plan; the northwest-most "future academic" building was added to the campus by 1969.

Patrick Henry Intermediate School, designed in 1960 by architect Clyde D. Goudie, and expanded in 1962 with a design by the architectural firm Goudie & Griffin, is a cluster-plan campus with four L-shaped classroom buildings, the administration building, and the multi-purpose building spatially arranged around a large central courtyard. The classroom buildings are also arranged to create two secondary courtyards between two sets of the buildings. While the campus layout closely follows the cluster plan, the classrooms' fenestration is limited to bands of clerestory windows on the outward facing building façades; no classrooms have views looking onto the courtyards.

Open-Plan Design

A sub-design of the cluster plan is the open-space plan. While retaining the core campus arrangement and building orientation of the cluster plan, beginning in the mid- to late-1960s campus buildings were designed to have greater interior flexibility (California Department of Education 2000: 7). The objective was to have classrooms with adaptable interiors with moveable walls to accommodate changes in group size and/or activities. To accomplish this school architects designed buildings with large interior spaces separated by non-load-bearing walls, long and high roof spans, and steel structural systems. A relative lack of windows further accommodated this flexibility. This was made possible by modern air conditioning systems. Massing increased and exterior corridors moved inside since the buildings by necessity took up a greater area of the campus site. Some open-plan schools were designed in circular plan, with hexagonal or circular classrooms clustered around a common area (Sapphos Environmental 2014: 104-105). SCUSD's Cabrillo Middle School, built in 1961, appears to be an example of a circular-design open-plan campus that followed the principle of the cluster plan. Survey of this campus is beyond the scope of this study.

The open plan was not widely accepted and was short-lived. By the 1980s there was a return to the visual and sound separation provided by the self-contained classroom. However, the structural flexibility associated with the open-space plans continued to be used for common spaces, such as gyms,

auditoriums, and cafeterias, most of which used moveable walls and space-function adjacency design to improve flow between the functional spaces (California Department of Education 2000: 8).

Architectural Typology

Modern and Modernist architecture spanned the late 1920s through the 1970s and included several distinctive styles of architecture. Regional expressions of Modernism can be found throughout California and the United States. Key characteristics of Modern buildings is the lack of historical ornament and references, and an emphasis on a new architectural vocabulary. In the San Francisco Bay Area Streamline Modern, International Style, Second Bay Tradition, Mid-Century Modern, International Style, Brutalism, and Contractor Modern populate the cities and suburbs. New materials and building technologies stimulated the rapid post World War II promulgation of these architectural styles, with the mass-production of building products that were distinct from earlier products. These included materials that were often factory finished, such as plate glass, structural glass, spandrel glass, acoustical board, asphalt tile, vinyl asbestos tile, aluminum, concrete, ceramic, terrazzo, vinyl fabric, gypsum board and plaster, rubber topset, plywood, clear wire glass, and plastic laminate.

The historic-period post-war SCUSD campuses, built between 1951-1969, share the basic design principles and express simple application of Mid-Century Modern design elements regardless of campus plan. “Mid-Century Modern” is not an academically accepted architectural style term but was generated by the public. It describes a wide range of design elements incorporated into buildings during the 1940s through the 1960s. Mid-Century Modern was influenced by the more formal machine-age aesthetic of the International style. Mid-Century Modern expresses the architectural features of International style in a more relaxed, generally scaled down and regional style and sometimes adopts architectural elements from other Modernist styles. It is characterized by honest expression of structure and function with little applied ornament. The style can be found in postwar institutional buildings, commercial buildings, as well as residences.

Mid-Century Modern style is characterized by balanced, rhythmic composition with an emphasis on simple, geometric forms. Footprints are generally square or long rectangular; buildings are seldom more than two stories in height and are predominately horizontal in massing. This composition is achieved by modular post-and-beam construction that allows for large expansions of open floor plans. The rooflines are low-shed, low-gabled or flat, with wide eaves and cantilevered canopies supported on posts or spider-legs. Windows are generally flush-mounted with metal frames that may act as infill panels or extend to the gable. Ribbons of clerestory windows are also commonly found on Mid-Century Modern buildings.

Evaluation:

Patrick Henry Intermediate School

1. Under CRHR criterion 1, the Patrick Henry Intermediate School does not qualify as a historical resource that has made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. Constructed in 1960 and 1962, it was one of many schools built during the post WWII era of rapid suburbanization and population growth in Santa Clara County, California, and throughout the United States. It is also one of hundreds of schools in Santa Clara County associated with the common trend of establishing and unifying school districts during the 1950s and 1960s. It is a commonplace example of these local and national trends and development patterns.

2. Under CRHR criterion 2, the Patrick Henry Intermediate School does not qualify as a historical resource associated with any individual whose activities are demonstrably important within local, California, or national history. For the school to be of significance under this criterion, it would have to be able to illustrate the person's important achievements in the field of education. At the time it was built Lawrence Curtis was the Jefferson School District Superintendent and George Boyko was the principal. While both men likely contributed to the continued growth and progress achieved by the Jefferson School District, what would become the Santa Clara Unified School District in 1965, research has not found that either man has made any specific contributions of demonstrable historic importance that would qualify the school as a historical resource under criterion 2.

   The school district purchased the land from the Castello family, the Cirrincione family, and the Teresi family. Research has not resulted in any noteworthy additional information about these Italian immigrants and first-generation California-born farming families. The Italian-born senior members of the families were likely part of the significant influx of Italians into the area during the late 19th and early 20th century, attracted by rich agricultural land and associated opportunities. They appear to have been typical farming families that subdivided and sold their property as Santa Clara County's post-war population grew rapidly and suburban communities developed. Furthermore, other than having once owned the subject land, none appear to have any association with the current school facilities.

3. Under CRHR criterion 3, the Patrick Henry Intermediate School does not qualify as a historical resource that embodies the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic value. Under this criterion, there are three contexts that must be considered: Architectural style of the overall campus and the multipurpose building individually, functional school style as an example of a cluster-plan campus, and the potential for its architects, Clyde D. Goudie and Dewitt J. Griffin to

be considered master architects. The campus's potential to be a district of a significant concentration of buildings and structures united aesthetically by plan or physical development is also considered.

Architectural Design:
The architectural design of the campus classroom buildings is modest Mid-Century Modern style. The designer applied the expected rhythmic composition, low horizontal massing, simple geometric volumes and strong right angles, low-pitched gable roofs with wide cantilevered overhangs, courtyard entryways, simply treated materials, and lack of historical design elements. While the buildings are characteristically Mid-Century Modern, they are not distinctively characteristic of the style and are not significant representatives of the style.

The gymnasium is primarily utilitarian, with only a few Mid-Century Modern elements applied, like strong right angles and lack of historical design elements; it is therefore not distinctive in its design.

The multipurpose building design is also generally Mid-Century Modern, but introduces some elements not found in the classroom buildings, most specifically its irregular footprint, large expanses of glass on the north elevation, and a series of tall columnar inset windows on the other three elevations that are vaguely classical and somewhat reminiscent of PWA Moderne architectural style with their shallow relief panels. The building uses the same materials and palettes as the other campus buildings, is generally horizontal in its massing, and, other than the slight classical reference, lacks historical design elements or ornamentation. While it is generally overall characteristic of Mid-Century Modern architecture, it, like the rest of the campus buildings is not a distinctive example of the style.

Campus Design:
Patrick Henry Intermediate School campus is generally designed in the cluster-plan style; the gymnasium is not part of the cluster of buildings. The campus is not a distinctive example of this style. While the buildings are oriented inward, facing courtyards, as is typical of this type of campus organization, most of the classroom buildings have a mix of exterior and interior corridors, and classroom fenestration is minimal and too high to bring in enough natural light and air characteristic of the cluster plan. Patrick Henry Intermediate School is not significant under criterion 3 as a distinctive example of the cluster plan campus.

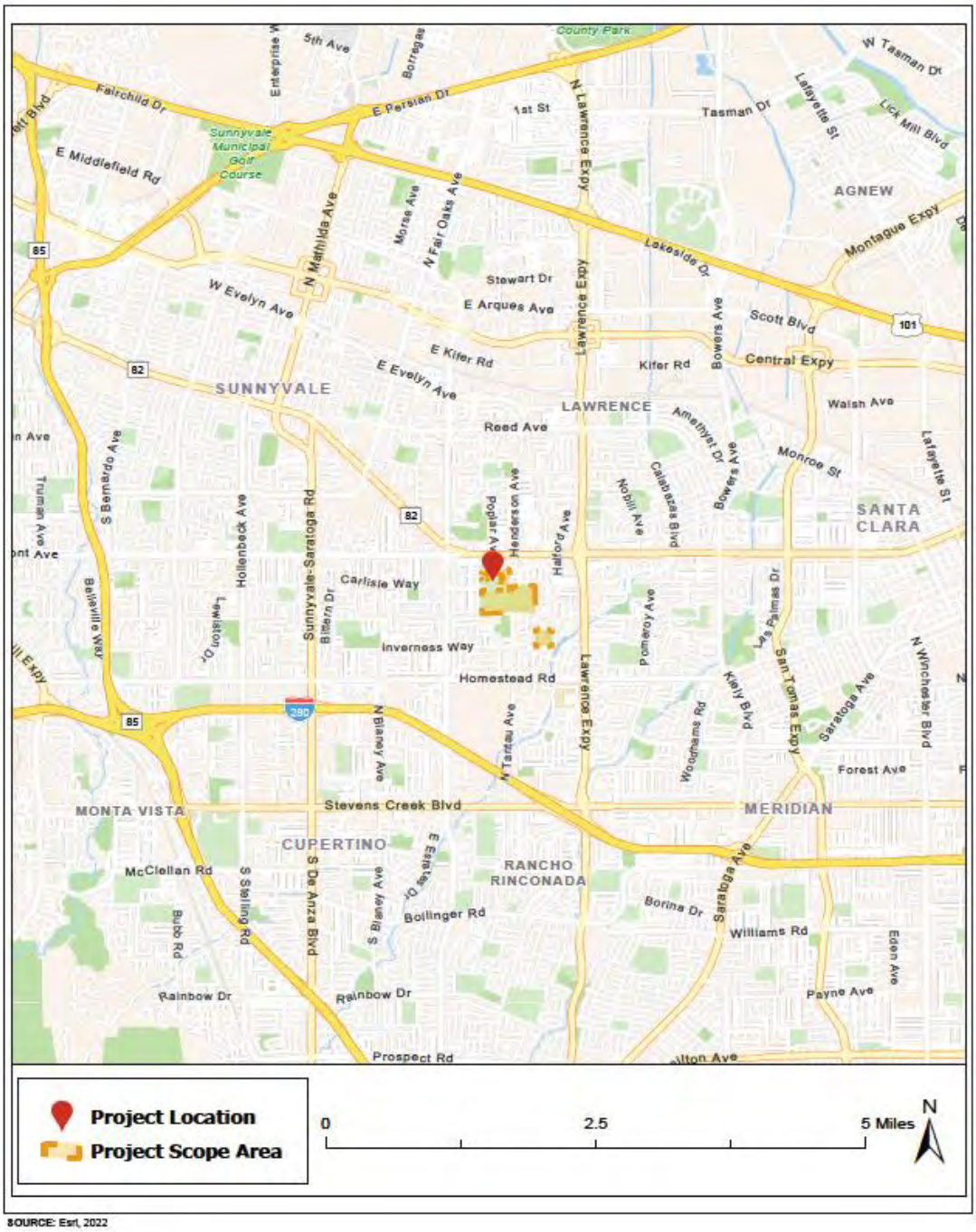
Master Architect:
Clyde D. Goudie independently designed the 1960-built campus. He partnered with Dewitt J. Griffin to design the 1962 multipurpose building and gymnasium. Clyde Goudie was the architect for the Jefferson School District in the 1950s and early 1960s and designed many of the

extant elementary schools in what is now the SCUSD. While locally fairly prolific, neither are recognized as being masters in the field of school architecture or architecture in general. Additionally, for a work to be considered significant for being designed by a master, it would need to express a particular phase in the development of the master's career. The Patrick Henry Intermediate School campus is not eligible under criterion 3 because it is not a significant example of the work of a master architect.

District:
The Patrick Henry Campus is not a significant historic district. Historic districts usually also meet the significance criteria of criterion 1 for its important association with a trend, and/or criterion 3, having high artistic values. While the campus composition is that of a concentration of buildings, structures, and landscape features that reflect one functional activity, it is an aesthetically commonplace example of a Mid-Century Modern 1960s school, broadly associated with the post WWII commonplace trend of suburban school construction.

4. Under CRHR criterion 4, the Patrick Henry Campus is not significant as a source (or likely source) of important information regarding architectural history. This property type is common and does not have any likelihood of yielding important information about historic construction materials or technologies. This evaluation makes no determination regarding the potential for the discovery of significant archaeological resources on the property.

Figures



SOURCE: Esri, 2022

Area Map, Santa Clara County, California. Courtesy Impact Sciences 2/2022.

Figure 1. The Patrick Henry campus is outlined in red. West of the campus are the SCUSD Farm, track/football field, and northwest is the Marian A. Peterson Middle School campus.

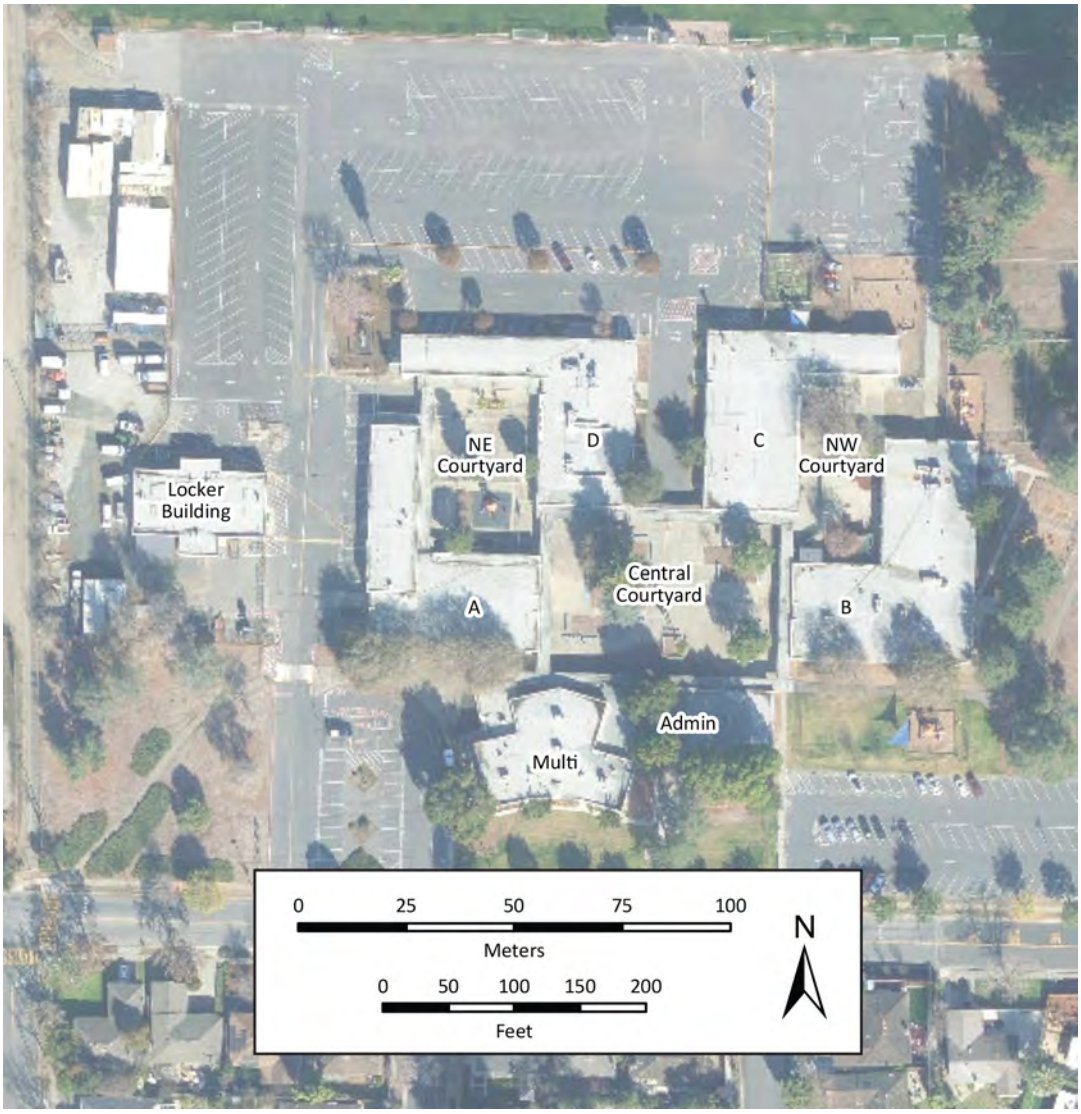


Figure 2. Patrick Henry campus. NE CY = northeast courtyard; NW CY = northwest courtyard. GoogleEarth Pro. Accessed 5/18/2022. Image date 9/27/2021.

Figure 3. Detail of southern façade of building A, with typical metal-framed plywood and glass panels beneath the shallow eave and blue facia. The two dark panels contain Aklo or plate glass. Photograph taken 1/17/2022.

Figure 4. East elevation of building A on the west side of the central courtyard. Photograph shows typical plain wall type, typical recessed entry with roof detail, and the covered walkway design. Photograph taken 1/17/2022.

Figure 5. Central courtyard and covered walkway. Camera facing west. Photograph taken 1/17/2022.

Figure 6. Classroom building A. Camera facing southeast. Photograph taken 1/17/2022.

Figure 7. The south façade of the administration building. Photograph taken 1/17/2022.

Figure 8. Northeast secondary courtyard. Building C. Camera facing north. Photograph taken 1/17/2022.

Figure 9. North elevation of classroom building D. Photograph taken 1/17/2022.

Figure 10. Walkway between the administration building (left) and multipurpose building. Photograph taken 1/17/2022.

Figure 11. N North façade of the multipurpose building. Photograph taken 1/17/2022.

Figure 12. Southeast corner of the multipurpose building. Photograph taken 1/17/2022.

Figure 13. South façade of the administration building. Photograph taken 1/17/2022.

Figure 14. West façade of the multipurpose building. Photograph taken 1/17/2022.

Figure 15. North façade of the gymnasium. Photograph taken 1/17/2022.

Figure 16. Typical "finger-plan" campus type. Briarwood Elementary School, Santa Clara. Built 1954-1956. GoogleEarth Pro. Accessed 5/18/2022. Image date 9/4/2020.

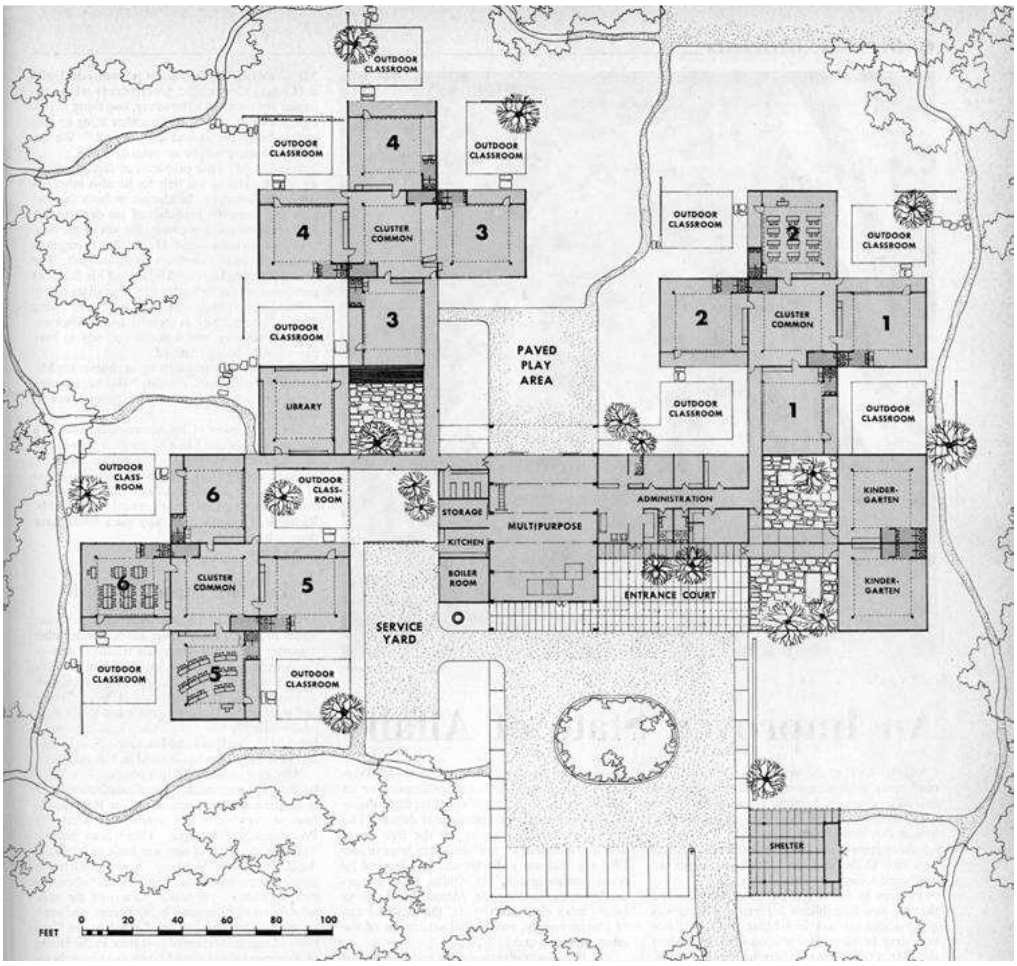


Figure 17. "Cluster-plan" campus. The Architects Collaborative's plan of a model school appeared in Collier's magazine, April 30, 1954. Image accessed from *Building for Learning in Postwar American Elementary Schools*, Journal of the Society of Architectural Historians, Volume 67. December 2008.

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State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** Marian A. Peterson Middle School

P1. Other Identifier: Marian A. Peterson High School

***P2. Location:** ☐ **Not for Publication** x **Unrestricted** ***a. County:** Santa Clara

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** **Date:** **T** ; **R** ; **¼ of** **¼ of Sec** ; M.D. **B.M.**

c. Address: 1380 Rosalia Avenue City: Sunnyvale Zip: 94087

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: APN # 313-10-004 (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Marian A. Peterson Middle School is located on the northwest portion of the subject parcel APN 313-10-004. Its primary entrance is on Rosalia Avenue and Poplar Way to the to the north; the northern boundary of the northeast parking lot is Bryant Way. The eastern boundary is Roadrunner Terrace. The western boundary abuts residences. South of the main campus is the football field and track, the Bryan Osborne Nature Center, and the Santa Clara Unified School District Farm; southeast of the campus is a large grassy field and, further south, the Patrick Henry campus. The SCUSD's 71.08 acre-property is surrounded by subdivisions of primarily modestly scaled single-family homes and multi-family units built in the 1950s -1970s.

See continuation sheet beginning page 3.

***P3b. Resource Attributes:** (List attributes and codes)

***P4. Resources Present:** xBuilding xStructure ☐Object ☐Site xDistrict ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

See continuation sheets beginning page 26.

P5b. Description of Photo: (View, date, accession #)

***P6. Date Constructed/Age and Sources:** xHistoric
☐Prehistoric ☐Both
1964, 1966, 1969, 2000, 2010

***P7. Owner and Address:**
Santa Clara Unified School District
1889 Lawrence Road
Santa Clara, CA 95051

***P8. Recorded by:** (Name, affiliation, and address)
Meg Scantlebury
Dogtrot Historical Consulting
1070 Perkins Way
Sacramento, CA 95818

***P9. Date Recorded:** January 2022

***P10. Survey Type:** Intensive

***P11. Report Citation:** Cultural Resources Inventory of the Patrick Henry Campus and Peterson Middle School Campus, Impact Sciences

***Attachments:** ☐NONE xLocation Map xSketch Map xContinuation Sheet xBuilding, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**

***Resource Name or #** (Assigned by recorder) Marian A. Anderson Middle School

B1. Historic Name: Marian A. Anderson High School
B2. Common Name: Marian A. Anderson Middle School
B3. Original Use: High School
B4. Present Use: Middle School

***B5. Architectural Style:** Midcentury Modern

***B6. Construction History:** (Construction date, alterations, and date of alterations)

1964: Classroom buildings A and B, Administration Building (demolished/replaced 2010), Library (demolished/replaced 2010) Science Building, portion of Shop Building, portion of Gymnasium, Locker Room (demolished/replaced 2021), Home Economics Room. 1966: Classroom F, Building H (demolished/replaced 2008), pool (demolished/replaced 2020). 1969: Classroom G, Gymnasium addition.

***B7. Moved?** x**No** ☐**Yes** ☐**Unknown** **Date:** **Original Location:**

***B8. Related Features:** none

B9a. Architect: L.F. Richards (historic era buildings; campus)
b. Builder: Barnhart Construction Co. (historic era only)

***B10. Significance: Theme:** n/a **Area:** n/a

Period of Significance: n/a **Property Type:** n/a **Applicable Criteria:** n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The intensive survey and evaluation finds that the Marian A. Peterson Middle School campus as a whole, and individual buildings are not eligible for the California Register of Historical Resources because of lack of historical or architectural significance.

Please see continuation sheets starting page 11 for the three contexts that were prepared for the evaluation: History of the Santa Clara Unified School District; public school campus design types; Mid-Century Modern architecture. See continuation sheet page 22 for evaluation.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:** See continuation sheet starting page 42.

B13. Remarks:

(Sketch Map with north arrow required.)

See continuation sheet pages 26- 27.

***B14. Evaluator:** Meg Scantlebury, Dogtrot Historical Consulting

***Date of Evaluation:** July 2022

(This space reserved for official comments.)

The school was designed and built in three phases in the historic period, 1972 or earlier. All historic-era buildings were designed by architect L.F. Richards. The first phase, designed in 1964, included the administration building (demolished), library (demolished), multipurpose building, most of the gymnasium, a locker building (demolished), home economics building "C", science building "D", classroom buildings "A" and "B", and half of shop building "E". The second phase was built in 1966 and included classroom building "F" and building "H" (demolished). The remainder of building "E", classroom building "G", and a small addition to the gymnasium were built in 1969. Extant buildings that were built after the historic period include the current library, administration building, locker room and additional athletic facilities, swimming pool, and the replacement of building "H", as well as the large landscaped area south of the gymnasium and new basketball courts where the original locker room once was. The tennis courts were built between 1968 and 1980. The bleachers for the football field were built in 1969; the identity of the designer is unknown.

Campus Description

Marian A. Peterson High School was originally designed as a hybrid "finger plan" and "cluster plan" campus. The campus is generally arranged in two parts: The western half serves the school's academics and administration while the eastern half contains buildings, structures and spaces associated with the school's athletic programs. Classroom buildings are clustered around the library and administration building, but their arrangement more closely resembles that of the finger plan. While the original library and administration building are no longer extant, their replacements are similarly sited on the campus, in relation to the historic period classroom buildings. The multipurpose building is sited inward toward a landscaped communal area. The gymnasium is now sited on an open, landscaped area but was originally opposite the large locker room building that was recently demolished. The main entrance into the gymnasium does not face inward but faces away from the campus toward the large parking lot to its north.

The school has two parking lots. The smaller lot is sited on the northwest corner of the campus and includes a curved drop-off area and serves as the primary approach to the campus. The larger lot is on the northeast corner of the school, north of the gymnasium, tennis courts and the other athletic facilities. The main entrance to the campus is the modern administration building. The library, a modern replacement, occupies the back of the administration building. A small, landscaped area north of the administration building marks the entrance to the campus with a sign and flagpole. A modern concrete walkway leading to the administration building is adjacent to a series of trees surrounded by benches that separate the walkway from the parking lot.

The administration/library building is flanked on each side by two east-west oriented long parallel classroom buildings, buildings A, B, F, and G, from the historic period. The space between these parallel buildings is a narrow paved area shaded by the buildings' deep cantilevered overhangs. Building H, a

modern replacement building, is directly south of the administration/library building. South of building H is building D, the science building, built in 1964. To the east of building D is a small building, building C, built in 1964 as the home economics building. South of building D is building E. Building E, originally a shop, was built in two phases in the 1960s. The building marks the southwest boundary of the campus, is parallel to, but longer than the other historic-period classroom buildings. Between classroom building G and classroom building E is a landscaped area, with grass, a Y-shaped pathway, and trees. East of classroom E is the Bryan Osborne Nature Center, outside of the project area.

North of classroom building A, separated by a large concrete courtyard with occasional trees and outdoor seating, is the multipurpose building, built in 1964. Directly east of the multipurpose building is the gymnasium also built in 1964, with two additions constructed on the building's east end in 1969. Between the east ends of classroom buildings A and B and the newly planted grassy field south of the gym, separated by a fence, is an informal landscaped area on a slight rise, with mature trees, grass and concrete paths. South of the gym are the new athletic buildings, structures, the swimming pool, basketball courts, and fixed workout equipment. East of the new buildings and pool are the tennis courts which were built prior to 1980. South of the tennis courts is the football field and bleachers, built in the 1960s.

Chain-link fencing and iron fencing surrounds much of the campus proper as well as functional areas within the campus.

Buildings

The campus is comprised of nine historic-period buildings: Seven classroom buildings, the multipurpose building, and the gymnasium. Four of the classroom buildings, buildings A, B, F, and G have identical footprints and are oriented east-west; buildings A and B were built in 1964 during Phase 1 of the campus's construction, and buildings F and G were indicated on the Phase 1 plan sheets as "future academic". Buildings C and D are smaller rectangles, oriented north-south. Classroom E, built in two phases is similar in footprint and orientation to A, B, F, and G, but is significantly longer. The multipurpose building and the gymnasium are significantly taller and, while they are similar to the classrooms in their horizontal massing, their overall scale and architectural features are comparatively grander. All are topped with what appears to be rolled asphalt roofing material. Overall, the historic-era buildings are in good condition. The following discussion only describes the historic-period campus buildings.

Classroom Buildings A, B, F, G

Classroom buildings A, B, F, and G have virtually identical footprints, however each building was purpose-built to accommodate some specific classroom functions, so the floor plans vary. The

northwest corner of A and B buildings house men's and women's restrooms with entrances on the west elevation. Building F (identified in the plans as building C) only has a girls' restroom and building G (identified in the plans as building D) only has a boys' restroom. In addition to multiple stall restrooms, in buildings A and B, a single men's room and a single women's room is centered between the two larger facilities. Building A contains a large storage room and a mechanical systems room, both accessed from the west end; the west end of building B was designed to house a darkroom, an identical mechanical systems room, and a smaller storage room. Buildings A and B include small teachers' rooms. Building A has eight classrooms; five are a standard square size of 28'x28', two are larger at 28'x42', designed to accommodate a driver education class and a mechanical drawing class. The eighth and largest classroom is 28'x84', designed to house a typing class. Classroom building B contains eleven standard 28'x28' classrooms. Classroom building F was designed to contain a large arts and crafts room, two standard sized special education rooms and two L-shaped team-teaching rooms. Classroom building G was designed with ten standard-sized classrooms, a larger 28'x42' drama room, and a smaller 14'x28' room. There are no interior corridors and all classrooms' entrances are on the north or south elevation.

The exteriors of the west ends of all buildings are identical and clearly express the structural system. A three-part concrete bent with legs 28' apart that is consistent with the width of the classrooms is visible and frames the exterior flat cement-plastered solid walls. The ends of the bents cantilever 12' beyond the ends of the walls. The roof is a very low side-gable and extends slightly beyond the wall; the facia on the east and west elevations is cream-colored porcelain enameled metal with spaced shallow vertical detailing. The facia on the north and south elevations is covered by rain gutters. The walls are cream colored, and the exposed bent is butter yellow.

The exterior of each north and south elevation is virtually identical, with rhythmic placement of architectural elements. A series of parallel concrete bents with the two outer legs partially exposed every 14' run the length of the buildings, creating a series of bays, and cantilever 12' beyond the vertical plane of the building. The cantilever beams support an overhang the length of the building, are fin-like and gradually narrow to 8"-wide and extend about 1' beyond the roof of the overhang. The walls between the exposed butter-colored bents are cream-colored cement plaster. Several bands of square windows are just below the roof eaves between the exposed bents. Doors are metal framed and painted blue. Most have a single full-width metal-framed side panels, with the top half glazed and the bottom half enamel coated. The entrances are topped with two transom lights. Single or double rows of metal lockers run the length of the buildings.

The east elevations contain the entrances to the boys', girls', women's and men's rooms, mechanical systems rooms, and building B's darkroom. Louvers vent the mechanical system rooms.

Building C

The 1964 plans identify this building as the Home Economics Building. It is the smallest of all the classroom buildings at 56' square, and doesn't have the long horizontal mass common to classroom buildings A, B, E, F, and G. It was designed to house a sewing studio and a cooking lab, with a small dining room, fitting room, laundry, and storage.

The east elevation is consistent with the west elevation of the classroom buildings A, B, F, and G, but with a single metal door hung in one bay. The west elevation includes the main entrance and exhibits a variation of the bent design. Rather than the three-leg bent, this façade exposes a four-leg bent, with the center two bents slightly less than 10' apart and containing a metal framed double plate-glass door.

The north and south elevation almost mirror each other and are consistent in design with the other classroom buildings, but with just four of the 14'-wide bays punctuated by five exposed bents. One bay on each of these elevations contains a row of metal lockers and one has a single metal door. Three of the four bays on the south elevation have the band of six windows just below the eave; all four of the bays on the north side have the same window treatment. The low-gable roof and covered cantilevered walkways are identical to those of the other classroom buildings; the facia is similar in style but blue, as are the gutters. A colorful mural is on the north façade of the building.

Building D

Identified on the 1964 plans as the Science Building, this is the only classroom building that does not follow the standardized structural unit sizes of 14' or multiples thereof on all elevations. This rectangular building is oriented north-south and was designed to accommodate two biology labs, two chemistry labs, a research lab, and an art studio. The building is 72'x126. The east and west façades are a series of nine of the standard bays, with the typical exposed bent system, cantilevered walkway overhang, roof style, cream, butter, and blue colors, and wall finish. The facia is blue, unlike that on buildings A, B, F, and G. Most bays contain a row of metal lockers, some include single metal doors in metal frames; all the bays on the east façade contain a band of six window just under the roof eave. Six of the nine bays on the west elevation contain the window treatment, with the three central bays windowless. Two bays have additional roof treatment inconsistent with other buildings in that the eaves of the third and sixth bay project out slightly resulting in a stepped effect. One bay contains three ventilation louver panels.

The north and south elevations are similar to the east elevation of building C in that the exposed bent structural system has four legs rather than the typical three-leg 56'-wide bent. This results in two wide expanses of plain cement-plastered walls with a narrow central plain wall on the north elevation and a single metal framed glass door flanked by two fixed lights of wire glass, all topped with three glass transoms on the south elevation.

Building E

Building E, identified in the original plans as a "shop" was designed and built in two phases in 1964 and 1969. The structural system and exterior design of the 1964 portion of the building is generally similar to the classroom buildings, however the horizontal footprint is longer, and the building is taller. The facia detail and low gable roof match that of the other classrooms. It was designed to contain a metal shop, a wood shop, offices, drying rooms, tool rooms, and finishing rooms. The east elevation, while taller, matches the west elevation of the classroom buildings with plain cream-colored walls inset within a three-part bent that cantilevers out to create a covered walkway on the north and south elevations.

The north elevation of the 1964 portion of the building is divided into six equal bays of 14' with the same exposed bents and cantilevers as found in the classroom buildings, plus a narrower 7'-wide bay. Moving east to west, the first three bays contain rows of lockers. Taller bands of six windows in each bay begin at approximately the same height as those in the classroom buildings and extend up to the roofline. The fourth bay also contains lockers, a low panel of louvers and a single metal door, but no windows. The fifth bay only contains lockers and a panel of louvers. The sixth bay mirrors the fourth bay; the seventh and eighth bay are identical to the first three. The final half bay of the 1964 building contains lockers and a louvered panel.

The north elevation of the addition is consistent in design, massing, and architectural features with the original 1964 building. It was designed to contain a power mechanics classroom, two drafting rooms, an electronics classroom, a carpentry shop, offices, a lecture room, and an addition to the metal shop. The addition is made up of fourteen bays that match those of the original building, each bay containing either lockers, doors, and/or vents. Four of the bays include upper bands of six windows.

The south elevation of the 1964 construction generally mirrors that of the north elevation, with its structural system clearly expressed by the exposed bents and cantilevers. There are no lockers on this façade. Moving east to west, the first bay is a plain cement-plastered wall with a six-light band of tall windows at the roof line. The second and third bay are hidden behind a taller simple rectangular, flat-roofed structure that extends above the roofline. The fourth bay contains double metal doors with three tall windows above it; the rest of the wall has the typical plastered cream-colored finish. The fifth bay is plain wall, the sixth is a mirror of the fourth bay. The remaining bays are plain and plastered, with no openings.

The south elevation of the 1969 addition also has no lockers. The fourteen bays are mostly plain, with no openings. The two bays on the west end of the elevation each contain large roll-up service doors. Two bays contain double metal man doors, and two contain a narrow band of windows just below the roof.

Multipurpose Building

The multipurpose building was designed and built as part of Phase 1 in 1964. It is oriented east-west. The kitchen is on the west side of the building, and on the east is a stage, behind which are music/chorale classrooms and storage. The center section of the building is a large, open, versatile space designed to be used as a cafeteria or for assemblies.

The central portion of the north façade opens onto Rosalia Avenue. The three separate functional components of the building are expressed with the different use of materials, heights and architectural elements. The west portion that houses the kitchen and mechanical systems is an 84'-wide, low building of three flat-topped, stepped-back north-facing planes, the first of which projects slightly north of the façade of the central portion of the building. The space resulting from the step backs is enclosed by a low off-white tilt-up concrete wall, creating an enclosed courtyard that allows access to the mechanical systems located in the first two stepped building sections. The wall is heavily textured with a flat-topped parapet. The first two planes of the building are concrete tilt-up walls with access doors. They are coated in rough gray concrete embedded with large, coarse tan, brown, and white irregularly sized rocks. The third plane has low horizontal metal-framed windows presumably to allow natural light into the working kitchen; the unglazed portion is also covered with the decorative rock. The joints of each tilt-up panel and 90-degree angles are indicated by vertical flat cream-colored concrete columns, accentuating the stepped design. The rock-faced wall extends 4' north of the central, main building's façade.

The architectural elements and finishes of the central portion of the building, the "multipurpose" section, are significantly different from either west or east wing. At over 22'-tall, with strong vertical architectural features and smooth lighter-colored wall finishes, this wider portion of the building appears significantly taller than the low, horizontal wings due to strong vertical architectural features. The façade is divided into nine mostly butter-colored 14'-wide bays, each divided by either a cream-colored engaged rectangular column or, in the case of two, deep buttress slabs. Flanking all but two eastern-most, and one western most columns/buttresses are a series of narrow vertical flat brushed-aluminum-framed lights. The six-part lights abut the engaged columns and buttress columns and begin inches above the ground with a tall light that matches the door height, followed by four small square lights, topped with a door-height light that stops only a few feet from the roof soffit. There are three bays between the two buttress columns. The center bay is plain butter-colored concrete-plaster with no openings other than the previously described narrow glazing abutting the columns. The other two bays are identical, with central steel-framed double glass doors and with the lower, approximately two-thirds of the wall coated in a cream-colored concrete plaster. Embedded in the cream-colored portion are horizontal aluminum bands that continue the lines of the muntins of the glazed bands of windows. These visually reinforce the horizontality of the roof line. The two buttress columns are horizontally scored in two locations, at the same height as two of the window muntins. A concrete cantilever beam with a vertical notch in the end extends off the top of the columns, supporting the roof. The soffit is

slightly stepped back from the end of the cantilever beam. The blue facia covers the edge of the roof that slightly juts out. The facia is a continual pattern of long raised-edge rectangles, further emphasizing the building's horizontality. The strong horizonal lines and vertical members make the building feel larger than it is.

A concrete patio with an octagonal planting bed in the center is in front of the three bays flanked by the buttress columns. Grass, low landscaping, and a few small trees are in front of the east portion of the building. The west portion has a concrete sidewalk, planning beds and a large Ponderosa pine tree.

The eastern portion of the building is the same height as the western wing and also extends about 4' north of the façade of the central portion of the building. It encloses most of the eastern-most bay of the central section. Like the western wing, it is sheathed in rough gray concrete, embedded with the same rock, and the tilt-ups are indicated by flush flat cream-colored concrete columns. However, the plane is flat, not stepped like the western wing. Also, unlike the western wing, the wall of this wing is topped with a blue metal cap.

The west elevation is 70'-wide. The stepped portions of this elevation are sheathed in the rough concrete and decorative stone; the western-most wall consists of two panels of butter-colored cement-plaster walls divided and flanked by cream-colored smooth flush concrete columns. Above these walls the 66'-wide west wall of the central, taller portion of the building is visible. It is divided into three bays separated by columns with cantilever beams at the top supporting the roof eaves. The facia is consistent in design with that found on the north façade of the central portion of the building.

The east elevation is wider, at 78' in width. It is divided into three bays, each covered in the same decorative rock and divided by flat cream-colored flush concrete columns, topped with a narrow blue metal cap. There are metal doors in each bay – two single and one double. As with the western façade, the central portion of the building is visible above the east wing and is identical to that seen above the west wing.

The southern elevation faces onto a large concrete area with some tall Ponderosa pines, brick planters, modular metal picnic tables/benches and benches. A long, free-standing butterfly awning covers a walkway that extends across the central portion of the building; another shelters the west wing. Two lower shelters flank the taller shelter in front of the multipurpose portion of the building.

The roofline of the western wing of the south elevation of the building, as previously stated, is lower than that of the central portion of the building. The front vertical plane of the west wing is consistent with that of the central section. It consists of four bays, three of which are 14'-wide, flanked by cream-colored flush concrete columns. The third is the width of three bays. The western-most bay is a plain, butter-colored cement-plastered wall with a single blue metal door, as are the third and fourth bays. The second bay, the 42'-wide bay, is mostly glazed and contains the entrance to the snack bar. The unglazed portion is covered by a colorful mural. A central metal-framed glass double door is flanked by

eight long aluminum-framed horizontal windows arranged in two columns of four lights. To the east and west of these windows are single metal framed glass doors.

The façade of the central portion of the building largely mirrors that of the north elevation. The primary difference is the location of the entrances, additional aluminum-framed fenestration that is consistent in geometry with the entrance doors, and the lack of buttressed columns. The recessed aluminum bands that mirror the muntins in the tall vertical window bands cross five of the bays on the south façade, rather than just three. From west to east, the first bay has no openings other than one band of the vertical lights; the second and sixth bay contain the entrance doors; the center of the third, fourth and fifth bays contain the four-part double door sized windows; and the last three bays are plain except for the vertical bands of glazing on either side of the engaged rectangular columns.

The south façade of the east wing, like the west wing, is at the same spatial plane as the central building except for a 12' panel at the eastern end that protrudes south. The wing is comprised of five panels of butter-colored plain walls divided into 14' bays divided by cream colored flush concrete columns. One bay has a plain double metal blue door.

Gymnasium

The gymnasium is also part of the original Phase 1 campus design and construction. During the initial design a future addition on the east elevation was indicated on the plans. During the 1969 Phase 3 design the addition, plus a "new auxiliary gym addition" were designed. The building is 110' x 150', plus the eastern "auxiliary" addition of 50'x 55'. The gymnasium was designed as an open floorplan; the northern entry was designed to contain a lobby, men's and women's restrooms, storage, and a janitor room.

The gym is surrounded on the north and east by an asphalt parking lot and former asphalt-surfaced basketball courts. The north elevation contains the public entrance, planting beds, and a concrete sidewalk. The southern elevation opens onto a new concrete-surfaced open space with a low zig-zag concrete seating wall, a free-standing long canopy the width of the building, and a large lawn; it faces the other, newer athletic facilities. The multipurpose building is immediately to the west.

The north façade, the public entrance, is consistent in overall design with the central portion of the multipurpose building, however the bays are wider at 16'8". Engaged rectangular concrete columns and cantilevered beams separate the bays. The roof design and detail match that of the multipurpose building. The wall surface between the columns, however, is finished with a more textured material. The long, deep, approximately half-height horizontal sheltered entrance crosses the first six bays starting on the western end of the building. It is enclosed on both ends. The central three sets of double metal framed doors are further sheltered by narrower concrete vertical panels. These panels and the inside of the outer panels are coated with a smooth concrete butter-colored plaster. The north facing planes

within the shelter are sheathed in the same rough stone embedded in concrete as can be found on the east and west wings of the multipurpose building, however they have been covered over with a colorful mural. The walls of the building above the shelter are also painted with a school spirit mural that includes the words "ENTERING PIRATE TERRITORY". The seventh bay is also painted with the mural; the eighth and ninth bay are plain, textured, and painted the butter color. The outer faces of the shelter walls are unpainted decorative rock.

The east façade is of the main gym consists of six bays separated in the typical manner with the same palate, a very low gable roof, and materials as found in the multipurpose building except that the bays are wider, and the surface is more textured. In the north half of this elevation is a double blue metal door in the central bay. The smaller addition is attached to the southern portion of the larger gym; the roofline of the main building extends slightly above the flat roof of the eastern-most addition. The north, east, and south walls of the addition are divided into three bays each, within the typical engaged concrete rectangular columns. There are no cantilevered beams; the roof is flat, and the facia is at the same plane as the engaged columns with simple blue facia. There is a single blue door on each of these facades.

The southern elevation of the main gymnasium is also articulated by nine bays between ten engaged rectangular columns with cantilevered beams at the top, under the extended roofline. The blue facia is peeling. All walls are textured and butter colored, and the columns and cantilever beams are smooth and cream colored. Two bays contain double blue metal doors; both are sheltered by flat horizontal awnings supported by two cables. The door in the southern façade of the smaller addition is also sheltered by the same style of awning.

The west elevation is a mirror of the east elevation without the smaller addition. It has the typical, but wider than those found on the other buildings, six bays articulated by seven engaged concrete rectangular columns with the same finish and roof detail found on the other elevations of the building. The first and sixth bays each has a double blue metal door immediately adjacent to the exterior columns.

Historic Contexts:

Santa Clara Unified School District Historic Context

The Santa Clara Unified School District (SCUSD) includes neighborhoods in the cities of Sunnyvale, San José, Cupertino, and Santa Clara; it comprises approximately 56 square miles of 1,290-square-mile Santa Clara County (SCUSD 2022a; U.S. Census Bureau 2022). The district, which educates over 15,300 K-12 students, is made up of 18 elementary school sites, one K-8 school site, four middle-school sites, three high-school sites, three alternative high-school sites, and four leased sites (SCUSD 2022a, 2022b). SCUSD is one of 32 elementary, high school and unified school districts in Santa Clara County, not counting the

Community College District, charter, or court schools (Santa Clara County Office of Education 2022a). Unified school districts are districts that teach both elementary and secondary levels of education.

19th-Century Public Education in Santa Clara County

On April 11, 1850, the California State Legislature passed an act providing for the election of a superintendent of public education, as directed by the Constitution of the State of California. John G. Marvin was elected that year on October 7 to serve as the state's first public school superintendent (San José Mercury News 1951: 181). Despite this, the first schools in Santa Clara County were private schools generally operated by religious entities or informal schools organized by residents (Laffey 1995: 51). In 1852 the Legislature authorized a state school tax of five cents per $100 and a county school tax of no more than two cents per $100 to initiate funding of the state's public education system (Santa Clara County Office of Education 2022b). It also allotted three school commissioners to each township and included the duties of a County Superintendent of Schools as among the responsibilities of the County Assessor (San José Mercury News 1951: 181). The first Santa Clara County Assessor was J.H. Morgan, elected in 1853; consequently he also become the county's first Superintendent of Schools (Laffey 1995: 51).

One year earlier, in the fall of 1852, the Santa Clara County Commissioners designated eight townships as school districts: Gilroy, Burnett, New Almaden, San José, Santa Clara, Fremont, Alviso, and Washington (now part of Alameda County). On March 15, 1853, the Santa Clara Register printed a notification that a school had opened in San José, signed by the San José Commissioners of Common Schools; the parents were expected to pay any costs that exceeded the school funds provided by the State. By May the school, located in a Baptist church, had ten pupils registered but insufficient funds to pay the teacher. The 1853 Legislature amended the State's school law to allow the Common Council to levy taxes on real or personal property to support city schools (San José Mercury News 1951: 181). By 1866 Santa Clara County Schools were some of the best funded in California (Laffey 1995: 51).

The State Legislature revised the County Assessor's duties in 1855 to no longer include that of Superintendent of Schools. Freeman Gates, a San José teacher, became Santa Clara County's first elected Superintendent of Schools (Santa Clara County Office of Education 2022b). In October 1855 Santa Clara County redistricted itself into eight townships and 16 school districts. School districts in the townships of Fremont, Santa Clara and Redwood numbered six; San José, Alviso, Burnett, Almaden and Gilroy had ten. Within a month district designations were revised again, and four separate school districts were established in the Santa Clara township (Munro-Fraser 1881: 137). By the end of 1859 there were 710 students enrolled county wide (Laffey 1995: 51).

The 1860s marked significant expansion of Santa Clara County schools, with the erection of over two dozen schoolhouses. These included schools in the Cambrian, Encinal, Jefferson, Laguna, Mt. Pleasant, Pala, Summit, Hester, and Willow Glen districts. What was once the Jefferson School District is now

within the boundaries of the SCUSD. The first high school in the county was opened in San José in 1860 (San José Mercury News 1951: 181).

Santa Clara County's rural school districts constructed generally small wood-framed one- or two-room schoolhouses between 1850 and 1880. These early schools appear to have been of consistent design with schoolhouses throughout the country (San José Mercury News 1951: 181). Located along existing roads and intersections, these schoolhouses were exposed to noise and dust, poorly lit, had poor ventilation and heating, and often had no wells, washbasins or toilet facilities (Englehardt 1942: 172). The typical classroom layout was rectangular, with the teacher's desk in front of rows of students' desks, emphasizing his or her authority (Ogata 2008: 563). The Mayfield School in Fremont township was described as being of common construction and type. An early California State Superintendent of Schools who visited it in 1855 referred to it as a "herring box" (San José Mercury News 1951: 181). Schools also found accommodations in existing buildings, such as Mr. Dunphy's school on the second floor of a two-story rented building in San José; Red Mac's Saloon occupied the first floor. Some schools shared buildings with other entities like churches or meeting halls (San José Mercury News 1951:183).

The rapid increase of population on the West Coast that followed the completion of the Transcontinental Railroad in 1869 resulted in a shortage of school funding and space (Laffey 1995: 52). According to the Census Bureau, the population in Santa Clara County grew from 11,912 in 1860 to 26,246 in 1870, a more than 120% increase (Bay Area Census 2022). At least four, and possibly six, new districts were established in the 1870s. These included Eagle, Uvas, Llagas, and Midway. Fifteen new school districts were formed in the 1880s, among them were Mount Hamilton, Halls Valley, Huyck, Campbell, Burrell, Lakeside, and Austin. Similarly, in the following decade, another thirteen districts were created, two in the new towns of Morgan Hill and Palo Alto (San José Mercury News 1951: 183). Most districts consisted of only one or two schools.

Despite the rapid establishment of new school districts, they were not always able to keep up with the educational needs of their growing communities. Although state funds covered much of the cost, parents had to purchase their children's books and cover other expenses; some poor families simply could not afford to send their children to school. Lack of adequate funding also resulted in deferred maintenance and inattention to advancement in school design to better serve the student body. In the 1873 Santa Clara School District's annual report, the School Superintendent accused the city of allowing the schools to become dilapidated. He stated that "the Cheap-John system which seems to pervade all the departments of our town governments admonishes us out of the necessity of studying economy, even to the degree of meanness (San José Mercury News 1951: 183)."

Another challenge the public educators faced was poor attendance. In 1860 the Santa Clara County Superintendent of Schools stated that "the principle cause of non-attendance by the children is the indifference with which many parents in the county districts treat all things connected with school discipline." "Discipline" in this instance was not referring to behavior but to regular attendance, particularly in the rural districts where farming and ranching families were dependent on children

helping at critical times such as harvest or planting (Laffey 1995: 51-52). In 1874, California made education for children from eight to 14 years of age compulsory and guaranteed state aid for each school based on the number of children in each district. High schools would not receive state funding until 1902. In 1911, the state stopped providing aid for each child in a given district but based the funding on attendance (California Department of Education 1961).

Despite the State's intervention, these challenges continued even as the number of school districts increased. By 1875 Santa Clara County boasted 53 school districts, 83 school buildings and 105 teachers. The average daily attendance was recorded as 4,892, not counting San José school attendance. This number indicated that only half of school-age children regularly attended school. By 1881 there were 62 districts county-wide, and by 1900 there were a total of 97 schools in 84 districts, and 562 teachers educating 14,320 students (Laffey 1995: 52). The majority of these schools were in rural communities and small towns, with the basic one- or two-room wood-framed schoolhouse still the most commonly built school type.

Late 19th and Early 20th Century: Continued Growth, New Approaches to Education and School Design

As the county's population increased and towns became more urbanized in the 1880s and 1890s, the basic schoolhouse was gradually replaced by larger, yet still modestly scaled schools that often expressed contemporary Victorian architectural styles. Nation-wide attitudes toward the importance of lower education were changing. With the close of the 19th century, school building design began to trend toward a more monumental and unified plan with architectural revival-style embellishments and elaborate approaches and entrances to celebrate the public's civic pride and devotion to education (American Educational Research Association 1942: 174). These schools typically had a central entrance, symmetrically planned classrooms on either side of a long corridor, and a large auditorium. The classroom plan was rectangular with blackboards on one or two walls, rows of windows on one side, and the desks in rows to emphasize order, desk work, and the teacher's authority (Ogata 2008: 563). The unreinforced masonry San José High School that opened in 1898 was a relatively grand civic building with classical styling, and a symmetrical design composition (San José Mercury News 1951: 181).

Architects and engineers introduced improved technologies and stronger materials that allowed school buildings to be two to three stories in height. They designed schools with improved ventilation and exposure to natural light and enhanced safety by using fireproof materials (Yates 2013: 1). These advancements in architectural design and the need for larger school buildings established a new era of school construction (American Educational Research Association 1942: 173). However local school designers apparently did not plan for potential seismic events, and the 1906 earthquake destroyed the new San José High School (San José Mercury News 1951: 181) and damaged the newly built Santa Clara High School. California would not mandate earthquake-resistant building construction for schools until after the 1933 Long Beach earthquake (Seismic Safety Commission n.d.).

As stated earlier, attitudes toward education began to evolve in the late 19th century. The influential progressive education movement would lead to significant changes in school and campus design over the next several decades. The movement was a reaction against the existing formalism and authoritarian teaching practices of traditional education and inspired a broad restructuring of educational methods in the United States. Guided by the theories of educators and philosophers such as John Dewey of the Columbia University Teachers College, the movement emphasized more hands-on, child-centered methods and curricula, individual achievement, and differentiation of children's abilities (Sapphos Environmental 2014: 39). The progressive education movement also brought a new emphasis on student health and physical activity as essential for proper childhood and adolescent mental and physical development (Yates 2013: 2). The notion that such development took place in stages led to the creation of the 6-3-3-year division of elementary schools, junior high schools, and high schools during this period (Yates 2013: 1-2).

As the progressive education movement gradually took hold in the first two decades of the 20th century, new school design incorporated features to support the health and well-being of the children (Yates 2013: 1-2). The 1906-built Santa Clara High School building was designed with traditional classroom layouts, but also included boys and girls "play rooms" and showers, a robust ventilation system, and landscaped grounds and tennis courts (Evening News 1906: 2).

In 1909 the Santa Clara County Board of Education, which consisted of the elected county superintendent of schools and four members appointed by the board of supervisors, amended an 1880 political code to provide that a majority of appointed members be experienced teachers who held at least a grammar school teaching certificate. The board of education was now authorized to qualify and hire teachers and set the standards for graduation (Laffey 1995: 52). Superintendent D.T. Bateman established the Teachers' Institute of the Santa Clara County Office of Education in 1911 to offer professional development to teachers. Teacher round tables included topics such as "How to Make Mathematical Work More Nearly Meet the Needs of Daily Life" and "Teaching Peace by Means of History" (Santa Clara County Office of Education 2022b). The supervision of attendance and child welfare was added to the duties of the county superintendent in 1918 (Santa Clara County Office of Education 2022c). These actions further reflect the gaining influence of the progressive education movement and the county's adoption of its theories.

The creation of new school districts in Santa Clara County continued and by 1912 there were at least 102 districts, not counting high schools, outside of the city of San José's corporate limits. Prior to the turn of the twentieth century, there was a high school in San José, one in Santa Clara, one in Gilroy, and one in Palo Alto. By 1951 the communities of Santa Clara, Morgan Hill, Los Gatos, Campbell, Mountain View, Fremont, and East Side had high schools. All, except for Palo Alto and San José, served large rural areas and were classified as union high schools (San José Mercury News 1951: 183). For example, graduates from Jefferson, Santa Clara, and Alviso elementary school districts matriculated to the Santa Clara Union High School District's high school (Evening News 1959: 15).

On April 30, 1926, voters in the Jefferson, Agnew, Braly and Milliken elementary school districts elected to consolidate the districts into the Jefferson Union School District. Each of these school districts was comprised of a single school. Both the Milliken and the Braly schools were two-story Mission Revival buildings; the Jefferson school, a simple board and batten single-gabled building located on Kifer Road (formerly unincorporated) constructed in 1857, was said to be the oldest school building in continuous use in the state at the time (San José Mercury Herald 1926a: 10; 1926b: 7). Irvin Pomeroy, trustee of the Milliken school, appealed to the voters, saying that, "the need of better schooling for our children is becoming acute. In the Milliken school children are so crowded for room that classes are held on the stage of the assembly. With these four districts consolidated we will have enough pupils for a separate classroom for each grade and special instruction in such subjects as domestic science and trades." (San José Mercury Herold 1926a: 10)

The new district quickly applied for and received a $100,000 bond to construct a new Jefferson Grammar School at Lawrence Road and Reed Lane (San José Mercury Herold 1926b: 7). The new Mission revival style building, designed by architects Wolfe and Higgins, was constructed of reinforced concrete and contained thirteen rooms that included classrooms, manual training and domestic science departments, offices, a library, and an assembly room capable of seating 600. Joseph Hancock, county superintendent of schools, stated that the Jefferson Union School District was the wealthiest in the county, with an assessed value of $3,000,000 (Evening News 1927: 6).

Santa Clara County Public Education and School Development Post 1930

The 1933 Long Beach earthquake destroyed 70 schools and resulted in significant damage to another 120 schools in Southern California. The California Legislature enacted the Field Act on April 10, 1933, one month after the earthquake, to protect children and staff from death and injury in public schools grades K-14 and protect the public's investment in school buildings during and after earthquakes (Seismic Safety Commission n.d.). The requirements of the act included maintaining one-story massing for new elementary schools and no more than two stories for junior and high schools. These requirements were in line with school design trends already in being adopted in California and beyond (Sapphos Environmental 2014: 21).

As Santa Clara County developed from primarily agriculture prior to World War II to industry during the war years, the rural school districts grew and organized union districts for either elementary or high school purposes. Under this system two or more contiguous districts united. District superintendents focused on establishing a centrally located school and provided transportation for students. By 1950 there were eight union school districts in Santa Clara County: Cupertino, Jefferson, Los Gatos, Campbell, Saratoga, Almaden, Alum Rock and Berryessa, and Loma Prieta and Ausaymus (San José Mercury News 1951: 183). Midway School District was annexed to the Jefferson School District in 1949 (San José Mercury Herold 1949a: 16). The 1927-built Jefferson school was expanded in 1946 and 1948, with the

construction of ten new classrooms and a cafeteria-music building. Enrollment increased an average of 20% each year between 1944 and 1949 (San José Mercury Herold 1949b: 11). In 1949 the Jefferson Unified School District encompassed the area from Sunnyvale city limits on the west to Coyote River on the east, and from a mid-way point between Stevens Creek and Homestead Roads on the south to Alameda County line on the north. The current SCUSD boundary appears to be wholly within the 1949 Jefferson Unified School District boundary. By 1950 the Santa Clara County school system included 39 elementary school districts, eight high-school districts and two unified school districts, totaling 109 schools with a combined enrollment of 51,797 (San José Mercury News 1951: 183).

The 1960s and 1970s brought a major change to the area as Santa Clara County grew rapidly and urban development overtook most remaining rural areas (Santa Clara County Office of Education 2022b). Population in Santa Clara County continued to grow as technology-based industries established during the war year expanded. A 1961 San José Mercury News article titled, "High Schools Bulge: Educators Grope for More Space As War Babies Swamp Ninth Grade", stated that enrollment for each grade was slightly larger than the next one above. This steady climb was illustrated by comparing 1960 first grade enrollment to 12th grade enrollment: County wide 16,533 first graders were registered that year compared to only 6,990 12th grade students (San José Mercury News 1961: 26-27). This large increase in attendance occurred primarily in the former rural areas of the county. Young families of newcomers moved into newly built housing tracts of mostly modest ranch and minimal-traditional style homes that replaced the county's orchards and farmlands. That year the Santa Clara High School District was already constructing its third high school, Adrian Wilcox, scheduled to open in September. Concurrently the district was planning a second phase to accommodate the expected high school student body increase of around 600 per year (San José Mercury News 1961: 26-27). In September 1965, Santa Clara, Jefferson, and Alviso Elementary School Districts joined the Santa Clara High School District to form the Santa Clara Unified School District (San José Mercury News 1965: 56). The Patrick Henry Campus, built 1960-1962 to accommodate 1,000 6th, 7th, and 8th grade students (Evening News 1960: 9), was originally built as part of the Jefferson School District (SCUSD 1960); phase 1 of the Marian A. Peterson High School was designed in 1964 as part of the Santa Clara High School District (SCUSD 1964).

Santa Clara Unified School District Campus Plan Typology

Of the 33 school campuses that make up today's SCUSD, all but six were initially designed and/or constructed prior to the establishment of the district in 1965, primarily in the 1950s and early 1960s. The six campuses built after the unification of the district are of modern construction, built in 1995 or later. Buchser Middle School, the only extant pre-World War II-built school in the district, was initially constructed in 1937 (SCUSD 2022b). The Buchser campus has been significantly expanded and no longer resembles a pre-war educational institution. In the years after the district's unification SCUSD built out or added to many of these campuses, and further addressed the shortage of classrooms by the introduction of portable or temporary classrooms district wide, particularly in the 1990s.

Functional School Campus Site Plans, 1940s – 1970s

Despite the infill and alterations implemented by SCUSD throughout the years, two standard campus designs, the "finger plan" and the "cluster plan", are easily recognizable district wide. A sub-design of the cluster plan is the open-space plan, where the buildings in the cluster-plan campuses had greater interior flexibility – open-space shells so that team teaching could be accommodated in a variety of patterns. School architects applied these two distinctive functional campus plans throughout California and the nation, with the finger plan beginning in the late 1930s and refined into the 1950s, followed by the cluster plan in the 1960s and 1970s. The open-space plan proved to be problematic and short lived; it was quickly modified to recapture the visual and sound separation of the self-contained classroom (California Department of Education 2000).

Architects interpreted these basic campus plan concepts and tailored them to the size of the student body, campus location - rural, suburban, or urban settings - climate, and topography. In the 1940s and 1950s school districts in California used a rule-of-thumb approach to determine school site size. Elementary schools were to have a minimum site of five acres plus an additional acre for each 100 pupils of predicted ultimate enrollment. For middle schools the basic size was 15 acres and high schools 15-20 acres plus the same additional acre per 100 students of predicted enrollment. By the mid-1960s, with land becoming scarce and expensive, school planners began to apply more precise methods to determine school size to support the functions or activities of the proposed educational program (California Department of Education 2000).

Combinations of these two basic campus design forms were applied as the finger plan transitioned into the cluster plan with this more site- and function-specific approach to school design. Both plans typically share the basic architectural principles that reflected those of midcentury modern design with their use of steel framing, plate glass, and low-rise horizontal massing to reflect the relationship between modern architectural forms and progressive teaching methods (Ogata 2008: 562-563).

The Marian A. Peterson Middle School, originally Marian A. Peterson High School, initially designed in 1964 for the Santa Clara Union High School District, is a hybrid of the finger plan and cluster plan campus; the Patrick Henry campus, was designed as the Patrick Henry Intermediate School for the Jefferson Union School District in 1960 in the cluster-plan style.

The Finger Plan

Just prior to the U.S. entering World War II European-trained architects working in the U.S. began to design schools and campuses that were radically different from the period-revival monumental school buildings that contained all school functions. One-story schools with expansive windows and immediate access to outdoor space just beyond the classrooms were introduced by master architect Richard Neutra in 1939. He designed single-story experimental schools in Los Angeles with large sliding glass doors that

led to adjacent gardens or courtyards modeled on contemporary ideas about students' need for access to air and light, and that were well suited to the mild California climate (Ogata 2008: 564).

The experimental school design evolved into the finger-plan campus concept with architects Franklin & Kump's design of the Acalanes Union High School in Lafayette, California (1939-1940). Franklin & Kump also designed San José High School in 1952, further refining the finger plan. *Architectural Forum 91* (October 1949) called the plan type the "western finger plan" and that the finger-plan school resembled "a tree plan, based on a trunk corridor with side branches. It rests on radical standardization of classrooms; on absolute insistence that all classrooms share the best (north) orientation to sun and air; daylight for all of them from the open-corridor side as well as the main window side. This plan is not only flexible… but extensible indefinitely outward like a tree, by growing at branch-ends and by sprouting new branches." (Sapphos Environmental 2014: 92)

Architectural Forum further described Acalanes as "the first large-scale school which could serve as a complete demonstration of principles which amounted to a schoolhouse revolution – the revolution of the thirties. Since then, the Acalanes type of school, with its wide ranging, one-story classrooms arranged according to the 'finger' plan, has swept the West Coast, is sweeping rapidly across the Midwest on its way to the East Coast." (Sapphos Environmental 2014: 92)

Consistent with contemporary design principals, the finger-plan became the most common school building type in the 1940s and 1950s in California. This campus design also satisfied the construction requirements of the 1933 Field Act. These finger-plan schools were multi-structure residential-scale campuses with individual purpose-built buildings with minimal ornamentation or only modest application of modern architectural elements (California Department of Education 2000). Administration buildings, auditoriums and gymnasiums, separate classroom, shop, and specialty wings, and cafeterias were designed to connect to the outdoors with patio spaces and covered open corridors linking buildings. Natural light and ventilation were provided by bands of windows, including multilight sashes, casements, and clerestories (Sapphos 2014: 21). These school buildings reflected a more intimate and better integrated element of the community compared to the earlier period-revival monumental buildings. This newer campus style was a workplace and recreation center, sited in a manner that was more intimately associated with community living. This type of arrangement was flexible and eliminated much of the institutional atmosphere of the earlier large, compact buildings (American Educational Research Association 1942: 175).

In addition to the site plans' suitability for housing progressive education methods, these schools were considered safer for evacuation. Along with the age-old threats of earthquake and fire, residual anxieties of the war and subsequent Cold War added to the appeal of this style of school campus. Other practical aspects of these single-story schools were low-cost materials, swift constructability, and flexibility. With the baby boom in full swing, these rigid-frame schools could be quickly built and easily expanded as needed, with war-industry-made prefabricated materials and steel, and continuous fenestration (Ogata

2008: 568). Instead of an auditorium, these post-war flexible school campuses included a multi-purpose building for school assembly, cafeteria, and meetings (Ogata 2008: 569).

All of SCUSD's elementary schools built in the 1950s were designed in the finger plan and share the same midcentury modern design principles and type of structural materials. These schools, significantly more modest in scale compared to Acalanes Union High School and San José High School, include Bowers, Bracher, Briarwood, Central Park, Haman, Mayne, Millikin, Pomeroy, Scott Lane, Washington, and Westwood elementary schools.

Cluster Plan

The Architects Collaborative (TAC), a firm founded by master architect Walter Gropius, designed a prototype school in 1954 that could be quickly and economically constructed and easily expanded. The design included a cluster of individual one-story buildings grouped around a central administration building. Small square classrooms were arranged in a grid that created outdoor "classrooms" or common areas interspersed between the buildings. Residential in scale, these building evoked the feeling of post-war suburban houses with the ubiquitous picture windows looking out onto landscaped spaces.

Contemporaneous with TAC's publishing their prototype cluster-plan campus design, the finger plan began to lose popularity. In addition to the large tracts of land required to accommodate a finger-plan campus, the spread-out buildings meant long cross-campus walk times and restricted communication. Classrooms oriented to maximize access to natural light proved to be costly. The variability of natural light throughout the day resulted in periods of excessive heat and glare followed by the need to augment daylight with electrical lighting. A desire for greater flexibility, domesticity and economy influenced a shift in campus design away from the finger plan to the more compact cluster plan. (Sapphos Environmental 2014: 97, Ogata 2008: 572).

The cluster plan retained the low massing, generally single-story layout of the finger-plan, and architects still designed classrooms with indoor-outdoor access and views. But rather than extending wings along an axis, the site plan transitioned to grouping individual modular buildings and structures around a central landscaped courtyard. The views from the classrooms were now oriented toward the courtyard and other classrooms, resulting in a more communal setting and informal environment (Sapphos Environmental 2014: 99).

Although school designers continued to construct finger-plan campuses, the cluster-plan approach began to be widely adopted in the 1960s. The later finger-plan campuses were usually condensed or used for elementary schools and smaller upper-level schools, particularly in California where there was still ample space (Sapphos 2014: 98). By 1965, according to *California School Buildings, 1960-1965,* "The 'Cluster Plan' has replaced the 'Finger Plan' concept for elementary schools. Arrangement of classrooms

around a core area encourages cooperation between teachers by giving them opportunities to share multi-use areas, resource centers and teacher prep areas all adjacent to their classrooms. Better acoustical control and better lighting is evident, and technology is employing these comfort factors to be coordinated with flexible interiors" (Gibson 1966: viii).

The Marian A. Peterson High School (now middle school), while primarily a cluster-plan campus, includes some residual design elements of the finger-plan campus, as can be seen in the original plot plan drawn in 1964 by architect L.F. Richards. Phase 1 of the campus plan had the academic buildings, library, administration building, multi-purpose building, gymnasium and locker rooms clustered around a large central courtyard. The planned siting of three long, parallel future academic buildings on the west side of the campus partially connected by a covered breezeway reflects the spatial arrangement of a finger plan; the northwest-most "future academic" building was added to the campus by 1969.

Patrick Henry Intermediate School, designed in 1960 by architect Clyde D. Goudie, and expanded in 1962 with a design by the architectural firm Goudie & Griffin, is a cluster-plan campus with four L-shaped classroom buildings, the administration building, and the multi-purpose building spatially arranged around a large central courtyard. The classroom buildings are also arranged to create two secondary courtyards between two sets of the buildings. While the campus layout closely follows the cluster plan, the classrooms' fenestration is limited to bands of clerestory windows on the outward facing building façades; no classrooms have views looking onto the courtyards.

Open-Plan Design

A sub-design of the cluster plan is the open-space plan. While retaining the core campus arrangement and building orientation of the cluster plan, beginning in the mid- to late-1960s campus buildings were designed to have greater interior flexibility (California Department of Education 2000: 7). The objective was to have classrooms with adaptable interiors with moveable walls to accommodate changes in group size and/or activities. To accomplish this school architects designed buildings with large interior spaces separated by non-load-bearing walls, long and high roof spans, and steel structural systems. A relative lack of windows further accommodated this flexibility. This was made possible by modern air conditioning systems. Massing increased and exterior corridors moved inside since the buildings by necessity took up a greater area of the campus site. Some open-plan schools were designed in circular plan, with hexagonal or circular classrooms clustered around a common area (Sapphos Environmental 2014: 104-105). SCUSD's Cabrillo Middle School, built in 1961, appears to be an example of a circular-design open-plan campus that followed the principle of the cluster plan. Survey of this campus is beyond the scope of this study.

The open plan was not widely accepted and was short-lived. By the 1980s there was a return to the visual and sound separation provided by the self-contained classroom. However, the structural flexibility associated with the open-space plans continued to be used for common spaces, such as gyms,

auditoriums, and cafeterias, most of which used moveable walls and space-function adjacency design to improve flow between the functional spaces (California Department of Education 2000: 8).

Architectural Typology

Modern and Modernist architecture spanned the late 1920s through the 1970s and included several distinctive styles of architecture. Regional expressions of Modernism can be found throughout California and the United States. Key characteristics of Modern buildings is the lack of historical ornament and references, and an emphasis on a new architectural vocabulary. In the San Francisco Bay Area Streamline Modern, International Style, Second Bay Tradition, Mid-Century Modern, International Style, Brutalism, and Contractor Modern populate the cities and suburbs. New materials and building technologies stimulated the rapid post World War II promulgation of these architectural styles, with the mass-production of building products that were distinct from earlier products. These included materials that were often factory finished, such as plate glass, structural glass, spandrel glass, acoustical board, asphalt tile, vinyl asbestos tile, aluminum, concrete, ceramic, terrazzo, vinyl fabric, gypsum board and plaster, rubber topset, plywood, clear wire glass, and plastic laminate.

The historic-period post-war SCUSD campuses, built between 1951-1969, share the basic design principles and express simple application of Mid-Century Modern design elements regardless of campus plan. “Mid-Century Modern” is not an academically accepted architectural style term but was generated by the public. It describes a wide range of design elements incorporated into buildings during the 1940s through the 1960s. Mid-Century Modern was influenced by the more formal machine-age aesthetic of the International style. Mid-Century Modern expresses the architectural features of International style in a more relaxed, generally scaled down and regional style and sometimes adopts architectural elements from other Modernist styles. It is characterized by honest expression of structure and function with little applied ornament. The style can be found in postwar institutional buildings, commercial buildings, as well as residences.

Mid-Century Modern style is characterized by balanced, rhythmic composition with an emphasis on simple, geometric forms. Footprints are generally square or long rectangular; buildings are seldom more than two stories in height and are predominately horizontal in massing. This composition is achieved by modular post-and-beam construction that allows for large expansions of open floor plans. The rooflines are low-shed, low-gabled or flat, with wide eaves and cantilevered canopies supported on posts or spider-legs. Windows are generally flush-mounted with metal frames that may act as infill panels or extend to the gable. Ribbons of clerestory windows are also commonly found on Mid-Century Modern buildings.

Evaluation:

1. Under CRHR criterion 1, the Marian A. Peterson Middle School does not qualify as a historical resource that has made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. Originally constructed in three phases between 1964 and 1969, it was one of many schools built during the post WWII era of rapid suburbanization and population growth in Santa Clara County, California, and throughout the United States. It is also one of hundreds of schools in Santa Clara County associated with the common trend of establishing and unifying school districts during the 1950s and 1960s. It is a commonplace example of these local and national trends and development patterns.

2. Under CRHR criterion 2, the Marian A. Peterson Middle School does not qualify as a historical resource associated with any individual whose activities are demonstrably important within local, California, or national history. For the school to be of significance under this criterion, it would have to be able to illustrate the person's important achievements in the field of education. At the time it was built Wendell Huxtable was the superintendent of the Santa Clara High School District and Louis Martini was the principal. While both men likely contributed to the continued growth and progress achieved by the Santa Clara High School District, what would become the Santa Clara Unified School District in 1965, research has not found that either man has made any specific contributions of demonstrable historic importance that would qualify the school as a historical resource under criterion B. Marian A. Peterson, for whom the school is named, was a former teacher and trustee of the Santa Clara High School District. The naming of the school was honorary; Mrs. Peterson does not appear to have any stronger association with the school.

   The school district purchased the land from the Castello family, the Cirrincione family, and the Teresi family. Research has not resulted in any important additional information about these Italian immigrants and first-generation California-born farming families. The Italian-born senior members of the families were likely part of the significant influx of Italians into the area during the late 19th and early 20th century, attracted by rich agricultural land and associated opportunities. They appear to have been typical farming families that subdivided and sold their property as Santa Clara County's post-war population grew rapidly and suburban communities developed. Furthermore, other than having once owned the subject land, none appear to have any association with the current school facilities.

3. Under CRHR criterion 3, the Marian A. Peterson Middle School does not qualify as a historical resource that embodies the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic value. Under this criterion, there are three contexts that must be considered: Architectural style of the overall

campus and the multipurpose building and gymnasium individually, functional school style as an example of a hybrid finger- and cluster-plan campus, and the potential for its architect, L.F. Richards to be considered a master architect. The campus's potential to be a district of a significant concentration of buildings and structures united aesthetically by plan or physical development is also considered.

Architectural Design:

Classrooms:
The architectural design of the campus classroom buildings is modest Mid-Century Modern style. The designer applied the expected rhythmic composition, low horizontal massing, simple geometric volumes and strong right angles, low-pitched gable roofs with wide cantilevered overhangs, courtyard entryways, visually expressed structural systems, simply treated materials, and lack of historical design elements. While the buildings are characteristically Mid-Century Modern, they are not distinctively characteristic of the style and are not pure representatives of the style.

Multipurpose Building:
The multipurpose building includes several features that are considered characteristic of Mid-Century Modern architecture, such as simple geometric volumes and strong right angles, a low-pitch gable roof with wide cantilevered overhangs and articulated primary façades. However, the composition, with its distinctively differently designed west and east wings, results in an unbalanced design in both proportion and material. While many significant examples of Mid-Century Modern are symmetrical, it is not essential for the style. The National Register of Historic Places- listed Research House by master architect Richard Neutra is not symmetrical, but a well-balanced composition of vertical and horizontal planes and columns. The multipurpose building also has some elements of New Formalism on the north and south façades of the central portion. New Formalism, which was a rejection of rigid Modernism, includes references to Classical building proportion and scale, columns, and stylized entablatures. The overall design of the building is inconsistent and not a significant example of a Mid-Century Modern or New Formalist building; it does not clearly express either architectural design type.

Gymnasium:
The gymnasium also includes several features that are characteristic of Mid-Century Modern architecture, such as simple geometric volumes and strong right angles, a low-pitch gable roof with wide cantilevered overhangs and articulated façades. The most architecturally distinctive elevation is the north entrance, with its deep, wide shelter across much of the façade. The placement of the entry shelter, beginning at the west end does not span the entire elevation

which results in an unbalanced composition. Overall, the building is only a simple expression of Mid-Century Modern. Its function as a gymnasium prevents the use of fenestration, an important characteristic of Mid-Century Modern architecture. The building is not a significant example of a Mid-Century Modern architecture; it does not represent an important expression of the style.

Campus Design:
Marian A. Peterson Middle School campus is a hybrid of the finger-plan campus and cluster-plan campus. Consequently, it is not a distinctive example of either type of campus design.

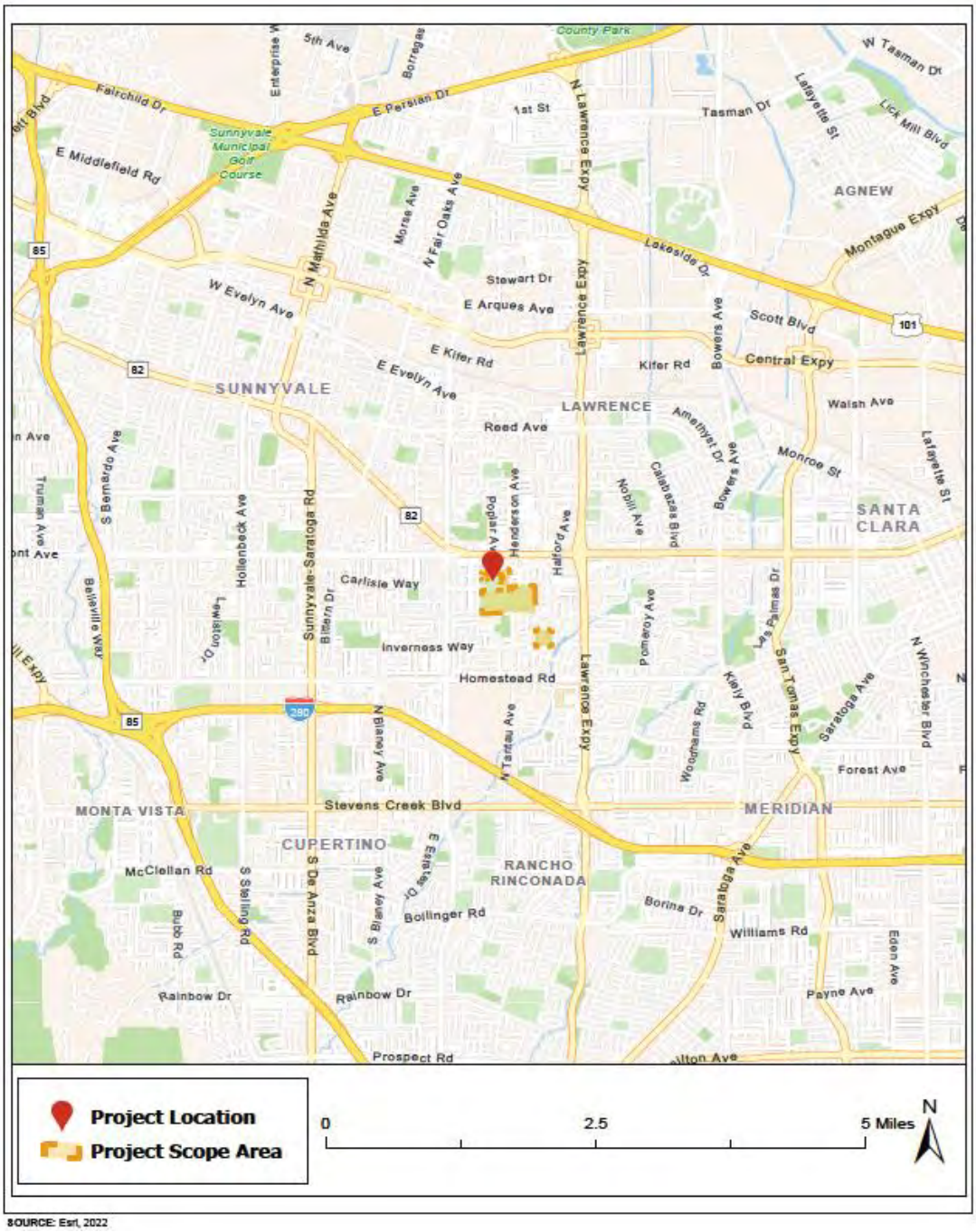
Master Architect:
L.F. "Fred" Richards designed the first three phases of Peterson Middle School in the 1960s. He received his Bachelor of Architecture in 1934 from the University of Southern California. Prior to WWII he was an in-house architect for Pasetta Construction, which brought him to the Bay Area. During WWII he worked for Kaiser Permanente, returning to Pasetta Construction near the end of the war. When Pasetta retired Richards opened his own business. He served as president of the Santa Clara Valley chapter of the American Institute of Architects (AIASCV) then California Council of the American Institute of Architects (CCAIA). He was elected to Fellowship (FAIA) in 1962. After closing his office, he worked part time for Dennis Burrow, AIA.

Richards designed schools for the Santa Clara, San Jose, San Martin, and Gilroy school districts, as well as the Santa Clara International Swim Center, which he considered his most significant project. While locally fairly prolific, he is not recognized as being a master in the field of school architecture or architecture in general. Additionally, for a work to be considered significant for being designed by a master, it would need to express a particular phase in the development of the master's career. The Marian A. Peterson Middle School campus is not eligible under criterion 3 because it is not a significant example of the work of a master architect.

District:
The Marian A. Peterson Middle School Campus is not a significant historic district. Historic districts usually also meet the significance criteria of criterion 1 for its important association with a trend, and/or criterion 3, having high artistic values. While the campus composition is that of a concentration of buildings, structures, and landscape features that reflect one functional activity, it is an aesthetically commonplace example of a Mid-Century Modern 1960s school, broadly associated with the commonplace trend of suburban school construction. Additionally, the campus lacks continuity due to the demolition and replacement of several important buildings and, therefore, cannot clearly express the plan and physical development of a 1960s school campus.

4. Under CRHR criterion 4, the Marian A. Peterson Middle School Campus is not significant as a source (or likely source) of important information regarding architectural history. This property type is common and does not have any likelihood of yielding important information about historic construction materials or technologies. This evaluation makes no determination regarding the potential for the discovery of significant archaeological resources.

Figures



SOURCE: Esri, 2022

Area Map, Santa Clara County, California. Courtesy Impact Sciences 2/2022.

Figure 1. The Marian A. Peterson Middle School campus is outlined in red. South of the campus are the SCUSD Farm, track/football field, and southeast is the Patrick Henry campus. GoogleEarth Pro aerial image, 9/27/2021. Accessed 7/13/2022.

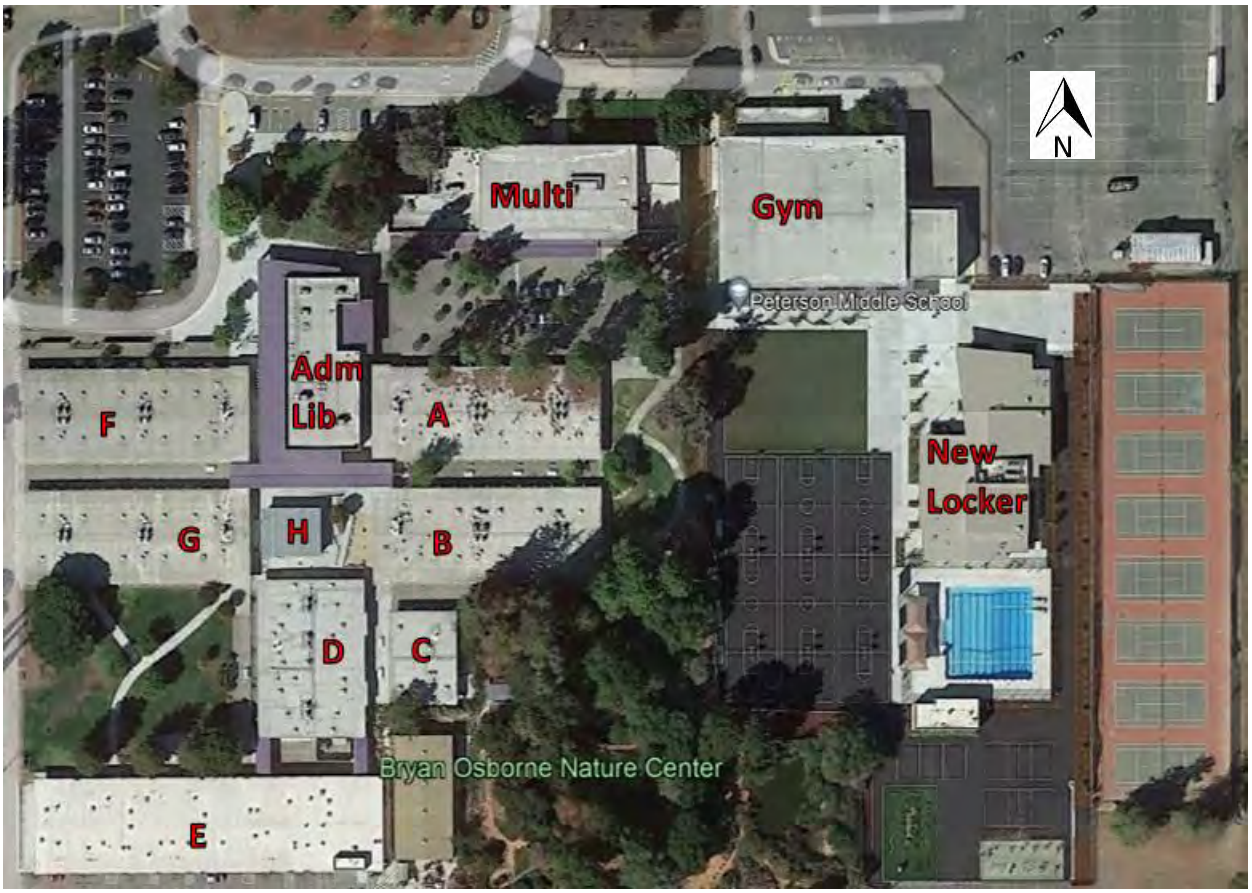


Figure 2. Marian A. Peterson Middle School Campus. GoogleEarth Pro. Accessed 5/18/2022. Image date 9/27/2021.

Figure 3. Outdoor space between classrooms A and B. Camera facing west. Photograph taken 1/17/2022.

Figure 4. Open area between classroom building A and the multipurpose building. Camera facing northeast. Photograph taken 1/17/2022.

Figure 5. Landscaped area east of classroom buildings A and B, looking northeast toward the gymnasium. Photograph taken 1/17/2022.

Figure 6. Classroom buildings F and G. Camera facing west. Photograph taken 1/17/2022.

Figure 7. South elevation of classroom building B. Photograph taken 1/17/2022.

Figure 8. East elevation of classroom building C. Photograph taken 1/17/2022.

Figure 9. Classroom buildings C and D and the open courtyard between them. Building E is visible to the south. Camera facing south. Photograph taken 1/17/2022.

Figure 10. North façade of the west wing of the multipurpose building. Photograph taken 1/17/2022.

Figure 11. North entrance to the multipurpose building. Photograph taken 1/17/2022.

Figure 12. Detail of one of the entrances on the north elevation of the multipurpose building. Note the horizontal aluminum bands embedded in the wall and the scoring on the buttress. Photograph taken 1/17/2022.

Figure 13. North façade of the multipurpose building. Photograph shows the scale of the buttresses and the exaggeration of the height of the building from the engaged columns and buttresses. The façade of the east elevation can also be seen on the left. Camera facing west. Photograph taken 1/17/2022.

Figure 14. North façade of the east wing of the multipurpose building. Photograph taken 1/17/2022.

Figure 15. West elevation of the multipurpose building. Photograph taken 1/17/2022.

Figure 16. East elevation of the multipurpose building. Photograph taken 1/17/2022.

Figure 17. South elevation of the multipurpose building. The central portion is sheltered by a free-standing butterfly canopy. Photograph taken 1/17/2022.

Figure 18. South façade of the west wing of the multipurpose building. Photograph taken 1/17/2022.

Figure 19. Detail of the multipurpose building fenestration and one of the doors, south elevation. Photograph taken 1/17/2022.

Figure 20. South façade of the east wing of the multipurpose building. The west façade of the gymnasium is on the right of the photograph. Camera facing northeast. Photograph taken 1/17/2022.

Figure 21. A portion of the north façade of the gymnasium showing the entrance. Photograph taken 1/17/2022.

Figure 22. The northern entrance. Camera facing southeast. Photograph taken 1/17/2022.

Figure 23. East elevation of the gymnasium with the addition. Camera facing southwest. Photograph taken 1/17/2022.

Figure 24. Southern façade of the gymnasium and additions. Camera facing northeast. Photograph taken 1/17/2022.

Figure 25. Typical "Finger-Plan" campus type. Briarwood Elementary School, Santa Clara. Built 1954-1956. GoogleEarth Pro. Accessed 5/18/2022. Image date 9/4/2020.

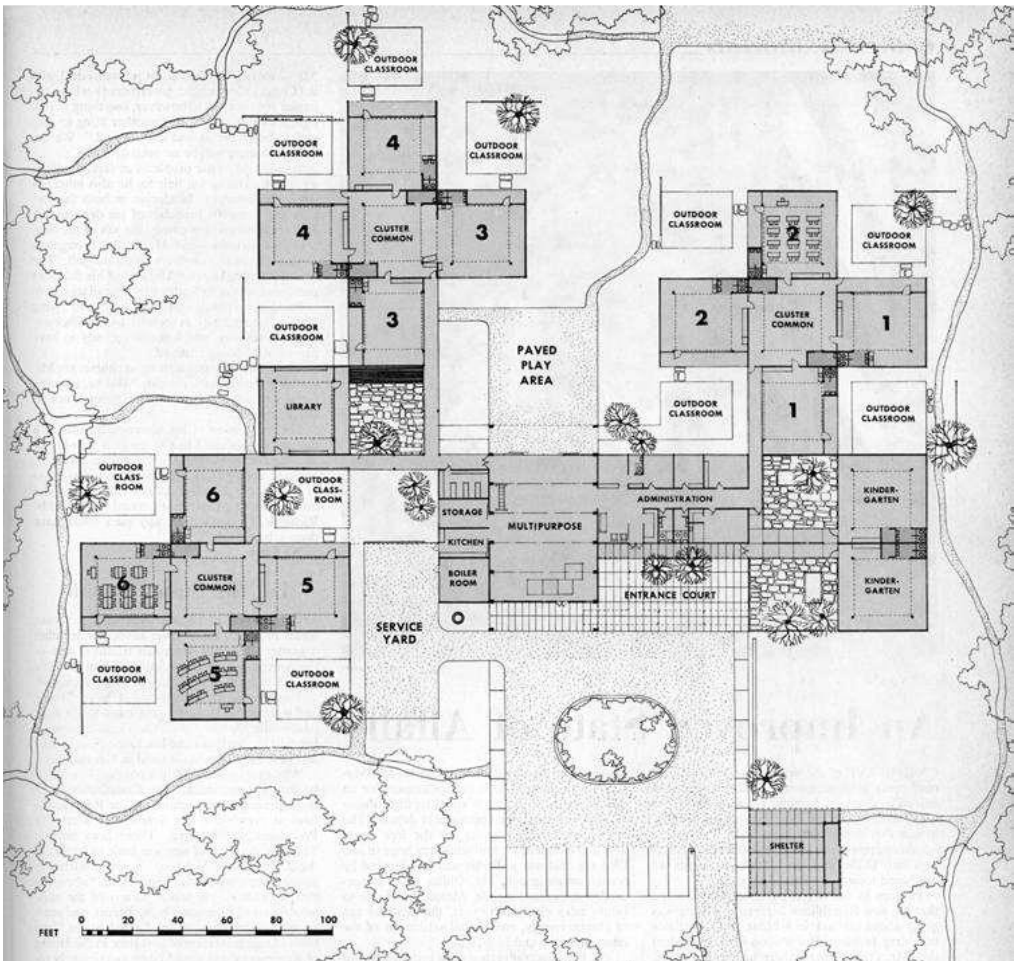


Figure 26. "Cluster-Plan" campus. The Architects Collaborative, plan of a model school, appeared in Collier's magazine, April 30, 1954. Image accessed from *Building for Learning in Postwar American Elementary Schools*, Journal of the Society of Architectural Historians, Volume 67. December 2008.

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Appendix D

Consultation Letters

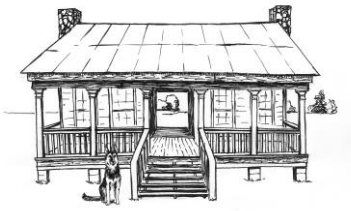
Information request and interested party consultation letters were sent via email to the following organizations:

Curator of Library, Archives and Multimedia
History San José
research@historysanjose.org

President
Santa Clara County Historical & Genealogical Society
president@scchgs.org

Museum Manager
Sunnyvale Historical Society and Heritage Park Museum
info@heritageparkmuseum.org

Librarian
San José Public Library
Martin Luther King, Jr. Library, California Room
Shane.curtin@sjlibrary.org



Dogtrot Historical Consulting

July 28, 2022

Cate Mills
Curator of Library, Archives & Multimedia
History San José
1650 Senter Road, San Jose, CA
95112

RE: Consultation for the Santa Clara Unified School District Proposed Master Plan Environmental Impact Report

Dear Ms. Mills,

The Santa Clara Unified School District (SCUSD), as lead agency under the California Environmental Quality Act (CEQA), is preparing an environmental impact report (EIR) for the proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Plan (Proposed Master Plan). Dogtrot Historical Consulting has contracted with Impact Sciences, on behalf of SCUSD, to assist in the identification of historical built resources that have the potential to be affected by activities considered in the plan. California Public Resources Code (PRC) 5020.1(j) defines a "historical resource" as including, but not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or architecturally significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California. Section 15064.5(a)(2-3) of the CEQA Guidelines require that state and local public agencies evaluate the potential for historical resources to be impacted by discretionary activities, using the criteria outlined in PRC section 5024.1.

The Proposed Master Plan includes the Patrick Henry School campus, Marian A. Peterson Middle School campus, and future use of the existing Laurelwood Elementary School. The plan's purpose is to create a long-term planning document that provides a visionary site plan to guide future expansion with enhanced student and community access to the sites. Currently funding is identified for only the new Laurelwood Elementary School and the Peterson track and field facility. As such, the historic property survey and evaluation is limited to determining the potential historical significance of the Patrick Henry and Peterson school buildings and campuses. Should these properties be determined to be historical

1070 Perkins Way
Sacramento, CA 95818
916-995-3868
meg@dogtrot-historical.com

resources eligible for the California Register of Historical Resources, and the activities proposed have the potential to adversely affect these resources, public and agency consultation will help to determine the most appropriate way to avoid or mitigate those impacts.

Patrick Henry Intermediate School campus, 1095 Dunford Way, Sunnyvale, was constructed in 1960 and 1962. Marian A. Peterson Middle School campus, 1380 Rosalia Avenue, Sunnyvale, was initially constructed between 1964 and 1969. Several buildings from Peterson's initial construction have been replaced. Research on the history of these two properties and the SCUSD is currently underway. If you or your organization have information on these two properties or would like to consult on the CRHR eligibility determination, please contact me, Meg Scantlebury, at meg@dogtrot-historical.com. I can also be reached at 916-995-3868.

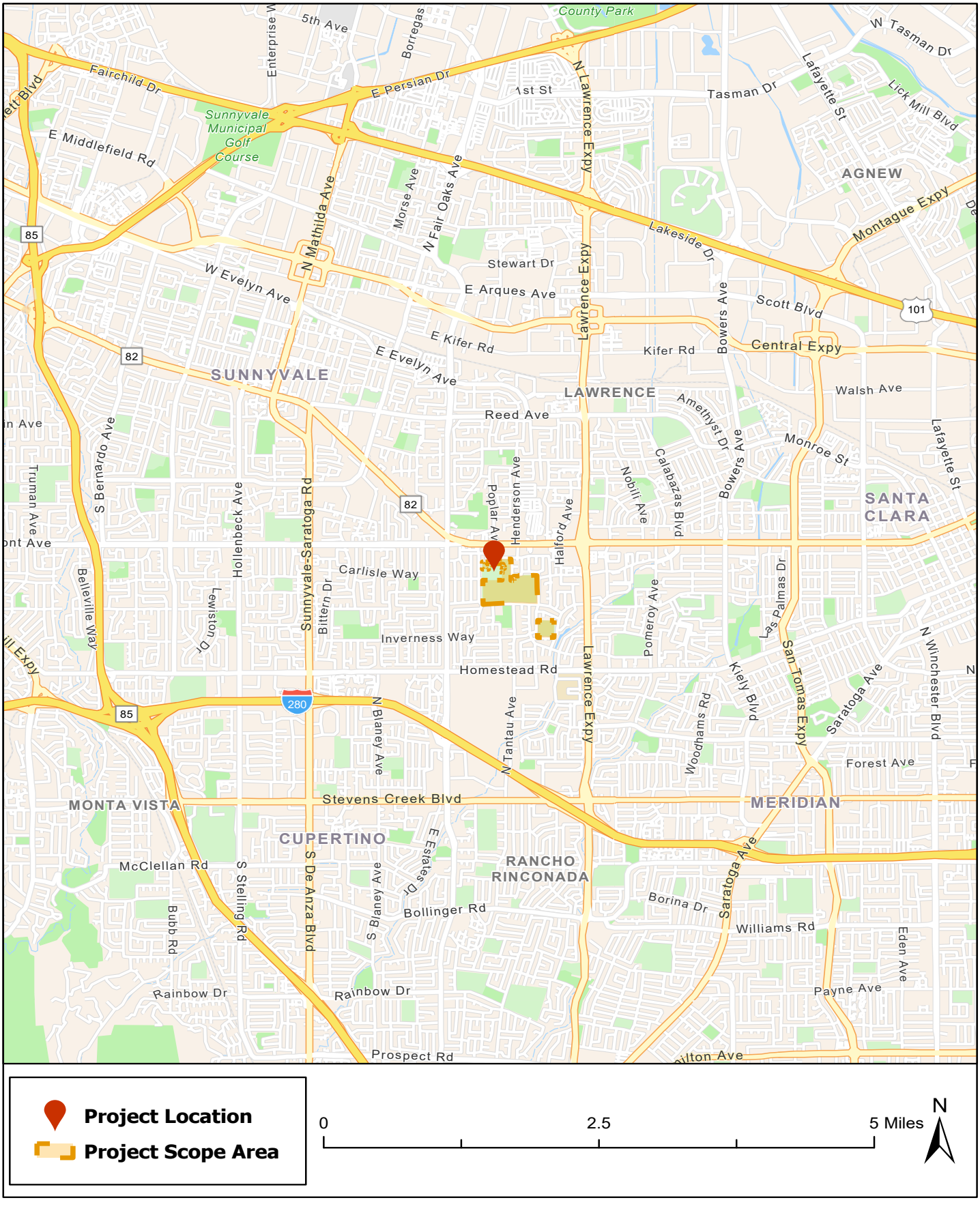
I look forward to receiving your response.

Sincerely,

Meg Scantlebury
Architectural Historian

Attachment: Project Location Map

1070 Perkins Way
Sacramento, CA 95818
916-995-3868
meg@dogtrot-historical.com



SOURCE: Esri, 2022

FIGURE **1**

IMPACT SCIENCES

Regional Context

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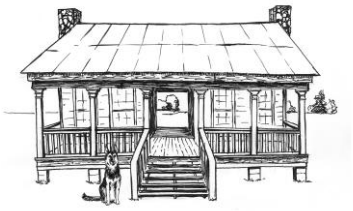

Dogtrot Historical Consulting

July 28, 2022

Nancy Moffett
President
Santa Clara County Historical & Genealogical Society
c/o Central Park Library
2635 Homestead Road
Santa Clara, CA 95051

RE: Consultation for the Santa Clara Unified School District Proposed Master Plan Environmental Impact Report

Dear Ms. Mills,

The Santa Clara Unified School District (SCUSD), as lead agency under the California Environmental Quality Act (CEQA), is preparing an environmental impact report (EIR) for the proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Plan (Proposed Master Plan). Dogtrot Historical Consulting has contracted with Impact Sciences, on behalf of SCUSD, to assist in the identification of historical built resources that have the potential to be affected by activities considered in the plan. California Public Resources Code (PRC) 5020.1(j) defines a "historical resource" as including, but not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or architecturally significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California. Section 15064.5(a)(2-3) of the CEQA Guidelines require that state and local public agencies evaluate the potential for historical resources to be impacted by discretionary activities, using the criteria outlined in PRC section 5024.1.

The Proposed Master Plan includes the Patrick Henry School campus, Marian A. Peterson Middle School campus, and future use of the existing Laurelwood Elementary School. The plan's purpose is to create a long-term planning document that provides a visionary site plan to guide future expansion with enhanced student and community access to the sites. Currently funding is identified for only the new Laurelwood Elementary School and the Peterson track and field facility. As such, the historic property

1070 Perkins Way
Sacramento, CA 95818
916-995-3868
meg@dogtrot-historical.com

survey and evaluation is limited to determining the potential historical significance of the Patrick Henry and Peterson school buildings and campuses. Should these properties be determined to be historical resources eligible for the California Register of Historical Resources, and the activities proposed have the potential to adversely affect these resources, public and agency consultation will help to determine the most appropriate way to avoid or mitigate those impacts.

Patrick Henry Intermediate School campus, 1095 Dunford Way, Sunnyvale, was constructed in 1960 and 1962. Marian A. Peterson Middle School campus, 1380 Rosalia Avenue, Sunnyvale, was initially constructed between 1964 and 1969. Several buildings from Peterson's initial construction have been replaced. Research on the history of these two properties and the SCUSD is currently underway. If you or your organization have information on these two properties or would like to consult on the CRHR eligibility determination, please contact me, Meg Scantlebury, at meg@dogtrot-historical.com. I can also be reached at 916-995-3868.

I look forward to receiving your response.

Sincerely,

Meg Scantlebury
Architectural Historian

Attachment: Project Location Map

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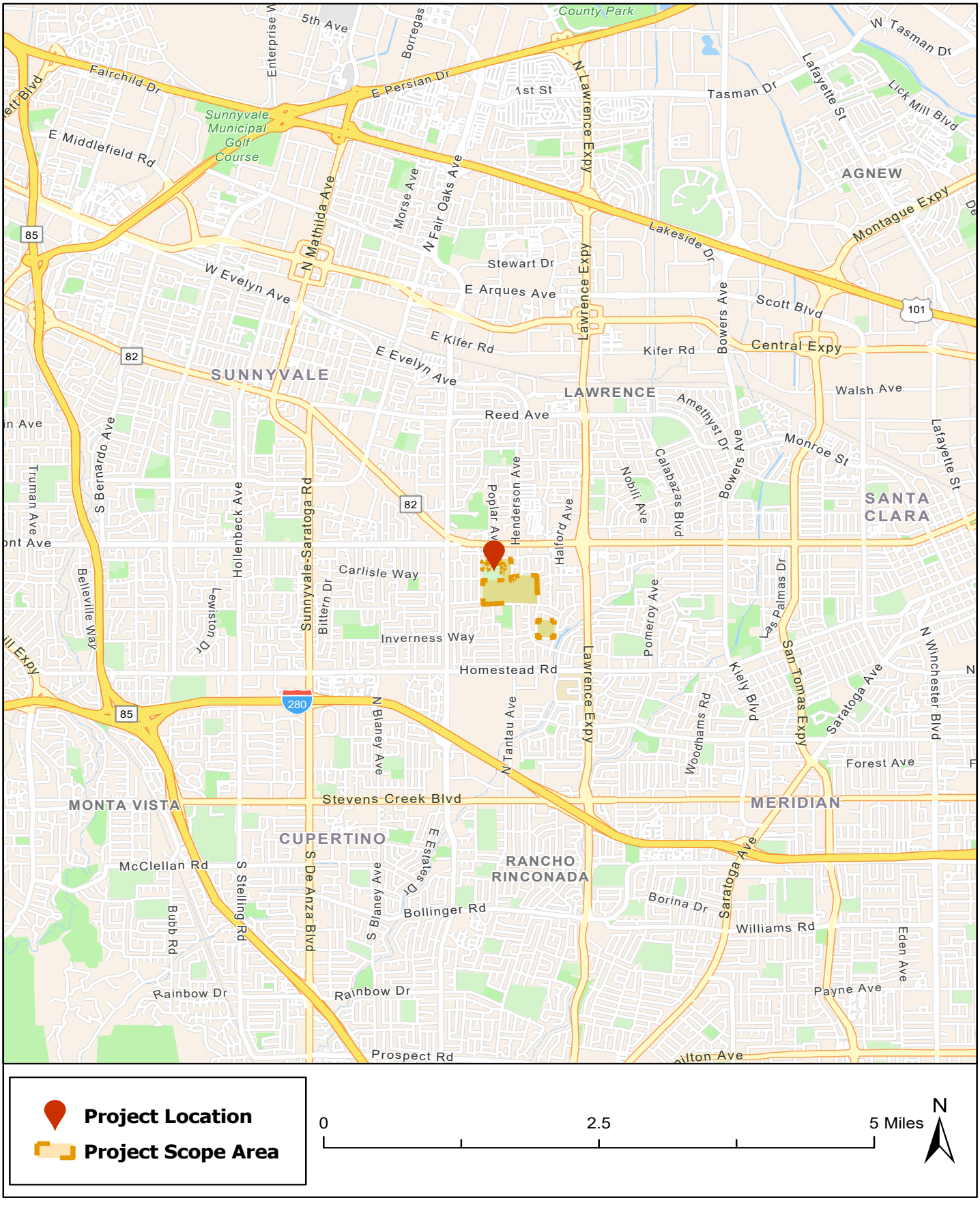
916-995-3868
meg@dogtrot-historical.com



SOURCE: Esri, 2022

FIGURE **1**

IMPACT SCIENCES

Regional Context

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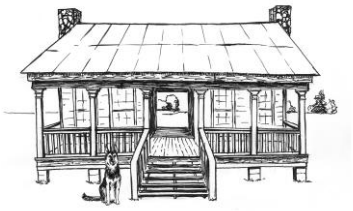

Dogtrot Historical Consulting

July 28, 2022

Shanna Gaudenti
Museum Manager
Sunnyvale Historical Society and Museum Association
570 E. Remington Drive
Santa Clara, CA 95051

RE: Consultation for the Santa Clara Unified School District Proposed Master Plan Environmental Impact Report

Dear Ms. Gaudenti,

The Santa Clara Unified School District (SCUSD), as lead agency under the California Environmental Quality Act (CEQA), is preparing an environmental impact report (EIR) for the proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Plan (Proposed Master Plan). Dogtrot Historical Consulting has contracted with Impact Sciences, on behalf of SCUSD, to assist in the identification of historical built resources that have the potential to be affected by activities considered in the plan. California Public Resources Code (PRC) 5020.1(j) defines a "historical resource" as including, but not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or architecturally significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California. Section 15064.5(a)(2-3) of the CEQA Guidelines require that state and local public agencies evaluate the potential for historical resources to be impacted by discretionary activities, using the criteria outlined in PRC section 5024.1.

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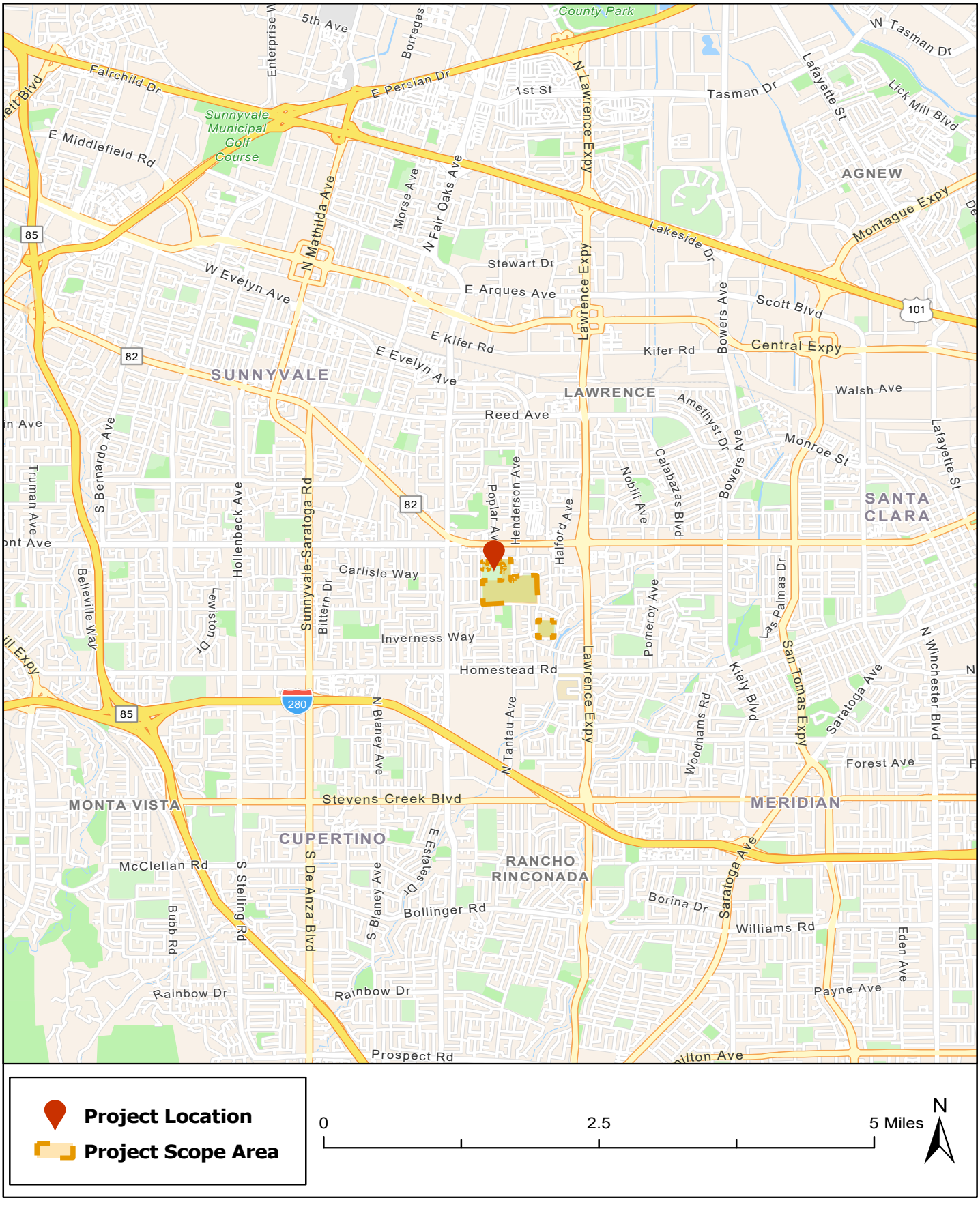

SOURCE: Esri, 2022

FIGURE **1**

IMPACT SCIENCES

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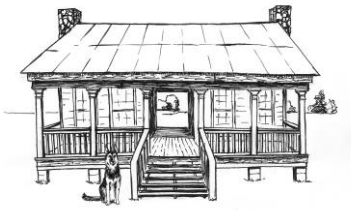

Dogtrot Historical Consulting

July 28, 2022

Shane Curtin
Librarian, California Room
Martin Luther King, Jr. Library
San Jose, CA
Shane.curtin@sjlibrary.org

RE: Consultation for the Santa Clara Unified School District Proposed Master Plan Environmental Impact Report

Dear Mr. Curtin,

The Santa Clara Unified School District (SCUSD), as lead agency under the California Environmental Quality Act (CEQA), is preparing an environmental impact report (EIR) for the proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Plan (Proposed Master Plan). Dogtrot Historical Consulting has contracted with Impact Sciences, on behalf of SCUSD, to assist in the identification of historical built resources that have the potential to be affected by activities considered in the plan. California Public Resources Code (PRC) 5020.1(j) defines a "historical resource" as including, but not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or architecturally significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California. Section 15064.5(a)(2-3) of the CEQA Guidelines require that state and local public agencies evaluate the potential for historical resources to be impacted by discretionary activities, using the criteria outlined in PRC section 5024.1.

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I look forward to receiving your response.

Sincerely,

Meg Scantlebury
Architectural Historian

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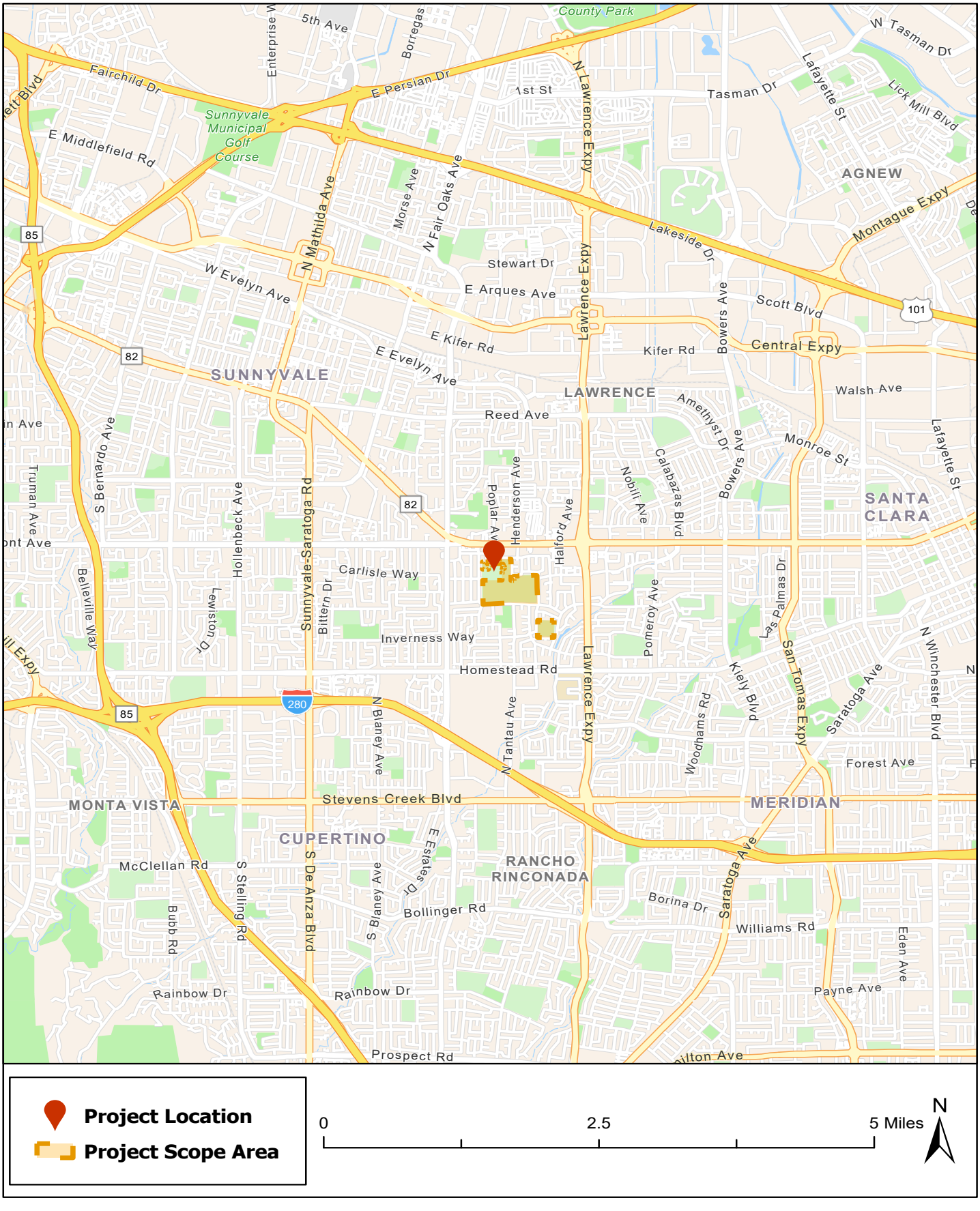


SOURCE: Esri, 2022

FIGURE **1**

IMPACT SCIENCES

Regional Context

1375.001•02/22

APPENDIX 3.5-2

Tribal Consultation Response

MUWEKMA OHLONE INDIAN TRIBE

OF THE SAN FRANCISCO BAY AREA REGION

'Innu Huššištak Makiš Mak-Muwekma *"The Road To The Future For Our People"*

July 11, 2022

TO: Mr. James Sarmento
Albion Environmental
1414 Soquel Avenue, Suite 205
Santa Cruz, California 95062
Email: jsarmento@albionenvironmental.com

Ms. Angeline Ruiz
Santa Clara Unified School District
1889 Lawrence Road,
Santa Clara, California 95051
Email: angruiz@scusd.net

FR: Charlene Nijmeh, Muwekma Tribal Charwoman
Monica V. Arellano, Muwekma Vice Chairwoman, MLD

RE: Response to AB 52 Tribal Consultation for the Santa Clara Unified School Proposed Master Plan EIR, Santa Clara, California

HorSe Tuuxi Mr. Sarmento and Ms. Ruiz,

Thank you for contacting our tribal administration with regards to the proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Project (Proposed Master Plan) located in the Cities of Sunnyvale and Santa Clara, Santa Clara County, California.

We have reviewed our site sensitivity maps and as far as we can tell there are no specifically known or recorded ancestral heritage sites within the subject parcel(s) that are situated in proximity to Calabazas Creek, which in all likelihood in the past periodically flooded and created important inland marsh resources. Furthermore, given the fact of previous construction within these two parcels, does not mean there are no extant subsurface occupational and/or mortuary-related ancestral remains within these two areas. We do know, however, that there are major and significant ancestral cemetery sites that have been recorded within the nearby region, such as the ***Kalawwasa Rummeytak*** **(Calabazas [Squash] Creek Site, CA-SCL-134)** located adjacent to, and to the north of Calabazas Creek, approximately 2 miles to the northeast of the larger subject parcel; and **CA-SCL-612**, located approximately 2 miles due east of the smaller subject parcel at the intersection of Homestead Road and Scott Blvd, east of Saratoga Creek. Also, we know that Dr. Bert Gerow in the early 1970s recovered burials on Kiefer Road, at an unrecorded site located approximately 1.6 miles north of the larger property. Given these factors, can you please share with us the results of your archival literature search conducted at the Northwest Information Center, Sonoma State University, in order for us to update our site sensitivity maps?

As you may already know that this project area falls within the aboriginal territory of ***Thámien*** Ohlone-speaking tribal groups of the greater Santa Clara Valley whose villages were missionized into Missions Santa Clara and San Jose, and therefore, have historic and biological ties to the Muwekma Tribe's history and genealogical heritage. The enrolled Muwekma members are **directly descended** from this region (specifically to the ***Thámien*** Ohlone-speaking ***Alson*** [**Santa Agueda**] **Ohlone Tribe**), and our genealogy was independently verified by the Bureau of Indian Affairs' Office of Federal Acknowledgement in 2002 as part of our petitioning efforts to regain the Tribe's previous federally acknowledge status. Furthermore, as the only documented previously Federally Recognized Ohlone tribe of the S.F. Bay Area, we, along with our over 600+ BIA documented tribal members claim this region as part of our ancestral and historic homeland.

Based upon our review of what you have sent to our Tribe, as mentioned above, there is a possibility of potential impacts to unreported and previously disturbed and undisturbed subsurface ancestral heritage features within the project parcels. As in the case of many areas within the greater Santa Clara County region, when 19th and 20th century construction projects occurred, almost never were our ancestral remains reported upon by the newspapers or formally recorded by municipalities, agencies and their representatives, and at times, by archaeologists, therefore, our knowledge-base has been obfuscated by these very same agencies, archaeologists and entities of dominant society.

Muwekma Tribe's Formal Determination of Previous Unambiguous Federal Recognition

The enrolled Muwekma members are **directly descended** from the aboriginal tribal groups whom were missionized into Missions Santa Clara, Dolores (SF), and San Jose, and our tribal member's genealogy and descendancy was independently verified by the Bureau of Indian Affairs' Office of Federal Acknowledgement in 2002 as part of our petitioning efforts to regain our Tribe's previous federally acknowledged status. Furthermore, as the only documented previously Federally Recognized Ohlone/Costanoan tribe, we, along with our over 600+ BIA documented tribal members, we claim the greater Santa Clara Valley region as part of our ancestral and historic homeland. Although, through various marginalizing mechanisms enacted by the dominant society, our ancestors found safe havens on our rancherias established in the East Bay, where it was one of the few areas, our people were able to live unmolested especially after the newly arrived intolerant American colonists.

In 1989 our Tribe sent a letter to the Branch of Acknowledgement and Research in order to have our Acknowledged status restored. After eight years in the petitioning process, and after submitting several hundred pages of historic and legal documentation, on May 24, 1996 the Bureau of Indian Affairs' Branch of Acknowledgment and Research (BAR) made a positive determination that:

> Based upon the documentation provided, and the BIA's background study on Federal acknowledgment in California between 1887 and 1933, **we have concluded on a preliminary basis that the Pleasanton or Verona Band of Alameda County was previous acknowledged between 1914 and 1927**. The band was among the groups, identified as bands, under the jurisdiction of the Indian agency at Sacramento, California. The agency dealt with the Verona Band as a group and identified it as a distinct social and political entity.

On December 8, 1999, the Muwekma Tribal Council and its legal consultants filed a lawsuit against the Interior Department/BIA – naming Secretary Bruce Babbitt and previous AS-IA Kevin Gover over the fact the Muwekma as a previously Federally recognized tribe it should not have to wait 24 or more years to complete our reaffirmation process.

In 2000 – D.C. District Court Justice Ricardo Urbina wrote in his **Introduction of his Memorandum Opinion Granting the Plaintiff's Motion to Amend the Court's Order** (July 28, 2000) and **Memorandum Order Denying the Defendants' to Alter or Amend the Court's Orders** (June 11, 2002) that:

> The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States." (Civil Case No. 99-3261 RMU D.D.C.)

Based upon the above, supported by the attached ethnohistoric and **legal** background information about our tribe's historic status that we are submitting, we make the following cultural resources management recommendations in dealing with any potential adverse effects on any and all ancestral heritage sites, features, and/or artifacts located within our aboriginal territory, and in this specific case:

1. Due to the proposed future construction as stated in the proposed Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Project within these identified parcels, and given their proximity to the Calabazas Creek and flood plain, as well as to previously recorded sites in the area, we are recommending that all subsurface excavations be monitored by a Muwekma Ohlone tribal monitor in conjunction with the contracted environmental/CRM (Albion) firm's field personnel and/or other consulting archaeologists.
2. Should any significant subsurface pre-contact ancestral Muwekma Ohlone features and/or burials be encountered, then all work shall be halted within 50 feet of the find until the feature be fully evaluated and determined to be significant under extant laws and statutes.
3. Should any ancestral human remains be discovered during the course of construction, then the Muwekma Ohlone Tribe should be contracted and involved along with the contracted environmental/CRM (Albion) firm's archaeologists in the exposure, removal, documentation, analysis, final report writing, and reburial of our ancestral remains.

In conclusion, the Muwekma Ohlone Tribal leadership expects a comprehensive monitoring program be implemented that will offset any adverse impacts to any of the Tribe's ancestral heritage cemeteries and village sites.

Furthermore, should evidence of our ancestral heritage indeed be identified during the testing and/or monitoring phases within those identified project locations, then our Tribal leadership desires to also submit an updated tribal ethnohistory to the final archaeological report that addresses the Muwekma Ohlone history and heritage, and our ties to the greater *Thámien* Ohlone-speaking tribal regions (now referred to as San Francisco Bay Costanoan Language region; Milliken et al 2009), as well as to the neighboring tribal groups that were brought under the sphere of influence of Missions, Santa Clara, San Jose, San Francisco, Pueblo de San Jose; and addressing the ensuing adverse impacts that occurred to our ancestral people through the colonial eras of Spanish and American conquests and destruction, as well as, about the Tribe's continued existence today.

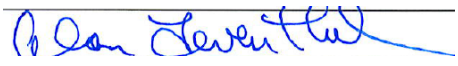
I am attaching a copy of one of the Tribe's ethnohistorical reports on the recovery of our ancestors from ***3rd Mission Santa Clara de Thámien*** (CA-SCL-30/H) along with other legal and historic documentation.

Should you have any questions, please feel free to contact me at marellano@muwekma.org, or Chairwoman Charlene Nijmeh at cnijmeh@muwekma.org (408-464-2892), or Alan Leventhal at aleventh@muwekma.org (408-761-4526).

On behalf of the Muwekma Ohlone Tribe of the San Francisco Bay Area,

Charlene Nijmeh, Chairwoman, Muwekma Ohlone Tribe, 

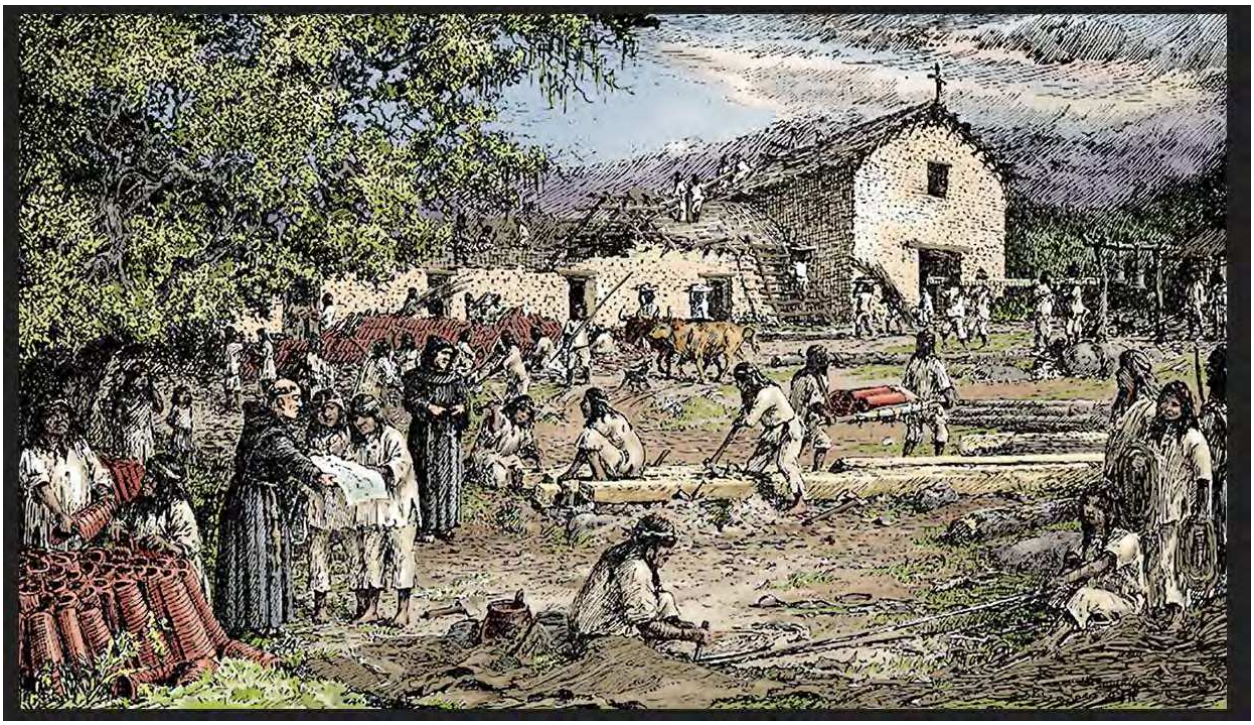
Monica V. Arellano, Vice-Chairwoman and Most Likely Descendant (MLD), Muwekma Ohlone Tribe 

Alan Leventhal, Muwekma Tribal Archaeologist and Ethnohistorian, 

Cc: Muwekma Ohlone Tribal Council
Native American Heritage Commission
CRM Files: AB 52 Tribal Consultation for the Santa Clara Unified School Proposed Master Plan EIR, Santa Clara, California Peterson Laurelwood Master Plan and the existing Laurelwood Elementary School Campus Project

Volume III

An Ethnohistory of Santa Clara Valley and Adjacent Regions; Historic Ties of the Muwekma Ohlone Tribe of the San Francisco Bay Area and Tribal Stewardship Over the Human Remains Recovered on the Prometheus Project located at 575 Benton Street and Affiliated with the 3rd Mission Santa Clara de Thámien Indian Neophyte Cemetery and Indian Rancheria: *Clareño Muwékma Ya Túnnešte Nómmo* [Where the Clareño Indians are Buried] Site CA-SCL-30/H



Report Prepared for:

Prometheus Construction
and
PaleoWest

Prepared by:
Monica V. Arellano, **Alan Leventhal**, **Sheila Guzman-Schmidt, Gloria E. Arellano Gomez, and Charlene Nijmeh**
Muwekma Ohlone Tribe of the San Francisco Bay Area

2021

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Figure No. **Page No.**

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Figure No. **Page No.**

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Figure No. **Page No.**

List of Maps

Acknowledgements

The Muwekma Tribal Council wants to thank Prometheus who funded the Burial and Archaeological Data Recovery Program for the recovery of the Muwekma Ohlone Tribe's ancestral remains from the **3rd Mission Santa Clara Indian Neophyte Rancheria** area adjacent to the ***Clareño Muwékma Ya Túnnešte Nómmo*** **[Where the Clareño Indians are Buried] Site CA-SCL-30/H** on this construction project.

We want to thank the archaeological field personnel from PaleoWest for working closely with Muwekma tribal members assigned to monitor this project and for supporting the publication of our ethnohistory as a companion volume to the final archaeological report.

We want to offer acknowledgement and thanks to the Elders of the Muwekma Ohlone Tribe, members of the Tribe's Language Committee **Monica V. Arellano, Sheila Guzman Schmidt** and **Gloria E. Arellano Gomez** who originally named this site in the Tribe's language, and also enrolled tribal members for their support on this as well as other projects addressing their ancestral heritage sites.

We also want to acknowledge the tribal co-authors Vice Chairwoman and MLD **Monica V. Arellano,** Tribal Councilwoman **Sheila Guzman Schmidt,** Tribal Councilwoman **Gloria E. Arellano Gomez,** Chairwoman **Charlene Nijmeh,** and Tribal Ethnohistorian **Alan Leventhal** who contributed to the ethnohistory chapter.

It is our hope that this report provides historical, cultural, and educational information about our Tribe's history and heritage and dispels many of the myths about our people. It is in the spirit of the preservation and dissemination of the Tribe's long history, struggle, and heritage that this report has been written. Aho!

Reburial Honoring Ceremony

A **Reburial Honoring Ceremony** will be conducted on-site of our ancestral infant remains within this heritage cemetery site. Plans for a Reburial Honoring Ceremony will be held by the Muwekma Ohlone tribal leadership by the time this volume has been published.

Dedication of this Report

Dedication of this Report

This report is dedicated to and in honor of the passing of
1) Muwekma Tribal Elder Albert Galvan, and;
2) The unknown Infant who was buried at *Clareño Muwékma Ya Túnnešte Nómmo* Site (CA-SCL-30/H);
3) The approximately 8,000 Ancestral Ohlone, Yokuts, Plains Miwok and other tribal relations who are buried at the two Indian Neophyte cemeteries associated with the 3rd and 4th Santa Clara de Thámien Missions, and throughout California.

In almost all of the previous published Muwekma Tribal archaeological reports, we honor one of the Elders or tribal members who have passed away. A decision was made to honor Tribal Elder and former Tribal Councilman **Albert Benjamin Galvan** who had passed away on November 20, 2020 at the age of 60 (**Figure TOC-1)**.

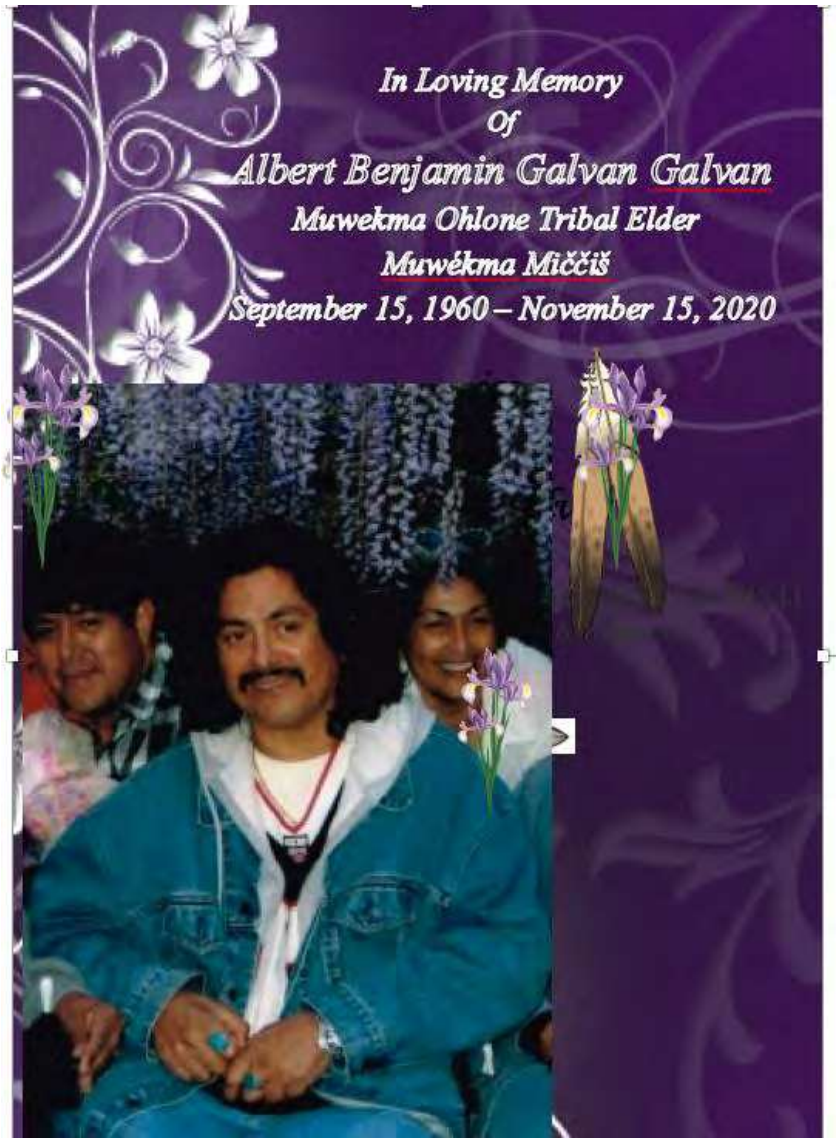


Figure TOC 1: Albert Benjamin Galvan

On November 15, 2020**,** Albert Benjamin Galvan**,** Muwekma Ohlone Tribal Elder - *Muwékma Miččiš*, and former Tribal Councilman passed away peacefully in Hayward, California surrounded by his family. Albert was 60 years old.

Born September, 15 1960 in Oakland, California to Muwekma Ohlone parents Jenny Mora and Ben Michael Galvan. He is survived by his sons Chad, Adam and Alex, grandchildren Gabriel, Phoenix, Silas and Raiden, by his many loving family members and friends, Muwekma Tribal relations, and will be greatly missed. Albert grew up in the San Leandro area within his families' ancestral homeland of the Jalquin/Yrgin Ohlone Tribe.

From 1968-1976, Albert worked with his father Ben and Uncle Phil on the maintenance and care of the **Ohlone Indian Cemetery**. He attended Pacific and Lincoln High Schools from 1974 -1977. Albert also worked on the recovery of pre-contact and historic artifacts during the restoration of Mission San Jose. During the 1980s Albert worked at Star Catering, at the Oakland Airport Flexigraphics, in Union City, and the San Leandro Glass Company.

During the 1990s he worked on several ancestral heritage sites through the Muwekma Ohlone Tribe's Cultural Resource Management business, and participated in several celebratory Tribal events such as the 1992 Cinco de Mayo Parade in San Francisco with the Muwekma Ohlone float which won first prize, 4th of July American's Festival, Guadalupe Park in San Jose, and others.

His mother Jenny Mora was a middle daughter of Muwekma Elder Mary Muñoz and Jose Mora. His aunts and uncles include Joseph Mora, Lupe Mora Massiatt, Margaret Mora, Alice Mora, Frances Mora Smith, Virginia Mora Massiet, Louis E. Medina, Edward Medina and Jesse Ramos. Albert's father was Muwekma Elder Michael F. Galvan (Ben) who in the early 1950s lived in the Oakland area and later in their ancestral homeland of San Leandro. Albert's four siblings are Theresa A. Laudani, Katherine J. Galvan, Ramona Robins, and Michael F. Galvan Jr.

During the early 1960s, Albert's parents and the other Muwekma Ohlone families gathered and worked under the principal efforts of his grandmother Dolores Marine Alvarez Piscopo Galvan and his aunt, Dottie Galvan Lameira, in order to protect the Ohlone Indian Cemetery in Fremont from destruction. His mother's mom, Mary Muñoz Mora, and her extended family attended various meetings and barbecues that were held near Mission San Jose. They all worked cleaning up and weeding the Ohlone Indian cemetery. Albert's mother was also listed as a Member of the "Ohlone Chapter, American Indian Historical Society."

By 1984, the Muwekma Ohlone Tribal leadership formed a formal Tribal government in order to articulate with Federal, State and local agencies about legal and cultural issues confronting the disenfranchised Muwekma Ohlone Tribal community. A few years later, Albert Galvan joined the Muwekma Tribal Council. As the Tribal Council developed policies and political strategies to deal with legal issues, Albert's family had been introduced to the effort by the Tribe to obtain Federal Recognition from the U.S. Government. Albert's cousins JoAnn Brose and Richard Massiatt are presently serving as Tribal Council members, while his aunt Lupe Mora Massiatt was a member of the Muwekma Ohlone Elders Council.

By the time the Tribe sent in its letter to petition the Federal Government for Acknowledgement in 1989, Albert's family got involved with both archaeological issues and the Tribe's efforts to regain its former Federal Recognition. Albert and his family participated as a Tribal members at Tribal Council meetings; Tribal sponsored events and educational workshops. During the Tribe's response to the Bureau of Indian Affair's (BIA) negative proposed finding, Albert's grandmother along with several of his aunts provided critical oral histories that helped reverse some of the negative findings and disprove some of the negative assumptions that the BIA had previously determined about the continuous existence of the Muwekma Ohlone Tribe

Albert Benjamin Galvan, following in the footsteps of his mother Jenny Mora Galvan, of his grandmother Mary Muñoz Mora Archuleta, continued to serve as a cultural bridge between two worlds – the post-transitional world of the neglected Federally Recognized Verona Band of Alameda County – to the incipient Ohlone Indian Tribe, Inc. to which his father Benjamin Michael Galvan became the president/chairman from 1965 to 1971 – and the revitalized and organized Muwekma Ohlone Tribe to which he was indeed a Tribal Elder of distinction. Soft spoken, loving and caring father, he fully knew and understood his Ohlone Indian identity from both sides of his family.

During the 1990s Albert gave various educational and cultural-related presentations at Coyote Hills East Bay Region Park, at the Blackhawk Museum in Danville, San Jose State University, at several public schools, and other educational institutions. Even though Albert struggled with his MS condition, this did not stop him from working on several of his Tribe's ancestral heritage sites, such as *Kaphan Húunikma* (The Three Wolves Site) CA-SCL-732 and CA-SCL-548 in San Jose. He also served as a Most Likely Descendant for the Tribe, and co-authored several articles on the Tribe's history including: The Muwekma Ohlone Indians of the San Francisco Bay, and The Cultural Revitalization and Federal Acknowledgment of Three Costanoan Tribes: A View from the Families of Harrington's Linguistic and Cultural Consultants.

Figure TOC 2: Albert, his Mother Jenny Galvan (right) and Aunt Dottie Lameira (left) at CA-SCL-732 *Kaphan Húunikma* (The Three Wolves Site)

Albert and his family lived to see a potentially bright future for all of the Muwekma Ohlone families. He also saw history being made when the title of the Ohlone Indian Cemetery in Fremont passed from the Catholic Church to the American Indian Historical Society, and then to his father's family whom made up the Board of Directors of Ohlone Indian Tribe, Inc.

Albert lived to see the Muwekma obtain a formal determination by the BIA of previous unambiguous Federal Recognition, a successful lawsuit against the Department of the Interior, and a positive determination that 100% of the enrolled membership are directly descended from members of the previously recognized **Verona Band of Alameda County**, which was also determined to be a historic tribe. Albert also lived to see U.S. District Judge, Ricardo Urbina formal opinion that:

> The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States.

Albert represented the seventh generation of a line of Ohlone Indians whose lives were disrupted by the expanding Hispanic Empire and the American Conquest of California. All of Albert's maternal and paternal Ohlone ancestors came into the Mission San Jose. Albert's lineage is descended from his great-great-great-great grandmother Efrena Quennatole who was born in 1797 and was of the Carquin Ohlone/Napian Coast Miwok Tribe of the North S. F. Bay and his great-great-great-great grandfather, Liberato Culpecse who was born in 1787, and baptized at Mission Dolores, and who was of the Jalquin/Saclan Tribes of the East Bay. Albert was further descended from Liberato's parents Faustino Poylemja who was born around 1764 from the Saclan Tribe (Walnut Creek/Concord/Lafayette area) and Obdulia Jobocme who was born around 1766 from the Jalquin Tribe from the greater San Lorenzo/San Leandro/Hayward region.

Efrena and Liberato's daughter was Maria Efrena Yakilamne. She was born in 1832 and was baptized at Mission San Jose, and buried at the Ohlone Cemetery. Maria Efrena had married Panfilo Yakilamne (Ilamne Tribe), and their daughter was Avelina Cornates. Avelina was born in 1863 and was baptized in 1864 at Mission San Jose, and she died in 1904 and buried at the Ohlone Indian Cemetery. Avelina had married Rafael Marine, and one of their daughters was Dolores Marine who was born in 1890, and another daughter, Victoria Marine who was born on May 9, 1897 on the Pleasanton Rancheria, and both were baptized at Mission San Jose. Victoria died and was buried at the Ohlone Cemetery in 1922 at the young age of 25. Victoria had married John Muñoz and they had two surviving children, Albert's grandmother, Mary who was born in 1910 and his great-aunt, Flora who was born in 1917.

Albert's Ohlone Tribal ancestors and families have been waiting since 1906 for their **rights** to be recognized and honored by the United States Government. Albert had been waiting his entire 60-year life span for full Federal rights to be accorded to his Tribe. In his own quiet way, Albert had made major contributions towards the reaffirmation of the Muwekma Ohlone Tribe, and he leaves that legacy for the future generations of the Tribe.

Albert passed away within his Tribe's ethnohistoric Jalquin Ohlone ancestral territory. Go with peace and join your Muwekma relations and ancestors and know that you made this world a better place for your Tribe.

'Úṯaspu Méene Albert - Mak 'Aččo, Mak Suyya, Mak Miččiš. Hemmen Heyešmin Meene Hišmet. Good Bye Albert - **Our Friend, Our Relation, Our Elder. May the Great Creator Bless You.**

Sunuuniy makiš 'em-suyya tušwiikne, makiš kaayi mak-hinnan makkam rokét 'ayye 'em-suyyakma.
Makkam kam mak sai-tak.

We are sorry your family member has passed, our hearts are very sad for you and your family.
You all are in our prayers. *A*ho!

Albert Galvan's Muwekma Ohlone Ancestral Lineage Through his Mother

Mission San Jose and Mission Dolores Records

Faustino Poylemja -------**Obdulia Jobocme**
(b. ca. 1764/Chaclanes/Saclanes) | (b. ca. 1766/Jalquin)

Liberato Culpecse ------ **Efrena Quennatole**
(b. 1787/Jalquin/Saclan) | (b. 1797/Karkin/Jarquin/Napian)

Maria Efrena -- **Ponfilo Yakilamne**
(b. 1832) | (baptized 1835?, Ilamne Tribe)

Avelina (Cornates) Marine -- Rafael Marine
(b. 1863/d. 1904 buried at the Ohlone Cemetery) |

Victoria Marine -- John Munoz
(b. 5-9-1897/d. 11-27-1922) |

Mary Munoz -- Jose Mora
(b. 8-28-1910/d. 11-23-2002) |

Jenny Mora -- **Michael F. Galvan**
(b. 2-8-1936/d. 2-26-2014) |

Albert B. Galvan
(b. 9-15.1960/ d. 11-15-20

California Indians
Ohlone Indian (East Bay)
Plains Miwok (Sacramento Delta)

Albert Galvan's Muwekma Ohlone Ancestral Lineage Through his Father

Mission San Jose and Mission Dolores Records

Faustino Poylemja ---------- **Obdulia Jobocme**
(b. ca. 1764/Chaclanes/Saclanes) | (b. ca. 1766/Jalquin)

Liberato Culpecse ----- **Efrena Quennatole**
(b. 1787/Jalquin/Saclan) | (b. 1797/Karkin/Jarquin/Napian)

Maria Efrena -- **Ponfilo Yakilamne**
(b. 1832) | (baptized 1835?, Ilamne Tribe)

Avelina (Cornates) Marine -- Rafael Marine
(b. 1863/d. 10-4-1904 buried at the Ohlone Cemetery) |

Dolores Marine – Felipe Galvan
(b. 3-1-1890/d. 11-27-1982) |

Ben Michael Galvan
(b. 6-27-1923/d. 4-13-1987)

Albert B. Galvan
(b. 9-15.1960/ d. 11-15-20)

Figure TOC 3: Albert and his Family

Circa. May 1965 – "Listing of Ohlone Contacts and Ohlone Members

Henry A. Alvarez
Stella T. Alvarez
Thomas M. Alvarez
Carol Ann Alvarez

Alfonso A. Juarez
Pauline Juarez
Peter D. Juarez
James A. Juarez
Richard H. Juarez
C. M. Juarez (Sullivan)
Rose Mary M. Juarez

Ruben Arellano
Ofelia F. Arellano
Ruben F. Arellano
(Cruz/Cline)
Arthur Steven Arellano

Sammy Arellano

Albert M. Arellano
Frank A. Arellano
Albert Tomas Arellano
Edwina E. Arellano
Gregory Arellano
Rebecca M. Arellano
Timothy Arellano
Frances Marie Arellano
Oscar Jaurequi

Arnold Sanchez
Edward Sanchez

Enos M. Sanchez
Angie C. Sanchez
Arthur R. Sanchez

Ishmael Arellano
Juanita Arellano

Albert's Father

Michael Galvan
Mary Archuleta
Philip Galvan

Jose Rodriguez
Concha Rodriguez
Henry Rodriguez
Susanne Rodriguez
Caroline Rodriguez

Margaret (Sanchez) Martinez
Ricardo Martinez
Robert Martinez
Natividad Martinez

Dolores (Sanchez) Martinez
Candelario Martinez
Manuel Martinez
Rose Mary (Cambra) Martinez
Mary Louise Martinez

Octavia W. Lopez
Julia Lopez
William James Lopez
Sylvia Lopez
Geraldine Lopez
Mrs. Emily Dewey (Marshall sister)
Jackie Dewey

Lydia Arellano Jaurequi
Pamela Jaurequi
Kathleen Jaurequi

Joel Arellano
Helen Arellano
Judy Arellano
Donna Arellano
Evelyn Arellano
Joel Arellano, Jr.

Virginia Arellano

Albert's Mother

Jenny Galvan
Dolores D. Galvan
Dolores M. Galvan

Figure TOC-4: Albert's Parents Listed as Ohlone Members 1965

Figure TOC-5: Ohlone Dancer/Warrior Mission Dolores (Kotzebue Expedition 1816)

The authors would also like to dedicate this report to all of the Ohlone/Costanoan men, women and children, **especially to the infant** recovered during the Prometheus project and reburied at ***Clareño Muwékma Ya Túnnešte Nómmo*** **Site (CA-SCL-30/H),** and those who had perished as a result of the impacts of the European and American colonization of Native American homelands, the majority of whom have remained faceless and nameless. No monument yet stands to honor Indigenous tribes who have resided over the millennia throughout the San Francisco Bay Area or the rest of California, and who paid the ultimate price as a result of the genocide of our people.

We also want to dedicate this report to the memory of those Muwekma families who had survived into the 20th Century and became members of the **Federally Recognized Verona Band of Alameda County**. Without them we would not have life today for our children and continue the struggle to obtain justice for our people.

The authors would also like to dedicate this report to our Muwekma ancestors who were recovered from their sacred ancestral burial grounds at ***Thámien Rúmmeytak*** **[Guadalupe River Site], (CA-SCL-128),** as well as all of the thousands of Ohlone/Costanoan men, women, children and their tribal relations who had perished at the missions and homelands as a result of the impacts of the European and American colonial invasion, the majority of whom have remained nameless and faceless. No monument yet stands to honor the multitude of the Indigenous tribes who have resided over the millennia throughout California and who paid the ultimate price as a result of the genocide of our people.

We also want to dedicate this report to the memory of those Muwekma families who had survived into the 20th Century and became members of the Federally Recognized **Verona Band of Alameda County**. Without them we would not have life for our children today as we continue the struggle to obtain justice for our people. **Aho!**

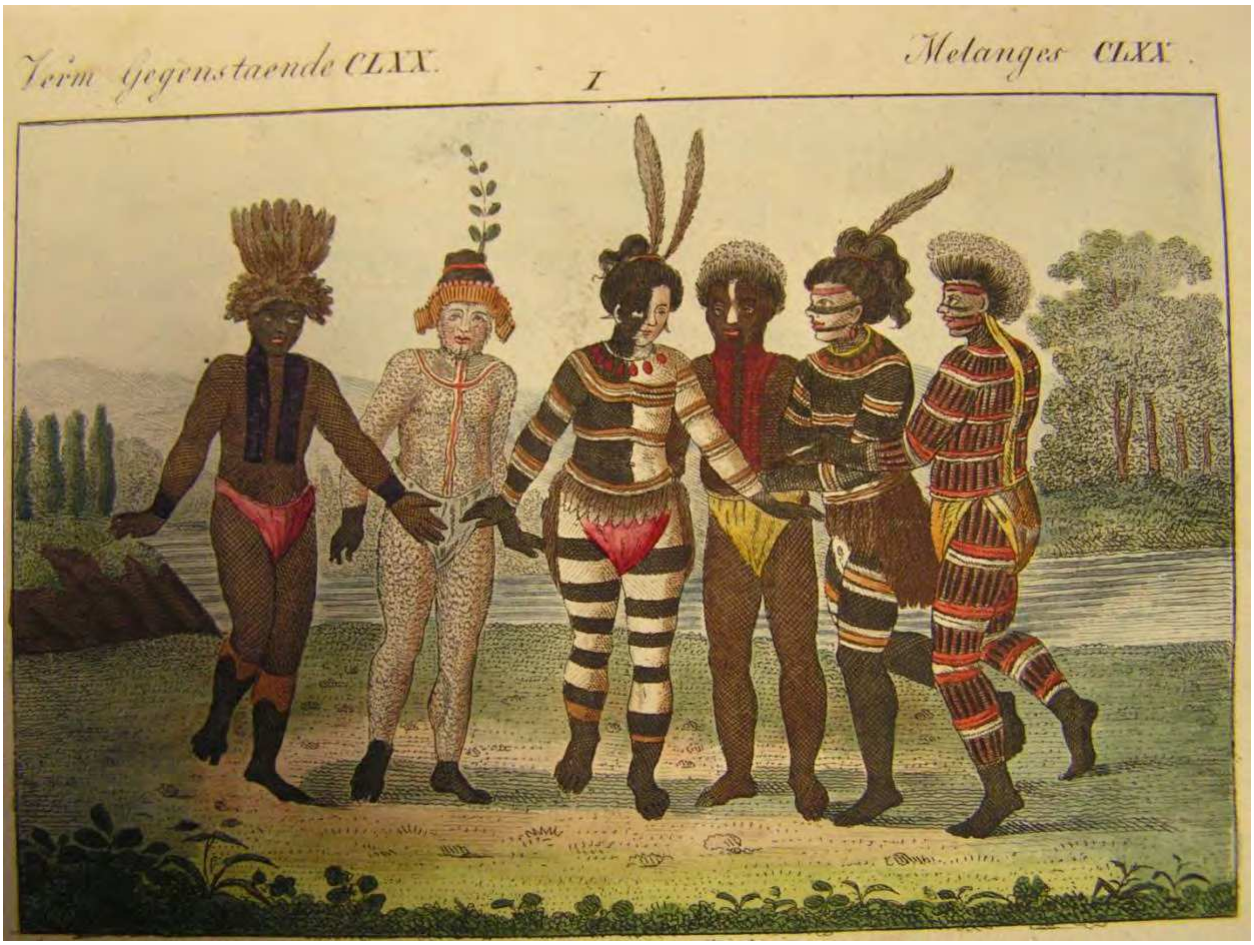


Figure TOC-6: Ohlone Dancers at Mission San Jose in 1806 (Langsdorff Expedition)

Volume III:
An Ethnohistory of Santa Clara Valley and Adjacent Regions; Historic Ties of the Muwekma Ohlone Tribe of the San Francisco Bay Area and Tribal Stewardship Over the Human Remains Recovered on the Prometheus Project located at 575 Benton Street and affiliated with the 3rd Mission Santa Clara de Thámien Indian Neophyte Cemetery and Indian Rancheria: *Clareño Muwékma Ya Túnnešte Nómmo* [Where the Clareño Indians are Buried] Site CA-SCL-30/H.

by
Monica V. Arellano, Alan Leventhal, Charlene Nijmeh, Shelia Guzman Schmidt, and Gloria Arellano Gomez

Introduction

As presented elsewhere in this report the Muwekma Ohlone Tribe of the San Francisco Bay Area had oversight and monitored the burial recovery/mitigation program conducted on this portion of the land surrounding the **3rd Mission Santa Clara de Thámien,** its adjacent **Indian Neophyte Cemetery,** and **Indian Rancheria Site CA-SCL-30/H** which is located at 575 Benton Street, City of Santa Clara, Santa Clara County, California. The Muwekma Ohlone Tribe has over the past 41 years continuously exercised its stewardship over the Tribe's ancestral heritage sites and human remains discovered within our aboriginal territory. The Tribe's leadership and members were involved in the recovery program and contributed this chapter to the final report on this ancestral cemetery site which the Tribe, in 2011, had renamed the cemetery portion of site CA-SCL-30/H ***Clareño Muwékma Ya Túnnešte Nómmo*** **[Where the Clareño Indians are Buried]** in the Tribe's aboriginal Chochenyo/Thámien (San Francisco Bay) Ohlone language (Milliken et al. 2019; Leventhal et al. 2011).

The Muwekma Ohlone Tribal leadership has over the past 41 years continuously exercised its stewardship over and renaming the Tribe's ancestral heritage village and cemetery sites, as well as some of the ancestral human remains discovered within our aboriginal ethnohistoric territory. This practice follows Muwekma Tribal tradition by which the Tribal leadership has over these past decades renamed some of our ancestral village and cemetery sites as part of a process to reclaim the Tribe's ancestral homeland with our Heritage Sites. This renaming tradition has formally occurred at many other South, East and West Bay pre-contact ancestral Muwekma Ohlone cemetery sites.

The Renaming of the 3rd Mission Santa Clara de Thámien (CA-SCL-30/H) Locality by the Muwekma Ohlone Tribe in Our Native Chochenyo/Thámien (San Francisco Bay) Ohlone Language

Previously, back in 2011, as the designated **Most Likely Descendant Tribal Group**, a decision was made by the Muwekma Ohlone Tribal leadership and the Tribe's Language Committee (Monica V. Arellano, Sheila Guzman-Schmidt and Gloria E. Arellano-Gomez) to honor their deceased ancestors by renaming the site with a place name in the Tribe's aboriginal Ohlone Chochenyo/Thámien language.

This renaming tradition has formally occurred at a multitude of Bay Area pre-contact ancestral Muwekma Ohlone cemetery sites as part of a reclamation process of the Tribe's Ancestral Heritage sites which include:

1) CA-SCL-732 located to the south/southeast of CA-SCL-128 along Coyote Creek. CA-SCL-732 was renamed ***Kaphan Umux*** **(Three Wolves) Site** [and recently corrected to ***Kaphan Húunikma***] in 1995 (Cambra et al. 1996; Hammett 1996);
2) CA-SCL-38 located in Milpitas located to the north of the site consisting of a very large mortuary earth mound that was renamed the ***Yukisma*** **("at the Oaks") Site** in 1996 (Bellifemine 1997);
3) CA-SCL-867 which is located in the Willow Glen area of San Jose approximately 3.75 miles to the south/southeast of **CA-SCL-30/H,** was renamed the ***Ríipin Waréeptak*** **Site** which means **"(in the) Willows Area**" in 2006 (Leventhal, et. al 2007);
4) CA-SCL-869 located approximately 6 miles to the south of **CA-SCL-128** was renamed ***Katwáš Ketneyma Waréeptak*** **(The Four Matriarchs) Site** in 2009 (Leventhal et al. 2009);
5) In 2010 the **CA-SCL-287/CA-SMA-263** site complex was renamed ***Yuki Kutsuimi Šaatoš Inūxw*** **[Sand Hill Road] Sites** located approximately 23 miles to the northwest on Stanford University lands (Leventhal et. al 2010);
6) At **CA-SCL-894** (redesignated as **CA-SCL-948** by the Northwest Information Center on August 17, 2016) entailed the recovery of a single male burial from the California Fox Theatre located approximately 1000 feet east of **CA-SCL-128** on South Market Street in downtown San Jose was renamed ***Tupiun Táareštak*** meaning **Place of the Fox Man Site** (Leventhal et. al 2012a);
7) The Muwekma Language Committee renamed a site excavated by San Jose State University in 1964 as part of a finalized archaeological report on site **CA-SCL-895/Blauer Ranch**. The language committee decided to rename this site after the original Mexican land grant **Yerba Buena y Socayre** which translates into the Muwekma language as ***Kiriṭ-smin 'ayye Sokőte Tápporikmatka*** **[Place of Yerba Buena and Laurel Trees Site]** (McDaniel et al. 2012);
8) CA-SCR-12 on the Santa Cruz coast was excavated by San Jose State University in 1986 and was renamed by the Tribe to ***Satos Rini Rumaytak*** meaning **At the Hill Above the River Site** (Starek 2014);
9) The Tribe's language committee renamed site **CA-SCL-125** which includes the **Santa Teresa Spring** at the Bernal-Gulnac-Joice Ranch County Park to ***'Arma 'Ayttakiš Rúmmey-tak*** meaning **(Place of the Spirit Woman Spring Site)** (Mabie 2015);
10) The Tribe had renamed **CA-SCL-128 (the Holiday Inn Site)** located in downtown San Jose in the ***Chochenyo/Thámien*** language to ***Thámien Rúmmeytak*** meaning **Place of the *Thámien* [(Guadalupe) River Site (CA-SCL-128/Hyatt Place Hotel)]** and is currently in the process of finalizing an extension of that ancestral cemetery (Leventhal et al 2015, Report in progress 2021);
11) Beginning in 2014, the monitoring of the construction on the expansion of the **Ronald McDonald House** on Stanford University campus, uncovered, three discrete **Early Bay Period** ancestral Muwekma burials, along with several isolated human remains, as well as non-burial features at site **CA-SCL-609**. The Tribe decided to honor the important service offered by the Ronald McDonald House to families by renaming the site ***Horše 'Iššéete Ruwwatka*** meaning **Place of the Good Health House Site** (Leventhal et al. 2016);
12) In September 2016, while working on a new Rapid Bus Transit platform along with water lines to a fire hydrant located on the eastside of San Jose, **Santa Clara Valley Transportation Authority** construction crews encountered an ancestral Muwekma burial at a site designated as **CA-SCL-950**. During the course of skeletal analysis, the Tribe's language committee named the site ***Cashrishmini 'Awweš 'Írek 'Innutka*** meaning **Yellow Salt (Alum) Rock Road Site** in the Tribe's language (Leventhal et al. 2017a);

13) **CA-SCL-851 (MST Site)** our Tribe was involved in the recovery project that involved ten ancestral Muwekma Ohlone burials which was conducted on behalf of Public Storage on Tully Road in San Jose in 2000. Public Storage failed to allow the Tribe to continue to monitor the rest of the construction project, as well as, did not provide funding for any analysis, final report, or reburial of those remains. The Muwekma leadership decided to rename this site ***'Utthin Širkeewis Tcitca 'Irekmatka*** meaning **Two Black Obsidian Rocks Site** (Leventhal et al. 2020);
14) In December 2017 several areas in a housing development located south of the Eastridge Mall in east San Jose yielded evidence of over 20 ancestral Muwekma Ohlone ancestral burials. As a result, during the course of the recovery of the ancestral remains, the Muwekma language committee named this site: ***Yakmuy 'Ooyákma-tka*** meaning **Place of the East Ridge Site (CA-SCL-215)** (Analysis and report in progress);
15) In the East Bay near the Tribe's historic Sunol and Alisal Rancherias our Tribe had renamed an ancestral cemetery site ***'Ayttakiš 'Éeṯe Hiramwiš Trépam-tak*** **[Place of Woman Sleeping Under the Pipe Site], CA-ALA-677/H** (Leventhal et al. 2017b);
16) Our Tribal Language Committee had named a major **Late Period** ancestral Muwekma Ohlone cemetery on an on-going project located at the **Sunol Water Temple** (**CA-ALA-565)** to ***Sii Túupentak*** meaning **Place of the Water Round House Site** (Byrd et al 2020)**;**
17) CA-ALA-704 located between the Town of Sunol and the Sunol Water Temple (site CA-ALA-565/H), was concurrently named ***Rummey Ta Kuccuwiš Tiprectak*** meaning **Place of the Stream of the Lagoon Site** by the Muwekma Ohlone Tribal leadership and Language Committee in our ***Chochenyo/Thámien*** language [see brief discussion about the background of the origins of the place name ***Thámien***, and the use of the Muwekma Ohlone ***Chochenyo/Thámien*** language in translating names for these sites as part of the Tribe's language revitalization and ancestral heritage site reclamation below]. The ***Rummey Ta Kuccuwiš Tiprectak*** locality is an ancestral Muwekma Ohlone heritage site that was occupied from 2437 to 177 calibrated years before present based on 60 radiocarbon dates. It is also the location of the mid-nineteenth-century Mexican Period Suñol Adobe (Byrd et al. 2020);
18) The Muwekma Tribal leadership recently working with East Bay Regional Park District (EBRPD) on the Garms Staging Area Project, Pleasanton Ridge, in the City of Pleasanton located north of the Tribe's historic Alisal Rancheria, has named site **CA-ALA-706**, ***Garms Ṯarin Warep-tak*** meaning the **Garms Grassland Site** (project and report in progress Shoup et al. Archaeological/ Historical Consultants);
19) Since 1982, the Muwekma Tribal leadership and Language Committee has worked with the East Bay Regional Park District administration and staff in naming parks, trails and places. In January of 2015, the Muwekma Language Committee proposed translating **Coyote Hills** into the Chochenyo language and presented the staff with ***Máyyan Šáatošikma.*** Later that year, EBRPD staff reached out to the Tribe and requested a translation for potential translated signage for 12 trails in various parks. In 2018, EBRPD staff requested a translation for a sign at Coyote Hill EBRPD. The Muwekma Language Committee recommended ***'Akkoyṯ Mak Muwékma Hiswi Warep Máyyan Šáatošikma*** meaning **Welcome to Muwekma's Ancestral Homeland Coyote Hills.** However, the EBRPD staff suggested otherwise, and limited the signage to read ***'Akkoyṯ Máyyan Šáatošikma*** meaning W**elcome to Coyote Hills;**
20) During the late 1950s through the 1960s, Stanford University and San Jose State University ran a series of summer excavations at **CA-ALA-329**, the Ryan Mound located at Coyote Hills, East Bay Region Park District. Over 550 burials were recovered along with several having the distinctive N Series "Banjo/Big Head" Kuksu pendants. As a result of the presence of so many of

the abalone pendants, the Muwekma Language Committee renamed this ancestral heritage mortuary mound ***Mánni Muwékma Kúksú Hóowok Yatiš Túnnešte-tka*** which translates as **Place Where the People of the Kúksú (Bighead) Pendants are Buried Site** (Leventhal 1993).
21) Working with Stanford University's administration on the Senior Class housing project, due to the Early Bay temporal period of the AMS dated burials, the Muwekma Tribal leadership renamed **CA-SCL-623,** ***Mánni Miččiyma Muwékma Yatiš Túnnešte-tka*** which means **Place Where the Ancient People are Buried Site** (Morley and Cambra 2000; Leventhal et al. in progress).
22) More recently, the Tribal leadership recovered an adult male ancestor at a site located in southwest San Jose along the upper reaches of the Guadalupe River. The individual was discovered laying on a bed of blue mussel shells, and a result, the Tribe's Language committee, named the site ***Táareš Tunnešte 'Ullaaštak Chitcomini Šaro-tka*** meaning **Place of the Man Buried on a Bed of Blue Mussel Shells Site CA-SCL-967** (Leventhal et al. 2020)**;**

As mentioned above, because of the discovery in 2011 of at least thirteen individuals whom were buried on top of each other and who had died very close in time to each other (1781-1818), the Muwekma Tribal Language Committee decided upon the name ***Clareño Muwékma Ya Túnnešte Nómmo*** **[Where the Clareño Indians are Buried] Site**. Therefore, CA-SCL-30/H will at times be referred interchangeably as ***Clareño Muwékma Ya Túnnešte Nómmo*** **Site** in following chapter**.**

In this ethnographic section, we provide an ethnohistoric overview of the **Santa Clara Valley** and surrounding geographic regions. This section also explores the complex historic interrelationships between the aboriginal Ohlone tribal groups from the greater San Francisco Bay region at the time of contact and the ensuing impacts resulting from the advent of the expanding late 18th century Hispanic Empire; the establishment of the Catholic Church and the effects of Missionization; the mid-19th century American conquest of California; the Gold Rush and theft of California Indian lands; the effects of the emergent State of California; and the Federal Recognition of California Indian Tribes, and specifically the **Verona Band of Alameda County** [the Bureau of Indian Affairs' (BIA) formal designation of the Muwekma Tribe from 1906-1927; see details below]. These topics are introduced and explored though discussions involving contact-period regional and ethnohistorical tribal ties to the present-day Muwekma Ohlone Tribe and by presenting aspects of the survival strategies and continual cultural and political identity of this historic tribe.

Ethnographic, Ethnohistoric and Ethnogeographic Setting

The ***Clareño Muwékma Ya Túnnešte Nómmo*** **[Where the Clareño Indians are Buried] Site** represents a post-contact ancestral Muwekma Ohlone heritage cemetery associated with the Third or Murguiá Mission Santa Clara (1781-1818). Formally designated with the State's trinomial system as CA-SCL-30/H, the site is located within the contact-period ethnogeographic territory of the **Our Mother Santa Clara Tribal Group/District** which was part of the larger defined **Thámien Ohlone-speaking** linguistic territory of the greater Santa Clara Valley. The ***Clareño Muwékma Ya Túnnešte Nómmo*** **Site** is also located within the larger catchment of the adjacent contact-period **Thámien** Ohlone-speaking village districts that includes **Our Patron San Francisco, San Juan Bautista** and **San Carlos/Matalan** Tribal Groups/Districts which were so named by the Mission Santa Clara priests (see C. King 1994, Milliken 1991, 1995, 2004; Hylkema1995, 2007 [CA-SCL-690 Tamien Station].

Milliken in his major study on the reconstructed ethnogeography of the San Francisco Bay region writes that "Fathers Murguiá and Peña of Mission Santa Clara noted in the title page of their Libro de Bautismos (Book of Baptisms), and again in a letter dated 1777, that the mission was built in an area known as **Tamien**" (Milliken 1995:256). Elsewhere, Milliken states that "Our Patron San Francisco, probably placed on the Guadalupe River near Our Mother Santa Clara and Santa Ysabel, east of present-day downtown Santa Clara" was part of the core villages that comprised the Tamien tribal district (Milliken in Hylkema 2007:52). He also suggested that "the villages of San Jose Cupertino, Our Mother Santa Clara, and Our Patron San Francisco formed a single tribelet that controlled most of the Guadalupe River system, and therefore, the core of the Santa Clara Valley" (ibid:54).

Although Winter, Milliken (and others) have spelled Tamien without the letter "h," historian Arthur Spearman, however, in his 1963 publication titled The Five Franciscan Churches of Mission Santa Clara, provided the following historic excerpt from a letter from Father Peña to Father Serra:

> Letter to Padre Presidente Junipero Serra
> From Padre Tomas de la Peña
> **Mission Santa Clara de Thámien**
>
> December 31, 1777
>
> The site of the Mission, which in the language of the natives is called ***Thámien***, is a plain stretching more than three leagues in every direction, pleasant to behold, with much land for irrigation of crops, and extensive areas for raising cattle. There is abundance of Ash, Alders. White Poplar, and Red, Willow, Laurel, black and live Oaks. At the distance of four leagues to the west is much redwood, so-called, from which we have already obtained some boards. A large population of Gentiles surrounds the site, such that we judge there are more than forty rancherias within a radius of five leagues, of a people that we may call Tares, since this is the name they give to the men (Spearman 1963:15). [Cited from Hylkema 2007: iii].

Furthermore, Milliken (1991) noted the following observation by the Spanish priests whom had established the **First Mission Santa Clara** in 1777 located 1 mile to the north of the **Prometheus Project** and the **3rd Mission Santa Clara**, its neophyte cemetery and rancheria (**Map 1**):

> "Mission Santa Clara in Thámien Lands
>
> … The Santa Clara Mission settlement lay at the northeastern edge of the **Thámien** tribal district, very near to lands of three other tribes. Three large villages of over 120 inhabitants each lay within four-mile radius of the Santa Clara Mission site. The native names of those villages are not known. The missionaries at Mission Santa Clara gave each of them a Spanish designation; San Francisco Solano village of the Alson tribe a mile or two downstream at the mouth of the Guadalupe River, Santa Ysabel village of a different, unnamed tribe east of San Francisco Solano on the lower Coyote River, and San Joseph Cupertino village of the Thámien tribe in the oak grove about three miles to the southwest of the mission site.

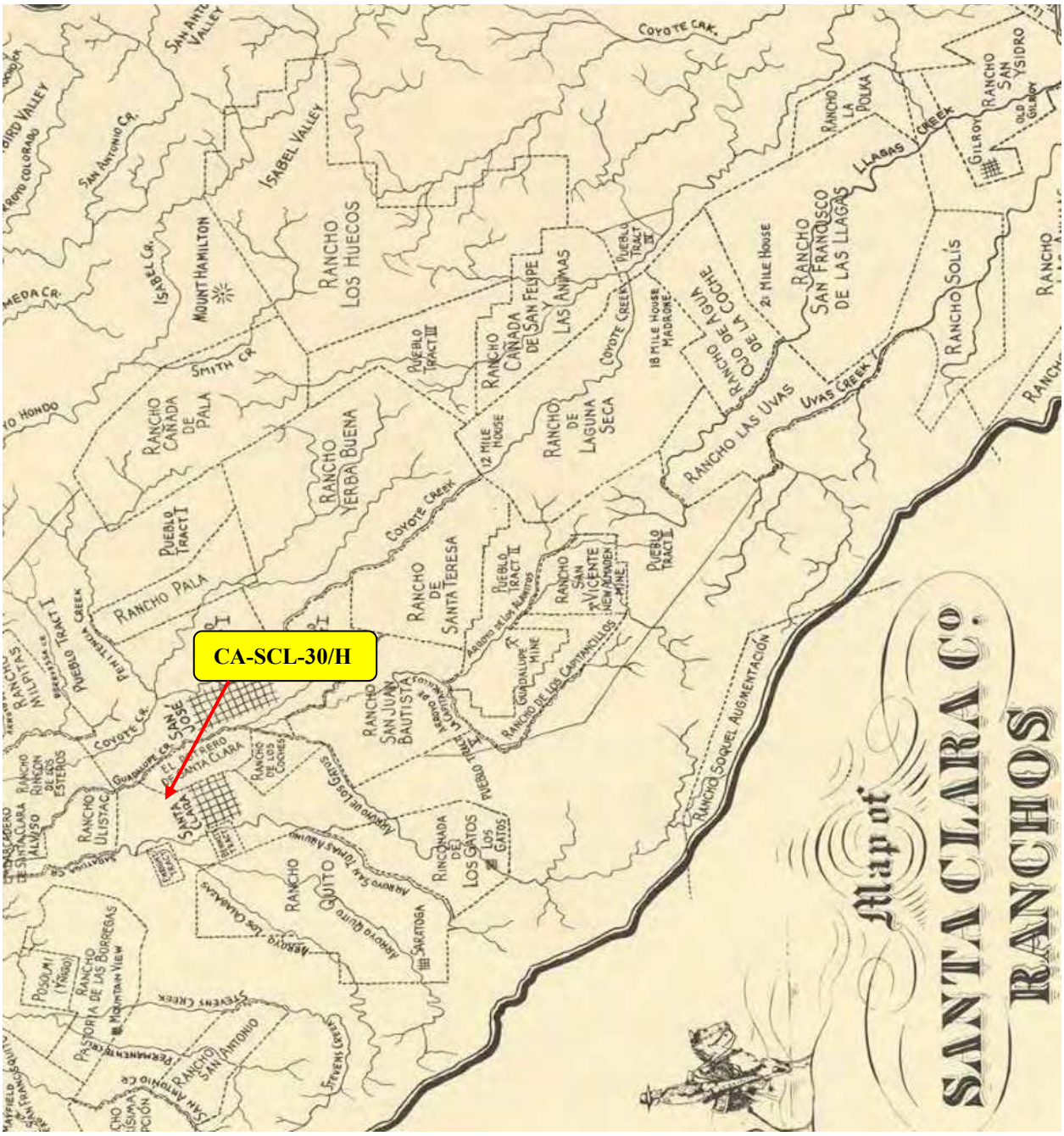
> Still nearer to the site were two tiny hamlets, **Our Mother Santa Clara** within a few hundred yards of the first mission site, and **Our Patron San Francisco** perhaps another mile upstream on the Guadalupe River" (Milliken 1991:116-117).

It is interesting to note that, on June 9, 1907, the San Jose Mercury News published an article titled **Marking the County's Historic Sites** noted the following about the founding of Mission Santa Clara:

> The mission Santa Clara, California, or **Mission Santa Clara de Thamien**, as it came to be known, most probably from a prior Indian name, "Thamien," was founded on January 12, 1777, by the Franciscan father, Tomas de le Pena, acting under the direction of the pioneer of Christianity in these parts, the illustrious Father Junipero Serra.

Milliken (2007) stated that "**Our Mother Santa Clara**, which was probably west of the Guadalupe River within a few yards of one of the Mission Santa Clara sites" was part of the core villages that comprised the Tamien tribal district (Milliken in Hylkema 2007:52). He also suggested that "the villages of **San Jose Cupertino**, **Our Mother Santa Clara**, and **Our Patron San Francisco** formed a single tribelet that controlled most of the Guadalupe River system, and therefore, the core of the Santa Clara Valley" (ibid). Some of these intermarried tribal groups, village communities, and districts also included the: **San Francisco Solano**, **San Juan Bautista**, and **San Carlos** or **Matalan Tribal Group/Districts**, and the bilingual **Alson** Thámien/Chochenyo Ohlone-speaking tribal group from the Alviso/Milpitas area.

The **San Juan Bautista** Tribal District located to the south of Mission Santa Clara, (not to be confused with the **Mission San Juan Bautista** established about 20 years later in 1797 which is located further south within **Mutsun** Costanoan-speaking territory in San Benito County), was identified by the Mission Santa Clara priests as being located to the south of the mission that included a portion of the Coyote Creek Corridor. To the west were the Puichon Ohlone (San Bernardino), and directly across on the eastern side of the bayshore, were the northern Santa Clara Valley **Thámien/Chochenyo Alson,** and the East Bay Chochenyo Ohlone-speaking ***Tuibun*** Ohlone tribal groups from the Santa Agueda District.



Map 1: Rancho Map of Santa Clara County (Arbuckle with Rambo 1968)

Previous Ethnohistoric Studies

Meaningful Contact Period ethnohistoric studies focusing on the demographic and geopolitical distribution of the different Ohlone/Costanoan tribal groups that came under the influence of Mission Santa Clara in 1777 were conducted by Chester King in the 1970s (1974, 1977, 1978a, 1978b, and 1994) and continued by Milliken (1983, 1991, 1995, 2004 and 2007 [in Hylkema 2004, 2007]); Cambra et al. 1996; Leventhal et al. 2011, 2020), Panich 2020, and others.

These studies helped lay the foundation for reconstructing the geopolitical and linguistic boundaries of those tribal groups and districts that were brought into each Bay Area mission, as well as providing information about the transformation and the cultural and political adaptation and responses of those surviving Ohlone/Costanoan tribal groups who adjusted to the disruption caused by the expanding Hispanic colonial empire, the impacts of missionization and ensuing spread of diseases and malnutrition.

The Santa Clara Valley and adjacent areas supported fairly large populations of Native peoples for upwards to over a period spanning the past 10,000 years [e.g., CA-SCR-177 (Cartier ed. 1993) and CA-SCL-178 (Hildebrandt 1983)]. During the Early to Late Periods (past 4000 years) this is evidenced by the prevalence of large pre-contact cemeteries within the San Francisco Bay region [see reports on Emeryville (CA-ALA-309); Ellis Landing (CA-CCO-295); Santa Rita Village (CA-ALA-413) [Wiberg 1984]; Patterson Mound (CA-ALA-328) [Davis and Treganza 1959]; Ryan Mound (CA-ALA-329) [Leventhal 1993]; CA-SCL-732, Three Wolves Site (Cambra et. al 1996); CA-SCL-38 (Bellifemine 1997); CA-SCL-690 Tamien Station (Hylkema 2007); CA-SCL-674 Rubino Site (Grady et al. 1999); University Village (CA-SMA-77) [Gerow 1968], CA-SCL-6W Lick Mill Boulevard (Cartier and others]; CA-SCL-128 (Winter 1978a and 1978b; Leventhal et al. 2015); CA-ALA-565/H and CA-ALA-704 (Byrd et al. 2020a, 2020b); and others].

Furthermore, based upon the analysis of grave-associated wealth and mortuary patterns derived from central California cemetery sites and specifically at **CA-SCL-128 *Thámien Rúmmeytak***, **CA-SCL-690 Tamien Station**, **CA-SCL-38 *Yukisma* Mound, CA-ALA-329 *Mánni Muwékma Kúksú Hóowok Yatiš Túnnešte-tka*,** and more recently at **CA-ALA-565 *Sii Túupentak***, **CA-CCO-138 Hotchkiss Mound (Delta Region)** (Atchley 1994), **Castlewood Country Club, Pleasanton**, **CA-ALA-309 Emeryville Mound, Tomales Bay (Marin County), Sacramento Valley,** and sites from the **Napa Region** (Gifford 1947**),** it can be postulated that the greater San Jose area appears to have been located within the southwestern most region of a Late Period religious complex, ceremonial, economic interaction sphere that employed the use of **Kuksu "Big Head"** (or "N series") abalone shell effigy pendants. These Kuksu effigy pendants first appeared sometime around the Middle Late Transition Period (MLT) 1000 A.D./Phase IA - Late Period (ca. 1100 A.D.), and presumably represents inclusion in the greater geographically-area-wide ceremonial interaction sphere that included the **Kuksu** religion that was practiced by a multitude of North–Central California Indian tribal groups (Kroeber 1925, Loeb 1932, 1933, Winter 1978a; Leventhal 1993; Hedges 2019).

These Kuksu practicing tribal groups ranged from the Hokan-speaking Salinans to the south (southern Monterey County); to the San Francisco Bay Penutian-speaking Ohlone and interior Bay Miwok and North Valley Yokuts tribal groups (Contra Costa and San Joaquin Counties), to the Penutian-speaking Coast Miwok and Patwin (Marin, Napa, Yolo, and Colusa Counties); to the Penutian-speaking Plains Miwoks and Konkow-Nisenan (Maidu-speaking groups) in the Sacramento and Central Valley foothills of the Sierra Nevada; to the Hokan-speaking Pomoan tribal groups (Sonoma, Lake and Mendocino Counties), Yukian-speaking Yukian tribal groups (northern Mendocino), and the Athabascan-speaking Cahto tribe located to the north of Fort Bragg. (see Loeb 1932, 1933; Du Bois 1939; Gifford 1947:20; Bennyhoff 1977:50; Winter 1978a; Bean and Vane 1978; Leventhal 1993:230-236; Hylkema 2007).

The preliminary data derived from comparatively similar mortuary patterning and associated grave assemblages identified from Late Period cemetery sites factored in conjunction with the similarities of tribal personal name-endings derived from the mission records such as "***-tole***" and variations of "***-mayen***" for females (of high status or chief) and "***-cse***" (or a variant thereof e.g., "***csi***") for males (also of high status or chief/capitan) that are found amongst the different linguistic groups within the same macro-geographical area as the **Big Head/Kuksu** pendants, supports the contention that the South and East Bay regions had very strong cultural ties, via trade, intermarriage, ceremonial interaction and shared religious belief systems as well as other cultural influences with the Central Valley interior, including the Sacramento and San Joaquin Delta (Stockton) regions (Lillard, Heizer and Fenenga 1939; Heizer and Fenenga 1939; Gifford 1947; Bennyhoff 1977; (CA-ALA-329) Leventhal 1993; Milliken 1995; Jones and Klar 2007; also see CA-SCL-128, Holiday Inn Site, Winter 1978a; (CA-SCL-38) Bellifemine 1997; (CA-SCL-128) Leventhal et al. 2015; (CA-ALA-565/H) Byrd et al., 2020; Hedges 2019). Gifford while discussing chieftanship notes that:

> Among the Southern Maidu, such a woman chief bore the title of *mayen* (cf. Miwok *mayengo*, Costanoan *mayin*). The Southern Maidu female chiefs who bore this title were either wives or daughters of chiefs. Such a chiefess functioned when the chief died without a male heir. She gave ceremonies like a male chief (Gifford 1927:250).

The evidence of a far-flung ceremonial and economic interaction sphere further suggests that the Thámien Ohlone-speaking tribal groups, including the **Our Mother Santa Clara** tribal/village/district catchment region and their further neighbors (i.e., **San Antonio** tribal district), were significantly involved within this larger religious and ceremonial interaction network that was partially influenced through mechanisms of trade, economic, military and marriage alliances with those tribal groups located to the east and north (Delta region) of the South Bay region – a region that at the time of Spanish contact had already cross-cut several major linguistic boundaries (including San Francisco Bay Ohlone, North Valley Yokut, Patwin, Coast Miwok, Bay Miwok and Plains Miwok) as well.

Limited detailed ethnohistoric (Contact Period) information about the aboriginal lifeways of the different San Francisco Bay Ohlonean-speaking tribal groups who resided within this mega-sphere of socio-cultural interaction, tends to be restricted to the various accounts written by early Spanish explorers, missionaries, secular and military authorities, and visiting European travelers. Other historical records written after the cataclysmic impact caused by missionization, colonialism and the ensuing American conquest continuing through the 20th century includes research conducted by more formally trained ethnographers, ethnohistorians, linguists as well as by other chroniclers to the greater Bay Area.

Early Spanish Expeditions to the San Francisco Bay Region

According to ethnohistoric research conducted by Milliken and others, an expedition led by **Gaspar de Portola** and Father **Juan Crespi** had traveled north along the California coast north of Monterey and on October 23, 1769 had encountered the **Quiroste** Ohlone village of **Mitenne** near *Punta de Año Nuevo* (New Year's Point). The **Quiroste** were located on the Pacific coast between Bean Hollow Creek and *Año Nuevo* and approximately 25 miles to the southwest of the **Puichon** tribal group from the Palo Alto and San Francisquito Creek region of the West Bay. Milliken citing Crespi [1769] noted that:

> The friendly Quirostes showered the Spaniards with foods and gifts. They brought two or three bags of the (wild) tobacco they use, and our people took all they wanted of it. One (old) heathen man came up smoking upon a very large (and well carven) Indian pipe made of hard stone. The Indians almost all carry tall red-colored staffs, some with many feathers; they presented four of these to Sergeant Don Francisco Ortega (Milliken 2007:87)

Sometime around mid-November [1769] the Portola expedition traveling south along the east side of the San Francisco peninsula eventually entered the territories of the Ssalsons, Lamchins and Puichons. The Lamchin Ohlone-speaking tribal group was the immediate northern neighbor of the Puichon and their territory spanned from Belmont to Redwood City. The Ssalson tribal group was located north of the Lamchin. Milliken indicated that the expedition "camped in the Palo Alto area" (2007:88).

In 1770 Captain Commander **Pedro Fages**, was perhaps, the first Spanish exploration to travel through the northern part of the **San Juan Bautista** and **San Carlos/*Matalan*** tribal districts (Thámien Ohlone-speaking territory) within the greater Santa Clara Valley. The **San Juan Bautista** and **San Carlos** (aka **Matalan**) Thámien Ohlone-speaking groups occupied the areas of south San Jose south to Morgan Hill. Milliken commented on and noted in his 1991 doctoral study on the San Francisco Bay tribal groups such as the "**Matalans** and **Thámiens"** (whom were also intermarried with the neighboring **San Antonio** rancherias) at the time of contact (1770-1810) in the following historical account derived from Captain Fages' diary:

> The **Matalans** and **Thamiens** of Santa Clara Valley watched a small Spanish party pass north through their lands in November of 1770. The party, under Pedro Fages, continued north along the east shore of San Francisco Bay (until) (sic) it reached a plain opposite the Golden Gate (presently North Oakland). ... Fages wrote of only one encounter:
>
> > 'Up close to the lake we saw many friendly good-humored heathens, to whom we made a present of some strings of beads, and they responded with feathers and geese stuffed with grass, which they avail themselves of to take countless numbers of these birds [Fages 1770 in Bolton 1911].'
>
> The goose hunters were Tuibuns or Alsons at a lake on the Fremont Plain just south of Alameda Creek (Milliken 1991:78).

The Chochenyo Ohlone-speaking **Tuibuns** or the Thámien Ohlone-speaking **Alson**s of the northeastern Santa Clara Valley whom Fages observed at the "lake on the Fremont Plain just south of Alameda Creek" were from the **Santa Agueda/Estero District** and were missionized into the Santa Clara Mission "during the 1780s and 1790s" (Milliken 1995:258).

Captain Commander Fages apparently at a later date again passed through the Thámien-Ohlone-speaking region in 1772 and explored the interior of the East Bay (see Crespi in Bolton 1926:336; Hylkema 1995). However, it was not until 1774 that the first intensive exploration of the Santa Clara Valley region occurred, which was led by Captain Fernando Rivera y Moncada who was accompanied by Fray (Father) Francisco Palóu. Writing of this expedition, Milliken made note of one of Rivera y Moncada's accounts:

> The next Spanish expedition into the Bay Area, in the late fall of 1774, came for the purpose of scouting locations for a possible mission and military base on the San Francisco Peninsula. ... Near the town of Coyote, probably Matalan territory, a group of local people were startled, but not terrorized.
>
> > 'We passed a patch of willows and cottonwoods, and now found running water in the creek. Here all at once there were heathens standing with their weapons in hand [though] they made no show of them. In people such as these, who have no knowledge of others and live like wild beasts at bay, it is a second nature to snatch them up (Rivera y Moncada [1774] quoted in Milliken 1991:80-81).'

Milliken commenting on the Fernando Rivera *y* Moncada expedition going through the **Puicho***n* Ohlone territory of the West Bay noted that:

> The new Spanish party intended to document the nature of San Francisco Bay and scout a location for a Spanish presidio and mission near its mouth. Passing through the Santa Clara Valley, the party arrived among the **Puichons** on San Francisquito Creek on November 28, 1774, where it was warmly received. Here, Father Palou commented about similarities between the local language and that of the natives at Mission Carmel (Milliken 2007:89)

Presumably near the same location as noted above by Rivera y Moncada, on November 26, 1774, Father Palóu independently recorded that the expedition had descended the north slope of what was probably Tulare Hill (south San Jose) and approached a stretch of trees where they found pools of water. Palóu wrote:

> We descended the hill and approached the trees, which we found to mark a river which had water only in pools. At about half-past twelve we halted near it, close to some live oaks with which the plain of the river (was) covered. Near the camping place we found vestiges of a village which showed evidences of having been recently moved (Bolton 1926:261).

Bolton while translating Palóu 's dairy also attempted to plot the location of where the party halted: "This camp was made soon after crossing the hills north of Coyote" (ibid). Conceivably, this location possibly represents the first written record near the location of the ***Kaphan Húunikma*** (Three Wolves Site: CA-SCL-732) locality because that site is located approximately one mile north of Tulare Hill (see Cambra et al 1996). The Three Wolves Site as mentioned above is located approximately 12 miles to the southeast of the first Mission Santa Clara (near where the San Jose International Airport is located) and the Prometheus Project.

Three years later, Mission Santa Clara was established on January 12, 1777. Collectively, with the establishment of Mission Dolores in 1776, Mission Santa Clara in 1777, and later Mission San Jose in 1797, located east of the Fremont Plain, the various Ohlonean tribal groups within the San Francisco Bay region began to experience the cataclysmic disintegration from this newly imposed colonial system of indenture and peonage. Milliken in one of his studies offered the following explanation of the circumstances under which the Ohlone tribal people agreed to enter into these missions:

> Through the ritual of baptism some young people from the Yelamu tribe began to exchange their independence for a subservient role of "neophytes" at Mission San Francisco in the spring of 1777. During the summer and fall local **Alson** and **Thamien** teenagers joined the Mission Santa Clara community. Francisco Palóu wrote that the first converts came to the missions out of interest in cloth, trinkets, and Spanish foods.
>
> > 'They can be conquered first only by their interest in being fed and clothed, and afterwards they gradually acquire knowledge of what is spiritually good and evil. If the missionaries had nothing to give them, they could not be won over [Palóu 1786].

Most scholars have agreed with Palóu's assessment that a material impulse brought the first Indian converts to be baptized at the mission. Sherburne Cook [1943:73] wrote that "ceremony, music, processions" and "inducements of clothing, shelter, and food" attracted large numbers of converts over the first twenty years. Malcolm Margolin [1989:28] pointed out "the dazzle of Spanish goods" (Milliken 1991:109-110).

Panich in his 2020 study titled Narratives of Persistence: Indigenous Negotiations of Colonialism in Alta and Baja California contributes to this discussion that:

> The Spanish clearly abhorred Indigenous beliefs, but they typically approached their initial face-to-face interactions with native people very differently. These were facilitated by gift exchanges that served as potent social lubricants among people of widely divergent worldviews. Like Native Californians throughout the region, Ohlone people often presented the Spanish with gifts of food and gladly received foreign objects in return – particularly glass beads and cloth that the Spanish purposefully brought along for just these kinds of occasions. There is little doubt the Spanish viewed these exchanges through an ethnocentric lens (Panich 2020:58).

While some of these limited interpretive perspectives provides an explanation from the contemporary "dominant society" perspective, which suggests at its foundation that "lesser complex indigenous cultures" were unilaterally influenced by the "more complex European colonizing cultures," perhaps as an alternative perspective we need to consider and explore possible other explanations, especially when viewing these dynamics through the social rules and mechanisms of late 18th century California Indian world view rather than through the colonial lens. Such alternative explanations should consider those pre-existing and established Native protocols and socio-cultural-political rules of social conduct, interaction and integration accorded to strangers, visitors, and distinguished guests as practiced by central California tribal groups.

For example, in cases when elites and high status families from neighboring tribal groups made arrangements to visit, and/or those who were invited to ceremonies, funerals, and/or economic exchange functions (e.g., Mourning Anniversaries, ceremonial dances, weddings, trade feasts, and etc.), there were specific rules that these groups would follow as social protocols. These same social principals and rules that were enacted between tribal groups and elite families would have no doubt been in effect at the time when the Spanish expeditions made their presence known.

After the period of contact had been established between the Indian tribal communities and the newly settled Spanish colonizers, no doubt, those established elites and their families desired to have their children associated (to some degree) with these newly established powerful and (relatively) wealthy Spanish entities and power brokers.

Some of these aboriginal social rules and protocols probably included:

> 1. Marriage arrangements of eligible teenagers for purposes of establishing and/or strengthening inter-tribal and/or intra-tribal alliances especially between and amongst powerful elite families;
> 2. The attempt by these powerful elites and/or families of specialists to establish formal ties with these newly emergent Spanish power brokers through "apprenticeships" – by having their children enter into the missions through the ritual of baptism-- and by doing so, creating and thus perpetuating, an extant belief system that this "apprenticed relationship" would continue to maintain their own power brokerage with the extant and transformed communities and provide them additional prestige within this new order.

By acting in conformance with these older socio-political-economic rules for establishing and maintaining military alliances, trade networks, and marriage alignments with neighboring tribal groups, villages and the with newly established Spanish colonial settlements, these elites were probably under the belief that by exercising this formal process, partially through the ceremony of baptizing themselves and/or their children, it was done as a continuation of their aboriginal power brokerage (see Bean 1978). For example there was a reciprocal ceremonial practice of purifying with water (ritual washing) persons of the opposite moiety (deer vs. bear or land vs. water) amongst central California tribal groups especially during and after the handling of the dead and their personal property. Therefore, the use of water in baptism had some pre-existing analogous practice and meaning in aboriginal purification ceremonies (Gifford 1955).

Initially, the "official policy" of the Spanish Empire was to develop the missions into self-supporting agricultural centers whereby Indians would be "civilized" and become peon laborers for the civilian pueblos and presidios. Ultimately it was expected that the Indians would themselves become citizens of the crown and help further colonize the region for Spain (see Rawls 1986, Hurtado 1988 and Monroy 1990). Nonetheless, the colonial experience resulted in the decimation of the California Indian tribes who were exposed to European diseases, unsanitary living conditions, and malnutrition while residing at and around the missions (Cook 1976a,b; Milliken 1995). Although the Native population was severely depleted after the first 40 years, by the time of the secularization of the missions during the mid-1830s, the surviving missionized Ohlone/Costanoan Indians continued to live and work in several Post-Contact Indian communities within the Santa Clara Valley as well as on the various rancherias and *Californio* ranchos surrounding each of the other greater Bay Area missions.

Distribution of Ohlone Tribal Groups of Santa Clara Valley and Adjacent East Bay

At the time of European contact in 1769, the Spanish explorers called the Indians living along the Monterey coast "Costeños," or people of the coast. After the missions were established, the Indians and the Spanish priests referred to the Mission Santa Clara Indian people as "Clareños" (Harrington 1921-1934). During the mid-19th century, scholars anglicized the term Costeños into "Costanoan"[1] to encompass all those tribal groups whose aboriginal territories spanned from greater Monterey Bay, Missions Soledad, Santa Cruz, Santa Clara, San Francisco, East Bay and the Carquinez Straits, and who spoke cline of distinctive, but related languages (Heizer 1974; Levy 1978; Milliken et al 2007; Milliken et al. 2009).

Very little information about the aboriginal Thámien-Ohlone speaking tribal groups who once occupied the lower Guadalupe River, Coyote Creek and Alameda Creek drainages was recorded by Contact Period Spanish missionaries who first established Mission Santa Clara de Thámien. Apparently some of these missionaries did not record the names of the many Thámien tribal rancherias and villages, as was practiced at the other neighboring Costanoan linguistic area missions (e.g., Missions San Jose, Dolores, San Juan Bautista and others). Instead, the mission Fathers had simply assigned names of Saints to the various villages and as directional "districts" surrounding Mission Santa Clara, rather than documenting the specific tribal villages from where the newly recruited and baptized Indians came from (see C. King 1994).

Milliken (1983, 1991, 1995, and 2007) and C. King (1978, 1994) have to date, conducted the most comprehensive geopolitical reconstructive ethnohistoric studies using the available Santa Clara Mission records (also see Winter 1978a and 1978b). Their studies clearly demonstrate that both the Thámien-Ohlone speaking tribal groups of Santa Clara Valley and the neighboring East Bay Chochenyo-Ohlone speaking tribal groups (e.g., Santa Agueda, Alson and Tuibun) of the Fremont Plain were brought under the sphere of influence of Mission Santa Clara and many of these Indians were baptized, married and had died at this mission. Chester King in his 1994 study entitled "Central Ohlone Ethnohistory" noted:

> The area between San Jose and San Juan Bautista [mission] and extending from Santa Cruz to the San Joaquin Valley has proven to be difficult map by village or tribe. At Santa Clara Mission only the closest villages were given separate names. The more distant were grouped by region (C. King 1994:203).

[1] More recently, various authors have suggested that the present-day descendants prefer to be called "Ohlone"; however, there are three surviving historic BIA-documented tribal groups with ancestral ties to 1) Missions San Jose, Dolores, Santa Clara, 2) Missions San Juan Bautista and Santa Cruz, and 3) Missions San Carlos (Carmel) and Soledad, who have formally organized (in accordance with the 1934 Indian Reorganization Act). These three historic tribal communities whose ancestors spoke their respective Costanoan/Ohlone languages as late as the 1930s, have since revitalized and organized themselves as tribal governments and communities. All three are presently listed with the BIA's, Office of Federal Acknowledgment (OFA) as: Muwekma Ohlone Tribe of the San Francisco Bay Region, Amah-Mutsun Ohlone Tribal Band, and Ohlone/Costanoan-Esselen Nation respectively. The tribal name Muwekma is actually the aboriginal term referring to "la Gente" meaning "the People" in the Thámien and Chochenyo languages spoken in the South and East Bay (Kroeber 1910; Harrington 1921-1934; Milliken et al. 2007).

> The closest villages to the mission were given the names "our mother Santa Clara" (north San Jose), "**our father San Francisco**" (downtown San Jose), **San Juan Bautista** (San Jose south of Hillsdale), **San Jose Cupertino** (Cupertino), **Santa Ysabel** (east San Jose), and **San Francisco Solano** (Milpitas-Alviso).
>
> The next four groups recognized in the Santa Clara Mission registers are very large and include people from villages located in particular directions from the mission. The four groups were **Santa Agueda** (villages north of Milpitas), **San Bernardino** (villages west of Cupertino), **San Carlos** (villages south of San Jose), and **San Antonio** (villages east of San Jose), northeast of San Antonio were the **Luechas** and southeast of San Antonio were **Tayssen**. (King 1977, Milliken 1991) [Cited by King 1994:203].

Milliken, in his 1995 published monumental doctoral study A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810, provides a more detailed location for the southern neighboring **Matalan** or San Carlos group:

> The **Matalan** tribe held the Santa Clara Valley corridor from the present town of Coyote south to the present town of Morgan Hill (1995:248).

In the 2007 **Tamien Station (CA-SCL-690)** site report, Milliken also provides reconstructed information regarding the geographical distribution and inter-relationships between the Thámien Ohlone-speaking tribal groups within the region surrounding Mission Santa Clara by noting that:

> … Four of the seven towns near Mission Santa Clara supplied enough converts to suggest that they originally contained more than 100 inhabitants.
>
> **San Bernardino**, probably located on lower Stevens Creek, at what is now Mountain View (44 adult married converts 1778-1800).
>
> **San Francisco Solano**, probably situated on the lower Guadalupe River at or near present Alviso (44 adult married converts 1778-1800).
>
> **Santa Ysabel**, probably established on the lower Coyote River or Penitencia Creek, now in north San Jose (40 adult married converts 1794-1802).
>
> **San Jose Cupertino**, probably found on Calabazas Creek or upper Stevens Creek, now part of Cupertino (50 adult married converts between 1780 -1797).
>
> The other three smaller villages were:
>
> **Our Mother Santa Clara**, which was probably west of the Guadalupe River within a few yards of one of the Mission Santa Clara sites … .
>
> **Our Patron San Francisco**, probably placed on the Guadalupe River near Our Mother Santa Clara and Santa Ysabel, east of present-day downtown Santa Clara

> **San Juan Bautista**, probably located on the Guadalupe River in the Willow Glen area south of present-day downtown San Jose … . (Milliken 2004:58-59; 2007:51-52).

In the same study, Milliken also noted that:

> The **Santa Ag**ueda district was the source of 90 percent of the Native people who went to Mission San Jose. Thus the Santa Agueda district actually must have been located on the Fremont Plain (2004:61; 2007:54) [see **Map 2** and **Map 3** below].

In an earlier study, Milliken (1983) determined that:

> The East Bay people at Santa Clara Mission were listed under the district name "Santa Agueda". ... The earliest were the "Estero," "Alameda," "Palos Colorados," and "Este." Many "Alameda" and "Estero" adults at Mission San Jose had children that had been baptized at Santa Clara under the "Santa Agueda" designation. ... Most of the Santa Clara converts who later married at Mission San Jose were also "Santa Agueda"..., although some were from "San Bernadino"... .
>
> ... The Mission San Jose priests provided more detailed genealogical information for each person than did those at Mission San Francisco. ... The cross references indicate that people from the "Estero" and the "Alameda" districts came from the Yrgin and Tuibun tribelets (Milliken 1983:99).

In his 1991 dissertation, Milliken, presented information about the "Santa Clara Valley Conversions, 1780-1784" stating that:

> At the start of 1780 the core group of adult Christians at Mission Santa Clara were from the Alson village of San Francisco Solano, rather than the nearer tiny Thamien villages of Our Mother Santa Clara and Our Patron San Francisco. (1991:139)
>
> Within the Santa Clara Valley and adjacent regions, during the first twenty years since the establishment of Mission Santa Clara, Milliken suggested that "(c)onversion of adult married couples in April (1795) had been concentrated among people from the southern East Bay, **Alson**, **Tuibun**, and perhaps **Jalquin/Yrgin**" tribal groups (1991:224).

Milliken's research also demonstrated that after the Mission San Jose was established in 1797, that "(i)n January of 1801 twenty-one couples became Christians, ... (t)hey were **Alsons** and **Tuibuns** from the local villages of the Fremont Plain" (1991.:265). These East Bay Chochenyo (and possibly) Thámien-Ohlone speaking tribal couples were relations to the families from those same tribal groups who were baptized years earlier at Mission Santa Clara.

Furthermore, it is interesting to note that Milliken also pointed out that "(i)n January and February (1802) twenty-one **Jalquin/Yrgin** families moved to Mission San Francisco" and, "they were intermarried with **Seunens** and **Tatcans**" (1991:266); [see **Map 3** and **Map 4,** and **Figure 1 Ohlone Indians at Mission Dolores** drawn by **Louis Choris** below].

It is important to note here that many of the lineages enrolled in the Muwekma Ohlone Tribe trace their direct ancestry to the Thámien/Chochenyo Ohlone-speaking **Alson**, and to the Chochenyo Ohlone-speaking **Seunen** and **Jalquin** tribal groups whom were missionized in to Missions Santa Clara, Dolores and San Jose.

Milliken noted that the **Alson** was "a tribe that held the low marshlands at the very southern end of the San Francisco Bay, probably both north and south of the mouth of the Coyote River [Creek] now the cities of Newark, Milpitas and Alviso" (1995:235). He also mentions that the **Seunen** tribal group was:

> A tribe that held a fairly small territory at the northwest side of the Livermore Valley in the hills east of San Francisco Bay. … Most of the Seunens went to Mission San Jose between 1801 and 1804, although four of them went to Mission San Francisco in 1801 and 1802 as part of a large Jalquin group" (1995:254).

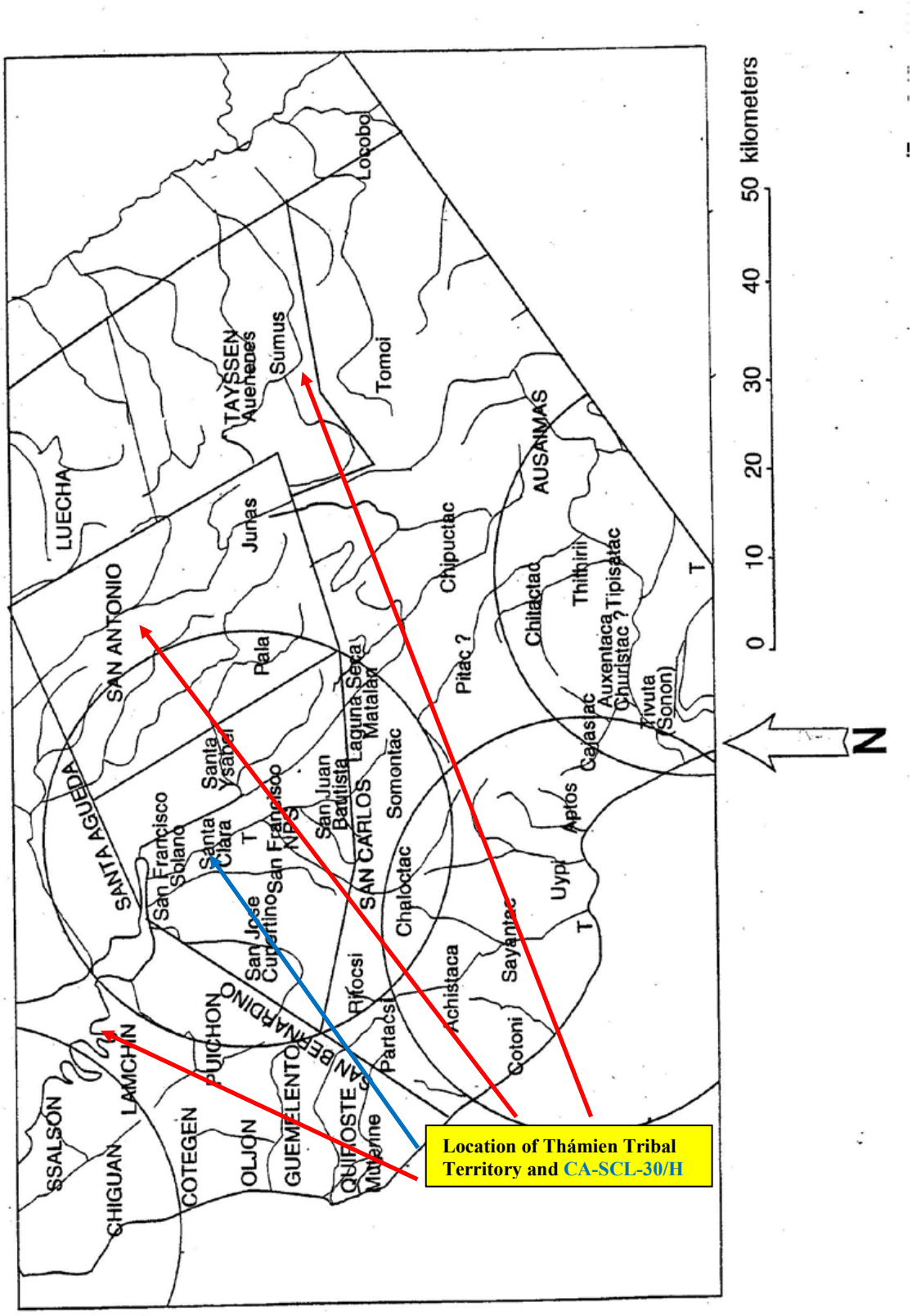
Milliken stated that the **Jalquins** and **Yrgins** were most probably a single tribal group. He suggested that the Yrgins represented the southernmost community from this tribal group who were missionized into Mission San Jose, while the northern Jalquins came under the influence of Mission Dolores in San Francisco.

The complex process that brought together East Bay and Santa Clara Valley Ohlone tribal groups into the mission system, though cataclysmic, these newly emergent mission-based communities had nonetheless maintained vestiges of their languages and culture that survived into the early 20th century. The impact of the Hispano-European colonization and missionization resulted in the first major rupture in the lives of California Indians and especially those along the coastal-interior mission strip.

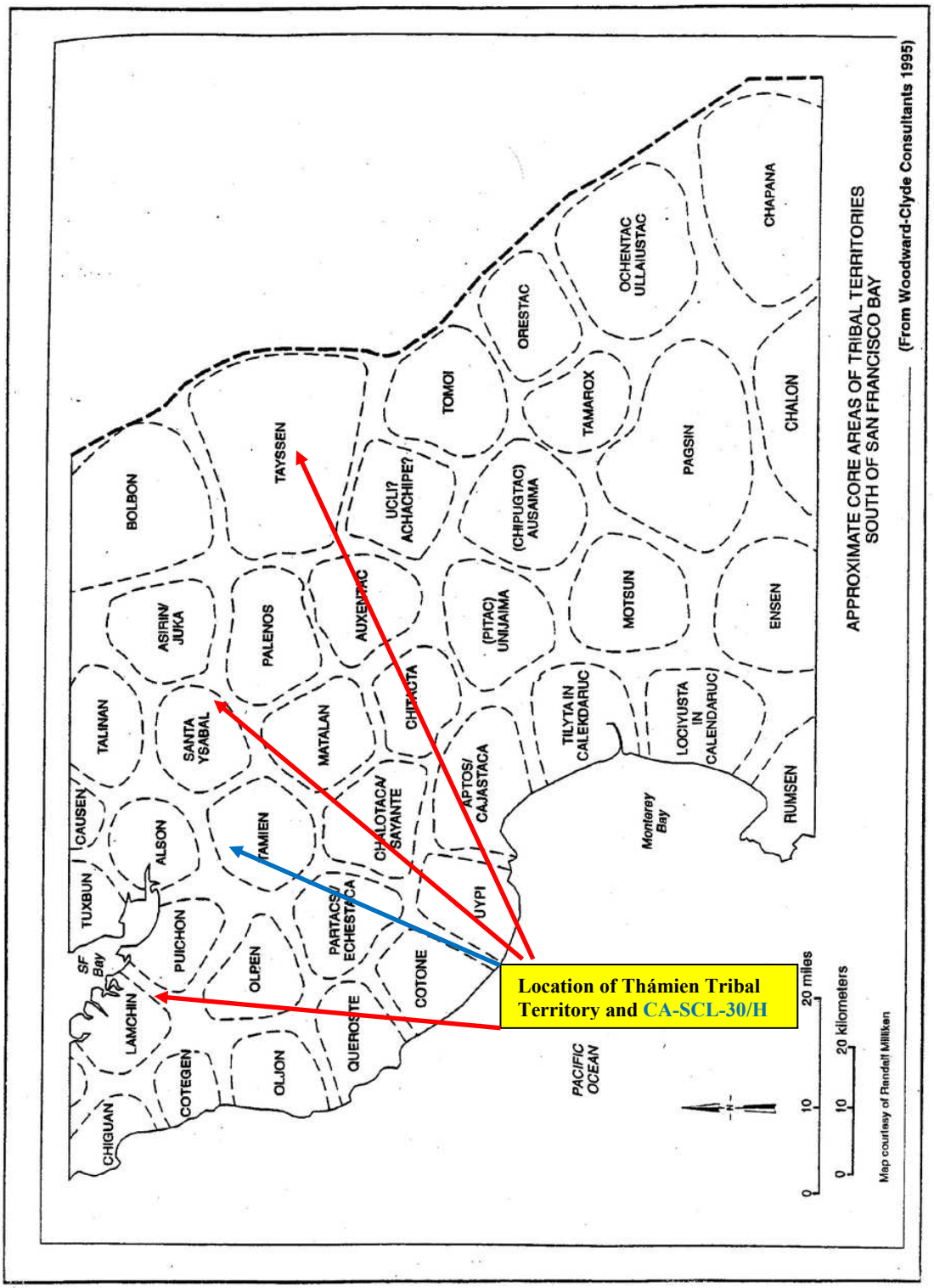
Thus two of the East Bay Chochenyo Ohlone-speaking linguistic consultants, Maria de los Angeles Colos who was born in 1839/40 and Jose Guzman who was born about 1853, had provided Smithsonian's Bureau of American Ethnology linguist John Peabody Harrington with the observation that "the **Clareños** [Indians of Mission Santa Clara] were very much intermarried with the **Chocheños** [Indians of Mission San Jose], the dialects were similar," and also at this time Harrington recorded the Chochenyo linguistic term – "***mu^{w}e'kma*, la gente**" [meaning the people] (Harrington 1929 field notes [1921-1934]).

Milliken (1991), based upon the mission records, conducted ethnogeographic reconstructions of tribal, village and district locations surrounding Mission Santa Clara for inclusion in his doctoral dissertation and had noted that:

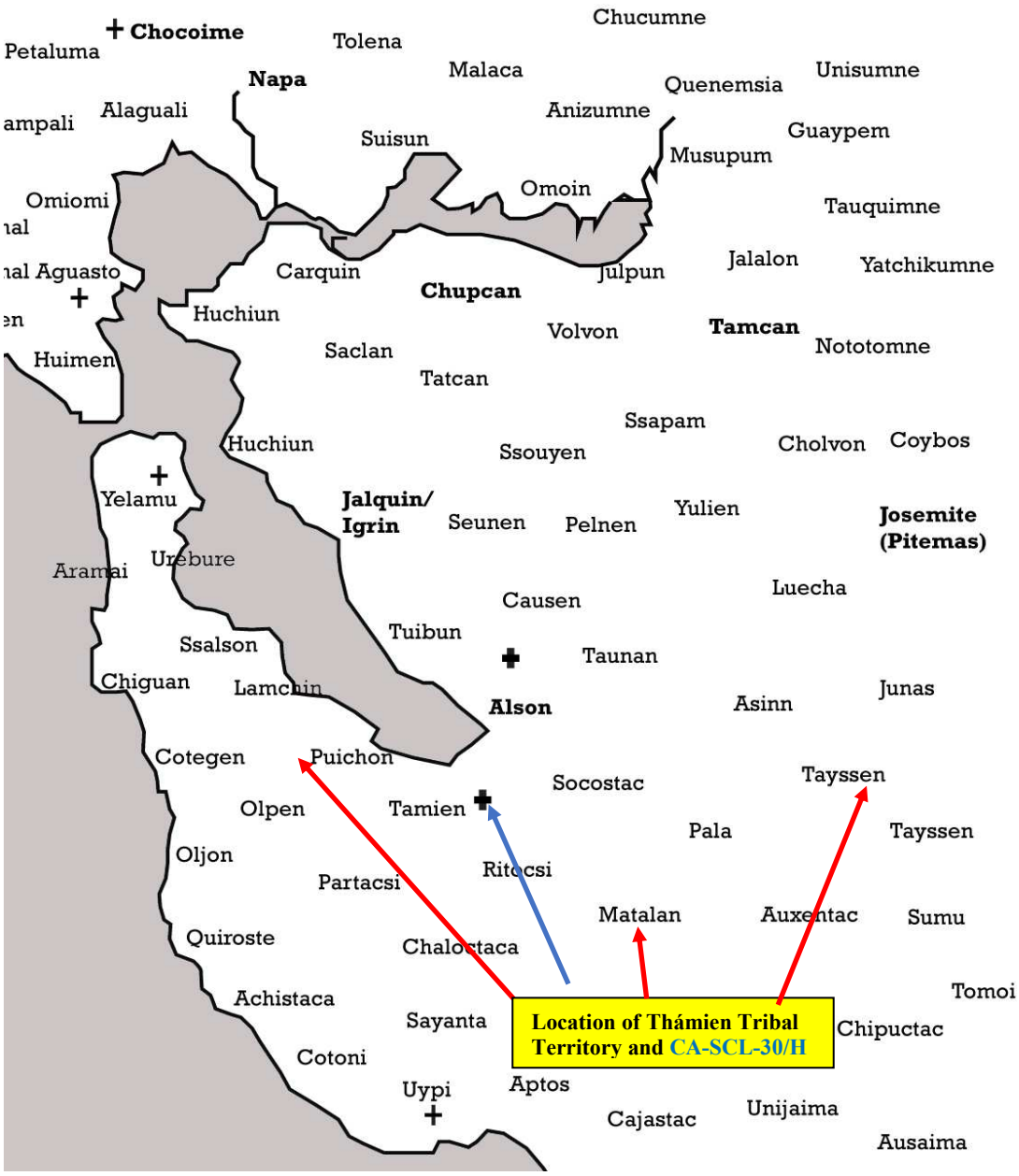
> The Santa Clara Mission settlement lay at the northeastern edge of the **Thamien** tribal district, very near to the lands of three other tribes. ...



Map 2: Distribution of Thámien Ohlone Tribal Groups/Districts and Location of CA-SCL-30/H (blue) in the Santa Clara Valley [From C. King 1994]



Map 3: Distribution of Ohlone Tribal Groups Surrounding the Thámien Region
[From Milliken 1994]



Map 4: Distribution of San Francisco Bay Tribal Groups
[From Milliken 1991]

Figure 1: Indians at Mission Dolores in 1816 [Drawn by Louis Choris 1816]

The missionaries at Mission Santa Clara gave each of them a Spanish designation; San Francisco Solano village of the **Alson** tribe a mile or two downstream at the mouth of the Guadalupe River, Santa Ysabel village of a different, unnamed tribe east of San Francisco Solano on the lower Coyote River, and San Joseph Cupertino village of the **Thamien** tribe in the oak grove about three miles to the southwest of the mission site (1991:117).

Chester King's Almaden Valley Ethnohistoric Study

In 1978 Chester King contributed an important ethnohistoric study focusing on one of the first major Thámien Ohlonean tribal groups to be brought into Mission Santa Clara. This study entitled *Almaden Valley Ethnohistory* was published in **The Archaeological Mitigation of 04-SCL-132, Alamitos Creek** by Archaeological Resource Management (1978). The following subsection presents excerpted information from King's study that principally focuses on the San Carlos Thámien Ohlone-speaking tribal group from the greater Almaden Valley and adjacent areas that were brought into Mission Santa Clara beginning in 1781:

Introduction

The Spanish colonization of the central Santa Clara Valley centered at Mission Santa Clara, where the Ohlone Indians living in the area were concentrated. The missionization program first directed its efforts to recruiting converts to the Church from the native settlements closest to the mission. As the population of these villages was depleted, the missionaries recruited converts from greater distances. The historical evidence indicated that conversions increased following Spanish military expeditions during which native people were killed. Fear of reprisals seems to have been one of the main motives for giving children to the missions or for personally joining the system.

After 1796, the mission population ceased to grow although many Ohlone were recruited every year. Diseases introduced by the Spanish resulted in the deaths of numerous Indians. It seems as though the concentration of people beyond a certain number resulted in increases in deaths as a result of disease. Violence against the native people by missionaries, settlers, and soldiers was also a cause of death. The data in the mission registers indicates that following 1782, many parents of young baptized children died without being baptized themselves.

Mission Recruitment from the San Carlos [Matalan] Tribe

… The people of the San Carlos tribe lived in the Almaden and Coyote Valleys with their tribal center at *Rancho La Laguna Seca.* The *Ranchos* were huge tracts of land, located in the undeveloped areas surrounding the Pueblo de San Jose, used for grazing. *La Laguna Seca* was centered in the Coyote Valley and encompassed the foothills on either side of the valley. *Rancho de Los Capitancillos* contained the Santa Cruz Mountain foothills on the east [west] side of the Almaden Valley, and was probably the "Mountains" referred to in the mission data of the 1780s … .

…. When the missionaries began baptizing people from a settlement, they usually first recruited children who were surrendered by their parents. Later, the Fathers increasingly induced adults to come to the missions. Many adults were often baptized in large numbers following times of major military activity.

… [P]lacenames mentioned in the Santa Clara Mission registers for villages within the San Carlos group illustrate a model of recruitment from the area. As recruitment of neophytes for Mission Santa Clara diminished the size of the settlements closest to the mission, the missionaries began taking people from villages farther from the mission.

… The mission registers … show that in the San Carlos tribe, people who lived in the mountains or *sierra* (*Los Capitancillos*--Almaden) were, in 1781, the first group to be baptized by the missionaries. Following the mountain people, Indians from *Rancho La Laguna* Seca--Coyote (also called *Matalanes)* were then baptized, beginning in 1789. The last date for a baptism of a person from the mountains (Almaden) was September 1790. After 1790, most of the baptisms were from *Rancho La Laguna Seca* (Coyote). This dominance continued until July 1802, then a single baptism in September 1803 was the last recorded from *Rancho La Laguna Seca.* The main villages in the Coyote Valley and remaining settlements of the Almaden Valley were essentially abandoned in 1802. After 1802, most of the people baptized by the missionaries were from a *"Rancheria de Guarto."* In the register, a man named Guarto was baptized #4871. Some of the latest (1807) associations between the mission and the Indians were with a *rancheria* of *Tomoy* which also contributed many baptisms to Mission Santa Cruz.

The information presented [in the Santa Clara baptism registry] shows that prior to 1794 some of the children baptized by the missionaries remained in their native villages with their unbaptized parents. The Fathers usually baptized the children in a settlement first, then tried to convert the parents at a later time.

The [data] also indicates that occasionally old people stayed in their native villages until they died. The relatively high frequency of burials or cremations of children by non-Christian parents demonstrates resistance by many adults to convert.

[The baptismal data also] indicates that a number of non-Christian San Carlos Indians were living in the Pueblo de San Jose at the time that they were baptized, during the later half of the 1790s. The move into the Pueblo was probably prompted by the Spanish military expeditions against the Ohlone in 1794.

Relations Between the Spanish and Indians from 1782 to 1802

Militarism and Baptism:

In January of 1783, Pedro Fages, Governor of Alta California, led a military expedition against *rancherias* in the vicinity of Mission Santa Clara. Father Palou of the mission reported:

> He came back again to chastise some heathen in the neighborhood of Santa Clara who had killed some mares belonging to the settlers of the Pueblo de San Jose. The heathen took up arms, and our soldiers killed two of them without having one of ours even wounded, and being frightened by this they voluntarily gave up some of their children for baptism (Bolton, 1926: 224).

The increase in baptisms in the San Carlos tribe in 1783 … may have been an effect of this expedition. On May 15, 1783, Fages sent a letter saying, among other things, that "the Indians of the *Sierra de San Jose* (Almaden hills) and those around Monterey are very peaceful as a result of the threat made to them, and many have been baptized at Santa Clara Mission" (California Archives 23: 99).

Except for those from close villages, most of the baptisms made between 1783 and 1789 were of children less than eleven years old. The recruitment situation during this time was described by Father Peña on December 31, 1786:

> There are innumerable heathen in the *Rancherias* that surround the mission and only a few of them know [Christianity] from those who have become baptized. We are denied the assistance of the guard in order to go out to allure them, flatter them, and charm them, without which we are unable to assure the fruit that we are after, as we have experimented, visiting from time to time the *rancherias,* to request them humbly [to submit] to the superiority... . (AGN. Mexico: Missions, Alta California, Series 2A, Vol. 2, Santa Clara Archives).

Brutality on the part of the missionaries was both a symptom and a cause for resistance by the Ohlone. When Father Peña of Mission Santa Clara was tried in 1786 for beating four Indians to death, he cited the behavior of Spanish soldiers against the Indians in his own defense. It was probably the Fages expedition of 1783 to which Peña referred:

> ... it has already been two years since the same Captain Dn Nicholas Soler has told and published to the whole province that the Governor (Pedro Fages) had killed with lashes and had commanded the two Sargeants at the Monterey Presidio and the San Francisco Presidio to kill more than twenty heathen Indians. On occasions soldiers use their weapons against the heathen without having encountered resistance. At times the heathen have been left abused by the cruel punishment of being hung in the trees by a foot, by scarifying their buttocks with swords, the soldiers hang them and then beat them with staffs alternating until they have all had a turn (AGN Prov. Internas, Vol. 1, No. 6: 46).

Military Policy in the Pueblo:

A series of dispatches written by Pedro Fages from Monterey and Ygnacio Vallejo, *Commandante* of the Pueblo de San Jose, indicate the 1785 to 1788 policy of the military. This policy was to keep all unbaptized Indians out of the settlement of San Jose, to not trade with the unbaptized Indians, to not allow the Indians to ride horseback, and to maintain an alert guard at the Pueblo because of potential attacks by the surrounding Indians, and to punish any neophyte who came to the Pueblo without passes (California Archives 44: 5-8).

On January 5, 1788, Fathers Peña and Noboa observed:

> ... [the heathen live with some] frequency in the Pueblo de San Jose, where many of both sexes have become semi-domestic servants and laborers of our neighbors. They are allowed to live with their old freedoms and heathen customs; along with these they have learned other unbecoming vices that they acquaint themselves with the Pueblo, and since they get food for their work they reject submission to the yoke of Evangalicism. (AGN Mexico: Missions Alta Calif, Series 2A, Vol. 2, Santa Clara Archives).

The situation of non-Christian Indians living in the Pueblo de San Jose described by Fathers Peña and Noboa was counter to instructions issued by Governor Fages on September 4, 1785. Fages' orders stated that "the Indians should be watched, not let into houses, not allowed to sleep in houses, and not permitted to ride horses, nor herd animals" (California Archives 44: 5). Also, "if anyone goes out in order to trade with the Indians or non-Christians for otter hides that are worth some means ought to be punished, 103 *estoperotes are* required" *(Ibid.:* 22).

These orders seem to indicate that during the last half of the 1780s, interactions between the Spanish settlers, the military, and the unbaptized Ohlones increased. … On April 30, 1788, Arguello reported to Fages concerning an altercation between heathen Indians in the vicinity of Santa Clara Mission and Spanish involvement. He said that Sargeant Amador was dispatched to Mission Santa Clara because of a report that the heathen of the *rancheria* near the mission had fought with the "Mountain Indians," and several mission Indians were involved in the skirmish. Sargeant Amador found two or three Christian Indians, who had gone to see the skirmish, being punished by the missionaries upon his arrival.

After this, Sargeant Amador went around to all the surrounding *rancherias* and scolded the leaders. He was informed that a heathen called "the Corporal of the laborers of the Pueblo" went about calling a meeting to make war against other heathen on account of a woman. He was captured, given several lashes and after being held prisoner for three days was set free (California Archives 4: 261).

A letter by Governor Fages to Macario Castro on January 2, 1790, outlined the degree to which the military should be involved in native disputes:

> When some non-Christians are being persecuted by others who have taken their women, you should persuade them that they ought to return them (the women). Try to make the persecutors see the wrong in what they have done, and tell them that if I know [about it], it will make me angry. Then I will come with many soldiers to punish them. The same approach is to be used if natives of the distant *Rancherias* steal women of their neighbors. The officials should be sent to petition the chiefs with the same council. If, on the other hand, the women have already been captured for some time and are with children, leave them as they are since it is desired that the non-Christians be free" (California Archives 44: 27-29).

Monterey Presidio:

The first year in which non-Christian Indians recruited from the San Jose area worked for the Monterey Presidio was 1790. Indians who lived in the Almaden Valley were probably among those providing services at Monterey, though it seems that the San Carlos tribe was not extensively involved in the labor program. After 1795, it appears that the San Antonio tribe [from the hills to the east of San Jose] provided the Presidio with most of the day laborers and harvesters of hemp.

Men were given a blanket or other payment and provisions of grain in return for working for the Presidio. In correspondence concerning Indian day laborers, *Capitancillos are* mentioned. It is possible that the name *Los Capitancillos,* associated with the Land Grant in the Almaden Valley, *was* derived from "sub-chiefs" discussed in Fages' May 31, 1790 letter to Macario Castro:

> ... neither hatchets nor other types of tools or arms are to be given to the Indians or their *Capitancillos* who struck the Indian woman. They should be admonished that if they repeat their act, they will be punished (California Archives 44: 37).

On July 22**,** 1790, Fages again wrote to Castro, this time concerning Indian laborers:

> Of the twenty-four Indians who arrived, not all are useful. The old ones have little value for the work. Can you see to getting fifty or twenty more and send them.
> The saddened Indian is in grievous condition due to being surprised in his dance. He has been strange, this action was not commanded, but contrary to it.

> In the company of Romero, you go to them. So as to not confuse them, it is best to see the *Capitancillos* and persuade them with suavety and style that four, six, or eight workers should come from each *Rancheria*. In this way they will come … (California Archives 44: 39).

On August 3, 1790, Governor Fages wrote:

> The method of gathering Indians is for the *Capitanejos* to be found and shown the need that the King has of them *(Ibid.: 41).*

On August 22, 1798, Fages wrote:

> Pablo and the other "capitan" came and pledged their aid, with Romero they will gather the Indians in the *Rancherias* that they are able to ... *(Ibid :* 42).

Abandonment of the Almaden Valley:

The mission registers seem to indicate that most of the members of the San Carlos tribe left the Almaden Valley and were baptized sometime around 1795. Abandonment of the valley and joining the Church was probably a result of military expeditions in 1794, which were in reprisal to the Ohlone's slaughtering of Spanish stock animals. In late 1794 to early 1795, following the military action, an increase in the baptisms of adults occurred. Later baptisms listed for the San Carlos tribe are of people who were probably coming from the Coyote Valley and other areas more distant from the mission than the Almaden Valley. The pattern of baptisms from more distant areas seems to indicate that most of the Ohlone had been removed from the Almaden Valley by 1795 (cited from King 1978:39-46 in A.R.M. 1978)

Distribution of Costanoan/Ohlone Languages

Ohlone/Costanoan-related languages were spoken over a considerable geographic area, stretching from the San Francisco Peninsula, Angel Island and the Carquinez Strait to the north (e.g., the bilingual Karkin/Carquin) to a less well defined southern boundary near or inland around Soledad and just south of Monterey Bay on the coast bordering Esselen and Esselen-Costanoan (e.g., the bilingual Sargentaruc) speaking tribal groups.

The interpretive linguistic literature, which includes Kroeber (1910, 1925), Beeler (1961), Levy (1976; 1978), and Milliken (1991) diverges concerning the extent to which the variation between what language was spoken from place to place should be differentiated as either **dialects** of one idiom or as completely separate languages. Levy (1976; 1978) identified eight distinct Ohlone idioms: ***Ramaytush*** (San Francisco Peninsula), ***Awaswas*** (Santa Cruz area), ***Rumsen*** (Monterey Bay and Carmel Valley), ***Mutsun*** (San Juan Bautista), ***Chalon*** (Soledad), ***Thámien*** (Santa Clara Valley), ***Chochenyo*** (East Bay), and ***Karkin*** (southern and northern shores of Carquinez Strait and possibly up to lower the Napa Valley).

Perhaps the most-weighty first-hand study in this regard was initiated by Father Felipe Arroyo de la Cuesta, who was perhaps the first literary person to describe the regional variation and interrelatedness of Costanoan/Ohlone languages. In his May 1, 1814 reply to the Interrogatory of 1812 regarding the languages spoken around Mission San Juan Bautista, Father de la Cuesta stated the following about the Costanoan/Ohlone languages:

> Though they appear to speak distinct languages this is only accidentally true; that is, some of the words are different only because of the manner of pronunciation, in some cases rough, in others agreeable, sweet, and strong. Hence it is that the Indians living in a circumference of thirty or forty leagues* understand one another (Arroyo de la Cuesta [1814] in Geiger and Meighan 1976: 20-21).
> [***Note**: a league equals about 2⅔ miles or 4.3 kilometers]

Aided by the linguistic records written by Father Arroyo de la Cuesta, Milliken (1991) concluded that people who lived in neighboring villages and regions likely would have spoken mutually comprehensible dialects, but that those who lived at the farthest extremes of the Costanoan/ Ohlone area probably would not have been able to understand one another. If, in fact, language variation occurred as smooth clines in this way, then the southern Santa Clara Valley was one of the regions of transition from one dialect to another. The Mission San Juan Bautista Mutsun-speaking dialect, bordered on the south of the centrally located Santa Clara Valley dialect Thámien-Ohlone speaking language area, likely making the Coyote Creek corridor a place where dialectic differences merged or overlapped [see Forbes 1969:184, for the **Muwekma (northern)** and **Mutsun-Rumsen (southern)** divisions of Ohlonean languages; Levy 1976; 1978].

Ortiz (1994a) in her study entitled **Chocheño and Rumsen Narratives: A Comparison** points to this difference by employing Costanoan personal names generated by Milliken from the mission records centering around the terms **Kaknú** (prairie falcon) from the Santa Clara Valley area to the North Bay and **Ka-kun** (Chicken Hawk) which was used in Costanoan speaking tribal territories to the south of Santa Clara Valley (Mutsun/Rumsen –speaking areas within the greater Monterey Bay region):

> Kaknú's use disappears in the personal names of those individuals baptized at Mission San Carlos Borromeo, Mission Santa Cruz, and San Juan Bautista. The similar "cancun," however, occurs in the names of four persons baptized at Mission Santa Clara. Two such names belong to individuals from the Fremont area, one from the San Antonio Valley, and only one outside that area. (Ortiz 1994a:107).

The existence of the **Mutsun** and **Thámien** linguistic boundary was also noted by 19th century historian Frederic Hall in his 1871 publication The History of San Jose and Surroundings:

> … The tribe of Indians which roamed over this great valley, from San Francisco to near San Juan Bautista Mission, (known a century ago as the valley of San Bernardino,) were the Olhones (sic) or (Costanes.)
>
> Their language slightly resembled that spoken by the Mutsuns, at the Mission of San Juan Bautista, although it was by no means the same. (1871:40)

Although Levy strongly implied that language areas were coterminous with areas of ethnic identity, e.g., that those people who spoke the Chochenyo dialect self-identified as the Chochenyo people, there is no evidence to support such a view. To the contrary, regional cultural identities in native California clearly overlapped language boundaries. Moreover, based upon pre-contact inter-marriages, especially among elites, natives (especially women due to village exogamy and patrilocal residential patterns) were more than likely multi-lingual speakers (see Blackburn 1976;

Milliken 1983:70; 1991), which again in the case of the Coyote Creek corridor seems particularly likely amongst the Thámien-speaking San Carlos/Matalan tribal group due to their strategic location bordering north of the Mutsun-speaking tribal groups. [**Note:** for an updated re-classification of the circum-San Francisco Bay Ohlone languages as a single language identified as **San Francisco Bay Costanoan** as determined by linguist Catherine Callaghan, see Milliken et al. 2009].

Evidence of Social Stratification and Hereditary Leadership in the S.F. Bay Area

Clearly, the basic political unit for native Californians, including those of the Thámien Ohlone-speaking tribal groups, was the sedentary residential village (representing one of many within the larger geo-political tribal territory). Pre-contact and contact-period central California tribal geopolitical boundaries, social structures, subsistence-settlement patterns and ceremonial and economic institutions were very complex and social interactions and ritual obligations between lineages went beyond the residential village community (Goldschmidt 1951; Blackburn 1976; Bean 1978; Bean and Vane 1978; T. King 1970, 1974; Wiberg 1984; Luby 1991; Leventhal 1993; Bellifemine 1997; Panich 2020, and others).

Because of the seasonality of subsistence-related activities covering a wide range of the micro-ecosystems (e.g. fresh water creeks and streams, inland lagoons and marshes, bay shore wetlands, coastal, and estuarine resources, hardwood and mixed chaparral forests, grasslands, etc.) that were all possibly located within a single tribal territory, Native families and small multi-family groups may have moved about during the course of a year from one harvesting locality to another all within a half day's trek from sedentary villages or resource-base camps.

These temporary resource-based sites and camps, possibly composed of several temporary house-shelters, contrasted with the larger, permanent (or semi-permanent) strategically situated principal ceremonial village. Thus each tribal group actually occupied a territory dotted with seasonal resource-related occupational and specialized task sites, lesser villages, as well as, semi-sedentary and sedentary villages. The Coyote Creek corridor, with its mostly year-round water supply and mixture of seasonally variable riparian, fresh water marshes, foothill, upland and valley habitats, fits this description well. **Father Paloú**, in 1774, described his encounter with this riparian habitat:

> [We] came to a large bed of a river [Coyote Creek], well grown with cottonwoods, alders, and willows, but without water. We followed this bed along its bank, which was very high and steep, and we made out across the river on a hill to the north of a village of heathen.
>
> We followed the bed of the river and came to a thick wood of several kinds of trees and blackberry bramble which it was necessary to cross, and in it we found some little houses of the heathen, who at the noise we made, left their things and concealed themselves in the thick woods. We crossed, near a village, a good brook of running water, which we soon saw no more, and we judged that it sank into the sand (Bolton 1926: 260).

Encompassing the territorial areas of each tribal group and its macro-resource harvest (catchment) zone were larger regions composed of several villages and their outliers (ceremonial shrines, cemeteries and specialized task sites). The Spanish explorers called these territorial units *rancherias*. Anthropologists have described these larger regions variably. Kroeber (1939, 1962) used the term "tribelet" to denominate rather small multi-village regions that he asserted composed the largest political units in native California.

C. King's (1977) description of pre-contact conditions in the southern Santa Clara Valley offers an early assessment of the political geography of what he calls the "**Matalan** tribelet," who inhabited the Coyote Creek corridor, Almaden Valley and environs just south of the Santa Teresa Hills area to just south of Morgan Hill. Perhaps unsurprisingly, King conflated language boundaries with the political borders of Kroeberian defined tribelets. There is also some confusion between the extent to which villages and multi-village regions composed units of kinship, such as clans, moieties, lineages, or residence groups, which are not equivalent.

Milliken (1991) recognized that villages were residential units composed of several non-related kin groups in the Ohlone/Costanoan areas generally, and the Santa Clara Valley specifically (Milliken 2004; 2007). He also described the larger multi-village regions as political groups that defended large territories. Bean (1976) has shown that intermarriage between village elites constructed regional elites, also described by King (1977) specifically for the **Thámien**-Ohlone speaking **Matalan** tribal territory. Through trade fairs and feasts, marriages and funerals, and other important ceremonial events were part of widespread ritual complexes such as the **Kuksú** religion, such elites were able to intermarry across considerable distances, effectively integrating even larger zones of complex interaction.

As far as these elites and the social hierarchy are concerned, many early explorers made clear that institutions of authoritarian leadership existed among native Californians in the San Francisco Bay area. While Father Arroyo de la Cuesta erroneously wrote "they neither had nor recognized any captain or superior," (Arroyo de la Cuesta [1814] 1976:115), he nonetheless described charismatic individuals who were instrumental in organizing both warfare and peacemaking with neighboring groups.

Milliken (2004) quoting Father Narciso Duran from Mission San Jose:

> They recognize neither distinction nor superiority at all. Only in war do they obey the most valiant or the luckiest, and in acts of superstition they obey the sorcerers and witch-doctors. Outside of these they do not recognize any subordination, either civil or political (Duran quoted in McCarthy 1958: 274).

C. King, by contrast, quoting Father Amoros' description of the natives near Mission San Carlos (Monterey) noted:

> The prominent Indians are the captains or kings. There is one for each tribe. They command obedience and respect during their lifetime. This office is hereditary, or, in default of an heir by direct descent, it goes to the closest relative. This chief alone among the pagans could retain or desert a number of unmarried women; but if he had children by one of them, she was held in higher esteem and he lived permanently with her (King 1977 quoting Heizer 1974: 41).

Bean (1976) concurs that chiefs (often referred to as ***capitanes*** (captains) by the Spaniards) utilized their kin-ties with neighboring elites to facilitate trade relations that acted as insurance against periods of relative resource deprivations, as well as possessing the power to collect and redistribute food surpluses in their own territories.

The power of chiefs and the elite families that controlled chiefly positions were symbolized by the possession of treasure goods which passed down through families over considerable lengths of time. King's ethnohistory of the Matalan (the **San Carlos** Thámien Ohlone-speaking tribal group) describes leadership and social stratification that accords with Bean's framework.

Milliken's view (1983, 1991), while tending more toward a strictly charismatic rather than stratified view of chiefs, also makes clear the importance of leadership among the pre-contact Ohlone/Costanoan peoples. He (Milliken 1983: 55-56) cites Father Vicente de Santa Maria who wrote:

> We noticed an unusual thing about the young men: none of them ventured to speak and only their elders replied to us. They were so obedient that, notwithstanding we pressed them to do so, they dared not stir unless one of the old men told them to; ... [Santa Maria in Galvin 1971 [1775]: 31].

Leventhal (1993:155-157) in his archaeo-mortuary study entitled A Reinterpretation of Some Bay Area Shellmound Sites: A View from the Mortuary Complex at CA-ALA-329, the Ryan Mound also considered the first-hand ethnohistoric observations made by Father Santa Maria in 1775 concerning Native political authority and military capability recorded among the **Carquin (**Karkin) Ohlone tribal group residing on both sides of the Carquinez Straits, in the southern vicinity of the Town of Martinez. Father Santa Maria noted:

> On the 15th of August the longboat set out on a reconnaissance of the northern arm [of the bay] with provisions for eight days. On returning from this expedition, which went to have a look at the rivers, José Cañizares said that in the entranceway by which the arm connects with them [Carquinez Strait] there showed themselves fifty-seven Indians of fine stature who as soon as they saw the longboat began making signs for it to come to the shore, offering with friendly gestures assurances of good will and safety.
>
> There was in authority over all these Indians one whose kingly presence marked his eminence above the rest. Our men made a landing, and when they had done so the Indian chief addressed a long speech to them ... .
>
> ... After the feast, and while they were having a pleasant time with the Indians, our men saw a large number of heathen approaching, all armed with bows and arrows.
>
> ... This fear obliged the sailing master to make known by signs to the Indian chieftain the misgivings they had in the presence of so many armed tribesmen. The ***themi**** (chief) (sic), understanding what was meant, at once directed the Indians to loosen their bows and put up all their arrows, and they were prompt to obey. The number of Indians who had gathered together was itself alarming enough.

> There were more than four hundred of them, and all, or most of them, were of good height and well-built [Santa Maria in Galvin 1971:51-53].

[*Note: The term ***themi*** might be in the root of the place-name **Thámien** in reference to *Capitans* or Chiefs as in the case of the 1842 land grant to Justo Larios' **Rancho Cañada de los Capitancillos** meaning "**Valley of the Little Captains**" located near New Almaden in south San Jose and site **CA-SCL-967**].

Captain Commander Fages (governor of Alta California, Monterey) in 1775 also contributed first-hand descriptive accounts about aspects of aboriginal contact-period political authority, social structure, and redistributive economy among the Costanoan-Esselen groups in the Monterey Bay region:

> Besides their **chiefs of villages**, they have in every district another one who **commands four or five villages together**, **the village chiefs being his subordinates**.
>
> Each of them collects every day in his village the tributes which the Indians pay him in seeds, fruits, game, and fish. ...
>
> The subordinate captain is under obligation to give his commander notice of every item of news or occurrence, and to send him all offenders under proper restraint, that he may reprimand them and hold them responsible for their crimes. ... Everything that is collected as the daily contribution of the villages is turned over to the commanding captain of the district, who goes forth every week or two to visit his territory. The villages receive him ceremoniously, make gifts to him of the best and most valuable things they have, and they assign certain ones to be his followers and accompany him to the place where he resides (Priestley1937:73-74).

Material Culture and Subsistence

The Spanish explorers encountered in central coastal California modes of living which were alien to their sensibilities. While the soils were clearly fertile, the native peoples did not cultivate (with the exception of Native tobacco). The numbers and diversity of wildlife astounded such early writers as Pedro Fages and Fray Juan Crespi, yet through their eyes such faunal abundance connoted untrammeled wilderness; everywhere they traveled they encountered villages and substantial populations of Native peoples. It is only recently that anthropologists have been able to pierce the incomprehension that the Spaniards and other European evinced about native Californian peoples before the latter's ways of life were destroyed by the activities of the former.

The material culture -- in other words the technologies for producing goods and products [technomic, sociotechnic and ideotechnic products (after Binford 1962, 1971)] -- that native Californians created are clearly derived from their adaptation to the landscapes they inhabited and the resources they utilized. Native Californians were sedentary-to-semi-sedentary gathering, hunting and fishing peoples living in an extraordinarily rich biotic habitat who, by their subsistence activities, tended to increase rather than deplete the resources upon which they depended.

Lewis (1973), Bean and Lawton (1976) and Blackburn (1976) were among the first to demonstrate that natives' use of controlled burns augmented the growth of wild grains eaten both by humans and herds of herbivores who congregated around areas humans altered in this way. These practices have been referred to as "quasi-agriculture" and "incipient game management." Fire management also helped to create concentrations of oak trees in specific areas from which harvests of acorns played an important seasonal role in native diets (Lewis 1973; Bean and Lawton 1976; Weigel 1993; Anderson 2006; Lightfoot and Parrish 2009).

Tools manufactured by natives were thus utilized to process the foods obtained from native resource management. Hunters, mostly male (women did engage in rabbit and possibly antelope drives and fishing; (see E. Wallace 1978), flaked ultra-sharp chert and obsidian arrow points, dart points, knives, chopping tools, scrapers, etc., found at the sites of their hunting camps, hunting blinds, and village sites. Such tools could also be used by women to process and cook meat, fish, and shellfish. Both sexes likely contributed to the weaving of string, cordage, rope, fishing nets and the construction of basketry traps for fish and small animals. But women clearly excelled in fiber manufactures: California is renowned as the locus of the finest and most diverse basketry in the world, and the macro-Ohlone/Costanoan region was no exception in this regard. Women utilized porous baskets to leach acorn meal in order to remove toxic tannic acid, and water-tight baskets to cook a variety of meals from different plants, animals and fish. Baskets were used in fishing, for hauling abalone and other mussels from the waterside, and for winnowing wild grain. Very large woven baskets on stilts acted as granaries and very small baskets were used to store jewelry and other commodities (Elsasser 1978; Shanks and Shanks 2006).

Both genders may have worked *Haliotis* (abalone), *Olivella* shells, and colorful feathers were integrated into elaborate necklaces, ear, nose and hair ornaments, and beads woven into dance skirts, headdresses and other ceremonial regalia (Bates 1982). While men and children commonly virtually wore no clothing during the warmer summer months, women used plant fibers and deer skin to fashion skirts and aprons. Ritual regalia and the finery of the social elite were also manufactured from the pelts of rabbits, deer, elk, antelope, bear and wild cat or, in coastal and bay areas, from sea otter and sea lion fur.

Residential shelters were basically round grass or tule and bulrush thatched structures built on willow pole frames, while the larger, excavated semi-subterranean ceremonial buildings utilized for assembly or dance houses and sweat lodges, probably used boughs of hardwood or redwood trees (especially on the West Bay) as center posts for structural support. The sweat lodges and dance houses (***túupentak*** in the Chochenyo dialect, but more commonly referred to in the literature by the Mexican term “temescal”) may also have been earth covered as elsewhere in California.

Ritual Practices and Ceremonial Sites

Of all aspects of pre-contact native Californian culture, religion and ritual evoked the most hostility from Spanish colonial invaders whose observations accordingly are difficult to assess for accuracy. It is clear that performances which in Western discourse are referred to as dancing were central aspects of religious ritual and reenactment of Creation Time, not only in the sense of worship, but also as activities which could themselves positively affect the balance of forces in the world and universe (Bean and Vane 1978).

From the reports and diaries of Fages, Font, Paloú, Crespi, Arroyo de la Cuesta, and others it is also apparent that each region's rituals may have varied in details of procedure, regalia, and song. However, given the view that these rituals were perhaps practiced within a larger framework or ceremonial interaction sphere among neighboring tribal groups, Milliken's caution (2004) that one ought not to draw excessively direct conclusions about the nature of ritual in the Santa Clara Valley from what is known about dance ceremonies conducted by East Bay Ohlones or the peoples of the Monterey region that may be useful, but not necessarily conclusive.

Notwithstanding that proviso, Santa Clara Valley Ohlone tribal groups likely danced world renewal ceremonies and paid a great deal of attention to funerary and mourning rituals as can be ascertained by Late Period mortuary sites (e.g., **CA-SCL-128**, [***Thámien Rúmmeytak***] Holiday Inn Site (Leventhal et al. 2015); **CA-SCL-38, *Yukisma* Mound** (Bellifemine 1997), **CA-SCL-690 Tamien Station** (Hylkema 2007); **CA-ALA-329 *Mánni Muwékma Kúksú Hóowok Yatiš Túnnešte-tka*** (Leventhal 1993); and more recently ***Síi Túupentak*/CA-ALA-565/H** in Sunol (see Byrd et al. 2020).

Dance enabled participants to open and travel through doors between the conscious world and an ongoing supernatural world where the beings who had initiated the creation of the world and of human beings continued to enact mythic dramas. Dancers' regalia were imbued with the power of these rituals, and certain natural locations, such as springs, rock formations, trees, etc. marked nodal points and served as shrines where ritual performance became particularly effective (see Bean 1975; Bean and Vane 1978, Bates 1982, Davis 1992).

Humans could also hallow sacred places through the burial of their ancestors in locations that even the Spanish identified as cemeteries (Leventhal 1993; Font in Bolton 1933 below). This is of note specifically in the case of the analysis conducted at the ***Clareño Muwékma Ya Túnnešte Nómmo* Site (CA-SCL-30/H** – 3rd Mission Santa Clara**)** which contained at least several thousand burials that bridged traditional Ohlonean world view and the transformed/emergent Hispano-Catholic Clareño world view of cemeteries as "sacred places" (Leventhal et al. 2011; Panich 2015, 2018, 2020). This is also of especial note for the purposes of this study since the ***Thámien Rúmmeytak* Site (CA-SCL-128)** contains at least upwards to 100 ancestral burials, and therefore does indeed represent the presence of a large ancient cemetery.

Pedro Font traveling through different parts of the Santa Clara Valley made several observations about the nature of Contact Period Ohlone cemeteries. Near modern-day Gilroy, Font noted:

> On passing near the village I mentioned on the road we saw on the edge of it something like a cemetery. It was made of several small poles, although it was not like the cemeteries which we saw on the Channel [between Santa Barbara and the Channel Islands]. On the poles were hung some things like snails and some tule skirts which the women wear. Some arrows were stuck in the ground, and there were some feathers which perhaps were treasures of the persons buried there (in Bolton 1933: 322).

Even closer to the 3rd Mission Santa Clara Indian Neophyte cemetery ***Muwékma Ya Túnnešte Nómmo*** **Site (CA-SCL-30/H)**, and approximately 3 miles northwest of the ***Thámien Rúmmeytak*** **Site,** Father Font described the following scene within the nearby Coyote Creek corridor located approximately 7 miles southeast of the mission. From his description, it can be understood that the use of feathers and other regalia hung from poles and related structures may not have been exclusive to cemeteries but were established as a kind of shrine:

> At this place we found still standing the poles of the little bower erected in the journey which in September of last year was made by the ship captain Don Bruno de Hezeta and Father Paloú … . We found that the Indians had made a fence of little poles around them, and in the middle had set up a thick post about three spans long, decorated with many feathers tied in something like a net, as if dressed, and with an arrow stuck through them.
>
> On one pole many arrows were tied and from another were hung three or four balls of grass like tamales, filled with pinole made of their seeds and of acorns, or of others of their foods which we did not recognize. In the middle of a long stake there was hung a tuft of several goose feathers, but we were unable to understand what mystery this decoration concealed (Font 1930 [1776]:321-322).

These above ethnohistoric observations potentially provide some of the parameters of ceremonial activity and ritual performance that were carried on at the **CA-SCL-128** site locality (within the ancestral Thámien-Ohlone speaking tribal territory) approximately between 2000 to ~300 years ago when these ancestral Ohlone people died and were buried at what was to be named ***Thámien Rúmmeytak*** by the present-day Muwekma Ohlone Tribe of the San Francisco Bay Area.

The Transformation of Costanoan/Ohlone Societies Resulting from the Impact of the Spanish Empire's Expansion into Alta California (1769-1836)

Based upon the research of many Californian anthropological scholars (e.g., Kroeber 1932, 1939, Goldschmidt 1951; Gifford 1955; T, King 1970, 1974; Fredrickson 1973; Bennyhoff 1977; Chartkoff and Chartkoff 1984; Moratto 1984; Bean and King, eds. 1974; Bean and Blackburn, eds. 1976; and others), prior to the time of contact with the expanding Spanish empire, central California Indian societies had already developed complex social, political, economic and ceremonial institutions that interconnected neighboring tribal groups and regions. This is evidenced by the wide distribution of artifact assemblages, traits and burial patterns found in central California mortuary mounds (sometimes referred to as Shellmounds in the San Francisco Bay Area) especially during **Phases I** and **II** of the **Late Period** (**Dating Scheme B1**: Bennyhoff and Hughes 1987) or during the beginning of the **Middle-Late Transition Augustine Pattern** post-**AD 1020** (Groza 2011; Byrd et al. 2017 the **Dating Scheme D2 Late Phase 1 (L1) AD 1265 –AD 1520** and **Late Phase 2 (L2) AD 1520 – AD 1770** (Groza et al. 2011; Byrd et al. 2019), and also demonstrated by the even wider distribution of the **Kuksú religion** which as stated above geographically ranged from the Salinan tribal groups to the south in Monterey County to the Cahto and Yuki to the north in Mendocino County; (see Mason 1918; Loeb 1932, 1933; Bennyhoff 1977; Bean and Vane 1978; Winter 1978a; Leventhal 1993; Bellifemine 1997; Hedges 2019; Byrd et al. 2020a).

These inter-regional linkages were principally integrated through mechanisms of trade, kinship (especially through marriage alliances of elites), the performance of shared rituals and ceremonial obligations (e.g., Kuksu ceremonies, trade feasts, funerals and mourning anniversaries [see Blackburn 1976]).

Among village elites, for example, the political world clearly did not stop at the boundaries of their own territory. Elites from villages throughout the territory of Ohlone/Costanoan-speaking peoples (and neighboring linguistic groups) married their children into other elite families from important neighboring villages, villages in which Ohlone/Costanoan-related languages may or may not have been spoken by neighboring tribal groups (see Milliken 1993; Milliken et al. 2009).

Intermarriage gave rise to extended kinship networks of multi-lingual elite families and communities, whose wealth and status represented the accumulation of economic surpluses from territories much larger than the village community itself (Bean 1978; Milliken 1990, 1991; Brown 1994). Through elite intermarriage, larger regions were integrated which overlapped and crossed linguistic boundaries (Bean and Lawton 1976; Bean 1992; Byrd et al. 2020a).

Elite intermarriage patterns also facilitated and underscored other regional integrating forces such as trade and ritual obligation (see Blackburn 1976). People from different villages, often distantly related, struck up personal trading relationships, called "special friendships," which often lasted whole lifetimes (Bean 1976). Through networks of "special friends" different foods, tools, and treasure goods were traded from village to village over long distances.

Networks of ritual and ceremonial obligation called together large numbers of diverse peoples for particular occasions, such as the funerals of significant inter-village elite personages (Blackburn 1976). On such occasions, trade fairs also occurred where elites likely arranged the future marriages of their children. Taken all together, the trading of subsistence and treasure goods, the exchanges of marriage partners, and the cycles of ritual and ceremony tied together constellations of kin-based village communities into integrated political, economic and cultural fields led by a small, inter-village elite strata (see Fages 1775 [1937]; Bean 1992). These elite-ruled realms might be described as quasi-chiefdoms or ranked chiefdoms (Service 1962, 1975; Fried 1967; for an archaeological perspective on evidence of social ranking within the San Francisco Bay see T. King 1970, 1974; Wiberg 1984; Luby 1991; Leventhal 1993; Bellifemine 1997; and others).
The paradox of a bountiful environment, large populations, and lack of recognizable cultivation confounded the Spaniards, the first Europeans determined to control what is now the state of California. Elsewhere in Latin America, particularly in the Andes and Meso-America (see Salomon 1981, Rappaport 1990, Smith 1990, many others), indigenous structures of governance and processes for manufacturing commodities were more familiar to European eyes. Therefore, at least for a time following the initial conquest of indigenous civilizations, the Spaniards harnessed indigenous political and economic organization for their own purposes. Because the Spaniards could not cognitively apprehend a civilization whose productive base, economic surplus, and sources of wealth were fundamentally alien, their domination of Californian natives hinged upon completely re-molding their cultures and societies into forms that were comprehensible to European sensibilities.

The Franciscan missions, the method the Spanish Empire used to lay claim to California, may be seen as the process of implanting European political and economic systems. This process required that Native American religions and cultural practices be restricted and eventually forbidden, and later, the destruction of the economic and environmental foundations of native life (Cook 1976b; Castillo 1978).

The missionized Native peoples of the Bay Area and elsewhere in coastal California became a labor force for an emergent agricultural and pastoral economy which obliged natives to leave aside most indigenous ritual and ceremonial practices, as well as the manufacture of many aspects of aboriginal material culture. As agricultural laborers, missionized Indians were largely separated from the seasonal rhythms of their own food production practices, while the growth of mission farms and rangeland for cattle initiated an environmental transformation of the Bay Area and the entire coast that destroyed much of the resource base of the indigenous economy.

Demographic collapse of the Ohlone/Costanoan populations held captive at Mission Dolores at the tip of the San Francisco peninsula, Missions Santa Clara and San Jose in the South and East Bay respectively; Mission San Juan Bautista farther to the south (San Benito County), and the Esselens at Mission San Carlos surrounding the Monterey peninsula occurred because of the horrendous effects of European-introduced diseases, exacerbated by the unhealthy diet and over-crowded living conditions at the missions. Birth rates plummeted from a psychological phenomenon now recognized as post-traumatic stress (Cook 1976a; Rawls 1986; Hurtado 1988; Jackson 1992).

As the populations of Ohlone/Costanoans both inside and surrounding the missions contracted diseases, survivors tended to congregate around the missions, seeking solutions to their seemingly unsolvable problems from the missionaries and colonists who were causing those same problems. Under the circumstance of socio-cultural "holocaust" which took approximately forty years (1769-1810) to unfold, many Bay Area Ohlones may have identified with their oppressors, who seemed to have overthrown and taken control of all of the old systems of spiritual and earthly power, although others may have fled and sought protection with the interior tribes to the east (see Milliken 1991, 1995, and 2008 for a different interpretation that partly exonerates the missions).

In response to the diminution of their labor-force, the Franciscan fathers and civil authorities directed Spanish soldiers to bring in new converts from outlying tribal areas. The neighboring Coast Miwok, Bay and Plains Miwok, Yokut, Patwin, and Esselen speaking peoples from villages located east, north and south of the Bay Area missions became the new cohort of neophytes as laborers, and they intermarried with the surviving "*viejos Cristianos*" Ohlone-speaking peoples (Harrington 1921-1939; Milliken 1978, 1982, 1983, 1990, 1991, 1995, 2007, 2008; Milliken et al. 2009; Panich 2020, and others).

Such intermarriage patterns were, as emphasized above, already established between neighboring North Valley Yokuts, Coast Miwok, Bay Miwok and Plains Miwok, Patwin and Ohlone/Costanoan-speaking elites during the late pre-contact and contact periods. Milliken (1991) discussing common female name suffixes amongst the **Huchiun-Aguastos** Ohlone/Costanoan-speaking tribal group of the southeast shore of the San Pablo Bay region noted:

> The Huchiun-Aguastos spoke a Costanoan dialect most similar to their Huchiun neighbors, and also very similar to the Carquins, if female personal names suffix clusters are good reflections of language. "Maen/main" [mayen] was the most common female name suffix at thirty-one percent, higher than any other Bay Area group.
>
> … Huchiun-Aguastos, Huchiun, and Carquin personal names contains numerous root and suffix syllable clusters common to Coast Miwok, and Bay Miwok names, such as "eyum," "joboc," "ottaca," "saquen," and "tole", suggesting extensive culture sharing in the San Pablo Bay area across language boundaries. (1991:427)

At the missions, intermarriage apparently continued to subtly reinforce sociopolitical hierarchies and older surviving elite families. Even under the triple assault of religious conversion, ecological and economic transformation, and demographic collapse, indigenous political leadership and resistance did not disappear.

In Panich's 2020 study, he contributes to this discussion by stating that:

> In the northern region of Alta California, people of diverse tribal backgrounds bonded together based on the shared experience of living and working at particular mission establishments. Through this pattern of coalescence, mission-based Native populations typically acquired generalized identities associated with the missions themselves (e.g., Clareño, Gabrielino, etc.) but it likely that these externally applied ethnonyms masked considerable internal divisions.
>
> Time was an important variable affecting the nature of mission communities. Indigenous people who were baptized in the early years had, for better or worse, adapted certain aspects of their precontact polities and lifeways to the constraints of the mission system. These people—whom colonists dubbed *Christianos Viejos*, or "Old Christians" – may not have truly embraced Christianity more were they particularly loyal to the colonial order but they nonetheless saw some advantages to aligning themselves with Euro-Americans, who by now were clearly here to stay (Panich 2020:99).

The missions struggled against frequent desertions by neophytes, and armed rebellions occurred at Missions Dolores, San Jose and Santa Clara (Milliken 1983, 1991). Led by **Pomponio** and **Charquin** at Mission San Francisco (early 1820s), by the famous **Estanislao** at Mission San Jose (1828-1829), and by **Cipriano** and **Yozcolo** at Mission Santa Clara (late 1830s), indigenous guerrilla armies combined the forces of both runaway neophytes and natives from villages the Spanish had not yet dominated (Holterman 1970; Brown 1975; Rawls 1986; Milliken 2008; Panich 2020). Yet the Spaniards mostly succeeded in destroying the ecological basis for the indigenous economy, and in transforming the Bay Area peoples and their close neighbors into an exploited, impoverished soon-to-be landless working class.

In Frances L. Fox's 1978 publication titled **Land Grant to Landmark**, he noted that:

> In reality no picture of this period could be complete without mentioning the Indians, as they were the working arms which made it possible to carry out agriculture and other projects needed to provide necessities of daily living. Without them the romantic leisurely days of early California would not have existed, as it was not uncommon for the *ranchero* to have from fifty to a hundred servants in the household. .
>
> Dr. john Marsh, American pioneer of 1836m stated, "Throughout all California the Indians were the principal laborers; without them the business of the country could hardly be carried on. … (Fox 1978:7-8).

It was as indebted peons that the ancestors of the Muwekma, the Ohlone people of the San Francisco Bay Area and elsewhere in Hispanic California confronted the next two stages of European domination, with the secularization of the missions and the ensuing conquest of California by the United States.

West Bay Ohlone Tribal Groups and the Last of the Puichon Descended Indians - The Evencio Family of San Mateo County

Randall Milliken, Lawrence Shoup and Bev Ortiz (2009) had conducted a comprehensive ethnohistoric study for the Golden Gate National Park on the Indians of the San Francisco Bay Area, wrote the following historic account on the Evencio family. Descended from the **Lamchin/Puichon Ohlone**-speaking tribal groups of the West Bay around San Francisquito Creek area, and the Saclan Bay Miwok speaking tribal group of the East Bay, Pedro Evencio (**Figure 2**) and his children were the last of the ***Doloreño*** Indians who had aboriginal descent from the West Bay. Milliken wrote:

> A four year old boy named Yaculo, who was to found the only San Mateo county Indian extended family documented into the twentieth century, was baptized at Mission Dolores on October 31, 1790. He was brought to the mission by his father Gesmon ("The Sun" [also spelled Exmon]) and his mother Ssipiem, San Francisco Bay Costanoan speakers from either the **Lamchin** or **Puichon** local tribe, and he was christened Evencio. Four years later, Evencio's future parents-in-law were baptized. They were Sacalinchi and his wife Uimusmaen, who led the first group of adult **Saclan Bay Miwoks** [from the East Bay] through the baptismal ceremony at the mission in December of 1794; after fleeing in 1795 they returned with a son who was christened Juan Diego in 1798. Their mission-born daughter Geronima, Evencio's future wife, was baptized in June of 1800. Geronima and Evencio were married in about 1826 and had at least eight children between that year and 1844. Their oldest son, **Pedro Evencio**, was the man whose testimony in federal court in 1869 about the eviction of the Indians from Rancho San Mateo ….
>
> … Pedro Evencio's paternal grandparents, Rosendo Exmon and Osana Ssapiem, were baptized at Mission Dolores in 1793 (SFR-B 1231, 1248), three years later than their son Evencio Yaculo. Evencio Yaculo grew up in the Mission Dolores community and married Salaverba, a Huchiun San Francisco Bay Costanoan, in 1804 (SFR-M 953, SFR-B 2747).

Evencio and Salaverba had five children before she died in 1820 …. Evencio Yaculo then married Geronima sometime during the mid-1820s, although no record of the wedding has been found. The seven children of Evencio and Geronima who appear in the Mission Dolores baptismal record were baptized between 1828 and 1844. Since none of them was named Pedro, we presume that he was born in 1826 and that Evencio Yaculo and Geronima were also married that year.

Evencio Yaculo and Geronima raised their children during the Rancho Era at the mission outstation of Rancho San Mateo. Pedro Evencio stated in 1869 court testimony that his father had been the leader of the San Mateo Indian community when Pedro was young. …

Pedro Evencio married Pastora at Mission Dolores in December of 1846. She was a Churuptoy **Patwin** from the present Woodland, Yolo county area by way of Mission San Francisco Solano (SFS-B 1166). The marriage entry lists Pedro as 20 years old and the bride as 18 (SFR-M 2162). Pedro Evencio and Pastora had four children who were baptized at Mission Dolores between 1852 and 1862. Those children were typical mixed-ancestry Doloreños, having as they did a Puichon San Francisco Bay Costanoan/Saclan Bay Miwok father and a Churuptoy Patwin mother.

Figure 2: Pedro Evencio (Photo taken by Mary S. Barnes from Stanford in 1894)

Unfortunately, with the passing of the Evencio family, there are no other known living descendants from either the *Puichon* Ohlone or other West Bay Ohlonean tribal groups that survived into the late 20th century with the possible exception of individuals within the Cordero family (see below).

There are however enrolled members of the Muwekma Ohlone Tribe, who are descendants of *Doloreños*, Ohlone Indians who were brought into Mission Dolores, during the early part of the 19th century from the East Bay. Mission records attest that there was intermarriage between elites from the ***Yelamu*** Ohlone of San Francisco and the ***Jalquin*** East Bay Ohlones during the early Contact Period (Milliken 1991:111; 1995:62).

In 2009, Milliken et al. noted the **recently discovered descendency of the Cordero family** noting:

> Until recently, it was believed that the last known descendent of a native Peninsula group died in the 1920s. We have now learned that Jonathon Cordero, sociology professor at California Lutheran University, traces his family's roots back to Francisca Xavier, a San Francisco Bay Costanoan from the Aramai village of Timigtac, on the Pacific Coast just south of San Francisco. From a wider perspective, hundreds of people are alive today who descend from local groups that spoke the same San Francisco Bay Costanoan language, but lived elsewhere around San Francisco Bay. Additionally, thousands of people trace their ancestry back to tribal speakers of Mutsun and Rumsen, two Monterey Bay Area languages of the same language family as San Francisco Bay Costanoan. The single-language family to which their ancestors all belonged has been labeled Costanoan since 1891, Olhonean (by a few) since the 1930s, Ohlone (by some) since 1978, and Ohlone/Costanoans (mainly by government agencies) since the early 1990s. (Milliken et al. 2009:2).

Milliken et al. also noted about the recent genealogical revelation conducted on the Cordero family that:

> Only one descendent family of San Francisco Peninsula Ohlone/Costanoans can now be identified. The family descends from Francisca Xaviera of the Aramai local tribe (of modern Pacifica) and her husband Jose Ramos (from Tulanzingo, Mexico), who married at Mission Dolores in 1783. Their children and grandchildren considered themselves to gente de razón, and were so considered within the hierarchal world of early Hispanic California. Their modern descendents, who carry the surnames Cordero, Robles, and Soto, among others, **have not participated as Indians in the modern cultural or political arenas** (Milliken et al. 2009:239).

Panich in his 2020 publication set the stage for the post-secularization of the Bay Area missions stating that:

> From secularization [1834-36] to the dawn of the twentieth century, Bay Area Ohlone people faced a new set of challengers spurred by the advance of American settler colonialism. Though the promises of secularization were almost immediately broken by Mexican-period elites, Native people were able to fall back on the skills learned in the missions to maintain economic continuity in California's agrarian economy. In the late 1840s, the dual revolution of American annexation and the Gold Rush quickly transformed the region, and Ohlone families and their

> relations sought refuge in the hills of the southeastern Bay Area as the demographic and political changes radiated outward from the north. There, they found common cause at Alisal and other interrelated rancherias. Indigenous religion thrived at the same time that agricultural work remained an important sources of livelihood despite the rapid urbanization of San Francisco, Oakland, and San Jose. The lives of individual Ohlone are difficult to see against the backdrop of the region's demographic and economic growth during this time, but Native people maintained significant social identities based on precontact and mission ancestry even as they intermarried with each other to perpetuate their contemporary community (2020:141).

1834-1846 Secularization of the Missions and its Aftermath

In the last decades of Mission San Jose's existence, between 1800 and the 1830s under Franciscan administration, the population of Ohlone peoples from the East, South and West Bay had endured such steep demographic declines that, as mentioned above, the mission's fathers were obliged to seek further afield for native people for conversion and to provide the labor to maintain the mission's farmlands, ranches and extensive herds.

As discussed above, many Indians from the Coast Miwok, Bay and Plains Miwok, to the north and east of the missions, and from the North Valley Yokut and Patwin tribal groups as well, were converted at Missions Dolores, San Jose and Santa Clara (Cook 1957, 1960; McCarthy 1958; Bennyhoff 1977; Milliken 1982, 1991, 1995, 2008; Milliken, Leventhal and Cambra 1987). Also as noted previously, marriage exchanges between these tribal peoples followed extremely old and established kinship traditions in central California; intermarriage and strong relations of kinship continued within the setting of the mission, albeit under circumstances Indian peoples found alien, harsh and objectionable.

Notwithstanding the enormously destructive changes missionization wreaked upon indigenous culture and society, the missions themselves were vulnerable to the winds of political change. Situated at the very northern edge of the Spanish empire, central California's history was really a part of a larger Latin American history until the late 1840s.

The Spanish crown had decided to secularize the missions as early as 1813, but the struggle for Mexican independence intervened. Between 1834 and 1836, the Mexican Republic enacted legislation that terminated the missions and proposed to divide mission properties among the missionized indigenous peoples. Yet this division of land and resources did not fully occur in the San Francisco Bay region. Instead, the local families of Spanish-Mexican descent, known as ***Californios***, proceeded to make formal claims upon most of the property owned by missions Santa Clara and San Jose. Large cattle ranchos were created and the *Californios* established themselves as neo-feudal lords (Phillips 1981; Milliken 2008; Milliken, Leventhal and Cambra 1987).

Milliken, conducting research with the Muwekma Tribe for the Interpretive Recommendations and Background Report for the East Bay Regional Park District, noted:

> Under Spanish law, Mission lands were to be held in trust for the Indians until the government felt that they had become enough like Europeans to be considered "people of reason". The Mexican government came under strong pressure during the 1820's to ignore the Indian land rights and open up mission lands to settlement by the families of ex-soldiers and by new settlers from Mexico. The government of Mexico finally gave in to these pressures with a series of secularization acts between 1834 and 1836. On paper these acts protected the Indian land rights. Administrators were to divide mission properties among the Indians, with the left over lands to be allocated to Mexican immigrants through petition.
>
> A veritable landrush began among local Mexican families from San Jose when Jose Jesus Vallejo became administrator of Mission San Jose in 1836. Within a two-year period, an instant feudal aristocracy was formed, complete with a population of Indian serfs. Families such as the Vallejos, Pachecos, Alvisos, Castros, and Bernals gained control of the mission lands and herds. These new land owners continued to live in San Jose, while former Mission San Jose Indians did all the labor on various ranchos (Milliken, Leventhal and Cambra 1987:11).

Thus the ancestors of the Muwekma Ohlone experienced a second abrupt and catastrophic shift in their lives when the Mexican government secularized the Franciscan Missions. Although, as stated above, Mexican law decreed that half of all the mission held lands were to be issued to the newly patriated neophytes, no such lands were formally granted with the exception of three or four individual land grants to several Clareño Ohlone Indian families (see below). Most Indians left the missions to become manual laborers, domestics and vaqueros on neighboring Californio-owned ranchos.

Mexican Land Grants Issued to Secularized Clareño Indians

Rancho Ulistac

Around the area of **Mission Santa Clara**, however, several (**Clareño**) Ohlone families were fortunate to be granted land grants by the Mexican government. In 1845, Governor Pio Pico granted the **Ulistac** land grant near Alviso in Santa Clara to **Marcello** (SCL-B #1360; baptized June 15, 1789 at age 4), whose father Alexandro Seunes (SCL-B # 4577; baptized July 21, 1804 at age 44 and died August 5, 1812) and whose mother Pacanagua (not baptized) were from the **San Bernardino** (district) Tamien Ohlone-speaking tribal group located to the west of Mission Santa Clara.

The Ulistac land grant was also issued to two other Mission Santa Clara Indian men named **Pio Guatus** (SCL-B # 4805; baptized June 21, 1805 at age 12 and died November 21, 1846) and **Cristobal** (SCL-B # 6157; baptized November 7, 1813 at age 3 days) and whose father was Audito Lataig (SCL-B # 4737; baptized June 20, 1805 at age 20) and whose mother Audita Petsilate (SCL-B # 4838; baptized June 21, 1805 at age 20, and died February 1, 1825) were from the **Tayssen** Ohlone-speaking tribal group**.**

As mentioned above, the **San Bernardino** tribal group/district was located in the Stevens Creek, Saratoga and Pescadero Creek water shed region to the west/southwest of Mission Santa Clara (Milliken 1995). **Pio Guatus** and **Cristobal** were traced through the Mission Santa Clara Baptismal records to the **Tayssenes** (and **Sumu**) Thámien Ohlone-speaking tribal group whose territory included the upland valleys to the southeast of San Jose towards the Orestimba Creek drainage and who were located to the east of the **Paleños**/**San Antonio** tribal group (Milliken 1995:229).

Rancho **Ulistac** measured half a league (2270 acres) and included the bay shore of the present-day cities of Santa Clara and Alviso (Brown 1994).

Rancho Posolmi

Earlier, on February 15, 1844, another Clareño Ohlone Indian named, **Lope Yñigo**, was issued title to 1695.9 acres (2.64 square miles) around present-day Moffett Field near Mountain View by Governor Micheltorena (Brown 1994). This land grant was called **Rancho Posolmi y Pozitas de las Animas (Little Wells of Souls).** Apparently, Yñigo was recognized as a chief or ***capitane*** of the "San Bernardino" Ohlone-speaking people who originally occupied this region. He was baptized at Mission Santa Clara in 1789 (SCL-B # 1501; baptized December 26, 1789 at age 8 years old). Yñigo's father Celedonio Samis (SCL-B # 3106; baptized April 5, 1795 at age 4 and died November 8, 1820) and mother Temnen (died before being baptized) were also from the **San Bernardino** tribal district located to the west/northwest of Mission Santa Clara (Huntington Library On-Line Mission Database).

Posolmi land grant was also referred to as **Yñigo's grant**, **Yñigo Reservation** (Thompson and West 1876 Historical Atlas Map of Santa Clara County) and **Pozitas de las Animas**, or **Little Wells of the Souls**.

Although reduced to approximately 400 acres, Yñigo's claim came under review in the U.S. Land Commission of 1852 (Walkinshaw vs. the U.S. Government, Posolmi, 125, Land Case 410) and he retained this small portion of his land until his death on March 2, 1864. Yñigo was buried somewhere on his land which is now occupied by Moffett Field and Lockheed Corporation. After Yñigo's death, it appears that his descendants may have afterwards moved to the Alviso Rancho [(see U.S. Land Commission Index to land Grants 1852, U.S. General Land Office, Posolmi, 125, Land case 410); Bancroft 1886; Harrington 1921-1934; Arbuckle 1968; see: Thompson and West 1876 Map identifies Yñigo Reservation (Moffett Field); Yñigo Rancho by Pat Joyce; Obituary of Yñigo in the **San Jose Patriot**)].

Rancho de los Coches

Also in 1844, Governor Manuel Micheltorena formally granted **Rancho de los Coches** (**the Pigs**), totaling 2219.4 acres, to a Mission Santa Clara (Clareño Ohlone) Indian named **Roberto Balermino**. Since 1836 Roberto had occupied this land west/southwest of the confluence point where the Guadalupe River and Los Gatos Creek meet in downtown San Jose. He built his adobe dwelling in the "Willows" area of what is now part of Willow Glen.

It is interesting to note that Rancho San Juan Bautista borders on the southeastern side of Rancho de los Coches and the ***Clareño Muwékma Ya Túnnešte Nómmo*** **Site (CA-SCL-30/H – Mission Santa Clara)** is located approximately three miles to the northwest of Roberto's adobe/homestead.

Fox (1978) in his publication, wrote about Roberto and his Land Grant stating:

> Undoubtedly Roberto was an Indian of stature as judged by his position of authority with the mission, the subsequent granting of the *Rancho de los Coches*, and the issuing of a "Certificate of Emancipation" giving him full citizenship rights. Such recognition was seldom given to Indians during this period (1978:15).
>
> …An interesting sidelight of the Roberto's Adobe history is that a part of the *Rancho de los Coches* it was a landmark case in the land grant settlements confirming the rights of Indians to hold grants and dispose of them. It was believed unusual for an Indian to receive a land grant , although in the same year 1844, Governor Manuel Micheltorema granted Rancho Posolmi (1695.90 acres) to Yñigo, chief of the tribe inhabiting land now occupied by Moffett Field (1978:21).

Roberto was baptized **Roberto Antonio** on September 26, 1785 at the age of 3 years old (SCL-B # 0791). He was identified as being from the **San Juan Bautista (district)** Tamien Ohlone-speaking tribal group. Roberto's father was Juan Jose, who was baptized on December 4, 1802 at the age of 40 years (SCL-B. #4384). Juan Jose was also identified as being from the San Juan Bautista (district) Ohlone tribal group. Juan Jose's Indian name was **Guascai** and he died on February 7, 1825 (MSC death register #5808). Roberto's mother's name was identified as **Sulum** but there was no additional baptism information.

Rancho de los Coches was adjacent to the aboriginal territory of Roberto's tribal homeland that included the district that the Spanish Priest called **San Juan Bautista** (again not to be confused with Mission San Juan Bautista located south near Hollister). At the age of nineteen (around 1801) Roberto had married his first wife Maria Estefana (this date is based upon the birth of one of their children). Roberto's marriage to Maria Estefana connected him to the **Alson** Ohlone Tribal group of the **San Francisco Solano** district located to the north of Mission Santa Clara (Milpitas/Alviso), and also connected him to the **Santa Ysabel** district to the east hills above San Jose (Brown 1994; C. King 1994).

Maria Estefana was baptized on August 8, 1785 (5 days old) and she was identified as coming from the **Santa Ysabel** (district) Costanoan/Ohlone-speaking tribal group (SCL-B. #0773). Maria Estefana's mother was **Micaelina Antonia** who was baptized at Mission Santa Clara on June 18, 1780 at the age of 18 years. She was identified as belonging to the **San Francisco Solano** (district) Costanoan/Ohlone tribal group (SCL-B #0181). Maria Estefana's father was named **Francisco Gil** by the Spanish priests and was baptized on April 21, 1782 at the age of 20 years (SCL-B #0347). His Indian name was Gilan. Francisco Gil was identified as coming from the **Santa Ysabel** (district) Costanoan/Ohlone tribal group. Maria Estefana died on April 29, 1811,

Approximately 4 years after the death of Maria Estefana, Roberto married a Clareño Ohlone Indian woman named **Manuela**. Manuela was baptized at Mission Santa Clara on November 30, 1804 at the age of 7 years (MSC Bapt. # 4656). Her Indian name was **Chebuunot** and she was identified as coming from the **Rancheria San Antonio** – Sojue(?) district/tribal group located in the mountains to the east of the mission. Forty-four years later, Manuela died on February 17, 1849 (MSC death register # 8207).

Roberto and Manuela sold the rancho to Antonio Sunol on January 1, 1847m for the equivalent of $500.00, and recorded in that deed of sale it states "I am in debt to him [Sunol] for $500, and have no means to acquit myself of this debt. Signed Jose Roberto Valermino … (Fox 1978:23). Roberto died later that year on October 26, 1847 (MSC death register #8053).

Years later, on February 17, 1851, Juan Balermino, Roberto's son renounce any claims to the Rancho, which was sold by his father to Antonio Sunol. Fox noted that "by the end of 1851 the entire family was deceased. They may have succumbed as a result of. The deadly choler epidemic that swept through the valley during that time" (1978:23).
[**Note:** between the summer of 2009 to its grand opening on March 7, 2015, the Muwekma Tribal leadership and Language Committee, brought the history and heritage of Roberto Antonio Balermino and his family back to visibility by naming a public park located at 1527 Almaden Expressway in his honor as a major Clareño Muwekma Ohlone Indian historic figure.]

Rancho La Purisima Concepcion

On the West Bay, a land grant was issued to another Clareño Ohlone Indian man named **Jose Gorgonio** and his family. **Jose Gorgonio** and his son, **Jose Ramon**, were granted **Rancho La Purisima Concepcion** by Governor Juan B. Alvarado on June 30, 1840. This rancho comprised 4,440 acres or 1 square league around the present day Palo Alto/Los Altos Hills area (Brown 1994). **Jose Gorgonio** was probably baptized as **Gorgonio** (SCL-B #1721; baptized July 15, 1790 at age 1½ years). His father's Indian name was **Lulquecse** and his mother's name was **Seguem.** Lulquecse was identified as **Chrisostomo Lulquesi** (SCL-B #2672; baptized November 27, 1794 at age 42 and had died November 5, 1801). He was listed as being from the **San Bernardino** district located to the west of Mission Santa Clara. Gorgonio was also identified as being from the San Bernardino tribal district.

Other Indian Settlements

During the post-secularization period (after 1836), there were at least six Indian rancheria settlements established areas surrounding **Pueblo de San Jose**. One major rancheria was located on the **Santa Teresa Rancho** (Bernal's property) south of the Pueblo San Jose near the Santa Teresa Hills. Another was located in the valley east of San Jose called **Pala Rancho**, while a third was established along the Guadalupe River above Agnew on the **Rinca de los Esteros Rancho** (City of Santa Clara)**.**

In the present-day City of Cupertino was the **Quito Rancho**. In **Pueblo de San Jose**, there was a settlement of "free Indians" on the east side of Market Street, and the sixth community was located further west along the banks of the Guadalupe River near Santa Clara Street (King 1978; Winter 1978a).

Establishment of the East Bay Rancherias

After secularization of the missions, many of the Mission Santa Clara (Clareño) Ohlones, including the **Luecha**, **Santos** and other families, found refuge with their familial cousins residing in the East Bay on rancho lands owned by Californios, especially near the present-day towns of **Pleasanton**, **San Leandro/San Lorenzo**, **Livermore**, **Sunol**, **Niles** and **Alviso** (Harrington 1921-1934).

During the years 1841-1842 some of the surviving Bay Area Mission Indians left the missions and found work on many of these neighboring ranchos as domestics, field laborers, farm hands and vaqueros (cowboys). During this period of time there appears to have been a free and independent Indian community working (and possibly owning) land between the San Leandro and San Lorenzo Creeks located within the aboriginal ***Jalquin/Yrgin*** **Ohlone**-speaking tribal territory near the present-day City of Hayward (see Nicholas Gray Survey Map of 1855; also see Harrington 1921-1934 interviews with Susanna Nichols, Jose Guzman and Maria de los Angeles Colos).

Recent research was conducted into the land claims made by two direct ancestral Muwekma Indian brothers Ancieto and Silvestre who lived on the **San Lorenzo/San Leandro Rancheria**. Detailed information was found in the following publication titled **A Geographic History of the San Lorenzo Creek Watershed: Landscape Patterns Underlying Human Activities. Prepared for the Alameda County Clean Water Program. A Technical Report of the Regional Watershed Program**, published in SFEI Contribution 85. San Francisco Estuary Institute, Oakland, California by, R. Grossinger and E. Brewster, in 2003. The following has been excerpted from that report:

> **Mission San Jose - Rangeland**
>
> In 1796 the alluvial plain surrounding San Lorenzo Creek, from which the Yrgin [Jalquin Ohlone] had harvested grains and hunted wildlife for generations, became part of the Mission San Jose Rancho. Established 15 miles south of San Lorenzo Creek, Mission San Jose constitutes the first major European land use of the area, and a potentially significant early impact to the watershed. The Mission is also the initial center of European development of the southern East Bay.
>
> After the secularization of the California missions in 1834, the lands around San Lorenzo Creek were granted by the Mexican government to several men including Joaquin Estudillo (San Leandro), Guillermo Castro (San Lorenzo Alto), Francisco Soto (San Lorenzo Baja), and Jose Amador (San Ramon) before the establishment of ranchos. During this period, grazing density may have reached even higher levels than during the Mission era. Some accounts put Castro's herd at 10,000–15,000 head in an area of less than 30,000 acres (a density of 1 cow/2-3 acres). As the herds expanded into the Yrgin's lands during this period, the Yrgin themselves probably served as vaqueros, herding the cattle on lands that had been previously their own. The high human mortality rate at the mission necessitated continual recruitment of converts, often using force to cause relocation to the mission. After 1810, many of the converts brought to the mission each year were from the larger populations of the Central Valley, who became the new labor force for Mission system.

The relationship between native peoples and the land has typically been denigrated since European contact (e.g. "In this land of plenty they had scarcely wits enough to keep alive" (Stuart 1951). Yet local tribes not only helped shape the open grassland ecosystem that facilitated the Spanish cattle-based economy, but also largely built the Mission landscape, as the primary source of labor for Mission activities. A rare recognition is found in a cemetery marker near Mission San Jose: "Here sleep Four Thousand of the Ohlone Tribe who helped the Padres build this Mission San Jose de Guadalupe. Sacred be their memory." (Stuart 1951: 39)

The Diramaderos, or "overflowing of the springs", was an array of mineral springs associated with the Hayward Fault. The springs produced a sizable flow (est. 3000 gallons of water per minute, ~6.7 cfs) that had a large zone of spatial influence. Early maps show stream channels extending from the springs across nearly the entire alluvial plain.

The spreading of these waters toward San Lorenzo Creek created an area between the spring channels and the creek that had an unusually high water table and supported extensive willow marshes, or "sausals." The sausals supplied native peoples with building materials and were likely managed, with techniques such as coppicing, to provide straight branches for arrows, baskets, and houses. The groves also provided shade on an open plain, shelter from the winds off the Bay, and probably contained smaller springs. In fact, the one native village in the area that was not associated with the Bay or the base of the hills was located in these groves, and later became downtown San Lorenzo. The water supplied by the Diramaderos may also have been partly responsible for San Lorenzo Creek's perennial flow along its lower reaches. The flowing of the springs at Diramaderos is said to have ended with the 1868 Hayward fault earthquake.

Some writers speculate that as many as 150 people lived in the native village at Diramaderos during the early 19th century, in a community that received unusual legal recognition from the Mexican government. As a condition of the grant to Estudillo, the Indians at the Diramaderos were granted the land "on the meadows" north of San Lorenzo Creek. These wet meadows and "overflow lands" were to be used by the Yrgin as a hunting and fishing preserve (Sandoval 1988: 43).

This stipulation was a rare instance of explicit transfer of lands to an Indian group in the Bay Area. It appears to have contributed to the general confusion regarding the boundary between Estudillo and Soto, making their claims more difficult to pursue in the American courts. Eventually both the Yrgin and the Mexican Rancheros lost ownership of the land to immigrant Americans. A map produced as part of these court

Towns

At the time of European contact, San Lorenzo Creek watershed was part of the lands of the Yrgin people. The Yrgin appear to have been closely related to their neighbors to the north, the **Jalquin,** who lived in the vicinity of San Leandro Creek and the Redwoods, and the **Seunen**, of the present San Ramon-Dublin area to the east. The Yrgins entered Mission San Jose primarily between 1799 and 1805, due to a variety of pressures, including aggressive missionary work, disease, and decreasing food supply.

In their initial contacts, the native people were generally peaceful in response to the newcomers. In an indicative description by Father Font, he reports that "[o]ne Indian who carried his provisions on the end of a pole invited us to eat some of them" (Bolton 1933: 357). In the vicinity of San Lorenzo Creek, Father Font describes the local language as "distinct from all those we had formerly heard," reflecting the cultural diversity of the Bay Area, which supported several dozen distinct tribes at the time of European contact (Milliken 1985).

Studies of the Alameda Creek area, several miles to the south, and other parts of the Bay Area, suggest that indigenous residences shifted seasonally to utilize the resources available at different times of year. Because of the year-round availability of shellfish and other aquatic foods, however, tribes usually maintained some permanent presence in a village on the shores of the Bay. In the San Lorenzo area, the shellmounds located at the northern edge of the vast South Bay marshlands may have been such a village. During winter, migratory waterfowl were hunted in the marshes. During spring and summer, groups spread out to the collect bulbs, greens, and grass seeds from the alluvial plain. They developed base camps and brought materials back to the bayside village for winter storage. In summer and fall, the hills were utilized for hunting deer and the intensive gathering of acorns from groves of oak trees. Seasonal villages were associated with these activities.

Artifacts and historical information suggest that seasonal villages in the San Lorenzo Creek area were probably located at the Diramaderos springs, in downtown Hayward, in the vicinity of the San Lorenzo Cemetery, and at the Holy Sepulcher Cemetery. These summer and fall habitations are located at springs or creeks at the base of the hills that would provide water sources later into the year, or, in the case of downtown San Lorenzo, along the creek in the willow groves downstream of the large spring at Diramaderos. Miller suggests that the Hayward Civic Plaza was a key village site because San Lorenzo Creek provided the only perennial source of freshwater (1975: 10).

Most of the early Spanish and American town centers in the vicinity - including San Lorenzo, Hayward, Alvarado (numerous shellmounds), and Mission San Jose (the Indian village of Oroysom) — were established on native village sites, which had already been identified as the best spots for human settlement. In fact, some of these sites, such as San Lorenzo and Alvarado, had been physically constructed by indigenous communities. Shellmounds several stories high provided an elevated position above the valley floor, removed from floods, and often planted with buckeye trees for shade.

Despite persistent Indian presence in the vicinity, squatters such as Mulford and Roberts were able to establish an American settlement in the shellmounds and willow groves near the Bay during the 1850s. "Squattersville" became the town of San Lorenzo, well-positioned for access to the waterfowl and salt resources of the marshes, and a natural crossroads (leading to its other historical name: "Four Corners").

Roads

When Europeans first explored the Bay Area, they generally didn't have to blaze trails through thick chaparral or tall grass. Rather, they followed the road - "el camino." The first Spanish expeditions commonly record "well-beaten paths," even in places where few native peoples were encountered (e.g. Bolton 1927: 285). Coming up the East Bay in 1776, Font comments that "the road is apart from the estuary, at first about a league and then farther and farther away" (Bolton 1933: 359) and "the road followed the foothills" (Bolton 1933: 361). Anza's diary from the same expedition summarizes the route near San Lorenzo Creek, also notes the grassland-covered hills, conspicuously lacking forest: "the road runs close to a small range completely bare of trees, for none are seen except some which grow in the canyons" (Bolton 1930: 135).

The roads encountered by the Spanish had been etched into the landscape through centuries of indigenous use, connecting villages or towns to local resources and more distant destinations. The Indian road described above linked the Santa Clara Valley with the Oakland area. With the assumption of control by the Spanish government, it became El Camino Real, the only continuous road along the East Bay plain in historical times. Present-day Mission Boulevard (East 14th St./International Blvd. in Oakland) largely follows the original Indian and subsequent Spanish road, but some adjustments were made. …

Despite these variations, many important modern roads generally follow ancient routes. Redwood Road carried felled trees from the neighboring San Leandro Creek watershed down through the less rugged Castro Valley. Marina Boulevard crossed the alluvial plain to Mulford Landing, the shellmounds, and a large salt pond. Similarly, Hesperian Boulevard split off from El Camino south of San Leandro to reach the important shellmounds, salt ponds, and landings on Alameda Creek at Alvarado.

As mentioned above in the study, eventually both the Indians and the Californios lost their ownership of their respective lands as a result of the U.S. land claims commission.

The Muwekma Enrolled Armija Family Descendancy from Silvestre Avendano

Genealogical studies conducted by the Muwekma tribal leadership as well as genealogists, have demonstrated direct lineal descent from Silvestre and his brother, Ancieto through Silvestre's son Jose Elias Armija (aka Elias Aleas Armijo). The following Mission San Jose record information has been identified for Elias Armija's (Jose Aleas) ancestry. Jose Elias Armija's mother **Perpetua SSAUECHEQUI** was from the **Tamcan** Tribal group from around the Byron area.

1809 Mar 16, #1636 **Perpetua SSAUECHEQUI**, Tamcan Tribe
Born: 1807 (2 years old at baptism)
Father: Deceased (gentil difunto)
Mother: Oyojola o Guayaatne
Godparents: Maria Higuera

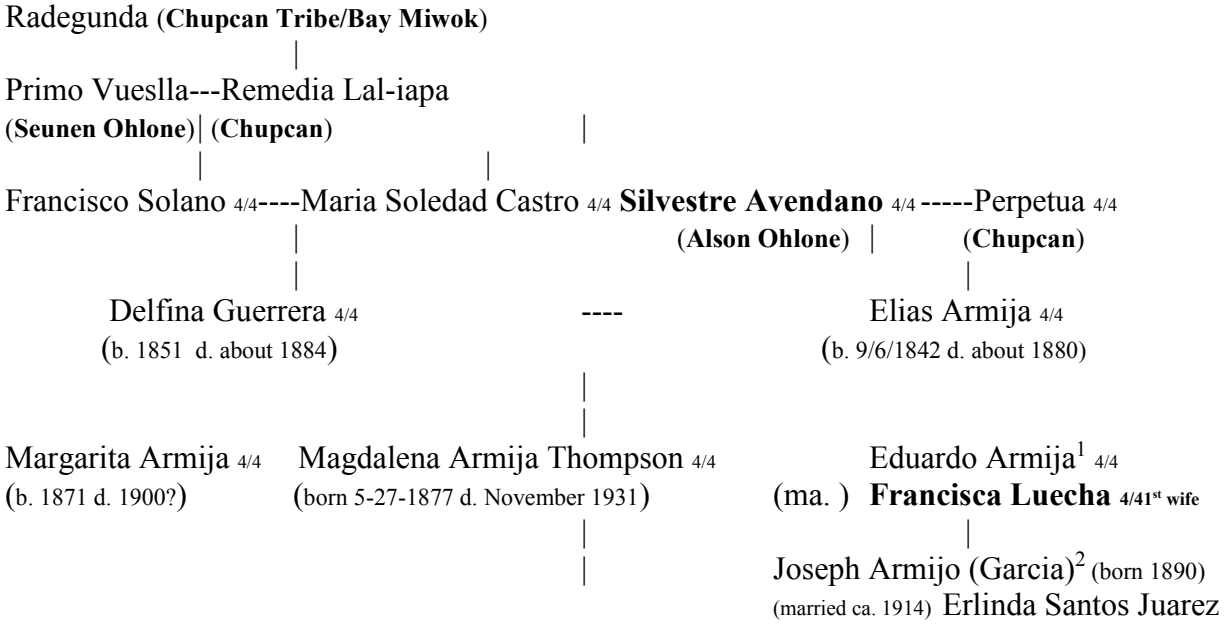
Jose Elias' father was Silvestre (Avendano) who was born February 26, 1800. It was from the baptismal information of one of his siblings **Ancieto** and Fermin that we know that they were from "del estero" which is located on the Fremont Plain within the **Alson** Ohlone Tribal territory:

1800 Feb 26, #292 **Silvestre**, Mission (del estero)
Born: Feb 26, 1800
Father: Crisanto (neofitos)
Mother: Crisanta
Godparents: Teodora Peralta

By 1842, Perpetua Ssauechequi had married Silvestre Avendano in October 1842 and they had a son named Jose Elias who was baptized at Mission San Jose:

1842 Nov 6, #8167, **Jose Elias**
Born: Oct 1842 (1 month old)
Father: Silvestre Avendano (MSJ # 292)
Mother: Perpetua (MSJ # 1636)

The Mission records for Jose Elias document that **Silvestre Avendano** was his father who was also baptized at Mission San Jose (MSJ Bapt. #292).
The Armija Family Ancestry is traced through several generations of Indians. The following is a basic genealogical tree:



|
Alphoso and Daniel Juarez
(b. 1914 and b. 1917)

(children) | (children)| (married) **Chona Bautista** **4/4 2nd wife**
| | |
Belle Stokes (Nichols) Rosa Bernal Cecelia Armija Marine
[bapt. Isabelle S. Olivares] Henry Marshall (born 1900 – d. 1949)
(born 2-19-1890) Roberto Mach (Marshall)
Joseph Aleas Flora Emma Thompson Martel
(born 5-11-1893) Emily Thompson
Ernest Thompson
Eduardo Thompson **(enrolled Muwekma tribal member)**
Lorenzo Thompson, Sr. **(enrolled Muwekma tribal member)**

Another Muwekma lineage having affiliation with the **San Lorenzo Rancheria** included the founding Elders **Liberato Culpecse** and his wife **Efrena Quennato**le who lived on that rancho. Based upon Mission San Jose record studies, the Muwekma Ohlone Tribe has documented that **Efrena Quennatole** [who was the great-grandmother of Dario, Dolores, Isabelle, Ramona, Mercedes, Victoria, Lucas and Trina Marine, grandmother of **Avelina Cornates Marine** and **Francisca Nonessi Guzman**, and the mother of **Maria Efrena** and **Liberato Nonessi, Jr.**] was recalled by Verona Band/Muwekma Ohlone consultants **Jose Guzman** and **Maria de los Angeles Colos** during one of their interviews with Harrington (see below). Mission records suggest that Efrena Quennatole and her third husband **Ybon Uacu-uga**, were living at "**de Rancho de San Lorenzo**" at the time of the birth and baptism of their son Ybon in 1838 (Mission San Jose baptism dated March 31, 1838). Years later, Ybon (Jr.) went through life by the name of Miguel Santos Pastor and he had married Celsa Santos[2]. The following is Ybon's Mission San Jose 1838 baptismal record:

1838 Mar 31,	**Ybon**, "de Rancho de San Lorenzo"
Born:	Mar 16, 1838 (15 days old)
Father:	Ybon
Mother:	Efrena

Based upon his research, Milliken also discovered that during this period of time:

> One group of Indians established an independent community somewhere along the road north from Mission San Jose toward Alameda Creek during the 1840's. The head of the community was Buenaventura, one of the few survivors of the original villages from the local "Estero" area, or bayshore.

[2] On the **1880 Census, Miguel Santos** (age 40); Maria (Celsa), wife, age 35; Hosa S. (Jose Santiago), son, age 15; Maria (Antonia), daughter, age 7; Vincent (Jose Antonio), son, age 5; and Pappoose, son, age 5/12, (born January 1880), were residing in Brooklyn Township, north of the San Leandro Creek near the old San Lorenzo Rancheria, possibly near the old town of Fitchburg (now Oakland).

> Buenaventura had been baptized as a two-year old at Mission San Jose in 1798 (JOB 161). Father Miguel Muro granted a license to Buenaventura, six other adult males and their families on 2 November 1844. His wife Desideria was of a family that had moved to the mission from the Jalalon area, now eastern Contra Costa county. Buenaventura died in 1847. Desideria sold the group's license to an American in 1849. The U.S. Land Commission of the 1850's did not recognize the license as a valid land title, however [Land Case 290 n.d.:11] (Milliken, Leventhal and Cambra 1987).

The "**Estero**" area along the bayshore included the **Chochenyo/Thámien Ohlone**-speaking (bilingual) **Alson** tribal group located along the lower Guadalupe River and the Chochenyo Ohlone-speaking **Tuibun** tribal group of the Fremont Plain. As discussed above both of these groups were first missionized at Mission Santa Clara (Milliken 1983, 1991, 2007, 2008).

1846 - 1870s American Invasion and Post-Conquest Period

Many of the missionized Indians, who had previously labored in the mission's fields and cared for the livestock, were hired on as vaqueros by the new Californio estate-owners, who continued the tradition of controlling indigenous peoples on and near the old mission lands. Yet, many of the formerly missionized Indians who worked on these ranchos opted in some cases to move to the most remote areas of the back-country within their old homelands. At least a thousand former mission Indians lived in the vicinity of Mission San Jose in the early 1840s, and it is likely that more Indians came to the area from the Mission Santa Clara region (History of Washington Township 1904). During this historic period, the part of the East Bay extending north of Mission San Jose up to San Leandro became a region of refuge (especially after the American invasion and conquest of California), to which the missionized Indian peoples of the East and South Bay migrated and in which communities of mission survivors coalesced.

During this period, invasion of the tribal territories throughout California accelerated dramatically and created the third major rupture to the lives of California Indians. Losses of land due to the Bear Flag Revolt of 1846-47 (American Conquest under **John C. Fremont** [**Figure 3**]), Gold Rush of 1848-49, and indifferent enforcement of the Treaty of Guadalupe Hidalgo of 1848 cut off any traditional means of subsistence, and forced the ancestors of the Muwekma Ohlones residing on the East Bay rancherias and surrounding ranchos into even greater dependence on the non-Indian economy.

Figure 3: John C. Fremont
[Note: Sent by his Father-in-Law Senator Thomas Hart Benton to Seize California in 1846]

The transition of power during the Gold Rush years and California Statehood witnessed great changes in policies towards Native Americans in California. One of the major figures to emerge during this period was **Peter Hardeman Burnett** (November 15, 1807 – May 17, 1895) (**Figure 4**) was an American politician who briefly served as the territorial civilian governor of California in December 1849. Burnett was the first elected state Governor of California, who served from December 20, 1849 to January 9, 1851. He was also the first California governor to resign from office.

Figure 4: Governor Peter Burnett

On September 9, 1850, California became the 31st state in the Union and with tensions rising between the newly established American settlers as they claimed more and more Indian lands and committed depredations against tribal groups. Four months later, on January 7, 1851, in Governor Peter Burnett's first address to the California State legislature, he opined that "**a war of extermination will continue to be waged between the races until the Indian race becomes extinct** … ." (California State Senate Journal, 1851; Hurtado 1988:135).

Peter Burnett's legacy is largely mixed. While regarded as one of the "fathers" of modern California, Burnett's openly racist attitudes towards Black people, Chinese, and Native Americans has left a tarnished legacy for himself and California's treatment toward minority groups. Furthermore, while Burnett was serving in the Oregon Territorial Legislature (1848) his attitude toward minorities especially African Americans helped facilitate the exclusion of Black people from that state until 1926. Also, his open hostility to foreign laborers influenced a number of federal and state California legislators to push legislation, such as the Chinese Exclusion Act of 1882.

As mentioned above Burnett was also an advocate of exterminating California Indian tribes, a policy that continued with successive state administrations over the ensuing decades. The State at one point offered a bounty ranging from 25 cents to 5 dollars for Indian scalps.

After California statehood, in 1850, President Millard Fillmore and the United States Congress appointed three commissioners to enter into treaties (the only legal instrument that the federal government had to take land from tribes) with the Indians of California for the purpose of ceding and to have them quit-claim all lands identified within the eighteen treaties which were negotiated between 1851-1852 **(Figure 5).** In return for quit claiming their aboriginal title to California, the tribes of California were to receive, as a set-aside, reservation lands totaling approximately 8.5 million acres along with food, supplies and services (Heizer 1972; Hoopes 1975)..

Although reaching Washington D.C., these eighteen treaties were never ratified by the United States Senate (Heizer 1972; Hoopes 1975). Under the terms of these treaties, the ancestors of the Muwekma Ohlone Tribe were to be the intended "beneficiaries" of two of the treaties: **E. Treaty** of **Dent's** and **Vantine's Crossing,** May 28, 1851 and **M. Treaty of Camp Fremont,** March 19, 1851. Had these treaties been ratified the Muwekma Ohlone tribal communities would have, in all likelihood, been rounded up and forced to move to the central valley.

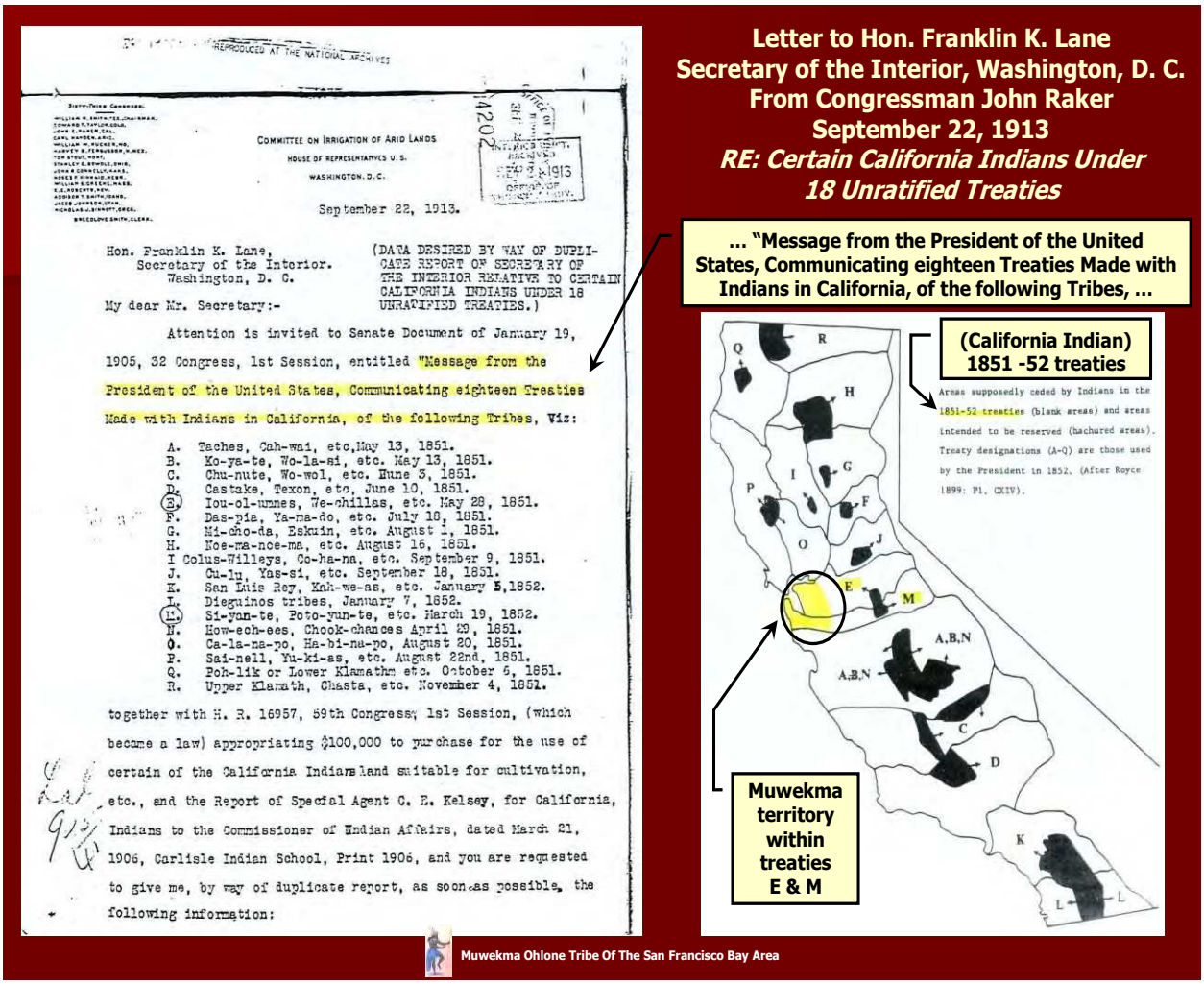


Figure 5: Eighteen Unratified Treaties of California

In a Daily Alta California article about The Indian Commissioners published on January 24, 1851 the author noted that:

> We happen to know something about the commission, something of its members, something of its intentions. Of the commissioners, we can tell the Legislature and Gov. McDougall, what they already probably know that is has ample powers to treat, and form treaties, with the Indians, that they have a *carte blanc* [sic] for that purpose, that they are prepared with proper goods for presents, and can draw upon U.S. officers here for such funds as are necessary. In reference to the members of that commission we may say that we have full confidence in their ability and integrity to consummate their mission in a manner honorable to their government, advantageous to our citizens, and for the best future for the Indians.
>
> As to their intentions and movements. Their intentions are peaceable treaties and extinguishment of Indian titles, if it can be peacefully effected. For this relinquishment of course they are empowered to secure the native occupants for the soil a remunerative consideration in the way of installments or some other equally

> satisfactory and protective, which shall amply pay the Indians for the rights which they yield, and secure to them the means of subsistence (published in Exterminate Them! by Trafzer and Hyer 1999.)

Trafzer and Hyer also noted that:

> … [T]he federal government dispatched three commissioners – Redick McKee, George Barbour, and O. M. Wozencraft – to negotiate agreements with the indigenous inhabitants of California. They negotiated 18 treaties with California's tribes, which the United States Senate rejected. At one time, California's tribes controlled all of the land, water, minerals, and other resources of the region, but under the treaties of the 1850s, they would have lost most of their estate. However, they would have retained for themselves approximately one-seventh of the state as Indian reservations. Even this was too much for whites in California, and the California delegation worked feverishly to scuttle the treaties, so that the native people had little formal relationship with the federal government, so that the state could assert its powers over the Indians. As a result, California allowed whites to steal Indian land, enslave Indian children, rape native women, and murder indiscriminately Indian men, women, and children (1999: 135-136).

As stated above, the newly elected senators from California, argued that the Indians should get nothing, and as a result the 18 unratified treaties were submerged under a seal of secrecy. No one was to know that the United States Government recognized the aboriginal title of all of California, belonged to the Indians facing genocide.

During this transformative American Conquest period between the late 1840s and 1860s, the small steps that the Indian rancherias of the San Francisco Bay, the ancestors of the contemporary Muwekma Ohlone, had taken to revitalize their communities and culture suffered a series of severe blows. The military invasion of California by the United States in 1846 and the subsequent Gold Rush (1849), followed by statehood in 1850, ushered in a new period of genocide against indigenous Californians.

A war of involuntary servitude and extermination was launched against indigenous peoples by the first legislators of the state (Hoopes 1975; Rawls 1986). Laws barred Indians from voting, from giving testimony in court, or from bringing lawsuits (Rawls 1986; Hurtado 1988). At the same time, American laws in most cases refused to recognize the validity of the land titles for the Californios' ranchos (1853 land cases). Coupled with a crippling drought afflicting central California during the 1860s, most of the Californios could not afford to maintain their land bases and were driven off their South and East Bay estates (Wood 1883). New American owners most likely expelled the Indian vaqueros and their families from the land (Milliken 2008; Milliken, Leventhal and Cambra 1987).

Between the decades spanning 1840 and the early 1860s, for reasons that are still not completely clear, many if not most of the remaining Indian people from Mission San Jose, perhaps many from Mission Santa Clara and elsewhere, gathered at several refuges which included the **Alisal (the Alders) Rancheria**, located just southwest of the city of Pleasanton on **Rancho El Valle de San Jose** which was granted to Antonio Maria Pico, Antonio Suñol and Augustin and Juan Bernal on April 10, 1839.

One historic account about the establishment of some of the East Bay rancherias has recently come to light via the oral recollections of Mary Ann Harlan Smith which was recorded by her daughter Emma Smith. Mary Ann Harlan was the daughter of George Harlan who was a wagon master on the ill-fated Donner Party expedition and who led his group successfully into California in 1846/47. Mary Ann Harlan had married Henry C. Smith in 1847 and was living at Mission San Jose at the time of the removal of the Indians to Alisal located between Sunol and Pleasanton. Emma Smith recorded the following account from her mother:

> My husband was appointed the first Alcalde or justice of the peace by Gov. Riley, Military Governor of California. He could speak Spanish very fluently and the Spaniards came to him with their difficulties. My husband and his brother remained in partnership for a couple of years, then his brother sold his interest to E. L. Beard and moved to Martinez. Beard and my husband continued in business for a short time. My husband purchased tract of land two and a half miles from the Mission, and also 800 acres on the Arroyo De Alameda, where he afterwards laid out and named the town of Alvarado. My second daughter, Emma was born in Mission San Jose. … .
>
> I grew very tired of living there, so we built a house on the rancho, near the Mission and moved there. We engaged in farming and stock raising. In the summer of 1850, my father who was living in Mission San Jose died from typhoid fever at the age of forty-eight.
>
> … . **The Mission Indians had a rancheria on our rancho and we often watched them performing their religious ceremonies.** They had a large room dug in the ground and covered with brush and earth, with one door to enter. This place was called a sweet house. The Indians decorated themselves with feathers and all sorts of ridiculous costumes. A fire was built in the center of the room and the Indians danced around it. When one made a trip in those days from Oakland to San Jose, one would see millions of cattle and quite a lot of wheat which was raised by the Indians.
>
> **Cholera broke out among the Indians, and a number of them died.** Their crying and howling and moaning were almost unbearable. My brother Joel, was obliged to take his family and go away where they could not hear the dreadful noise. When I found out that he was going, I had our men take me and my family along. I was very much afraid of the disease. My husband was away at the time. **When he returned and found us gone, he immediately had all the Indians moved to the Alisal, located where Pleasanton now is.** (Emma Smith, 1923). [Emphasis added]

The Alisal Rancheria appears to have been established in the vicinity of a large pre-contact ancestral Muwekma Ohlone village, now underneath or near the Castlewood Country Club (Gifford 1947). The Bernals, who, unlike many of their Californio neighbors, were able to hold onto their rancho lands, continued to maintain their economy with the help of Indian labor. The Bernals also had a long history of sponsoring Indian children as godparents and apparently had children with some of the ancestors of the Muwekma Ohlone.

Furthermore, Muwekma Elder **Maria de los Angeles Colos** (Angela), one of J. P. Harrington's principal Chochenyo speaking and cultural consultants, stated that she was born on the Bernal rancho located at the Santa Teresa Hills (near ancestral heritage site CA-SCL-125) in south San Jose located approximately nine miles southeast from the Third Mission Santa Clara (Harrington 1921-1934; Ortiz 1994a).

From the Santa Clara and San Jose Mission records research conducted by the Muwekma Ohlone Tribe, it was discovered that Maria de los Angeles' parents were Zenon and Joaquina Pico whom were married at Mission Santa Clara in 1838. Angela Colos informed J. P. Harrington that her father was a **Koriak** whom some have thought to be originally from northern Siberia (Ortiz 1995:101). However, C. Hart Merriam in his collection of place names suggested that the "'Koreakka' was a variant of the name for the Karquins (Korekines) … Tribe of South of Suisun Bay, probably same as Karquines" (unpublished Merriam notes, U.C. Berkeley). The Karquins were northern Ohlone.

Other examples of interrelationships with the Bernal and Sunol families are found in the mission records, censuses and historic documents. In the Alisal Rancheria community there was a Clareño Ohlone man named Raymundo Bernal, who was also identified in San Jose Mission records as Raymond Sunol. Mission Santa Clara baptismal records identifies a child by the name of **Jose Raymundo (Bernal)** who was baptized on April 10, 1842 (MSC Baptism # 10219). He was identified as the son of Domingo Bernal and Maria Tacia Sunol who were both listed as "neofitos" (baptized Indians). His godparents were **Antonio Bernal** and Eusebia Valencia.

Raymundo Bernal (Sunol) was married to a Angela Cornelia (**Angela Colos**) and they had a child named **Joaquino Guadalupe Sunol** who was baptized at Mission San Jose on May 15, 1872.

1872 May 15, #1046, Page 211, **Joaquino Guadalupe Sunol** (Indiei) [Indians]
Born: Jul 7, 1872 (probably 1871)
Father: Raimundi Sunol (Bernal)
Mother: Angela Cornelia (Colos?)

A year later, on May 30, 1873, Maria de los Angeles and Raymundo Bernal (Sunol) joined with other Indian couples of the Muwekma community to renew their marriage vows at Mission San Jose. Interestingly, this was done during the height of the 1870 Ghost Dance religious movement (Milliken 2008:90-91).

1873 May 30, #212, Page 62, Jose cum Refugia - This entry holds three marriages.
Die 30, May 1873, coram Maria Selio et Raimundo consentium renovavares J.o Jose cum Rafaela; 2. **Reimendums Bernal (Sunol) et Maria de los Angeles** 3. Maria con Selso.

In 1875, Raymundo Sunol (Bernal) and Maria had their third son, Eduardo Sunol who was baptized at Mission San Jose on December 19, 1875:

1875 Dec 19, #1378, Page 262, **Eduardo Sunol**
Born: Oct 13, 1875
Father: Raymundo Sunol
Mother: Maria (de los Angeles)
Godparents: Philippo & Maria Catharina Gonzales*
[***Note**: Philippo and Maria Catherina Gonzales were Indians from the Alisal community]

the 1880 Census for **Murray Township**, Alameda County (District 26), **Angela Colos** was identified as **Sincion, Anchaline**, (Asuncion, Angeline) Indian, age 30. She was listed as a **widow** and living with her daughters, **Francisca** (**Luecha**), Indian, age 14 (born ca. 1866), Juana, Indian,

age 11 (born ca. 1869), Louisa (Aloisia?), Indian, age 6, Rita (Aloisia?), Indian, age 2. Angela Colos and her family were living eight houses away from **Antonio Bernal, Jr**.

Also on the 1880 Census for **Murray Township**, Alameda County (District 26), a **Ramon Sinol** (Sunol), estimated age 22 (born ca. 1858) was listed as a farm hand in the household of John Kottenger. He was also living not too far from Angela Colos and her daughters. Ramon was in all likelihood Angela and Raymundo's son Joseph who was born in 1862. Raymundo Sunol (Bernal) and his half-sister, **Francesca Luecha** appeared as godparents for another Indian couple in 1882.

Raymundo Bernal was remembered by Muwekma Ohlone Elder **Dario Marine** in 1965, when he was interviewed by members of his sister's family during the time when the Tribe was involved in saving the Ohlone Indian Cemetery located in Fremont from destruction. Dario was born in 1888 and in that 1965 interview he identified the Ohlones who were members of the Muwekma/Verona Band/Mission San Jose Indian community. Dario remembered Raymundo and Guadalupe Bernal stating:

> **Raymundo Vernal [Bernal/Sunol]** was Great grandfather people, so were Lupe Vernal and Jose Vinoco [Binoco] an uncle (Avelina Family History, Dario Marine Interview 1965).

In 1894, Antonio Bernal (most likely Jr.?) and Muwekma ancestor, **Magdalena Armija Marshall Thompson** (b. 1878 – d. 1931) had a daughter named Rosa Bernal who was baptized at Mission San Jose on January 26, 1895:

1895	Jan 26,	**Rosa Bernal** (Indian)
	Born:	Nov 20, 1894
	Father:	Antonio Bernal
	Mother:	Magdalena Armina (Armija)
	Godparents:	Manetta Cosmo* & Petra Igo (Phoebe Inigo Alaniz)

[***Note**: Rosa's Godfather was either Daniel Cosmos or Manuel Santos]

Perhaps, as a consequence of these factors and familial interrelationships between the Bernals, Sunols and the ancestors of the Muwekma Ohlone, the Bernal family was willing to allot a portion of their rancho lands to the Muwekma Indian community which became the Alisal Rancheria.

In other areas throughout the East Bay, small groups of formerly missionized Indians also settled at lesser known rancherias in nearby Livermore (**Arroyo del Mocho**), Niles (**El Molino**), San Lorenzo (**The Springs**) and Sunol (Harrington 1921-1934). All of these rancherias maintained close ties with their Plains Miwok, Bay Miwok, and Coast Miwok and North Valley Yokut neighbors and Ohlone blood-relations as well (Kroeber 1904; Gifford 1926, 1927; Kelly 1932).

The Alisal Rancheria was unquestionably one of the most prominent and important communities of Ohlone Indians from at least the 1860s onward into the early twentieth century, and constituted the first known post-American conquest, Indian revitalization center within the Bay Area.

The people of Alisal and surrounding rancherias revived many dance ceremonies during the early 1870s, which strongly implies that other traditional arts and kinds of cultural knowledge, about ceremonial regalia, songs, sacred language, and crafts also experienced a cultural resurgence. But more than revival took place at Alisal and the other rancherias.

The available evidence depicts a constant ebb and flow of people, of surviving Indians from all over the Bay Area (including **Clareño Ohlones** from the Mission Santa Clara area) and central California moving into and out of Alisal, Niles, San Lorenzo and Livermore rancherias (Gifford 1926, 1927; Gayton 1936; Kelly 1978; Harrington 1921-1934). Thus, many surviving fragments of traditional knowledge and ritual were brought together in this one place, from the many Ohlone peoples, each with their own varying customs and ways of thinking, as well as from the intermarried and neighboring Miwoks, Yokuts, and other more distant tribal peoples brought under the sphere of influence of the missions. Inevitably, a blending of older forms took place, a fusion of traditions and religious beliefs that together generated a new cultural vitality (Gifford 1926, 1927; DuBois 1939).

1870 Religious Revitalization Movement: The Ghost Dance at the Pleasanton Rancheria

During the 1870s, a religious messianic-oriented revitalization movement referred to as "**the Ghost Dance**" spread throughout central California. This first Ghost Dance originated in Nevada beginning around 1869, involved a Paiute prophet named Wodziwob who taught that by dancing certain dream inspired dances, Indian people could end the domination of their land and destruction of their lives by the whites, and usher in a new golden age for all Indian peoples (Du Bois 1939).

At Alisal, the ancestors of the contemporary Muwekma Ohlone combined elements and doctrine from the imported Ghost Dance with the ancient **Kuksú** Religion, regalia and compliment of dances, the World Renewal Ceremonies as well as other rites practiced throughout central and northern California (Gifford 1926; Loeb 1932, 1933; DuBois 1939; Bean and Vane 1978). So potent was the syncretic combination derived by the people of Alisal (and the surrounding rancherias) that non-Christian Native American missionaries were sent out from there to preach the new religious doctrine to other indigenous peoples to the east, south, and north of the Pleasanton (Alisal) Rancheria (Gifford 1926, 1927, 1955; Kelly 1932, 1991; Gayton 1936; Field et al. 1992).

Berkeley Anthropologist Edward W. Gifford visited the Livermore and Pleasanton region in 1914 and the Alisal Rancheria in particular. Still later, as a result of field work conducted in the interior amongst neighboring central California tribes, Gifford reported in his Miwok Cults (1926) and Southern Maidu Religious Ceremonies (1927) that his principal cultural consultants recollected that the songs, dances and regalia were brought to them by three non-Christian missionaries from the Pleasanton region. These three teachers were **Sigelizu**, who taught the following dances to the Central Miwok: *Tula*, *Oletcu, Kuksuyu*, *Lole*, *Sunwedi*, *Sukina*, *Kilaki*, *Mamasu*, and *Heweyi*. Another man named **Yoktco**, from Pleasanton, introduced similar dances to Southern Maidu, while a third, named **Tciplitcu** taught these dances to Miwoks and North Valley Yokut people at Knight's Ferry.

Interestingly, all three teachers had non-Hispanic or non-Anglo names, thus perhaps representing through a revitalized religious doctrine a rejection of the colonial (alien) order. Knight's Ferry is on the Stanislaus River, in ***Lacquisamne*** North Valley Yokut tribal territory (see information relating to the Estanislao rebellion), showing continuous ties to the area throughout the 1870s.

The *Lacquisamne* tribal region is also where Muwekma Elder Jose Guzman's maternal grandmother, Nimfadora, originally came from in the early 19th century (Milliken, Leventhal and Cambra 1987; Milliken 1991; see MSJ baptismal record # 4276, September 26, 1820).

Ethnographic information from the Coast Miwok region on the Marin Peninsula recorded by Berkeley anthropologist Isabel Kelly 1931-1932 (1932, 1978, and 1991) who independently provided other accounts about how important the Pleasanton/San Jose Mission [**Verona Band**] region was to the Coast Miwok and demonstrates the ebb and flow of contact between Marin and Pleasanton areas during this period of time. Tom Smith and Maria Copa were two of Kelly's principal Coast Miwok linguistic and cultural consultants. Kelly inquired from them "Did they dance Kuksui at San Jose?" Maria Copa's response was:

> I should say so. My grandmother said that the people here had to buy Kuksui Dance from the San Jose people. All of those songs are in the San Jose language (Kelly 1991:354).

There were also specific references to Mrs. Martha Guzman (herself a Coast Miwok and Costanoan descendant) from Marin regarding the *kawai-yoyolomko* (horse eaters) [Costanoans]:

> This is what the people around Redwood City were called. Mrs. Guzman's father belonged to those people. I saw Mrs. Guzman last night. Her father came from Santa Clara, although once before she said Redwood City (Kelly 1991:355).

Jose Guzman (born around 1853) was one of the last knowledgeable singers from the Muwekma community until his death in 1934 (Harrington recorded 27 songs at Niles in 1930). He recollected songs that he and his father were introduced to while visiting other Indian communities to the south at Missions San Juan Bautista and San Antonio (and possibly San Carlos/Carmel) during the time the 1870 Ghost Dance was in its full height.

Although not mentioned by name, Berkeley anthropologist Cora DuBois attempted to interview Jose Guzman in 1934 as part of her 1870 Ghost Dance Study stating:

> In the central portion of California which lies to the north and south of the Sacramento delta there occurred during the 1870's an interchange of dances and ceremonies.
> Gifford described a portion of these movements when he presented data concerning the Pleasanton revival. One man from Pleasanton, called Yoktco, took the Kuksui and other dances to the Nisenan of Ione; while Sigelizu, also of Pleasanton, imported a series of dances to the Central Miwok of Knights Ferry. Gifford is inclined to attribute the Pleasanton "revival" and the spread of dances from there to the 1870 Ghost Dance. …

> Unfortunately, the last survivor of the Pleasanton period is unable to throw light on the tentative suggestions of Gifford and Gayton. Repeated attempts to elicit information were useless because his physical disabilities and senility. (1939:114)

U. C. Berkeley ethnographer Edward Gifford during the early twentieth century interviewed various Maidu and Miwok elders who remembered aspects of the 1870 Ghost Dance religious revitalization when they were young. These interior Miwok elders recollected that "there appeared... teachers of dances who came from the west" (Gifford 1926:400). As mentioned above, based upon Gifford's interviews with both Miwok and Maidu elders they identified the names of three of these missionaries: **Yoktco**, who preached among the Southern Maidu; **Sigelizu**, himself a Plains Miwok, who came to the Central Sierra Miwok; and **Tciplitcu**, a Costanoan/Ohlone man who taught the dances to the Plains Miwok were known to have come from the Pleasanton area (ibid).

Gifford wrote the following background information about Yoktco and his ties to the northern Ohlone/Bay Miwok region in his 1927 Southern Maidu Religious Ceremonies:

> Yoktco, the introducer of the third and latest stratum of dances was said by informants. To have dwelt in the vicinity of Mt. Diablo (regarded by the Indians as the home of spirits), Contra Costa county. Actually he lived at the Indian settlement near Pleasanton, Alameda county, but that fat of dwelling near the great mountain, which is visible over a large area in central California, seemed to impress the informants more and may have been also impressed upon them by Yoktco.
>
> …At dancing time Yoktco spoke a strange language, Yokuts or Costanoan perhaps, both of which he would have become acquainted with at Pleasanton, where he resided the Indians formerly gathered at Mission San Jose, Alameda county.
>
> When Yoktco cam eto Ione, in Northern Miwok territory, to give instruction he brought dancers from Pleasanton to show the Ione people the steps. He also taught his dances at Folsom in Southern Maidu territory,. There he taught *hiweyi*, *kilaki*, *kuksui*, (with two performers called *kuksu*i and *musil*), *mamas*, and *ta* (Gifford 1927:229-230).

Also as mentioned above, all of these men's names are in their respective indigenous language, whereas after missionization, Costanoan/Ohlones, Miwoks, Yokuts, and their descendants were given either Hispanic or Anglo Christian names when baptized. A more generalized revival of indigenous names may have also taken place at Alisal as well as on the other rancherias in order to "reject" the older imposed colonial system. Although the Ghost Dance did not achieve its full objectives, its fluorescence at Alisal and at the other rancherias demonstrates the depth and conviction of indigenous identity and culture in the East Bay during the late nineteenth and early twentieth centuries.

Furthermore, cultural ties to the interior tribes continued to be maintained during the 1940s and later years, especially by Dario Marine and his son Lawrence Domingo Marine who had married Pansy Potts (daughter of Marie Potts) who was from one of the Maidu tribal groups. Dances that

were exported from Pleasanton continued to be danced by members of the Miwok, Nisenan and Maidu tribal communities into the present day (see Gifford 1926, 1927; Du Bois 1939). The children of Lawrence Domingo Marine (Lawrence Mason Marine and Marvin Lee Marine) were taught tribal dances and continued the tradition of dancing with these interior tribal communities to present day and some of these dances have been recently reintroduced back to the Costanoan/Ohlone area (News from Native California, Vol. 7 No. 3, 1993). More recently Marvin Lee Marine (Maidu/Muwekma) has reintroduced traditional dances back to the Costanoan/Ohlone region, with the Amah-Mutsun Tribal Band having learned some of the dances from him. His older brother, Lawrence Mason Marin, recently passed away on December 22, 2020.

A number of published and unpublished documents also record the lifeways and linguistic complexity of the Alisal Indian community or as it also came to be known after the construction by Western Pacific of the Verona Railroad Station nearby, the "**Verona Band of Alameda County.**" In 1880, French linguist Alphonse Pinart recorded a detailed North Valley Yokuts vocabulary from the mother of Phoebe Inigo Alaniz, **Maria Trinidad Gonzales** at Alisal (Kroeber 1908; Merriam 1955). Other languages were also spoken, particularly the Plains Miwok **Ki'k** (meaning "water") language, as well as the Chochenyo and Thámien Ohlone dialects as well as other Costanoan idioms (Curtin 1884, Kroeber 1910; Gifford 1914; Mason 1916; Harrington 1921-1934; Milliken, Leventhal and Cambra 1987). It was Phoebe Inigo Alaniz and her mother Trinidad Gonzales who raised two of Mercedes Marine's sons, Albert Arellano and Thomas Garcia, after Mercedes died in 1914. Albert Marine, who was born on the Alisal Rancheria was the grandfather of Muwekma Vice Chairwoman Monica V. Arellano who is also the lead author on this ethnohistory.

LATE 19TH CENTURY: EAST BAY RANCHERIAS

Muwekma Community Identified as the "Nusbaumer Indians" by the News Media

During the 1880s to the early 1900s the Muwekma Ohlone tribe and members of their community occasionally appeared in the various Bay Area newspapers. Other than referring to them just as Indians, they were at times referred to as the **Nusbaumer Indians** because the **Alisal Rancheria** was located on the land purchased by **Carl Duerr** and **Louis Nusbaumer** that was part of the old Bernal-Sunol-Pico ***Rancho El Valle de San José*** **(Map 5).** Furthermore, various articles written by members of the dominant society, in one newspaper, the *San Francisco Call* on December 29, 1889 published caricatures of some of the notable people of the Pleasanton area including one of the "Nusbaumer Indians," as well as another article in the *Daily Alta California* casting negative impressions on the surviving members of the ancestral Muwekma Alisal/Sunol/Niles communities.

> **Daily Alta California, Volume 80, Number 167, 16 June 1889**
> **A DECAYING TRIBE.**
> **Chief Avencio and His Four Score Subjects at Sunol.**
> **Once There Were Hundreds**.
>
> **The Story of Their Life as Told by Those Who Have Lived Among Them in the [Sunol] Glen— A Doomed Race**.

The story is the old one of whisky, disease and indolence, which have always marked the contact of high pressure Caucasian civilization with the rude habits of the savage whom he found in possession of this continent through all its width of forest, mountain and prairie between the two oceans. But in this story the chapter of violence has never been written which has been so prominent in the other tales of Indian affairs, and for that much one should be thankful; the story of the Indians of Alameda county is not blotted with the record of midnight raid and vengeful reprisal; rows of scalps do not dry in the smoke of the lodges, and murdered settlers not lie bleeding on the edges of their clearings.

It is a story of the survival of the fittest, which is the strongest, of the steady, merciless extinction of the lower race before the higher. What remnants have they left? A shell mound on the bay shore, two more on the encinal shore of the basin, a few forgotten burial places in the marshes or the canyons in the hills, just one topographical name and some eighty people slowly dying in **Sunol Glen** and at **Niles**. Once they covered the land. The mission priests of the rule of St. Francis found them numerous enough a century ago to found for their instruction the Mission of San Jose, where pious fathers taught native catechumens that Christian civilization of progress which has killed them. In the childhood of men yet young there were still hundreds of them, and now but four score may be found. Who knows aught about them?

Neglected by the church, **forgotten by the Government**, they linger in the canyon of the Alameda where passers on the railroad sometimes catch a glimpse of the brown shimmer of their skins as they wade the creek in search of fish; the curious may have caught a phrase or so of their guttural speech, but it is probable that there is not a white man in the county who knows by what name they call themselves. Long years ago the **Nusbaumers** settled in the narrows of the Livermore valley, first at Pleasanton, later on a portion of the **Rancho el Valle de San Jose** at **Sunol**. The Indians then were thick all about them, and it is from conversation with the two brothers, **George Nusbaumer**, the County Surveyor, and **Emil Nusbaumer**, of the District Attorney's office, that this fragmentary account of the remnants of the Indians has been drawn.

Wherever, in the pastoral days of the land, there was a Spanish rancho, there was always in the neighborhood an Indian rancherie, whose people were practically peons of the Spaniards.

But they led an easy life, their services were only seldom required, and meanwhile they were not ill-treated, and received a fair provision of food in case of need; but the land was such a savage paradise, so filled with all sorts of game, that the food supply rarely gave them concern. When the Nusbaumers lived at Pleasanton there was a large rancherie on the Bernal portion of the rancho, and the Indians were all about.

When they moved to the old homestead in the glen the chief, **Avencio**, [although this is the name of Jose Guzman and his father Habencio Guzman, this might be mistaken as the name of **Captain Jose Antonio**] who still lives, came to ask permission to

build a rancherie on the property, which was granted, and the Nusbaumer boys had, therefore, good facilities for watching the Indian life.

In this rancherie were nine large houses, a temescal, and a number of smaller houses. These structures were uniformly four sided, with a pitched roof. The walls were formed by driving stakes of the proper length and then weaving between them osiers and reeds tied with rawhide. Over this was plastered adobe. The roofs were made of tules and were quite water-tight. The floors were always the natural soil stamped hard and even. It was characteristic of the tribe that though they carefully eschewed any neatness about their persons, their houses were kept very clean, and before each was a little area where no rubbish was allowed to lie. A sweat-house, known in the native tongue as a "temescal," [*Tupentak*] was a prominent feature of every rancherie. It was always built near some pool in the creek, and was generally partly underground. A pit was dug about four feet deep, and some fifteen feet across, and over this was built a penthouse with a small vent in the top. The only entrance was through a little passage some ten feet long, which would allow a man to enter by crawling, and at its inner end was a door, which could be closed so as almost completely to exclude the air Into this they were wont to crawl whenever ill, build a fire on the floor and fill it with cobbles, and when they were sufficiently heated, deluge them with water, while the patient sat in the hot cloud of steam until he could bear it no longer, when he crept out of the temescal and plunged at once into a cool stream.

The people were well formed and rugged, and rarely had an illness before they were contaminated by the vices of civilization. Men full six feet in height were not uncommon. Quarrels with white men were unknown, and among themselves were rare, except when they were drunk. Though it is contrary to law, whisky is constantly sold them, and they are no good until the whisky is all gone. They retain no traditions of their former history and religion, or if there are any such they are too taciturn to communicate them even to those who know them best. They are in the main kind to their women, rarely abusing them, though, according to savage custom, making them do all the hard work. Marriage is simply cohabitation, and divorce was equally simple. Their families seem never to have been large, and are now smaller than ever. Most of those still remaining are of the pure blood, and the few half-breeds are, as usual, endowed with all the characteristic vices and none of the virtues of their parent stocks.

For food they used the native vegetables, game and fish, and the refuse of the ranches, being quite content to feed upon a cow that was found dead in the pasture, and which no white man would touch. They are expert fishermen, and are fond of the big dace [minnow family] and suckers in the Alameda. These fish they sometimes caught with spears and sometimes by building elaborate fish traps composed of dams and weirs. More commonly they made use of a recumbent weed which grows everywhere along the creek, and is known only as the "fishweed" [Yerba de Pescado].

The leaves and stems of this they were in the habit of bruising to a pulp and then throwing into a pool. Soon all the fish for a considerable distance around within reach of its stupefying influence floated to the surface, belly up, and were brought to shore. The poison was only temporary in its effect, and never had any bad effect upon the food value of the fish. They would seem never to have had any hooks, but were experts in the use of slip nooses of horse hair, with which they were very deft in catching fish of even considerable size. Their customary drink was a decoction of the parched acorns of the live oak, which **Emil Nusbaumer** describes as not unpleasant to the taste.

They seemed to know almost by instinct when the sturgeon were running in the San Joaquin, and all the men organized a great party to cross the mountains and spear the fish. Sometimes they smoked the sturgeon and brought a supply home, but more commonly they feasted and speared and speared and feasted, until they were gorged. Similarly, they were in the habit of forming parties to go down to the salt marshes and net ducks. Smoked duck and jerked beef were the only provisions that they ever stored, and not much of either. They were never known to beg for food; and in general begging was not characteristic of them. One of their greatest delicacies was the flesh of the chickenhawk.

Twice a year they had great dances, and the custom is still kept up. This is about the only occasion in which the chief seems to have any power over the tribe, and even then it is but ceremonial. One dance comes in the spring, about the time when the berry crop is at its best, the others along later when the watermelons are most abundant. Sometimes the dance is held in the temescal, but more often in the woods, where an area some fifty feet in diameter is cleared and surrounded with handles.
In the center is a fire, and about it dance men and women painted with bars of red and white across their cheeks and clad in costumes of reeds and feathers. About the fire they dance and whoop and yell, while an orchestra of eight or ten men sing in agreeable cadences monotonous tones to the accompaniment of split sticks, which they shake in regular measure. Sleeping by day and dancing by night they often consume a week at a time, and can give no explanation except that the custom is traditional.

On the death of an Indian the women sit around and howl for a day or so, the length of the howling time being dependent upon the degree of consideration in which the dead was held. After a sufficient howl the body is encased in a plain box and put in the ground without further ceremony. A favorite burial ground up to within the last dozen years was on the first little hill this side of Pleasanton, on the lands of Neal. Those who best knew them rarely learned any words of their native language, which is still used by them universally in communication among themselves. Two salutations are all that are known — wellawella* huga for "good morning," and for "good night" wellawella hi. Such and so much is what is known of that swiftly vanishing tribe known in default of a better name as the **Nusbaumer Indians (**Daily Alta California, Vol 80, No. 167, 16 June 1889).
*[Note: **welwel** means “good” and **hi** means “sun” in the Plains Miwok “kik” language spoken at the Alisal Rancheria (Barrett 1908:366.]

Brief Background on the Nusbaumer Family (1856-1878)

Louis Nusbaumer and his wife Elizabeth (Roth) Nusbaumer lived in San Francisco until the fall of 1856, when they moved on an eighty-acre farm on Dry Creek, Washington Township, Alameda County, which was purchased by Carl (Charles) Duerr for Nusbaumer and himself. In October, 1857 Duerr and Nusbaumer (**Figure 6**) had rented the estate of John W. Kottinger, which was situated in Murray Township, embracing the larger part of the present town of Pleasanton. Their business consisted of merchandising and sheep-raising. At the expiration of their lease in 1862, they bought a joint interest in the old Bernal-Sunol-Pico ***Rancho El Valle de San José*** consisting of some three thousand acres, where they made their permanent home.

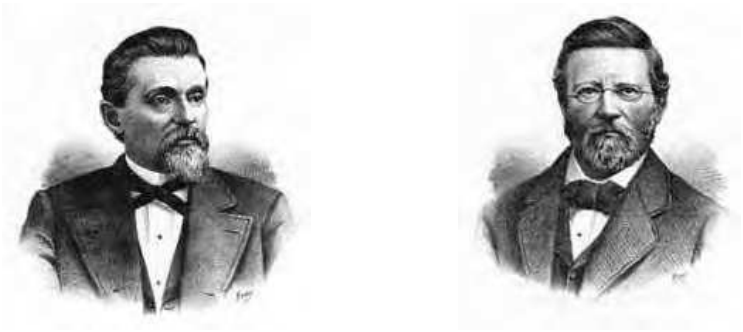
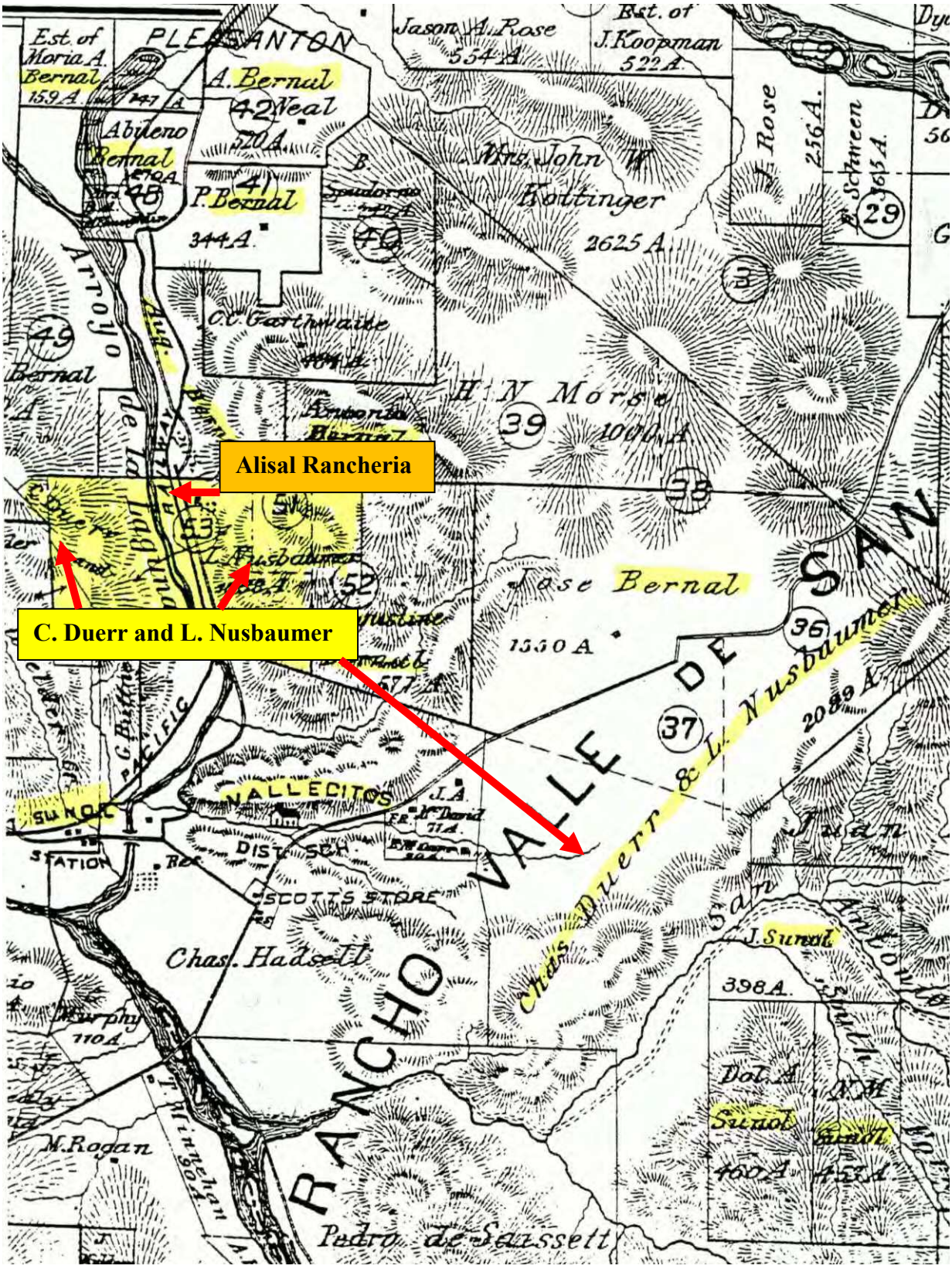


Figure 6: Portraits of Carl Duerr and Louis Nusbaumer

Years later on the 10th day of July, 1878, Louis Nusbaumer's youngest son Emil became the Deputy District Attorney of Alameda County. He was born in San Francisco, February 13, 1856. He first attended school six miles from home, in Dublin, afterwards in Pleasanton, when a school was first established there about 1865, and later in Vallecitos (Sunol) from 1868 to 1872 **(Map 6)**.

In 1873 Louis became a clerk in Sunol, in a general store [Scott's store by Sunol Corner which was opened in the 1850s], which had also the post-office and express office. Years later Emil became a Judge of the Superior Court, where he remained until his election as Justice of the Peace for Oakland Township in 1882. From January 1, 1883, to December 31, 1888, he served as Justice, and in 1889 was appointed Deputy by George W. Reed, District Attorney.



Map 5: 1878 Map of the Duerr and Nusbaumer Properties and Alisal Rancheria
(1878 Thompson and West)

Sometime during the late 1870s, U.S. Senator **George** and **Phoebe Apperson Hearst** purchased a large parcel of land from either Duerr and Nusbaumer or the Bernals that included the Alisal Rancheria, and they allowed the Indians to maintain their community for a time being and some worked for the Hearsts and Appersons. A slow decline in the Verona Band community during the late 19th century, however, is apparent in light of later events. Pressures of assimilation, an increasingly large number of white Americans settling in surrounding towns and farmlands and taking over the old *Californio* ranchos, the precarious economics of seasonal ranch work, and some out-migration, as well as death due to infectious diseases all contributed to the waning of the indigenous revival at Alisal (Olsen, Leventhal and Cambra 1985; Milliken 1994 in Davis et al. 1994).

According to several historic documents, the last Kuksú dances were held at Alisal in 1897 (Womens' Research Committee of Washington Township 1904; Marine Family History 1965; Galvan 1968). Writing in 1904, the authors of the History of Washington Township wrote about such ceremonial events:

> The dance in September was a very serious, ceremonial dance, lasting several days. Their dresses, worn for the dance, were very elaborate and well made, of feathers. Upon one day, the Coyote dance, a rude sort of play, was given, one of the favorite characters being Cooksuy [Kuksu]—a clown.
>
> There must have been some meaning of a memorable character to this dance, because when asked why they danced, they always replied: "**Because our fathers are dead**" (1904:52).

Earlier that year, on January 6, 1897, the last recognized ***Capitan*** of the Alisal Rancheria, **José Antonio**, died. Noted in Book of Funerals at Mission San Jose 1859-1908 (p. 147):

> **Josephus Antonius, Indian** DOD: 6 Jan 1897, Age: about 70 [60]. Buried: Indian Cemetery, Mission San Jose, D.A. Rapora, Astt. Mission San Jose

In 1904, the **Northern Association for California Indians**, a philanthropic group of concerned citizens who advocated on behalf of the dying and landless Indians submitted a "**Memorial of the Northern California Indian Association, Praying that Lands be Allotted to the Landless Indians of the Northern Part of the State of California**" to President Theodore Roosevelt. The Memorial was signed by Mrs. T. C. Edwards, President, and **Charles E. Kelsey**, Secretary for the Association. Attached to the **Memorial** was a "Schedule" identifying the landless Indian bands/communities and their estimated population which were scattered throughout northern California (meaning north of Los Angeles County).

In Alameda County, the Schedule identified the Indians living at **Pleasanton** (Verona Band) as having a population of 70, at **Niles (Figure 7) [**there was a community with a population of 8, and in Contra Costa County in the towns of Danville and Byron having a population of 5 and 20 people, respectively]**.**

All four communities were identified as "Costanoan." (Sen. Doc. No. 131, 58th Cong., 2d Sess., 1904, 1-16 (reprinted in Robert Heizer's Federal Concern about Conditions of California Indians 1853 to 1913: Eight Documents 1979).

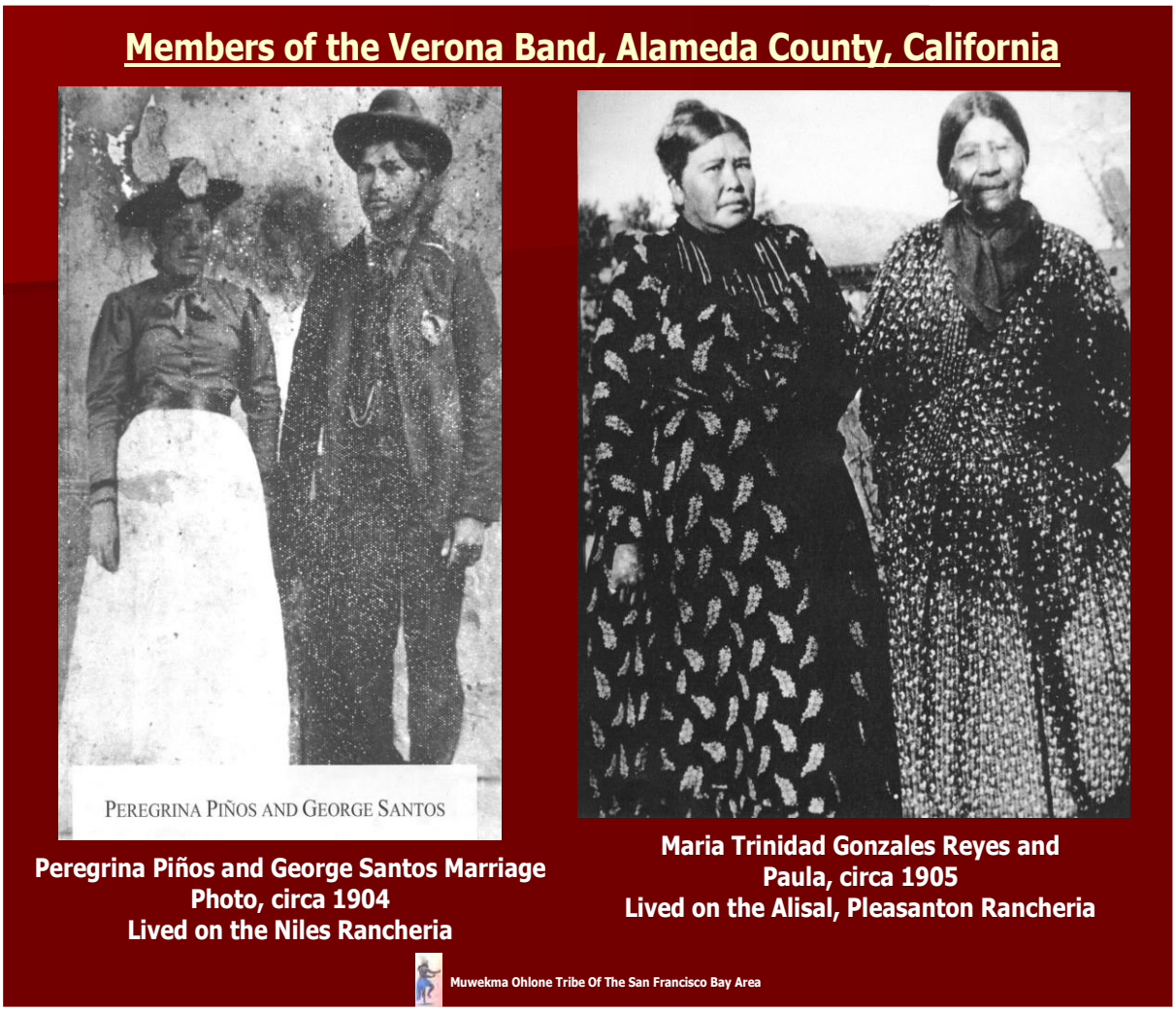


Figure 7: Muwekma Indians at the Niles and Pleasanton Rancherias

In the History of Washington Township published in 1904, the authors provided the following commentary about the Mission San Jose/Verona Band/Muwekma Indians residing at the nearby rancherias:

> The only remaining Indian villages today in this part of the state are in this township. They are in the native tongue, El Molino, the mill near Niles, and Alisal near Pleasanton, with perhaps half a hundred persons in each village. In the former, the last full-blooded Indian chief died some three years ago. In Alisal, the wife of the chief still lives, and six others of full blood. ... Alisal is on Mrs. Phoebe Hearst's property, and that lady has always a kindly hand ready to help them when necessary. ...
>
> All of the information appearing in these papers concerning the old Indian history and customs has been gleaned from these seven full-blooded Indians, one being the widow [Jacoba] of the last chief, whose name was **Jose Antonio**. .... (History of Washington Township, 1904:53).

From the interviews conducted between 1925-1930 with Muwekma Elders Jose Guzman and Maria de los Angeles Colos, Bureau of American Ethnology linguist John Peabody Harrington, was able to learn that ***Capitan*** **Jose Antonio's** Indian name was **Hu'ská** (Harrington Field Notes 1921-1934). Jose Antonio was a great-great-grand relation to some of the current generation of the Muwekma Elders and ex-council members such as Lawrence Mason Marine, Jr. and his younger brother (Dance Leader) Marvin Lee Marine are directly descended from him and Jose Guzman. Jose Guzman had married Jose Antonio's daughter Augusta Losoyo.

After his death in 1897, Jose Antonio's wife Jacoba, who was a *mayen* (meaning the wife of a captain or a female chief), directed that the ceremonial round house/sweat-lodge (or ***tuupentak*** in Chochenyo) be torn down, in keeping with tradition (Galvan 1968). A new ***tuupentak*** was not constructed, as it would have been in previous times, because the community did not formally select a new captain. Apparently, the political power was inherited by Jacoba through marriage as well as her descendency from her parents *Capitan* Taurino and Joaquina.

According to Muwekma oral tradition, it was Raphael Marine, husband of Avelina Cornates Marine who was tasked to take down the old ceremonial ***Tuupentak*** **(**roundhouse). Interestingly, just two years prior to his death, in 1895 *Capitan* Jose Antonio and his wife Jacoba served as godparent to Raphael and Avelina Marine's fourth daughter, **Mercedes Marine** (co-authors Monica V. Arellano and Gloria Gomez's great-grandmother) who after the death of her mother Avelina in 1904, was raised on the Alisal rancheria by Jacoba. (1910 Federal Indian Population Census, "**Indian Town**," Pleasanton Township, Alameda County).

Also raised by Jacoba was **Catherine Guzman Peralta** one of Jose Guzman's granddaughters (**Figure 8**). who was identified on the **1900 Federal Indian Census** (Washington Township); **Kelsey's 1905-1906 Special Indian Census;** (Heizer 1971); and the **1910 Federal Indian Population Census** (Pleasanton Township) as an Indian resident of the Alisal Rancheria in Alameda County.

Just before the turn of the 20th century (1897) there were still at least eleven casitas (houses) and the ***Tuupentak*** (temescal/round house) still standing on or near the Alisal Rancheria. During this critical period of time, the Guzman, Armija, Santos, Pinos, Marine, Nichols, Inigo (Alaniz), and other interrelated Muwekma **(Verona Band**) families remained in the Sunol/Pleasanton/ Livermore area or on the original Alisal Rancheria until fire destroyed the remaining houses due to work along the Western Pacific Railroad tracks sometime around 1916.

The house of **Catherine Peralta** (granddaughter of Jose Guzman) and **Dario Marine** (eldest son of Avelina Cornates Marine) which was originally owned by Jacoba and Jose Antonio had burned down as a result of that fire. Prior to the fire, Catherine and Dario had raised their first four children, Beatrice (born 1909), Josephine (b. 1911), Evelyn (b. 1914) and Filbert Marine (b. 1915) on the rancheria.

By the time their fifth child, Lawrence Domingo Marine was born in 1919, they had moved to 544 Alvarado-Centerville Road in Centerville now part of the City of Fremont (see 1900 and 1910 Indian Censuses and 1920 Census, Washington Township; Harrington field notes; Olsen, Leventhal and Cambra 1985; 1928-1933 California Enrollment Applications # 10298 and 10675; 1910, 1920 and 1930 Federal Censuses).

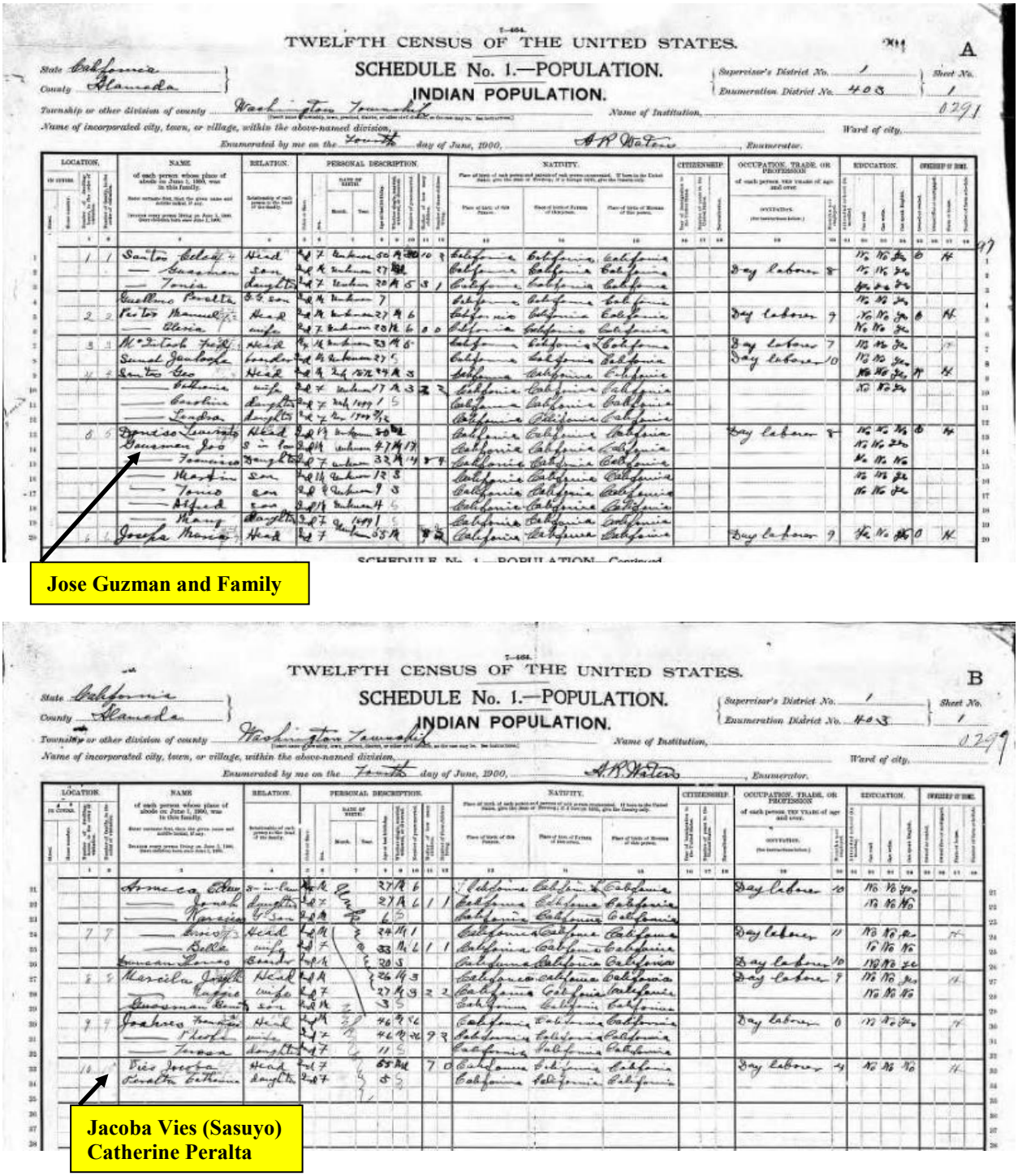


Figure 8: 1900 Indian Population Census, Niles, Washington Township, Alameda County

After the Alisal Rancheria was abandoned, the various surviving Muwekma families continued to work locally in the East Bay, residing on ranches, vineyards, hopyards and renting homes in Niles (e.g., Shinn property), Newark, Centerville, Fremont, Milpitas, Pleasanton, Sunol, Livermore, Alameda and elsewhere. The Muwekmas continued to live peaceably near the Alisal Rancheria as long as they could and had continued to visit and use the locality as best they could.

Avelina Cornates Marine's children [Dario, Dolores, Elizabeth (Belle), Ramona, Mercedes, Victoria, Lucas and Trina Marine] along with the Nichols, Guzman, Binoco, Pinos, Santos, Inigo, Juarez, Armija and other Muwekma families, had to readapt and relocate to other nearby residences in order to work and maintain their families. Some of the men worked for Southern Pacific Railroad, Spring Valley Water Company, Leslie Salt, and on the local orchards, ranches, and farms.

During the 20th century Muwekma families continued to marry and baptize their children at Mission San Jose, St. Augustine's Church in Pleasanton, Corpus Christi in Niles, and St. Edwards in Newark. Photographic and other records showing life around the Alisal Rancheria and neighboring areas from the early 1900s, WW I, the depression, and WW II survive.

Kelsey Special Indian Census 1905-1906, Congressional Homeless California Indian Act of 1906, and the Federal Recognition of the Muwekma/Verona Band of Alameda County.

In 1905, as a result of the discovery of the **18 unratified California Indian Treaties** (which were negotiated between 1851-1852) from the **U. S. Senate Secret Archives**. Mr. **Charles E. Kelsey**, a lawyer who resided on S. 12th Street in San Jose, was serving at that time as the Secretary for the philanthropic **Northern Association for California Indians** (**Figure 9**). In 1905 he was appointed **Special Indian Agent to California** by the Commissioner of Indian Affairs (**Indian Service Bureau/Bureau of Indian Affairs)** in Washington, D.C. Agent Kelsey was charged by the BIA to conduct a Special Indian Census and identify all of the landless and homeless California tribes and bands residing from north of Los Angeles to the Oregon border who were to come under the jurisdiction of the BIA and the ensuing Congressional Homeless Indian Acts. For a detailed overview of the rediscovery of the 18 treaties and the efforts of Charles E. Kelsey, see The Secret Treaties with California's Indians by Larisa K. Miller published by Prologue Magazine, Fall/Winter 2013.
(https://followingdeercreek.files.wordpress.com/2017/03/secret-treaties-with-california-indians.pdf.)

Figure 9: Special Indian Agent Charles E. Kelsey

Based upon the partial results of Kelsey's Special Indian Census which was initiated by the discovery of the 18 unratified California Indian treaties in 1905 from the Senate archives, Congress passed multiple Appropriation Acts beginning in 1906 on through 1937, for the purpose of purchasing "home sites" for the many surviving, but landless, California Indian tribes and bands.

One of the bands officially identified by Special Indian Agent Kelsey was the **Verona Band of Alameda County** residing between Pleasanton, Sunol and Niles (as well as living in other adjacent towns, areas and ranches surrounding Mission San Jose). The direct ancestors of the present-day Muwekma Tribe who comprised the Verona Band became **Federally Acknowledged** by the U.S. Government through the **Appropriation Acts of Congress** beginning in 1906.

While Kelsey was working out details of his Special Indian Agent assignment in Washington D.C., after he completed his Special Indian Census (1905-1906), Acting Indian Commissioner Charles F. Larrabee forwarded the following letter to President Theodore Roosevelt:

> May 23, 1908 Letter from Acting Commissioner C. F. Larrabee to President Theodore Roosevelt
>
> "Doctor [Stanford's President David Starr] Jordan commends, and justly, the services of Special Agent C. E. Kelsey, who during the past few years has been engaged in an attempt to secure them fixity of tenure in their homes, security of legal rights and additional lands on which the homeless Indians can be placed from an appropriation granted by Congress under the act of June 21, 1906 (34 Stat. L 325, 335).
>
> Among the resolutions passed by the conference was one pledging the members of the conference … to assist in the upholding and continuance of this work until every landless Indian in California shall be secured land upon which he can maintain a home; …
> …
> When California was ceded to the United States by the treaty of Guadalupe Hidalgo, the Indian occupants of that state had certain rights to the lands which they occupied and under the law then existing could not be legally ejected therefrom.
> …
> Also treaties which had been concluded with the various bands or tribes were overlooked or ignored and failed of ratification, the Indians claimants never being paid for their land.
>
> It is believed that Congress realizes this fully and if the money which has already been appropriated is insufficient **to give every landless Indian a place he may call his own**, that later it will grant additional appropriation for their benefit.
>
> It is the intention of the Office to persist in the work that is now going on until every Indian has been cared for, and while it is impossible now to undo all that is past and restore the original owners of the soil to their possessions, the Congress will be asked from time to time, if necessary, to do what seem reasonable and enable the homeless Indians to have a fair start in life even at this late day (Letter dated May 23, 1908; pages 1-4, National Archives).

Between the years 1906 and 1927, the Verona Band fell under the direct jurisdiction of the Indian Service Bureau in Washington, D.C., and by 1914, the Tribe's jurisdiction was transferred to the **Reno Agency,** and later again, transferred over to the **Sacramento Agency** (sometime around 1923). During this time, Federal Government Indian Service Bureau agents attempted to purchase land for many of the Federally Recognized, landless, California Indian tribes and bands.

To this effort, both the Indian Service Bureau agents and the Indian bands were faced with two major obstacles:

1. Many Californian landowners did not want Indians living next to or near them, so they would not sell suitable parcels of land.

2. Others who were willing to sell parcels to the government wanted greatly inflated prices, usually at prices much higher than what was either allocated to purchase lands, or above the actual value of the land.

After the Congressional Appropriation Acts of 1906, 1908, and ensuing years (until 1937) many Indians in California obtained trust lands as members of tribes which had not abandoned their respective tribal areas, and these homesites became known as Indian "**rancherias**." [see the Indian Homestead Act of March 3, 1875 (18 Stat. L. 420), 25 U. S. C. 334, 336, Feb. 8, 1887, Ch. 119, Sec. 4, and other statutes, (34 Stat. 325, June 24, 1906 and 35 Stat. 70, April 30, 1908), and using an added set aside of $10,000 under the Joint Resolution of March 4, 1915 (CR 6122, March 4, 1915)].

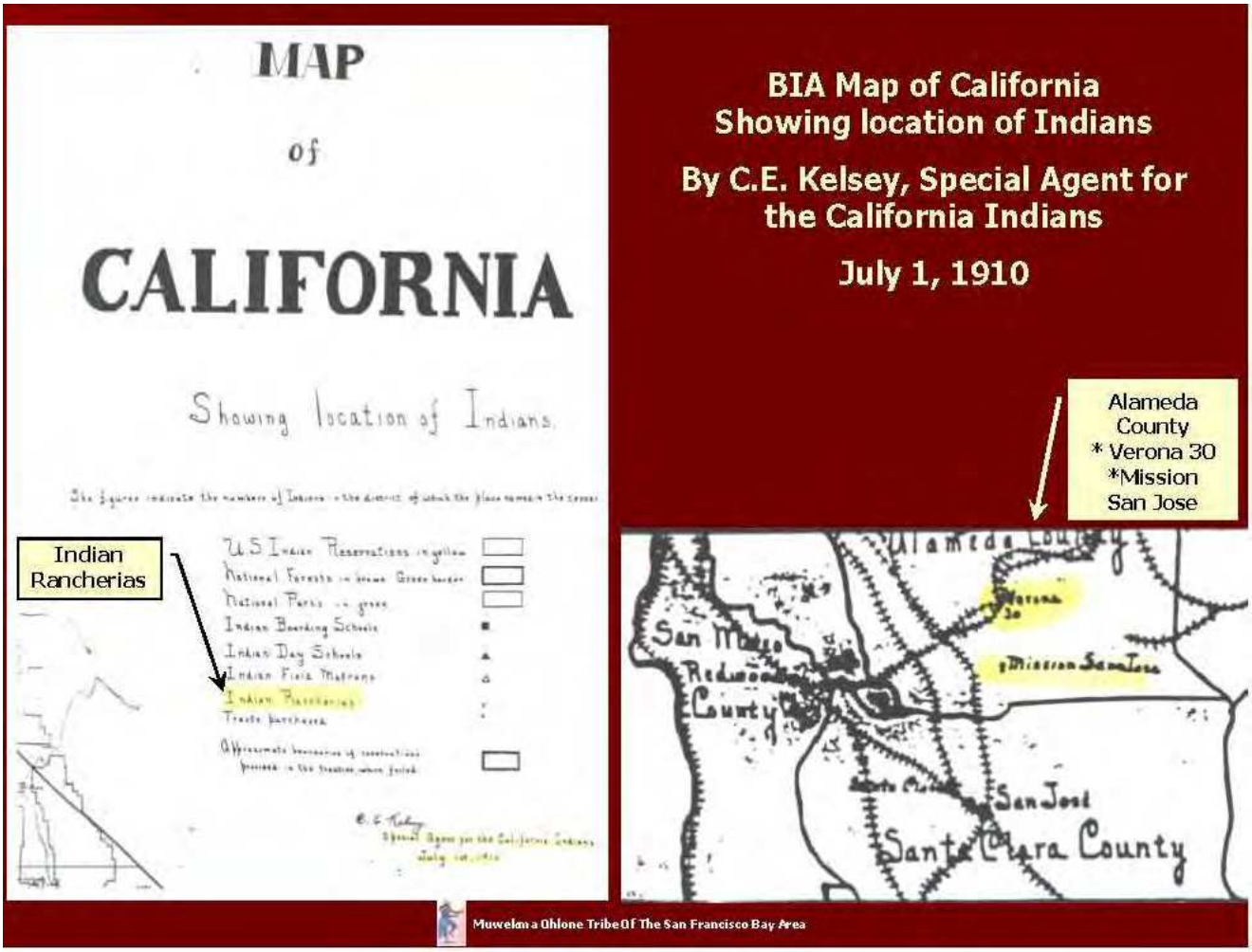
The evidence of previous **Federal Recognition** of virtually all the present-day unacknowledged tribal groups in California and especially in this case, the **Verona Band of Alameda County**, is found in the Federal records at the National Archives (Record Group 75. California Consolidated Files, Cal. Special, file # 12026113-032, filed with 114202-13-032; Map, accompanying Letter of October 4, 1913, Special Indian Agent for California C. E. Kelsey to Commissioner in response to request for information from 2nd Dist. Congressman John Raker, 9/22/1913. See file # 114202) (**Map 6 – Special Indian Agent Kelsey's 1910 Map of Indian Rancherias – Verona Band**).

On October 4, 1913, Special Indian Agent Charles Kelsey wrote a response letter to Cato Sells Commissioner of Indian Affairs informing him of the following information relative to the 18 unratified treaties:

> 1. None of the treaties mentioned in the Senate document were ever ratified. … It is clear the treaties were never ratified and so never became technically operative. The Government took everything ceded in the treaties and more, i.e., for example the reservations, and paid nothing.
> …
> 4. Absolutely no steps or measures have been taken or had to extinguish the rights of the tribes to the lands described in the treaties unratified, in any way, shape, or form.
> 12. … The Indian Office did not even have record of the 18 treaties until we dug them out of the secret archives of the Senate.

… About two thousand Indians have still no land. … It may be necessary to buy land for about 1100 of them. All of these 2,000 Indian still landless are descendants of Indians represented in the 16 [northern California] treaties.

By the end of 1913, being exhausted and personally in debt to the amount over $18,000, Special Indian Agent C. E. Kelsey tendered his formal resignation. It was not until a year later that a new agent, **Charles H. Asbury** from the Reno Agency, was selected to replace Kelsey.



Map 6: Indian Agent Kelsey's 1910 Map of Indian Rancherias – Verona Band

Writing to the Commissioner of Indian Affairs on Dec. 7, 1914, from the Reno, Nevada Indian Agency, **Charles H. Asbury,** already named Special Indian Agent for California, reported progress in his investigation of the character, location and need of landless California Indians.

It is noteworthy that he called on his predecessor C. E. Kelsey for help in locating **30 individuals at Verona**, and then proceeded to suggest that they receive assistance in a land purchase in his report to the Commissioner. However, a thorough investigation of the Indians of California not provided with land would have required a great deal of time and expense.

Being understaffed and located in Reno, Special Agent Asbury was not able to accomplish anything on behalf of the landless California Indian bands and he was reassigned to the Indian Agency in the Southwest sometime in 1915. **John Terrell** was then selected as a replacement as Special Indian Agent for most of northern and central California by May 1915 and he continued to conduct on-site inspections and make censuses of many the bands that were under his jurisdiction.

However, during Terrell's tenure between 1915 and 1919, his efforts were oriented towards "needy" tribes and bands that were located in northern California counties (e.g., Mendocino and north) as well as the Sacramento Valley and the Sierra. Those tribes that were located within the northern "**mission area**" including the Muwekma (Verona Band of Alameda County), Amah Mutsun (San Juan Bautista Band), Esselen Nation (Monterey Band of Monterey County), the Salinan Indian tribal communities (Pleyto, Milpitas and Jolon) centering around Missions San Miguel and San Antonio, as well as the **Coast Miwok** tribal community located at the towns of Bodega Bay, Marshall, and Fishman were all but ignored and neglected.

A Call to War: Muwekma Men Enlist in all Three Branches of the U.S. Armed Forces Before and During World War I [1914 – 1920]

Even before California Indians legally became citizens in **1924,** prior to and during America's entrance into World War I on **April 6, 1917**, at least six Muwekma men joined 17,000 other Native Americans and served in the United States Armed Forces in the Army, Navy, and Marine Corps. These Muwekma men enlisted through the **San Francisco Presidio** and **Mare Island** and four of them are buried at the **Golden Gate National Cemetery.**

Antonio (Toney) Guzman, U.S. Army, Private, **166th Field Artillery Brigade, Battery F, 347th Field Artillery, 91st Division**. Toney Guzman was born on March 27, 1890 either in Centerville or on the Niles Rancheria. He was the son of Muwekma Indians Francisca Nonessa and Jose Guzman. Toney enlisted in the U.S. Army and he fought in the **Meuse-Argonne** (September 26 to October 8, 1918), **Ypres-Lys**, and **Lorraine** campaigns in France. Toney served in the Army from April 29, 1918 and was honorably discharged at the **San Francisco Presidio** on April 26, 1919 (**Figure 10**).

The **91st Division** was known as the "**Wild West Division.**" The Division's shoulder patch was a green fir tree referring to its origin at Camp Lewis in the Pacific Northwest. The Division was deployed to France in August, 1918 and fought with great distinction. In the **Ypres-Lys** campaign, the Division served in the **Flanders Army Group**, under the command of the **King of Belgium**. The Division was headquartered adjacent to Flanders Field. Five members of the Division earned the **Congressional Medal of Honor**. The **347th Field Artillery Regiment** was assigned 4.7" inch guns, and the 91st Division received the following **Victory Medal Clasps**: **Ypres-Lys**, **St. Mihiel**, **Meuse-Argonne,** and **Defensive Sector**.

Twelve days before the end of World War I, the division, as part of the VII Corps of the French Sixth Army, helped drive the Germans east across the Escaut River. The division was awarded separate campaign streamers for its active role in the **Lorraine, Meuse-Argonne** and **Ypres-Lys** campaigns

In October 1931, Toney Guzman and his brothers enrolled with the **Bureau of Indian Affairs** under their mother's **BIA Application #10293**. On his WW II Registration Card dated April 27, 1942, Toney was identified as "**Indian."** Toney passed away on **October 8, 1948** and was buried on October 12, 1948 at the **Golden Gate National Cemetery** (Section J, Grave 254).

Figure 10: Toney Guzman (1934)

Alfred (Fred) Guzman, U.S. Army, Private, **Company "C," 110th Infantry**, **28th Division** under Brigadier General T. W. Darrah. Alfred Guzman was born on the Pleasanton Rancheria on June 27, 1896 to Francisca and Jose Guzman. Prior to the declaration of War, Fred Guzman had served in the **National Guard** at **Fort Mason in San Francisco** in **1917**. Afterwards he enlisted in the U.S. Army, and served in the **28th Division**, **55th Brigade Infantry, 110th Infantry, Company "C"** and fought in the major battles at **Ourcq-Vesle** (July 28, 1918), **Second Battle of the Marne** (July 15-August 5, 1918), **Meuse-Argonne Offensive** (September 26 to October 8, 1918), and **Havrincourt** (October 8 – November 11, 1918) in France.

The 28th Division fought in the following **campaigns:** Champagne-Marne**,** Aisne-Marne**,** Oise-Aisne**,** Meuse-Argonne**,** Champagne **(1918), and** Lorraine **(1918). The cost in lives of these six campaigns was 4,183 casualties including 760 dead. The six fleurs-de-lis on the regimental insignia commemorates their World War I service. T**he **28th Infantry Division** was a unit of the United States Army formed in 1917 at the outbreak of World War I. It was nicknamed the "Keystone Division", as it was formed from units of the Pennsylvania Army National Guard; Pennsylvania is known as the "**Keystone State.**" It was also nicknamed the "Bloody Bucket" division by German forces in WWII, after its red insignia. Fred Guzman served from **July 28, 1917** and was honorably discharged at **San Francisco Presidio** on May 31, 1919. On his WW II Registration Card dated April 25, 1942, Fred was identified as **Indian**. Fred Guzman died on **November 3, 1961**, was buried at **Golden Gate National Cemetery** (Section Y, Grave 1059).

Joseph Aleas, U.S. Army, Sergeant, **Company D, 21st MG BN, 7th Division**. Joseph Aleas was born on the Alisal (Pleasanton) Rancheria on May 11, 1893 and was the son of Margaret Armija. He enlisted in the US Army on **June 30, 1916**. According to Armija-Thompson family recollections, he was a good horseman and wanted to fight against Pancho Villa, who had led approximately 1,500 Mexican raiders in a cross-border attack against Columbus, New Mexico, in response to the U.S. government's official recognition of the Carranza regime. Villa's troops attacked a detachment of the 13th U.S. Cavalry, seized 100 horses and mules, burned the town, killed 10 soldiers and eight of its residents, and made off with ammunition and weapons.

President Woodrow Wilson responded by sending 6,000 troops under General John J. Pershing to Mexico to pursue Pancho Villa and his troops. This military mobilization was called the Punitive or Pancho Villa Expedition.

Later, Joseph Aleas served in France with the **21st Machine Gun Battalion, 7th Infantry Division** (its Hourglass insignia dates back to 1918). Organized originally to serve in the American Expeditionary Forces (AEF) during World War I, the U.S. Army's 7th Infantry Division was created at Camp Wheeler, Georgia on December 6, 1917 and the 7th fought in **Alsace-Lorraine**, France during the war. The division also served as an occupation force during the post-war period.

On October 10-11, 1918 the 7th was shelled for the first time and later it encountered gas attacks in the **Saint-Mihiel** woods. Defensive occupation of this sector continued from October 10th to November 9th during which the infantry regiments of the 7th Division probed up toward **Prény** near the Moselle River, captured Hills 323 and 310, and drove the Germans out of the **Bois-du Trou-de-la-Haie** salient. After 33 days in the line of fire, the 7th Division had suffered 1,988 casualties, of which three were prisoners of war. Thirty Distinguished Service Crosses were awarded members of the 7th Division.

Joseph Aleas was honorably discharged at **Camp Funston**, Riley, Kansas on July 9, 1920 and was awarded the **World War I Victory Medal** and the **Bronze Victory Button**. Joseph Aleas enrolled with the **Bureau of Indian Affairs** in October 1931 (**BIA Application # 10299**). On May 24, 1955 Joseph enrolled during the second enrollment period with the **Bureau of Indian Affairs**. Joseph Francis Aleas passed away **July 13, 1964** and was buried at the **Golden Gate National Cemetery** Plot Z, grave 2597 (**Figure 11**).

Henry Abraham Lincoln Nichols, U.S. Navy, Fireman 1st Class**, Battleships *USS Arizona* and *USS Oklahoma*.** Henry Nichols was born in Niles on February 12, 1895 to Charles Nichols and Muwekma Ohlone Susanna Flores Nichols. Henry enlisted on May 23, 1917 and first served on the **USS *Albatross.*** By December 31, 1917 he was transferred to the Battleship **USS *Arizona***, and later on March 26, 1918 he was transferred again to the Battleship **USS *Oklahoma.*** During World War I Henry Nichols served in the North Atlantic and was on escort duty in December 1918 when the *Oklahoma* was serving as escort during President Woodrow Wilson's arrival in France at the end of the war (November 11, 1918). The *Oklahoma* returned to Brest, France on June 15, 1919 to escort home President Wilson who was transported on the *USS George Washington* from his second visit to France.

Henry Nichols was honorably discharged at Mare Island on August 14, 1919 and was issued the **World War I Victory Medal**. On Henry Nichols Draft Registration Card dated April 27, 1942 he is identified as **Indian**. Henry Nichols died on January 5, 1956 and buried at the **Golden Gate National Cemetery** (Section L-5, Grave 7455).

Figure 11: Grave Stones of Joseph Aleas, Fred Guzman, Toney Guzman, Henry Nichols

Franklin P. Guzman (Service # 87843) Sergeant, **U.S. Second Marine Corps Division, Fourth Marine Infantry Brigade, Sixth Machine Gun Battalion, 81st "D" Company.** Franklin was born on the Alisal Rancheria on January 15, 1898 and was the son of Pleasanton Indians Teresa Davis and Ben Guzman (who later died in 1907). He was also the nephew of Toney and Fred Guzman. Franklin was listed on the **1910 Federal Indian Population Census** for "**Indian Town**", Pleasanton Township. He enlisted on October 20, 1916 while working near Sacramento, reported for duty on October 25, 1916 and was assigned to **Company "B" Marine Barracks, Navy Yard, Mare Island**. On May 28, 1917 Franklin was promoted to the rank of Corporal. By March 31, 1918, he earned an **Expert Rifleman Badge** and a **Marksman Badge** and by April he was assigned to the **111th Company, 8th Regiment**.

In May, Franklin was transferred to the **150th Company 1st Machine Gun Replacement Battalion** at Quantico, Virginia and he was promoted to Sergeant on May 22, 1918.

The 1st Machine Gun Replacement Battalion sailed on May 26, 1918 on the *USS Henderson* and disembarked in France on June 8, 1918. The 1st Machine Gun Battalion was later renamed the 6th Machine Gun Battalion in France. From September 12 to 16, 1918 the brigade was engaged in the **St. Mihiel offensive** in the vicinity of **Remenauville**, **Thiaucourt**, **Xammes**, and **Jaulny**. On September 16, 1918, he was wounded in the left thigh and from September through December he was placed in various Field and Base Hospitals in France, and finally transferred back to the States on December 16, 1918. Franklin remained in recovery at the US Navy Hospital at Norfolk, Virginia until he was honorably discharged from service as a Sergeant on June 27, 1919.

Franklin's Battalion participated in the **Chateau-Thierry** sector (capture of Hill 142, Bouresches, Belleau Wood) from June to July, 1918; **Aisne-Marne** (Soissons) offensive from July 18 to July 19, 1918; **Marbache** sector, near Pont-a-Mousson on the Moselle River from August 9 to August 16, 1918; **St. Mihiel** from September 12 to September 16, 1918; and later the **Meuse-Argonne** offensive (October 1 to 10, 1918, and November 1 to 10, 1918). Franklin passed away on May 30, 1979 and was buried in the **Riverside National Cemetery** (Section 8, Grave 2826) (**Figure 12**).

Figure 12: Veteran Headstone for Franklin Guzman

John Michael Nichols was a Muwekma Ohlone Indian from the San Francisco Bay Area. He was born on September 29, 1893 in Niles, California and was baptized at Mission San Jose. John was the older brother of Henry Nichols who had served in the Navy on the battleships *Arizona* and *Oklahoma* during WWI (May 1917 – August 1919).

John enlisted in the US Army on **October 27, 1914** and was stationed at **Fort McDowell on Angel Island**. He fought in France serving with the **59th Coast Artillery Corps (CAC)**. In 1913, the defenses of individual harbors were renamed coast defenses, as in "the **Coast Defenses of San Francisco**." Coast artillery districts were retained, but the term now had a different meaning. Three continental coast artillery districts were created within the geographic departments. The Pacific Coast Artillery District (ranging from San Diego to Puget Sound) was established in the Western Department. Beginning in December 1917 and continuing into 1918, Regular Army and National Guard companies were combined, creating the **54th** through the **71st Artillery Regiments**, **CAC**.

The 59th was engaged in the **St. Mihiel** offensive and the **Meuse-Argonne** offensive and earned a Service Clasp (WWI Victory Medal for: **St. Mihiel Offensive, France (**2 September-16 September 1918), and **Meuse-Argonne Offensive, France** (26 September-11 November 1918)). John was discharged at **Fort Winfield Scott** at the **SF Presidio** on June 4, 1920. John apparently came back to the states with the 67th C.A.C. which appears on his gravestone. John M. Nichols was listed as an **Indian** on the 1930 Federal Census along with his son Alfred in Santa Cruz County, California. On John Nichols's WWII Draft Registration Card dated April 27, 1942 he was identified as residing at the Veteran's Home in Napa (Yountville), California and he had resided there from 1941 to 1953. John Nichols died in April 1968 while living in Stockton, California (**Figures 13** and **14**).

The regiments in France were largely demobilized as soon as possible after returning to the states, typically by March 1919. However, 12 regiments that had served in France were retained in active service at the end of the war for training purposes. This number was shortly reduced to 10: 42nd, 43rd, 52nd, and 53rd Artillery, CAC (Ry) formed the 30th Brigade, posted at Camp Eustis, VA. The 31st Brigade, consisting of the 55th, 57th, and **59th Artillery**, **CAC (TD),** was initially posted at **Fort Winfield Scott, CA,** before moving to Camp Lewis, WA, in the later months of 1919 (California State Military History site:
http://www.militarymuseum.org/Muwekma.html.).

Figure 13: Veteran Headstone for John Nichols and a World War I Victory Clasp

Figure 14: Henry Nichols (left) **Franklin Guzman** (center), **John Nichols** (right) [ca. 1918]

Muwekma Tribe Honors the Native American Code Talkers Who Served During WWI

Excerpted from two websites on the implementation and use of Native American code talkers on the front lines during World War I. Even though the Muwekma men who enlisted did not serve as code talkers, nonetheless, the tribal leadership thought it important to honor those Native men by including information of their service to the U.S. Those website authors provide the following information on line:

> In France during World War I, the 142nd Infantry Regiment, 36th Division, had a company of Indians who spoke 26 languages and dialects. Two Indian officers were selected to supervise a communications system staffed by 18 Choctaw. The team transmitted messages relating to troop movements and their own tactical plans in their native tongue. Soldiers from other tribes, including the Cheyenne, Comanche, Cherokee, Osage, and Yankton Sioux also were enlisted to communicate as code talkers. Previous to their arrival in France, the Germans had broken every American code used, resulting in the deaths of many Soldiers. However, the Germans never broke the Indians' "code," and these Soldiers became affectionately known as "code talkers" (**Figure 15**).
> (https://www.army.mil/americanindians/code_talkers.html)
>
> When the United States entered World War I in April 1917, it had not yet granted citizenship to all Native Americans, and government-run boarding schools were still largely attempting to stamp out their languages and cultures. Nonetheless, several thousand Native Americans enlisted in the armed forces to fight the Central Powers. Nearly 1,000 of them representing some 26 tribes joined the 36th Division alone, which consisted of men from Texas and Oklahoma.
> (https://www.history.com/news/world-war-is-native-american-code-talkers)

Figure 15: Native American Code Talkers During WWI

After serving overseas during World War I, the over 17,000 Native American servicemen were offered a path to citizenship if they wanted to apply. On November 6, 1919, the United States Congress granted citizenship to the honorably discharged Indian veterans of World War I who were not yet citizens.

> BE IT ENACTED . . . that every American Indian who served in the Military or Naval Establishments of the United States during the war against the Imperial German Government, and who has received or who shall hereafter receive an honorable discharge, if not now a citizen and if he so desires, shall, on proof of such discharge and after proper identification before a court of competent jurisdiction, and without other examination except as prescribed by said court, be granted full citizenship with all the privileges pertaining thereto, without in any manner impairing or otherwise affecting the property rights, individuals or tribal, of any such Indian or his interest in tribal or other Indian property.

The 1919 American Indian Citizenship Act did not grant automatic citizenship to American Indian veterans who received an honorable discharge. The Act merely authorized those American Indian veterans who wanted to become American citizens to apply for and be granted citizenship. Few Indians actually followed through on the process, but it was another step towards citizenship.

It was during President Calvin Coolidge's Administration that the United States Congress finally granted citizenship to Native American servicemen and their respective tribes on June 2, 1924, (**Figure 16**). However, the Native American tribes of Arizona and New Mexico would have to wait another 24 years before full citizenship and voting rights were granted in 1948 after their service in the Armed Forces during World War II.

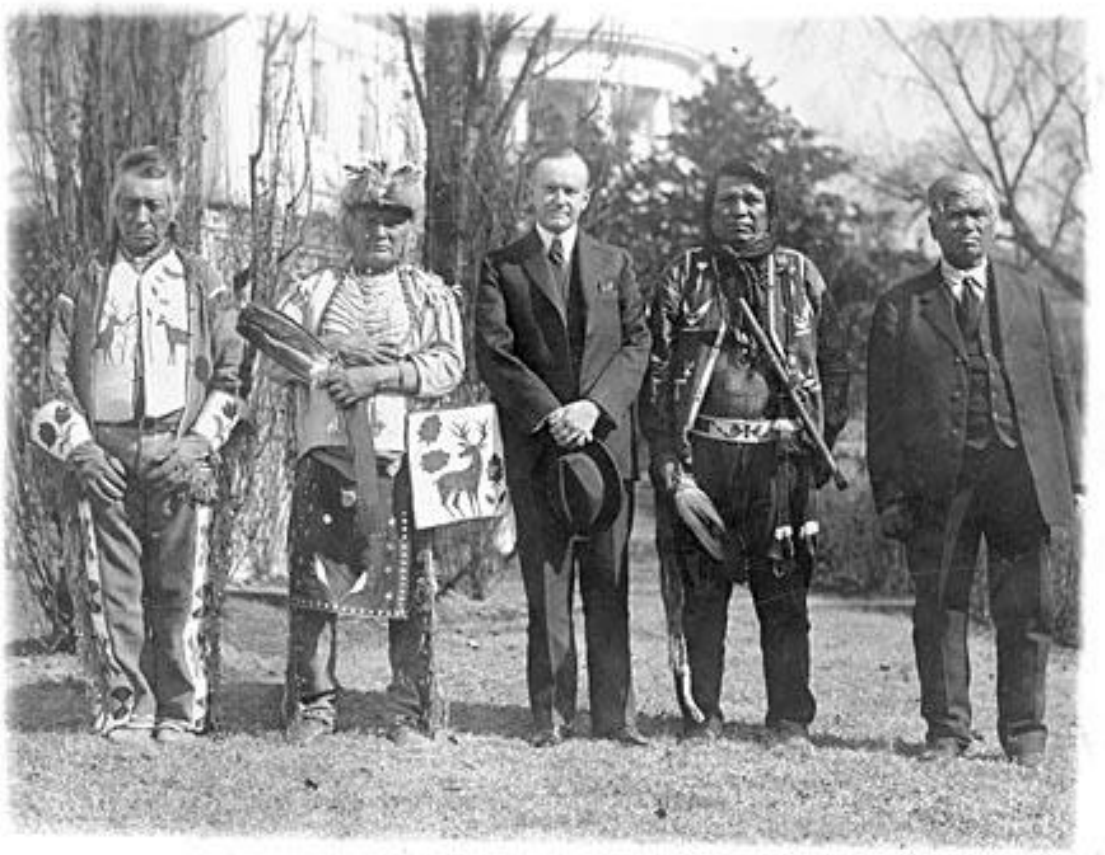


Figure 16: President Calvin Coolidge with Four Osage Indian Leaders

Thomas Grillot in his recently published book titled First Americans: U.S. Patriotism in Indian Country after World War I wrote that:

> The years between 1918 and the end of the 1940s were crucial ones in recent Indian history. Beginning in the 1920s, reservation groups were allowed to claim reparation for broken treaties from the American government in the U.S. Court of Claims. A few years later, they were encouraged to write constitutions for their tribal governments. The New Deal saw the first major attempt to reverse the most undesirable effects of the assimilation policy the federal government had followed since the last decades of the nineteenth century. World War II occasioned the massive reenlistment of yet another generation of Indian soldiers. Finally, at the end of the 1940s, the major assault on the existence of reservations as separate territories known as "termination" began.

The Muwekma/Verona Band under the Jurisdiction of the Indian Service Bureau: Reno and Sacramento Agencies 1923 – 1927, and the Removal of 135 Landless Tribal Bands

After Terrell left the Indian Service, the jurisdiction fell to **James Jenkins**, Superintendent of the Reno Agency. Writing his Annual Report to the Commissioner of Indian Affairs in 1923, Superintendent Jenkins commented:

> The jurisdiction of Reno Agency comprises the following named reservations and colonies, villages, camps, etc., in addition to all scattered bands of Indians in Nevada and California not under the jurisdiction of any other superintendency; also Indians whose allotments, homesteads, etc., are carried at the land offices located at Stockton, Sacramento, Visalia, San Francisco, Los Angeles, and Independence and Marysville, California, and Carson City and Elko, Nevada. …
>
> … Other Indians in California under this jurisdiction but not occupying government lands are found in the localities named below:
>
> | **County** | **Communities** | **Estimated** |
> |---|---|---|
> | **Alameda** | **Verona** | **30** |
>
> (Jenkins:1923 Annual Report: 3-5)

Sometime around 1923, the jurisdiction of the landless Indians of northern central California had shifted to the Sacramento Agency under the aegis **Colonel Lafayette A. Dorrington**, who was a prison warden in the Philippines during the American occupation. Dorrington, who was probably a political appointee to the Sacramento Superintendency and was probably rewarded for his military service as a prison warden in the Philippines during the post-Spanish American War period of occupation.

It is interesting to note that Dorrington's on-line Military Burial record provides the following information: He was identified as a **1st Lieutenant Company H, 2nd Nebraska Infantry – 4/29/98 to 10/24/98; 2nd Lt., Company L, 2nd U.S. Infantry; 10/27/98 to 6/22/99** which served in **Cuba.** His last rank was **1st Lieutenant, Company A, 34th U.S. Volunteer Infantry.** His last

appointment was 7/5/99 and he was discharged on 6/30/1901. Dorrington died on October 8, 1934 and was buried at Arlington National Cemetery on January 13, 1937. His grave is located in Section 3, Grave No. 3947 (document from Ancestry.com).

In January 1927, Sacramento Superintendent **Col[onel]. Lafayette A. Dorrington** (1918-1930) received a detailed office directive from **Assistant Commissioner E. B. Merritt** for him to list by county all of the tribes and bands under his jurisdiction that had yet to obtain a land base for their "home sites." This directive was issued so that Congress could plan its allocation budget for fiscal year 1929. Dorrington, who was not an advocate for California Indians, was chronically derelict in his duties and he decided not to respond to this directive. He also decided not to respond to many of the other requests issued by the Washington, D. C. Office. By May 1927, under threat of investigation, Dorrington yet again received another strongly worded directive from the Assistant Commissioner E. B. Merritt (**Figure 17**).

To this second directive, Dorrington reluctantly responded on June 23, 1927 by generating a report, which in effect, illegally, unilaterally, and administratively "**terminated**" the existence and needs of approximately 135 tribes and bands throughout northern California from their **Federally Acknowledged** status. He did this by completely dismissing the needs of these identified homeless and landless tribal groups. The very first casualty on Dorrington's "**hit list"** was the **Verona Band of Alameda County**. Without any benefit of any on-site visitation or needs assessment, which he was charged to conduct by the Assistant Commissioner, Dorrington opined:

> There is one band in Alameda County commonly known as the Verona Band, … located near the town of Verona; these Indians were formerly those that resided in close proximity of the Mission San Jose. It **does not appear** at the present time that there is need for the purchase of land for the establishment of their homes. (Dorrington Report dated June 23, 1927)

The fact that Dorrington makes mention that the Verona Band resided "near the town of Verona" makes it clear that he never visited the Muwekma Tribal community. There is no town of Verona in Alameda County. Thus, with the stroke of a pen and without benefit of any due process or direct communication with the tribe, the Muwekma/Verona Band along with the other 134 tribes and bands of California, apparently **lost their formal status as Federally Recognized Tribes**. Although not formally "terminated" by any policy decision or act of Congress these tribes were essentially knocked off the "radar screen" of the Bureau of Indian Affairs and as landless tribes were considered **ineligible** to organize as tribes under the 1934 Indian Reorganization Act.

During the 20th Century, no other state within the United States had experienced the massive **illegal "termination"** of so many Federally Recognized tribal groups whose rights were extinguished by gross negligence and crass neglect.

This massive dismissal and removal of recognized landless tribes was deliberate and due as a result of the callous actions and dereliction of duty by an incompetent **Bureau of Indian Affairs** agent.

Three years later, Dorrington, still being prodded by BIA officials in Washington, D.C. about the needs of the landless and homeless Indians in California under his jurisdiction, offered insight to his actions and his personal beliefs in a letter he wrote to **Commissioner Rhoads**. In that letter dated April 23, 1930, Dorrington wrote:

…Kindly be respectfully advised that the matter of land purchase for homeless Indians has really been given constant and diligent attention throughout the current fiscal year to date and an earnest effort has been made to fully meet the needs of the Indians to the fullest extent without unnecessary or unjustified expenditure of funds, believing that to be the spirit of the law and your wishes in the premises. …

It has been my opinion, and therefore my belief, for several years that the best interests of the Indians will be served through an arrangement whereby those concerned may be settled on the already acquired land **instead of procuring additional which cannot be turned to beneficial use and occupancy by the Indians** in mind because of their inability financially to establish themselves thereon.

…In its final analysis, Mr. Commissioner, kindly understand and know that **additional land for homeless Indians of California is not required and therefore further demands on the appropriation for the fiscal year 1930 are not warranted or justified** (Dorrington Letter to Commissioner Rhoads April 20, 1930). [Emphasis added]

Figure 17: Sacramento Superintendent Lafayette A. Dorrington October 21, 1926

By July 1931, **Dorrington** had either quit the Indian Service or was transferred or was fired and he was replaced by **Oscar H. Lipps** as Superintendent of the Sacramento Agency. **Lipps,** responding to an inquiry written by Assistant Commissioner J. Henry Scattergood offered specific concerns about the **conditions of the homeless California Indians** for whom land was purchased:

> Receipt is acknowledged of your letter, dated June 30, 1931, relating to the matter of purchasing land for homeless Indians of California. …I am addressing this letter to you personally and calling the subject matter thereof to your special attention for the reason that there **appears to be a grave lack of understanding in the Office regarding this whole matter of providing homes for homeless California Indians**.
>
> I think it is all the more important that this matter be brought to your personal attention at this time in view of your recent visit to California with the Senate Committee and your familiarity with the sentiment and feeling in this State with respect to the past administration of the affairs of the California Indians.
>
> The conditions on some of these rancherias are simply deplorable. No one can view many of them and observe the conditions under which the Indians are trying to exist without the feeling that someone is guilty of **gross neglect** or **inefficiency** and that a **cruel injustice** has been meted out to a helpless people under the name of beneficent kindness… And yet there are those who say that I will never do to let the local authorities have charge of the affairs of the Indians lest the Indians be neglected and abuse.
>
> …**I have not yet seen a single instance where the federal government has done anything like so much for the improvement of the homes and living conditions of the Indians under this jurisdiction** as has been done by Sonoma County for the Indians residing on the Stewart's Point Rancheria.
>
> Now it seems to me that the thing for us to do is to look at the facts in the face and admit that in the past the Government has been woefully negligent and inefficient, and then start out with the determination, as far as possible, to rectify our past mistakes.
>
> It is difficult to locate the blame, but somewhere along the line there appears to have been **gross negligence** or **crass indifference**. If Congress has been honestly and fully advised of conditions and has refused or failed to give relief asked for, then the Indian Bureau is not responsible for the neglect of the Indians. On the other hand, if Congress believed and intended by appropriating funds for the purchase of lands for homeless Indians and improvements thereon that good and suitable lands would be purchased and houses constructed and improvements made, **then we have neglected to do our duty** (Lipps letter to Assistant Commissioner Scattergood 1931 [Emphasis added].

Although left completely landless, and in some instances completely homeless, between 1929 and 1932 **all of the surviving Verona Band/Muwekma lineages enrolled with the BIA under the 1928 California Indian Jurisdictional Act** which were approved by the Secretary of Interior in the pending claims settlement. Concurrently, during the last decades of the 19th century and first three of the 20th century (between 1884 and 1934), renowned anthropologists and linguists such as Jeremiah Curtin, Alfred Kroeber, E. W. Gifford, John Alden Mason, C. Hart Merriam, and John

Peabody Harrington interviewed the last fluent speakers of the "Costanoan" and other Indian languages spoken at the East Bay rancherias. It was during this time period that **Verona Band Elders** still employed the linguistic term **"Muwekma"** which means **"la Gente or the People"** in Chochenyo and Thámien Ohlone language spoken in the East and South San Francisco Bay region.

Muwekma Enrollment with the Bureau of Indian Affairs (1928-1932): The Passage of the California Indian Jurisdictional Act of 1928

As a result of the passage of the Indian Citizenship Act of 1924, also known as the Snyder Act, California Indians and Allied Indian Associations started to advocate looking into claims against the federal government for lands illegally taken under the 18 unratified treaties of California. Under the 1924 Act indigenous people did not have to apply for citizenship, nor did they have to give up their tribal citizenship to become a U.S. citizen. Most tribes had communal property and in order to have a right to the land, Indians must belong to the tribe.

In 1928, the United States Congress passed the **California Indian Jurisdictional Act**, which created a census of all eligible Indians who could prove that their ancestors resided in California at the time when the 18 unratified treaties were negotiated between 1851-1852. Between the years 1928 and 1932 a little over 17,000 California Indians filled out applications and almost all were approved by the Indian Service Bureau.

During this time period almost all of the Muwekma Indian head of households enrolled as "**Ohlones**" and/or as "**Mission San Jose Tribe**" under this act and their applications were approved by the Secretary of Interior, the BIA and Federal (**Figures 18** to **37: Muwekma Ohlone BIA 1928-1932 Applications**).

Enrolling were members of the Marine-Peralta, Marine-Alvarez-Piscopo-Galvan, Marine-Sanchez, Marine-Arellano-Garcia, Marine-Muños, Marine-Armija, Armija-Thompson, Armija-Aleas, Armija-Nichols, Guzman, Binoco, Bautista-Armija, Inigo-Gonzalez-Alaniz, Santos-Pinos-Colos-Saunders-Pena-Corral, and Pinos-Juarez families. All of these Muwekma families were living in the Pleasanton, Sunol, Niles, Newark, Livermore as well as other areas within the East Bay and Santa Clara County.

JJ e--ok

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10298

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Marine, Lucas	Head	38	M	10-18-1900	1/2
" , Ernest	Son	2	M	1-26-1926	3/4

Note:* See application of Katie Marine, wife, Centerville, Alameda County, California. App. No. 10675

2. Residence on May 18, 1928 Centerville, Alameda County, California.

3. Post Office Box 6, Centerville (Town or City, Box Number or Rural Route Number.) Alameda (County) California (State)

Note:* Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children Near Sunol, Alameda County, California. My child was born in Alameda County, California.

Name Marine, Lucas Application Number 10298 Action taken Approved, FAB

Figure 18: Lucas Marine BIA Application # 10298

5. Where have you and your children resided since birth? In Alameda and Mendocino Counties, California.

6. Are you married? Yes.

7. If a married woman, give your name before you were married. ---

8. Name and exact date of birth (Month, Day, and Year) of your wife (or husband). Katie Marine, nee Peralta-- Age about 35 years.

9. Is he (or she) of Indian blood? If so, state the name of the Tribe or Band, and degree of Indian blood.

Yes 4/4 Ohlones, (Tribal name unknown) Alameda County, California.

10. What is your degree of Indian blood and to what Tribe or Band of Indians of the State of California do you belong?

1/2 (Degree of Indian Blood) — Ohlones (?) Tribal name Unknown, Alameda County, California. (Name of Tribe or Band)

11. To what Treaty or Treaties were you or your ancestors a party, and where did you (or they) reside on June 1, 1852? Where and when were said Treaties negotiated?

I do not know.

12. Give the names of your California Indian ancestors living on June 1, 1852, through whom you claim, who were parties to any Treaty or Treaties with the United States. If you claim through more than one ancestor living on that date, set forth each claim separately. State your descent from said ancestor or ancestors setting forth your relationship to them.

Names	Tribe or Band	Relationship by Blood
Evalina Marine	Ohlones, Tribal name unknown, Alameda County, California.	Mother.

(See Nos 15 and 26)

Figure 19: Lucas Marine BIA Application Identifying his Tribe as "Ohlones"

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10293

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Guzman, Francisca	Head (Separated)	65	F	10-11-1863	4/4
" , Tony J.	Son	37	M	10-11-1891	4/4
" , Jack	Son	25	M	2-6-1903	4/4
Hernandez, Paul	Son	21	M	1-14-1907	1/2

2. Residence on May 18, 1928 Niles, Alameda County, California.

3. Post Office Box 101, Niles (Town or City, Box Number or Rural Route Number) Alameda (County) California. (State)

Note:* Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children Alameda County, California.

Application Number 10293
Name Guzman, Francisca
Action taken Approved. FAB

Figure 20: Francisca Guzman and Children BIA Application # 10293

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10301

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

Name Alaniz, Phoebe Application Number 10301 Action taken Approved. FAB

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Alaniz, Phoebe	Head	51	F	8-1-1877	4/4
Garcia, Thomas	Adopted Son	11	M	1-1-1917	4/4
Gonzales, Trinidad *	Mother	72	F	11-28-1856	4/4

* (Died October 28, 1928)

Note:- The husband of the applicant was a Mexican.

2. Residence on May 18, 1928 Livermore, Alameda County, California.

3. Post Office General Delivery, Livermore, Alameda California
(Town or City, Box Number or Rural Route Number) (County) (State)

Note:* Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children

Between Sunol and Pleasanton, Alameda County, California.

Adopted son born near Sacramento, California.

Figure 21: Phoebe Alaniz, her Mother and her Adopted Son BIA Application # 10301

Application Number 10296 Name Thompson, Magdalena Action taken Approved. FAB

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10296

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Thompson, , Magdalena	Head	51	F	5-27-1877	4/4
Thompson, ~~Amelia~~ (Emily)	Dau	18	F	10-31-1910	1/2
" , Ernest	Son	16	M	4-21-1912	1/2
" , Eduardo (Edward)	Son	14	M	7-21-1914	1/2
" , Lorenzo (Lawrence)	Son	10	M	9-9-1918	1/2

Note:* The husband of the applicant is not of Indian blood.

2. Residence on May 18, 1928 Alameda County, California.

3. Post Office P.O. Box 3, Newark (Town or City, Box Number or Rural Route Number.) Alameda (County) California. (State)

Note:* Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children Alameda County, California.

Figure 22: Magdalena Thompson and Children BIA Application # 10296

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10294

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Martel, Flora Emma Thompson	Head	19	F	3-7-1909	1/2
Martel, Laura May	Dau	2 Mos	F	3-2-1928	1/4

Note:- The husband of the applicant is a white man.

2. Residence on May 18, 1928 Newark, Alameda County, California.

3. Post Office General Delivery, Newark (Town or City, Box Number or Rural Route Number.) Alamead (County) California. (State)

Note:- Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children

Newark, Alameda County, California.

Application Number 10294
Name Martel, Flora Emma Thompson
Action taken
Approved. FAB

Figure 23: Flora Emma Thompson Martel and Daughter BIA Application # 10294

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10676

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

Application Number 10676 Action taken ..... Approved .....
Name Juarez, Maggie

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month	Day	Year	Degree of Indian Blood
Juarez, Maggie J (Margarita)	Head	43	F	6	17	1885	4/4
Santos, Daniel	Grand Nephew	11	M	1	3	1917	4/4
X Conrad, Erolinda	Head	33	F			1895	4/4
" , Arthur	Son	3	M			1925	4/4
" , Robert	Son	1	M			1927	4/4
XX Gonzales, Eulario	Single	66	M			1862	4/4

2. Residence on May 18, 1928 Newark, California

3. Post Office Gen. Del. Newark Alameda Calif
Town or City, Box Number or Rural Route Number. County State
does not live on trust lands

4. Place of birth of yourself and each of your minor children
Benecia Alameda Co. Calif

X Niece of Maggie Juarez.

XX niece of " " -1-

Figure 24: Maggie Pinos Juarez and Family BIA Application 10676

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10297

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Indian Names	Ages	Sex	Dates of birth Month Day Year	Deg
Andrade, Chona	Head	50	F	11-27-1878	4/4

Note:- The husband of the applicant is a white man (Portuguese).

2. Residence on May 18, 1928 San Quentin, Marin County, California.

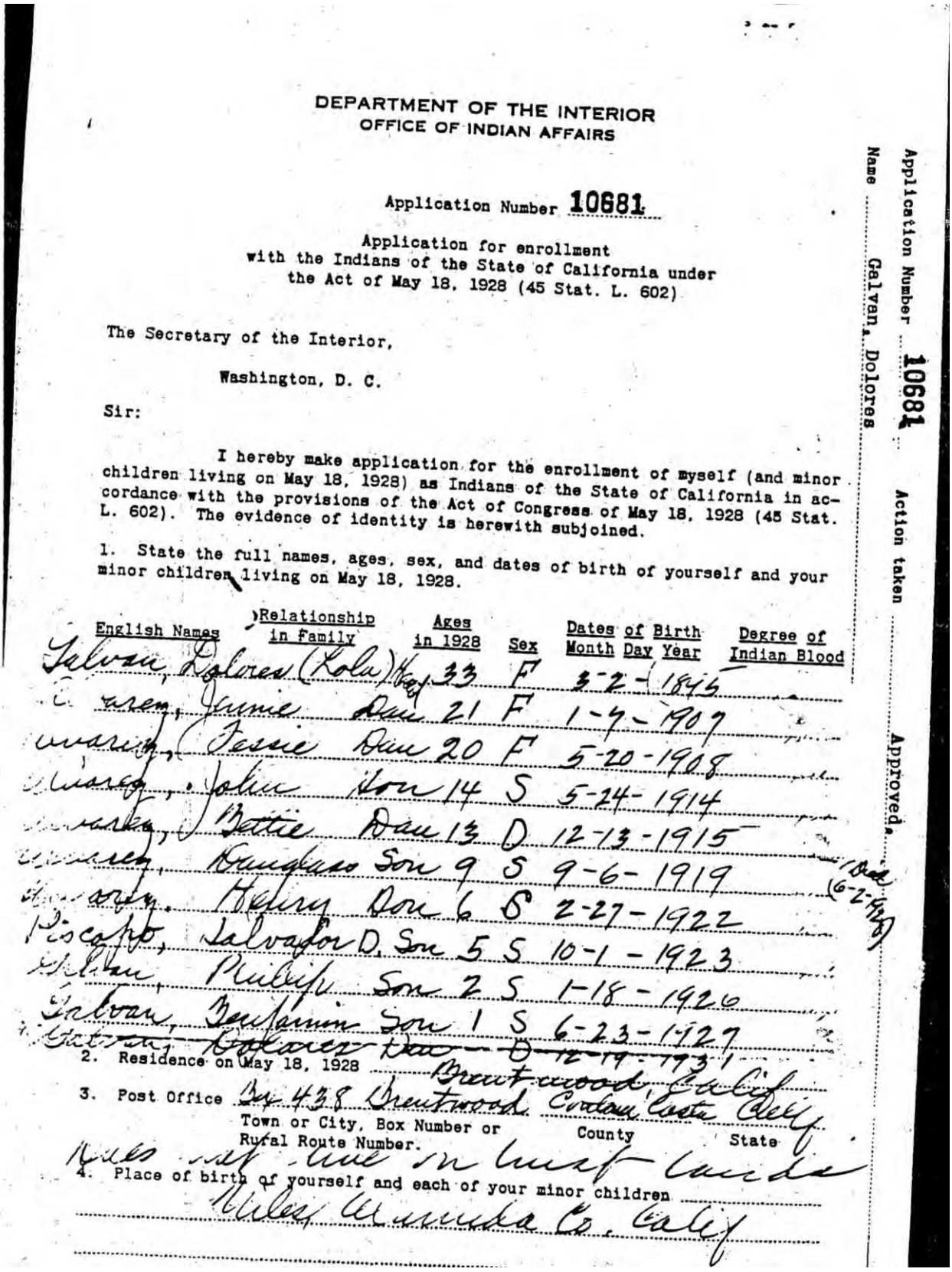
3. Post Office San Quentin, # 30036 Marin California.
Town or City, Box Number or Rural Route Number. County State

Note:* Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children
Niles, Alameda County, California.

Name Andrade, Chona Application Number 10297 Action taken Approved. FAB

Figure 25: Chona Bautista Armija Andrade BIA Application # 10297



DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10681

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month	Day	Year	Degree of Indian Blood
Galvan, Dolores (Kola)	Mother	33	F	3	2	1845	
Galvan, Jennie	Dau	21	F	1	4	1907	
Galvan, Jessie	Dau	20	F	5	20	1908	
Galvan, John	Son	14	S	5	24	1914	
Galvan, Bettie	Dau	13	D	12	13	1915	
Galvan, Douglass	Son	9	S	9	6	1919	
Galvan, Henry	Son	6	S	2	27	1922	
Piscopo, Salvador D.	Son	5	S	10	1	1923	
Galvan, Phillip	Son	2	S	1	18	1926	
Galvan, Benjamin	Son	1	S	6	23	1927	
~~Galvan, Dolores~~	~~Dau~~	~~D~~		~~12~~	~~19~~	~~1931~~	

2. Residence on May 18, 1928 Brentwood, Calif.

3. Post Office Box 438 Brentwood, Contra Costa, Calif.
Town or City, Box Number or Rural Route Number. County State

4. Place of birth of yourself and each of your minor children
Niles, Alameda Co. Calif

Application Number 10681
Name Galvan, Dolores
Action taken
Approved
Date (6-2-1930)

Figure 26: Dolores Marine Alvarez Piscopo Galvan and Children, BIA Application 10681

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10677

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month	Day	Year	Degree of Indian Blood
Marine, Dario J.	Head	40	M	12	18	1888	1/2
" , Beatrice Dau		19	F	1	15	1909	3/4
" , Josephine Dau		17	F	11	5	1911	3/4
" , Evelyn Dau		15	F	1	15	1913	3/4
" , Filbert Son		13	M	12	31	1915	3/4
" , Domingo Son		9	M	5	4	1919	3/4

Note: See affidavit of Cecelia Arrnija Marine, wife, Aff No 10637.

2. Residence on May 18, 1928 Evelyn Near Jamestown

3. Post Office Jamestown Route 1 Box 142-A California
Town or City, Box Number or Rural Route Number. County State

Does not live on land.

4. Place of birth of yourself and each of your minor children
Tuolumne County, California

Application Number 10677 Name Marine, Dario J. Action taken Approved.

Figure 27: Dario Marine and Children, BIA Application 10677

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10680

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

Application Number 10680 Action taken Approved.
Name Sanchez, Dolores

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month	Day	Year	Degree of Indian Blood
Sanchez, Dolores	Single	14	F	-		1914	
Sanchez, Augusta	Sister	13	F	-		1915	
" , Morgan	Bro	11	M	-		1917	
" , Margie	Sister	9	F	-		1919	
" , Ignacio	Bro	16	M	-		1912	

2. Residence on May 18, 1928 Alameda Co. Calif
3. Post Office Milpitas Santa Clara Calif
Town or City, Box Number or Rural Route Number. County State
4. Place of birth of yourself and each of your minor children Do not live on trust lands
Alameda County, Calif

Figure 28: Dolores Sanchez and Siblings, BIA Application 10680

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10679

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

Name Arrellano, Albert Application Number 10679 Action taken Approved.

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month	Day	Year	Degree of Indian Blood
Arrellano, Albert	Single	20	M	-	-	1908	-/-
" Edwina	-	19	F	-	-	1909	-/-

2. Residence on May 18, 1928 Masco, near Fresno, Calif

3. Post Office Masco (Town or City, Box Number or Rural Route Number) Fresno (County) California (State)
Domiciled on Trust Lands

4. Place of birth of yourself and each of your minor children
Alameda County, California

Figure 29: Albert Arellano and Sister, BIA Application 10879

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10678

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

Application Number 10678 Action taken Approved.
Name Redondo, Mary Munoz

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month	Day	Year	Degree of Indian Blood
Redondo, Mary Muñoz	Head	20	F	7		1908	
" , Joseph	Son	1	M	6		1927	
Muñoz, Flora	Sister	10	F			1918	

2. Residence on May 18, 1928 Alameda Co. Calif.

3. Post Office Mountain View (Town or City, Box Number or Rural Route Number) Contra Costa (County) Calif. (State)
Has not land in trust lands.

4. Place of birth of yourself and each of your minor children
Alameda Co Calif

Figure 30: Mary Munoz and Sister Flora and Son, BIA Application 10678

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10682

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Marine, Trina (Trina)	Single	27	F	2-27-1901	½

2. Residence on May 18, 1928, San Leandro, Calif.

3. Post Office Box 438 Brentwood Contra Costa Calif.
(Town or City, Box Number or Rural Route Number. County State)

Note Does not live on Indian Land

4. Place of birth of yourself and each of your minor children
Washington, California

Name Maxine, Trina

Application Number 10682

Action taken

Approved.

Figure 31: Trina Marine, BIA Application 10682

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10299

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Aleas, Joseph Francis	Single	35	M	5-11-1893	1/2

2. Residence on May 18, 1928 Newark, Alameda County, California.

3. Post Office Box 3, Newark (Town or City, Box Number or Rural Route Number.) Alameda (County) California. (State)

Note:* Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children Pleasanton, Alameda County, California.

Application Number 10299 Action taken Approved. FAB

Name Aleas, Joseph Francis

Figure 32: Joseph Francis Aleas, BIA Application 10299

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10637

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Marine, Cecelia Armija	Wife	F		11-27-1900	1/2

Note: Re application of Dario J. Marine, husband, #10677

2. Residence on May 18, 1928 Escalon, California.

3. Post Office Route 1, Box 142-A Oakdale (Town or City, Box Number or Rural Route Number) Stanislaus (County) California. (State)

Note:* Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children

Niles, Alameda County, California.

Application Number 10637. Name Marine, Cecelia Armija. Action taken Approved. FAB.

Figure 33: Cecilia Armija Marine BIA Application 10637

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10675

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

Name Marine, Catherine

Application Number 10675

Action taken

Approved.

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month	Day	Year	Degree of Indian Blood
Marine Catherine (Catherine)	Wife	35	F	11	22	1893	4/4
Ferdinand, Lucas	Marine						Mo 16298

2. Residence on May 18, 1928 Centerville California

3. Post Office care of Box 6 Centerville — Alameda — Calif
Town or City, Box Number or Rural Route Number. — County — State

4. Place of birth of yourself and each of your minor children Alameda County, California

Figure 34: Catherine Peralta Marine BIA Application 10675

Application Number 8419

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Bianoco, Jose	Single (Widower)	86	M	10-8-1842	4/4

2. Residence on May 18, 1928 Pleasanton, Alameda County, California.

3. Post Office Fairmont Hospital, San Leandro (Town or City, Box Number or Rural Route Number.) Alameda (County) California. (State)

Note:- Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children

Mission San Jose, Alameda County, California.

Bianoco, Jose

tion Number 8419

Action taken

Approved, March 20, 1931.

Figure 35: Jose Binoco BIA Application 8419

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10300

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,

Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

English Names	Relationship in Family	Ages in 1928	Sex	Dates of Birth Month Day Year	Degree of Indian Blood
Nichols, Belle	Wife	38	F	2-19-1890	1/2

Note:* See application of Joseph Nichols, husband, Niles, Alameda County, California. App. No. _____

2. Residence on May 18, 1928 Niles, Alameda County, California.

3. Post Office Niles, Gen. Del. Alameda California.
Town or City, Box Number or Rural Route Number. County State

Note Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children Niles, Alameda County, California.

Name Nichols, Belle Application Number 10300 Action taken Approved. KAB

Figure 36: Belle Nichols BIA Application 10300

5. Where have you and your children resided since birth? Alameda County, California.

6. Are you married? Yes.

7. If a married woman, give your name before you were married. Belle Stokes

8. Name and exact date of birth (Month, Day, and Year) of your wife (or husband). Joseph (Joe) Nichols.---- Age 48 years.

9. Is he (or she) of Indian blood? If so, state the name of the Tribe or Band, and degree of Indian blood. Yes 1/2 Olanian Tribe, Alameda County, California.

10. What is your degree of Indian blood and to what Tribe or Band of Indians of the State of California do you belong?

1/2	Olanian Tribe, Alameda County, California.
Degree of Indian Blood	Name of Tribe or Band

11. To what Treaty or Treaties were you or your ancestors a party, and where did you (or they) reside on June 1, 1852? Where and when were said Treaties negotiated? I do not know.

12. Give the names of your California Indian ancestors living on June 1, 1852, through whom you claim, who were parties to any Treaty or Treaties with the United States. If you claim through more than one ancestor living on that date, set forth each claim separately. State your descent from said ancestor or ancestors setting forth your relationship to them.

Names	Tribe or Band	Relationship by Blood
Margarita Armija	Olanian Tribe, Alameda County, California.	Mother.

(See Nos 15 and 26)

Figure 37: Belle Nichols BIA Application 10300 "Olanian Tribe" (Page 2)

Muwekma Children Attend Indian Boarding Schools

During the Great Depression years (1930s through the beginning of World War II), the Muwekmas continued to adjust to the economic hardships facing the families. Although at times moving around as farm hands, fruit pickers and laborers, the family heads still maintained important social kinship networks, religious, economic and political ties with each other.

Just prior to the outbreak of World War II, the youngest son of Dario Marine (BIA Application # 10677) and Catherine Peralta Marine (BIA Application # 10675), **Lawrence Domingo Marine** was sent to the Bureau of Indian Affair's Indian boarding school at **Sherman Institute**, Riverside County in southern California from 1931-1940 and there he met his future wife, Pansy Lizzette Potts (daughter of Marie Potts Mason, Maidu Tribe). Lawrence and Pansy's first three children Lawrence Mason Marine, Marvin Lee Marine and Suzie Marine were born and raised in Quincy, California (Maidu territory) and later they lived in Sacramento. Both Lawrence and Marvin Lee became traditional California Indian dancers with the help of their grandmother Marie Potts and Nisenan/Miwuk tribal elder, Bill Franklin (see Bibby article in News for Native California Vol. 7, No. 3, Summer 1993:21-36).

The children of Jack Guzman and Flora (Marine) Munoz, John Guzman, Jr. and his sister Rena Guzman were sent to the BIA boarding school at **Chemawa**, in Salem, Oregon from 1944 -1947. At this time, leadership was still in the hands of Muwekma adults and elders: Phoebe Alaniz (Petra Inigo) [died 1947], Margarita Pinos Juarez, Francisca Nonessi Guzman (died 1942), Dolores Marine Galvan, Dario Marine, Lucas Marine, and Trina Marine.

John Peabody Harrington's Ethnographic and Linguistic Field Work: Interviews with the Muwekma Tribal Community

During the late 1920s and early 1930s, anthropological linguist John Peabody Harrington from the Bureau of American Ethnology conducted interviews with members of the Muwekma tribal community (e.g., Susanna Nichols, Jose Guzman, Francisca Nonessi, Maria de los Angeles Colos, Catherine Peralta and others) who were still residing in the Niles, Centerville, Newark, Pleasanton and Livermore areas.

Harrington's principal linguistic and cultural consultants are direct biological ancestors of the Muwekma Ohlone families many of whom are presently living in the Oakland/ Livermore/Hayward/Castro Valley/Fremont/Newark/Niles/San Jose/Tracy areas. Also during this period of time sound recordings made by Harrington of twenty-seven songs sung by Jose Guzman in 1930 and later in 1934 photos were taken by C. Hart Merriam of Jose Guzman and his family members which attest to the Tribe's presence within their historic homeland (See **Figure 38 - John P. Harrington, Muwekma Elders Jose Guzman** and **Maria de los Angeles "Angela" Colos).**

J. P. Harrington's field notes (dated October 12, 1929, and October 1934) provides information about the culture, history and languages spoken by the **Verona Band/**Mission San Jose Indians. Jose Guzman and Angela Colos shared the following information with him:

- The San Jose Indians were of many tribes gathered at the mission. They are called Chocheños.

- I asked inf. how to say Abajeños, but inf. never heard the term. But inf. knows how to say arribenos.... when I asked if these were the Indians of Oakland, Inf. said no, that they were from [Martinez].

- Inf. does know one tribe, Halkin. It is the name of a tribe up San Rafael way. Liberato here was a Halkin, or was said to be one. [inf.] told him he was a Halkin, and Liberato got mad, denied it.... He [Jose Guzman] made a map, showing the location of "Hacienda Station" for Mrs. Hearst's place.

- From Sunol, … he drew a line, indicating the former location of "Barona" [Verona] Station north of the San Jose Mission. Then, he noted under Roundhouse/Dancehouse:

- Was a big temescal just up the road from here. Until recently could see the place. Door inside and a big hole & also a smaller hole in the roof. Tu'pentak, temescal. Used to have fiestas here**.**

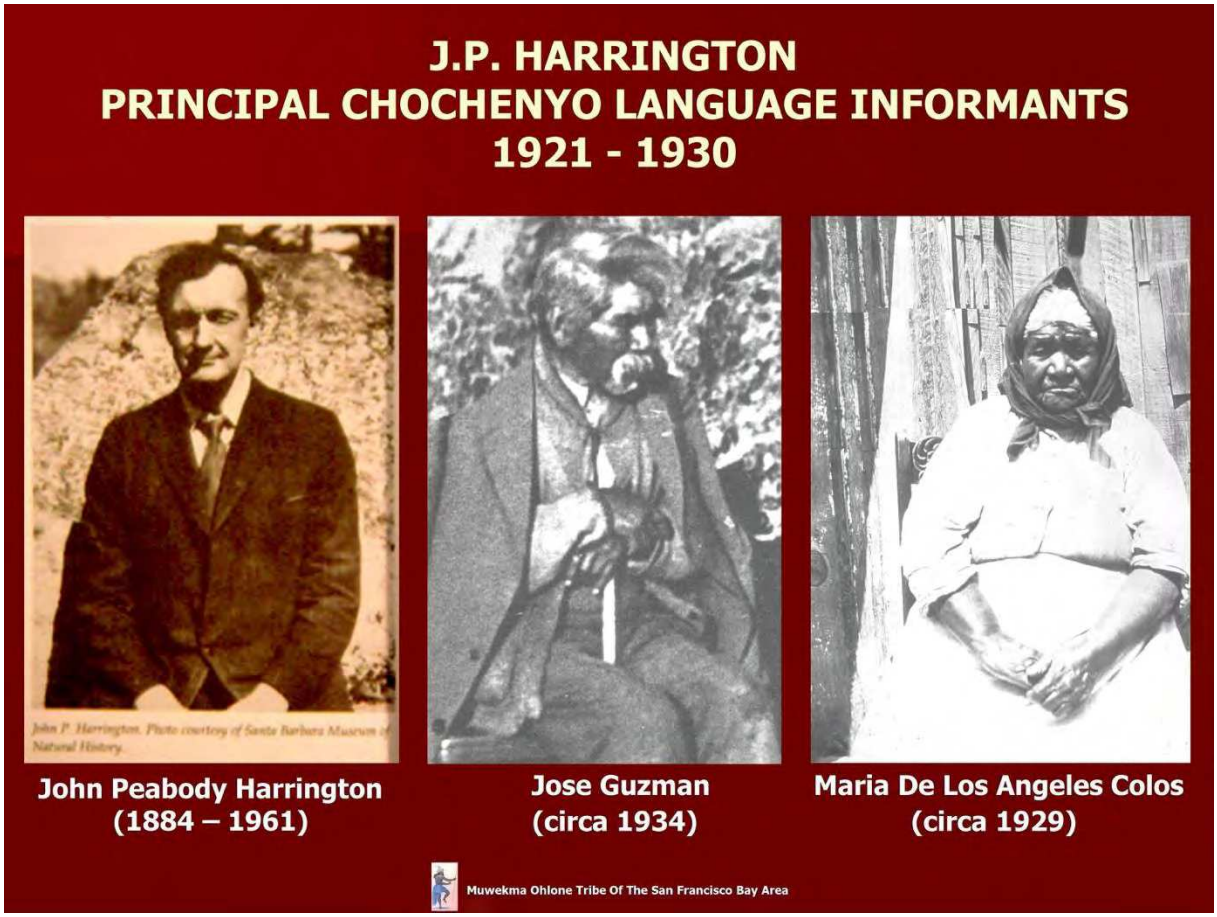


Figure 38: J. P. Harrington, Muwekma Elders Jose Guzman and Angela Colos

The Outbreak of World War II: Muwekma Men Again Answer the Call to War

During **World War II**, almost all of the Muwekma men served in the United States Armed Forces both in the Pacific and European theaters and stateside. Five brothers enlist in the Armed Forces.

- Hank A. Alvarez, Pfc. U.S. **Army, 101st Airborne Division landed Utah Beach Normandy.** Hank was born on February 27, 1922 in San Jose. He spent his childhood in Santa Cruz, Alvarado and Brentwood. While living in Brentwood, on March 18, 1932, his mother Dolores Marine enrolled herself and her children with the **Bureau of Indian Affairs** (see **Figure 26** BIA Application # 10681 above).

Hank enlisted at the San Francisco Presidio and served from December 28, 1942 to December 15, 1945 in the 101st Airborne Division. He returned home from Europe with the 82nd Medical Battalion, 12th Armored Division. While serving in the **101st Airborne Division** he landed at Utah Beach in Normandy, he was later reassigned to the **106th Infantry Division, 423rd Infantry Regiment, Company B** and continued to fight in France, Belgium, Luxembourg and Germany. He regiment saw action at Saint Laurent sur Mer and Saint Nazaire, France, and near Malmedy, Belgium. Later, Hank was reassigned to the **326th Engineer Battalion** during the **Battle of the Bulge** at **Bastogne** and at the **Ramagen Bridge** crossing the Rhine River in Germany. After landing in Europe Hank's units fought in the following campaigns with the 101st Airborne Division: **Ardennes, Rhineland (GO 40 WD 45)**, and **Northern France (GO 33 WD 45).** Hank was issued the following medals and badges: **Sharpshooter M1**, **WWII Victory Medal**, and **European African Middle East Campaign Medal**. The 101st Airborne Division and the 106th Infantry Division earned **Presidential Unit Citations**. Hank was honorably discharged at Camp Beale, California on December 15, 1945.

Hank enrolled himself and his family with the **BIA** on April 26, 1950 during the second enrollment period. During the early 1960s Hank served in a leadership position along with his brothers and sister to save the Tribe's **Ohlone Indian Cemetery** from destruction. Hank has served on the Muwekma Tribal Council since 1992 and is presently the oldest surviving member of the Verona Band of Alameda County and oldest veteran in the Tribe.

- John (Johnnie) Abraham Alvarez was the older brother of Hank Alvarez. John Alvarez was born on May 24, 1914 in San Jose and spent most of his life living in Santa Cruz. He was enrolled with his siblings with the **BIA** in March 1932. John enlisted in **U.S. Army** on October 22, 1941 just prior to America's Declaration of War against Japan, Germany and Italy and he served as a Pfc. in the **U.S. Army Air Corps** in the **Pacific Theater**. A letter was sent to Dolores Marine Alvarez Piscopo Galvan that her son John while serving overseas was **missing in action**, however, although the details are now clouded he was either liberated or saved and he continued to serve. John was honorably discharged on November 20, 1945 and received the **American Defense Service Medal, American Campaign Medal, WWII Victory Medal,** and **Honorable Service Lapel Button WWII**. John Alvarez died on March 6, 2002.

- Francis Salvador "Sal" Samuel Dominic Piscopo, Sergeant Technical [E-7] U.S. Army, European Theater. Salvador was born in San Jose on October 1, 1923 and was a younger brother of Hank and John Alvarez. He went by the name of Samuel Dominic by the time he enlisted in the US Army. Sal was enrolled on March 18, 1932 with the **Bureau of Indian Affairs** with his siblings under his mother Dolores Marine's **BIA Application # 10681**. Sal spent his younger years living in San Jose and Brentwood.

Sal enlisted in the **U.S. Army** on January 25, 1943. He attained the rank of **Sergeant Technical (E-7)** and served in the **14th Mechanized Cavalry Group, 18th Cavalry Squadron.** On 28 August 1944, the 14th Cavalry Group sailed for Europe, where it landed on **Omaha Beach** on 30 September and pressed east. On 18 October 1944, the unit was split into the **18th Squadron**, attached to the **2nd Infantry Division**, and the 32nd Squadron, attached to the 83rd Infantry Division. The unit regained its autonomy on 12 December 1944 and began guarding the Losheim Gap in Belgium. On 16 December, the 14th Cavalry Group received the full brunt of the German winter counteroffensive in the **Battle of the Bulge**. After two days of savage fighting, the unit reassembled at Vielsam, Belgium and was attached to the **7th Armored Division**.

On 23 December, the unit secured the southern flank of the perimeter, which allowed friendly troops to withdraw to safety. On 25 December, the unit was reequipped, attached to the **XVIII Airborne Corps** and moved back into the Bulge to push back the German Army. After the bloody and brutal fight in the Ardennes, the regiment was assigned to the **3rd US Army**.


2nd Infantry Division **7th Armored Division** **XVIII Airborne Corps** **3rd Army**

In December 1944, **the 18th Cavalry Squadron** was **"chopped"** to the **106th Infantry Division** still in sector. The tasks for these squadrons were the traditional cavalry missions of screening to the front and reconnaissance. On 12 December, the 32nd Squadron was returned to Group control and passed lines to the rear for refitting. The 18th Squadron also retuned to Group control but continued its screening mission in the Ardennes region of Belgium.

At 0630 on 16 December 1944, Von Rundstedt launched the final German bid for victory - the now famous 'Ardennes Offensive' or better known as the 'Battle of the Bulge'. After a terrific artillery and rocket barrage designed to destroy communications and disrupt our organization, the German attack was launched. The full weight of this drive was felt early that morning when more than half of the **18th Cavalry Squadron became surrounded, and were captured** or killed by 10:00 hours.

Patton's Third Army Division had begun the Lorraine Campaign by August 1944 and reached the Moselle River near Metz, France. By December 1944, Salvador's tank division turned north to relieve the surrounded and besieged **101st Airborne Division** at **Bastogne** in the Ardennes during the **Battle of the Bulge**. By February 1945 the Third Army moved into the Saar Basin in Germany and later crossed the Rhine River at Oppenheim on March 22, 1945.

On Salvador Piscopo's uniform at the time when his photograph was taken he had four **service bars** representing **two years of overseas service** and also one **three-year reenlistment service stripe**. Sal was wounded when his tank was hit by German anti-tank fire. He carried shrapnel in his chest all of his life. He also was captured by the Germans and was issued a medal with five **Bronze Service Stars, European-African-Middle Eastern Campaign, Good Conduct Medal** and **World War II Victory Medal** and participated in the **Rhineland** (15 Sep 44 to 21 Mar 45), Ardennes-Alsace (16 Dec 44 to 25 Jan 45), and **Central Europe** (22 Mar to 11 May 45) **Campaigns**. He was hospitalized after being liberated and after he was discharged. His brother Hank Alvarez said that Sal's nickname was "**Fade Away**" meaning that "no one can find him, one day he's around and then he would be gone for weeks and then show up again". Sal was discharged at Camp Beale in 1945. Salvador died on September 21, 1968 and is buried in the Disabled Veterans section of **Oak Hill Cemetery** in San Jose, California.

- Philip Galvan Pvt. US Army, Fort Benning, Georgia. Philip was born in September 1926 in Alvarado, Alameda County and was the younger brother of Sal Piscopo. He was enrolled along with his siblings with the **Bureau of Indian Affairs** on his mother Dolores Marine's BIA Application # 10681. Philip enlisted in the **U.S. Army** on April 13, 1944 and was sent to the Monterey Presidio and afterwards he was stationed at Fort Benning, Georgia. Fort Benning was the home of the 2nd Armored Division called "Hell on Wheels". At Ft. Benning the core units of the 2nd Armored Division were the 41st Armored Infantry Regiment, the 66th Armored Regiment,

the 67th Armored Regiment, the 17th Armored Engineer Battalion, the 82nd Armored Reconnaissance Battalion, and the 142nd Armored Signal Company. The 2nd Armored had three artillery battalions (the 14th, 78th, and 92nd). The Division also had support units, including the 2nd Ordnance Maintenance Battalion, a Supply Battalion, the 48th Armored Medical Battalion, and a Military Police Platoon. Some of the units were attached to the 41st Infantry Division in Europe Philip was honorably discharge at Camp Beale in 1946. During the 1960s Philip and his siblings were responsible for protecting the Tribe's Ohlone Indian Cemetery from destruction. Later, Philip joined the editorial board of the American Indian Historical Society's Indian Historian publication journal. Philip also served as the Secretary for the Ohlone Indian Tribe from 1965 to 1971. Philip Galvan was the caretaker of the Tribe's Ohlone Indian Cemetery, located near Mission San Jose. On June 13, 1982, Phil and his brother Ben Galvan laid the cornerstone for the widely acclaimed reconstruction of the 1809 Mission San Jose adobe Church. Philip passed away on March 25, 2013 at the age of 87 years.

- "Ben" Michael Benjamin Galvan, Merchant Marines, **U.S. Navy – (USS *Enterprise)*, U.S. Army and Army Air Corps**. Ben was born on June 23, 1927 in Alvarado and was the last "formal" member of the Federally Recognized Verona Band of Alameda County. In March 1932, he was enrolled with the Bureau of Indian Affairs under his mother Dolores Marine Alvarez Piscopo Galvan's BIA Application # 10681. After serving in the Merchant Marines because he was under aged, he served in the Navy on board the *USS Enterprise*.

The *USS Enterprise* participated in nearly every major engagement of the war against Japan, including the Battle of Midway, the Battle of the Eastern Solomons, the Battle of the Santa Cruz Islands, various other air-sea actions during the Battle of Guadalcanal, the Battle of the Philippine Sea, and the Battle of Leyte Gulf, as well as participating in the "Doolittle Raid" on Tokyo. USS *Enterprise* has the distinction of earning **20 battle stars** and a **Presidential Unit Citation**, the most for any U.S. warship in World War II. Ben Galvan was awarded six Battle Stars and a Purple Heart.

After being injured during combat on the *USS Enterprise*, Ben requested to be transferred to the U.S. Army/Army Air Corps. At the end of his service, he reenlisted in the service on January 15, 1946 at Camp Beale, Marysville, California. On December 4, 1951 Ben enrolled himself and his family during the second BIA enrollment period.

During the early 1960s he was involved is saving the Ohlone Indian Cemetery from destruction and in 1965 Ban became the first chairman of the Ohlone Tribe. Ben served as the chairman of the Ohlone Tribe for thirteen years from 1965 to 1978. Ben Galvan passed away on April 13, 1987.

- Thomas Joseph Garcia, Pfc. U.S. Army, **Co. F. 358th Engineers GS Regiment**. Joseph Garcia was born on December 12, 1912 on the Alisal Rancheria near Pleasanton. Both his mother Mercedes Marine and his father Joseph Armijo Garcia were Muwekma Ohlone Indians. After the death of his mother in 1914, Joseph was adopted by his godmother Phoebe Inigo Alaniz who was also a member of the Verona Band Indian Community. He enrolled with the **Bureau of Indian Affairs** with his step-mother **Phoebe Alaniz** on October 7, 1930 (Application # 10301) and spent most of his life in Livermore.

Thomas Garcia enlisted on July 30, 1942 at the **San Francisco Presidio** and he served until November 27, 1945. On January 10, 1943 the **358th Engineers Regiment** was activated at Camp Claiborne, Louisiana and they departed the U.S. for Europe on July 1, 1943. The Regiment landed in France on August 24, 1944 and crossed into Belgium November 27, 1944 and participated in the **Normandy**, **Northern France**, **Rhineland**, and **Central Europe Campaigns**. He was honorably discharge on November 27, 1945. On April 22, 1953, he enrolled during the second **BIA** enrollment period. Thomas Garcia passed away on February 9, 1956 and was buried **Golden Gate National Cemetery** (Section Q, Grave 59).

- Ben L. (Angel) Guzman, Pfc. U.S. Army. Bennie Guzman was born on October 2, 1922 in Niles. His father was Fred Guzman who had served in the 28th Infantry Division during WW I. Bennie enlisted on November 5, 1942 at **San Francisco Presidio**. He first went to Camp Niles, California and then onto Camp White, Oregon, and fought in the **Asiatic Pacific Theater of Operations**. His enlistment record identifies him as an "**American Indian, Citizen"**. Ben attained the rank of Private and was discharged on January 9, 1946 at Camp Beale, California. He was issued the **World War II Victory Medal**, **WW II Lapel Button**, **Asiatic-Pacific Campaign Medal**, **Bronze Star**, and **Combat Infantry Badge**. Ben Guzman died on March 11, 1995 and he is buried in the **San Joaquin National Cemetery** in Gustin, Ca. (Plot C-3 0 517).

- Frank Harry Guzman, Pfc. U.S. Army. Frank was the younger brother of Bennie Guzman and he was born on April 2, 1926 in Pleasanton. Muwekma Ohlone Indians Dario Marine and Cecelia Armija were his godparents. Frank and his brother Bennie were photographed with their uncle Toney Guzman by anthropologist C. Hart Merriam in September 1934.

Frank's enlistment record identifies him as an "**American Indian, citizen"** and that he enlisted at the **San Francisco Presidio**. Frank served from July 21, 1944 to June 1946 as a Light Machine Gunner in the unattached **345th Infantry Regiment, 87th Infantry Division** that was during the war assigned to the **3rd Corps**, **8th Corps**, **12th Corps of General Patton's 3rd Army** (25 Nov 1944), **15th Corps of the 7th Army**, **8th Corps of the 1st Army** and the **8th Corps of the 9th Army** during the European Theater of Operations (October 1944 - May 1945). Frank was also briefly assigned to the **82nd Airborne Division** and received his Parachute Badge.

On December 15, 1944, the **345th Infantry** Regiment was in the vicinity of Rimling, France and by December 17rt the regiment took the town of Medelsheim, Germany. By December 26th the Germans had broken through the American defenses along the German-Belgian border between Malmedy, Belgium and Echternach, Luxembourg and create a fifty-five mile salient through the Ardennes Forest. The 345th was sent to the Cathedral city of Rheims to prevent a German breakthrough there and by December 28th the regiment was reassigned to General Patton's Third Army. On 29 December 29th the 345th Infantry Regiment was again on the road bound for an assembly area in the Luchie Woods 19 kilometers southwest of Moircy, Belgium.

The **Battle of the Bulge** which lasted from December 16, 1944 to January 28, 1945 was the largest land battle of World War II in which the United States participated. More than a million men fought in this battle including some 600,000 Germans, 500,000 Americans, and 55,000 British. At the conclusion of the battle the casualties were as follows: 81,000 U.S. with 19,000 killed, 1,400 British with 200 killed, and 100,000 Germans killed, wounded or captured.

Frank was engaged in the **Rhineland** and **Central Europe** campaigns. He received the Army **Presidential Unit Citation Ribbon**, **Combat Infantry Badge**, **European Africa and Middle Eastern Campaign Meda**l (**Three Bronze Stars for Campaigns**), **Good Conduct Medal**, **American Campaign Medal**, **World War II Victory Medal**, **Army of Occupation Medal (Berlin), Parachute Badge, Marksman Badge** for Machine Gun and Rifle. Frank Guzman was honorably discharged at Camp Beale, California on June 27, 1946. Frank Guzman was a member of the V.F.W. Post No. 1537 of Tracy, California; he died on March 17, 1982.

aul Marine, Pfc. U.S. Army, 58th Armored Field Artillery he son of Muwekma Ohlone Indians Lucas Marine and Catherine y 26, 1926 in Centerville. He was enrolled with his father with the nuary 11, 1930 (**BIA Application # 10299**) and his mother had llment (**Application # 10675**). His father Lucas Marine had Cornates Marine) and Ernest's mother (Catherine Peralta Marine) cation.

Ernest Marine enlisted on April 13, 1944 at the Monterey Presidio. On June 6th 1944 (D-Day), the 58th was ordered to land on Omaha Beach in support of the 116th Combat Team, and the 2nd and 5th Ranger Battalions. Ernest served in Europe in the unattached **58th Armored Field Artillery Battalion** self-propelled 105 Howitzers, temporarily attached to the **29th Infantry Division, V Corps** and **XIX Corps**, and he fought in the **Rhineland** (September 15, 1944 – March 21, 1945), **Ardennes-Alsace** (**Battle of the Bulge, Bastogne, Belgium**, December 16, 1944 – January 25, 1945) and **Central Europe Campaigns** (March 22, 1945 – May 11, 1945). Ernest enrolled with his father Lucas Marine during the second **BIA** enrollment period on December 23, 1950. Ernest Marine was honorably discharged at Camp Beale on June 15, 1946. After the war he spent most of his life living with his aunt Trina Thompson Ruano in Newark and he passed away on October 20, 1977 in Sacramento.

- Filbert S. Marine, Technician Fifth Grade (**T/5** or **TEC 5, U.S. Army, Pacific Theater.** Filbert was the last child born on the Alisal Rancheria on December 31, 1915. Both of his parents Dario Marine and Catherine Peralta were **Muwekma Ohlone Indians**. His godparents were also Muwekma Ohlone Indians Franklin Guzman who served in the Marine Corps during WWI and Francisca Guzman. Filbert and his siblings were enrolled with the Bureau of Indian Affairs on their father's BIA **Application # 10677** on March 11, 1932.

Filbert enlisted in the Army on February 18, 1942 at the Presidio of Monterey. His enlistment record identifies him as "**American Indian**, citizen." He fought in the Pacific Theater and was assigned to the **226th Field Artillery Battalion, Battery B**. His unit was assigned to **XXIV Corps** during the Battle of Leyte in the Philippines. The Marines that took part in the Leyte landings were elements of the VAC Artillery, which had been attached to the XXIV Corps earlier in 1944, while still at Hawaii. The **V Amphibious Corps** (VAC) was a formation of the United States Marine Corps and was composed of the 3rd, 4th and 5th Marine Divisions during World War II. They were the amphibious landing force for the United States Fifth Fleet and were notably involved in the battles for **Tarawa** and **Saipan** in 1944 and the **Battle of Iwo Jima in 1945.**

The Marine complement consisted of the 5th 155mm Howitzer Battalion; the 11th 155mm Gun Battalion, and Headquarters Battery. Army field artillery battalions in the XXIV Corps were the 198th Field Artillery Battalion (155mm Howitzer), the **226th Field Artillery Battalion (155mm Gun),** and the 287th Field Artillery Battalion (Observation).

The Marine artillery elements assigned to the XXIV Corps, as well as the **226th Field Artillery Battalion** had been formed from former seacoast artillery units; though familiar with heavy artillery, the men had received only rudimentary field artillery training. Prior to the departure of these units from Hawaii, the Marine artillery had undergone intensive field artillery training. Embarkation of personnel from Hawaii was accomplished between 6 and 14 September 1944.

The island of Leyte, lying in the Visayas Group of the Central Philippines, is 115 miles in length and varies in width from 15 to 40 miles. The main mountain range runs the entire length of the island from north to south, leaving a wide coastal plain along the east coast. The Sixth Army troops for Operation KING II, code name for the invasion of Leyte, were composed of the X and **XXIV Corps** and the 6th Ranger Battalion. The X Corps included the 1st Cavalry Division and the 24th Infantry Division; the XXIV Corps consisted of the 7th and 96th Infantry Divisions. After the Leyte (20 Oct 1944) Philippine Campaign ended, the **226th Field Artillery Battalion** continued on and participated in the **Okinawa Campaign** (14 June 1945). Filbert's unit may have gone from Camp Forrest, Tennessee to Fort Oglethorpe Georgia to Fort Sill, Oklahoma to Camp Stoneman, California to Maui to Oahu to Molokai to Eniwetok to Manus to Leyte to Samar and ended up on (Ryukyus) Okinawa in 1945.

Filbert was issued the **Asiatic-Pacific Campaign Medal**, **Good Conduct Medal**, **Philippines Liberation Medal**, **World War II Victory Medal, and Philippine Liberation Medal** and was honorable discharged on November 24, 1945 with the rank of Tec. 5. He died in Sacramento on March 31, 1953 and was buried in the military section (Veteran's Plot) of the City of Sacramento Cemetery.

--Lawrence Domingo Marine, Platoon Sergeant, U.S. Marine Corps (Serial # 299599)**.** Lawrence was the younger brother of Filbert Marine and he was born on May 4, 1919 in Centerville. He was one of the last Muwekma Ohlone Indians to be baptized at Mission San Jose. He was enrolled with the Bureau of Indian Affairs on his father's BIA **Application # 10677** on March 11, 1932. He was also sent to **Indian Boarding School** at **Sherman Institute**, Riverside, California in 1931 and graduated from there in 1939. He also met his future wife Pansy Potts from the Maidu Tribe while attending Sherman Institute.

After leaving Sherman Institute, Domingo returned to the Bay Area and enlisted in the U.S. Marine Corps in January 1940 in San Francisco. By December 1, 1940, he was assigned to **Headquarters and Service Battery, 1st Battalion, 10th Marine, 2nd Marine Brigade FMF**, in San Diego before shipping out to the Pacific. By April 1, 1942, Lawrence was promoted to Corporal while stationed

at Tutuila, American Samoa. Later by January 1, 1943, Lawrence was promoted to Sergeant while stationed at Guadalcanal while assigned to **Headquarters and Service Battery, 1st Battalion, 10th Marine, 8th Marine Reinforced**. He was later transferred to **Battery "A", 75mm Gun, 10th Marines, 2nd Marine Division, FMF, In the Field** by April 1943. By July 1, 1944, he was assigned to the **Light Anti-Aircraft Group, Eighth Anti-Aircraft Battalion, Corps Artillery, Fifth Amphibious Corps** and later by October 1, 1944, Lawrence was a **Platoon Sergeant**, (identified in the Muster rolls as **Assistant Platoon Commander, 2nd Platoon, 40 mm Battery**) with the **Light Anti-Aircraft Group, Eighth Anti-Aircraft Battalion, Fleet Marine Force, Pacific.** From April 1 – April 30, 1945, Lawrence's unit location and "secret agenda" was on Okinawa, Ryukyus Islands. By January 1 -January 30, 1946, Lawrence's unit returned to the U.S. and was station on Treasure Island. Lawrence was now with the **Guard Company Marine Barracks, Treasure Island Activities, San Francisco**. He was still classified as a Platoon Sergeant, Sergeant of Guard.

Lawrence D. Marine was engaged in the following major battles, engagements, and ports from January 2, 1942 – November 8, 1945: **Hawaiian Islands Area**, **American Samoan Islands**, **Wellington, New Zealand, Guadalcanal, B.S.I** (**British Solomon Islands, New Georgia**), **Eniwetok, Marshall Islands, Ulithi, Caroline Islands, Okinawa,** and **Ryukyus** (southern Japanese Islands). The **Battle of Eniwetok** was a battle of the Pacific campaign of World War II, fought February 17, 1944 - February 23, 1944 on Eniwetok Atoll in the Marshall Islands.

The invasion of Eniwetok followed the American success in the battle of Kwajalein to the southeast. Capture of Eniwetok would provide an airfield and harbor to support attacks on the Mariana Islands to the northwest. **Battle of Okinawa** was the largest amphibious invasion of the Pacific campaign and the last major campaign of the Pacific War. More ships were used, more troops put ashore, more supplies transported, more bombs dropped, more naval guns fired against shore targets than any other operation in the Pacific. The fleet had lost 763 aircraft. Casualties totaled more than 38,000 Americans wounded and 12,000 [including nearly 5,000 Navy dead and almost 8,000 Marine and Army dead killed or missing], more than 107,000 Japanese and Okinawan conscripts killed, and perhaps 100,000 Okinawan civilians who perished in the battle.

Lawrence Domingo Marine was honorably discharged at **Treasure Island** on November 20, 1946 after having an extended two-year reenlistment. He received the **Presidential Unit Citation**, **Good Conduct Medal**, and **Good Conduct Medal Bar No. (1), Honorable Discharge Button, Honorable Service Button.** Lawrence Marine enrolled during the second **BIA** enrollment period on October 12, 1950. He passed away on May 21, 1988 and was buried in Woodland, California.

- Henry Vernon Marshall, Sergeant, U.S. Marine Corps was born in Newark on June 27, 1925. He was the son of Muwekma Ohlone Indian Henry Marshall, Sr. who was the son of Magdalena Armija Marshall Thompson. Henry Marshall, Jr. was a member of the Verona band of Alameda County. His grandmother, Magdalena enrolled her children with the Bureau of Indian Affairs on October 7, 1930 (BIA Application # 10296). Henry Marshall, Jr. enlisted on May 19, 1942 (Service # 394908) in the United States Marine Corps and was assigned to the **1st Marine Division** (Guadalcanal). He fought in the Pacific Theater of Operations and was issued the **Navy Presidential Unit Citation** with one

Bronze Star, **American Campaign Medal**, **Asiatic Pacific Campaign Medal, Rifle Sharpshooter Badge,** and a three-tiered **Weapons**(?) qualifying badge. He was honorably discharged on May 19, 1946. His father later enrolled the family during the third **BIA** enrollment period on May 7, 1969 as part of the California Indian Claims Judgment. Henry passed away on September 24, 1986.

- Arthur M. Pena, Sergeant, U.S. Army, Company A, 155th Engineers Combat Battalion, Pacific Theater. Arthur was born in Crockett, California on September 24, 1924. His mother was Erolinda Santos (Juarez/Saunders) Pena Corral who was a member of the **Muwekma Ohlone Verona Band Indian Community**. Arthur was enrolled along with his mother and siblings with the **Bureau of Indian Affairs** on his great-aunt Maggie Pinos Juarez's **BIA Application # 10676** on March 18, 1932. Prior to WWII, Arthur was working for Southern Pacific Railroad.

Arthur Pena registered with the draft board on December 21, 1942 and enlisted in the army on April 13, 1943 at the **San Francisco Presidio** and served in the unattached **155th Engineering Combat Battalion** in the Pacific Theater. He served in the **Southern Philippines** and **Western Pacific Campaigns** (**Leyte** October 17, 1944 – July 1, 1945 and **Western Pacific** June 15, 1944 – September 2, 1945) and his battalion was sent to **Guadalcanal** (August 12 – August 24, 1944). From Guadalcanal, the battalion went on to **Palau, Ulithi, New Caledonia** (February 20, 1945)**, Southern Philippines** (May 16, 1945), and **Japan** (September 8, 1944 – September 25, 1945).

Arthur Pena was honorably discharged at Camp Beale, Marysville, California on February 2, 1946 and he was issued the **Philippines Liberation Ribbon**, **Asiatic Pacific Campaign Medal**, **American Campaign Medal**, **Good Conduct Medal** and **World War II Victory Medal**. He reenlisted on August 7, 1946 and served in Germany in Company C 793rd Military Police Battalion and he also went through the European Command Intelligence School. He was honorably discharged on March 25, 1955 and then reenlisted again on March 26, 1955. After serving another two years, Arthur was discharged at Fort Leonard Wood, Missouri on December 9, 1957. Arthur was also issued the **UN Service Meda**l, **National Defense Service Medal**, and **Army of Occupation Germany Medal**. On December 27, 1957, he enrolled his family with the Bureau of Indian Affairs during the second enrollment period.

- Robert P. Corral, U.S. Army, Pfc. Infantry, Head Quarters Regiment, Ft. Benning, GA. Robert was born in Crockett, California on June 1, 1926 and was the younger brother of Arthur Pena. His mother was Erolinda Santos (Juarez/Saunders) Pena Corral who was a member of the Muwekma Ohlone Verona Band Indian Community. Robert was enrolled along with his mother and siblings with the **Bureau of Indian Affairs** on his great-aunt Maggie Pinos Juarez's **BIA Application # 10676** on March 18, 1932.

Robert enlisted at the **San Francisco Presidio** on December 18, 1944 and was honorably discharged on November 13, 1946. At Fort Benning, Georgia Robert completed six parachute jumps and was awarded a **Parachutist Badge, World War II Victory Medal, Good Conduct Medal, and American Campaign Medal.** On May 16, 1955 Robert enrolled himself and his family during the second BIA enrollment period. During the third BIA enrollment period on April 30, 1969, Robert enrolled his family as "**Ohlone Indians**" with the BIA as part of the California Indian Claims Judgment (Application # 21123). During the 1990s Robert P. Corral served as a **Muwekma Ohlone Tribal Elder** and he passed away on June 28, 1996 in Stockton.

- Enos Marine Sanchez, Pfc. U.S. Army, 89th Division, 1st Battalion, Co. M, 354th Infantry Regiment, (39 390 899). Enos Sanchez was born on February 1, 1910 near the Alisal Rancheria in Sunol and his birth certificate identified him as "**California Indian.**" Enos and his younger siblings were enrolled with the **Bureau of Indian Affairs** on March 18, 1932 (**BIA Application # 10680**). He along with his mother was Ramona Marine Sanchez were members of the Federally Recognized **Verona Band of Alameda County**.

Enos enlisted on June 29, 1942 in Sacramento and was shipped out to Camp Carson, Colorado Springs and later that year served in Greenland and Iceland. The 89th Division was called the "**Rolling W**" standing for MW (Middle West). After landing at LeHarve, France, the 89th received orders to move into Mersch, Luxembourg (March 8, 1945). The 89th was assigned to the **XII Corps** of **General Patton's Third Army**. Crossing into Germany the 89th met the German 2nd Panzer Division and seven Volksgrenadier Divisions and by March 26, 1945, the 89th crossed the Rhine River. Enos' Military Occupational Specialty (MOS) was a Heavy Machine Gunner (605). On April 4, 1945, the 4th Armored and the 89th Infantry Divisions were involved in the liberation of the **Ohrdruf Death Camp,** which was part of the Buchenwald concentration camp network. It was the first Nazi concentration camp liberated by the U.S. Army.

Enos' unit fought in the **Rhineland** and **Central Europe** (GO WO WD 45) **Campaigns** and he was awarded the **Combat Infantry Badge (31), Good Conduct Medal, American Campaign Medal, European, African, Middle Eastern Campaign Medal, World War II Victory Medal** (TWX WD 23 Oct 45), and **Marksman M1 Rifle** Sep 42 (55). Enos was honorable discharged on November 15, 1945 and separated from Camp Beale, California. In 1965 Enos was identified along with his family and fellow Tribal members by the American Indian Historical Society on a list of "**Ohlone Contacts and Ohlone Members**". He died on July 19, 1995 at the age of 85 and was buried at the **Calvary Cemetery** in San Jose California.

- Robert R. Sanchez, U.S. Army, Technician Fourth Grade, 7th Co. 508th Prcht. Infantry, 82nd Airborne Division. Robert Sanchez was the younger brother of Enos Sanchez and he was born in Sunol near the Alisal Rancheria on March 26, 1917. Robert and his siblings were enrolled with the **Bureau of Indian Affairs** on March 18, 1932 (**BIA Application # 10680**).

Robert enlisted in October 1942, and he volunteered to join the 82nd Airborne Division, 508th Parachute Infantry Regiment. On June 5-6, 1944, the paratroopers of the 82nd's three parachute infantry regiments and reinforced glider infantry regiment boarded hundreds of transport planes and gliders and, began the largest airborne assault in history. They were among the first soldiers to fight in Normandy, France.

The Division air-assaulted behind **Utah Beach, Normandy, France**, between Saint Mere Eglise and Carentan on June 6, 1944, being reinforced by the **325th Glider Regiment** the next day. The 82nd Airborne Division was reinforced by both the attached 507th PIR and the **508th PIR**.

The **508th Parachute Infantry Regiment** (a.k.a. the Red Devils) **whose battle cry was "**Diablo!**"** was originally an organic part of the **2nd (Battalion) Airborne Infantry Brigade** that was attached to the **82nd Airborne Division** through most of its time in combat. Campaigns include **Normandy** (D-Day June 6, 1944), **Rhineland**, **Ardennes-Alsace** (France), and **Central Europe** (Nijmegen-Arnhem Holland, and Belgium).

By July 1945, the 82nd Airborne was moved to Berlin to occupy the American Sector. The 508th which had fought alongside the 82nd since Normandy was sent to occupy Frankfort, Germany. For his service in the 508th PIR, **Robert Sanchez** was issued the **Distinguished (Presidential) Unit Citation**, **Combat Infantry Badge, Parachute Badge, European Africa and Middle Eastern Campaign Medal, World War II Victory Medal, Army of Occupation Medal (Berlin), Belgian Citation (Lanyard) and French Citation (Lanyard).**

The **82nd Airborne Division** and the 508th Parachute Infantry Regiment **were issued the** Distinguished (Presidential) Unit Citations **for actions during the** Normandy **Campaign.** "The 508th Parachute Infantry is cited for outstanding performance of duty in action against the enemy

between 6 and 9 of June 1944, during the invasion of France. … The courage and devotion to duty shown by members of the 508th Parachute Infantry are worthy of emulation and reflect the highest traditions of the Army of the United States. The **Netherlands Citation** was issued by the Dutch Government to the 82nd Airborne and its attached divisions (508th PIR) on October 8, 1945 for airborne operations and combat actions in the central part of the Netherlands (**Nijmegen**) during the period from September 17, 1944 to October 4, 1944. The 82nd Airborne Division became the first non-Dutch military unit to be awarded the ***Militarie Willems Orde***, Degree of Knight Fourth Class to wear the Orange Lanyard of the Royal Netherlands Army.

The **Belgian Citation** (Lanyard) was issued by the Belgian Government to the 82nd Airborne Division with the 508th Parachute Infantry attached "has distinguished itself particularly in the Battle of the Ardennes" from December 17, 1944 – December 31, 1944. The **French Citation** (Lanyard) was issued to the 508th Parachute Infantry by the Government of France. "The President of the Provisional Government of the French Republic Cites to the Order of the Army: 508th Parachute Infantry Regiment: A magnificent unit, reputed for the heroism and spirit of sacrifice of its combatants and which made proof of the greatest military qualities during the battle of Normandy" (June 6, 1944 – June 20, 1944). This citation includes the award of the ***Croix de Guerre with Palm.***

O. B. Hill from the 508th P.I.R. Association, 82nd Airborne Division wrote: "2,056 men of the 508th Parachute Infantry Regiment (attached to the 82nd Airborne) jumped into Normandy on D-Day, and on July 15, 1,918 returned. The rest had been killed, captured or wounded".

Robert was honorably discharged on February 2, 1948 and spent most his life in the greater Bay Area. Robert Sanchez was one of the early prime movers and active Elders in the Muwekma Ohlone Tribe. He passed away on April 26, 1999.

- Daniel G. Santos (Juarez), Technical Sergeant, **U.S. Army**, **41st Division** – 1941-1945. Daniel Santos (Saunders/Juarez) was born in Sunol near the Alisal Rancheria on January 21, 1917. Both his parents Joseph Saunders and Erolinda Santos were members of the **Verona Band of Alameda County**. Daniel was enrolled with the **Bureau of Indian Affairs** along with his mother and siblings under his great-aunts' **BIA Application (# 10676)** on March 18, 1932.

Daniel Juarez (Santos) received a draft notice dated **March 14, 1941**, from Local Board No. 36 located in Manteca, California. It was addressed to Mr. Dan George Juarez, Route, Box 29A, Tracy, California. The letter stated:

> We received a call for 70 men to be inducted from this area on March 27th 1941. … it is probable that you will be included in the group, and we are therefore taking this

opportunity of notifying you, before (?) official order is issued, so that you may make your plans accordingly.

Daniel enlisted on March 27, 1941 at Sacramento before the war was declared. The **Jungleer** or **Sunset Division** was Federalized on September 16, 1940. By December 7, 1941, the 41st Division was ready. It continued the series of "firsts" by being the first United States Division to deploy to the South Pacific. It became the first American Division sent overseas after Pearl Harbor, the first American Division trained in Jungle Warfare. It spent 45 months overseas (longer than any other Division), and earned the title of "**Jungleers**". The 41st Division left for Australia in March of 1942. Elements of the division landed January 23, 1943 in **Dobodura, New Guinea.** On the **Island of Biak** (May 27, 1944) the American Forces fought the first tank battle of the war against the Japanese destroying seven without loss. The division also fought in the Philippines (January 9, 1945) and fought on **Palawan** and **Sulu Archipelago** (March 10, 1945) and arrived in **Japan** on October 6, 1945. The 41st participated in 3 campaigns (**New Guinea, Luzon, and Southern Philippines**) and suffered 4,260 casualties.

Former Secretary of Defense Caspar W. Weinberger also served in the 41st Division as an officer. The 41st Division earned three **Distinguished (Presidential) Unit Citations**. Daniel Santos was honorably discharged in 1945. Daniel enrolled with the Bureau of Indian Affairs during the second BIA enrollment period on May 23, 1955. He also worked at Leslie Salt Company in Newark and spent his life working on and racing cars. Daniel passed away on April 28, 1980.

- Lawrence Thompson, Sr., Tec Fifth Grade, U.S. Army, 640th Tank Destroyer Battalion. Lorenzo Thompson, Sr. was born in Newark September 9, 1918. His mother Magdalena Armija Thompson was a member of the **Verona Band of Alameda County**. Lawrence and his siblings enrolled with their mother with the Bureau of Indian Affairs on October 7, 1930.

The **640th Tank Destroyer Battalion** was formed at Camp San Luis Obispo on December 19, 1941 as an element of the **40th Infantry Division**, and served in the Pacific Theater of Operation. The 640th was activated on March 3, 1941 from National Guard Divisions from California and Utah and was sent overseas on August 23, 1942.

The 640th Campaigns included: **Bismarck Archipelago, Southern Philippines,** and Luzon and were issued 3 **Distinguished Unit Citations**; Awards: MH-1; DSC-12; DSM-1; SS-245; LM-21; SM-30; BSM-1,036; AM-57.

Lawrence Thompson enlisted at the age of 23 on September 10, 1941 at the **San Francisco Presidio**. At that time, he was living at 2370 Pine St. in San Francisco**.** His MOS was Cannons S45 and he fought in the following campaigns: **Aleutian Islands [Attu and Kiska Island** with the **7th Infantry Division], Luzon** and **Southern Philippines** and **Eastern Mandates [Marshall**

Islands, Kwajalein, Eniwetok]. Initially deployed to Hawaii in September 1942, the **640th Tank Destroyer Battalion** participated in combat landings at **Guadalcanal** (February 5, 1944), **Cape Glouster, New Britain** (May 3, 1944), **Lingayen Gulf, Luzon, Commonwealth of the Philippines** (January 9, 1945), and **Los Negros Islands** (March 29, 1945). The **640th Tank Destroyer Campaign Honors** include: **Bismarck Archipelago** [**islands of New Guinea**] (December 15, 1943 – November 27, 1944)**,** and **Luzon and Southern Philippines [GO 33 WD 45]** (December 15, 1944 – July 4, 1945). "**Seek, Strike, and Destroy"** was the motto of the Tank Destroyers.

Lawrence Thompson was honorably discharged on October 2, 1945 at Camp Beale, Marysville, California and was issued the **American Defense Service Medal**, **Asiatic Pacific Campaign Medal** and **Philippine Liberation Ribbon with Bronze Star**.

After the war Lawrence Thompson, Sr. and his son Lawrence Thompson, Jr. enrolled with the Bureau of Indian Affairs during the third BIA enrollment period on June 24, 1969. Later during the early 1990s Lawrence, Sr. served on the Muwekma Tribal Council. He passed away in November 1999.

- George James (Guzman) Hernandez was born in Niles on November 13, 1923 to Candeliana (Carolyn/Carrie) Guzman Hernandez (born March 12, 1905) who was the daughter of Muwekma Elder **Francisca Guzman Nonessa** (BIA #10293) and Manuel Hernandez. Manuel Hernandez was working for Elbert Apperson during the early 1900s while living on Glenn Avenue in Sunol (1920 Federal Census). George enlisted on September 12, 1945 at Camp Beale, Marysville, California and had the rank of Private in the United States Army, he was discharged from the service on July 2, 1946. On his June 30, 1942 Draft Registration card he identified Paul Guzman (Hernandez) as his uncle and that he worked on the W. Walton Ranch in Centerville (now the City of Fremont) which was the same employer of his uncle Toney Guzman. He was the nephew of Toney and Fred Guzman, and first cousin to Frank Harry and Bennie Guzman.

George died in the Town of Middleton, Lake County on June 26, 1995 and was buried in the **Golden Gate National Cemetery**, Section K, Site 631.

See **Figures 39** and **40** for some of the Muwekma men who served in WWII.

Figure 39: Some of the Muwekma Men Who Served During World War II

Figure 40: Some of the Muwekma Men Who Served During World War II

From Post-World War II to the 1960s

At the end of the war, the returning Muwekma men had to readjust to the peacetime economy and search for employment throughout the central California region. Work was difficult to find at times, but families helped each other and maintained tribal relations through religious and social mechanisms (e.g., compadrazo/godparenting and witnessing) that have long been established within the Muwekma families.

After World War II, in May 1947, **Ernest Thompson, Jr.** the son of Magdalena Armija Thompson, along with other tribal elders became members of the **Bay Area California Indian Council** which represented the contractual interests for over one thousand California Indians residing in the Bay Area as a result of the 1928, 1944, and 1946 Indian Claims Acts and ensuing legal decisions by the Justice Department (**Figure 41**).

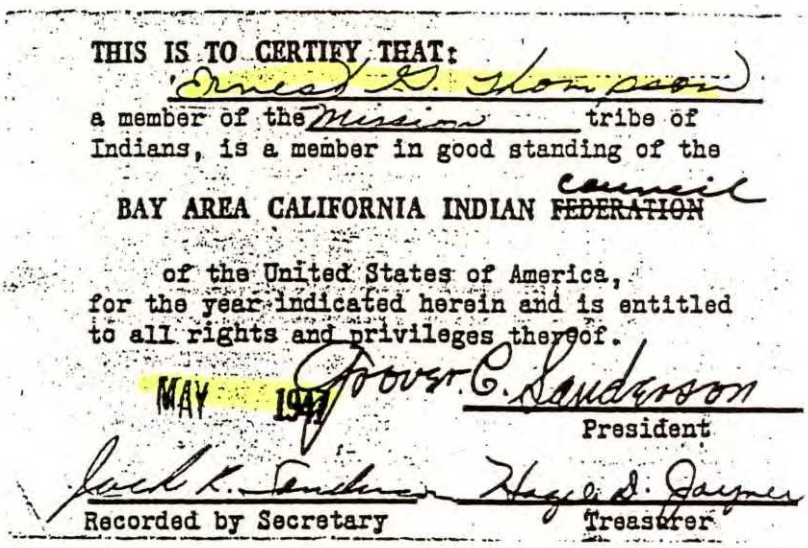

THIS IS TO CERTIFY THAT:
Ernest D. Thompson
a member of the Mission tribe of
Indians, is a member in good standing of the
BAY AREA CALIFORNIA INDIAN ~~FEDERATION~~ Council
of the United States of America,
for the year indicated herein and is entitled
to all rights and privileges thereof.
MAY 1947
Hoover C. Sanderson
President
Jack R. Tenbrink
Recorded by Secretary
Hazel D. Haynes
Treasurer

Figure 41: Ernest Thompson Membership in Bay Area California Indian Council

After 1950, those surviving Muwekma and other California Indians were issued checks for the sum of **$150.00** per person as compensation for the value (with interest going back to 1852) for the value of the 8.5 million acres of land and promised services that they never received. Deducted from the final lump sum was the cost of every military operation, Indian services, and bullets spent to kill Indian people, so that the settlement would not be a burden to the American taxpayer.

Although still landless, community and tribal related activities fell under the leadership of Muwekma Elder, **Margarita (Maggie) Pinos Juarez**, and **Dolores Marine Galvan** ,and her brothers **Dario Marine** and **Lucas Marine,** and her younger sister, **Trina Marine Thompson Ruano** (Ernest Thompson, Sr., had married Trina after the death of his first wife, Magdalena Armija Thompson)**.** These tribal activities and interactions were further spurred by communications with the BIA Sacramento Agency, which notified the Muwekma lineages of the expanded enrollment opportunities under the California Indian Jurisdictional Act for children born after May 28, 1928. Families contacted and helped each other to go to Sacramento to enroll their children, nieces and nephews. After the California Indian Roll was approved on November 23,

1951, the Sacramento Area Office published a list of enrollees that identified **forty** Muwekma as "**Tribe Mission San Jose**" (BIA list 1951).

Also, during this period of time (from 1930s and 1950s), some of the families moved about seeking new employment opportunities and residential stability. The residence of Lucas Marine and Catherine Peralta (before her passing in 1934), as well as Francisca Guzman and her son Alfred Guzman and his family resided on the **Shinn Ranch** in Niles and became an important gathering place for the families and relations (see Harrington notes 1921-1934 regarding events between Liberato and Pedro Confessor prior to the turn of the century). Other important households were the residences of Dolores Marine Galvan in Brentwood and San Jose, Dario Marine in Centerville and later Woodland, and Margarita Pinos Juarez and Trina Marine Thompson Ruano in Newark where the families would gather for various occasions.

Continuous Connections to the Tribe's Sacred Sites: The Protection of the Ohlone Indian Cemetery, Located in Fremont, Mission San Jose, California

The **Ohlone Indian Cemetery** located on Washington Boulevard, one mile west of Mission San Jose in Fremont, was used for burial by members of the Guzman, Santos, Pinos, Marine, Armija (Thompson) and Nichols families until 1926, while the original Ohlone burial ground was located under the northern wing of the mission church. Martin Guzman (died October 4, 1925), Victorian Marine Munoz (died November 27, 1922), and her son Jose Salvador Munoz (died 1921) were some of the last Muwekma Ohlone Indians to be buried there. On Jose Salvador Munoz's death certificate it identifies his place of burial as "**Ohlone Cem**"[etery].

During the 1960's Muwekma families under the leadership of **Dolores Marine Galvan**, participated in securing the legal title to the Historic Ohlone Cemetery located on Washington Boulevard in the City of Fremont. In 1971, a board of directors for the Ohlone Indian Tribe, Inc. was established by Dolores Marine Galvan and her children Philip Galvan, Benjamin Michael Galvan and Dolores Galvan Lameira in order to secure title to the tribe's ancestral cemetery.

During this period of time when the **American Indian Historical Society** obtained legal title of the Ohlone Cemetery on behalf of the Muwekma Ohlone community, invitations went out to various families, including the children of Magdalena Armija, Ernest Thompson and the other Marine-related families, to help clean up the run-down cemetery (**Figure 42 – Ohlone Cemetery**). As mentioned above, the Guzman, Marine, Armija-Thompson and Nichols families had loved ones (e.g., Avelina Cornates Marine (died 1904), Elizabeth (Belle) Marine Nichols (d. 1911), Ramona Marine Sanchez (d. 1921), Victoria Marine Munoz (d. 1922), Dario's son Gilbert Marine, Rosa Nichols and Mary Nichols, Salvador Munoz (d. 1922), Charles Thompson (d. ~ 1917), Martin Guzman (d. 1925), and others were buried there during the first three decades of this century (Marine Family History 1965; Leventhal, Escobar, Alvarez, Lameira, Sanchez, Sanchez, Sanchez and Thompson 1995).

Figure 42: Lillian Massiatt, Ramona and Michael Galvan at Ohlone Cemetery (1966)

Benjamin Michael Galvan who was born on June 23, 1927, and was the last formal member of the historic Verona Band of Alameda County to be born into the Federally Recognized tribe. Ben was born the same day that BIA Superintendent Lafayette A. Dorrington decided in his report that the landless Verona Band tribe did not need any land. Ben served as the **first chairman** of the Ohlone Indian Tribe between 1965 and 1978.

Since World War II, Dolores Marine's (**1928 BIA Application 10681**) children had married and raised families and Henry "Hank" Alvarez and his sister, Dolores "Dotty" Galvan Lameira are Muwekma Tribal Elders, and had served as elected council members. Dotty Lameira's son Arnold Sanchez had served as an elected tribal councilman. The family of Benjamin and Jenny Galvan are also enrolled in the Tribe and their son, Albert Galvan, had also served as a tribal council member. The same is the case for the children and grandchildren of Victoria Marine (**1928 BIA Application # 10678**). Magdalena Armija had married Ernest Thompson, Sr. and their sons Edward Thompson and Lawrence Thompson, Sr. were elders, and Lawrence was a former elected tribal councilman of the tribe (**1928 BIA Application # 10296**).

The children of Ernest Thompson, Jr. are also enrolled tribal members. As discussed earlier, Francisca Nonessi (**1928 BIA Application 10293**) was married to Jose Guzman, their son Jack Guzman (Sr.) had married Flora Freda Munoz (Victoria Marine's daughter), and their son John Guzman, Jr. (now deceased) and daughter, Rena Guzman Cerda and their respective children are Muwekma tribal members. Lawrence Mason Marine, the grandson of Dario Marine (**1928 BIA Application 10677**) and Catherine Peralta (**1928 BIA Application 10675**) also served as a tribal councilman.

The children and grandchildren (**1928 BIA Application 10680**) of Ramona Marine and Porfirio Sanchez instituted the contemporary leadership of the Muwekma Ohlone Tribe, and were joined by the children of Trina Marine Elston Thompson Ruano (**1928 BIA Application 10682**) and Albert Marine Arellano (**1928 BIA Application 10679**) in their efforts to spearhead the tribe's regaining its previously recognized status and revitalization.

In the late 1890s, George Santos (grandson of Hipolito Santos and Refugia Simon who were one of the founding families of the Niles rancheria) had married Peregrina Pinos (who was the daughter of Benedicta Guerrera and Manuel Pinos). Their eldest daughter, Erolinda Pinos Corral, enrolled with the BIA with her children along with her Aunt, Maggie Pinos Juarez, in 1932 (**1928 BIA Application 10676**). The children and grandchildren Alfonso Juarez, who was the eldest son of Erolinda Santos Juarez Pena Corral are enrolled members of the Muwekma Ohlone Tribe. Presently Carol Juarez Sullivan is a Muwekma tribal councilwoman.

Anthropologists and the Court of Claims of 1946 and the Hearings of 1954-1955

Published elsewhere, that the adverse impact that Berkeley Anthropologist A. L. Kroeber's pronouncement in his 1925 monumental tome Handbook of the Indians of California (Bureau of American Ethnology Bulletin 78) had by stating that the "Costanoan group is extinct so far as all practical purposes are concerned," contributed to the perpetration and perpetuation of the myths, misinformation, marginalization, disenfranchisement, and detriment to the surviving Ohlone/Costanoan communities, as well as, to other tribal groups (Buckley 1989; Leventhal et al. 1992; Field et al. 1992; Leventhal et al. 1994; Field with the Muwekma Tribe 2003; Field et al. 2013; and others).

Kroeber and his colleagues had interviewed the Elders of the Muwekma Verona Band community in the early 1900s, yet by 1925 he issued his extinction sentence as the quintessential authority on California Indians. Independently, as presented elsewhere in this chapter, the Muwekma were: **1)** under the direct jurisdiction of the Bureau of Indian Affairs between 1906 [1914] and 1927; **2)** Muwekma tribal elders and their respective families enrolled with the Bureau of Indian Affairs (1929-1932) under the 1928 California Indian Jurisdictional Act; **3)** Muwekma children were sent to Indian boarding schools at Riverside and Chemawa (1930s -1940s); **4)** enrolled as members of the Bay Area California Indian Council (1947), **5)** and those Muwekma heads of households enrolled with the BIA during the second BIA enrollment period (1950-1957) and again during the third BIA enrollment (1968-1971). Therefore, how could the Muwekma tribal community be pronounced "extinct" by members of the dominant society, especially if they continued to present themselves as an actively living tribal community, but landless Indian tribe?

As stated above, the adverse effect of Kroeber's extinction sentence was especially felt when the Muwekma was involved in the repatriation of their ancestral human remains from Stanford University in 1989. Various anthropologists and educational institutions blatantly attacked Muwekma echoing Kroeber's sentence of extinction.

For example, Government Anthropologist Ruth Underhill essentially parroted Kroeber in her 1953 book **Red Man's America**:

> Esselen . . .: Possibly a remnant of a larger group; first California group to become extinct.
> Costanoan . . . : Now extinct for all practical purposes (1953:288, 291).

Lantis, Steiner, and Karinen, cultural geographers teaching at two California universities (Chico State and Long Beach State) wrote in their 1963 textbook **California: Land of Contrast** the following excerpted account for the Costanoans and the Esselens of the central coast:

> The Hokans were represented by three groups (Esselens, Salinan, and Chumash). The Esselen lived south of the Costanoans in limited numbers. . . . These were the first California Indians to become extinct (1963:266).

In her very widely read 1992 Cultural Anthropology text on Native American Societies titled Native North Americans: A Comprehensive Account, Anthropologist Alice Kehoe declared:

> The central coast south of San Francisco and the adjacent Santa Clara Valley across the Coast Range were occupied by the Costanoans, once speaking a language closely related to Miwok, now effectively extinct as a nation (1992:402).

Another such group, called ACPAC (American Committee for Preservation of Archaeological Collections) was supported by Constance Cameron (Museum of Anthropology, California State University) and Clement W. Meighan (Emeritus Professor of Anthropology, UCLA) and a number of others. This group published a politically charged informational newsletter that has made the Ohlones something of a *bete noire*. In 1993, E. J. Neiburger's article "Profiting From Reburial" declaimed:

> Public money for reburials is the latest growth industry for numerous activists: $135,000 of taxpayers' money was used to pay off land-owners, lawyers, archaeologists and activists … . Religious and historic traditions, accurate identifications and the desires of the next-of-kin have little influence on many activists who demand reburial of all remains under a variety of self-styled "traditional" religions. Thus, Stanford University has released 550 Ohlone skeletons to individuals who had identified with this tribe (**the last recognized member of which died in the early 1800s**) (Originally published in Nature 1990, 344:297; republished in ACPAC Newsletter, March 1993:3).

In 1989, Frank Norick, then Principal Museum Anthropologist at the Phoebe Apperson Hearst Museum at UC Berkeley, was quoted in a newspaper interview as follows:

> . . . there are few Indians left in the Bay Area who have some vague Native American heritage, but until [a recent book on the subject] came out, they didn't know who the East Bay Indians were. We don't know who the East Bay Indians were, and the few Indians that happened to survive were swallowed up and exterminated by civilization by the latter part of the last century. That's not to say that there aren't people around here who are of Indian heritage, but I'd be willing to bet they couldn't give you even the semblance of a [lineage] account that was aboriginal (Norick interview in Express Newspaper 9/21/89:15-16).

These are some of the examples that the Muwekma Ohlone Tribe had brought forward in several previous publications. Nonetheless, while these anti-Ohlone perspectives had cast negative views about California Indian in general, and the Ohlone in particular, one anthropologist Dr. Omar C. Stewart, did publish an important narrative about the changing role of anthropologists as legal witnesses and advocates on behalf of California Indian tribes during the Claims Hearings of 1955.

Anthropologists Alfred L. Kroeber and Omar C. Stewart,
and the California Indian Claims Hearings 1954-1955

The following was excerpted from a 1961 paper written and submitted by Dr. Omar C. Stewart to The Kroeber Anthropological Society Papers (Number 25) that was included in a special edition titled Alfred L. Kroeber: A Memorial. The paper itself was titled Kroeber and the Indian Claims Commission Cases. Stewart at the invitation of Kroeber and others provided testimony at these hearings, and because of his previous interactions in Indian-related court cases, he helped guide the UC Berkeley team of anthropologists to prepare to present testimony and evidence before the Court of Claims.

> **Kroeber and the Indian Claims Commission Cases**
>
> The role of A. L. Kroeber in Docket 31-37, Indians of California vs. The United States of America, before the Indian Claims Commission, may well serve as the symbol of a change in anthropology in America. Kroeber and other anthropologists serving as expert witnesses on opposite sides in litigation before the U. S. Indian Claims Commission have marshalled in a new dimension of applied anthropology. A short history of Indian claims cases, particularly for California Indians, and a review of the contribution of anthropology to hearings under Public Law 726 - 79th Congress, 2nd Session (H.R. 4497) known as The Indian Claims Commission Act of August 13, 1946, 60 Stat. 1049, will reveal the extent of the changes which have come about.
>
> At the outset we should be reminded that claims cases against the U. S. Government by Indian tribes are not new. In 1863 the law establishing the U. S. Court of Claims as amended bracketed Indian tribes with foreign countries and required all to obtain from Congress special permission to sue the U. S. Government. Nevertheless, a large number of claims were adjudicated during the last century. The procedure was for the tribe and/or its attorney to obtain a special act of Congress, called **Jurisdictional Act**, to allow a tribe to sue the government in the Court of Claims. Not only were years required to obtain congressional approval for such special laws, but additional years were needed to get a decision from the Court of Claims because of its chronic backlog of cases. Even more discouraging than the delays, from the point of view of the Indians and their attorneys, was the frequent very explicit and limiting phraseology of the bills of authorization, which in turn were followed to the letter by both the Court of Claims and the Supreme Court. Notwithstanding the slowness of legislation and of court action from January 28, 1884 to May 7, 1945, one hundred fifty-two separate cases were authorized by Congress and reached the Court of Claims. It will be of interest to review the decisions rendered before the passage of the Indian Claims Commission Act of 1946: …

… In other words, during the seventy-one years preceding the Indian Claims Commission Act of 1946, the Court of Claims declared that $37,753,954.13 should be paid the Indians to satisfy legal claims against the government, whereas payment of about **two billion dollars** had been requested. A review of many records reveals the curious fact that, in spite of the interest and knowledge that local anthropologists might always be expected to have concerning the American Indians, and in spite of the extent of the litigation, in all this time anthropologists, so far as I could discover, had nothing to do with either the obtaining of the permission to get into court or with the hearings in the Court of Claims, with two exceptions. The exceptions were the remarkable work of **Dr. C. Hart Merriam**, biologist turned ethnologist, on behalf of the Indians of California leading to a decision dated December 4, 1944, requesting Congress to pay them **$5,024,842.34**, and the testimony of **Dr. John P. Harrington** in the Alcea Case (103 C.Cls. 494) in 1945.

The claims cases of the Indians of California **rest ultimately upon original Indian title**, which was recognized by the eighteenth and nineteenth century laws of Spain and of Mexico and **by the United States in the Treaty of Guadalupe Hidalgo**, proclaimed July 4, 1848. They are supported by Acts of Congress of September 30, 1850, and February 27, 1851, appropriating **$50,000.00** to pay the expenses of a treaty commission **to negotiate with the Indians of California to extinguish their Indian title to the lands of California, and by the 18 treaties signed by the Indians but not ratified by Congress**. Traveling to get the treaties signed was a major exploring expedition as reported in "The Journal of the Expedition of Colonel Redick M'Kee [McKee]. .. through Northwestern California . ..1851," by George Gibbs, and printed by Henry R. Schoolcraft in his History . . . of the Indian Tribes of the United States, Part III, 1853. (The Journal was reprinted in the Hearings for the Indians Claims Commission Act, 79th Cong., 2nd Session, June-July, 1946.) While M'Kee was negotiating treaties in northern California, O. M. Wozencroft and G. W. Barbour were getting treaties signed in central and southern California. Funds were exhausted before all tribes were visited. After the last treaty was signed January 7, 1852, with the Diegueno Indians [of southern California], the 18 treaties were delivered to the Senate by President Millard Fillmore, June 1, 1852, **with recommendation for ratification by officials of the Bureau of Indian Affairs**.

By coincidence, the first California State Legislature was in session when the 18 treaties were sent to the U. S. Senate and **the California Legislature memorialized the U. S. Senate not to ratify the treaties because the area to be assigned the Indians was evaluated at $100,000,000**. It was then, on June 7, 1852, that **the California senators succeeded in having the treaties classified as secret and hidden away in Senate files**, where they remained until 1905 when **the injunction of secrecy was removed**. In many other ways the Gold Rush miners' disregard for the rights of the aborigines characterized California for at least three decades.

The **Century of Dishonor** by Helen Hunt Jackson, published in 1881, pricked the conscience of America to the extent that many people of good will decided to do something about the Indian problem. The Indian Rights Association was founded

in Philadelphia in 1882 with a California branch to follow soon. In **Ramona**, 1884, Mrs. Jackson so dramatized the poverty and misery of the Mission Indians of southern California that the Bureau of Indian Affairs bought many small farms to be permanent rancheros for landless Indians in California. Many of the reforms in Bureau administration were achieved by the publicity given Indian problems by the Board of Indian Commissioners from 1881 to 1933. The Board was composed of important citizens appointed by the President of the United States and authorized to visit reservations, investigate conditions and recommend administrative and legislative reforms.

In 1883, Mr. A. K. Smiley, an appointee of President Hayes to the U. S. Board of Indian Commissioners, sought to gain public support for needed changes in Indian affairs by a conference of interested and influential citizens convened at his summer lodge at Lake Mohonk, New York. The Lake Mohonk Conference on Indian Affairs became an annual meeting of officials, missionaries, Indians, and laymen who came together to seek ways to improve the conditions of the Indians. For nearly forty years the Lake Mohonk Conferences brought together annually two to three hundred citizens dedicated to helping the Indians. **Few anthropologists ever attended these conferences**. Many of the same people were listed as members of the Indian Rights Association, the Lake Mohonk Conference, the National Indian Association and many local organizations formed to help the Indians. From the Society of American Indians (1910) to the National Congress of American Indians (19hh) several organizations of "Indians to help Indians" sought assistance from all friends of the Indians to get laws passed which would allow the various tribes to have their claims adjudicated. Again, few anthropologists were members of such organizations.

Perhaps the most important man to help the California Indians get heard in court was Frederick G. Collett. In August, 1946, when he appeared before the congressional committee on Indian Affairs during Hearings on the Indian Claims Commission Act, … .

… Collett helped, without doubt, to secure the passage of the California Indians Jurisdictional Act of May 18, 1928, which **authorized the California State Attorney General to sue for payment for the reservations the Indians had never received**. Collett attempted later to have it amended to allow the Indians to be represented by private legal counsel because he thought private counsel might obtain a better award than the Attorney General of the State of California working without additional recompense. It was during the Hearings before congressional committees concerned with the California Indians Jurisdictional Act from 1920 to 1928 that C. Hart Merriam testified.

No anthropologists were asked to testify before the Committee on Indian Affairs preceding the enactment of H.R. 4497, the Indians Claims Commission Act, August 13, 1946. Only two names of professional anthropologists, those of **A. V. Kidder** and **Gene Weltfish**, appeared in support of the bill, and they were given-only as

members of the Indian Committee of the American Civil Liberties Union. One might properly inquire why anthropologists should be so conspicuous' by their absence when legislation of such great importance to American Indians was being considered. Since the Society for Applied Anthropology had been formed in 1941, one might ask particularly: "Where were the applied anthropologists?"

… At any rate anthropologists, while considering themselves the experts on aboriginal cultures of America, have seemed to avoid involvement in modern Indian Affairs. However, America's first home-grown anthropologists did not feel this way. **Lewis H. Morgan**, for example, was always involved with the practical affairs of the Seneca [Iroquois]. **John W. Powell** made special studies of the Great Basin tribes for the Bureau of Indian Affairs in 1872 and often testified before congressional committees. **George Bird Grinnell** wrote and spoke regarding the contemporary conditions of the Plains Tribes from the time of his first visit in 1870 until his death in 1938. **Warren K. Moorehead**, archaeologist, from 1888, museum curator and teacher at Phillips Academy from 1901 to 1938, was associated with the Bureau of Indian Affairs, but only as investigator. Moorehead was appointed a member of the Board of Indian Commissioners by President Theodore Roosevelt in 1909, a position he kept until the Board system was dissolved in 1933. This, however, is a very small proportion of American anthropologists over this long period, and all four could be classified as "dedicated amateurs."

Professional American anthropology began largely as a museum science of the strange and exotic. Not until just before World War II when **Commissioner John Collier** employed a number of anthropologists was the pattern altered. A few remained in the Indian service during Collier's whole term of office and beyond, but a larger number found practical, applied anthropology not congenial to their training and interest. … However, in March and June 1945, and in June and July 1946, congressmen failed to call anthropologists to testify regarding the proposed Indian Claims Commission Act.

It is against such a background that starting in 1950, dozens of anthropologists were approached and asked to testify as expert witnesses in cases involving millions of dollars. Kroeber received a letter from the attorneys for Indians of California, Docket No. 37, written on June 23, 1952. The attorneys for Indians of California, Docket No. 31, approached him on January 8, 1953, and were told he had "signed up two months ago . . . to work exclusively" for the attorneys for Docket No. 37. Docket No. 31 and Docket No. 37 were finally consolidated by order of the Indian Claims Commission.

Neither Kroeber nor his associates, **Robert F. Heizer**, **Edward W. Gifford**, **Samuel A. Barrett**, **S. F. Cook** and **Donald Cutter**, had previously testified before the Indian Claims Commission. Since I had testified twice, Kroeber invited me to Berkeley to tell him about my own experiences preparing exhibits and testifying, and also my reactions to court room procedures. Later I was invited to be present

when the Indians presented their case in Berkeley, in June, 1954, and also to serve as Kroeber's understudy during cross-examination of the witnesses for the Government in San Francisco, September, 1955.

In spite of the historic reluctance of anthropologists to be involved in modern Indian problems which still prompted a few established members of the profession to refuse employment by either side, Kroeber, past [age] 75, entered energetically and wholeheartedly into restudying the ethnohistory of California in order to present accurately and completely the information pertinent to the case. Realizing the research required to prepare for the searching and detailed questioning by Department of Justice attorneys, Kroeber and Heizer, with the help of a number of graduate students, combed the massive literature on California ethnology to assemble, reproduce if necessary, and tabulate, data on all ethnological points at issue.

Kroeber prepared a new map of the aboriginal linguistic groups of California, changing boundaries which had been drawn for the Handbook of California Indians in 1925 where new evidence had become available. (It is interesting that the 1925 map needed so few modifications).[3]

In accordance with the Indian Claims Commission Act and with decisions of earlier claims cases that had been reviewed by the U. S. Supreme Court, **aboriginal Indian title could be established by evidence that an identifiable group used and occupied a definable area, at the exclusion of others, since time immemorial**. Kroeber quickly recognized the types of data to he presented and then worked to assemble and review the publications which contained the relevant material. Kroeber's Handbook of California Indians was, of course, the primary basis for the case of the Indians of California, but an additional 186 exhibits were required to present ethnographic, historical, botanical and archaeological data not covered by the Handbook.

The attorneys for the Department of Justice are at a real disadvantage when handling cases based on aboriginal use and occupancy. It is simply a matter of fact that most ethnographic reports tend to support the claims of the Indians. However, in order to protect the American taxpayer and comply with the Indian Claims Commission Act itself, the Department of Justice must make the best defense possible. In addition to purely legal consideration, the attorneys for the government

[3] **Note:** it is also interesting that as a result of the passage of HR 2144 in 1992 that created the Advisory council on California Indian Policy (ACCIP), Leventhal contacted the BIA office in Sacramento for a map showing the Agency and sub-Agency jurisdictions in California so that the tribal communities could hold requisite elections for seven representatives from Recognized and Unrecognized, and two from Terminated tribes. Leventhal and others served as volunteers on the Federal Recognition Task Force to create such a map for seven geo-socio-cultural-political regions for those elections to proceed.

found that Kroeber's former students, **Julian H. Steward, William-Duncan Strong, Harold E. Driver, Erminie Brooke Wheeler Voegelin, Walter R. Goldschmidt, Abraham M. Halpern**, and **Ralph L. Beals** could testify that the Indians of California gained most of their subsistence from a relatively small proportion of their territory. …

… It might be best to let Associate Commissioner Louis J. O'Marr himself explain why the Indian Claims Commission accepted Kroeber's interpretation of complete aboriginal land use in California and rejected the Government's ecological theory of partial use, by citing from the Opinion of the Commission rendered July 31, 1959 (8 Ind. C1. Com. 1, pp. 31-36), viz.:

Land Use and Occupancy

"One of the most difficult, if not the most difficult, questions we have to decide is what California lands the petitioners actually occupied and used for their subsistence, that is, the lands they exploited for their day to day existence.

We can proceed with our inquiry with the basic fact, which nobody questions, that Indians occupied and used California lands from time immemorial and as the aboriginal inhabitants thereof. The native population is unknown, but estimates range from a high of 700,000 to 260,000 by Dr. Merriam and 133,000 by Dr. A. L. Kroeber. (Pet. Ex. RH-125, pp. 68-71). These Indians were not an homogenous group, but were made up of many groups or tribelets which compose many linguistic divisions or nationalities in California. It has been estimated by Dr. Kroeber that there were 500 or more Indian groups in California about the time we acquired California from Mexico in 1848. (Record pp. 29-30, 129, 153 and 498).

These tribelets occupied and used fairly well defined areas dependent in sizes upon the economic resources of the particular area and the population requirements of those living in it. …

... Furthermore, it is plain that because of the uneven and rather sparse distribution of the available natural resources in the state, large areas of land were needed to provide subsistence. The Indians' permanent and main habitats were, in general, in locations which provided the greatest abundance of natural resources, but they were required, and generally did, extend their searches over large areas beyond their places of permanent settlement. The record is replete with proof of temporary camps occupied by the Indians in their seasonal gathering, fishing and hunting operations which covered large areas in the mountains, plains and deserts. …

… The testimony and ethnographic literature, of which there are volumes in evidence, show that the Indian groups ranged throughout their respective territories in their gathering, hunting, and fishing exertions. While these Indians were never considered nomads, their exploitation of the available resources in a given territory required frequent and extended traveling within the territories claimed. We believe it unrealistic and contrary to the Indian mode of life to

> restrict Indian territorial rights to the lands which would simply provide adequate subsistence and disallow their land claims to the areas which were of secondary importance or supplemental to the main sources of supplies. We suspect territorial expanse was as much the desire of these primitive peoples as it is characteristic of the white man for there is much ethnographic evidence that the Indian groups in California moved about their respective domains gathering wild foods as they ripened or captured available wild game, and during a normal season would visit and use the whole territory to which they asserted ownership as their exclusive places of abode.
>
> We know of no decision by the courts or the administrative officers of the Government which limited Indian land claims to those lands which provided them with the common necessities of life. The requirements of the Indians were so varied that they could only be obtained from a large area for salt, edible seeds and insects, flint and other important supplies were in most cases not available in the confined areas of valleys but obtainable from desert areas. …
>
> … Since 1946 there have been at least fifty anthropologists involved in the Indian Claims Cases as expert witnesses for the Government or for the Indians. Attorneys did not seek anthropological testimony for either side in the initial cases. Following an order for a rehearing by the Court of Claims in an appeal of a Northern Paiute case, and also a rehearing of a Chippewa case, anthropologists have participated in nearly every case since where aboriginal title was an issue. That anthropologists have also proved useful to the government is apparent. Otherwise it would not have obtained their services. That anthropologists have benefitted from this serious application of their knowledge to practical problems, far more than from the monetary remuneration they received, is also true (Stewart 1961).

Omer Call Stewart (August 17, 1908 – December 31, 1991) was an American cultural anthropologist and author who worked at the University of Colorado. He was a student of Alfred L. Kroeber. He defended Native American land claims. In 1940, he received his doctorate in Anthropology from the University of California, Berkeley. Years later, in 1978, Stewart contributed a chapter titled **Litigation and its Effects** in the Handbook of North American Indians, Vol 8. California,, edited Robert F. Heizer (1978), Washington, D.C.: Smithsonian Institution, Omer C. Stewart. Pages 705-712.

Here it should be pointed out that anthropologists and historians have worked diligently on behalf of Native American tribes as they seek federal recognition or reaffirmation of their previous federally acknowledged status under the 1978 Federal Acknowledgement Project (25 CFR Part 83 *Procedures for Federal Acknowledgment of Indian Tribes*). Both anthropologists and historians had also worked on behalf of petitioning tribes up until the Department of Interior put a stop to BIA scholars by stating:

> The staff's research during the active consideration period is for the purpose of verifying and/or elaborating on an already complete petition. The staff's caseload no longer permits them to do the research necessary to fill in gaps in the petition on

behalf of the petitioner to the extent they have sometimes done in the past (Bureau of Indian Affairs, Office of Federal Acknowledgement Determinations - https://www.bia.gov/as-ia/ofa) .

Muwekma Families Enroll with the Bureau of Indian Affairs during the Second Enrollment Period (1950-1957)

Under the Act of 1948, almost all of the Muwekma Ohlone "heads of household" enrolled with their families once again with during the **second BIA Enrollment** between 1950 and 1957. These Muwekma include:

Dolores Marine Galvan, October 6, 1950**; Domingo Lawrence Marine**, October 12, 1950; **Dario Marine**, November 1, 1950; **Flora Munoz Carranza**, December 12, 1950; **Lucas Marine**, December 23, 1950; **Henry Alvarez**, April 7 & 26, 1951; **Trina Marine Thompson Ruano**, May 21, 1951; **Maggie Pinos Juarez**, July 19, 1951 (**Figure 43)**; **Benjamin Galvan**, December 4, 1951; **Belle Stokes Olivares Nichols,** February 25, 1952; **Ernest Thompson**, April 16, 1952; T**homas Garcia***,* April 22, 1953; **Flora Emma Martel Thompson***,* February 4, 1954; **Erolinda Santos Juarez Pena Corral**, May 16, 1955 (**Figure 43)**; **Robert Corral**, May 16, 1955; **Edward Thompson,** May 21, 1955; **Daniel Santos**, May 23, 1955; **Joseph Francis Aleas**, May 24, 1955; **Albert Arellano**, June 18, 1955; **Dolores "Dottie" Galvan Lameira**, October 3, 1955; and, **Arthur Pena Corral**, December 27, 1957.

Figure 43: Muwekma Elders Maggie Pinos Juarez and Erolinda Santos Juarez Corral

Third Bureau of Indian Affairs Enrollment Period (1969-1971)

Following the Act of 1964, between 1969 and 1971, the following Muwekma "heads of households" and their families once again enroll during the third BIA Enrollment period with most of the applicants identifying themselves as "**Ohlone**" on Question # 6: "**Name the California Tribe, Band or Group of Indians with which your ancestors were affiliated on June 1, 1852**":

Mary Munoz Mora Ramos Archuleta, January 10, 1969, "**Ohlone, Mission**."
Mary Marine Galvan, January 27, 1969, "**Ohlone**."

Ernest George Thompson,. February 20, 1969, "**Ohlone Tribe, Mission San Jose**."
Patricia Ferne Thompson Brooks, March 27, 1969, "Mission Indians."
Madeline Cynthia Thompson Perez, March 27, 1969, "Mission Indians."
Karl Thompson, March 27, 1969, "Mission Indians."
Robert P. Corral,. April 30, 1969, "**Ohlone Indian**."
Henry Marshall, May 7, 1969, "**Ohlones**."
Glenn Thompson, June 11, 1969, "Mission Indian."
Lorenzo Thompson, June 24, 1969,. "Costanoan."
Lawrence Thompson, Jr., June 24, 1969, "Costanoan."
Rosemary Juarez Ferreira, July 15, 1969, "**Ohlone Indians**."
Peter D. Juarez, July 23, 1969, "**Ohlone Indians**."
Dolores Sanchez Martinez, August 11, 1969, "**Ohlone**."
Margaret Martinez, August 21, 1969, "**Ohlone Mission Indian**."
Joan Guzman, August 26, 1969, "**Ohlone Indian.**"
Belle Nichols, September 4, 1969, "Mission."
John Paul Guzman, September 12, 1969, "**Ohlone Mission Indian**."
Beatrice Marine, January 5, 1971, "Costanoan."

Neither the Amah Mutsun tribal community of the greater Mission San Juan Bautista/Gilroy area or the Esselen Nation tribal community of the greater Mission San Carlos (Carmel)/Monterey Bay region ever used the ethnonym tribal identifier "Ohlone" for any of their BIA enrollments (1928 – 1971). It was not until after Malcolm Margolin's interpretive book **The Ohlone Way** was published in 1978 that non-Indians were informing them that they were Ohlone Indians. Therefore, the broader use of 'Ohlone' was later applied by various scholars and archaeological firms to all Costanoan communities after 1978. Only the Muwekma Ohlone Tribe of the San Francisco Bay Area has a history of identifying themselves as Ohlone prior to and after 1978 (Escobar, Field and Leventhal 1999).

The efforts of California Indians to sue the federal government under the Jurisdictional Act of 1928 resulted in the creation of the Federal Indian Claims Commission in 1946. This federal body allowed Indian groups to press for compensation to tribes over the theft of their lands in the 19th century. After 20 years of tortuous maneuvering all separate California Indian claims were consolidated into a single case.

A compromise settlement of **$29,100,000** was offered for **64,425,000 acres of land**. After deduction of (BIA) attorney's fees **($12,609,000**) plus interest the payment amounted to **47 cents per acre**!

Payments of **$668.51** per eligible person was issued by 1972 (**Figure 44**). What is of great significance here is the fact that the entire claims activities were conducted outside of normal court proceedings protected by the constitution. Thus Indians are the only class of citizens in the United States who are denied constitutional protection of their lands.

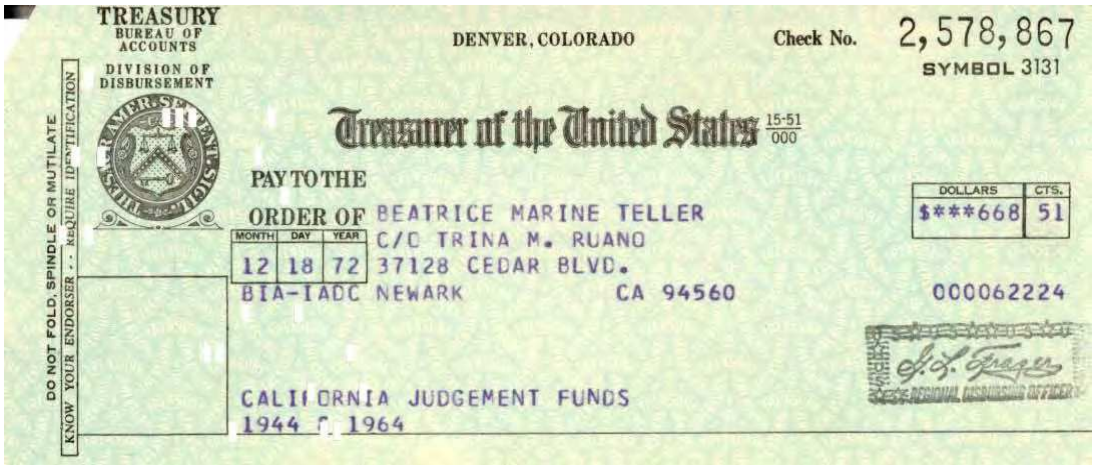


Figure 44: Distribution Check for Muwekma Elder Beatrice Marine for $668.51 (1972)

Muwekma Service in the United States Armed Forces During the 1950s, Viet Nam War, Desert Storm and Iraq

During the 1950s, 1960s and 1970s Muwekma men served in Korea, Viet-Nam and elsewhere.

Candelario T. Martinez served in the **United States Marine Corps** during the Korean War.

Ruben Cota Arellano, Sr. Corporal, U.S. Army, Medical Corps, **SP4 E4 HQ Battery 1st TGT ACQ Battalion, 25th Artillery, APO 2,** July 5, 1960 – July 4, 1966**, Korea.** Ruben passed away on March 4, 2006.


Lawrence Mason Marine served in the United States Marine Corps from 1959-1965 and was **a Staff Sergeant** serving in Viet-Nam**, 3rd Marine Division, 3rd Tank Battalion,** and **3rd Force Reconnaissance, Charlie Company (Viet-Nam) from 1960-1961.** Lawrence also served on the Muwekma Tribal Council. Lawrence passed away on December 22, 2020.


Marvin Lee Marine (younger brother of Lawrence Mason Marine) also served in the Vietnam War in the U.S. Army's **173rd Airborne Division**. His older brother Muwekma Elder Lawrence Mason Marine and his family are enrolled members of the Muwekma Tribe.


- Karl Thompson, SP5, U.S. Army, **43rd Engineer Bn. 931st Eng. Gp. Armed Forces Expeditionary Medal (Korea),** May 8, 1968 – May 7, 1971.

Tom M. Alvarez, Sr., U.S. Army, Medical Corps, 1965 – 1967, Vietnam, recipient of **Soldier's Medal**.


Frank Y. Ruano, Sr., E4, U.S. Army, **56th Artillery**, 1965 – July 25, 1971, **Vietnam.** Frank currently serves on the Muwekma Tribal Council.

Robert C. Martinez, Sr., Sergeant, **Air Cavalry, 14th Cavalry Regiment U.S. Army, European, 7th Army Command**, May 22, 1968 – May 14, 1970.

Ricardo "Rick" Martinez, SP 5 (T) Sergeant, Company D, 69th Engineer Battalion, USARPAC Vietnam; National Defense Service Medal, Vietnam Service Medal, Vietnam Campaign Medal and **Good Conduct Medal;** January 26, 1967 – January 12, 1969, Reenlisted in the Army and Honorably discharged January 24, 1973. Rick passed away on February 8, 2020.

Wayne Gibson, Vietnam, US Army 1969-1971, 4th Infantry Division. In August 1966, led by the 2nd Brigade, the 4th Infantry Division's ("Ivy Division"—a play on the Roman numeral IV) headquarters closed in on the central highlands of Vietnam. On September 25, 1966, the division began a combat assignment against the North Vietnamese that would not end until December 7, 1970. By the time the Ivy Division completed their assignment in Vietnam and returned to Fort Carson, Colorado, at the end of 1970, some 2,497 Ivy soldiers had been killed and 15,229 had been wounded. Eleven Ivy Division soldiers earned the Medal of Honor during that period.

John A. Massiatt, Airman, **U.S. Air Force** January 1, 1968 - October 1, 1969.

Thomas Joseph Marshall (**U.S. Army Vietnam Era**) [deceased]

Richard A. Juarez, SP 4 – **E-4, U.S. Army, 589th Transportation Co., Co. B 4H BN 2D BCT BDE, 1st Army**, Fort Eustis, Virginia., served from January 25, 1971 – October 30, 1973.

JayP Massiet, E5/Staff Sergeant, Military Police, **U.S. Air Force Van Nuys Air National Guard**, June 1975 – January 1988

Michael F. Galvan, Jr., **Sergeant, U.S. Air Force, 95th Recon Squadron,** 1977 – 1997 (**Desert Storm Campaign**)

Tracie Massiet Lents, **U.S. Air Force,** 1979 – 1983

Paul Guzman (Service Records n/a)

John J. Cambra, Jr., Pfc. **U.S. Army Company C 4th Battalion 30th Infantry and Company B 2nd Battalion 159th Infantry**, 1991 – 1994

David J. Splan, Lance Corporal, **U.S. Marine Corps**, 1993 – 2001.

Cory Gumersindo Massiet, Airman 1st Class, **U.S. Air Force,** 1994 – 1997. Separated Edwards Air Force Base, Ca. Awards: Air Force Training Ribbon, National Defense Service Medal, Humanitarian Service Medal.

Jesse Calles, US Army, November 2004-December 2009, Specialist Grade 4, Field Artillery Automated Tactical Data Systems Specialist. Jesse is the grandson of Muwekma Elder Faye Thompson Frei who served the U.S. Army in Baghdad, Iraq (**Operation Iraqi Freedom**) since December 2005 in the **Headquarters and Headquarters Battery Fires Brigade 4th Infantry Division (Mechanized), Awarded the Army Commendation Medal (2006).**

Angela Galvan, the granddaughter of Muwekma Elder Jenny Galvan had recently served in Iraq in the **U.S. Marine Corps, Corporal/E-4, 1st Marine Logistics Group, 7th Engineer Support Battalion, Support Company Motor Transportation Platoon, May 27, 2003 –** She had served in Iraq (twice deployed). **Campaigns and Citations: OIF 2 Fallujah Campaign** in Feb 2004 - Sept 2004 and **OIF 3-6** Sept 2005 - Mar 2006, **Combat Action Ribbon** for operations on Michigan ASR (Alternative Supply Route) and an impact **Navy Marine Corps Achievement Medal for operations in Haditha (December 2005);** also involved during **OIF February 3-6, 2004.**

JayP Massiet, Jr. U.S. Army, Second Tour in Iraq; issued a Purple Heart.

Aaron Lenci, US Navy, Ensign, stationed at Pensacola Naval Air Station (Currently Serving).

David Marroquin, Jr., **California Air National Guard, A1C** (Currently Serving)

Muwekma Tribal Stewardship over their Ancestral Heritage and Cultural Sites

Since 1980 to the present, the Muwekma families have worked independently to establish the "Most Likely Descendant" (MLD) status of members of the Muwekma Tribe in their area with the Native American Heritage Commission of the State of California. Also in 1984 the Muwekma Ohlone Tribal leadership developed their own Cultural Resource Management arm of the tribe, previously identified as Ohlone Families Consulting Services (OFCS), which had been recognized since 1988 by the Department of the Interior as a Native American business under the Buy Indian Act. Over the past several years, all cultural, archaeological and educational-related project are fully under the jurisdiction of the Muwekma Tribal Council.

Since the establishment of the Tribe's Culture Resource Management arm, many of the Muwekmas, as well as, Amah-Mutsun and Esselen Nation tribal members, Pomo, Sioux, Yokuts, Miwok, Wiyot and other tribal people have gone through archaeological training and obtained employment as field crew on various archaeological projects. Over these past decades the Muwekma Tribe has sought alternatives for indigenous people who are concerned about their ancestral past. Under these circumstances, the documented aboriginal Ohlone tribal people of the San Francisco Bay Area have taken greater responsibility for their ancestral heritage as primary stakeholders by becoming fully engaged in the environmental and ensuing scientific processes that affect their ancestral sites, as in the case of the burial recovery project previously conducted at the ***Clareño Muwékma Ya Túnnešte Nómmo*** **[Where the Clareño Indians are Buried] Site (CA-SCL-30/H)** at the 3rd Mission Santa Clara in 2010 (Leventhal et al 2011), and on the present Prometheus project on Benton Street.

Muwekma Ohlone Tribe and its Reaffirmation as a Federally Recognized Tribe

In 1989 the Muwekma Ohlone Tribe began the arduous process of petitioning the U.S. Government regarding its status clarification as a Federally Recognized tribe under 25 C.F.R. Part 83. Over the years, interfacing with the BIA's Office of Federal Acknowledgment has been a very difficult and acrimonious process. However, in face of the "extinction" sentence issued by Alfred L. Kroeber in his 1925 California Handbook, and adversity by the BIA, the Muwekma Ohlone Tribe has nonetheless made great strides forward. In 1996, the Tribe shattered the myth perpetuated by the dominant society, that the Ohlone were never Federally Recognized.

On **May 24, 1996**, the United States Department of the Interior, Deborah Maddox, Director of the Office of Tribal Services for the Bureau of Indian Affairs, formally concluded in a letter sent to the Muwekma Ohlone Tribe that:

> Based on the documentation provided, and the BIA's background study on Federal acknowledgment in California between 1887 and 1933, we have concluded ... that the Pleasanton or Verona Band of Alameda County was previously acknowledged

> between 1914 and 1927. The band was among the groups, identified as bands, under the jurisdiction of the Indian agency at Sacramento, California.
>
> The agency dealt with the Verona Band as a group and identified it as a distinct social and political entity (letter in response to the Muwekma Petition, Branch of Acknowledgment and Research, Bureau of Indian Affairs, Washington, D.C.).

In 1998 working with the Congressional created Advisory Council on California Indian Policy (ACCIP) which was legislated in 1992 (HR 2144) the Muwekma Tribe sought formal alternatives to the arduous Federal Recognition process under 25. CFR Part 83. After obtaining a formal positive determination of previous unambiguous federal recognition (under 25 CFR Part 83.8), the Muwekma leadership in concert with the leadership of another northern California Indian tribe, Tsungwe Council requested support from the BIA in Sacramento. Responding to the tribe's request, Acting Area Director, Michael Smith, wrote:

> The Bureau of Indian Affairs, Sacramento Area Office, is ready to assist the Tsungwe Council and the Muwekma Ohlone Tribe in seeking administrative Federal recognition on the basis your tribes were never terminated (Letter Michael R, Smith dated January 23, 1998) [**Figure 45]**.

On April 13, 2000 as a result of the submittal of reports to Congress the findings from the Advisory Council on California Indian Policy Act (HR 2144), California Congressman George Miller (D- Pleasant Hill) and his staff drafted a Recognition Bill titled California Indian Act of 2000 the purpose of which was:

> To restore Federal recognition to certain California Indian tribes, address the special land need of the California Indians, establish equitable treatment of California Indians in the programs and services of the Bureau of Indians Affairs, develop adequate California tribal justice systems, and for other purposes. Be it enacted by the Senate and House of Representatives of the United State of American in Congress Assembled …

Included in that proposed legislation was the legislative reaffirmation/restoration of six previously federally recognized tribes whose legal status was never terminated by any Act of Congress. These six tribes include: 1) Dunlap Band of Mono Indians; 2) Lower Lake Koi; 3) Tsungwe Council; 4) Muwekma Ohlone Tribe; 5) Tolowa Nation; and 6) Southern Sierra Miwok (from Yosemite) [**Figures 46 – 48**].

JAN-28-98 WED 12:01

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Sacramento Area Office
2800 Cottage Way
Sacramento, California 95825

IN REPLY REFER TO:

Ms. Dena Magdaleno
Post Office Box 56
Burnt Ranch, CA 95527

JAN 2 3 1998

Dear Ms. Magdeleno:

This is to acknowledge receipt of your letter dated December 16, 1997 and received in this office on December 22, 1997. Please accept our apologies for the delay in responding.

At your request, I am writing a letter of support for the Tsnungwe Council and the Muwekma Ohlone Tribe in their bid for Federal recognition. First let me state that the Bureau of Indian Affairs, Sacramento Area Office, is painfully conscious of the fact that California Indian tribes and their individual members have suffered numerous atrocities and inequities from the dominant culture through the hands of the United States Government and the State of California. To this day, those tribes who are fortunate to have Federal recognition status continue to suffer inequities in their share of Federal funds compared to funds received by similar tribes in other states. To that end, this office fully supports efforts by Indian groups such as the Tsnungwe Council and the Muwekma Ohlone Tribe in their bids for Federal recognition status.

Along with your request regarding the Tsnungwe Council, you provided a letter signed by the Acting Director, Office of Tribal Services, which acknowledged that you had established evidence that your ancestors were considered as parties to the 1864 Treaty. We concur with the Central Office of this finding and will support your bid for Federal recognition. I believe the Assistant Secretary - Indian Affairs has the administrative authority to reaffirm Federal status to your tribe.

Although the Central Office has noted that the 1851 Treaty did not provide conclusive evidence that the treaty did not establish clear evidence of Federal recognition of your ancestors, I am fully supportive of your efforts to establish "unambiguous" Federal recognition of your ancestoral group as a tribal entity.

The Bureau of Indian Affairs, Sacramento Area Office, is ready to assist the Tsnungwe Council and the Muwekma Ohlone Tribe in seeking administrative Federal recognition on the basis your tribes were never terminated.

Sincerely,

Acting Area Director

Figure 45: Letter of Support from BIA Acting Area Director Michael R. Smith

4/13/00 California Indian Bill Draft

H.L.C.
[DRAFT]

April 13, 2000
106th CONGRESS
2nd Session
H. R. ___

IN THE HOUSE OF REPRESENTATIVES

Mr. George Miller of California introduced the following bill; which was referred to the Committee on _____

A BILL

To restore Federal recognition to certain California Indian tribes, address the special land needs of the California Indians, establish equitable treatment of California Indians in the programs and services of the Bureau of Indian Affairs, develop adequate California tribal justice systems, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) Short Title.--This Act may be cited as the "California Indian Act of 2000".
(b) Table of Contents.--The table of contents for this Act is as follows:

Figure 46: Title Page of Congressman Miller's Recognition Bill (2000)

SEC. 2. FINDINGS AND PURPOSE.

(a) Findings.--Congress finds that--

(1) the Advisory Council on California Indian Policy, pursuant to the Advisory Council on California Indian Policy Act of 1992 (Public Law 10209416; 25 U.S.C. 651 note), submitted its proposals and recommendations regarding remedial measures to address the special status of California's terminated and unacknowledged Indian tribes and the needs of California Indians relating to economic self-sufficiency, health, and education;
(2) in the Advisory Council on California Indian Policy Extension Act of 1998 (Public Law 10509294), the Congress directed the Council to work with the Congress, the Secretaries of the Interior and Health and Human Services, and the California Indian tribes to implement the Council's proposals and recommendations contained in its report to Congress, including presenting draft legislation to Congress for implementation of the recommendations requiring legislative changes.
(3) California Indian tribes cannot effectively exercise sovereignty or self-determination without a land base large enough to develop economically and provide for the basic needs of tribal members, including adequate housing, employment, and social welfare services;
(4) as a result of their uniquely tragic history, California Indian tribes do not have a land base that is adequate to meet their immediate and essential needs for housing, economic development, and cultural and natural resource protection and preservation;
(5) although a large number of California Indian tribes negotiated 18 treaties with the United States in the early 1850's that would have set aside approximately 8,500,000 acres as their tribal homelands, the United States Senate failed to ratify these treaties;
(6) the Senate's failure to ratify the California Indian treaties, in conjunction with Congress' passage of the 1851 Land Claims Act which required those claiming interests in California lands to file their claim within 2 years or forever forfeit such claim, denied California Indians any legally cognizable claim to their ancestral lands;
(7) most California Indians were rendered homeless by these Federal actions, a situation that remained unremedied for many years until the United States

Figure 47: Page 3 of Congressman Miller's Recognition Bill (2000)

and early 1860's by military and volunteer patrols that resulted either in their death, removal to the Hoopa Valley Reservation or hiding in the hills. However, a few years later the Tsnungwe returned to their aboriginal lands where they have remained ever since.

(4) The Muwekma are the aboriginal inhabitants of the southern, eastern, and western regions of the San Francisco Bay Area, including all of what is now San Francisco, San Mateo, Alameda, and Contra Costa Counties, much of what is now Santa Clara County, and parts of Santa Cruz, San Joaquin, Napa, and Solano Counties. The Muwekma Indians are from the following aboriginal tribes: Passasimi/Yatikumne, Tamcan, Josemite, Lacquisemne, Julpun, Napian/Karkin, Jalquin/Yrgin, Alson/Tamien, Suenen, Chupcan, Choquoime, and Nototomne. Spanish missionaries forced the ancestors of the Muwekma Tribe into the Missions Dolores, San Jose, and Santa Clara in the late 18th and early 19th centuries. In the 1830's the Mexican Government secularized the missions and distributed their lands. Many Muwekma left the missions and resettled in other parts of the Bay Area, including on20a number of rancherias in Alameda County, including the Alisal Rancheria near Pleasanton, the Del Mocho Rancheria in Livermore, the El Molino Rancheria in Niles, as well as on rancherias in Sunol and San Leandro/San Lorenzo until the early part of the 20th century. The Muwekma people continue to reside in their aboriginal territory in the San Francisco Bay Area.

(5) The Tolowa are the aboriginal inhabitants of the present day county of Del Norte, located in the northwestern corner of California. In this area, their villages were scattered along the coastline, at the Lakes Earl and Tolowa, and along the larger tributaries of the Smith and Winchuck Rivers. The Tolowa signed a treaty with the United States on August 17, 1857, and were removed to the Klamath Reservation that same year. They were subsequently moved to the Smith River Reserve until it was discontinued on May 3, 1862, and thereafter moved several more times, including to the Siletz Indian Reservation in Oregon and to the Round Valley, Hoopa, and Klamath Reservations in California. Documents of the Bureau of Indian Affairs from 1915 through 1916 show that 100 acres of land was to be purchased for the Lake Earl (Tolowa) Indians and the Lipps-Michaels Survey of Landless Nonreservation Indians of California, 1919091920, confirms such a purchase of 100 acres of undivided land near Crescent City, Del Norte County, for these Indians.

(6) The Southern Sierra Miwuk Nation is composed of several bands or groups of Indians of the Yosemite/Mariposa area. These bands or groups are mentioned in countless official letters and journals of the United States Commissioners who were charged by Congress to negotiate treaties with the California Indian tribes during the period 1851091852. The first treaty camp was Camp Fremont, just northwest of Mariposa, California. The second treaty camp was Camp Barbour, south of Mariposa in the Millerton Lake area. Some of the Southern Sierra Miwuk bands or groups that signed the treaties or were mentioned in the

Figure 48: Page 15 of Congressman Miller's Recognition Bill (2000)

Another letter of support came from Lieutenant Governor Cruz Bustamante who wrote to the BIA on August 29, 2002:

> The Muwekma Ohlone Tribe meets all of the criteria for reaffirmation set by the court as well as the Bureau of Indian Affairs' acknowledgement criteria. The tribe is a previously recognized tribe. It has demonstrated that it has had a trust relationship with the United States from 1906 to the present and Congress has never terminated their relationship. (Letter dated August 29, 2002) [**Figure 49**]

Even though support from recognition had been formally expressed by Congresswoman Zoe Lofgren, State and County politicians, the Advisory Council on California Indian Policy (1998), and in proposed federal legislation sponsored by Congressman George Miller in 2000, the Bureau of Indian Affairs stated in their Final Determination that they would not look at or consider any evidence after 1985.

CRUZ M. BUSTAMANTE
Lieutenant Governor
State of California

August 29, 2002

The Honorable Neal McCaleb
Assistant Secretary-Indian Affairs
United States Department of the Interior
1849 C Street, N.W.
Washington, D.C. 20240

Dear Secretary McCaleb:

I write to urge you to support Petition #111 by the Muwekma Ohlone Tribe for reaffirmation of Federal Acknowledgement.

The Muwekma Ohlone Tribe meets all of the criteria for reaffirmation set by the court as well as the Bureau of Indian Affairs' acknowledgement criteria. The tribe is a previously recognized tribe. It has demonstrated that it has had a trust relationship with the United States from 1906 to the present and Congress has never terminated their relationship.

The tribe's members descend from an historical Indian tribe and they are not members of any other Federally-recognized tribe.

After compiling data and completing extensive research, the Muwekmas have presented a compelling case for the tribe's Federal Acknowledgement. I respectfully urge you and the Bureau of Indian Affairs to carefully review their Petition.

Sincerely,

Cruz M. Bustamante

CRUZ M. BUSTAMANTE
Lieutenant Governor

cc: The Honorable Aurene Martin, Deputy Assistant Secretary-Indian Affairs

Figure 49: Letter of Support from California Lt. Governor Cruz Bustamante

In 2000 – U.S. District Court Justice Ricardo Urbina wrote in his Introduction of his Memorandum Opinion Granting the Plaintiff's Motion to Amend the Court's Order (July 28, 2000) and later in his Memorandum Order Denying the Defendants' to Alter or Amend the Court's Orders (June 11, 2002) that:

> The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States. (Civil Case No. 99-3261 RMU D.D.C.)

On October 30, 2000, the BIA's Office of Federal Acknowledgment and Tribal Services Division responded to Justice Urbina's Court Order regarding the Muwekma Ohlone Tribal enrollment and their descendency from the Verona Band of Alameda County:

> … . When combined with the members who have both types of ancestors), 100% of the membership is represented. Thus, analysis shows that the petition's membership can trace (and, based on a sampling, can document) its various lineages back to individuals *or to one or more siblings of individuals* appearing on the 1900, "Kelsey", and 1910 census enumerations described above (**Figure 50**).

On June 30, 2005, Congressman Richard Pombo, then ranking Republican Chair of the House Resources Committee wrote to Secretary of Interior Gail Norton supporting a settlement of the Muwekma lawsuit against Interior:

> Dear Secretary Norton:
> As part of my Committee's oversight of the procedures for federal recognition of Indian Tribes, I have heard testimony in a hearing earlier this year of the protracted litigation concerning the recognition of the Muwekma Ohlone Tribe. The Tribe informs me that the Department of the Interior has determined that Muwekma is a previously recognized tribe, federally recognized until **1927,** also that no formal action by the Department and no Act of Congress removed it from recognition and that **99%** of the members of the current tribe are direct descendants of the members of the recognized tribe.
>
> The Muwekma Tribe raises the issue that, in a very similar situation, the Department reaffirmed the federally-recognized status of the Lower Lake Koi Tribe and the Ione Band of Miwok in California by a letter signed by the then Assistant Secretary of the Interior restoring them to recognized **status** without making them go through forma1 recognition procedures.
>
> I understand that in December of **2003** the Tribe explored with the Department a possible settlement, including a rehearing that might lead to reaffirmation of the Tribe, or, according to the Tribe, at the suggestion of a Department attorney, the organization of the half-blood members of the Tribe as a new Tribe under the Indian Reorganization Act. Therefore, I would suggest, if possible, that the Department meet with the Tribe to pursue settlement opportunities. (Letter Rep. Richard Pombo dated June 30, 2005).

After the Office of Federal Acknowledgement "declined" to extend, and therefore reaffirm the Tribe's Federally Acknowledged status on September 6, 2002, the Muwekma Tribe had to pursue its second lawsuit against the Department of the Interior.

Muwekma Tribe's Litigation Against the Department of Interior, Bureau of Indian Affairs

On September 21, 2006, U.S. District Court Justice, Reginald B. Walton in **Muwekma Ohlone Tribe v. Dirk Kempthorne, Secretary of the Interior, et al.**, Civil Action No. 03-1231 (RBW) issued a favorable Court Opinion on the side of the Muwekma Tribe stating:

> The following facts are not in dispute. Muwekma is a group of American Indians indigenous to the San Francisco Bay area, the members of which are direct

descendants of the historical Mission San Jose Tribe, also known as the Pleasanton or Verona Band of Alameda County ("the Verona Band"). … From 1914 to 1927, the Verona Band was recognized by the federal government as an Indian tribe. … Neither Congress nor any executive agency ever formally withdrew federal recognition of the Verona Band. … Nevertheless, after 1927, the federal government no longer acknowledged the Verona Band, or any past or present-day incarnation of the plaintiff, as a federally recognized tribal entity entitled to a government-to-government relationship with the United States … (alleging that "sometime after 1927 the Department began to simply ignore the Tribe for many purposes and substantially reduced the benefits and services provided to the Tribe") … (pages 2-3) **[Figure 51].**

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

MUWEKMA TRIBE, Plaintiff, v. BRUCE BABBITT,, Secretary of the United States Department of the Interior, and KEVIN GOVER, Assistant Secretary for Indian Affairs, United States Department of the Interior, Defendants.	Civil Action No.: 99-3261 (RMU) Document Nos.: 27, 28

MEMORANDUM OPINION

Granting the Plaintiff's Motion to Amend the Court's Order

I. INTRODUCTION

The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma Tribe as an Indian tribe under the jurisdiction of the United States. In more recent times, however, and despite its steadfast efforts, the Muwekma Tribe has been unable to obtain federal recognition, a status vital for the Tribe and its members. Without federal recognition, the Tribe cannot receive the benefits of health care, housing, economic development, and self-governance that the United States provides to federally recognized tribes. *See* Pl.'s Mot. for Summ. J. at 2; 25 C.F.R. § 83.2.

Figure 50: Memorandum of Opinion U.S. District Court (2000)

Specifically, Muwekma contends, inter alia, that the Department violated the Equal Protection Clause and the APA by requiring it to undergo the Part 83 acknowledgment procedures while allowing similarly situated tribal petitioners to bypass these procedures altogether. Compl. ¶¶ 37-39; Points and Authorities in Support of Plaintiff's Motion for Summary Judgment ("Pl.'s Mem.") at 22-30. Currently before the Court are the parties' cross-motions for summary judgment.[4] For the reasons set forth below, the Court denies both parties' motions without prejudice and directs the Department to supplement the administrative record.

I. Background

The following facts are not in dispute. Muwekma is a group of American Indians indigenous to the San Francisco Bay area, the members of which are direct descendants of the historical Mission San Jose Tribe, also known as the Pleasanton or Verona Band of Alameda County ("the Verona Band"). Pl.'s Mem. at 4; Defs.' Mem. at 5; Answer at 6. From 1914 to 1927, the Verona Band was recognized by the federal government as an Indian tribe. Pl.'s Mem. at 4-5; Defs.' Mem. at 5; Answer at 12-13. Neither Congress nor any executive agency ever formally withdrew federal recognition of the Verona Band. Pl.'s Mem. at 5; Answer at 14.

Figure 51: U.S. District Court Opinion (2006)

2003 Litigation

U.S District Judge, Reginald B. Walton further wrote:

> Muwekma brought this action on June 6, 2003, seeking reversal of the Final Determination, placement on the Department's list of federally recognized tribes, and other injunctive relief. ... On July 13, 2005, Muwekma moved for summary judgment, alleging, inter alia, that the Department violated the APA and the Equal Protection Clause when it required Muwekma to petition for acknowledgment of its tribal status pursuant to the "lengthy and thorough" regulatory procedures of Part 83, …, despite administratively reaffirming the status of similarly situated tribes without requiring those tribes to undertake the Part 83 process and without sufficient explanation for the disparate treatment. ... Specifically, Muwekma contends that "[t]he Department returned Lower Lake and Ione to the list of recognized tribes

outside of the [Part 83] procedures [while] requir[ing] Muwekma to complete the Part 83 process and then, applying a greater evidentiary burden, denied Muwekma recognition despite [its] significantly stronger case for recognition." … (pages 10-11) …

If the Department were compelled to require tribes seeking federal recognition to complete petitions under Part 83—that is, if it had no discretion to exempt certain tribes from the Part 83 procedures—then its argument that "federal acknowledgment regulations specifically take into account demonstrations of previous acknowledgment," … Here, however, the Secretary of the Interior is **expressly** empowered to "waive or make exceptions to [the Department's regulations] in all cases where permitted by law," if the Secretary makes a finding that "**such waiver or exception is in the best interest of the Indians**." 25 C.F.R. § 1.2; ... Thus, if the Department is "permitted by law" to waive or except the Part 83 tribal acknowledgment procedures when it is "in the best interest of the Indians," 25 C.F.R. § 1.2, and if it appears that it has waived the acknowledgment procedures in other, ostensibly similar instances, then it is incumbent upon the Department to explain to Muwekma "why it has exercised its discretion in a given manner" in this instance, State Farm, 463 U.S. at 48-49. ... **This it has not done**. (pages 18-20) …

In addition, the Department's representation to Muwekma that it lacked the authority to confer federal recognition on the tribe outside of the Part 83 acknowledgment process, see Answer at 23 (admitting that "[n]otwithstanding the Department actions to the contrary with respect to the Ione Band and Lower Lake, [Department] staff repeatedly advised [Muwekma] that the Assistant Secretary [of Indian Affairs] lacked authority to administratively reaffirm tribal status"), appears from the Department's own admission to be **patently false**, ... (footnote 12, page 21) …

Upon remand, the Department must provide a detailed explanation of the reasons for its refusal to waive the Part 83 procedures when evaluating Muwekma's request for federal tribal recognition, particularly in light of its willingness to "clarif[y] the status of [Ione] . . . [and] reaffirm [] the status of [Lower Lake] without requiring [them] to submit . . . petition[s] under . . . Part 83." … At issue for the purpose of this remand is not whether the Department correctly evaluated Muwekma's completed petition under the Part 83 criteria, but whether it had a sufficient basis to require Muwekma to proceed under the heightened evidentiary burden of the Part 83 procedures in the first place, given Muwekma's alleged similarity to Ione and Lower Lake. In addition, the Department **shall** express its position regarding whether it is permitted, under 25 C.F.R. § 1.2 or otherwise, to waive or make exceptions to the Part 83 acknowledgment procedures, and whether this waiver or exception imposes a lesser evidentiary burden on petitioning tribes than the completion of a Part 83 petition. (pages 31-32) …

IV. Conclusion

When an agency provides a statement of reasons insufficient to permit a court to discern its rationale, or states no reasons at all, the usual remedy is a remand to the agency for additional investigation and explanation.' ... Here, the Court is unable to

> discern the Department‘s rationale for requiring Muwekma to proceed through the Part 83 tribal acknowledgment procedures while allowing other tribes that appear to be similarly situated to bypass the procedures altogether, an issue which is dispositive of Muwekma‘s Equal Protection Act and APA claims. Accordingly, it will remand this matter to the Department for the limited purpose of supplementing the administrative record in a manner consistent with this Opinion. During this time, the case shall be administratively closed. The Court shall retain jurisdiction over this matter and shall require the Department to complete its evaluation and submit a supplement to the administrative record by November 27, 2006. In light of the Department‘s past delays, and given the narrow purpose for which this matter is being remanded, the Court will look extremely skeptically on motions for extensions of time. …. (page 32)

On September 30, 2008 the US District Court in Washington, D.C. handed the Muwekma Tribe another **victory**. Judge Reginald B. Walton opined:

> These arguments, and the explanation from the Department giving rise to them, seemingly cannot be reconciled with the Court‘s September 21, 2006, memorandum opinion. In that opinion, the Court noted that the defendants opposed the plaintiff‘s initial motion for summary judgment on three grounds, two of which concerned whether the plaintiff was similarly situated to Ione and Lower Lake for purposes of the plaintiff‘s constitutional and APA arguments. Specifically, ―the defendants argue[d] that the Department ha[d] not treated like cases differently because by their very nature, federal acknowledgment decisions require highly fact-specific determinations,‖ and ―claim[ed] that [the plaintiff] was not treated differently than similarly situated petitioners because groups demonstrating or alleging characteristics similar to [the plaintiff] are regularly required to proceed through the federal acknowledgment process.

The Court rejected both of these arguments. It dismissed the defendants‘ ―hand-waving reference to highly fact-specific determinations,‘‖ in which, in the Court‘s estimation, ―[did] not free the defendants of their obligation to justify the decision to treat the plaintiff differently from Ione and Lower Lake based on the administrative record for the plaintiff‘s petition. Further, the Court found the argument ―that groups such as [the plaintiff] have been regularly and repeatedly required to submit Part 83 petitions‖ **insufficient** ―to refute [the plaintiff‘s] claim that the Department has treated it differently from similarly situated tribal petitioners without sufficient justification.

The Court further noted in a footnote that the defendants ―”obliquely provided a ―basis for distinguishing [the plaintiff] and Lower Lake in their reply to [the plaintiff‘s] opposition to their cross-motion for summary judgment,” but also found this argument wanting. Specifically, the Court explained that:

> First, and most obviously, [the defendants‘ argument] pertain[ed] only to a difference between [the plaintiff] and one of the tribes with whom it [was] claiming to be similarly situated. **The defendants [did] not assert any ―highly fact-specific determination**[]‖ that would explain why [the plaintiff] is not similarly situated to Ione in such a way as to require a reasoned explanation of the Department‘s disparate

> actions. Second, the Department [did] not contend, here or in the administrative record, that it required [the plaintiff] and not Lower Lake to undergo the Part 83 procedure because the latter, unlike the former, had received land in trust and had participated in an election.
>
> **Having rejected all of the defendants' arguments on the issue of similarity of circumstances**, the Court proceeded to find that **—the Department . . . ha[d] never provided a clear and coherent explanation for its disparate treatment** of [the plaintiff] when compared with Ione and Lower Lake,‖ nor had it ever —articulated the standards that guided its decision to require [the plaintiff] to submit a petition and documentation under Part 83 while allowing other tribes to bypass the formal tribal recognition procedure altogether.‖ Because there was —virtually nothing‖ in the administrative record that would —allow the Court to determine whether [the Department's] judgment . . . reflect[ed] reasoned decisionmaking,‖ the Court concluded that it was —necessary to remand [the] case to allow the Department to supplement the administrative record in this regard.

In other words, the Court determined in its prior memorandum opinion that the defendants' arguments to the effect that the plaintiff was not similarly situated to Ione and Lower Lake were without merit, and remanded the case to the Department so that the Department could explain why it treated the plaintiff differently than other, similarly situated tribes. The necessary implication of both conclusions is that the Court found the plaintiff to be similarly situated to Ione and Lower Lake.

> … Here, the Department's explanation and the defendants' arguments in defense of that explanation and in support of summary judgment in their favor would appear to run afoul of the law of the case established in this Court's prior memorandum opinion. The Court concluded, implicitly if not explicitly, that the plaintiff is similarly situated to Ione and Lower Lake, and remanded the case to the Department for the sole purpose of ascertaining a reason as to why the plaintiff was treated differently. Yet, the defendants do not even acknowledge that their arguments are inconsistent with the law-of-the-case, let alone provide a —compelling reason to depart‖ from it.
>
> The defendants' insouciance regarding the law-of-the-case is particularly troubling because they appear to rely at least in part on administrative records for Ione and Lower Lake that were not considered when the Department initially considered the plaintiff's petition for recognition. This tactic harkens back to the defendants' reply memorandum in support of their initial cross-motion for summary judgment, where they argued —that because the full body of administrative records regarding Ione and Lower Lake [was] not before the Court, [the plaintiff] [could not] establish a violation of the Equal Protection Clause or the APA simply by alleging that it ha[d] been treated differently than those tribes.

The Court rejected that argument, explaining that —[w]hat matter[ed] . . . [was] whether the Department sufficiently justified in the administrative record for [the plaintiff's] tribal petition its decision to treat [the plaintiff] differently from Ione and Lower Lake.
The Court remanded this case to the Department so it could explain why it treated similarly situated tribes differently, **not so that it could construct post-hoc arguments** as to whether the tribes were similarly situated in the first place. **It certainly did not remand the case so that the**

Department could re-open the record, **weigh facts that it had never previously considered, and arrive at a conclusion** vis-à-vis the similarity of the plaintiff's situation to those of Ione and Lower Lake that it had never reached before. **The Court would therefore be well within its discretion to reject the defendants' arguments outright, grant the plaintiff summary judgment with respect to its equal protection claim, and bring this case to a close. [**Emphasis added]

As a result of newly appointed clerks in the Federal Courts, Justice Walton permitted a 180 degree reversal of his demand to Interior, and permitted a post-hoc argument from Interior, which did not exist in the administrative record on how the Office of Federal Recognition considered Muwekma's repeated requests to be treated equally as a similarly situated tribe as was accorded the Ione Miwok and Lower Lake Koi, who were reaffirmed without having to submit a documented petition.

Concluding Remarks

The Muwekma Ohlone Tribe of the San Francisco Bay Area has moved both its legal history and efforts seeking reaffirmation as Federally Recognized tribe almost to full circle, thus completing its over century-long-plus journey since the Tribe first became Federally Acknowledged through the Congressional Homeless Indian Acts beginning in 1906.

The portion of the ***Clareño Muwékma Ya Túnneste Nómmo*** **[Where the Clareño Indians are Buried] Site (CA-SCL-30/H**) located at 575 Benton Street, as well as the many other ancestral heritage/archaeological projects that the Tribe has worked on have also served as important —bridges to the Tribe's long historic and pre-contact ancestral past. This archaeological work has been exceedingly important and meaningful to the Tribal membership by providing a forum -- in the form of the present study and its ethnohistorical ties to the Tribe's to Mission Santa Clara and to its larger territory -- thus allowing our Tribe to have a voice in telling part of its story after being completely disenfranchised for so many decades by public agencies, policy makers, academic institutions and archaeologists**.**

This present ethnohistory study has provided a greater in-depth ethnographic, ethnohistoric and legal background information about our ancestral Muwekma Tribe – the aboriginal and historic tribal people of the greater circum-San Francisco Bay region -- in both a historic and contemporary context. This has been presented in greater detail that most, if not all. CRM studies within the our ancestral homeland. Furthermore, this chapter was structured using contemporary anthropological and historical frameworks with two major research goals in mind:

1. . To present herein, ethnohistoric and historic information that addresses the biological and cultural continuation of our aboriginal Muwekma Ohlone Tribal people from the San Francisco Bay region and thus identifying and discussing those —"vital" cultural linkages between the living people and their ancestors and ancestral heritage sites, and specifically in this case, to those ancestral Clareño Muwekma Ohlone who buried at the Third Mission Santa Clara Indian Neophyte Cemetery, and surrounding areas;
2. To bring forward an interpretive understanding about the life of out ancestral Muwekma Ohlone people who were buried at the ***Clareño Muwékma Ya Túnneste Nómmo*** **Site (CA-SCL-30/H)** and within the Prometheus project area; and bring closure to this project with

the Reburial-Honoring ceremony of these ancestors by placing them back into the earth (***warep***), within the original cemetery location from which they were laid to rest by their people between 1781 and 1818.

The continuation of the Muwekma Tribe's cultural traditions and language has been an ongoing concern over these past decades.

Although there are almost no protections against the destruction of Native American Ancestral Heritage cemetery and village sites, and as far as we know, no ancestral Muwekma Ohlone site is eligible for Historical Landmark status under the Landmark statutes in Santa Clara County, nonetheless our Muwekma Tribe desires to honor the good efforts and diligent work displayed by the Prometheus project construction and management firm, and field archaeological staff from PaleoWest in facilitating the recovery of our ancestral remains who were buried at:

Clareño Muwékma Ya Túnnešte Nómmo **Site (CA-SCL-30/H).**

The Muwekma Tribal Council, AHo!

The following photos (**Figures 52 - 75**) are from Tribal gatherings and events that celebrate our Native heritage, history, culture and traditions.

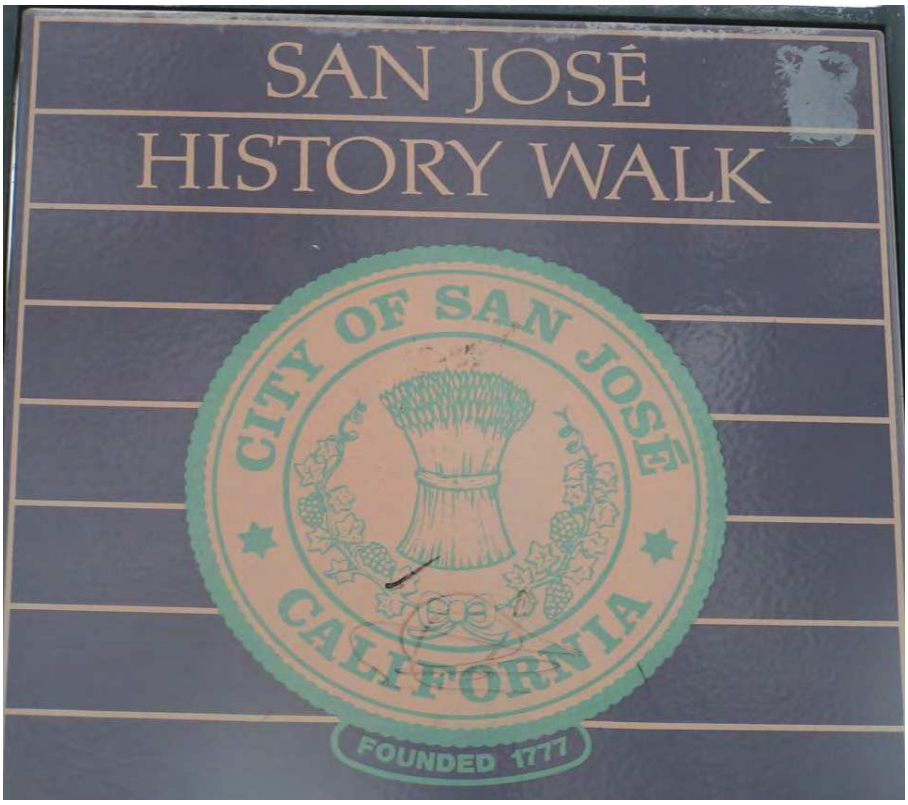


Figure 52: History Walk Historical Marker Downtown San Jose, California

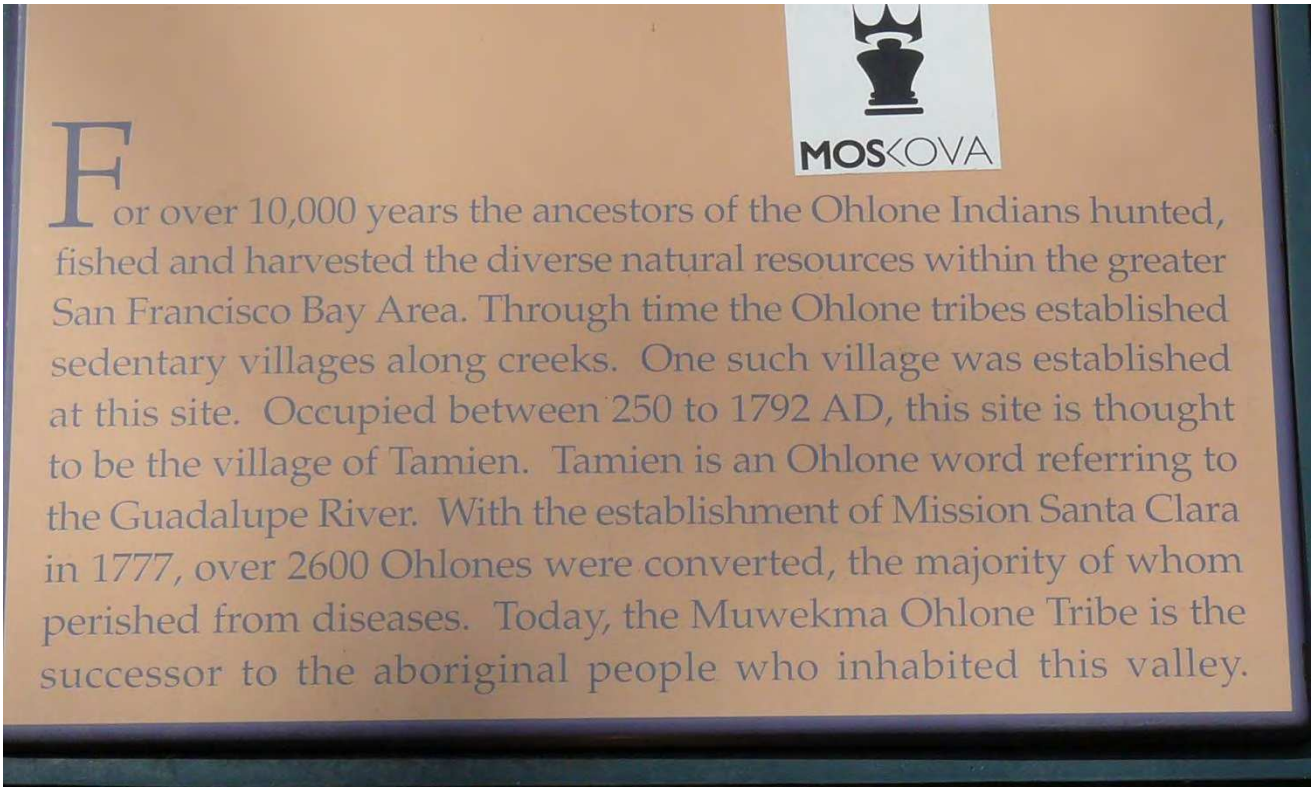


Figure 53: The Site of Tamien an Ohlone Indian Village (*Thámien Rúmmeytak* Site)

Transcription of the Historical Marker Village of Tamien Text

> For over 10,000 years the ancestors of the Ohlone Indians hunted, fished and harvested the diverse natural resources within the greater San Francisco Bay Area. Through time the Ohlone tribes established sedentary villages along creeks. One such village was established at this site. Occupied between 250 and 1792 AD, this village is thought to be the village of Tamien [***Thámien***]. Tamien is an Ohlone word referring to the Guadalupe River. With the establishment of the Santa Clara Mission in 1777, over 2600 Ohlones were converted, the majority of whom perished to diseases. Today the Muwekma Ohlone Tribe is the successor to the aboriginal people who inhabited this valley.

Public Art over the Park Avenue Bridge: Eagle, Coyote and Hummingbird

On May 13, 1994 the City of San Jose unveiled the public art displaying Eagle, Coyote and Hummingbird and a version of the Ohlone Creation Narrative honoring the Muwekma Ohlone Tribe and later immigrants to San Jose, California with a plaque and sculptures (**Figures 54– 58).**

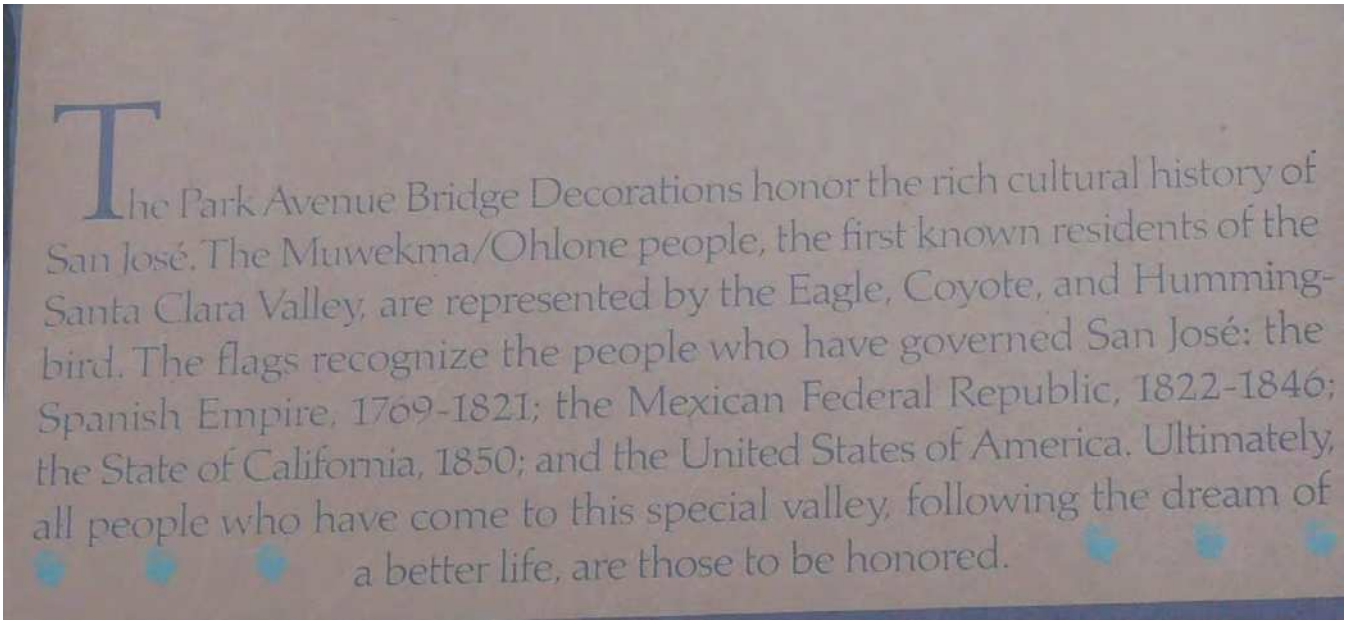


Figure 54: Honoring Plaque over the Park Avenue Bridge Downtown San Jose

Transcription of the Informational Plaque on the Park Avenue Bridge

The Park Avenue Bridge Decorations honor the rich cultural history of San Jose. The Muwekma Ohlone people the first know residents of the Santa Clara Valley, are represented by the Eagle, Coyote and Hummingbird. The flags recognize the people who have governed San Jose: the Spanish Empire, 1769-1821; the Mexican Federal Republic, 1822-1846; the State of California, 1850; and the United States of America. Ultimately all people who have come to this special valley following the dream of a better life, are those to be honored.

The Muwekma Ohlone Tribute (Presented by the Guadalupe River Park Conservancy)

"The Muwekma Ohlone people, Native Americans who once lived along the Guadalupe River, are honored with animal sculptures important to their tradition, on the Park Avenue Bridge. These include the Coyote, the Hummingbird, and the Eagle. The four flags that fly from atop the bridge represent the past and present governments of the area: Spain, Mexico, California and the United States. The Coyotes were created by artist Peter Schiffrin; the Eagle and Hummingbirds by Tom Andrews. The Coyote, Hummingbird and Eagle represent the Muwekma Ohlone creation story. Coyote was the father of the human race who was responsible for creating people and teaching them how to live properly. Hummingbird was wise and clever. Eagle was a leader" (http://www.grpg.org/public-art_).

Figure 55: Eagle with Two Humming Birds above

Figure 56: Coyote (One of the First People)

Figure 57: Hummingbird (One of the three First People in Creation Narrative)

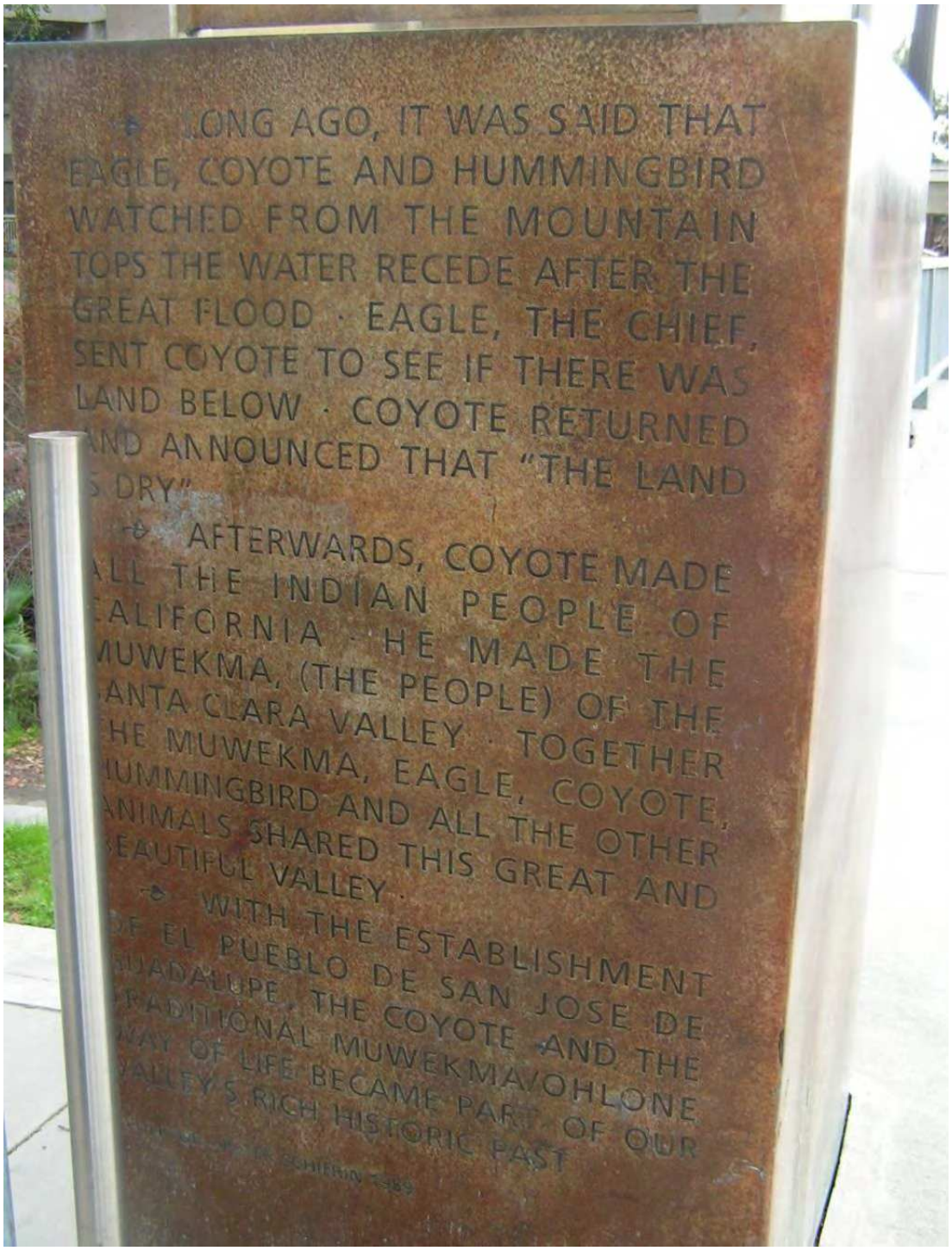


Figure 58: One of the Four Corner Plaques Honoring the Muwekma Ohlone Tribe

For a transcription of the text engraved on one of the cornerstones at the Park Avenue Bridge and information about this Commemoration honoring the History of San Jose and Muwekma Ohlone Tribe (see **Figure 59** below):

Eagle

Hummingbird

Coyote

Long ago, it was said that Eagle, Coyote, and Hummingbird watched from the mountain tops the water recede after the great flood. Eagle, The Chief, sent Coyote to see if there was land below. Coyote returned and announced that "the land is dry".

Afterwards, Coyote made all the Indian people of California. He made the Muwekma, (The People) of the Santa Clara Valley. Together the Muwekma, Eagle, Coyote, Hummingbird and all the other animals shared this great and beautiful valley.

With the establishment of the El Pueblo De San José De Guadalupe, the Coyote and the traditional Muwekma / Ohlone way of life became part of our valley's rich historic past.

Muwekma / Ohlone creation story

Commemoration of the history of San José

The Muwekma / Ohlone people
The Spanish Empire
The Mexican Federal Republic
The State of California
The United States of America

Sponsored by The Redevelopment Agency of the City of San Jose

May 13, 1994

Figure 59: Commemoration of the History of San Jose and the Muwekma Ohlone Tribe

Figure 60: CalTrain Tamien Station Plaque

Figure 61: Tamien CalTrain Station Plaque Honoring Muwekma Ohlone

Figure 62: Muwekma Ohlone Tribe Campout 2003

Figure 63: Muwekma Tribal Big Feast and Annual Meeting (2010)

Figure 64: Muwekma Tribal Leadership at the Dedication Ceremony for the Roberto Antonio Balermino Neighborhood Park

Figure 65: Muwekma Tribal Representatives at the Opening of the "Back from Extinction" and "Cement Prairie" Exhibits at the New Museum in Los Gatos (2016)

Figure 66: Muwekma Information Booth at Stanford Powwow (May 2018)

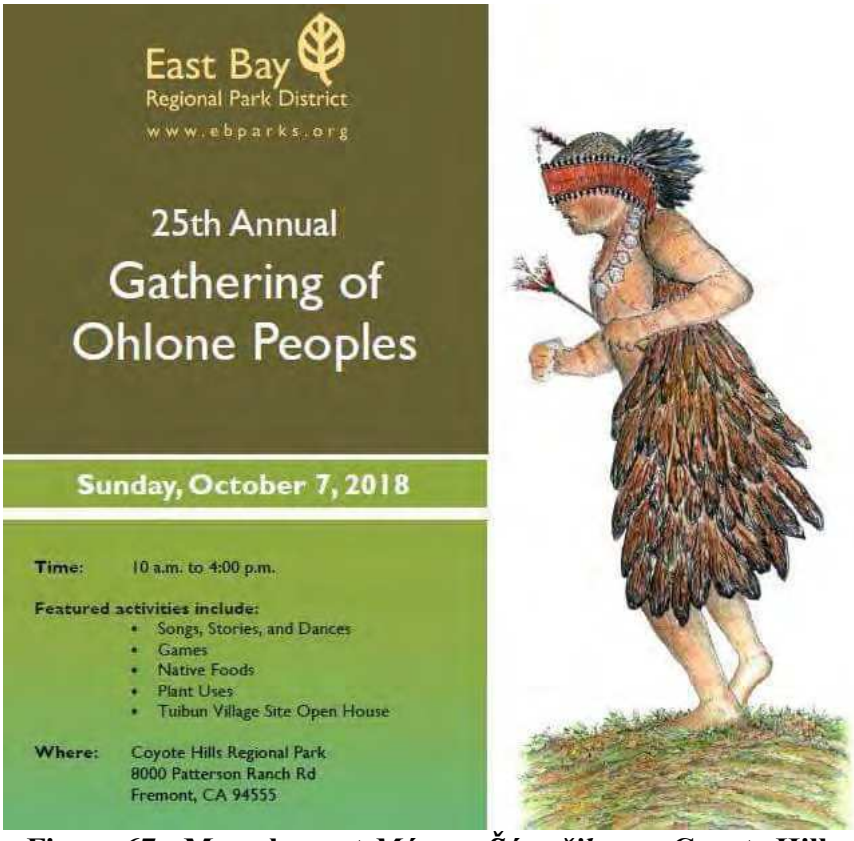


Figure 67: Muwekma at *Máyyan Šáatošikma* – Coyote Hills East Bay Regional Park Ohlone Gathering (October 2018)

Figure 68: October 8, 2018 Muwekma Ohlone Tribal Council opened the First Indigenous Peoples Day Celebration at Yerba Buena Gardens within the Tribe's Yelamu Territory in San Francisco

Figure 69: Muwekma Leadership Singing Welcoming Song at the Inaugural California Indian Flag Raising Event City of Milpitas (November 1, 2018)

CALIFORNIA LEGISLATURE

Assembly

CERTIFICATE OF RECOGNITION

PRESENTED TO

MUWEKMA OHLONE TRIBE OF THE SAN FRANCISCO BAY AREA

IN RECOGNITION OF THE

Inaugural California Indian Heritage Flag Raising

For creating a space for the City of Milpitas and its residents to honor the tribes and nations whose land we reside on. Your tireless efforts to demanding a more just and equitable world for all indigenous people is truly and inspiration to us all. On behalf of the 27th Assembly District, thank you for your commitment to celebrating the first people of this continent and congratulations on the success of your Inaugural California Indian Heritage Flag Raising.

Dated this 1st day of November, 2018

HONORABLE ASH KALRA
Chair, Committee on Aging and Long Term Care
27th Assembly District- San Jose

Figure 70: Assemblyman Ash Kalra Honoring the Muwekma Tribe during the Inaugural California Indian Flag Raising Event City of Milpitas (November 1, 2018)

Figure 71: Muwekma Town Hall Tribal Meeting Stanford University (November 2018)

Figure 72: Opening Ceremony with Representatives of the Muwekma Ohlone Tribe and Keynote Address Dolores Huerta American Anthropological Association Meeting (November 14, 2018)

In 2019, the downtown San Jose community, school district and students attending the Burnett Middle School voted to rename that school after the **Muwekma Ohlone Tribe**. Elizabeth Barcelos writing for the online San Jose Spotlight wrote on September 24, 2019:

> The school's outgoing namesake is California's first governor, Peter Burnett, whose racist policies included the Chinese Exclusion Act of 1882 and attempts to keep black Americans out of California. He also believed that Native Americans should be eliminated from the newly-created state, making the change to Ohlone an especially strong statement.
>
> The Ohlone people were the original inhabitants of what is now San Jose. Ohlone College in Fremont is also named after them. According to the ballot, "By choosing this name, we will be teaching students about the Ohlone people while honoring their historical importance in the Santa Clara Valley."

Figure 73: Renaming Peter Burnett Academy to Muwekma Ohlone Middle School (June 2019)

San Francisco Maritime National Historical Park and Museum ¶

Indigenous·Peoples'·Day,·October·14th¶

FOR·IMMEDIATE·RELEASE·10-12-2019¶

MAKING·HISTORY--·MUWEKMA·OHLONE·TRIBE·INFORMATION·&·CULTURAL·EXHIBIT·AT·THE·SAN·FRANCISCO·MARITIME·NATIONAL·HISTORIC·PARK·AND·MUSEUM.¶

The·Muwekma·Ohlone·Tribe·are·presenting·a·one·day·only·cultural·exhibit·and·knowledge·giving·event°at·the°San·Francisco·Maritime·National·Historical·Park·and·Museum.·¶

The·Muwekma·Exhibit·is·in·Honor·of·Indigenous·Peoples'·Day,·October·14th,·an·important·day·of·remembrance·of·our·ancestors·and·an·important·day·to·rightly·dispel·the·myth·that·Columbus·discovered·America.¶

¶

From·the·Tribal·Vice·Chairwoman:¶

↵

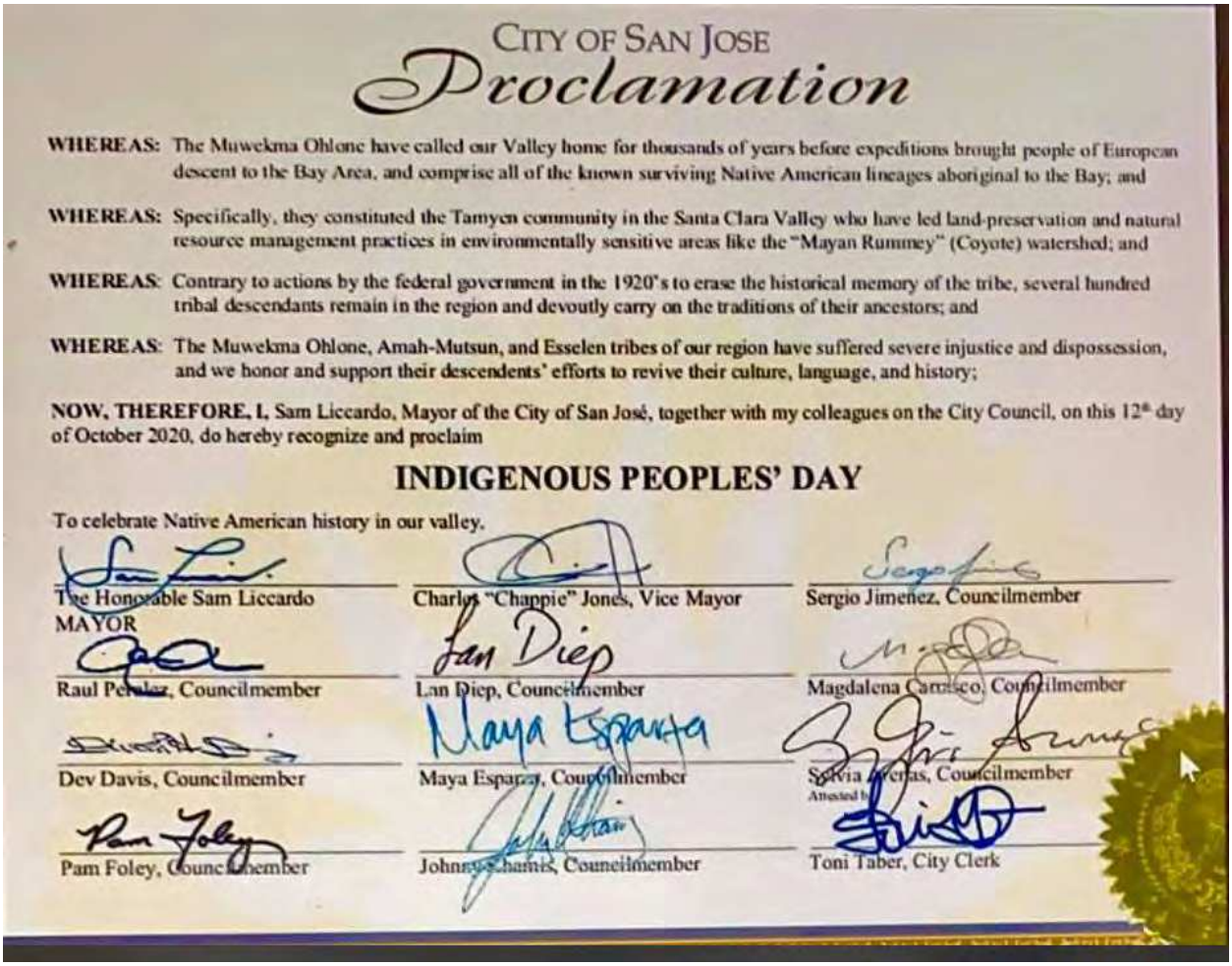
We·celebrate·the·Survival,·Resilience·and·Contributions·of·the·Indigenous·Peoples·who·have·lived·in·this·area·for·more·3,000·years.·We·honor·the·special·contributions·that·native·peoples·all·over·the·world·continue·to·give·to·our·thriving·societies.¶

↵

We·invite·you·into·our·community·to·learn·about·our·Muwekma·Ohlone·Tribe·&·experience·our·Cultural·Exhibit.·Hope·to·see·you·this·Monday·at·the·San·Francisco·Maritime·National·Historic·Park·and·Museum.°https://www.nps.gov/safr/index.htm°499·Jefferson·Street,·at·the·corner·of·Hyde·Street,·San·Francisco,·CA·94109.·Museum·Hours:·9:30am·to·5·pm.·For·more·information·on·the·Muwekma·Ohlone·Tribe·of·the·San·Francisco·Bay·Area·visit·muwekma.org.·Find·us·on·Facebook·www.facebook.com/muwekma/·Mákkin·Mak·Muwékma·Wolwóolum·~·We·Are·Muwekma·Ohlone!·Aho!¶

Muwekma·Ohlone·Tribal·Members·paddling·in·a·canoe·in·the·Aquatic·Cove,·just·as·their·ancestors·once·traveled·in·the·beautiful·SF·Bay·waters¶

Figure 74: Muwekma Paddling a Tule Boat in San Franicsco Bay (October 14, 2019)



CITY OF SAN JOSE

Proclamation

WHEREAS: The Muwekma Ohlone have called our Valley home for thousands of years before expeditions brought people of European descent to the Bay Area, and comprise all of the known surviving Native American lineages aboriginal to the Bay; and

WHEREAS: Specifically, they constituted the Tamyen community in the Santa Clara Valley who have led land-preservation and natural resource management practices in environmentally sensitive areas like the "Mayan Rummey" (Coyote) watershed; and

WHEREAS: Contrary to actions by the federal government in the 1920's to erase the historical memory of the tribe, several hundred tribal descendants remain in the region and devoutly carry on the traditions of their ancestors; and

WHEREAS: The Muwekma Ohlone, Amah-Mutsun, and Esselen tribes of our region have suffered severe injustice and dispossession, and we honor and support their descendents' efforts to revive their culture, language, and history;

NOW, THEREFORE, I, Sam Liccardo, Mayor of the City of San José, together with my colleagues on the City Council, on this 12th day of October 2020, do hereby recognize and proclaim

INDIGENOUS PEOPLES' DAY

To celebrate Native American history in our valley.

The Honorable Sam Liccardo
MAYOR

Charles "Chappie" Jones, Vice Mayor

Sergio Jimenez, Councilmember

Raul Peralez, Councilmember

Lan Diep, Councilmember

Magdalena Carrasco, Councilmember

Dev Davis, Councilmember

Maya Esparza, Councilmember

Sylvia Arenas, Councilmember

Pam Foley, Councilmember

Johnny Khamis, Councilmember

Toni Taber, City Clerk

Figure 75: Proclamation from the San Jose City Council (October 12, 2020)

Figure 76: Muwekma Tribal Flag

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APPENDIX 3.9-1

Draft Phase I Environmental Site Assessment Report

ARCADIS

Santa Clara Unified School District

DRAFT PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Patrick Henry School Campus, Santa Clara Unified School District Farm, and Peterson Middle School Campus

1095 & 1055 Dunford Way, 1380 Rosalia Avenue

Sunnyvale, California

Date Prepared: June 20, 2022

Overall Viability Date: October 20, 2022

Draft Phase I Environmental Site Assessment Report

Patrick Henry School Campus, Santa Clara Unified School District Farm, Peterson Middle School Campus: 1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California

June 20, 2022

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Executive Summary

Arcadis U.S., Inc. (Arcadis) was retained by Santa Clara Unified School District (SCUSD) to conduct a Phase I Environmental Site Assessment (ESA) for a portion of the Santa Clara County Assessor Parcel Number (APN) 31310004, excluding the Peterson Middle School structures (subject property). The subject property includes a portion of the Peterson Middle School (specifically, a current parking lot), the Patrick Henry School Campus (including recreational fields), and the SCUSD Farm located at 1380 Rosalia Avenue, 1095 Dunford Way, and 1055 Dunford Way, respectively, in Sunnyvale, California (**Figures 1 and 2**). The Phase I ESA was performed in general accordance with the ASTM International (ASTM) Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21).

Subject Property Layout Description

The subject property comprises an approximately 54-acre area that is improved with the following permanent buildings within the Patrick Henry School Campus that are summarized on **Table 1**. Structures in the remaining portions of the subject property include small sheds, Conex boxes, and temporary portable classrooms and trailer buildings that will be removed prior to construction.

Current Building Name (Historical Building Name)	Building Size (square feet)	Purpose
Building E/Building 800 (Building A)	13,328	Former Classroom Building and Conference Room
Building 600 (Building B)	4,223	Former Classroom Building and Storage Area
Building B/Building 500 (Building C)	16,685	Appleseed Montessori and SCUSD Classrooms
Building C (Building D)	12,054	Silicon Valley Academy
Building D (Building E)	12,758	New Concept Chinese School and SCUSD Administrative Offices
Building 300 (Building F)	9,395	Auditorium and Storage Area
Building G	5,170	SCUSD Print Shop/Music Instrument Storage

The buildings listed above are wooden-frame buildings with a plaster exterior that are present in the eastern portion of the subject property. Other than current administrative operations in Building D and the SCUSD Print Shop in Building G, the remaining portions of the Patrick Henry School Campus buildings consist of vacant classrooms, an auditorium used for storage, and utility rooms. A pad-mounted transformer was observed on a concrete pad north of Building G with several large cables emanating from subgrade areas beneath the transformer pad. A pole-mounted transformer is also located south of the Patrick Henry School Campus along the southern boundary of the subject property

on Dunford Way. No labeling was visible regarding the polychlorinated biphenyl (PCB) content of oil within the unit and no staining or evidence of corrosion was noted on or around the units. The western portion of the Patrick Henry Campus consists of a gravel-paved storage area for Conex boxes, vehicle storage, and miscellaneous machinery and equipment storage. The Conex boxes are used for furniture storage and miscellaneous storage for the SCUSD maintenance staff. Arcadis observed five polyethylene tanks in the northeastern portion of the storage yard that were used off-site at a nearby high school for pool cleaning products. According to Mr. Maes, a Maintenance Lead for SCUSD, the tanks were emptied prior to storage at the subject property. Arcadis noted that the tanks appeared to be partially filled with accumulated stormwater. De minimis amounts of staining were observed on the gravel in the storage yard that was attributed to minor leaks and spills from automobile parking. The stains were observed underneath and around cars that were stored in the yard. The remaining portions of the Patrick Henry School Campus consisted of play areas, asphalt-paved parking lots north and south-adjacent to the school buildings, and landscaped and grassy areas east of the school.

The northeastern portion of the subject property along Teal Drive consists of a former soccer field, and small storage sheds that were most recently rented by a recreational soccer league. According to information reported in the EDR Radius Map Report and the Santa Clara Valley Water District (SCVWD), there are two former agricultural wells that have been abandoned at the subject property in the soccer field area and along the eastern boundary with Teal Drive.

The far northern portion of the subject property consists of an asphalt-paved parking lot for the Peterson Middle School, a temporary construction office building, recreational courts, and storage area for the SCUSD. According to Ms. Healy, the office is not currently in use and will be removed. De minimis amounts of hydrocarbon staining was observed on the asphalt-paved parking lot that was attributed to minor leaks and spills from automobiles.

The central portion of the subject property consists of a large grassy football field, track, and bleacher area with a corrugated metal storage building for concession and sports equipment. No areas of concern or staining were observed in this portion of the subject property.

The southwestern portion of the subject property encompasses the SCUSD Farm. The farm consists of mulch and compost storage areas in the eastern portion of the farm, small storage buildings, sheds, and orchard land in the northern portion of the farm, row crops and a storage barn in the central and southern portions of the farm, and a covered patio area and storage building in the western portion of the farm.

Operations

The subject property is owned by the SCUSD. The buildings within the Patrick Henry School Campus were used as classroom space and office space for the SCUSD, New Concept Chinese School, Silicon Valley Academy, and Appleseed Montessori School. The western portion of the Patrick Henry Campus operates as a print shop, storage area for musical instruments, storage yard for SCUSD vehicles, and Conex box storage for miscellaneous equipment. The central and western portions of the subject property are used as recreational fields, solar panels and associated machinery, and portable classroom storage. The southern portion of the subject property is operated as the SCUSD Farm with

areas for orchards and row crops. The northern portion of the subject property is used as an asphalt-paved parking lot for the Peterson Middle School.

Subject Property History

The subject property appeared in topographic maps as developed with four structures in the central portion of the subject property from as early as 1897 through at least 1902. By 1939, these structures had been demolished and the subject property had been redeveloped as part of a larger tract of orchard land. No significant changes were evident until 1960, when the eastern portion of the subject property was cleared and appeared to be under construction. Buildings A through E were constructed in 1960 and Buildings F and G were constructed in 1962. By 1963, the Patrick Henry Campus buildings, an asphalt-paved parking lot in the southeastern portion of the campus, garden and orchard areas in the central and northern portions of the school campus, and recreational court areas north of the building were visible in aerial photography. The area surrounding Building G in the western portion of the campus appeared to be under construction with areas of concrete or building materials. The area north of the school campus was cleared and the western portion of the subject property remained developed with orchards.

By 1968, a small structure was constructed north of Building G in the footprint of the current transformer pad in the western portion of the school campus and the orchard areas in the remaining portions of the subject property had been cleared. The central portion of the subject property was redeveloped with the current football field and track and the western portion was developed with two baseball fields. The far northern portion of the subject property was cleared and appeared to be used for automobile parking. By 1974, bleachers had been constructed along the western portion of the football field and track and several small, cleared areas were visible in the field north of the school campus. The far northern portion of the subject property was further developed with the current asphalt-paved parking lot for the adjoining Peterson Middle School. No significant changes were evident until 1982, when the current corrugated metal shed building was visible north of the bleachers in the central portion of the subject property and a large, cleared area was visible in the footprint of the former baseball field in the southern portion of the subject property. No changes were visible until 1991, when multiple small buildings were visible south of Building G and north of the football field and a rectangular building or Conex box was visible in the far northern portion of the subject property. No changes were evident until 1998, when a new, practice field for the San Jose Saber Cats (arena football) was constructed north of Building G. By 2000, the large rectangular structure north of the building was visible as an enclosed recreational court and by 2002, a new structure had been constructed west of Building G. No changes were evident until 2005, when the area northwest of Building G was used for parking and additional Conex boxes and storage equipment were visible in this area beginning in 2007. By 2008, the southwestern portion of the subject property had been developed with the Full Circle Farm run by the Sustainable Community Gardens and associated buildings and the area northwest of the farm had been cleared and appeared to be used for Conex box or portable classroom storage. By 2013, the current solar panels were constructed in the western portion of the subject property. No changes were evident until 2016, when the practice field for the San Jose Saber Cats and two structures west and northwest of Building G were removed. These areas were further developed as storage areas with portable classroom buildings in the northwestern portion of the subject property and Conex boxes and vehicle storage in the northwestern portion of the Patrick Henry Campus through the present.

Prior owners of the subject property include the Pacific Manufacturing Company, who sold the land to A.H. Buehren on March 3, 1899 as well as Ignasio Rosalia Castello; Dokenic, Lena, Salvtaore, and Rosie Cirrincione; and Frank L., Pearl, Salvatore, and Pauline Teresi,who sold portions of the subject property to the Jefferson Union High School District of Santa Clara County, a former operating name for the SCUSD, between 1955 and 1962. The Patrick Henry School Campus was historically referred to as Patrick Henry Junior High School as of August 1960. The campus was operated as a middle school in the 1960s and 1970s. I 1979, the Patrick Henry School was closed and the school campus was used for administrative office space. Portions of the campus were also rented out to other private schools including the Palmer College of Chiropractic West, who used Building G for cadaver storage for their anatomy and physiology labs. Other tenants at the school have included AppleSeed Academy, Christian Church Scholars, River of Life, Silicon Valley School, New Concept Chinese School, Mount Bell Academy, and Dynasty Academy. With the exception of the SCUSD administrative office space in Building D and a District print shop and music instrument storage area in Building G, the school is currently vacant. The remaining portions of the subject property have been historically developed with orchards, recreational fields (soccer, baseball), and the SCUSD Farm.

Surrounding Area

At the time of Arcadis's site reconnaissance, surrounding area properties consisted primarily of residential properties located along Dunford Way (south of the subject property), Teal Drive (east of the subject property), Norman Drive (west of the subject property), Bryant Way (north of the subject property), and Roadrunner Terrace (northeast of the subject property). Raynor Park Christian Church and the Raynor/Stratford School were located south-adjacent to the subject property across Dunford Way.

Findings and Opinion

Arcadis has performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM E1527-21 for Phase I ESAs. This assessment has revealed the following recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), historical recognized environmental conditions (HRECs), and noteworthy conditions as defined in Section 1 of this Phase I ESA Report.

Recognized Environmental Conditions

The following RECs were identified in connection with the subject property:

Agricultural Land and Orchard Use: The subject property was developed as part of a larger agricultural tract of land from at least 1939 through 1960, when the Patrick Henry School Campus was constructed. The southern portion of the subject property was more recently redeveloped as the SCUSD Farm from 2008 through the present.

Based on the use of the subject property as a historical orchard, the application of agricultural chemicals is a potential REC for the subject property in accordance with the August 2008 Department of Toxic Substances Control (DTSC) Interim Guidance.

Lead-based Paint: Lead-based paint was commonly used for a variety of purposes, until 1978 when federal regulations banned consumer uses of lead-containing paint, though exceptions applied for certain commercial and other paints. Federal regulations require certain disclosures regarding lead-based paint for housing constructed prior to 1978. The buildings at the subject property were constructed in 1960 and 1962, which pre-dates the ban on consumer uses of lead-containing paint. Painted surfaces were observed throughout the Patrick Henry campus and several buildings had chipped, peeling, and deteriorating paint areas along the sides of the structures. No information was available regarding lead sampling conducted at the school site. It is Arcadis' understanding that the onsite buildings will be properly abated prior to demolition.

Based on the construction dates of the building and the condition of the paint at the school, the potential historical use of lead-based paint on site structures and peeling off the structure and contacting surficial soil is a potential REC in soil for the subject property in accordance with the June 2006 DTSC Interim Guidance.

Polychlorinated Biphenyls (PCBs): PCBs are a group of organic chemicals that were used historically in a variety of industrial and chemical applications, including cooling oil in transformers prior to 1979. PCBs were manufactured in the United States from 1929 until 1979, when PCB manufacturing was banned due to the toxicity of PCBs.

One pad-mounted electrical transformer was observed north of Building G within a larger concrete pad. No labels were present to indicate the PCB content of the transformer and no information was available regarding historical transformers in use at the property. In addition, a pole-mounted transformer is located along the southern boundary of the subject property on Dunford Way. Given the age of the buildings, it is possible that the transformers contain PCBs. The potential presence of PCBs in soil adjacent to the transformers at the subject property is a potential REC in accordance with the June 2006 DTSC Interim Guidance.

Termiticide Application: OCPs were historically used as insecticides for termite controls around wooden structures. The buildings at the Patrick Henry School Campus were constructed in 1960 and 1962 and are wood-framed buildings with plaster exteriors. Based on the construction dates, the potential presence of termiticides in soil adjacent to the structures at the subject property is a potential REC in accordance with the June 2006 DTSC Interim Guidance.

Controlled Recognized Environmental Conditions

No CRECs were identified in connection with the subject property.

Historical Recognized Environmental Conditions

No HRECs were identified in connection with the subject property.

Noteworthy Conditions

The following noteworthy conditions were identified in connection with the subject property:

Asbestos Containing Building Materials (ACBMs): The buildings at the Patrick Henry campus were constructed in 1960 and 1962. Based on the construction dates and prior surveys that have been conducted at the school, ACBMs are likely present at the subject property and represent a noteworthy condition.

Naturally Occurring Asbestos: According to a 2007 Geologic Map of the Cupertino and San Jose West quadrangles, Santa Clara, and Santa Cruz Counties, California, the subject property is located approximately 7 miles northeast of the nearest serpentine rock deposits. Given that the outcrops of the serpentine rock deposits are within the 10-mile radius established by the Interim Guidance for Naturally Occurring Asbestos (NOA) at School Sites (DTSC 2004), the potential presence of NOA is a noteworthy condition for the subject property. It is important to note that NOA is not identified as a REC in the Phase I ESA as naturally-occurring rock deposits do not constituent a REC under CERCLA and therefore are not a REC under ASTM.

Historical Vehicle Storage Operations: The area west of the Building G has been used for automobile and equipment storage since at least 2007. During site reconnaissance, Arcadis observed multiple vehicles stored in this area including damaged vehicles. Small amounts of staining were observed on the gravel within this area that was attributed to minor leaks and spills. As such, the vehicle storage in this area is a noteworthy condition for the subject property.

Historical Well: According to the EDR Radius Map Report database and the California Department of Water Resources Website, a former well was located in the current soccer field in the northern portion of the subject property. The well was historically used as a water supply well and was last sampled in May and September 1949. It is unclear if the well was properly abandoned as no evidence of the current well was visible during site reconnaissance. Arcadis submitted a records request to the California Department of Water Resources and the Santa Clara Valley Water District and no records were available. Given the absence of information regarding the well or proper closure of the well, it is a noteworthy condition for the subject property.

Significant Data Gaps

No significant data gaps were identified during this Phase I ESA.

1 Introduction

Arcadis U.S., Inc. (Arcadis) was retained by Santa Clara Unified School District (SCUSD) to conduct a Phase I Environmental Site Assessment (ESA) for portion of the Santa Clara County Assessor's Parcel Number (APN) 31310004, excluding the Peterson Middle School structures (subject property, **Figures 1 and 2**). The subject property includes a portion of the Peterson Middle School (specifically, a current parking lot), the Patrick Henry School Campus (including recreational fields), and the SCUSD Farm located at 1380 Rosalia Avenue, 1095 Dunford Way, and 1055 Dunford Way, respectively, in Sunnyvale, California.

1.1 Purpose

Arcadis understands that the purpose for conducting this Phase I ESA is to assess and document the current status of environmental impact conditions at the subject property.

1.2 Scope of Work

The Phase I ESA was performed in general accordance with the ASTM International (ASTM) Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21), including the limitations outlined in the standard. The goal of the Phase I ESA was to identify recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), and historical recognized environmental conditions (HRECs) associated with the subject property.

Findings from this Phase I ESA are classified and defined as follows:

- A REC is defined in ASTM E1527-21 as "the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment."
- A CREC is defined in ASTM E1527-21 as "recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations)."
- A HREC is defined in ASTM E1527-21 as "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations)."
- A de minimis condition is defined in ASTM E1527-21 as "condition related to a release that generally does not present a threat to human health or the environment and that generally would

not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a de minimis condition is not a recognized environmental condition nor a controlled recognized environmental condition."

- Noteworthy Conditions are considered environmental issues that do not clearly fall within the ASTM definition of a REC, CREC, HREC, or de minimis condition, fall outside the scope of the ASTM practice (e.g., asbestos), or are considered a business environmental risk.

As required by ASTM E1527-21, the scope of work for this Phase I ESA included the following elements, except as otherwise indicated as a data gap in Section 8.8 or as a deviation in Section 8.9 of this report:

- **Review of User-provided Information:** Arcadis requested and reviewed documents and information provided by the User.
    - The User of this Phase I ESA is Santa Clara USD.
- **Review of Physical Setting Resources:** Arcadis contracted Environmental Data Resources, Inc. (EDR) to provide a report (EDR Report) summarizing physical setting information for the subject property and surrounding area. Arcadis also reviewed other physical setting resources.
- **Review of Government Records:** The EDR Report also summarizes federal, state, tribal, and local environmental record source database listings for the subject property and for the adjoining and surrounding properties within specified search radii, as required by ASTM E1527-21. Arcadis also reviewed regulatory agency files and records, as deemed necessary and documented in Section 9.2 of this Report.
- **Review of Historical Records:** Arcadis reviewed historical records to understand the past uses of the subject property, adjoining properties, and surrounding area.
- **Site reconnaissance**: Arcadis completed a site reconnaissance to visually observe exterior areas and accessible interior common areas and representative occupant spaces. Arcadis did not look under floors, above ceilings, or behind walls. Adjacent properties and the surrounding area were viewed from the subject property and/or from publicly accessible properties or rights-of-way.
    - Ms. Divya Mehta of Arcadis performed the site reconnaissance on April 16th and April 25th, 2022.
    - During the site reconnaissance, the temperature was approximately 60° Fahrenheit, and conditions were observed to be sunny.
- **Interviews with Owners, Operators, and Occupants:** Arcadis interviewed Ms. Michal Healy, Director of Facility Development and Planning (associated with the subject property for 8 years), Ms. Angeline Ruiz, Facility Development and Planning Technician (associated with the subject property for 4 years), and Mr. Dan Maes, Maintenance Lead (associated with the subject property for 7 years) during the site reconnaissance. Ms. Ruiz and Ms. Healy are the key site managers, as defined in ASTM E1527-21.
- **Interviews with Local Government Officials:** Arcadis interviewed government officials via submission of a request for information regarding the subject property.
- **Evaluation and Report:** This Phase I ESA Report summarizes and documents the Phase I ESA.

The scope of work for the Phase I ESA also included the following:

- A cursory visual observation for apparent wetland areas in accessible exterior areas of the subject property and review of readily available wetlands information to identify wetlands that have been previously delineated and/or reported to be present on the subject property.
- A cursory visual observation to identify typical suspect asbestos-containing materials (ACMs) and lead-based paint and a review of associated documentation.
- A review of radon test data for the subject property area as included in the EDR Report.
- A cursory visual observation to identify apparent mold in interior areas, and a review of associated documentation.
- A high-level assessment to identify current or historical use, storage, or disposal of per- and polyfluoroalkyl substances (PFAS) at the subject property, and a review of the EDR Report to identify known releases of PFAS at adjoining or surrounding properties (within the search distances specified in ASTM E1527-21) that are likely to impact the subject property. Arcadis notes that the search radii specified in ASTM E1527-21 and the inherent limitations of PFAS-related database information may not be suited to fully evaluate the potential for PFAS impacts from off-property sources.

The scope of work for this Phase I ESA did not include the collection or analysis of soil, water, air, other environmental media, transformer/electrical fluids, ACMs, lead-based paint, other building materials, mold, or other samples.

2 Subject Property Setting and Description

2.1 Subject Property Location

The subject property is located at 1095 Dunford Way, Sunnyvale, Santa Clara County, California **(Figure 1)**. The subject property comprises a portion of one 71-acre parcel identified by the Santa Clara County Assessor's Office as Assessor Parcel Number (APN) 31310004. The subject property is located along the northwestern corner of Dunford Way and Teal Drive. Land use in the surrounding area consists of residential, agricultural, school, and commercial properties.

2.2 Subject Property Layout Description

The subject property comprised an approximately 54-acre area that was improved with the following permanent buildings within the Patrick Henry School Campus that are summarized on **Table 1**. Structures in the remaining portions of the subject property include small sheds, Conex boxes, and temporary portable classrooms and trailer buildings that will be removed prior to construction.

Table 1. On-property Buildings

Current Building Name (Historical Building Name)	Building Size (square feet)	Purpose
Building E/Building 800 (Building A)	13,328	Former Classroom Building and Conference Room
Building 600 (Building B)	4,223	Former Classroom Building and Storage Area
Building B/Building 500 (Building C)	16,685	Appleseed Montessori and SCUSD Classrooms
Building C (Building D)	12,054	Silicon Valley Academy
Building D (Building E)	12,758	New Concept Chinese School and SCUSD Administrative Offices
Building 300 (Building F)	9,395	Auditorium and Storage Area
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on Dunford Way. No labeling was visible regarding the polychlorinated biphenyl (PCB) content of soil within the unit and no staining or evidence of corrosion was noted on or around the units. The western portion of the Patrick Henry Campus consists of a gravel-paved storage area for Conex boxes, vehicle storage, and miscellaneous machinery and equipment storage. The Conex boxes are used for furniture storage and miscellaneous storage for the SCUSD maintenance staff. Arcadis observed five polyethylene tanks in the northeastern portion of the storage yard that were used off-site at a nearby high school for pool cleaning products. According to Mr. Maes, ae Maintenance Lead for SCUSD, the tanks were emptied prior to storage at the subject property. Arcadis noted that the tanks appeared to be partially filled with accumulated stormwater. De minimis amounts of staining were observed on the gravel in the storage yard that was attributed to minor leaks and spills from automobile parking. The stains were observed underneath and around cars that were stored in the yard. The remaining portions of the Patrick Henry School Campus consisted of play areas, asphalt-paved parking lots north and south-adjacent to the school buildings, and landscaped and grassy areas east of the school.

The northeastern portion of the subject property along Teal Drive consists of a former soccer field, and small storage sheds that were most recently rented by a recreational soccer league. According to information reported in the EDR Radius Map Report and the SCVWD, there are two former agricultural wells that have been abandoned at the subject property in the soccer field area and along the eastern boundary with Teal Drive.

The far northern portion of the subject property consists of an asphalt-paved parking lot for the Peterson Middle School, a temporary construction office building, recreational courts, and storage area for the SCUSD. According to Ms. Healy, the office is not currently in use and will be removed. De minimis amounts of hydrocarbon staining was observed on the asphalt-paved parking lot that was attributed to minor leaks and spills from automobiles.

The central portion of the subject property consists of a large grassy football field, track, and bleacher area with a corrugated metal storage building for concession and sports equipment. No areas of concern or staining was observed in this portion of the subject property.

The southwestern portion of the subject property encompasses the SCUSD Farm. The farm consists of mulch and compost storage areas in the eastern portion of the farm, small storage buildings, sheds, and orchard land in the northern portion of the farm, row crops and a storage barn in the central and southern portions of the farm, and a covered patio area and storage building in the western portion of the farm.

Photographs of the subject property and surrounding areas were taken to document current conditions and are included in **Appendix A**.

2.2.1 Heating and Cooling

One large natural gas-fired boiler unit is located in a utility room in the northwestern portion of Building C that was used to provide heat and hot water to most of the buildings on the Patrick Henry School Campus. One smaller natural gas-fired boiler was located in the southern portion of Building E/Building 800. Multiple electric-powered mini split units and packaged electric and natural gas-fired units are used to heat and cool the remaining buildings and are housed on the roof of the buildings. Multiple

small electric-powered mini air conditioning units were observed for classrooms in Buildings B and C that are mounted along the side of the buildings.

2.3 Operations

The subject property is owned by the SCUSD. The buildings within the Patrick Henry School Campus were used as classroom space and office space for the SCUSD, New Concept Chinese School, Silicon Valley Academy, and AppleSeed Montessori School. The western portion of the Patrick Henry Campus operates as a print shop, storage area for musical instruments, storage yard for SCUSD vehicles, and Conex box storage for miscellaneous equipment. The central and western portions of the subject property are used as recreational fields, solar panels and associated machinery, and portable classroom storage. The southern portion of the subject property is operated as the SCUSD Farm with areas for orchards and row crops. The northern portion of the subject property is used as an asphalt-paved parking lot for the Peterson Middle School.

2.4 Physical Setting

2.4.1 Topography

According to information obtained from the U.S. Geological Survey (USGS) 7.5 Minute Series Topographic Map of the Cupertino and San Jose West, California quadrangles dated 2018, the subject property is at an approximate elevation of 124 feet above mean sea level and is generally flat with a slight slope to the northeast. The topography of the surrounding area is also flat with a general topographic gradient to the northeast.

2.4.2 Geology

No previous environmental investigation reports were available for the subject property; therefore, property-specific geology information was not available. Geologic information in the EDR Report **(Appendix B)** specifies that the sediments beneath the subject property have been identified as part of the Quaternary Series of the Quaternary System of the Cenozoic Era. According to the United States Department of Agriculture (USDA) Soil Conservation Service, the subject property is underlain by the Botella soil component, which has a surface soil texture of clay loam and exhibits moderate infiltration rates.

According to a well completion report provided by the California Department of Water Resources (DWR) for a nearby public supply well, soils in the subject property area consist of gravel, sand, and clay from approximately 0 to 23 feet below ground surface (bgs). Deeper soils are a mix of gravel and coarse sands, hard clay, and sandy clays.

According to a 2007 Geologic Map of the Cupertino and San Jose West quadrangles, Santa Clara, and Santa Cruz Counties, California presented in the United States Geological Survey MapView Database, the subject property is underlain by alluvial sand, fine-grained, silt, and gravel. Where differentiated, these surficial sediments represent alluvial fan deposits at the base of slopes and the outer edge of fan areas. According to the database, the subject property is located approximately 7 miles northeast of the

nearest serpentine rock deposits. Given that the outcrops of the serpentine rock deposits are within the 10-mile radius established by the Interim Guidance for Naturally Occurring Asbestos (NOA) at School Sites (DTSC 2004), the potential presence of NOA is a Noteworthy Condition for the subject property.

2.4.3 Hydrology

2.4.3.1 Surface Water

No surface water bodies are located on the subject property. The closest surface water feature is man-made pond located north-adjacent to the subject property within the Bryan Osborne Nature Center. Other water bodies in the surrounding area included Calabazas Creek, located approximately 1,700 feet southeast of the subject property, and the San Francisco Bay located approximately 5 miles north of the subject property.

2.4.3.2 Wetlands

According to information obtained from the U.S. Fish and Wildlife Service (FWS) National Wetland Inventory (NWI) included in the EDR Report, no NWI-delineated wetland areas are located on the subject property. The closest delineated wetlands were identified approximately 0.75 miles southeast of the subject property along Calabazas Creek. During the Site reconnaissance, Arcadis did not observe apparent wetlands at the subject property. According to Ms. Healy and Ms. Ruiz, no wetlands have been delineated at the subject property.

2.4.4 Hydrogeology

According to the EDR Report and the DWR Website, a former well was located in the current soccer field in the northern portion of the subject property. The well was historically used as a water supply well and was last sampled in May and September 1949. No evidence of the well was visible during site reconnaissance. Arcadis submitted a records request to the DWR and no records were available. According to the SCVWD mapping database, a second well is mapped along the eastern boundary of the subject property. According to records provided by the SCVWD, the well was historically located 25 feet east of Teal Drive and is located at the east-adjoining residential neighborhood. No information was available from the SCVWD regarding the well reported in the EDR Report and the DWR Website. Based on the absence of this information, the well is a noteworthy condition for the subject property.

Arcadis reviewed documents associated with the former Panasonic, Intersil, and Siemens facilities that are located approximately 3,000 feet south (hydraulically upgradient) of the subject property. Several groundwater monitoring wells have been installed associated with these offsite facilities to evaluate the extent of chlorinated solvents in groundwater. According to a 1990 Phase II Investigation conducted by Beak Consultants Limited (Beak) and the most recent 5-Year Report conducted in September 2020 for the Intersil Inc. and Siemens Facility, regional groundwater underlying the area south of the subject property consists of the shallow water-bearing zones and the deep aquifer. The shallow water bearing unit has been divided into three main zones: A-zone, B-zone, and C-zone groundwater. According to the most recent 5-Year Report, the A-zone was found to extend from the top of the groundwater table at approximately 40 feet bgs to 115 to 125 bgs, B-zone groundwater was found from 130 to 150 feet bgs, and C-zone groundwater was found from 180 to 210 feet bgs. The deep aquifer was separated

from the C-zone groundwater by a thick aquitard and extends from approximately 300 to 500 feet bgs. Groundwater flow for the shallow water-bearing zones flows to the north and northeast. The four closest groundwater monitoring wells to the south of the subject property are PG-1B, S-3B, S-4C, LH-1C (**Figure 3**). These wells were most recently sampled in 2019 and trichloroethylene (TCE) and other chlorinated solvents were either not detected or were not detected above the 2019 groundwater vapor intrusion Regional Water Quality Control Board Environmental Screening Levels (RWQCB ESLs) for either the residential or commercial/industrial scenario. This investigation is discussed further in Section 6.3.

3 Subject Property History

3.1 Historical Subject Property Summary

The subject property appeared in topographic maps as developed with four structures in the western portion of the parcel from as early as 1897 through at least 1902. By 1939, these structures had been demolished and the subject property had been redeveloped as part of a larger tract of orchard land. No significant changes were evident until 1960, when the eastern portion of the parcel was cleared and appeared to be under construction. Buildings A through E were constructed in 1960 and Buildings F and G were constructed in 1962. By 1963, the Patrick Henry Campus buildings, an asphalt-paved parking lot in the southeastern portion of the campus, garden and orchard areas in the central and northern portions of the school campus, and recreational court areas north of the building were visible in aerial photography. The area surrounding Building G in the western portion of the campus appeared to be under construction with areas of concrete or building materials. The area north of the school campus was cleared and the western portion of the subject property remained developed with orchards.

By 1968, a small structure was constructed north of Building G in the footprint of the current transformer pad in the western portion of the school campus and the orchard areas in the remaining portions of the subject property had been cleared. The central portion of the subject property was redeveloped with the current football field and track and the western portion was developed with the current baseball field. By 1974, bleachers had been constructed along the western portion of the football field and track and several small, cleared areas were visible in the field north of the school campus. No significant changes were evident until 1982, when the current corrugated metal shed building was visible north of the bleachers. No changes were visible until 1991, when multiple small buildings were visible south of Building G and north of the football field. No changes were evident until 1998, when a new, practice field for the San Jose Saber Cats (arena football)was constructed north of Building G. By 2000, the large rectangular structure north of the building was visible as an enclosed recreational court and by 2002, a new structure had been constructed west of Building G. No changes were evident until 2005, when the area northwest of Building G was used for parking and additional Conex boxes and storage equipment was visible in this area beginning in 2007. By 2008, the southwestern portion of the subject property had been developed with the Full Circle Farm run by the Sustainable Community Gardens and associated buildings and the northwestern portion of the subject property had been cleared and appeared to be used for Conex box or portable classroom storage. By 2013, the current solar panels were constructed in the western portion of the subject property. No changes were evident until 2016, when the practice field for the San Jose Saber Cats and two structures west and northwest of Building G were removed. These areas were further developed as storage areas with portable classroom buildings in the northwestern portion of the subject property and Conex boxes and vehicle storage in the northwestern portion of the Patrick Henry Campus through the present.

Prior owners of the subject property include the Pacific Manufacturing Company, who sold the land to A.H. Buehren on March 3, 1899 as well as Ignasio Rosalia Castello; Dokenic, Lena, Salvtaore, and Rosie Cirrincione; and Frank L., Pearl, Salvatore, and Pauline Teresi, who sold portions of the subject property to the Jefferson Union High School District of Santa Clara County, a former operating name for the SCUSD, between 1955 and 1962. The Patrick Henry School Campus was historically referred to as

Patrick Henry Junior High School as of August 1960. The campus was operated as a middle school in the 1960s and 1970s. In 1979, the Patrick Henry School was closed and the school campus was used for administrative office space. Portions of the campus were also rented out to other private schools including the Palmer College of Chiropractic West, who used Building G for cadaver storage for their anatomy and physiology labs. Other tenants at the school have included Appleseed Academy, Christian Church Scholars, River of Life, Silicon Valley School, New Concept Chinese School, Mount Bell Academy, and Dynasty Academy. With the exception of the SCUSD administrative office space in Building D and a District print shop and music instrument storage area in Building G, the school is currently vacant prior to redevelopment. The remaining portions of the subject property have been historically developed with orchards, recreational fields (soccer, baseball), and the SCUSD Farm.

3.2 Historical Information Sources

A list of the sources reviewed **(Appendix C)** is presented in the table below; information from these sources is summarized in Section 3.1. Additional details regarding the records (such as the names of the publishers, titles of the publications, and years of publication for city directories, business directories, and historical maps; the names of the entities that produced aerial photographs, and dates or years that the photographs were taken) are included in the appended documents.

Table 2. Historical Information Sources

Type of Record	Dates of Information	Source
Aerial photographs and satellite imagery	1939, 1948, 1950, 1956, 1963, 1968, 1974, 1982, 1991, 1993, 1998, 2006, 2009, 2012, 2016	The EDR Aerial Photo Decade Package
Aerial photographs and satellite imagery	1948, 1985, 1991, 1993, 2000, 2000 through 2020	Google Earth Pro
Aerial photographs and satellite imagery	1948, 1953, 1956, 1960, 1968, 1980, 1982, 1987, 1991, 1993, 1998, 1999, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2018	Nationwide Environmental Title Research, LLC (NETR) Online
Fire insurance maps	No maps available	Certified Sanborn® Map Report
Property tax files	August 5, 1964	Property record card (Santa Clara County Property Search)
Recorded land title records	August 5, 1964	Property record card (Santa Clara County Property Search)
USGS topographic maps	1889, 1897, 1899, 1902, 1943, 1947, 1948, 1953, 1961, 1968, 1973, 1980, 1995, 2012, 2015, 2018	EDR Historical Topo Map Report with Quadmatch™
Local street directories	1963, 1964, 1968, 1975, 1982, 1985, 1986, 1991, 2001	EDR-City Directory Image Report

Type of Record	Dates of Information	Source
Building department records	1996 to 2007	EDR Building Permit Report
Zoning/land use records	2022	Sunnyvale Zoning Map (Sunnyvale Planning and Zoning Department)
Other	February 12, 2016	Title Record Report
Other	April 13, 2022	Interview with Ms. Healy and Ms. Ruiz
Other	May 15, 2022	User Questionnaire

3.3 Prior Environmental Assessments, Investigations, and Events

Arcadis reviewed the following environmental report for the subject property (Appendix D).

***Six-Month Surveillance Asbestos Hazard Emergency Response Act (AHERA) Report*, prepared by Hazmat Doc (Hazmat), dated June 12, 2020.**

Hazmat conducted an asbestos survey at the Patrick Henry School Campus in June 2020. This survey was an update to prior surveys conducted between May 2015 and November 2019 in accordance with federal AHERA requirements. Prior surveys identified numerous suspect ACBMs at the school including vinyl floor and associated mastic, floor tiles and associated mastic, caulking, ceiling tiles and associated mastic, plaster wall surfacing, fire door core insulation, and carpet mastic. The survey identified the following conditions:

- Numerous suspect ACBMs have been identified at the building through surveys conducted between 2015 and 2020; however, it does not appear that these materials have been sampled.
- Multiple tile, adhesive, and mastic samples were observed in fair condition; however, no abatement was done. Hazmat recommended that these materials be a managed in place; however, Arcadis noted that recommendations later in the report stated that damaged materials should be replaced.

Additional details regarding the specific locations and conditions of ACBMs identified at the Patrick Henry Campus are summarized in the survey report. The subject property address is listed in the DTSC Haznet database and Hazardous Waste Tracking System (HWTS) databases in 2001 for the removal of asbestos containing waste (California Waste Code 151). No further information was available from SCUSD regarding the materials removed during this abatement work. The historical use of ACBMs in buildings within the Patrick Henry School Campus are a noteworthy condition under ASTM 1527-21 for the subject property. It is Arcadis' understanding that the onsite buildings will be properly surveyed and abated for hazardous materials, including ACBMs, prior to demolition.

***Soil Report*, prepared by Soil Control Lab, dated April 16, 2022.**

SCUSD provided a copy of soil analysis that was conducted for the SCUSD Farm. Soil samples were collected and analyzed for multiple metals and soil health parameters (e.g., ammonia, nitrate, available

nitrogen) to support agricultural purposes and not for environmental purposes. Arcadis noted that the metals reported in the report were not detected above the applicable 2019 RWQCB ESLs or the 2022 DTSC screening levels. No screening levels were available for soil health parameter constituents.

4 Subject Property Regulatory Database Information

The EDR Report summarizes the federal, state, tribal, and local environmental record source regulatory database listings for the subject property and for the adjoining and surrounding properties within specified search radii, as required by ASTM E1527-21. The subject property address was listed on the databases indicated in the table below. Details of the database listings are discussed in the sections of this Report indicated below; database listings pertaining only to environmental compliance are not further discussed.

Table 3. Environmental Database Listings

Database Name	Database Description	Entity Name Listed	Report Section
California Haznet	The CA Haznet Database provides information for facilities that generate and transport hazardous waste from hazardous waste manifests submitted to the DTSC.	Palmer College Chiro/West, Santa Clara USD	Section 5.3
California Hazardous Waste Tracking System (CA HWTS)	The CA HWTS system database provides information for facilities listed on hazardous waste manifests submitted to the Department of Toxic Substances Control (DTSC).	Palmer College Chiro/West, Santa Clara USD	Section 5.3

Search results for the adjoining and surrounding properties are discussed in Section 6. The subject property address at 1380 Rosalia Avenue is listed on databases that are discussed in Section 6.2 as it pertains to listings at the adjoining Peterson Middle School buildings.

5 Operational Environmental Matters

5.1 Material Handling and Storage

5.1.1 Aboveground Storage Tanks (ASTs)

Arcadis observed seven polyethylene empty tanks stored in the maintenance storage yard in the western portion of the Patrick Henry campus. According to Mr. Maes, these tanks previously held chlorine and other water treatment chemicals for a nearby school in the SCUSD. The tanks appeared to be in good condition and were partially filled. The current content of the tanks was unknown as Mr. Maes reported that the tanks were empty and may be filled currently with rainwater.

No other ASTs were observed at the subject property, and no evidence of historical ASTs was identified through the review of the sources listed in Section 8 or through physical evidence observed during the Site reconnaissance.

5.1.2 Underground Storage Tanks (USTs)

No USTs were observed at the subject property, and no evidence of current or historical USTs was identified through the review of the sources listed in Section 8 or through physical evidence observed during the Site reconnaissance.

5.1.3 Other Material Handling and Storage

Based on Arcadis' on-property observations, the following materials are currently handled and stored at the subject property:

- **Paint:** Paint used for maintenance activities is stored in 5-gallon cans and 10-gallon buckets within utility and maintenance rooms at the Patrick Henry campus.
- **Cleaning Materials:** Arcadis observed several small containers (less than 5 gallons) of cleaning materials stored on carts and in storage areas of the Patrick Henry campus buildings.

Arcadis did not observe containers of hazardous substances or petroleum products, other than those described above and used in connection with identified uses at the subject property.

Arcadis did not observe opened or damaged containers with unidentified contents suspected of being hazardous substances or petroleum products at the subject property.

Based on the use of the subject property as cultivated farmland and orchard land, agricultural chemicals such as pesticides, herbicides, and fertilizers likely have been used at the subject property. Information regarding use, storage, or application rates of such chemicals was not available. Provided that the chemicals have been applied in accordance with manufacturer recommendations, residuals remaining in subject property soils and/or groundwater are expected to be similar to other area properties. No information was available to determine whether residual concentrations exceed government use or exposure criteria. Based on the duration of agricultural operations and the potential

use of lead or arsenic-based pesticides, the application of agricultural chemicals is a REC for the subject property.

5.2 Air Emissions

Arcadis did not observe air emissions that are likely to adversely affect other environmental media or to present a REC at the subject property. There are two natural gas-fired furnace units and two natural gas-fired boiler units present at the Patrick Henry School Campus buildings that are not currently in use. Other potential sources of air emissions include natural gas and electric-powered heating and cooling units housed on the roof of the subject property buildings. Arcadis did not observe other sources of air emissions at the subject property.

5.3 Waste

5.3.1 Hazardous Waste

No hazardous wastes were observed to be generated or disposed at the subject property.

According to listings in the Haznet and HWTS databases, the subject property is listed in the databases in 2001 for the disposal of ACBMs. The Palmer College Chiro/West facility is also listed in the Haznet and HWTS databases for the generation of laboratory waste chemicals (California Waste Code 551), and metal sludge (California Waste Code 171) in 1993. No violations were noted.

Other than the listings discussed above, no other evidence of historical on-property hazardous waste generation or disposal was identified through the review of the sources listed in Section 8 or through physical evidence observed during the Site reconnaissance.

Ms. Healy and Ms. Ruiz stated that the Patrick Henry Campus has not been subject to enforcement pursuant to RCRA or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund), as it pertains to cleanups of on-property hazardous waste releases or disposal.

5.3.2 Other Regulated Waste

Based on interviews with Mr. Maes and Arcadis' on-property observations, the following other regulated waste streams are currently generated or were formerly generated at the subject property: academic laboratory waste and universal waste (halogen lamps and batteries).

According to Mr. Maes, these wastes are not stored at the Patrick Henry campus and are taken off-site for storage at the larger SCUSD storage yard. Arcadis did observe new halogen bulbs stored in Building E/Building 800 in a cardboard box.

Mr. Maes was not aware of spills or releases of other regulated waste at the subject property. No other regulated wastes were observed at the subject property, and no evidence of other historical regulated wastes was identified through the review of the sources listed in Section 8.

5.3.3 Non-Hazardous Waste

Based on Arcadis' on-property observations, recycling and general refuse are the only non-hazardous solid waste and recycling stream that are or were formerly generated at the subject property. These materials are stored in dumpsters in the asphalt-paved parking lot north of the Patrick Henry Campus buildings or in a gated area south of Building G.

In general, housekeeping in the non-hazardous waste accumulation areas was observed to be good. No staining or evidence of spills or releases was noted.

Ms. Healy and Ms. Ruiz were not aware of spills or releases of non-hazardous waste at the subject property. No other non-hazardous wastes were observed at the subject property, and no evidence of other historical non-hazardous wastes was identified through the review of the sources listed in Section 8 or through physical evidence observed during the Site reconnaissance.

5.3.4 On-property Solid Waste Disposal

During the Site reconnaissance, Arcadis looked for areas that were apparently filled or graded by non-natural causes (or filled with material of unknown origin) that suggest the presence of trash construction debris, demolition debris, or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal. No such areas were observed.

5.4 Water, Wastewater, and Storm Water

5.4.1 Water Use and Supply

The subject property is connected to the City of Sunnyvale water supply. No other sources of water are used at the subject property.

As discussed in Section 2.4.4, there was a historical municipal well that was present in the northern portion of the subject property. According to information provided in the EDR Radius Map Report from the California Department of Water Resources, the well was last sampled in May and September 1949. No further information was available regarding the well. A request was submitted to the California Department of Water Resources for additional information regarding the well and no further information was available regarding the well.

5.4.2 Wastewater

5.4.2.1 Drains and Sumps

Floor drains were observed in multiple student and employee restrooms throughout the Patrick Henry campus. De minimis amounts of staining were observed near floor drains in restrooms and maintenance areas that were attributed to poor housekeeping. One groundwater sump structure was observed in the Building D boiler room that was used to pump accumulated stormwater to the sanitary sewer system. No other floor drains or sumps were observed at the subject property.

5.4.2.2 Septic Systems and Cesspools

No evidence of current or former septic systems or cesspools at the subject property was identified through the review of the sources listed in Section 8 or through physical evidence observed during the Site reconnaissance.

5.4.2.3 Discharges to Publicly Owned Treatment Works

No process wastewater is or was generated at the Patrick Henry campus. Wastewater streams at the campus included mop water from cleaning and boiler blowdown when the machinery was in use. The floor drains at the buildings are routed directly to the sanitary sewer system.

5.4.2.4 Pits, Ponds, and Lagoons

No pits, ponds, or lagoons are located at the subject property.

5.4.3 Storm Water

Stormwater runoff sheet flows to grated inlets located in the paved parking areas outside the building. No visual indications of oil or other pollutants were noted near the drains. The drains are routed to the municipal stormwater system. As noted in Section 5.4.2.1, stormwater that accumulates in the Building D boiler room is pumped via a sump pump to the sanitary sewer system.

5.5 Hazardous Building Materials and Conditions

5.5.1 Asbestos-Containing Materials (ACMs)

ACMs have historically been used in a variety of building materials and other products. Between 1973 and 1978, under the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP), the USEPA banned spray-applied surfacing ACM. In 1989, the USEPA issued a final rule under Section 6 of the Toxic Substances Control Act (TSCA) banning most asbestos-containing products; however, in 1991, the rule was vacated and remanded by the Fifth Circuit Court of Appeals. Only the bans on corrugated paper, rollboard, commercial paper, specialty paper, flooring felt, and any new uses of asbestos remain banned under the 1989 rule. In addition, the Occupational Safety and Health Act defines presumed ACM (PACM) as thermal system insulation (TSI) and surfacing material found in buildings constructed no later than 1980.

The buildings at the Patrick Henry campus were constructed in 1960 and 1962. Based on the construction dates and prior surveys that have been conducted at the Patrick Henry campus between 2015 and 2020 (discussed in Section 3.3), ACMs are present at the subject property and represent a noteworthy condition.

5.5.2 Lead-based Paint

Lead-based paint was commonly used for a variety of purposes, until 1978 when federal regulations banned consumer uses of lead-containing paint, though exceptions applied for certain commercial and

other paints. Federal regulations require certain disclosures regarding lead-based paint for housing constructed prior to 1978.

The buildings at the subject property were constructed in 1960 and 1962, which pre-dates the ban on consumer uses of lead-containing paint. Painted surfaces were observed throughout the Patrick Henry campus and several buildings had chipped, peeling, and deteriorating paint areas along the sides of the structures. No information was available regarding lead sampling conducted at the school site. Based on the construction dates of the building and the condition of the paint at the school, the potential historical use of lead-based paint on structures is a REC for soil for the subject property.

5.5.3 Mold

Mold growth is not expected in buildings and can be an indication of an underlying water intrusion or humidity issue. While some mold is often present inside buildings, mold typically is only a potential problem when it creates elevated airborne mold spore concentrations or other by-products such as chemical effluents, which can cause indoor air quality issues. Exposures to mold can cause minor respiratory issues, allergic reactions, and in some rare cases, more serious illnesses. Mold growth inside buildings can be mitigated by removal of affected building materials, controlling the amount of moisture inside the building, and eliminating sources of unwanted water intrusion such as roof leaks, pipe leaks, and infiltration around windows and doors.

Arcadis did not observe apparent water damage or staining that would suggest the likely presence of unwanted mold growth. Arcadis did observe water damage to carpets and minor staining on the ceiling tile attributed to leaks but did not observe mold at these locations. Ms. Healy and Ms. Ruiz were not aware of water damage or mold at the subject property.

5.6 Other Hazardous Substances and Emerging Contaminants

5.6.1 Polychlorinated Biphenyls (PCBs)

PCBs are a group of organic chemicals that were used historically in a variety of industrial and chemical applications, including transformers, ballasts, other electrical equipment, and hydraulic oils, among many other products. PCBs were manufactured in the United States from 1929 until 1979, when PCB manufacturing was banned due to the toxicity of PCBs.

The buildings at the Patrick Henry campus were constructed in 1960 and 1962. Based on the construction dates, PCBs may be present in building equipment and materials in these buildings. The small sheds and Conex boxes present in the northwestern portion of the campus were not constructed prior to 1979 and it is unlikely that PCBs are present in the structures.

Arcadis observed the property for types of equipment that have been historically associated with the use of PCBs. According to interviews with Mr. Maes, the buildings at the Patrick Henry campus are equipped with fluorescent lighting and associated light ballasts. According to Mr. Maes, the lamps have been removed and replaced, as needed, but the ballasts are likely original to the buildings. One pad-mounted transformer was present north of Building G and one pole-mounted transformer was present

along the southern boundary of the subject property. Both units appeared to be in good condition with no indications of leaks or spills. No labels were observed to indicate the PCB-content of the transformers. Given the age of the buildings, it is possible that the transformers contain PCBs.

5.6.2 Per- and Polyfluoroalkyl Substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS) are a large group of emerging contaminants of which Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) currently are the two most widely regulated compounds. PFAS can be used in a variety of commercial, industrial, and fire-fighting applications and in medical and consumer products. Other potential sources of PFAS include landfills, biosolids, and pulp and paper mill residuals. PFAS have been manufactured and used in various industries around the world since the 1940s. PFOA and PFOS are no longer manufactured in the United States but are still produced internationally and can be imported into the United States.

Regulatory scrutiny associated with PFAS is increasing, and although USEPA has not yet established regulatory cleanup standards for PFAS, several states have begun promulgating such standards.

Based on Arcadis' review of the sources identified in Section 8.0, neither current nor historical subject property operations appear to include the use of PFAS. Known or potential sources of PFAS associated with adjacent or surrounding properties, if identified, are discussed in Section 6.0.

5.7 Indicators of Environmental Impact

5.7.1 Odors

No odors that would indicate a REC were noted during the Site reconnaissance.

5.7.2 Stains and Corrosion

Arcadis observed multiple areas of de minimis amounts of staining on concrete floors within utility rooms at the Patrick Henry Campus that was attributed to poor housekeeping. De minimis staining was also observed on ceiling tiles and portions of concrete that were attributed to minor leaks from the ceiling. De minimis amounts of staining was also observed near floor drains within the restrooms that was attributed to poor housekeeping. De minimis staining was also observed on the asphalt-paved parking lot that was attributed to minor leaks and spills from automobiles. The flooring materials in these areas were in fair condition with no indications of leaks or spills. As a result, this staining is a de minimis condition.

Arcadis also observed small areas of staining on the gravel within the maintenance yard that was attributed to minor leaks or spills from vehicle storage.

5.7.3 Stressed Vegetation

During the Site reconnaissance, Arcadis' representative looked for areas of stressed vegetation (from other than insufficient water). No areas of stressed vegetation were observed during this assessment.

5.7.4 Environmental Liens and Activity and Use Limitations

Ms. Healy and Ms. Ruiz were not aware of environmental liens or activity and use limitations (AULs) associated with the subject property. No AULs or Liens were recorded in the EDR Environmental Lien and AUL report prepared for the subject property.

5.8 Radon

Radon is a radioactive gas and a product of the natural decay of uranium. Radon can migrate from soil gas into buildings, accumulate in confined spaces, and become a health hazard.

According to the USEPA, the subject property is located in Radon Zone 2, which comprises counties with predicted average indoor radon screening levels from 2 to 4 picocuries per Liter (pCi/L) of air. Federal Area Radon Information from USGS summarizes radon test results at 2 locations in ZIP code 94087, which average 2.45 pCi/L in first floor living areas. The California Radon database summarizes radon test results for 64 locations in Zip Code 94087 in Santa Clara with 8 locations that had radon levels greater than 4 pCi/L.

No property-specific radon test data were available.

6 Adjoining Properties and Surrounding Area

6.1 Current Uses of Adjoining Properties and Surrounding Area

Adjoining properties are those which have a contiguous or partially contiguous border with the subject property, or those which would have a contiguous or partially contiguous border with the subject property but for a street, road, or other public thoroughfare separating the property from the subject property. The following properties adjoin the subject property **(Figure 3)**:

- **North:** Residences are located north of the eastern portion of the subject property, beyond which is Castelton Way. Peterson Middle School is located north of the western portion of the subject property, beyond which are Rosalia Avenue and Bryant Way.
- **East:** Teal Drive, beyond which are residences.
- **South:** Dunford Way is located south of the eastern portion of the subject property, beyond which are residences. The remaining portions of the SCUSD farm are located south of the western portion of the subject property, beyond which are Dunford Way, Raynor Park, and Raynor/Stratford School, and Raynor Park Christian Church.
- **West:** Residences, beyond which are Norman Drive and Marion Way.

Land use in the surrounding area consists of residential, commercial, agricultural, and school properties.

No physical evidence of impact to the subject property from the adjoining properties (such as outdoor storage of drums, tanks, pooled liquids, or poor chemical or waste handling) was observed during a visual survey of the adjoining properties conducted at the time of the Site reconnaissance. However, several of the facilities adjoining and surrounding the subject property were identified in the databases listed in the EDR Report, as discussed in Section 6.3.

6.2 Historical Uses of Adjoining Properties and Surrounding Area

The subject property area appeared as developed with multiple small structures and roads nearby from as early as 1889. Calabazas and Campbell Creek were depicted east and southeast of the subject property by 1897 with the Southern Pacific Railroad tracks depicted far north. No changes were evident until 1939, when the subject property area had been developed with orchards, agricultural row crop areas, and associated residential and commercial buildings. No significant changes were evident until 1956, when the area west-adjacent to the subject property had been redeveloped with a large residential neighborhood and the Raynor School south of the subject property was under construction. The area north-adjacent to the subject property was also developed with row crop land and associated smaller buildings. By 1963, the Raynor School south of the subject property had been constructed and multiple residences had been constructed south and east-adjacent to the subject property. By 1968, the remaining areas of orchard land west and north had been redeveloped with the current Peterson Middle School and residential neighborhoods. The surrounding area continued to be further developed with

courts and building within the Peterson Middle School campus and residential homes north and east of the subject property. By 2008, the adjoining and surrounding properties appeared to be in a configuration generally consistent with the current property uses.

6.3 Environmental Record Sources and Regulatory Agency File and Records Reviews

The EDR Report summarizes the federal, state, tribal, and local environmental regulatory database listings for the subject property and for the adjoining and surrounding properties within specified search radii, as required by ASTM E1527-21. Adjoining and surrounding properties identified within the search radii were evaluated to determine if they are likely to have adversely impacted the subject property. The criteria used to evaluate the potential for adverse impact to the subject property include:

- Distance from the subject property
- Expected depth and direction of groundwater flow
- Expected direction of surface water and stormwater runoff flow
- Presence or absence of documented releases of hazardous substances and/or petroleum products at the identified facilities, the nature of such releases, and where applicable, status of associated investigations, remediation, and regulatory closure

6.3.1 Adjoining Properties

Adjoining properties identified in the databases and a determination of the necessity of further regulatory agency research are listed in the following table:

Table 4. Adjoining Property Regulatory Database Listings

Property Name and Address **Direction (and gradient) from Subject Property**	**Database Listing(s)** **Determination of Necessity of Further Regulatory Agency Research**
SCUSD, SCUSD Peterson Middle School 1380 Rosalia Avenue, Sunnyvale, California North (crossgradient)	**RCRA NonGen/NLR** This address is for the Peterson Middle School located immediately north-adjacent to the subject property. SCUSD and SCUSD – Peterson Middle School are listed in the Resource Conservation and Recovery Act Non Generator/ No Longer Generating (RCRA NonGen/NLR) database in 2018 and 2019 as universal waste generators. No further information was available regarding hazardous waste codes and no violations or evaluations were noted. Given that these listings pertain to compliance matters and no violations were noted, no further review is warranted.

Property Name and Address Direction (and gradient) from Subject Property	Database Listing(s) Determination of Necessity of Further Regulatory Agency Research
Gerald Cummings 1054 Castleton Way, Sunnyvale, California North (crossgradient)	**RCRA NonGen/NLR** This property is located immediately north-adjacent to the subject property. Gerald Cummings is listed in the RCRA NonGen/NLR database in 2021. No further information was available regarding historical hazardous waste generation and no violations were noted. Arcadis noted that the mapped address is for a residence that is listed with a NAICS code of 56299, All Other Waste Management Services, and it is unclear what operations were conducted. Given that this listing pertains to compliance matters and no violations were noted, no further review is warranted.
Katie Bessette 1486 Teal Drive, Sunnyvale, California South (upgradient)	**RCRA NonGen/NLR** This property is located immediately east-adjacent to the subject property. Katie Bessette is listed in the RCRA NonGen/NLR database in 2021. No further information was available regarding historical hazardous waste generation and no violations were noted. Arcadis noted that the mapped address is for a residence that is listed with a NAICS code of 56299, All Other Waste Management Services, and it is unclear what operations were conducted. Given that this listing pertains to compliance matters and no violations were noted, no further review is warranted.

6.3.2 Surrounding Properties

Numerous surrounding properties were identified on the databases in the EDR Report. Based on the criteria listed in Section 6.3, the following surrounding properties listed in the EDR database report were evaluated to determine if they are likely to represent a concern of environmental impairment to the subject property:

Panasonic, Intersil, and Siemens at 10900 North Tantau Avenue, Cupertino, California

Panasonic, Intersil, and Siemens operated at a facility that is located approximately 3,000 feet south and hydraulically upgradient to the subject property. The facility is listed in several databases that are summarized below. Database listings that pertain to compliance and are not independently indicative of an environmental concern (e.g., stormwater permitting) are not discussed further.

Intersil Inc. is listed in the RCRA Small Quantity Generator (RCRA-SQG) database in September 1996. The facility was historically listed as a RCRA Large Quantity Generator (RCRA-LQG) in 1980 and 1992 and historically operated as a semiconductor. No further information was available regarding hazardous waste codes and no violations were noted. Panasonic is listed in the Haznet database for generation of laboratory waste chemicals (California Waste Code 551), halogenated solvents (California Waste Code 211), asbestos containing waste (California Waste Code 151), other inorganic solid waste (California Waste Code 181), other empty containers 30 gallons or more (California Waste Code 512) liquids with hexavalent chromium greater than or equal to 500 miligram per liter (mg/L; California Waste Code 723), other organic solids (California Waste Code 352), unspecified solvent mixture and (California Waste Code 214) from 1988 to 1994. Intersil is listed in the HWTS database for hazardous waste generation between 1982 and 1994. No violations were noted.

Intersil Inc./Siemens Components are listed in the National Priority List (NPL), Superfund Enterprise Management System (SEMS), US Engineering Controls, Envirostor, Cleanup Program Sites – Spills, Leaks, Investigations, and Cleanups (CPS-SLIC), Historical Cal-Sites, Record of Decision (ROD), Potentially Responsible Party (PRP), Enforcement (ENF), and the California Environmental Reporting System (CERS) databases for an investigation that began at the facility in 1983. Soil and groundwater sampling was conducted that identified chlorinated solvents in soil and groundwater primarily in the northern and central portions of the facility. Groundwater extraction systems were implemented in 1987 that have been addressing chlorinated solvent concentrations in groundwater. Prior investigations have been conducted that indicated that groundwater flow in the area is to the north-northeast (from the facility towards the subject property). Groundwater sampling has been conducted through the present to evaluate off-site impacts to groundwater. There are four groundwater monitoring wells (PG-1B, S-3B, S-4C, LH-1C) that have been advanced approximately 1,000 feet south and southeast of the subject property. According to the most recent 2019 Groundwater Monitoring Report and 2020 Five-Year Report (Appendix E), trichloroethylene (TCE) was detected at 0.25 microgram per liter (µg/L) at well PG-1B and 0.5 µg/L at well S-4C in October 2019. These concentrations do not exceed the current 2019 RWQCB Environmental Screening Level (ESL) for groundwater vapor intrusion (1.2 µg/L for residential scenarios, 7.5 µg/L for commercial/industrial facilities). TCE was not detected at well S-3B and LH-1C was not sampled. No other volatile organic compounds (VOCs) were detected in the most recent groundwater sampling event in these aforementioned wells. According to the 2019 Groundwater Monitoring Event and 2020 Five-Year Report, the northernmost shallow groundwater monitoring well in the A-zone (A1; well MW-OS-3A1) is located approximately 2,500 feet south of the subject property. The well was installed in 2014 and had a concentration of 21 µg/L that exceeds both the residential and commercial/industrial groundwater vapor intrusion ESLs for TCE. No further wells have been delineated through the present downgradient of the well and according to the 2020 Five-Year Report, the groundwater plume in Zone A only extends 800 feet north (approximately 2,200 feet south of the subject property) and the groundwater plume in the B-zone extends 1,400 feet north (approximately 1,600 feet south of the subject property) of the source areas. Groundwater monitoring wells upgradient of the well have generally indicated decreasing trends and concentrations in A-zone wells. In addition, TCE has not been detected in sampling events between 2015 and 2021 at the Raynor well located south-adjacent to the subject property. Given the decreasing trends in groundwater at the facilities and off-site areas, the distance from the subject property, the depth to groundwater, the extent of the plume as reported in the most recent 2020 Five Year Report; the off-site groundwater VOC plume emanating from the facility is not a REC for the subject property.

EMCON Associates and American Microsystems Inc. at 3800 Homestead Road

American Microsystems Inc. (AMI) is located approximately 2,900 feet south of the subject property. The facility is listed in the Response, Envirostor, Leaking Underground Storage Tank (LUST), CPS-SLIC, Deed, Cortese, ENF, Historical Cortese, and CERS databases for an investigation that began in 1987. The facility is located east-adjacent to the former Siemens and Intersil properties and prior investigations have identified elevated concentrations of chlorinated solvents in soil and groundwater at the facility. According to the most recent 2021 Groundwater Monitoring Report for the facility, groundwater monitoring wells have been advanced northeast of the facility and east of groundwater monitoring wells for the Siemens/Intersil Facility. TCE is the primary constituent of concern in groundwater and was measured at low concentrations at groundwater monitoring wells located downgradient of the former AMI facility. The closest groundwater monitoring wells are E-28A and A-

27A, which are approximately 1,300 and 1,800 feet southeast of the subject property, respectively. TCE was not detected at the two wells during 2017 and they were not re-sampled during the most recent sampling events. TCE concentrations at wells located upgradient to the two wells were also found to have low concentrations of TCE that ranged from 0.9 to 2.5 µg/L. The highest concentration at the wells was found to exceed the residential groundwater vapor intrusion ESL, but not the commercial scenario ESL. Given the low concentrations of TCE in groundwater and the distance from the subject property, the investigation is not a REC for the subject property.

7 Vapor Encroachment Screening

A Vapor Encroachment Screening (VES) was completed for the site consistent with ASTM E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.* The E2600-15 standard provides guidance on identifying and evaluating vapor migration at contaminated properties and defines a Vapor Encroachment Condition (VEC) as "the presence or likely presence of COC vapors in the vadose zone of the subject property caused by the release of vapors from contaminated soil and/or groundwater either on or near the subject property as identified by the Tier 1 or Tier 2 procedures in E2600-15." Four conclusions are possible as a result of the VES: (1) A vapor encroachment concern (VEC) exists; (2) a VEC likely exists; (3) a VEC cannot be ruled out; or (4) a VEC can be ruled out because a VEC does not or is not likely to exist.

A Tier 1 VES consists of a review of the information provided in this report combined with the application of professional judgment. In particular, the Tier 1 VES considers (1) a search distance test to determine if any known or suspect contaminated properties are in the area of concern (AOC); and (2) a chemicals of concern (COC) test to determine if COC are likely to be present in the AOC from those known or suspected contaminated properties.

7.1 Contaminated Property Review

Section 6 of this report describes the regulatory review completed for the subject property. All search distances are within those recommended for the VES. Based on the following criteria, none of the properties in the EDR Report appear to present a VEC at the subject property for the following reasons:

- Distance from the subject property;
- Expected depth and direction of groundwater flow;
- Presence or absence of documented releases of hazardous substances and/or petroleum products at the identified facilities, the nature of such releases, and where applicable, status of associated investigations, remediation, and regulatory closure.

7.2 Site Use

The subject property is owned by the Santa Clara USD and the eastern portion was previously leased by several private and charter schools for administrative office and classroom space within the Patrick Henry School Campus. The southern portion of the subject property is developed as part of the SCUSD Farm. The northern portion of the subject property is used as an asphalt-paved parking lot for the

Peterson Middle School. The central and western portions of the subject property are developed with recreational fields.

7.3 Chemicals of Concern

No investigations have been conducted at the subject property to evaluate constituents of concern in soil or groundwater. The primary constituents of concern at investigations south of the subject property are chlorinated VOCs including TCE and PCE.

7.4 Soil and Groundwater Data

As noted in the prior section, no soil and groundwater data are available for the subject property. The closest groundwater monitoring wells are located approximately 1,000 feet south of the subject property that were last sampled in 2019. Groundwater concentrations at two of the wells ranged from 0.25 to 0.5 µg/L. The Raynor municipal water well south-adjacent to the subject property across Dunford Way has been sampled for VOCs from 2013 to 2021 and TCE and other VOC constituents have not been detected.

7.5 Vapor Conduits

Potential vapor conduits include floor drains and sumps that are discussed further in Section 5.4.2.1.

7.6 Clean up Status

No known remediation activities have been performed at the subject property. The investigations at the Intersil Inc./Siemens Components and AMI Industries facilities are still open under RWQCB oversight.

7.7 VES Conclusions

A VEC is not likely to exist based on currently available information.

8 Conclusions

8.1 Findings and Opinion

Arcadis has performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM Practice E1527-21 for Phase I ESAs. This assessment has revealed the following RECs, CRECs, HRECs, de minimis conditions, and noteworthy conditions as defined in Section 1.2 of this Phase I ESA Report. Other findings, which do not constitute a REC, CREC, HREC, or de minimis condition in the opinion of the Environmental Professional, may be discussed previously in this report.

8.1.1 Recognized Environmental Conditions

The following RECs were identified in connection with the subject property:

Agricultural Land and Orchard Use: The subject property was developed as part of a larger agricultural tract of land from at least 1939 through 1960, when the Patrick Henry School Campus was constructed. The southern portion of the subject property was more recently redeveloped as a farm from 2008 through the present.

Based on the use of the subject property as historical orchard, the application of agricultural chemicals is a potential REC for the subject property in accordance with the August 2008 DTSC Interim Guidance.

Lead-based Paint: Lead-based paint was commonly used for a variety of purposes, until 1978 when federal regulations banned consumer uses of lead-containing paint, though exceptions applied tor certain commercial and other paints. Federal regulations require certain disclosures regarding lead-based paint for housing constructed prior to 1978. The buildings at the subject property were constructed in 1960 and 1962, which pre-dates the ban on consumer uses of lead-containing paint. Painted surfaces were observed throughout the Patrick Henry campus and several buildings had chipped, peeling, and deteriorating paint areas along the sides of the structures. No information was available regarding lead sampling conducted at the school site. It is Arcadis' understanding that the onsite buildings will be properly abated prior to demolition.

Based on the construction dates of the building and the condition of the paint at the school, the potential historical use of lead-based paint on site structures and peeling off the structure and contacting surficial soil is a potential REC in soil for the subject property in accordance with the June 2006 DTSC Interim Guidance.

Polychlorinated Biphenyls: PCBs are a group of organic chemicals that were used historically in a variety of industrial and chemical applications, including cooling oil in transformers prior to 1979. PCBs were manufactured in the United States from 1929 until 1979, when PCB manufacturing was banned due to the toxicity of PCBs.

One pad-mounted electrical transformer was observed north of Building G within a larger concrete pad. No labels were present to indicate the PCB content of the transformer and no information was available regarding historical transformers in use at the property. In addition, a pole-mounted transformer is located along the southern boundary of the subject property on Dunford Way. Given the age of the buildings, it is possible that the transformers contain PCBs. The potential presence of PCBs in soil

adjacent to the transformers at the subject property is a potential REC in accordance with the June 2006 DTSC Interim Guidance.

Termiticide Application: OCPs were historically used as insecticides for termite controls around wooden structures. The buildings at the Patrick Henry School Campus were constructed in 1960 and 1962 and are wood-framed buildings with plaster exteriors. Based on the construction dates, the potential presence of termiticides in soil adjacent to the structures at the subject property is a potential REC in accordance with the June 2006 DTSC Interim Guidance.

8.1.2 Controlled Recognized Environmental Conditions

No CRECs were identified in connection with the subject property.

8.1.3 Historical Recognized Environmental Conditions

No HRECs were identified in connection with the subject property.

8.1.4 De Minimis Conditions

The following de minimis condition was identified in connection with the subject property:

Staining: Arcadis observed multiple areas of de minimis amounts of staining on concrete floors within utility rooms at the Patrick Henry Campus that was attributed to poor housekeeping. De minimis staining was also observed on ceiling tiles and portions of concrete that were attributed to minor leaks from the ceiling. The flooring materials in these areas were in fair condition with no indications of leaks or spills.De minimis staining was also observed on the asphalt-paved parking lot that was attributed to minor leaks and spills from automobiles. As a result, this staining is a de minimis condition.

8.1.5 Noteworthy Conditions

The following noteworthy conditions were identified in connection with the subject property:

ACBMs: The buildings at the Patrick Henry campus were constructed in 1960 and 1962. Based on the construction dates and prior surveys that have been conducted at the school, ACBMs are likely present at the subject property and represent a noteworthy condition.

Naturally Occurring Asbestos: According to a 2007 Geologic Map of the Cupertino and San Jose West quadrangles, Santa Clara, and Santa Cruz Counties, California, the subject property is located approximately 7 miles northeast of the nearest serpentine rock deposits. Given that the outcrops of the serpentine rock deposits are within the 10-mile radius established by the Interim Guidance for Naturally Occurring Asbestos (NOA) at School Sites, the potential presence of NOA is a noteworthy condition for the subject property.

Historical Vehicle Storage Operations: The area west of the Building G has been used for automobile and equipment storage since at least 2007. During site reconnaissance, Arcadis observed multiple vehicles stored in this area including damaged vehicles. Small amounts of staining were

observed on the gravel within this area that was attributed to minor leaks and spills. As such, the vehicle storage in this area is a noteworthy condition for the subject property.

Historical Well: According to the EDR Radius Map Report database and the California DWR Website, a former well was located in the current soccer field in the northern portion of the subject property. The well was historically used as a water supply well and was last sampled in May and September 1949. It is unclear if the well was properly abandoned as no evidence of the current well was visible during site reconnaissance. Arcadis submitted a records request to the California DWR and the SCVWD and no records were available. Given the absence of information regarding the well or proper abandonment of the well, it is a noteworthy condition for the subject property.

8.1.6 Significant Data Gaps

No significant data gaps were identified during this Phase I ESA.

8.2 Environmental Professional Certification

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in Title 40 of the Code of Federal Regulations (CFR) § 312.10, and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR § 312.*

The designated Environmental Professionals for this project are Ms. Divya Mehta, Mr. Stephen Daly, and Mr. Lucas Goldstein

Resumes for Ms. Mehta, Mr. Daly, and Mr. Goldstein are attached in **Appendix F**.

*A professional geologist's or registered environmental assessor's certification of conditions comprises a declaration of his or her professional judgment. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations, and ordinances.

9 Sources, References, Assumptions, and Limitations

9.1 User-provided Information

Ms. Healy of SCUSD provided information regarding the subject property via a User Questionnaire **(Appendix G)**, to satisfy the User's responsibilities described in ASTM E1527-21 Sections 6.2 to 6.7. Information provided by Ms. Healy is summarized in relevant sections throughout this Phase I ESA Report.

9.2 Records Review

9.2.1 Regulatory Agency File and Records Reviews

Regulatory agency files and records requested and/or reviewed for the subject property are summarized in the following table:

Table 5. Regulatory Agency File and Records Requests

Agency	Method of Request	Date of Request	Response
USEPA	Online request; Online database review (Envirofacts, ECHO)	April 22, 2022	No records available
Regional Water Quality Control Board	Email request; Online database review (Geotracker)	April 22, 2022	No records available for the subject property. See Section 6.3 for records reviewed for surrounding area properties.
Department of Toxic Substances Control	Email request; Online database review (Envirostor)	April 22, 2022	No response received
National Pipeline Mapping System (NPMS)	Online database review (NPMS Viewer)	April 22, 2022	No records available
California Department of Water Resources	Email request; Online database review	May 5, 2022	Records available (see Section 2)
Santa Clara County Department of Environmental Health	Online request	April 22, 2022	No records available

Agency	Method of Request	Date of Request	Response
Santa Clara County Department of Agriculture	Online and telephone request	May 5, 2022	No records available for the subject property.
Santa Clara Valley Water District (SCVWD)	Online request; Online database review	May 5, 2022	Records available (see Section 2); however, a copy of the supply well abandonment reports have not yet been received (data gap).
Bay Area Air Quality Management District	Online Request	May 5, 2022	No records available
City of Sunnyvale	Online Request	April 22, 2022	No records available
Pacific Gas & Electric	Telephone Request	May 5, 2022	No response provided

9.2.2 Physical Setting Sources

The physical setting sources are described in Section 2.4 of this Report.

9.2.3 Standard and Other Historical Sources

The standard and other historical sources are listed in Section 3.2 of this Report.

9.3 Interviews with Past and Present Owners and Occupants

Arcadis interviewed the following owner(s) and occupant(s) of the subject property:

- Ms. Healy, Director of Facility Development and Planning (present owner/occupant representative)
- Ms. Ruiz, Facility Development and Planning Technician (present owner/occupant representative)

Contact information for past owners and occupants of the subject property was not provided to Arcadis. The subject property is not abandoned; therefore, owners and occupants of neighboring or nearby properties were not interviewed.

9.4 Interviews with State and/or Local Government Officials

State and/or local government officials contacted during this Phase I ESA are summarized in Section 8.2.1.

9.5 Other References

ASTM. 2021. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E 1527-21.

EDR. 2022. EDR Radius Map™ Report with GeoCheck®. Inquiry Number 6951305. April 22.

EDR. 2022. The EDR Aerial Photo Decade Package. Inquiry Number 6951305. April 22.

EDR. 2022. The EDR-City Directory Image Report. Inquiry Number 6951305. April 22.

EDR. 2022. EDR Historical Topo Map Report with Quadmatch™. Inquiry Number 6951305. April 22.

EDR. 2022. Certified Sanborn® Map Report. Inquiry Number 6951305. April 22.

Other documents reviewed are referenced throughout this Phase I ESA.

9.6 Significant Assumptions

Arcadis has assumed that the information sources used for this Phase I ESA provided accurate information.

Evaluations presented in this Phase I ESA Report are based exclusively on the sources listed herein; no invasive field activities were conducted, and no laboratory analyses were performed.

The boundaries of the subject property were described in documents provided by Santa Clara USD and by interviews with Property representatives. Arcadis has assumed that this information was accurate.

9.7 Limitations and Exceptions

The services performed and any opinions expressed by Arcadis in this Phase I ESA Report are based upon the limits of the Phase I ESA described herein. Arcadis has relied upon the accuracy of documents, information, data, and other materials provided or made available by the User and others. Arcadis has not independently verified such information and assumes no liability for the accuracy or completeness of such information. Conclusions provided with regard to subsurface soil and groundwater impacts are limited to those that can be formed based on a non-intrusive investigation. The absence of environmental hazards in the subsurface cannot be guaranteed based on conditions observed on the surface. The scope of this project did not include sampling of environmental media. Arcadis makes no guarantee that subject property conditions do not exist, or will not exist in the future, that were undetected or that could lead to liability in connection with the subject property. Similarly, past and present activities at the subject property indicating the potential for the existence of environmental concerns may not have been discovered by Arcadis. Such activities may include those that would indicate the potential for regulated hazardous substances at the subject property. Likewise, subject property conditions or subject property activities that were outside the scope of the services described above, or changes to subject property conditions or regulatory requirements may lead to liabilities in connection with the subject property that are not identified in this Phase I ESA Report. Arcadis has reviewed the information obtained in connection with the performance of the services described above, in keeping with existing applicable environmental consulting standards and enforcement practices but

cannot predict what actions any given agency may take or what standards and practices may apply in the future.

Unless otherwise described in the body of this Phase I ESA Report, if any one or more of the standard sources under ASTM was not reviewed, this was due to information from the source not being readily available or a determination by the Environmental Professional that the standard source was not likely to be useful. Similarly, unless otherwise noted in this Phase I ESA Report, an incompleteness in connection with the review was determined not to affect the Environmental Professional's ability to form conclusions regarding the subject property.

Arcadis evaluates the potential for the presence or likely presence of vapor in the subsurface of the subject property using the Environmental Professional's professional judgment and evaluation of the available information and may use portions of ASTM E2600-15 as a guide. This evaluation is not a full Vapor Encroachment Screen (VES) pursuant to ASTM E2600-15. The vapor evaluation is not exhaustive and cannot wholly eliminate uncertainty regarding the presence or potential presence of vapors in the subsurface of the subject property.

Where access to portions of the subject property or to structures on the subject property was unavailable or limited, Arcadis renders no opinion and accepts no responsibility for assessment of the condition of these portions of the subject property, including specifically, but not limited to, the presence of hazardous substances or petroleum products at these locations. In addition, Arcadis renders no opinion concerning the presence or absence of hazardous substances or petroleum products where direct observation of any part of the subject property, or structure on the subject property, is limited by physical obstructions. Unless otherwise noted herein, Arcadis did not access the roof(s) of on-property building(s).

The conclusions and observations are based upon limited data and professional opinions, and the Site reconnaissance was performed on a particular date. Subject property conditions and activities may change after that date. Therefore, the risk of undiscovered environmental impairment of the subject property cannot be ruled out. Arcadis does not make any representations or warranties regarding the condition or value of the subject property, regardless of the results of the assessment presented in this Phase I ESA Report.

Arcadis' scope of work includes a cursory visual observation for apparent wetland areas and a cursory visual observation to identify typical suspect ACMs and lead-based paint. The Arcadis representative who performed the Site reconnaissance and made such observations is not necessarily a US Army Corps of Engineers (USACOE)-certified wetland professional or a state-accredited asbestos or lead-based paint inspector.

Arcadis makes no guarantees, certifications, warranties, or representations of any kind whatsoever, whether expressed or implied, regarding this Phase I ESA, the condition of the subject property, or the liabilities associated with the subject property.

9.8 Data Gaps

ASTM E1527-21 defines a data gap as "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information." The following data gaps were identified during this Phase I ESA:

Past Uses of the Subject Property: Arcadis was unable to identify the past uses of the subject property back to first developed use or 1940, whichever is earlier, pursuant to ASTM E1527-21 Section 8.3.8; thus, the failure to achieve the historical research objective is a data failure. Based on information obtained from other sources (as listed in Section 3.2 of this report), the subject property appeared as developed with four structures from as early as 1889 and was later visible in aerial photography by 1939 as orchard land. This data gap is unlikely to affect Arcadis' ability to identify RECs at the subject property; therefore, this data gap is considered to be non-significant.

Limiting Conditions: During the subject property reconnaissance, Arcadis was unable to visually observe the interior of recreational storage sheds located in the northern portion of the subject property as no keys were available. According to interviews with Ms. Healy, Ms. Ruiz, and Mr. Maes, these structures are fully enclosed and were historically used for recreational equipment storage. This data gap is unlikely to affect Arcadis' ability to identify RECs at the subject property; therefore, this data gap is considered to be non-significant.

9.9 Deviations

No deviations from ASTM E1527-21 occurred in this Phase I ESA.

9.10 Reliance

This Phase I ESA Report has been prepared for the sole use of SCUSD and the contents thereof may not be used or relied upon by any other person without the express written consent and authorization of Arcadis. Use of this Phase I ESA Report by any other party shall be at such party's sole risk and liability.

9.11 Viability

The components of this Phase I ESA were completed on the dates indicated in the following table. The Phase I ESA is viable for 180 days following the earliest of the components specified below:

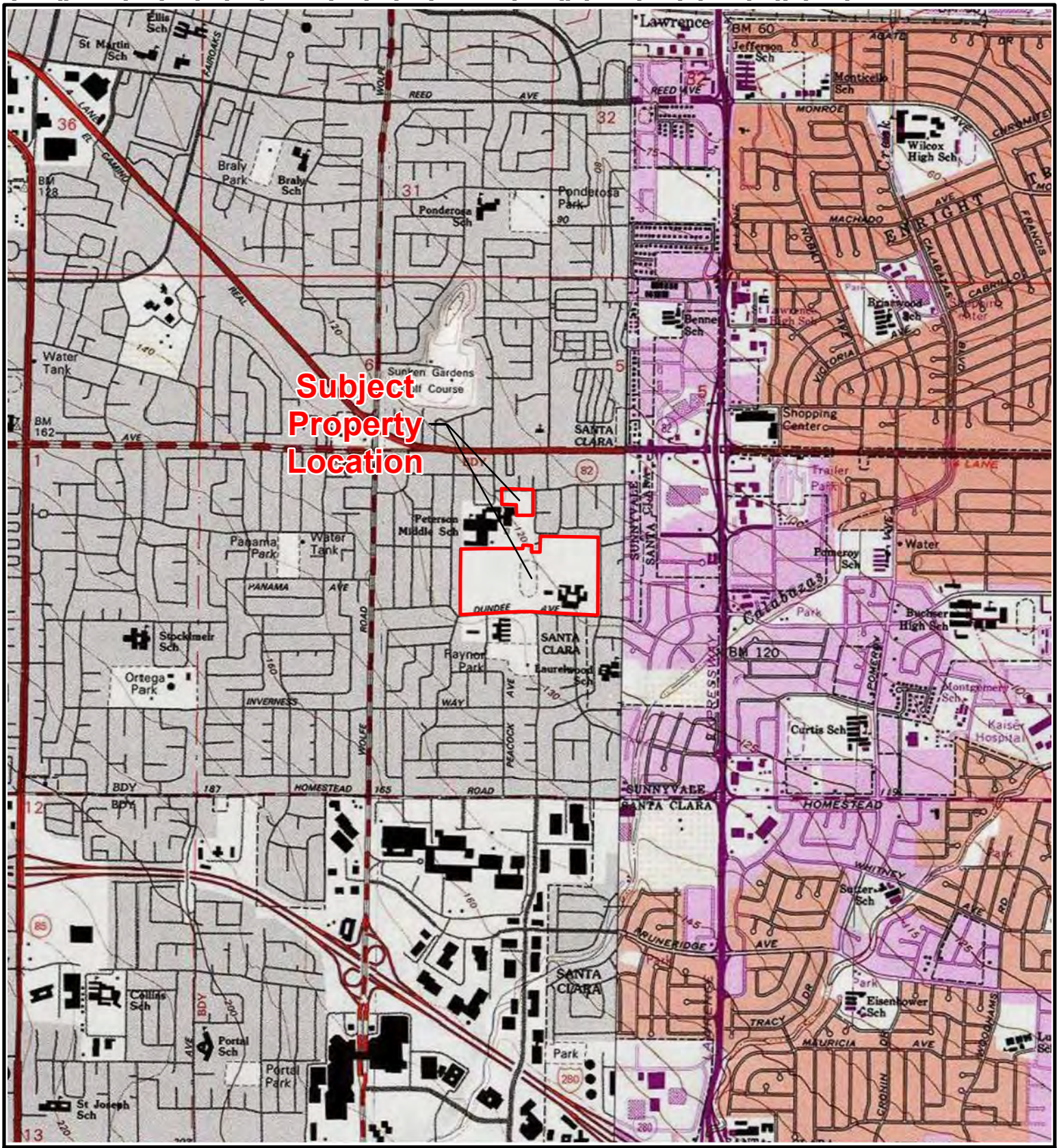
Table 6. Viability of Phase I ESA

Component	Earliest Date Completed	Last Day of Viability
Interviews with owners, operators, and occupants	April 13, 2022	October 10, 2022

Component	Earliest Date Completed	Last Day of Viability
Searches for recorded environmental cleanup liens (a user responsibility)	April 25, 2022	October 22, 2022
Reviews of federal, tribal, state, and local government records	April 22, 2022	October 19, 2022
Visual inspections of the subject property and of adjoining properties	April 13, 2022	October 10, 2022
Declaration by the environmental professional responsible for the assessment or update	June 20, 2022	November 16, 2022
Overall Viability Date		**October 20, 2022**

Figures

T:_ENV\PHASE_I_ESAS\PROJECT_FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\GIS\ARCMAP_MXD\PHASE_I_ESA_REPORT\1095_DUNFORD_WAY_SUNNYVALE_CA\FIG_1_SITE_LOCATION_MAP.MXD DATE: 6/1/2022 9:19:51 AM



LEGEND:

Subject Property

0 2,000 4,000

SCALE IN FEET

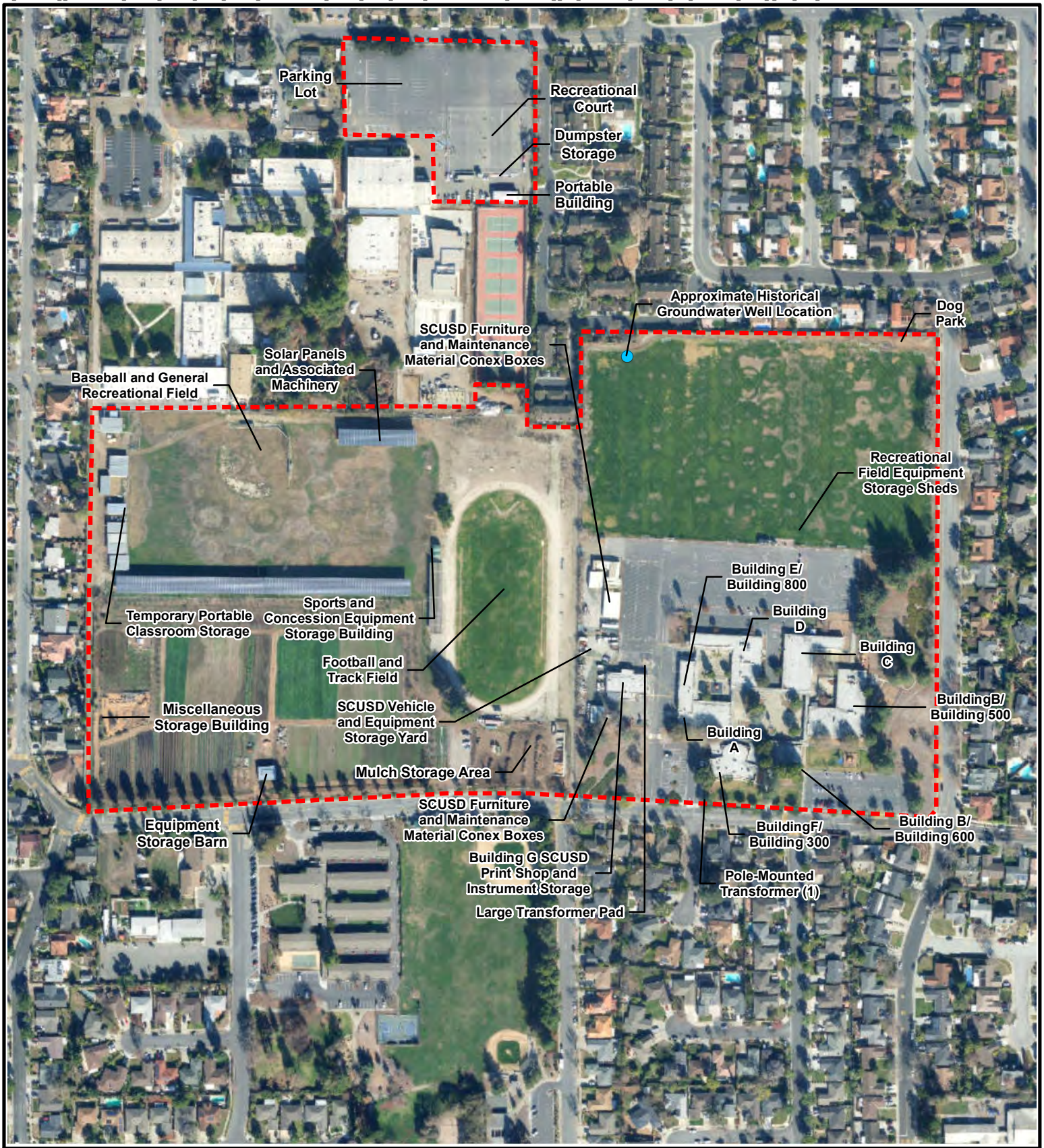
FORMER PATRICK HENRY SCHOOL CAMPUS, PORTION OF THE PETERSON MIDDLE SCHOOL CAMPUS & SCUSD ORGANIC FARM
1095 & 1055 DUNFORD WAY AND 1380 ROSALIA AVENUE
SUNNYVALE, CA

SITE LOCATION MAP

ARCADIS

FIGURE 1

T:_ENV\PHASE_I_ESAS\PROJECT_FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\GIS\ARCMAP_MXD\PHASE_I_ESA_REPORT\1095_DUNFORD_WAY_SUNNYVALE_CA\FIG_2_SITE_PLAN_MAP.MXD DATE: 6/1/2022 9:17:28 AM



LEGEND:

- Approximate Historical Groundwater Well Location
- Site Boundary

0 320 640

SCALE IN FEET

FORMER PATRICK HENRY SCHOOL CAMPUS, PORTION OF THE PETERSON MIDDLE SCHOOL CAMPUS & SCUSD ORGANIC FARM
1095 & 1055 DUNFORD WAY AND 1380 ROSALIA AVENUE
SUNNYVALE, CA

SITE PLAN MAP

ARCADIS

FIGURE
2

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

T:_ENV\PHASE_I_ESAS\PROJECT_FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\GIS\ARCMAP_MXD\PHASE_I_ESA_REPORT\1095_DUNFORD_WAY_SUNNYVALE_CA\FIG_3_SURROUNDING_PROPERTY_MAP.MXD DATE: 6/1/2022 9:21:51 AM

LEGEND:

- Monitoring Well Location
- Subject Property

0 500 1,000

SCALE IN FEET

FORMER PATRICK HENRY SCHOOL CAMPUS, PORTION OF THE PETERSON MIDDLE SCHOOL CAMPUS & SCUSD ORGANIC FARM
1095 & 1055 DUNFORD WAY AND 1380 ROSALIA AVENUE
SUNNYVALE, CA

SURROUNDING PROPERTY MAP

ARCADIS

FIGURE 3

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Appendix A

Subject Property Photographs

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 1

Description:
Southern portion of the Patrick Henry School Campus.

Location:
Southern portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 2

Description:
View of main courtyard at Patrick Henry School Campus.

Location:
Western portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 3

Description:
Example of office and classroom spaces in Building A.

Location:
Western portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 4

Description:
Example of halogen bulb storage.

Location:
Building A, Western Portion of the Patrick Henry Campus

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 5

Description:
Old furnace unit in Building A mechanical room.

Location:
Western portion of the Patrick Henry Campus

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 6

Description:
Example of de minimis staining on the floor of the Building A mechanical room.

Location:
Western portion of the Patrick Henry Campus

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 7

Description:
Example of de minimis staining in Building A kitchenette.

Location:
Western portion of the Patrick Henry Campus

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 8

Description:
View of auditorium in Building 300.

Location:
Southern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 9

Description:
Example of water damage on ceiling tiles in the auditorium.

Location:
Southern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 10

Description:
Example of broken ceiling tiles in classroom buildings near the auditorium.

Location:
Southern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 11

Description:
Example of classrooms at the campus.

Location:
Building 600, Southern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 12

Description:
Example of de minimis staining in Building 600 utility room.

Location:
Southern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 13

Description:
View of former garden or play areas near Building B.

Location:
Central portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 14

Description:
Example of water damage on carpets from ceiling leaks.

Location:
Building B, Appleseed Elementary, Eastern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 15

Description:
Example of dry-type transformers in utility room.

Location:
Eastern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 16

Description:
View of mini wall-mounted air conditioning units and peeling paint along the exterior.

Location:
Building C, Northern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 17

Description:
Example of floor drains in restrooms at school buildings.

Location:
Building C, Northern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 18

Description:
View of play areas along the northern side of Building C.

Location:
Northern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 19

Description:
Example of cleaning supply carts at the school campus.

Location:
Building D, Northern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 20

Description:
Example of satellite electronic waste storage.

Location:
Building D, Northern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 21

Description:
View of fire hydrant and air stack for Building D boiler room.

Location:
Northern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 22

Description:
View of historical boiler unit.

Location:
Building D Boiler Room.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 23

Description:
View of stormwater sump pump system in boiler room.

Location:
Building D Boiler Room.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph: 24

Description:
View of solid waste dumpster, sheds for recreational equipment storage, and soccer field.

Location:
Northern portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 25

Description:
View of recreational equipment storage area.

Location:
Northern portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph: 26

Description:
View of recreational field and north-adjacent residences.

Location:
Northern portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 27

Description:
View of Building G, pad-mounted transformer, and campus entrance.

Location:
Western portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 28

Description:
View of pad-mounted transformer pad.

Location:
Western portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 29

Description:
View of SCUSD print building.

Location:
Building G, Western portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 30

Description:
View of SCUSD instrument storage room and former cadaver room.

Location:
Building G, Western portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 31

Description:
View of de minimis staining on the floor of the printer rooms.

Location:
Building G, Western portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 32

Description:
View of the gravel maintenance yard storage area.

Location:
Western portion of the Patrick Henry Campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 33

Description:
View of historical furnace and water heater unit.

Location:
Maintenance room in Building G.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph: 34

Description:
View of boiler unit and empty, unlabeled drum.

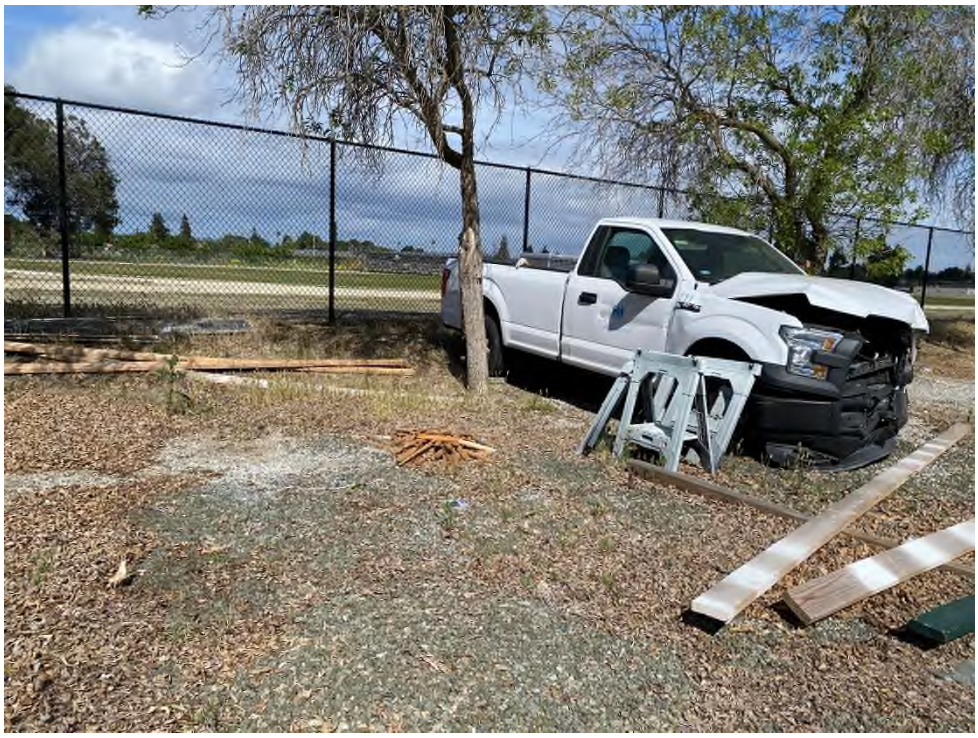
Location:
Maintenance room in Building G.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698



Photograph: 35

Description:
Example of vehicle storage in the maintenance yard.

Location:
Western portion of the Patrick Henry campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 36

Description:
View of former pool water cleaning machinery storage.

Location:
Western portion of the Patrick Henry campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 37

Description:
View of empty former pool cleaning material polyethylene tanks.

Location:
Western portion of the Patrick Henry campus.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 38

Description:
View of football track and field.

Location:
Central portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 39

Description:
View of greenhouse and SCUSD Organic Farm buildings.

Location:
Southern portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 40

Description:
View of bleachers and solar panels.

Location:
Central portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 41

Description:
View of solar panels and associated machinery.

Location:
Central portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 42

Description:
Solar panel machinery.

Location:
Central portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 43

Description:
View of electrical vault.

Location:
Central portion of the subject property near baseball diamond.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 44

Description:
View of north-adjacent portions of Peterson Middle School.

Location:
Northwestern boundary of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 45

Description:
View of portable classroom storage area.

Location:
Western portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph: 46

Description:
View of west-adjacent residences.

Location:
Western portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/13/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 47

Description:
View of storage buildings at the SCUSD farm.

Location:
Southern portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph: 48

Description:
Example of product and equipment storage at SCUSD farm.

Location:
Southern portion of the subject property.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 49

Description:
View of Conex box storage.

Location:
Parking lot at the Peterson Middle School campus.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph: 50

Description:
View of the northeastern portion of the subject property.

Location:
Parking lot at the Peterson Middle School campus.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 51

Description:
View of the temporary office trailer and dumpster storage area.

Location:
Parking lot at the Peterson Middle School campus.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph: 52

Description:
View of Santa Clara Raynor municipal well and 550-gallon diesel aboveground storage tank.

Location:
South of the subject property beyond Dunford Way.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Photograph Log

Patrick Henry School Campus, SCUSD Organic Farm, and Parking Lot Portion of Peterson Middle School Campus
1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California
Our Ref: 30126698

Photograph: 53

Description:
View of the church properties.

Location:
South of the subject property beyond Dunford Way.

Photograph taken by:
Divya Mehta

Date: 4/25/2022

Appendix B

EDR Radius Map™ Report with GeoCheck®

Patrick Henry and Peterson Campus Phase I ESA
1095 Dunford Way
Sunnyvale, CA 94087

Inquiry Number: 6951305.2s
April 22, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1095 DUNFORD WAY
SUNNYVALE, CA 94087

COORDINATES

Latitude (North):	37.3470490 - 37ˆ 20' 49.37''
Longitude (West):	122.0055580 - 122ˆ 0' 20.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	588081.1
UTM Y (Meters):	4133632.5
Elevation:	124 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12016429 CUPERTINO, CA
Version Date:	2018
Southeast Map:	12021561 SAN JOSE WEST, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140606
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1095 DUNFORD WAY
SUNNYVALE, CA 94087

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	PALMER COLLEGE CHIRO	1095 DUNFORD WAY	HAZNET, HWTS		TP
A2	SANTA CLARA USD	1095 DUNFORD	HAZNET, HWTS		TP
Reg	PANASONIC	10900 N TANTAU AVENU	NPL, SEMS, RCRA-SQG, US ENG CONTROLS, ENVIROSTOR,	Same	543, 0.103, South
B3	SANTA CLARA UNIFIED	1380 ROSALIA AVENUE	RCRA NonGen / NLR	Higher	1 ft.
B4	SCUSD - PETERSON MID	1380 ROSALIA AVENUE	RCRA NonGen / NLR	Higher	1 ft.
B5	SCUSD - PETERSON MID	1380 ROSALIA AVENUE	RCRA NonGen / NLR	Higher	1 ft.
B6	SANTA CLARA UNIFIED	1380 ROSALIA AVE	RCRA NonGen / NLR	Higher	1 ft.
7	GERALD CUMMINGS	1054 CASTLETON WAY	RCRA NonGen / NLR	Lower	54, 0.010, NE
C8	KATIE BESSETTE	1486 TEAL DRIVE	RCRA NonGen / NLR	Lower	87, 0.016, ESE
9	BECK, OLGA	1531 SANDPIPER COURT	RCRA NonGen / NLR	Higher	237, 0.045, SSE
C10	SMITH, MICHAEL	1146 DOON COURT	RCRA NonGen / NLR	Lower	257, 0.049, ESE
C11	MARY MARTINEZ	1145 DUNFORD WAY	RCRA NonGen / NLR	Lower	262, 0.050, ESE
D12	KEEGAN, PAT	1130 CLYDEBANK CT	RCRA NonGen / NLR	Lower	415, 0.079, East
13	EVA CHING	1357 SPRIG COURT	RCRA NonGen / NLR	Lower	475, 0.090, NE
E14	JANE WONG	1374 THUNDERBIRD AVE	RCRA NonGen / NLR	Lower	611, 0.116, ENE
E15	HOLLMAN WONG	1374 THUNDERBIRD AVE	RCRA NonGen / NLR	Lower	611, 0.116, ENE
16	DORETHY HAAS	1056 DURHAM CT	RCRA NonGen / NLR	Higher	616, 0.117, South
D17	CHARLIE SHEMWELL	1426 THUNDERBIRD AVE	RCRA NonGen / NLR	Lower	626, 0.119, East
F18	VENDAVATI KALE	1371 NAVARRO DRIVE	RCRA NonGen / NLR	Higher	630, 0.119, WNW
F19	VENDAVATI KALE	1371 NAVARRO DRIVE	RCRA NonGen / NLR	Higher	630, 0.119, WNW
E20	GARY & SHERI YOUNG	1368 THUNDERBIRD AVE	RCRA NonGen / NLR	Lower	648, 0.123, ENE
E21	ZOHRA MAJID	1353 THUNDERBIRD AVE	RCRA NonGen / NLR	Lower	651, 0.123, NE
22	KEIKO TACHIBANA	1342 SAGE HEN WAY	RCRA NonGen / NLR	Lower	686, 0.130, NNE
G23	CATHERINE L WEY	1220 HALFORD AVENUE	RCRA NonGen / NLR	Lower	805, 0.152, ENE
G24	CATHERINE L WEY	1220 HALFORD AVENUE	RCRA NonGen / NLR	Lower	805, 0.152, ENE
25	JOHN HOFFMAN	938 ETON WAY	RCRA NonGen / NLR	Higher	921, 0.174, WSW
H26	RANCH, DAVID & SHARO	3739 BENTON STREET	RCRA NonGen / NLR	Higher	955, 0.181, SE
27	BENSON HE & QINGHUA	943 MARION WAY	RCRA NonGen / NLR	Higher	1051, 0.199, WSW
28	ROHIT JNAGAL	3724 BENTON STREET	RCRA NonGen / NLR	Lower	1054, 0.200, ESE
H29	MARION & RICHARD MAL	3749 BENTON ST	RCRA NonGen / NLR	Higher	1082, 0.205, SE
I30	EXCEL CLEANERS #2	1082 E EL CAMINO REA	CUPA Listings	Lower	1094, 0.207, NNE
I31	COAST DISCOUNT CLEAN	1082 E EL CAMINO REA	RCRA-SQG, FINDS, ECHO, DRYCLEANERS, HAZNET, CERS,	Lower	1094, 0.207, NNE
I32	EXCEL CLEANERS	1082 E EL CAMINO REA	CUPA Listings	Lower	1094, 0.207, NNE
33	ICI PAINTS	1450 HALFORD AVE.	RCRA-SQG, FINDS, ECHO	Lower	1130, 0.214, NE
34	BHARADWAY, VIKRANT	1393 HAMPTON DRIVE	RCRA NonGen / NLR	Higher	1133, 0.215, WNW
J35	BELL PLAZA CHIROPRAC	1052 E EL CAMINO REA	CUPA Listings, HAZNET, HWTS	Lower	1188, 0.225, NNE
J36	GEARY'S QUALITY PHOT	1044 E EL CAMINO REA	CUPA Listings	Lower	1188, 0.225, NNE
J37	PAREDES AUTOWORKS	1062 E EL CAMINO REA	RCRA NonGen / NLR	Lower	1192, 0.226, NNE
J38	PAREDES AUTOWORKS	1062 E EL CAMINO REA	CERS HAZ WASTE	Lower	1192, 0.226, NNE

MAPPED SITES SUMMARY

Target Property Address:
1095 DUNFORD WAY
SUNNYVALE, CA 94087

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
J39	JC AUTO REPAIR	1062 E EL CAMINO REA	CUPA Listings	Lower	1192, 0.226, NNE
J40	IVY TRUMAN AUTOMOTIV	1062 E EL CAMINO REA	CERS HAZ WASTE	Lower	1192, 0.226, NNE
J41	AUTO ELECT & RADIATO	1062 E EL CAMINO REA	CUPA Listings	Lower	1192, 0.226, NNE
J42	IVY & TRUMAN AUTOMOT	1062 E EL CAMINO REA	RCRA NonGen / NLR	Lower	1192, 0.226, NNE
J43	IVY & TRUMAN AUTOMOT	1062 E EL CAMINO REA	RCRA NonGen / NLR	Lower	1192, 0.226, NNE
J44	JC AUTO REPAIR	1062 E EL CAMINO REA	RCRA-SQG, FINDS, ECHO	Lower	1192, 0.226, NNE
J45	MAZDA MASTERS	1062 E EL CAMINO REA	CUPA Listings	Lower	1192, 0.226, NNE
J46	QUALITY AUTO CENTER	1062 E EL CAMINO REA	CERS HAZ WASTE, HWTS	Lower	1192, 0.226, NNE
J47	J C AUTO REPAIR	1062 E EL CAMINO REA	RCRA NonGen / NLR	Lower	1192, 0.226, NNE
J48	WOLFGANG VW REPAIR &	1062 E EL CAMINO REA	CUPA Listings	Lower	1192, 0.226, NNE
K49	YING LIU	917 EXMOOR WAY	RCRA NonGen / NLR	Higher	1193, 0.226, WSW
L50	DON AND JOHN'S AUTOM	1080 E EL CAMINO REA	RCRA NonGen / NLR	Lower	1194, 0.226, NNE
L51	DON & JOHN'S AUTOMOT	1080 E EL CAMINO REA	CERS HAZ WASTE, CERS	Lower	1194, 0.226, NNE
L52	DON & JOHN'S AUTOMOT	1080 E EL CAMINO REA	CUPA Listings	Lower	1194, 0.226, NNE
M53	TIBET MIMAROGLU	1040 GLOUCESTER CT.,	RCRA NonGen / NLR	Higher	1203, 0.228, South
M54	TIBET MIMAROGHU	1040 GLOUCESTER CT	RCRA NonGen / NLR	Higher	1203, 0.228, South
N55	SAIGON CLEANERS	1034 E EL CAMINO REA	DRYCLEANERS, HWTS	Lower	1205, 0.228, North
N56	VELMA DRY CLEANERS	1034 E EL CAMINO REA	RCRA-SQG	Lower	1205, 0.228, North
N57	J PHOTO CENTER	1018 E EL CAMINO REA	CUPA Listings, HWTS	Lower	1205, 0.228, North
N58	SAIGON CLEANERS	1034 E EL CAMINO REA	RCRA NonGen / NLR	Lower	1205, 0.228, North
N59	SAIGON'S DRY CLEANER	1034 E EL CAMINO REA	CUPA Listings	Lower	1205, 0.228, North
N60	ALPHA DENTAL CARE	1024 E EL CAMINO REA	RCRA NonGen / NLR	Lower	1205, 0.228, North
N61	SAIGON CLEANERS	1034 E. EL CAMINO RE	CERS HAZ WASTE, CERS	Lower	1205, 0.228, North
N62	SAIGON CLEANERS	1034 E EL CAMINO REA	FINDS, ECHO, DRYCLEANERS	Lower	1205, 0.228, North
O63	JULIE WADE	1563 PATRIDGE COURT	RCRA NonGen / NLR	Higher	1230, 0.233, SSW
O64	JULIE WADE	1563 PARTRIDGE CT.	RCRA NonGen / NLR	Higher	1230, 0.233, SSW
K65	KIKU AND DOUG MURAKA	913 EXMOOR WAY	RCRA NonGen / NLR	Higher	1236, 0.234, WSW
66	STATION 101 APARTMEN	3700 LILLICK DR	RCRA NonGen / NLR	Lower	1261, 0.239, ENE
P67	HIROSHI MIYANO	960 WOOD DUCK AVE	RCRA NonGen / NLR	Higher	1263, 0.239, SE
68	MARINSHAW, JOHN	1004 WOOD DUCK AVENU	RCRA NonGen / NLR	Lower	1272, 0.241, ESE
K69	PIERO CASSARA	912 EXMOOR WAY	RCRA NonGen / NLR	Higher	1314, 0.249, WSW
J70	VELMA CLEANERS	1059 EL CAMINO REAL	RCRA-SQG, FINDS, ECHO, HAZNET, HWTS	Lower	1315, 0.249, North
P71	ARIE MATSLIAH	967 WOOD DUCK AVE	RCRA NonGen / NLR	Higher	1315, 0.249, ESE
72	ST ANTONE	1008 E. EL CAMINO RE	RCRA NonGen / NLR	Lower	1320, 0.250, NNW
73	ESSEX SANTA CLARA SQ	3700 EL CAMINO REAL	CPS-SLIC, CERS	Lower	1480, 0.280, ENE
74	E Z RENTS	954 E EL CAMINO REAL	LUST, HIST LUST, Cortese, HIST CORTESE, CERS	Higher	1518, 0.287, NW
Q75	CHEVRON	3740 EL CAMINO REAL	HIST CORTESE	Lower	1532, 0.290, NE
Q76	CHEVRON #9-0243	3740 EL CAMINO REAL	LUST, HIST LUST, SWEEPS UST, Cortese	Lower	1532, 0.290, NE
Q77	D&L CHEVRON	3740 EL CAMINO REAL	LUST, CA FID UST, CERS	Lower	1532, 0.290, NE

MAPPED SITES SUMMARY

Target Property Address:
1095 DUNFORD WAY
SUNNYVALE, CA 94087

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Q78	CHEVRON #9-0243	3740 EL CAMINO REAL	LUST, HIST UST	Lower	1532, 0.290, NE
79	EL CAMINO PLAZA	1053 EL CAMINO REAL,	CPS-SLIC, CERS	Lower	1551, 0.294, North
R80	EXXON #7-3850	3725 EL CAMINO REAL	LUST, CHMIRS, HIST CORTESE	Lower	1771, 0.335, NE
R81	EXXON #7-3850	3725 EL CAMINO REAL	LUST, HIST LUST, SWEEPS UST, CA FID UST, Cortese,...	Lower	1771, 0.335, NE
S82	UNOCAL	898 FREMONT	HIST CORTESE	Higher	2004, 0.380, NW
S83	UNOCAL	898 E FREMONT AVE	LUST, HIST LUST, Cortese	Higher	2012, 0.381, WNW
S84	UNOCAL	898 E FREMONT AVE	LUST, SWEEPS UST, HIST UST, CERS	Higher	2012, 0.381, WNW
S85	UNOCAL	898 E. FREMONT AVENU	LUST, HIST UST, Cortese	Higher	2012, 0.381, WNW
S86	SOUTHLAND CORP PROPE	895 FREMONT	HIST CORTESE	Higher	2061, 0.390, NW
S87	SOUTHLAND CORPORATIO	895 E FREMONT AVE	LUST, HIST LUST, Cortese, CERS	Higher	2185, 0.414, NW
S88	SOUTHLAND CORPORATIO	895 E FREMONT AVE	LUST	Higher	2185, 0.414, NW
T89	SHELL	905 EL CAMINO REAL	LUST, HIST LUST	Higher	2210, 0.419, NW
T90	SHELL - 905 EL CAMIN	905 EL CAMINO REAL	LUST, Cortese, CERS	Higher	2226, 0.422, NW
91	SIEMENS-19000 HOMEST	19000 HOMESTEAD	ENVIROSTOR, CPS-SLIC, DEED, Cortese, ENF, HIST...	Higher	3159, 0.598, South
U92	EMCON ASSOCIATES	3800 HOMESTEAD ROAD	EMI, HWP	Higher	3389, 0.642, SSE
U93	3800 HOMESTEAD RD, A	3800 HOMESTEAD	RESPONSE, ENVIROSTOR, LUST, CPS-SLIC, DEED,...	Higher	3389, 0.642, SSE
94	INTERSIL/SIEMENS	(INTERSIL) 10900 TAN	CA BOND EXP. PLAN	Higher	3810, 0.722, South
95	CUPERTINO VILLAGE CL	10989 NORTH WOLFE RO	ENVIROSTOR, VCP, CERS	Higher	4074, 0.772, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
PALMER COLLEGE CHIRO 1095 DUNFORD WAY SUNNYVALE, CA 94087	HAZNET GEPAID: CAL000046072 HWTS	N/A
SANTA CLARA USD 1095 DUNFORD SUNNYVALE, CA 94087	HAZNET GEPAID: CAC002379543 HWTS	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

EXECUTIVE SUMMARY

Lists of Federal RCRA generators

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-VSQG ..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US INST CONTROLS ..... Institutional Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF ..... Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST ..... Underground Storage Tank Listing
UST ..... Active UST Facilities
AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

VCP ..... Voluntary Cleanup Program Properties
INDIAN VCP ..... Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS - Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL - Delisted National Clandestine Laboratory Register
SCH - School Property Evaluation Program
CDL - Clandestine Drug Labs
Toxic Pits - Toxic Pits Cleanup Act Sites
US CDL - National Clandestine Laboratory Register
PFAS - PFAS Contamination Site Location Listing
AQUEOUS FOAM - Former Fire Training Facility Assessments Listing

Local Lists of Registered Storage Tanks

SWEEPS UST - SWEEPS UST Listing
HIST UST - Hazardous Substance Storage Container Database
CA FID UST - Facility Inventory Database
CERS TANKS - California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS - Environmental Liens Listing
LIENS 2 - CERCLA Lien Information
DEED - Deed Restriction Listing

Records of Emergency Release Reports

HMIRS - Hazardous Materials Information Reporting System
CHMIRS - California Hazardous Material Incident Report System
LDS - Land Disposal Sites Listing
MCS - Military Cleanup Sites Listing
SPILLS 90 - SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS - Formerly Used Defense Sites
DOD - Department of Defense Sites
SCRD DRYCLEANERS - State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR - Financial Assurance Information
EPA WATCH LIST - EPA WATCH LIST
2020 COR ACTION - 2020 Corrective Action Program List
TSCA - Toxic Substances Control Act
TRIS - Toxic Chemical Release Inventory System
SSTS - Section 7 Tracking Systems
RMP - Risk Management Plans
RAATS - RCRA Administrative Action Tracking System
PRP - Potentially Responsible Parties
PADS - PCB Activity Database System
ICIS - Integrated Compliance Information System
FTTS - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS - Material Licensing Tracking System
COAL ASH DOE - Steam-Electric Plant Operation Data
COAL ASH EPA - Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER - PCB Transformer Registration Database

RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
FINDS ---- Facility Index System/Facility Registry System
ECHO ---- Enforcement & Compliance History Information
UXO ---- Unexploded Ordnance Sites
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
EMI ---- Emissions Inventory Data
ENF ---- Enforcement Action Listing
Financial Assurance ---- Financial Assurance Information Listing
ICE ---- ICE
HWT ---- Registered Hazardous Waste Transporter Database
MINES ---- Mines Site Location Listing
MWMP ---- Medical Waste Management Program Listing
NPDES ---- NPDES Permits Listing
PEST LIC ---- Pesticide Regulation Licenses Listing
PROC ---- Certified Processors Database
Notify 65 ---- Proposition 65 Records
HAZMAT ---- Hazardous Material Facilities
UIC ---- UIC Listing
UIC GEO ---- UIC GEO (GEOTRACKER)
WASTEWATER PITS ---- Oil Wastewater Pits Listing
WDS ---- Waste Discharge System
WIP ---- Well Investigation Program Case List
MILITARY PRIV SITES ---- MILITARY PRIV SITES (GEOTRACKER)
PROJECT ---- PROJECT (GEOTRACKER)
WDR ---- Waste Discharge Requirements Listing
CIWQS ---- California Integrated Water Quality System
CERS ---- CERS
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)
MINES MRDS ---- Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---- Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 01/25/2022 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PANASONIC Cerclis ID:: 901325 EPA Id: CAD041472341	***10900 N TANTAU AVENU***	***S 0 - 1/8 (0.103 mi.)***	***0***	***12***

Lists of Federal sites subject to CERCLA removals and CERCLA orders

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 01/25/2022 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PANASONIC Site ID: 0901325 EPA Id: CAD041472341	***10900 N TANTAU AVENU***	***S 0 - 1/8 (0.103 mi.)***	***0***	***12***

EXECUTIVE SUMMARY

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/28/2022 has revealed that there are 6 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PANASONIC EPA ID:: CAD041472341	***10900 N TANTAU AVENU***	***S 0 - 1/8 (0.103 mi.)***	***0***	***12***

Lower Elevation	Address	Direction / Distance	Map ID	Page
COAST DISCOUNT CLEAN EPA ID:: CAD982416141	***1082 E EL CAMINO REA***	***NNE 1/8 - 1/4 (0.207 mi.)***	***I31***	***110***
ICI PAINTS EPA ID:: CAR000010348	***1450 HALFORD AVE.***	***NE 1/8 - 1/4 (0.214 mi.)***	***33***	***140***
JC AUTO REPAIR EPA ID:: CAR000000463	***1062 E EL CAMINO REA***	***NNE 1/8 - 1/4 (0.226 mi.)***	***J44***	***180***
VELMA DRY CLEANERS EPA ID:: CA0000372201	1034 E EL CAMINO REA	N 1/8 - 1/4 (0.228 mi.)	N56	214
VELMA CLEANERS EPA ID:: CAD981582117	***1059 EL CAMINO REAL***	***N 1/8 - 1/4 (0.249 mi.)***	***J70***	***248***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 11/19/2021 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PANASONIC EPA ID:: CAD041472341 EPA ID:: CAD041472341	***10900 N TANTAU AVENU***	***S 0 - 1/8 (0.103 mi.)***	***0***	***12***

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there is 1 RESPONSE site within

approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
3800 HOMESTEAD RD, A	***3800 HOMESTEAD***	***SSE 1/2 - 1 (0.642 mi.)***	***U93***	***337***
Database: RESPONSE, Date of Government Version: 01/24/2022 Status: Refer: RWQCB Facility Id: 43360031				

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/24/2022 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PANASONIC Facility Id: 43360032 Status: Refer: RWQCB	***10900 N TANTAU AVENU***	***S 0 - 1/8 (0.103 mi.)***	***0***	***12***
SIEMENS-19000 HOMEST Facility Id: 71002455 Status: Inactive - Needs Evaluation	***19000 HOMESTEAD***	***S 1/2 - 1 (0.598 mi.)***	***91***	***329***
3800 HOMESTEAD RD, A Facility Id: 43360031 Status: Refer: RWQCB	***3800 HOMESTEAD***	***SSE 1/2 - 1 (0.642 mi.)***	***U93***	***337***
CUPERTINO VILLAGE CL Facility Id: 60000385 Status: Active	***10989 NORTH WOLFE RO***	***SW 1/2 - 1 (0.772 mi.)***	***95***	***354***

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 13 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
E Z RENTS	***954 E EL CAMINO REAL***	***NW 1/4 - 1/2 (0.287 mi.)***	***74***	***262***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014 Database: LUST, Date of Government Version: 12/06/2021				

Facility Status: Case Closed
Date Closed: 02/09/2001
Global Id: T0608500537
SCVWD ID: 07S1W06K01F
Status: Completed - Case Closed
date9: 2/9/2001

UNOCAL ***898 E FREMONT AVE*** ***WNW 1/4 - 1/2 (0.381 mi.)*** ***S83*** ***294***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
Facility Status: Pollution Characterization
date9: 4/24/1991

UNOCAL ***898 E FREMONT AVE*** ***WNW 1/4 - 1/2 (0.381 mi.)*** ***S84*** ***296***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Date Closed: 04/24/1991
SCVWD ID: 07S1W06F04F
SCVWD ID: 07S1W06F01F

UNOCAL ***898 E. FREMONT AVENU*** ***WNW 1/4 - 1/2 (0.381 mi.)*** ***S85*** ***299***
Database: LUST, Date of Government Version: 12/06/2021
Global Id: T0608501540
Global Id: T0608502281
Status: Completed - Case Closed

SOUTHLAND CORPORATIO ***895 E FREMONT AVE*** ***NW 1/4 - 1/2 (0.414 mi.)*** ***S87*** ***316***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
date9: 1/4/1996

SOUTHLAND CORPORATIO 895 E FREMONT AVE NW 1/4 - 1/2 (0.414 mi.) S88 317
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 12/06/2021
Date Closed: 01/04/1996
Global Id: T0608501933
SCVWD ID: 07S1W06F02F
Status: Completed - Case Closed

SHELL ***905 EL CAMINO REAL*** ***NW 1/4 - 1/2 (0.419 mi.)*** ***T89*** ***319***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Pollution Characterization

SHELL - 905 EL CAMIN ***905 EL CAMINO REAL*** ***NW 1/4 - 1/2 (0.422 mi.)*** ***T90*** ***319***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 12/06/2021
Global Id: T0608587185
SCVWD ID: 07S1W06G01F
Status: Completed - Case Closed

Lower Elevation	Address	Direction / Distance	Map ID	Page

CHEVRON #9-0243 ***3740 EL CAMINO REAL*** ***NE 1/4 - 1/2 (0.290 mi.)*** ***Q76*** ***267***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Pollution Characterization

D&L CHEVRON ***3740 EL CAMINO REAL*** ***NE 1/4 - 1/2 (0.290 mi.)*** ***Q77*** ***269***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Date Closed: 11/15/2004
SCVWD ID: 07S1W05L01F

CHEVRON #9-0243 ***3740 EL CAMINO REAL*** ***NE 1/4 - 1/2 (0.290 mi.)*** ***Q78*** ***270***
Database: LUST, Date of Government Version: 12/06/2021

Global Id: T0608500379
Status: Completed - Case Closed

EXXON #7-3850 ***3725 EL CAMINO REAL*** ***NE 1/4 - 1/2 (0.335 mi.)*** ***R80*** ***276***
Database: LUST, Date of Government Version: 12/06/2021
Global Id: T0608501405
Status: Open - Verification Monitoring

EXXON #7-3850 ***3725 EL CAMINO REAL*** ***NE 1/4 - 1/2 (0.335 mi.)*** ***R81*** ***290***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Facility Status: Pollution Characterization
SCVWD ID: 07S1W05F01F

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 3 CPS-SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PANASONIC	***10900 N TANTAU AVENU***	***S 0 - 1/8 (0.103 mi.)***	***0***	***12***
Database: SLIC REG 2, Date of Government Version: 09/30/2004 Facility Id: 43S0064				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ESSEX SANTA CLARA SQ	***3700 EL CAMINO REAL***	***ENE 1/4 - 1/2 (0.280 mi.)***	***73***	***261***
Database: CPS-SLIC, Date of Government Version: 12/06/2021 Facility Status: Open - Verification Monitoring Global Id: T10000010352				
EL CAMINO PLAZA	***1053 EL CAMINO REAL,***	***N 1/4 - 1/2 (0.294 mi.)***	***79***	***275***
Database: CPS-SLIC, Date of Government Version: 12/06/2021 Facility Status: Open - Site Assessment Global Id: T10000011653				

HIST LUST: A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

A review of the HIST LUST list, as provided by EDR, and dated 03/29/2005 has revealed that there are 6 HIST LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
E Z RENTS	***954 E EL CAMINO REAL***	***NW 1/4 - 1/2 (0.287 mi.)***	***74***	***262***
SCVWD ID: 07S1W06K01				
UNOCAL	***898 E FREMONT AVE***	***WNW 1/4 - 1/2 (0.381 mi.)***	***S83***	***294***
SCVWD ID: 07S1W06F01 SCVWD ID: 07S1W06F04				
SOUTHLAND CORPORATIO	***895 E FREMONT AVE***	***NW 1/4 - 1/2 (0.414 mi.)***	***S87***	***316***

SCVWD ID: 07S1W06F02

SHELL	***905 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.419 mi.)***	***T89***	***319***

SCVWD ID: 07S1W06G01

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON #9-0243	***3740 EL CAMINO REAL***	***NE 1/4 - 1/2 (0.290 mi.)***	***Q76***	***267***
SCVWD ID: 07S1W05L01				
EXXON #7-3850	***3725 EL CAMINO REAL***	***NE 1/4 - 1/2 (0.335 mi.)***	***R81***	***290***
SCVWD ID: 07S1W05F01				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 HIST Cal-Sites site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PANASONIC	***10900 N TANTAU AVENU***	***S 0 - 1/8 (0.103 mi.)***	***0***	***12***

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/18/2022 has revealed that there are 5 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PAREDES AUTOWORKS	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J38	163
IVY TRUMAN AUTOMOTIV	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J40	168
QUALITY AUTO CENTER	***1062 E EL CAMINO REA***	***NNE 1/8 - 1/4 (0.226 mi.)***	***J46***	***184***
DON & JOHN'S AUTOMOT	***1080 E EL CAMINO REA***	***NNE 1/8 - 1/4 (0.226 mi.)***	***L51***	***202***
SAIGON CLEANERS	***1034 E. EL CAMINO RE***	***N 1/8 - 1/4 (0.228 mi.)***	***N61***	***223***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 02/28/2022 has revealed that

there are 47 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SANTA CLARA UNIFIED EPA ID:: CAC003018289	1380 ROSALIA AVENUE	0 - 1/8 (0.000 mi.)	B3	42
SCUSD - PETERSON MID EPA ID:: CAC002999621	1380 ROSALIA AVENUE	0 - 1/8 (0.000 mi.)	B4	45
SCUSD - PETERSON MID EPA ID:: CAC002970458	1380 ROSALIA AVENUE	0 - 1/8 (0.000 mi.)	B5	47
SANTA CLARA UNIFIED	1380 ROSALIA AVE	0 - 1/8 (0.000 mi.)	B6	50
BECK, OLGA EPA ID:: CAC003007983	1531 SANDPIPER COURT	SSE 0 - 1/8 (0.045 mi.)	9	57
DORETHY HAAS EPA ID:: CAC002989644	1056 DURHAM CT	S 0 - 1/8 (0.117 mi.)	16	75
VENDAVATI KALE	1371 NAVARRO DRIVE	WNW 0 - 1/8 (0.119 mi.)	F18	80
VENDAVATI KALE	1371 NAVARRO DRIVE	WNW 0 - 1/8 (0.119 mi.)	F19	82
JOHN HOFFMAN EPA ID:: CAC003047325	938 ETON WAY	WSW 1/8 - 1/4 (0.174 mi.)	25	97
RANCH, DAVID & SHARO EPA ID:: CAC003024898	3739 BENTON STREET	SE 1/8 - 1/4 (0.181 mi.)	H26	100
BENSON HE & QINGHUA	943 MARION WAY	WSW 1/8 - 1/4 (0.199 mi.)	27	102
MARION & RICHARD MAL EPA ID:: CAC003057957	3749 BENTON ST	SE 1/8 - 1/4 (0.205 mi.)	H29	107
BHARADWAY, VIKRANT	1393 HAMPTON DRIVE	WNW 1/8 - 1/4 (0.215 mi.)	34	144
YING LIU	917 EXMOOR WAY	WSW 1/8 - 1/4 (0.226 mi.)	K49	197
TIBET MIMAROGLU EPA ID:: CAC002970088	1040 GLOUCESTER CT.,	S 1/8 - 1/4 (0.228 mi.)	M53	208
TIBET MIMAROGHU EPA ID:: CAC003010949	1040 GLOUCESTER CT	S 1/8 - 1/4 (0.228 mi.)	M54	210
JULIE WADE EPA ID:: CAC003008960	1563 PATRIDGE COURT	SSW 1/8 - 1/4 (0.233 mi.)	O63	230
JULIE WADE EPA ID:: CAC003007350	1563 PARTRIDGE CT.	SSW 1/8 - 1/4 (0.233 mi.)	O64	233
KIKU AND DOUG MURAKA EPA ID:: CAC003047832	913 EXMOOR WAY	WSW 1/8 - 1/4 (0.234 mi.)	K65	235
HIROSHI MIYANO EPA ID:: CAC003019548	960 WOOD DUCK AVE	SE 1/8 - 1/4 (0.239 mi.)	P67	240
PIERO CASSARA	912 EXMOOR WAY	WSW 1/8 - 1/4 (0.249 mi.)	K69	245
ARIE MATSLIAH EPA ID:: CAC003032099	967 WOOD DUCK AVE	ESE 1/8 - 1/4 (0.249 mi.)	P71	256

Lower Elevation	Address	Direction / Distance	Map ID	Page
GERALD CUMMINGS	1054 CASTLETON WAY	NE 0 - 1/8 (0.010 mi.)	7	52
KATIE BESSETTE	1486 TEAL DRIVE	ESE 0 - 1/8 (0.016 mi.)	C8	55
SMITH, MICHAEL EPA ID:: CAC003051026	1146 DOON COURT	ESE 0 - 1/8 (0.049 mi.)	C10	60
MARY MARTINEZ EPA ID:: CAC003059053	1145 DUNFORD WAY	ESE 0 - 1/8 (0.050 mi.)	C11	62
KEEGAN, PAT	1130 CLYDEBANK CT	E 0 - 1/8 (0.079 mi.)	D12	65
EVA CHING	1357 SPRIG COURT	NE 0 - 1/8 (0.090 mi.)	13	67

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
JANE WONG	1374 THUNDERBIRD AVE	ENE 0 - 1/8 (0.116 mi.)	E14	70
HOLLMAN WONG	1374 THUNDERBIRD AVE	ENE 0 - 1/8 (0.116 mi.)	E15	72
CHARLIE SHEMWELL EPA ID:: CAC003052603	1426 THUNDERBIRD AVE	E 0 - 1/8 (0.119 mi.)	D17	77
GARY & SHERI YOUNG	1368 THUNDERBIRD AVE	ENE 0 - 1/8 (0.123 mi.)	E20	85
ZOHRA MAJID EPA ID:: CAC003043446	1353 THUNDERBIRD AVE	NE 0 - 1/8 (0.123 mi.)	E21	87
KEIKO TACHIBANA EPA ID:: CAC003010937	1342 SAGE HEN WAY	NNE 1/8 - 1/4 (0.130 mi.)	22	90
CATHERINE L WEY	1220 HALFORD AVENUE	ENE 1/8 - 1/4 (0.152 mi.)	G23	92
CATHERINE L WEY	1220 HALFORD AVENUE	ENE 1/8 - 1/4 (0.152 mi.)	G24	95
ROHIT JNAGAL EPA ID:: CAC003019191	3724 BENTON STREET	ESE 1/8 - 1/4 (0.200 mi.)	28	105
PAREDES AUTOWORKS EPA ID:: CAL000313116	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J37	161
IVY & TRUMAN AUTOMOT EPA ID:: CAL000350286	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J42	175
IVY & TRUMAN AUTOMOT EPA ID:: CAL000444654	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J43	178
J C AUTO REPAIR	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J47	194
DON AND JOHN'S AUTOM EPA ID:: CAL000200538	1080 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	L50	199
SAIGON CLEANERS	1034 E EL CAMINO REA	N 1/8 - 1/4 (0.228 mi.)	N58	217
ALPHA DENTAL CARE EPA ID:: CAL000171898	1024 E EL CAMINO REA	N 1/8 - 1/4 (0.228 mi.)	N60	220
STATION 101 APARTMEN EPA ID:: CAL000280911	3700 LILLICK DR	ENE 1/8 - 1/4 (0.239 mi.)	66	238
MARINSHAW, JOHN EPA ID:: CAC002995479	1004 WOOD DUCK AVENU	ESE 1/8 - 1/4 (0.241 mi.)	68	243
ST ANTONE EPA ID:: CAC002967846	1008 E. EL CAMINO RE	NNW 1/8 - 1/4 (0.250 mi.)	72	258

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 01/25/2022 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PANASONIC EPA ID:: CAD041472341	***10900 N TANTAU AVENU***	***S 0 - 1/8 (0.103 mi.)***	***0***	***12***

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
INTERSIL/SIEMENS	(INTERSIL) 10900 TAN	S 1/2 - 1 (0.722 mi.)	94	353

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/16/2021 has revealed that there are 7 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
E Z RENTS	***954 E EL CAMINO REAL***	***NW 1/4 - 1/2 (0.287 mi.)***	***74***	***262***
Cleanup Status: COMPLETED - CASE CLOSED				
UNOCAL	***898 E FREMONT AVE***	***WNW 1/4 - 1/2 (0.381 mi.)***	***S83***	***294***
Cleanup Status: COMPLETED - CASE CLOSED				
UNOCAL	***898 E. FREMONT AVENU***	***WNW 1/4 - 1/2 (0.381 mi.)***	***S85***	***299***
Cleanup Status: COMPLETED - CASE CLOSED				
SOUTHLAND CORPORATIO	***895 E FREMONT AVE***	***NW 1/4 - 1/2 (0.414 mi.)***	***S87***	***316***
Cleanup Status: COMPLETED - CASE CLOSED				
SHELL - 905 EL CAMIN	***905 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.422 mi.)***	***T90***	***319***
Cleanup Status: COMPLETED - CASE CLOSED				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON #9-0243	***3740 EL CAMINO REAL***	***NE 1/4 - 1/2 (0.290 mi.)***	***Q76***	***267***
Cleanup Status: COMPLETED - CASE CLOSED				
EXXON #7-3850	***3725 EL CAMINO REAL***	***NE 1/4 - 1/2 (0.335 mi.)***	***R81***	***290***
Cleanup Status: OPEN - VERIFICATION MONITORING				

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 11 CUPA Listings sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
EXCEL CLEANERS #2	1082 E EL CAMINO REA	NNE 1/8 - 1/4 (0.207 mi.)	I30	110
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
EXCEL CLEANERS	1082 E EL CAMINO REA	NNE 1/8 - 1/4 (0.207 mi.)	I32	139
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
BELL PLAZA CHIROPRAC	***1052 E EL CAMINO REA***	***NNE 1/8 - 1/4 (0.225 mi.)***	***J35***	***146***
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
GEARY'S QUALITY PHOT	1044 E EL CAMINO REA	NNE 1/8 - 1/4 (0.225 mi.)	J36	161
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				

Lower Elevation	Address	Direction / Distance	Map ID	Page
JC AUTO REPAIR	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J39	168
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
AUTO ELECT & RADIATO	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J41	175
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
MAZDA MASTERS	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J45	183
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
WOLFGANG VW REPAIR &	1062 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	J48	196
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
DON & JOHN'S AUTOMOT	1080 E EL CAMINO REA	NNE 1/8 - 1/4 (0.226 mi.)	L52	207
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
J PHOTO CENTER	***1018 E EL CAMINO REA***	***N 1/8 - 1/4 (0.228 mi.)***	***N57***	***216***
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				
SAIGON'S DRY CLEANER	1034 E EL CAMINO REA	N 1/8 - 1/4 (0.228 mi.)	N59	220
Database: CUPA SANTA CLARA, Date of Government Version: 11/19/2021				

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there are 3 DRYCLEANERS sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
COAST DISCOUNT CLEAN	***1082 E EL CAMINO REA***	***NNE 1/8 - 1/4 (0.207 mi.)***	***I31***	***110***
Database: DRYCLEANERS, Date of Government Version: 08/27/2021				
EPA Id: CAL000224689				
SAIGON CLEANERS	***1034 E EL CAMINO REA***	***N 1/8 - 1/4 (0.228 mi.)***	***N55***	***213***
Database: DRYCLEANERS, Date of Government Version: 08/27/2021				
EPA Id: CAL000257973				
SAIGON CLEANERS	***1034 E EL CAMINO REA***	***N 1/8 - 1/4 (0.228 mi.)***	***N62***	***229***
Database: DRYCLEANERS, Date of Government Version: 08/27/2021				
EPA Id: CA0000372201				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 5 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
E Z RENTS	***954 E EL CAMINO REAL***	***NW 1/4 - 1/2 (0.287 mi.)***	***74***	***262***
Reg Id: 43-0491				
UNOCAL	898 FREMONT	NW 1/4 - 1/2 (0.380 mi.)	S82	294
Reg Id: 43-1580				
SOUTHLAND CORP PROPE	895 FREMONT	NW 1/4 - 1/2 (0.390 mi.)	S86	315

Reg Id: 43-2105

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON Reg Id: 43-0322	3740 EL CAMINO REAL	NE 1/4 - 1/2 (0.290 mi.)	Q75	267
EXXON #7-3850 Reg Id: 43-1433	***3725 EL CAMINO REAL***	***NE 1/4 - 1/2 (0.335 mi.)***	***R80***	***276***

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 11/15/2021 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

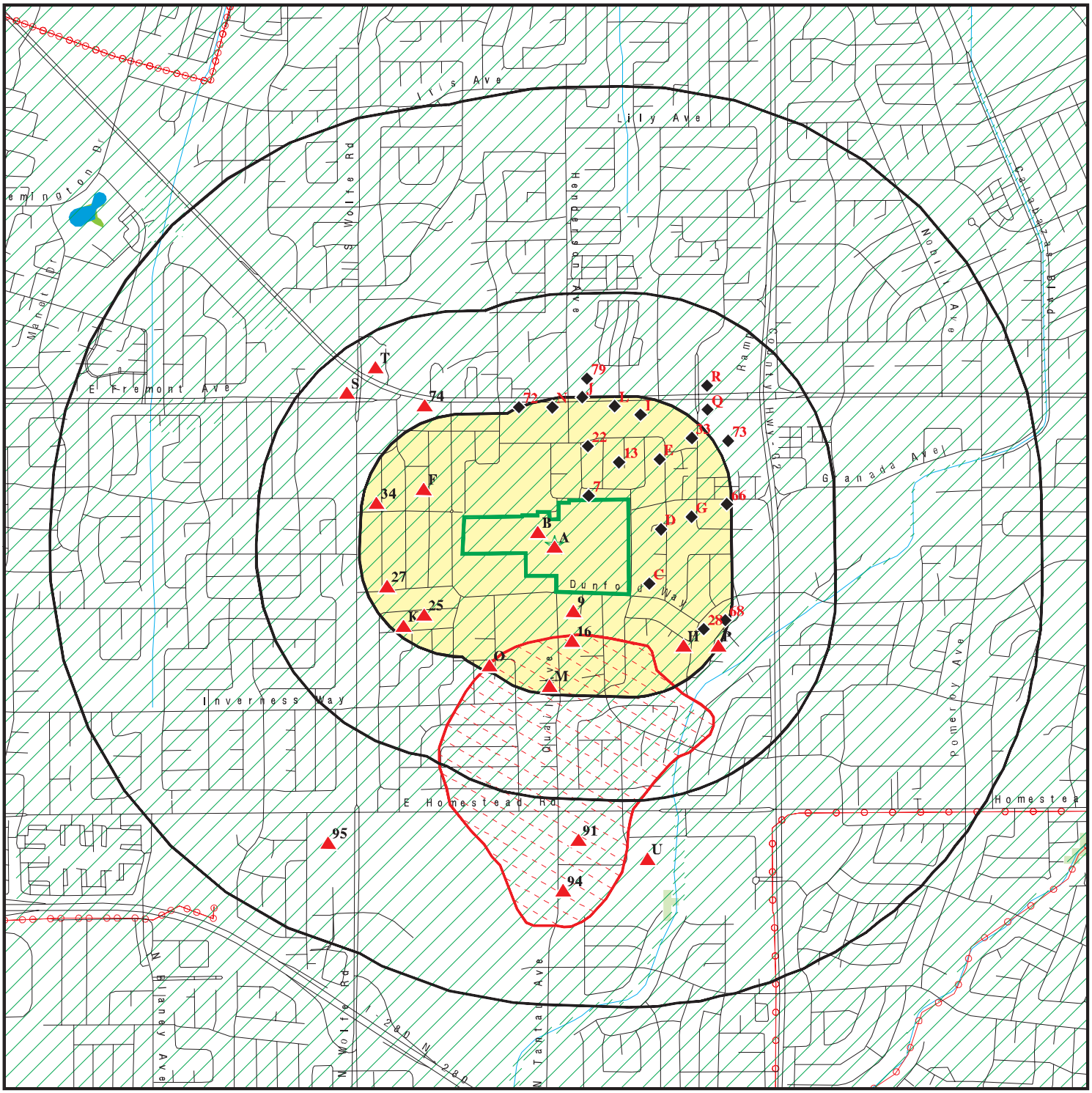
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EMCON ASSOCIATES EPA ID: CAD046491577 Cleanup Status: CLOSED	***3800 HOMESTEAD ROAD***	***SSE 1/2 - 1 (0.642 mi.)***	***U92***	***335***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
SHELL	LUST, HIST LUST, Cortese, HIST CORTESE
CONOCOPHILLIPS # 11213	LUST, HIST LUST, Cortese

OVERVIEW MAP - 6951305.2S

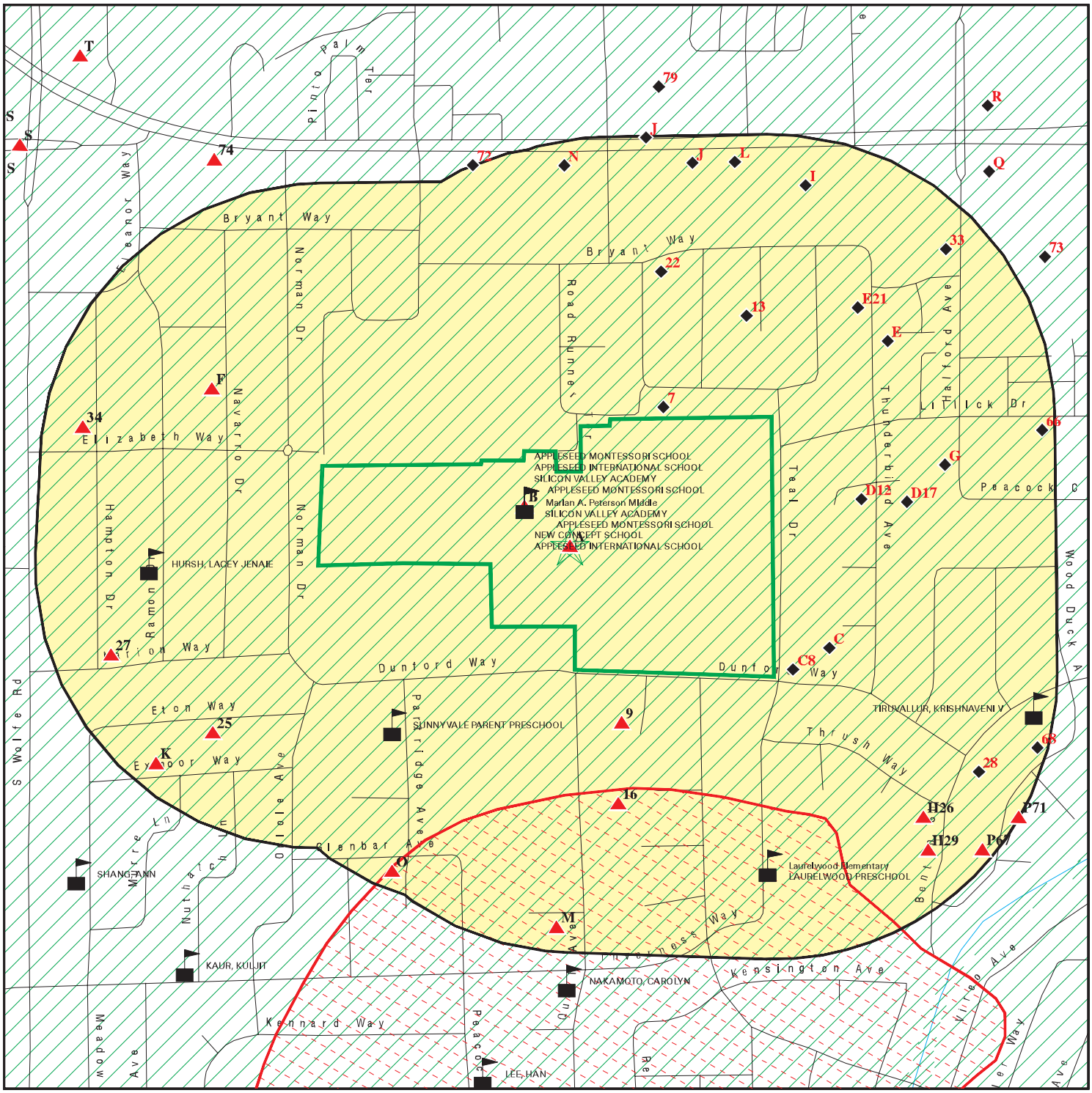


- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Patrick Henry and Peterson Campus Phase I ESA	CLIENT:	ARCADIS U.S., Inc.
ADDRESS:	1095 Dunford Way Sunnyvale CA 94087	CONTACT:	Divya Mehta
LAT/LONG:	37.347049 / 122.005558	INQUIRY #:	6951305.2s
		DATE:	April 22, 2022 10:15 am

DETAIL MAP - 6951305.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Patrick Henry and Peterson Campus Phase I ESA	CLIENT:	ARCADIS U.S., Inc.
ADDRESS:	1095 Dunford Way Sunnyvale CA 94087	CONTACT:	Divya Mehta
LAT/LONG:	37.347049 / 122.005558	INQUIRY #:	6951305.2s
		DATE:	April 22, 2022 10:16 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	0	NR	NR	1
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	5	NR	NR	NR	6
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	1	NR	1
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		1	0	0	3	NR	4
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	13	NR	NR	13
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		1	0	2	NR	NR	3
HIST LUST	0.500		0	0	6	NR	NR	6
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		1	0	0	0	NR	1
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	5	NR	NR	NR	5
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		19	28	NR	NR	NR	47
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		1	0	0	0	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
Cortese	0.500		0	0	7	NR	NR	7
CUPA Listings	0.250		0	11	NR	NR	NR	11
DRYCLEANERS	0.250		0	3	NR	NR	NR	3
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	2	NR	NR	NR	NR	NR	2
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	5	NR	NR	5
HWP	1.000		0	0	0	1	NR	1
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP	2	NR	NR	NR	NR	NR	2
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		4	27	52	33	6	0	122

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **PALMER COLLEGE CHIRO/WEST** **HAZNET** **S113040216**
Target **1095 DUNFORD WAY** **HWTS** **N/A**
Property **SUNNYVALE, CA 94087**

Site 1 of 2 in cluster A

Actual:
124 ft.

HAZNET:

Name:	PALMER COLLEGE CHIRO/WEST
Address:	1095 DUNFORD WAY
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000
Contact:	UNDELIVERABLE SURVEY 2-1-95 HJ
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	1095 DUNFORD WAY
Year:	1993
Gepaid:	CAL000046072
TSD EPA ID:	CAD009452657
CA Waste Code:	551 - Laboratory waste chemicals
Disposal Method:	D99 - Disposal, Other
Tons:	0.115
Year:	1993
Gepaid:	CAL000046072
TSD EPA ID:	NMD097970065
CA Waste Code:	171 - Metal sludge (Alkaline solution (pH >= 12.5) with metals)
Disposal Method:	-
Tons:	0.008

Additional Info:

Year:	1993
Gen EPA ID:	CAL000046072
Shipment Date:	19930610
Creation Date:	9/8/1995 0:00:00
Receipt Date:	19930610
Manifest ID:	91658671
Trans EPA ID:	CAT080031248
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009452657
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD009452657
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

PALMER COLLEGE CHIRO/WEST (Continued) **S113040216**

Shipment Date:	19930610
Creation Date:	9/8/1995 0:00:00
Receipt Date:	19930610
Manifest ID:	91658671
Trans EPA ID:	CAT080031248
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009452657
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD009452657
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.04
Waste Quantity:	80
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930317
Creation Date:	8/31/1995 0:00:00
Receipt Date:	Not reported
Manifest ID:	92437265
Trans EPA ID:	CAD982482390
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NMD097970065
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	171 - Metal sludge (see 121
RCRA Code:	D011
Meth Code:	- Not reported
Quantity Tons:	0.008
Waste Quantity:	16
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	PALMER COLLEGE CHIRO/WEST
Address:	1095 DUNFORD WAY
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000
EPA ID:	CAL000046072
Inactive Date:	01/01/1995
Create Date:	02/15/1991
Last Act Date:	07/24/2001

PALMER COLLEGE CHIRO/WEST (Continued) **S113040216**

Mailing Name:	Not reported
Mailing Address:	1095 DUNFORD WAY
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SUNNYVALE, CA 940870000
Owner Name:	PALMER COLLEGE CHIRO/
Owner Address:	--
Owner Address 2:	Not reported
Owner City,State,Zip:	--, 99 --
Contact Name:	UNDELIVERABLE SURVEY 2-1-95 HJ
Contact Address:	--
Contact Address 2:	Not reported
City,State,Zip:	--, 99 --

A2 **SANTA CLARA USD** **HAZNET** **S112917157**
Target **1095 DUNFORD** **HWTS** **N/A**
Property **SUNNYVALE, CA 94087**

Site 2 of 2 in cluster A

Actual:
124 ft.

HAZNET:

Name:	SANTA CLARA USD
Address:	1095 DUNFORD
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000
Contact:	GILBERT ROMAN
Telephone:	4089832000
Mailing Name:	Not reported
Mailing Address:	1889 LAWRENCE RD
Year:	2001
Gepaid:	CAC002379543
TSD EPA ID:	CAD981382732
CA Waste Code:	151 - Asbestos containing waste
Disposal Method:	D80 - Disposal, Land Fill
Tons:	4.214

Additional Info:

Year:	2001
Gen EPA ID:	CAC002379543
Shipment Date:	20010902
Creation Date:	11/1/2001 0:00:00
Receipt Date:	20010914
Manifest ID:	98124542
Trans EPA ID:	CAR000049957
Trans Name:	Not reported
Trans 2 EPA ID:	CAR000017657
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981382732
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD981382732
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	4.214

SANTA CLARA USD (Continued) **S112917157**

Waste Quantity: 5
Quantity Unit: Y
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

HWTS:
Name: SANTA CLARA USD
Address: 1095 DUNFORD
Address 2: Not reported
City,State,Zip: SUNNYVALE, CA 940870000
EPA ID: CAC002379543
Inactive Date: 09/10/2002
Create Date: 08/08/2001
Last Act Date: 08/08/2001
Mailing Name: Not reported
Mailing Address: 1889 LAWRENCE RD
Mailing Address 2: Not reported
Mailing City,State,Zip: SANTA CLARA, CA 950510000
Owner Name: SANTA CLARA USD
Owner Address: 1889 LAWRENCE RD
Owner Address 2: Not reported
Owner City,State,Zip: SANTA CLARA, CA 950510000
Contact Name: GILBERT ROMAN
Contact Address: 1889 LAWRENCE RD
Contact Address 2: Not reported
City,State,Zip: SANTA CLARA, CA 950510000

NPL
Region
South
< 1/8
543 ft.

PANASONIC
10900 N TANTAU AVENUE
CUPERTINO, CA 95014

NPL **1000218337**
SEMS **CAD041472341**
RCRA-SQG
US ENG CONTROLS
ENVIROSTOR
CPS-SLIC
HIST Cal-Sites
ROD
PRP
FINDS
ECHO
ENF
HAZNET
WDS
CIWQS
CERS
HWTS

NPL:
EPA Region: 9
EPA ID: CAD041472341
Site ID: 901325
Name: INTERSIL INC./SIEMENS COMPONENTS
Address: 10900 N TANTAU AVE/19000 HOMESTEAD RD
City,State,Zip: CUPERTINO, CA 95014
Federal: N
Final Date: 1990-08-30 00:00:00

PANASONIC (Continued) **1000218337**

Latitude:	37.3361
Longitude:	-122.0015
Site Score:	28.899999999999999
NAI:	Not reported
Native American Entity:	Not reported

NPL:

NPL Status:	Currently on the Final NPL
Substance ID:	Not reported
CAS Number:	Not reported
Substance:	Not reported
Pathway:	Not reported
Scoring:	Not reported

NPL Status:	Currently on the Final NPL
Substance ID:	C069
CAS Number:	67-63-0
Substance:	ISOPROPANOL
Pathway:	NO PATHWAY INDICATED
Scoring:	1

NPL Status:	Currently on the Final NPL
Substance ID:	C290
CAS Number:	123-86-4
Substance:	BUTYL ACETATE
Pathway:	NO PATHWAY INDICATED
Scoring:	1

NPL Status:	Currently on the Final NPL
Substance ID:	C401
CAS Number:	12002-48-1
Substance:	TRICHLOROBENZENE
Pathway:	NO PATHWAY INDICATED
Scoring:	1

NPL Status:	Currently on the Final NPL
Substance ID:	U078
CAS Number:	75-35-4
Substance:	DICHLOROETHENE, 1,1-
Pathway:	NO PATHWAY INDICATED
Scoring:	1

NPL Status:	Currently on the Final NPL
Substance ID:	U121
CAS Number:	75-69-4
Substance:	TRICHLOROFLUOROMETHANE
Pathway:	NO PATHWAY INDICATED
Scoring:	1

NPL Status:	Currently on the Final NPL
Substance ID:	U154
CAS Number:	67-56-1
Substance:	METHANOL
Pathway:	NO PATHWAY INDICATED
Scoring:	1

NPL Status:	Currently on the Final NPL
Substance ID:	U210

PANASONIC (Continued) **1000218337**

CAS Number: 127-18-4
Substance: TETRACHLOROETHENE
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U220
CAS Number: 108-88-3
Substance: TOLUENE
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U226
CAS Number: 71-55-6
Substance: TRICHLOROETHANE, 1,1,1-
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U228
CAS Number: 79-01-6
Substance: TRICHLOROETHYLENE (TCE)
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U239
CAS Number: 1330-20-7
Substance: XYLENE
Pathway: NO PATHWAY INDICATED
Scoring: 1

Summary Details:

Conditions at proposal June 24, 1988): Intersil, Inc., and Siemens Components have manufactured semiconductors for several years on two locations near one another covering 15 acres in Cupertino, Santa Clara County, California. The facilities are surrounded by residential, industrial, and business areas. Investigations conducted in 1982 as part of the California Regional Water Quality Control Board s underground tank leak detection program found organic solvents, including trichloroethylene, 1,1,1-trichloroethane, tetrachloroethylene, trichlorofluoroethane, and 1,1-dichloroethylene, in soils on the site and in ground water on and off the site. Contamination is believed to have resulted from locali ed spills and from leaking underground storage tanks, piping, and other equipment involving the two companies. More than 300,000 people obtain drinking water from public wells within 3 miles of the site. Siemens and Intersil began remedial investigations at the site in 1982 and 1983, respectively, under State supervision. The underground storage tanks were removed, and in 1983 a system was installed to extract gases from soil; the system was expanded in 1985. In June 1986, the California Regional Water Quality Control Board issued Waste Discharge Requirements under the California Water Code requiring both companies to determine the extent of contamination in ground water and soils. In July 1986, a system was installedto pump contaminated ground water in the uppermost aquifer to the surface and treat it. Since April 1988, a pump and treat system for the two uppermost aquifers has been in full-scale operation. Intersil stopped operations in 1988, and all remaining underground

PANASONIC (Continued) **1000218337**

equipment was removed. Status August 30, 1990): In February 1990, the two companies released draft reports of remedial investigations/feasibility studies for the site and off-site downgradient areas. Interim off-site remedial activities are scheduled to begin in June 1990. Also in June 1990, the State plans to issue tentative site cleanup requirements and hear public comments on the proposed remedial action plan.

NPL:
NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer-> 100 Feet
Category Value: 130 FTBGS

NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 1300

NPL:
NPL Name: INTERSIL INC./SIEMENS COMPONENTS

NPL:
EPA Region: 09
Site ID: 0901325
Site Status: F
Federal Site: N
Date Deleted: Not reported
Date Finalized: 08/30/90
Date Proposed: 06/24/88

NPL:
Proposed Date: 06/24/1988
Final Date: 08/30/1990
Deleted Date: Not reported
NPL Status: Final

SEMS:
Site ID: 0901325
EPA ID: CAD041472341
Name: INTERSIL INC./SIEMENS COMPONENTS
Address: 10900 N TANTAU AVE/19000 HOMESTEAD RD
Address 2: Not reported
City,State,Zip: CUPERTINO, CA 95014
Cong District: 14,17
FIPS Code: 06085
Latitude: +37.336100
Longitude: -122.001500
FF: N
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:
Region: 09
Site ID: 0901325
EPA ID: CAD041472341
Site Name: INTERSIL INC./SIEMENS COMPONENTS

PANASONIC (Continued) **1000218337**

NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	3
Start Date:	1990-08-14 04:00:00
Finish Date:	8/14/1990 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	NF
Action Name:	NPL FINL
SEQ:	1
Start Date:	1990-08-30 04:00:00
Finish Date:	8/30/1990 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	3
Start Date:	2004-12-31 05:00:00
Finish Date:	9/29/2005 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	2
Start Date:	2000-08-01 04:00:00
Finish Date:	9/28/2000 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09

PANASONIC (Continued) **1000218337**

Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	NP
Action Name:	PROPOSED
SEQ:	1
Start Date:	1988-06-24 04:00:00
Finish Date:	6/24/1988 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1990-11-26 05:00:00
Finish Date:	Not reported
Qual:	E
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	2
Start Date:	1989-08-07 04:00:00
Finish Date:	8/7/1989 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	1
Start Date:	1992-12-29 05:00:00
Finish Date:	12/29/1992 5:00:00 AM
Qual:	Not reported

PANASONIC (Continued) **1000218337**

Current Action Lead: EPA Perf

Region: 09
Site ID: 0901325
EPA ID: CAD041472341
Site Name: INTERSIL INC./SIEMENS COMPONENTS
NPL: F
FF: N
OU: 00
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: H
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901325
EPA ID: CAD041472341
Site Name: INTERSIL INC./SIEMENS COMPONENTS
NPL: F
FF: N
OU: 00
Action Code: FE
Action Name: 5 YEAR
SEQ: 1
Start Date: 1995-09-28 04:00:00
Finish Date: 9/28/1995 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901325
EPA ID: CAD041472341
Site Name: INTERSIL INC./SIEMENS COMPONENTS
NPL: F
FF: N
OU: 01
Action Code: RO
Action Name: ROD
SEQ: 1
Start Date: 1990-09-27 04:00:00
Finish Date: 9/27/1990 4:00:00 AM
Qual: R
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901325
EPA ID: CAD041472341
Site Name: INTERSIL INC./SIEMENS COMPONENTS
NPL: F
FF: N
OU: 00
Action Code: FE
Action Name: 5 YEAR
SEQ: 4

PANASONIC (Continued) **1000218337**

Start Date:	2010-09-30 04:00:00
Finish Date:	9/30/2010 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	CM
Action Name:	PCOR
SEQ:	1
Start Date:	1992-09-08 04:00:00
Finish Date:	9/8/1992 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	1987-06-01 04:00:00
Finish Date:	6/1/1987 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1987-03-01 05:00:00
Finish Date:	3/1/1987 5:00:00 AM
Qual:	H
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00

PANASONIC (Continued) **1000218337**

Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1986-05-01 04:00:00
Finish Date:	5/1/1986 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	5
Start Date:	2014-11-05 05:00:00
Finish Date:	9/22/2015 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	6
Start Date:	2019-11-07 06:00:00
Finish Date:	9/28/2020 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	1
Start Date:	2020-03-02 06:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS

PANASONIC (Continued) **1000218337**

NPL: F
FF: N
OU: 01
Action Code: BF
Action Name: PRP RA
SEQ: 1
Start Date: 1990-09-27 04:00:00
Finish Date: 9/8/1992 4:00:00 AM
Qual: Not reported
Current Action Lead: St Ovrsght

Region: 09
Site ID: 0901325
EPA ID: CAD041472341
Site Name: INTERSIL INC./SIEMENS COMPONENTS
NPL: F
FF: N
OU: 00
Action Code: MA
Action Name: ST COOP
SEQ: 1
Start Date: 1989-09-15 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: St Ovrsght

Region: 09
Site ID: 0901325
EPA ID: CAD041472341
Site Name: INTERSIL INC./SIEMENS COMPONENTS
NPL: F
FF: N
OU: 01
Action Code: BE
Action Name: PRP RD
SEQ: 1
Start Date: 1990-09-27 04:00:00
Finish Date: 9/27/1990 4:00:00 AM
Qual: Not reported
Current Action Lead: St Ovrsght

Region: 09
Site ID: 0901325
EPA ID: CAD041472341
Site Name: INTERSIL INC./SIEMENS COMPONENTS
NPL: F
FF: N
OU: 01
Action Code: BD
Action Name: PRP RI/FS
SEQ: 1
Start Date: 1989-03-16 05:00:00
Finish Date: 9/27/1990 4:00:00 AM
Qual: Not reported
Current Action Lead: St Ovrsght

Region: 09

PANASONIC (Continued) **1000218337**

Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	01
Action Code:	OM
Action Name:	OM
SEQ:	1
Start Date:	1990-09-27 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	St Ovrsght

Region:	09
Site ID:	0901325
EPA ID:	CAD041472341
Site Name:	INTERSIL INC./SIEMENS COMPONENTS
NPL:	F
FF:	N
OU:	01
Action Code:	NA
Action Name:	PRP RI
SEQ:	1
Start Date:	2011-10-12 04:00:00
Finish Date:	11/19/2014 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

RCRA-SQG:

Date Form Received by Agency:	19960901
Handler Name: INTERSIL INC	
Handler Address:	10900 N TANTAU AVE
Handler City,State,Zip:	CUPERTINO, CA 95014
EPA ID:	CAD041472341
Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	2
Mailing Address:	10710 NORTH TANTAU AVENUE
Mailing City,State,Zip:	CUPERTINO, CA 95014
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	NOT REQUIRED

PANASONIC (Continued) **1000218337**

Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

PANASONIC (Continued) **1000218337**

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	INTERSIL INCORPORATED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19960901
Handler Name: INTERSIL INC	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	19800818
Handler Name: INTERSIL INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	19920229
Handler Name: INTERSIL, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported

PANASONIC (Continued) **1000218337**

Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	334413
NAICS Description:	SEMICONDUCTOR AND RELATED DEVICE MANUFACTURING

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

SIte:

Name:	INTERSIL INC./SIEMENS COMPONENTS
Address:	10900 N TANTAU AVE/19000 HOMESTEAD RD
Address 2:	Not reported
City,State,Zip:	CUPERTINO, CA 95014
Event Code:	Not reported
Action Taken Date:	09/27/1990
EPA ID:	CAD041472341
Action Name:	Record of Decision
Action ID:	1
Operable Unit:	01
Contaminated Media:	Groundwater
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

Media:

EPA ID:	CAD041472341
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL

PANASONIC (Continued) **1000218337**

Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Soil

PANASONIC (Continued) **1000218337**

Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported

PANASONIC (Continued) **1000218337**

Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

EPA ID:	CAD041472341
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/27/1990
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	N
Fiscal Year:	1990
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+37.336100
Longitude:	-122.001500

ENVIROSTOR:

Name:	INTERSIL
Address:	10910 N TANTAU AVE
City,State,Zip:	CUPERTINO, CA 95014
Facility ID:	43360032
Status:	Refer: RWQCB
Status Date:	01/30/1989
Site Code:	Not reported
Site Type:	Federal Superfund
Site Type Detailed:	State Response or NPL
Acres:	Not reported
NPL:	YES
Regulatory Agencies:	US EPA

PANASONIC (Continued) **1000218337**

Lead Agency: US EPA
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Assembly: 28
Senate: 15
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.33097
Longitude: -122.0082
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: INTERSIL INC / SIEMENS COMPONENTS
Alias Type: Alternate Name
Alias Name: INTERSIL/SIEMENS
Alias Type: Alternate Name
Alias Name: CAD041472341
Alias Type: EPA Identification Number
Alias Name: 110001168245
Alias Type: EPA (FRS #)
Alias Name: 110033615185
Alias Type: EPA (FRS #)
Alias Name: P23080
Alias Type: PCode
Alias Name: 43360032
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 08/11/1981
Comments: Facility Identified: Hazardous Waste/Border Zone Property List.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SLIC REG 2:
Region: 2
Facility ID: 43S0064
Facility Status: Remedial action (cleanup) Underway
Date Closed: Not reported
Local Case #: Not reported
How Discovered: Not reported
Leak Cause: Not reported

PANASONIC (Continued) **1000218337**

Leak Source: Not reported
Date Confirmed: Not reported
Date Prelim Site Assmnt Workplan Submitted: Not reported
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

Calsite:
Name: INTERSIL
Address: 10910 N TANTAU AVE
City: CUPERTINO
Region: BERKELEY
Facility ID: 43360032
Facility Type: NPRP
Type: NPL SITE, RP-FUNDED
Branch: NC
Branch Name: NORTH COAST
File Name: Not reported
State Senate District: 01301989
Status: DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) LEAD
Status Name: PROPERTY/SITE REFERRED TO RWQCB
Lead Agency: ENVIRONMENTAL PROTECTION AGENCY
NPL: Listed
SIC Code: 36
SIC Name: MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: SF
Region Water Control Board Name: SAN FRANCISCO BAY
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported
Lat/Long Description: Not reported
State Assembly District Code: 22
State Senate District Code: 11
Facility ID: 43360032
Activity: DISC
Activity Name: DISCOVERY
AWP Code: Not reported
Proposed Budget: 0
AWP Completion Date: Not reported
Revised Due Date: Not reported
Comments Date: 08111981
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: REFRW
Definition of Status: PROPERTY/SITE REFERRED TO RWQCB
Liquids Removed (Gals): 0

PANASONIC (Continued) **1000218337**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	19000 HOMESTEAD (SIEMENS)
Alternate City,St,Zip:	CUPERTINO, CA 95014
Alternate Address:	10900 TANTAU AVENUE (INTERSIL)
Alternate City,St,Zip:	CUPERTINO, CA 95014
Alternate Address:	10600 RIDGEVIEW CT
Alternate City,St,Zip:	CUPERTINO, CA 95014
Alternate Address:	10910 N TANTAU AVE
Alternate City,St,Zip:	CUPERTINO, CA 95014
Background Info:	A manufacturer of microwave electronic equipment has been in operation at the site since 1963. Manufacturing processes include the use of acids and solvents. Contamination at the site appears to be primarily associated with a neutralization sump and a chemical storage shed. The facility is located within the Hillview-Porter region. Detected soil contaminants include trichloroethene (TCE), dichloroethene (DCE), trichloroethane (TCA), and chlorobenzenes. Groundwater contaminants include TCE at 910 parts per billion (ppb), 1,1-DCE at 92 ppb, chloroform at 100 ppb, and Freon at 63 ppb. There are seven private wells and a creek downgradient of the site. There are two backup municipal supply wells within 1.5 miles of the site. Inhabitants of the residential area downgradient from the site are potential receptors for groundwater and surface water contamination.
Comments Date:	01311989
Comments:	This is the date the site was first listed pursuant to
Comments Date:	01311989
Comments:	section 25356.
Comments Date:	01311990
Comments:	Groundwater and soil contaminated with VOCs. Potential
Comments Date:	01311990
Comments:	health threats include touching contaminated soils, drinking
Comments Date:	01311990
Comments:	contaminated groundwater, inhaling VOCs from use of ground-
Comments Date:	01311990
Comments:	water, and inhaling chemicals volatized from soil.
Comments Date:	01311990
Comments:	Site is a RWQCB referral.
Comments Date:	08111981
Comments:	Facility Identified: Hazardous Waste/Border Zone Property
Comments Date:	08111981
Comments:	List.
Comments Date:	08311981
Comments:	Facility Drive-By: No evidence of waste.
ID Name:	BEP DATABASE PCODE
ID Value:	P23080
ID Name:	EPA IDENTIFICATION NUMBER

PANASONIC (Continued) **1000218337**

ID Value: CAD041472341
Alternate Name: INTERSIL INC / SIEMENS COMPONENTS
Alternate Name: INTERSIL/SIEMENS
Alternate Name: INTERSIL
Alternate Name: Not reported
Special Programs Code: Not reported
Special Programs Name: Not reported

ROD:
Name: INTERSIL INC./SIEMENS COMPONENTS
Address: 10900 N TANTAU AVE/19000 HOMESTEAD RD
City,State,Zip: CUPERTINO, CA 95014
EPA ID: CAD041472341
RG: 9
Site ID: 901325
Action: GOVT ROD for PRP Remedy
Operable Unit Number: OVERALL SITE
SEQ ID: 1
Action Completion: 1990-09-27 00:00:00
NPL Status: Final
Non NPL Status: Not reported

PRP:
PRP Name: INTERSIL, INC.
MENLO EQUITIES ASSOCIATES LLC
SIEMENS COMPONENTS, INC.

FINDS:
Registry ID: 110064129269

Click Here:

Environmental Interest/Information System:
SUPERFUND NPL
Registry ID: 110058327519

Click Here:

Environmental Interest/Information System:
AIR EMISSIONS CLASSIFICATION UNKNOWN
Registry ID: 110001168245

Click Here:

Environmental Interest/Information System:
California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.
RCRAInfo is a national information system that supports the Resource

PANASONIC (Continued) **1000218337**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
HAZARDOUS AIR POLLUTANT MAJOR
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000218337
Registry ID:	110001168245
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001168245
Name:	INTERCIL C/O GEOMATRIX
Address:	10900 N TANTAU AVENUE
City,State,Zip:	CUPERTINO, CA 95014

ENF:

Name:	10900 N. TANTUA, CUP, INTERSIL
Address:	10900 TANTAU
City,State,Zip:	CUPERTINO, CA 95014
Region:	2
Facility Id:	201394
Agency Name:	Not reported
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	37.335635
Place Longitude:	-122.005359
SIC Code 1:	3674
SIC Desc 1:	Semiconductors and Related Devices
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported

PANASONIC (Continued) **1000218337**

Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	225142
Region:	2
Order / Resolution Number:	90-119
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	08/15/1990
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	Enforcement - 2 438181N01
Description:	Not reported
Program:	ENFCAO
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	10900 N. TANTUA, CUP, INTERSIL
Address:	10900 TANTAU
City,State,Zip:	CUPERTINO, CA 95014
Region:	2

PANASONIC (Continued) **1000218337**

Facility Id:	201394
Agency Name:	Not reported
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	37.335635
Place Longitude:	-122.005359
SIC Code 1:	3674
SIC Desc 1:	Semiconductors and Related Devices
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported

PANASONIC (Continued) **1000218337**

WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	222753
Region:	2
Order / Resolution Number:	90-11901
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	08/15/1990
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	Enforcement - 2 438181N01
Description:	ORDER FOR INVESTIGATION AND REMEDIATION OF POLLUTED SOIL & GROUND WATER.
Program:	ENFCAO
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HAZNET:

Name:	INTERSIL INC
Address:	10900 N TANTAU AVE
Address 2:	Not reported
City,State,Zip:	CUPERTINO, CA 950140000
Contact:	WILLIAM SANBORN SR, ENGR FRMN
Telephone:	4087434319
Mailing Name:	Not reported
Mailing Address:	3910 RCA BLVD STE 1011
Year:	1994
Gepaid:	CAD041472341
TSD EPA ID:	CAD009452657
CA Waste Code:	551 - Laboratory waste chemicals
Disposal Method:	D99 - Disposal, Other
Tons:	0.225
Year:	1993
Gepaid:	CAD041472341
TSD EPA ID:	KYD005009923
CA Waste Code:	211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method:	*** - Invalid Code
Tons:	1
Year:	1993
Gepaid:	CAD041472341

PANASONIC (Continued) **1000218337**

TSD EPA ID: CAD982042475
CA Waste Code: 151 - Asbestos containing waste
Disposal Method: D80 - Disposal, Land Fill
Tons: 6.7424

Year: 1993
Gepaid: CAD041472341
TSD EPA ID: KYD005009923
CA Waste Code: -
Disposal Method: D80 - Disposal, Land Fill
Tons: 3

Year: 1989
Gepaid: CAD041472341
TSD EPA ID: CAD009452657
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: R01 - Recycler
Tons: 1.5

Year: 1988
Gepaid: CAD041472341
TSD EPA ID: CAD981424732
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: R01 - Recycler
Tons: 0.0125

Year: 1988
Gepaid: CAD041472341
TSD EPA ID: CAD059494310
CA Waste Code: 512 - Other empty containers 30 gallons or more
Disposal Method: D99 - Disposal, Other
Tons: 0.1

Year: 1988
Gepaid: CAD041472341
TSD EPA ID: UTD991301748
CA Waste Code: 723 - Liquids with chromium (VI) >= 500 Mg./L
Disposal Method: -
Tons: 3.753

Year: 1988
Gepaid: CAD041472341
TSD EPA ID: CAT000646117
CA Waste Code: 352 - Other organic solids
Disposal Method: D80 - Disposal, Land Fill
Tons: 48.8824

Year: 1988
Gepaid: CAD041472341
TSD EPA ID: CAD009452657
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: R01 - Recycler
Tons: 2.502

Click this hyperlink while viewing on your computer to access
101 additional CA HAZNET: record(s) in the EDR Site Report.

PANASONIC (Continued) **1000218337**

Additional Info:

Year:	1993
Gen EPA ID:	CAD041472341
Shipment Date:	19931117
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19931119
Manifest ID:	93138821
Trans EPA ID:	CAD981425911
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD982042475
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	2.5284
Waste Quantity:	3
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931117
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19931119
Manifest ID:	93138821
Trans EPA ID:	CAD981425911
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD982042475
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	4.214
Waste Quantity:	5
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930901
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19930908
Manifest ID:	92289975
Trans EPA ID:	ARD981908551

PANASONIC (Continued) **1000218337**

Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	KYD005009923
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D040
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	3
Waste Quantity:	6000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930122
Creation Date:	9/15/1995 0:00:00
Receipt Date:	19930129
Manifest ID:	92289981
Trans EPA ID:	OHD009865825
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	KYD005009923
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.
RCRA Code:	D040
Meth Code:	*** - Invalid Code
Quantity Tons:	1
Waste Quantity:	2000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1994
Gen EPA ID:	CAD041472341

Shipment Date:	19940209
Creation Date:	9/15/1995 0:00:00
Receipt Date:	19940209
Manifest ID:	93163895
Trans EPA ID:	CAD009452657
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD009452657

PANASONIC (Continued) **1000218337**

Trans Name:	Not reported
TSDF Alt EPA ID:	CAD009452657
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.225
Waste Quantity:	450
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

WDS:

Name:	10900 N TANTAU INTERSIL
Address:	10900 N TANTAU AVE
City:	CUPERTINO
Facility ID:	San Francisco Bay 438181002
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAG912003 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	2
Facility Telephone:	6109927885
Facility Contact:	LISA HAMILTON
Agency Name:	GENERAL ELECTRIC COMPANY
Agency Address:	640 FREEDON BUSINESS CTR
Agency City,St,Zip:	KING OF PRUSSIA 19406
Agency Contact:	LISA HAMILTON
Agency Telephone:	6109927885
Agency Type:	Private
SIC Code:	3674
SIC Code 2:	Not reported
Primary Waste Type:	Hazardous/Influent or Solid Wastes that contain toxic, corrosive, ignitable or reactive substances and must be managed according to applicable DOHS standards.
Primary Waste:	CNWTRS
Waste Type2:	Not reported
Waste2:	Contaminated Ground Water
Primary Waste Type:	Hazardous/Influent or Solid Wastes that contain toxic, corrosive, ignitable or reactive substances and must be managed according to applicable DOHS standards.
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The POTW Does not have an approved pretreatment program. Some POTWs may have local pretreatment programs that have not been approved by

PANASONIC (Continued) **1000218337**

the regional board and/or EPA.

Treat To Water: Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.

Complexity: Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.

CIWQS:

Name:	10900 N. TANTUA, CUP, INTERSIL
Address:	10900 TANTAU
City,State,Zip:	CUPERTINO, CA 95014
Agency:	General Electric Company
Agency Address:	412 Creamery Way, Exton, PA 19341
Place/Project Type:	Other
SIC/NAICS:	3674
Region:	2
Program:	UNREGS
Regulatory Measure Status:	Historical
Regulatory Measure Type:	WDR
Order Number:	86-049
WDID:	2 438181N01
NPDES Number:	Not reported
Adoption Date:	06/18/1986
Effective Date:	06/18/1986
Termination Date:	Not reported
Expiration/Review Date:	06/18/1989
Design Flow:	0.0001
Major/Minor:	Not reported
Complexity:	A
TTWQ:	1
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	37.335635
Longitude:	-122.005359

CERS:

Name:	10900 N. TANTUA, CUP, INTERSIL
Address:	10900 TANTAU
City,State,Zip:	CUPERTINO, CA 95014
Site ID:	348178
CERS ID:	201394
CERS Description:	Unregulated

Enforcement Action:

Site ID:	348178
Site Name:	10900 N. Tantua, Cup, Intersil
Site Address:	10900 TANTAU
Site City:	CUPERTINO
Site Zip:	95014
Enf Action Date:	08-15-1990
Enf Action Type:	Clean-up and Abatement Order
Enf Action Description:	Clean-up and Abatement Order

PANASONIC (Continued) **1000218337**

Enf Action Notes: Not reported
Enf Action Division: Water Boards
Enf Action Program: UNSPEC
Enf Action Source: CIWQS,

HWTS:
Name: INTERSIL INC
Address: 10900 N TANTAU AVE
Address 2: Not reported
City,State,Zip: CUPERTINO, CA 950140000
EPA ID: CAD041472341
Inactive Date: 04/15/1994
Create Date: 07/23/1982
Last Act Date: 09/14/2004
Mailing Name: Not reported
Mailing Address: 3910 RCA BLVD STE 1011
Mailing Address 2: Not reported
Mailing City,State,Zip: PALM BEACH GARDENS, FL 334100000
Owner Name: HARRIS SMICONDUCTOR
Owner Address: 2401 PALM BAY RD NE STE M/S59-
Owner Address 2: Not reported
Owner City,State,Zip: PALM BAY, FL 329050000
Contact Name: WILLIAM SANBORN SR, ENGR FRMN
Contact Address: --
Contact Address 2: Not reported
City,State,Zip: --, 99 --

NAICS:
EPA ID: CAD041472341
Create Date: 2002-03-14 16:36:26.000
NAICS Code: 334413
NAICS Description: Semiconductor and Related Device Manufacturing
Issued EPA ID Date: 1982-07-23 00:00:00
Inactive Date: 1994-04-15 00:00:00
Facility Name: INTERSIL INC
Facility Address: 10900 N TANTAU AVE
Facility Address 2: Not reported
Facility City: CUPERTINO
Facility County: Not reported
Facility State: CA
Facility Zip: 950140000

B3 **SANTA CLARA UNIFIED SCHOOL DISTRICT** **RCRA NonGen / NLR** **1025838693**
1380 ROSALIA AVENUE **CAC003018289**
< 1/8 **SUNNYVALE, CA 94087**
1 ft.

Site 1 of 4 in cluster B

Relative: **Higher**
Actual: **124 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20190605
Handler Name: SANTA CLARA UNIFIED SCHOOL DISTRICT
Handler Address: 1380 ROSALIA AVENUE
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003018289
Contact Name: LARRY ADAMS
Contact Address: 1889 LAWRENCE ROAD

SANTA CLARA UNIFIED SCHOOL DISTRICT (Continued) **1025838693**

Contact City,State,Zip:	SANTA CLARA, CA 95051
Contact Telephone:	408-423-2001
Contact Fax:	Not reported
Contact Email:	LADAMS@SCUSD.NET
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1889 LAWRENCE ROAD
Mailing City,State,Zip:	SANTA CLARA, CA 95051
Owner Name:	SANTA CLARA UNIFIED SCHOOL DISTRICT
Owner Type:	Other
Operator Name:	LARRY ADAMS
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

SANTA CLARA UNIFIED SCHOOL DISTRICT (Continued) **1025838693**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	LARRY ADAMS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1889 LAWRENCE ROAD
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051
Owner/Operator Telephone:	408-423-2001
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SANTA CLARA UNIFIED SCHOOL DISTRICT
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1889 LAWRENCE ROAD
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051
Owner/Operator Telephone:	408-423-2001
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20190605
Handler Name:	SANTA CLARA UNIFIED SCHOOL DISTRICT
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

SANTA CLARA UNIFIED SCHOOL DISTRICT (Continued) **1025838693**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 611110
NAICS Description: ELEMENTARY AND SECONDARY SCHOOLS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B4 **SCUSD - PETERSON MIDDLE SCHOOL** **RCRA NonGen / NLR** **1024779665**
1380 ROSALIA AVENUE **CAC002999621**
< 1/8 **SUNNYVALE, CA 94087**
1 ft.

Site 2 of 4 in cluster B

Relative: **Higher**
Actual: **124 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	20190205
Handler Name:	SCUSD - PETERSON MIDDLE SCHOOL
Handler Address:	1380 ROSALIA AVENUE
Handler City,State,Zip:	SUNNYVALE, CA 94087
EPA ID:	CAC002999621
Contact Name:	SCUSD HALE
Contact Address:	1889 LAWRENCE ROAD
Contact City,State,Zip:	SANTA CLARA, CA 95051-2162
Contact Telephone:	408-423-2056
Contact Fax:	Not reported
Contact Email:	HZUNIGA@SCUSD.NET
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1889 LAWRENCE ROAD
Mailing City,State,Zip:	SANTA CLARA, CA 95051-2162
Owner Name:	SCUSD HALE
Owner Type:	Other
Operator Name:	SCUSD HALE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No

SCUSD - PETERSON MIDDLE SCHOOL (Continued) **1024779665**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190222
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SCUSD HALE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1889 LAWRENCE ROAD
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051-2162

SCUSD - PETERSON MIDDLE SCHOOL (Continued) **1024779665**

Owner/Operator Telephone: 408-423-2056
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: SCUSD HALE
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1889 LAWRENCE ROAD
Owner/Operator City,State,Zip: SANTA CLARA, CA 95051-2162
Owner/Operator Telephone: 408-423-2056
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20190205
Handler Name: SCUSD - PETERSON MIDDLE SCHOOL
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 611110
NAICS Description: ELEMENTARY AND SECONDARY SCHOOLS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B5 **SCUSD - PETERSON MIDDLE SCHOOL** **RCRA NonGen / NLR** **1024750668**
1380 ROSALIA AVENUE **CAC002970458**
< 1/8 **SUNNYVALE, CA 94087**
1 ft.

Site 3 of 4 in cluster B

Relative: Higher
Actual: 124 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 20180711
Handler Name: SCUSD - PETERSON MIDDLE SCHOOL
Handler Address: 1380 ROSALIA AVENUE
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC002970458
Contact Name: HILDA ZUNIGA
Contact Address: 1889 LAWRENCE ROAD

SCUSD - PETERSON MIDDLE SCHOOL (Continued) **1024750668**

Contact City,State,Zip:	SANTA CLARA, CA 95051-2162
Contact Telephone:	408-423-2056
Contact Fax:	Not reported
Contact Email:	HZUNIGA@SCUSD.NET
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1889 LAWRENCE ROAD
Mailing City,State,Zip:	SANTA CLARA, CA 95051-2162
Owner Name:	SCUSD MANAGEMENT CO., INC.
Owner Type:	Other
Operator Name:	HILDA ZUNIGA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

SCUSD - PETERSON MIDDLE SCHOOL (Continued) **1024750668**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SCUSD MANAGEMENT CO., INC.
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1889 LAWRENCE ROAD
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051-2162
Owner/Operator Telephone:	408-423-2056
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	HILDA ZUNIGA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1889 LAWRENCE ROAD
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051-2162
Owner/Operator Telephone:	408-423-2056
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20180711
Handler Name:	SCUSD - PETERSON MIDDLE SCHOOL
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

SCUSD - PETERSON MIDDLE SCHOOL (Continued) **1024750668**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 611110
NAICS Description: ELEMENTARY AND SECONDARY SCHOOLS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B6 **SANTA CLARA UNIFIED SCHOOL DISTRICT** **RCRA NonGen / NLR** **1026715586**
1380 ROSALIA AVE **CAC003104022**
< 1/8 **SUNNYVALE, CA 94087**
1 ft.

Site 4 of 4 in cluster B

Relative: **Higher**
Actual: **124 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	20210204
Handler Name:	SANTA CLARA UNIFIED SCHOOL DISTRICT
Handler Address:	1380 ROSALIA AVE
Handler City,State,Zip:	SUNNYVALE, CA 94087
EPA ID:	CAC003104022
Contact Name:	LARRY ADAMS
Contact Address:	3350 BROOKDALE DR
Contact City,State,Zip:	SANTA CLARA, CA 95051
Contact Telephone:	408-423-2001
Contact Fax:	Not reported
Contact Email:	JGALOS@SCUSD.NET
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1380 ROSALIA AVE
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	SANTA CLARA UNIFIED SCHOOL DISTRICT
Owner Type:	Other
Operator Name:	LARRY ADAMS
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No

SANTA CLARA UNIFIED SCHOOL DISTRICT (Continued) **1026715586**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210226
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	LARRY ADAMS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	3350 BROOKDALE DR
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051

SANTA CLARA UNIFIED SCHOOL DISTRICT (Continued) **1026715586**

Owner/Operator Telephone: 408-423-2001
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SANTA CLARA UNIFIED SCHOOL DISTRICT
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1889 LAWRENCE ROAD
Owner/Operator City,State,Zip: SANTA CLARA, CA 95051
Owner/Operator Telephone: 408-423-2001
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20210204
Handler Name: SANTA CLARA UNIFIED SCHOOL DISTRICT
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 336350
NAICS Description: MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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7 **GERALD CUMMINGS** **RCRA NonGen / NLR** **1027070118**
NE **1054 CASTLETON WAY** **CAC003141555**
< 1/8 **SUNNYVALE, CA 94087**
0.010 mi.
54 ft.

Relative: **Lower**
Actual: **118 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20210930
Handler Name: GERALD CUMMINGS
Handler Address: 1054 CASTLETON WAY
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003141555
Contact Name: GERALD CUMMINGS
Contact Address: 1054 CASTLETON WAY

GERALD CUMMINGS (Continued) **1027070118**

Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	408-910-7021
Contact Fax:	Not reported
Contact Email:	NICOLE@ENV-REM.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1054 CASTLETON WAY
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	GERALD CUMMINGS
Owner Type:	Other
Operator Name:	GERALD CUMMINGS
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

GERALD CUMMINGS (Continued) **1027070118**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211004
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	GERALD CUMMINGS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1054 CASTLETON WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-910-7021
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GERALD CUMMINGS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1054 CASTLETON WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-910-7021
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20210930
Handler Name: GERALD CUMMINGS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

GERALD CUMMINGS (Continued) **1027070118**

Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C8 **KATIE BESSETTE** **RCRA NonGen / NLR** **1027073498**
ESE **1486 TEAL DRIVE** **CAC003145127**
< 1/8 **SUNNYVALE, CA 94087**
0.016 mi.
87 ft. **Site 1 of 3 in cluster C**

Relative: **Lower**
Actual: **122 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20211025
Handler Name:	KATIE BESSETTE	
Handler Address:		1486 TEAL DRIVE
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003145127
Contact Name:		KATIE BESSETTE
Contact Address:		1486 TEAL DRIVE
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-250-6756
Contact Fax:		Not reported
Contact Email:		LILIAN.RAMOS@SYNERGYCOMPANIES.ORG
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1486 TEAL DRIVE
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		KATIE BESSETTE
Owner Type:		Other
Operator Name:		KATIE BESSETTE
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

KATIE BESSETTE (Continued) **1027073498**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211026
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	KATIE BESSETTE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1486 TEAL DRIVE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087

KATIE BESSETTE (Continued) **1027073498**

Owner/Operator Telephone: 408-250-6756
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: KATIE BESSETTE
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1486 TEAL DRIVE
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-250-6756
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20211025
Handler Name: KATIE BESSETTE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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9 **BECK, OLGA** **RCRA NonGen / NLR** **1025828430**
SSE **1531 SANDPIPER COURT** **CAC003007983**
< 1/8 **SUNNYVALE, CA 94087**
0.045 mi.
237 ft.

Relative:
Higher

Actual:
128 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 20190329
Handler Name: BECK, OLGA
Handler Address: 1531 SANDPIPER COURT
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003007983
Contact Name: BECK, OLGA
Contact Address: 1531 SANDPIPER COURT

BECK, OLGA (Continued) **1025828430**

Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	408-247-0477
Contact Fax:	510-651-7702
Contact Email:	MICKIEL@PWSEI.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1531 SANDPIPER COURT
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	BECK, OLGA
Owner Type:	Other
Operator Name:	BECK, OLGA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

BECK, OLGA (Continued) **1025828430**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190626
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	BECK, OLGA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1531 SANDPIPER COURT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-247-0477
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BECK, OLGA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1531 SANDPIPER COURT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-247-0477
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20190329
Handler Name: BECK, OLGA	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

BECK, OLGA (Continued) **1025828430**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C10 **SMITH, MICHAEL** **RCRA NonGen / NLR** **1026044689**
ESE **1146 DOON COURT** **CAC003051026**
< 1/8 **SUNNYVALE, CA 94087**
0.049 mi.
257 ft. **Site 2 of 3 in cluster C**

Relative: **Lower**
Actual: **121 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20200114
Handler Name:	SMITH, MICHAEL	
Handler Address:		1146 DOON COURT
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003051026
Contact Name:		SMITH, MICHAEL
Contact Address:		1146 DOON COURT
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-391-7847
Contact Fax:		Not reported
Contact Email:		CHERILYNIBARRA@ALLIANCE-ENVIRO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1146 DOON COURT
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		SMITH, MICHAEL
Owner Type:		Other
Operator Name:		SMITH, MICHAEL
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

SMITH, MICHAEL (Continued) **1026044689**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200210
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SMITH, MICHAEL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1146 DOON COURT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087

SMITH, MICHAEL (Continued) **1026044689**

Owner/Operator Telephone: 408-391-7847
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SMITH, MICHAEL
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1146 DOON COURT
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-391-7847
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20200114
Handler Name: SMITH, MICHAEL
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C11 **MARY MARTINEZ** **RCRA NonGen / NLR** **1026052160**
ESE **1145 DUNFORD WAY** **CAC003059053**
< 1/8 **SUNNYVALE, CA 94087**
0.050 mi.
262 ft. **Site 3 of 3 in cluster C**

Relative: RCRA NonGen / NLR:
Lower
Date Form Received by Agency: 20200306
Actual: Handler Name: MARY MARTINEZ
122 ft. Handler Address: 1145 DUNFORD WAY
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003059053
Contact Name: MARY MARTINEZ
Contact Address: 1145 DUNFORD WAY

MARY MARTINEZ (Continued) **1026052160**

Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	408-854-2631
Contact Fax:	Not reported
Contact Email:	JOHN@JWHARS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1145 DUNFORD WAY
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	MARY MARTINEZ
Owner Type:	Other
Operator Name:	MARY MARTINEZ
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

MARY MARTINEZ (Continued) **1026052160**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200313
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MARY MARTINEZ
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1145 DUNFORD WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-854-2631
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MARY MARTINEZ
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1145 DUNFORD WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-854-2631
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20200306
Handler Name: MARY MARTINEZ	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

MARY MARTINEZ (Continued) **1026052160**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

D12 **KEEGAN, PAT** **RCRA NonGen / NLR** **1026804787**
East **1130 CLYDEBANK CT** **CAC003116929**
< 1/8 **SUNNYVALE, CA 94087**
0.079 mi.
415 ft. **Site 1 of 2 in cluster D**

Relative: **Lower**
Actual: **117 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20210427
Handler Name:	KEEGAN, PAT	
Handler Address:		1130 CLYDEBANK CT
Handler City,State,Zip:		SUNNYVALE, CA 94087-7917
EPA ID:		CAC003116929
Contact Name:		KEEGAN, PAT
Contact Address:		1130 CLYDEBANK CT
Contact City,State,Zip:		SUNNYVALE, CA 94087-7917
Contact Telephone:		650-278-3427
Contact Fax:		510-651-7702
Contact Email:		MICKIEL@PWSEI.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1130 CLYDEBANK CT
Mailing City,State,Zip:		SUNNYVALE, CA 94087-7917
Owner Name:		KEEGAN, PAT
Owner Type:		Other
Operator Name:		KEEGAN, PAT
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

KEEGAN, PAT (Continued) **1026804787**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210427
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	KEEGAN, PAT
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1130 CLYDEBANK CT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-7917

KEEGAN, PAT (Continued) **1026804787**

Owner/Operator Telephone: 650-278-3427
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: KEEGAN, PAT
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1130 CLYDEBANK CT
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087-7917
Owner/Operator Telephone: 650-278-3427
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20210427
Handler Name: KEEGAN, PAT
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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13 **EVA CHING** **RCRA NonGen / NLR** **1026709294**
NE **1357 SPRIG COURT** **CAC003097368**
< 1/8 **SUNNYVALE, CA 94087**
0.090 mi.
475 ft.

Relative: **Lower**
Actual: **114 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20201216
Handler Name: EVA CHING
Handler Address: 1357 SPRIG COURT
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003097368
Contact Name: EVA CHING
Contact Address: 1357 SPRIG COURT

EVA CHING (Continued) **1026709294**

Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	408-309-1558
Contact Fax:	Not reported
Contact Email:	MELISA@ENV-REM.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1357 SPRIG COURT
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	EVA CHING
Owner Type:	Other
Operator Name:	EVA CHING
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

EVA CHING (Continued) **1026709294**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20201218
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	EVA CHING
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1357 SPRIG COURT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-309-1558
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	EVA CHING
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1357 SPRIG COURT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-309-1558
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20201216
Handler Name: EVA CHING	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

EVA CHING (Continued) **1026709294**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E14 **JANE WONG** **RCRA NonGen / NLR** **1026483303**
ENE **1374 THUNDERBIRD AVENUE** **CAC003089372**
< 1/8 **SUNNYVALE, CA 94087**
0.116 mi.
611 ft. **Site 1 of 4 in cluster E**

Relative: **Lower**
Actual: **112 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20201021
Handler Name:	JANE WONG	
Handler Address:		1374 THUNDERBIRD AVENUE
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003089372
Contact Name:		JANE WONG
Contact Address:		1374 THUNDERBIRD AVENUE
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-249-3177
Contact Fax:		Not reported
Contact Email:		NICOLE@ENV-REM.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1374 THUNDERBIRD AVENUE
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		JANE WONG
Owner Type:		Other
Operator Name:		JANE WONG
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

JANE WONG (Continued) **1026483303**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20201026
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JANE WONG
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1374 THUNDERBIRD AVENUE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087

JANE WONG (Continued) **1026483303**

Owner/Operator Telephone: 408-249-3177
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: JANE WONG
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1374 THUNDERBIRD AVENUE
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-249-3177
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20201021
Handler Name: JANE WONG
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E15 **HOLLMAN WONG** **RCRA NonGen / NLR** **1026488554**
ENE **1374 THUNDERBIRD AVENUE** **CAC003094774**
< 1/8 **SUNNYVALE, CA 94087**
0.116 mi.
611 ft. **Site 2 of 4 in cluster E**

Relative: **Lower**
Actual: **112 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20201130
Handler Name: HOLLMAN WONG
Handler Address: 1374 THUNDERBIRD AVENUE
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003094774
Contact Name: HOLLMAN WONG
Contact Address: 1374 THUNDERBIRD AVENUE

HOLLMAN WONG (Continued) **1026488554**

Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	650-346-3333
Contact Fax:	Not reported
Contact Email:	MELISA@ENV-REM.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1374 THUNDERBIRD AVENUE
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	HOLLMAN WONG
Owner Type:	Other
Operator Name:	HOLLMAN WONG
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

HOLLMAN WONG (Continued) **1026488554**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20201130
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	HOLLMAN WONG
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1374 THUNDERBIRD AVENUE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	650-346-3333
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	HOLLMAN WONG
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1374 THUNDERBIRD AVENUE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	650-346-3333
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20201130
Handler Name: HOLLMAN WONG	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

HOLLMAN WONG (Continued) **1026488554**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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16 **DORETHY HAAS** **RCRA NonGen / NLR** **1024769748**
South **1056 DURHAM CT** **CAC002989644**
< 1/8 **SUNNYVALE, CA 94087**
0.117 mi.
616 ft.

Relative: **Higher**

Actual: **130 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20181116
Handler Name:	DORETHY HAAS	
Handler Address:		1056 DURHAM CT
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC002989644
Contact Name:		DORETHY HAAS
Contact Address:		1056 DURHAM CT
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-839-1839
Contact Fax:		Not reported
Contact Email:		DHAAS243@GMAIL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1056 DURHAM CT
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		DORETHY HAAS
Owner Type:		Other
Operator Name:		DORETHY HAAS
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

DORETHY HAAS (Continued) **1024769748**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20181120
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	DORETHY HAAS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1056 DURHAM CT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087

DORETHY HAAS (Continued) **1024769748**

Owner/Operator Telephone: 408-839-1839
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: DORETHY HAAS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1056 DURHAM CT
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-839-1839
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20181116
Handler Name: DORETHY HAAS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

D17 **CHARLIE SHEMWELL** **RCRA NonGen / NLR** **1026046144**
East **1426 THUNDERBIRD AVENUE** **CAC003052603**
< 1/8 **SUNNYVALE, CA 94087**
0.119 mi.
626 ft. **Site 2 of 2 in cluster D**

Relative: RCRA NonGen / NLR:
Lower
Date Form Received by Agency: 20200124
Actual: Handler Name: CHARLIE SHEMWELL
116 ft. Handler Address: 1426 THUNDERBIRD AVENUE
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003052603
Contact Name: CHARLIE SHEMWELL
Contact Address: 1426 THUNDERBIRD AVENUE

CHARLIE SHEMWELL (Continued) **1026046144**

Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	408-472-2892
Contact Fax:	Not reported
Contact Email:	LIZDUENAS@ALLIANCE-ENVIRO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1426 THUNDERBIRD AVENUE
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	CHARLIE SHEMWELL
Owner Type:	Other
Operator Name:	CHARLIE SHEMWELL
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

CHARLIE SHEMWELL (Continued) **1026046144**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200210
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CHARLIE SHEMWELL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1426 THUNDERBIRD AVENUE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-472-2892
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	CHARLIE SHEMWELL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1426 THUNDERBIRD AVENUE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-472-2892
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20200124
Handler Name: CHARLIE SHEMWELL	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

CHARLIE SHEMWELL (Continued) **1026046144**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

F18 **VENDAVATI KALE** **RCRA NonGen / NLR** **1027077074**
WNW **1371 NAVARRO DRIVE** **CAC003148886**
< 1/8 **SUNNYVALE, CA 94087**
0.119 mi.
630 ft. **Site 1 of 2 in cluster F**

Relative: **Higher**
Actual: **132 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20211117
Handler Name:	VENDAVATI KALE	
Handler Address:		1371 NAVARRO DRIVE
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003148886
Contact Name:		VENDAVATI KALE
Contact Address:		1371 NAVARRO DRIVE
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-757-6736
Contact Fax:		Not reported
Contact Email:		VEDAVATI@GMAIL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1371 NAVARRO DRIVE
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		VENDAVATI KALE
Owner Type:		Other
Operator Name:		VENDAVATI KALE
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

VENDAVATI KALE (Continued) **1027077074**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211117
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	VENDAVATI KALE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1371 NAVARRO DRIVE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087

VENDAVATI KALE (Continued) **1027077074**

Owner/Operator Telephone: 408-757-6736
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: VENDAVATI KALE
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1371 NAVARRO DRIVE
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-757-6736
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20211117
Handler Name: VENDAVATI KALE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

F19 **VENDAVATI KALE** **RCRA NonGen / NLR** **1027076761**
WNW **1371 NAVARRO DRIVE** **CAC003148561**
< 1/8 **SUNNYVALE, CA 94087**
0.119 mi.
630 ft. **Site 2 of 2 in cluster F**

Relative: **Higher**

Actual: **132 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20211115
Handler Name: VENDAVATI KALE
Handler Address: 1371 NAVARRO DRIVE
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003148561
Contact Name: VENDAVATI KALE
Contact Address: 1371 NAVARRO DRIVE

VENDAVATI KALE (Continued) **1027076761**

Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	408-757-6736
Contact Fax:	Not reported
Contact Email:	VEDAVATI@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1371 NAVARRO DRIVE
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	VENDAVATI KALE
Owner Type:	Other
Operator Name:	VENDAVATI KALE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

VENDAVATI KALE (Continued) **1027076761**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211115
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	VENDAVATI KALE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1371 NAVARRO DRIVE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-757-6736
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	VENDAVATI KALE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1371 NAVARRO DRIVE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-757-6736
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20211115
Handler Name: VENDAVATI KALE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

VENDAVATI KALE (Continued) **1027076761**

Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E20 **GARY & SHERI YOUNG** **RCRA NonGen / NLR** **1027070216**
ENE **1368 THUNDERBIRD AVENUE** **CAC003141658**
< 1/8 **SUNNYVALE, CA 94087**
0.123 mi.
648 ft. **Site 3 of 4 in cluster E**

Relative: **Lower**
Actual: **112 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20211001
Handler Name:	GARY & SHERI YOUNG	
Handler Address:		1368 THUNDERBIRD AVENUE
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003141658
Contact Name:		GARY & SHERI YOUNG
Contact Address:		1368 THUNDERBIRD AVENUE
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-246-0521
Contact Fax:		Not reported
Contact Email:		GISELLE.ESPIRITU@SYNERGYCOMPANIES.ORG
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1368 THUNDERBIRD AVENUE
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		GARY & SHERI YOUNG
Owner Type:		Other
Operator Name:		GARY & SHERI YOUNG
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

GARY & SHERI YOUNG (Continued) **1027070216**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211004
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	GARY & SHERI YOUNG
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1368 THUNDERBIRD AVENUE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087

GARY & SHERI YOUNG (Continued) **1027070216**

Owner/Operator Telephone: 408-246-0521
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: GARY & SHERI YOUNG
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1368 THUNDERBIRD AVENUE
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-246-0521
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20211001
Handler Name: GARY & SHERI YOUNG
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E21 **ZOHRA MAJID** **RCRA NonGen / NLR** **1025862715**
NE **1353 THUNDERBIRD AVE** **CAC003043446**
< 1/8 **SUNNYVALE, CA 94087**
0.123 mi.
651 ft. **Site 4 of 4 in cluster E**

Relative: **Lower**
Actual: **111 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20191115
Handler Name: ZOHRA MAJID
Handler Address: 1353 THUNDERBIRD AVE
Handler City,State,Zip: SUNNYVALE, CA 94087-3732
EPA ID: CAC003043446
Contact Name: ZOHRA MAJID
Contact Address: 1353 THUNDERBIRD AVE

ZOHRA MAJID (Continued) **1025862715**

Contact City,State,Zip:	SUNNYVALE, CA 94087-3732
Contact Telephone:	408-781-2750
Contact Fax:	Not reported
Contact Email:	MARIAE@PWSEI.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1353 THUNDERBIRD AVE
Mailing City,State,Zip:	SUNNYVALE, CA 94087-3732
Owner Name:	ZOHRA MAJID
Owner Type:	Other
Operator Name:	ZOHRA MAJID
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

ZOHRA MAJID (Continued) **1025862715**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20191122
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ZOHRA MAJID
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1353 THUNDERBIRD AVE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-3732
Owner/Operator Telephone:	408-781-2750
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ZOHRA MAJID
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1353 THUNDERBIRD AVE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-3732
Owner/Operator Telephone:	408-781-2750
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20191115
Handler Name: ZOHRA MAJID	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

ZOHRA MAJID (Continued) **1025862715**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

22
NNE
1/8-1/4
0.130 mi.
686 ft.

KEIKO TACHIBANA
1342 SAGE HEN WAY
SUNNYVALE, CA 94087

RCRA NonGen / NLR **1025831378**
CAC003010937

Relative:
Lower

Actual:
115 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20190418
Handler Name:	KEIKO TACHIBANA	
Handler Address:		1342 SAGE HEN WAY
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003010937
Contact Name:		KEIKO TACHIBANA
Contact Address:		1342 SAGE HEN WAY
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-296-2283
Contact Fax:		Not reported
Contact Email:		SACRAMENTO@PWSEI.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1342 SAGE HEN WAY
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		KEIKO TACHIBANA
Owner Type:		Other
Operator Name:		KEIKO TACHIBANA
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

KEIKO TACHIBANA (Continued) **1025831378**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190626
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	KEIKO TACHIBANA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1342 SAGE HEN WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087

KEIKO TACHIBANA (Continued) **1025831378**

Owner/Operator Telephone: 408-296-2283
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: KEIKO TACHIBANA
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1342 SAGE HEN WAY
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-296-2283
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20190418
Handler Name: KEIKO TACHIBANA
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

G23 **CATHERINE L WEY** **RCRA NonGen / NLR** **1026823518**
ENE **1220 HALFORD AVENUE UNIT #1** **CAC003136518**
1/8-1/4 **SANTA CLARA, CA 95051**
0.152 mi.
805 ft. **Site 1 of 2 in cluster G**

Relative: **Lower**
Actual: **114 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20210827
Handler Name: CATHERINE L WEY
Handler Address: 1220 HALFORD AVENUE UNIT #1
Handler City,State,Zip: SANTA CLARA, CA 95051
EPA ID: CAC003136518
Contact Name: CATHERINE L WEY
Contact Address: 1220 HALFORD AVENUE UNIT #1

CATHERINE L WEY (Continued) **1026823518**

Contact City,State,Zip:	SANTA CLARA, CA 95051
Contact Telephone:	408-749-1680
Contact Fax:	Not reported
Contact Email:	GISELLE.ESPIRITU@SYNERGYCOMPANIES.ORG
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1220 HALFORD AVENUE UNIT #1
Mailing City,State,Zip:	SANTA CLARA, CA 95051
Owner Name:	CATHERINE L WEY
Owner Type:	Other
Operator Name:	CATHERINE L WEY
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

CATHERINE L WEY (Continued) **1026823518**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210827
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	CATHERINE L WEY
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1220 HALFORD AVENUE UNIT #1
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051
Owner/Operator Telephone:	408-749-1680
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CATHERINE L WEY
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1220 HALFORD AVENUE UNIT #1
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051
Owner/Operator Telephone:	408-749-1680
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20210827
Handler Name: CATHERINE L WEY	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

CATHERINE L WEY (Continued) **1026823518**

Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

G24 **CATHERINE L WEY** **RCRA NonGen / NLR** **1026823519**
ENE **1220 HALFORD AVENUE UNIT #2** **CAC003136519**
1/8-1/4 **SANTA CLARA, CA 95051**
0.152 mi.
805 ft. **Site 2 of 2 in cluster G**

Relative: **Lower**
Actual: **114 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20210827
Handler Name:	CATHERINE L WEY	
Handler Address:		1220 HALFORD AVENUE UNIT #2
Handler City,State,Zip:		SANTA CLARA, CA 95051
EPA ID:		CAC003136519
Contact Name:		CATHERINE L WEY
Contact Address:		1220 HALFORD AVENUE UNIT #1
Contact City,State,Zip:		SANTA CLARA, CA 95051
Contact Telephone:		408-749-1680
Contact Fax:		Not reported
Contact Email:		GISELLE.ESPIRITU@SYNERGYCOMPANIES.ORG
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1220 HALFORD AVENUE UNIT #1
Mailing City,State,Zip:		SANTA CLARA, CA 95051
Owner Name:		CATHERINE L WEY
Owner Type:		Other
Operator Name:		CATHERINE L WEY
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

CATHERINE L WEY (Continued) **1026823519**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210827
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	CATHERINE L WEY
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1220 HALFORD AVENUE UNIT #1
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051

CATHERINE L WEY (Continued) **1026823519**

Owner/Operator Telephone: 408-749-1680
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CATHERINE L WEY
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1220 HALFORD AVENUE UNIT #1
Owner/Operator City,State,Zip: SANTA CLARA, CA 95051
Owner/Operator Telephone: 408-749-1680
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20210827
Handler Name: CATHERINE L WEY
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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25 **JOHN HOFFMAN** **RCRA NonGen / NLR** **1026041197**
WSW **938 ETON WAY** **CAC003047325**
1/8-1/4 **SUNNYVALE, CA 94087**
0.174 mi.
921 ft.

Relative:
Higher

Actual:
138 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 20191216
Handler Name: JOHN HOFFMAN
Handler Address: 938 ETON WAY
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAC003047325
Contact Name: JOHN HOFFMAN
Contact Address: 938 ETON WAY

JOHN HOFFMAN (Continued) **1026041197**

Contact City,State,Zip:	SUNNYVALE, CA 94087-4926
Contact Telephone:	408-431-3040
Contact Fax:	Not reported
Contact Email:	SHACARRAHENDERSON@ALLIANCE-ENVIRO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	938 ETON WAY
Mailing City,State,Zip:	SUNNYVALE, CA 94087-4926
Owner Name:	JOHN HOFFMAN
Owner Type:	Other
Operator Name:	JOHN HOFFMAN
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

JOHN HOFFMAN (Continued) **1026041197**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200210
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JOHN HOFFMAN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	938 ETON WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-4926
Owner/Operator Telephone:	408-431-3040
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JOHN HOFFMAN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	938 ETON WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-4926
Owner/Operator Telephone:	408-431-3040
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20191216
Handler Name: JOHN HOFFMAN	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

JOHN HOFFMAN (Continued) **1026041197**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

H26 **RANCH, DAVID & SHARON** **RCRA NonGen / NLR** **1025845276**
SE **3739 BENTON STREET** **CAC003024898**
1/8-1/4 **SANTA CLARA, CA 95051**
0.181 mi.
955 ft. **Site 1 of 2 in cluster H**

Relative: **Higher**
Actual: **125 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20190719
Handler Name:	RANCH, DAVID & SHARON	
Handler Address:		3739 BENTON STREET
Handler City,State,Zip:		SANTA CLARA, CA 95051
EPA ID:		CAC003024898
Contact Name:		RANCH, DAVID & SHARON
Contact Address:		3739 BENTON STREET
Contact City,State,Zip:		SANTA CLARA, CA 95051
Contact Telephone:		408-410-1704
Contact Fax:		510-651-7702
Contact Email:		MICKIEL@PWSEI.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		3739 BENTON STREET
Mailing City,State,Zip:		SANTA CLARA, CA 95051
Owner Name:		RANCH, DAVID & SHARON
Owner Type:		Other
Operator Name:		RANCH, DAVID & SHARON
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

RANCH, DAVID & SHARON (Continued) **1025845276**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190729
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	RANCH, DAVID & SHARON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	3739 BENTON STREET
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051

RANCH, DAVID & SHARON (Continued) **1025845276**

Owner/Operator Telephone: 408-410-1704
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: RANCH, DAVID & SHARON
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 3739 BENTON STREET
Owner/Operator City,State,Zip: SANTA CLARA, CA 95051
Owner/Operator Telephone: 408-410-1704
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20190719
Handler Name: RANCH, DAVID & SHARON
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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27 **BENSON HE & QINGHUA MENG** **RCRA NonGen / NLR** **1026712303**
WSW **943 MARION WAY** **CAC003100528**
1/8-1/4 **SUNNYVALE, CA 94089**
0.199 mi.
1051 ft.

Relative:
Higher

Actual:
140 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 20210112
Handler Name: BENSON HE & QINGHUA MENG
Handler Address: 943 MARION WAY
Handler City,State,Zip: SUNNYVALE, CA 94089
EPA ID: CAC003100528
Contact Name: BENSON HE & QINGHUA MENG
Contact Address: 943 MARION WAY

BENSON HE & QINGHUA MENG (Continued) **1026712303**

Contact City,State,Zip:	SUNNYVALE, CA 94089
Contact Telephone:	408-933-9620
Contact Fax:	Not reported
Contact Email:	SUMMER9338@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	943 MARION WAY
Mailing City,State,Zip:	SUNNYVALE, CA 94089
Owner Name:	BENSON HE & QINGHUA MENG
Owner Type:	Other
Operator Name:	BENSON HE & QINGHUA MENG
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

BENSON HE & QINGHUA MENG (Continued) **1026712303**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210226
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BENSON HE & QINGHUA MENG
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	943 MARION WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94089
Owner/Operator Telephone:	408-933-9620
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	BENSON HE & QINGHUA MENG
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	943 MARION WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94089
Owner/Operator Telephone:	408-933-9620
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20210112
Handler Name: BENSON HE & QINGHUA MENG	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

BENSON HE & QINGHUA MENG (Continued) **1026712303**

Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

28
ESE
1/8-1/4
0.200 mi.
1054 ft.

ROHIT JNAGAL **RCRA NonGen / NLR** **1025839591**
3724 BENTON STREET **CAC003019191**
SANTA CLARA, CA 95050

Relative:
Lower

Actual:
123 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20190611
Handler Name:	ROHIT JNAGAL	
Handler Address:		3724 BENTON STREET
Handler City,State,Zip:		SANTA CLARA, CA 95050
EPA ID:		CAC003019191
Contact Name:		ROHIT JNAGAL
Contact Address:		3724 BENTON STREET
Contact City,State,Zip:		SANTA CLARA, CA 95050
Contact Telephone:		408-306-1964
Contact Fax:		Not reported
Contact Email:		JOHN@JWHARS.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		3724 BENTON STREET
Mailing City,State,Zip:		SANTA CLARA, CA 95050
Owner Name:		ROHIT JNAGAL
Owner Type:		Other
Operator Name:		ROHIT JNAGAL
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

ROHIT JNAGAL (Continued) **1025839591**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ROHIT JNAGAL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	3724 BENTON STREET
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95050

ROHIT JNAGAL (Continued) **1025839591**

Owner/Operator Telephone: 408-306-1964
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: ROHIT JNAGAL
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 3724 BENTON STREET
Owner/Operator City,State,Zip: SANTA CLARA, CA 95050
Owner/Operator Telephone: 408-306-1964
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20190611
Handler Name: ROHIT JNAGAL
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

H29 **MARION & RICHARD MALVINI** **RCRA NonGen / NLR** **1026051088**
SE **3749 BENTON ST** **CAC003057957**
1/8-1/4 **SANTA CLARA, CA 95051**
0.205 mi.
1082 ft. **Site 2 of 2 in cluster H**

Relative: RCRA NonGen / NLR:
Higher
Date Form Received by Agency: 20200227
Actual: Handler Name: MARION & RICHARD MALVINI
125 ft. Handler Address: 3749 BENTON ST
Handler City,State,Zip: SANTA CLARA, CA 95051
EPA ID: CAC003057957
Contact Name: MARION & RICHARD MALVINI
Contact Address: 3749 BENTON ST

MARION & RICHARD MALVINI (Continued) **1026051088**

Contact City,State,Zip:	SANTA CLARA, CA 95051
Contact Telephone:	408-813-6721
Contact Fax:	Not reported
Contact Email:	MELISA@ENV-REM.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	3749 BENTON ST
Mailing City,State,Zip:	SANTA CLARA, CA 95051
Owner Name:	MARION & RICHARD MALVINI
Owner Type:	Other
Operator Name:	MARION & RICHARD MALVINI
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

MARION & RICHARD MALVINI (Continued) **1026051088**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200306
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MARION & RICHARD MALVINI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	3749 BENTON ST
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051
Owner/Operator Telephone:	408-813-6721
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MARION & RICHARD MALVINI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	3749 BENTON ST
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051
Owner/Operator Telephone:	408-813-6721
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20200227
Handler Name: MARION & RICHARD MALVINI	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

MARION & RICHARD MALVINI (Continued) **1026051088**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

I30 **EXCEL CLEANERS #2** **CUPA Listings** **S121470787**
NNE **1082 E EL CAMINO REAL 1** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.207 mi.
1094 ft. **Site 1 of 3 in cluster I**

Relative:
Lower

Actual:
110 ft.

CUPA SANTA CLARA:
Name: EXCEL CLEANERS #2
Address: 1082 E EL CAMINO REAL 1
City,State,Zip: SUNNYVALE, CA 94087
Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Program Identifier: DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude: 37.352038
Longitude: -122.002460
Record ID: PR0316335
Facility ID: FA0213322

I31 **COAST DISCOUNT CLEANERS INC** **RCRA-SQG** **1000387171**
NNE **1082 E EL CAMINO REAL** **FINDS** **CAD982416141**
1/8-1/4 **SUNNYVALE, CA 94087** **ECHO**
0.207 mi. **DRYCLEANERS**
1094 ft. **Site 2 of 3 in cluster I** **HAZNET**
CERS

Relative:
Lower

HWTS

Actual:
110 ft.

RCRA-SQG:
Date Form Received by Agency: 19960901
Handler Name: COAST DISCOUNT CLEANERS INC
Handler Address: 1082 E EL CAMINO REAL
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAD982416141
Contact Name: Not reported
Contact Address: Not reported
Contact City,State,Zip: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	2
Mailing Address:	E EL CAMINO REAL
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	COAST DISCOUNT CLEANERS INC
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20000915
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	COAST DISCOUNT CLEANERS INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19960901
Handler Name:	COAST DISCOUNT CLEANERS INC
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002808622

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000387171
Registry ID:	110002808622
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002808622
Name:	COAST DISCOUNT CLEANERS INC
Address:	1082 E EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94087

DRYCLEANERS:

Name:	EXCEL CLEANERS
Address:	1082 E EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 940870000
EPA Id:	CAL000224689
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	12/26/2000
Facility Active:	No
Inactive Date:	06/30/2001
Facility Addr2:	Not reported
Owner Name:	XAY LEE
Owner Address:	1082 E EL CAMINO REAL
Owner Address 2:	Not reported
Owner Telephone:	4082499357
Contact Name:	XAY LEE-OWNER
Contact Address:	1082 E EL CAMINO REAL
Contact Address 2:	Not reported
Contact Telephone:	4082499357
Contact Fax:	Not reported
Mailing Name:	Not reported
Mailing Address 1:	1082 E EL CAMINO REAL
Mailing Address 2:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Mailing City: SUNNYVALE
Mailing State: CA
Mailing Zip: 940873780
Owner Fax: Not reported
Region Code: 2
Latitude: 37.374752
Longitude: -122.058728

HAZNET:
Name: COAST DISCOUNT CLEANERS INC
Address: 1082 E EL CAMINO REAL
Address 2: Not reported
City,State,Zip: SUNNYVALE, CA 940870000
Contact: UNDELIVERABLE SURVEY 1-28-95JV
Telephone: 4082499357
Mailing Name: Not reported
Mailing Address: 1082 E EL CAMINO REAL

Year: 2000
Gepaid: CAD982416141
TSD EPA ID: CAD981397417
CA Waste Code: 211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: R01 - Recycler
Tons: 0.0667

Year: 1999
Gepaid: CAD982416141
TSD EPA ID: CA0000084517
CA Waste Code: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.195

Year: 1999
Gepaid: CAD982416141
TSD EPA ID: CAD981397417
CA Waste Code: -
Disposal Method: R01 - Recycler
Tons: 0

Year: 1999
Gepaid: CAD982416141
TSD EPA ID: CAD981397417
CA Waste Code: 211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: R01 - Recycler
Tons: 0.2001

Year: 1998
Gepaid: CAD982416141
TSD EPA ID: CA0000084517
CA Waste Code: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.195

Year: 1998
Gepaid: CAD982416141

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

TSD EPA ID:	CAD981397417
CA Waste Code:	-
Disposal Method:	R01 - Recycler
Tons:	0
Year:	1998
Gepaid:	CAD982416141
TSD EPA ID:	CAD981397417
CA Waste Code:	211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method:	R01 - Recycler
Tons:	0.1334
Year:	1997
Gepaid:	CAD982416141
TSD EPA ID:	CA0000084517
CA Waste Code:	741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	H01 - Transfer Station
Tons:	0.78
Year:	1996
Gepaid:	CAD982416141
TSD EPA ID:	CAT000613950
CA Waste Code:	741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	H01 - Transfer Station
Tons:	0.195
Year:	1996
Gepaid:	CAD982416141
TSD EPA ID:	CA0000084517
CA Waste Code:	741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	H01 - Transfer Station
Tons:	1.56

Click this hyperlink while viewing on your computer to access
5 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:

Year:	1995
Gen EPA ID:	CAD982416141
Shipment Date:	19951128
Creation Date:	7/26/1996 0:00:00
Receipt Date:	19951130
Manifest ID:	95814996
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19951013
Creation Date:	7/26/1996 0:00:00
Receipt Date:	19951017
Manifest ID:	95629918
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950809
Creation Date:	4/3/1996 0:00:00
Receipt Date:	19950814
Manifest ID:	95641939
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Shipment Date:	19950711
Creation Date:	10/25/1995 0:00:00
Receipt Date:	19950714
Manifest ID:	95625950
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950613
Creation Date:	10/24/1995 0:00:00
Receipt Date:	19950616
Manifest ID:	95424935
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950516
Creation Date:	10/24/1995 0:00:00
Receipt Date:	19950519
Manifest ID:	95413206
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.2925
Waste Quantity:	585
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950417
Creation Date:	4/2/1996 0:00:00
Receipt Date:	19950419
Manifest ID:	95508038
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950324
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950328
Manifest ID:	93773717
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950221
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950223
Manifest ID:	95088722
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613950
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950124
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19950125
Manifest ID:	95043009
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1994
Gen EPA ID:	CAD982416141

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Shipment Date:	19941201
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941207
Manifest ID:	95079986
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613950
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19941102
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941104
Manifest ID:	93763732
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613950
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19941007
Creation Date:	3/26/1996 0:00:00
Receipt Date:	19941011
Manifest ID:	95063440
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613950
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940908
Creation Date:	3/26/1996 0:00:00
Receipt Date:	19940913
Manifest ID:	95062718
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613893
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940712
Creation Date:	3/26/1996 0:00:00
Receipt Date:	19940719
Manifest ID:	93665779
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613893
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940613
Creation Date:	3/26/1996 0:00:00
Receipt Date:	19940617
Manifest ID:	93668321
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613893
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940512
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19940517
Manifest ID:	93505500
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.2925
Waste Quantity:	585
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940223
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19940301

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Manifest ID:	93193226
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19940124
Creation Date:	10/10/1995 0:00:00
Receipt Date:	Not reported
Manifest ID:	93022123
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	- Not reported
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19940106
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19940111
Manifest ID:	92552039
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1996
Gen EPA ID:	CAD982416141
Shipment Date:	19961122
Creation Date:	5/20/1997 0:00:00
Receipt Date:	19961202
Manifest ID:	96463042
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.2925
Waste Quantity:	585
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19961003
Creation Date:	6/26/1997 0:00:00
Receipt Date:	19961010
Manifest ID:	96477669
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.2925
Waste Quantity:	585

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960807
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960813
Manifest ID:	96497277
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960612
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960618
Manifest ID:	96141866
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960516
Creation Date:	5/20/1997 0:00:00

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Receipt Date:	19960521
Manifest ID:	96128343
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.2925
Waste Quantity:	585
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19960409
Creation Date:	10/16/1996 0:00:00
Receipt Date:	19960411
Manifest ID:	96077771
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.2925
Waste Quantity:	585
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19960123
Creation Date:	10/9/1996 0:00:00
Receipt Date:	19960125
Manifest ID:	95946980
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613950
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1998
Gen EPA ID:	CAD982416141
Shipment Date:	19981204
Creation Date:	4/1/1999 0:00:00
Receipt Date:	19981216
Manifest ID:	98829289
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.
RCRA Code:	F002
Meth Code:	R01 - Recycler
Quantity Tons:	0.0667
Waste Quantity:	16
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981204
Creation Date:	4/1/1999 0:00:00
Receipt Date:	19981216
Manifest ID:	98829289
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	R01 - Recycler

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Quantity Tons:	0
Waste Quantity:	0
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981012
Creation Date:	1/21/1999 0:00:00
Receipt Date:	19981015
Manifest ID:	98442603
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0
Waste Quantity:	0
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981012
Creation Date:	1/21/1999 0:00:00
Receipt Date:	19981015
Manifest ID:	98442603
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.
RCRA Code:	F002
Meth Code:	R01 - Recycler
Quantity Tons:	0.0667
Waste Quantity:	16
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Shipment Date:	19980612
Creation Date:	9/3/1998 0:00:00
Receipt Date:	19980618
Manifest ID:	98173888
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19980122
Creation Date:	3/31/1998 0:00:00
Receipt Date:	19980127
Manifest ID:	97358129
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1999
Gen EPA ID:	CAD982416141

Shipment Date:	19991028
Creation Date:	5/1/2000 0:00:00
Receipt Date:	19991012
Manifest ID:	99309840
Trans EPA ID:	CAR000030841

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Trans Name:	Not reported
Trans 2 EPA ID:	CAD076548635
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0
Waste Quantity:	0
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19991028
Creation Date:	5/1/2000 0:00:00
Receipt Date:	19991012
Manifest ID:	99309840
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	CAD076548635
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.
RCRA Code:	F002
Meth Code:	R01 - Recycler
Quantity Tons:	0.0667
Waste Quantity:	16
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19990716
Creation Date:	12/16/1999 0:00:00
Receipt Date:	19990720
Manifest ID:	99093545
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	CAD063547996
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	211 - Halogenated solvents (chloroform, methyl chloride,

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

	perchloroethylene, etc.
RCRA Code:	F002
Meth Code:	R01 - Recycler
Quantity Tons:	0.0667
Waste Quantity:	16
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19990716
Creation Date:	12/16/1999 0:00:00
Receipt Date:	19990720
Manifest ID:	99093545
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	CAD063547996
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0
Waste Quantity:	0
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19990219
Creation Date:	4/20/1999 0:00:00
Receipt Date:	19990223
Manifest ID:	98860910
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19990208
Creation Date:	6/3/1999 0:00:00
Receipt Date:	19990211
Manifest ID:	98112774
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	CAR000030841
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.
RCRA Code:	F002
Meth Code:	R01 - Recycler
Quantity Tons:	0.0667
Waste Quantity:	16
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19990208
Creation Date:	6/3/1999 0:00:00
Receipt Date:	19990211
Manifest ID:	98112774
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	CAR000030841
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0
Waste Quantity:	0
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1993
Gen EPA ID:	CAD982416141
Shipment Date:	19931202

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Creation Date:	3/25/1996 0:00:00
Receipt Date:	19931207
Manifest ID:	93030558
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19931103
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19931109
Manifest ID:	93027811
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19931006
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19931012
Manifest ID:	93093683
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930910
Creation Date:	9/13/1995 0:00:00
Receipt Date:	19930914
Manifest ID:	93222515
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930722
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19930727
Manifest ID:	92570991
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 1997
Gen EPA ID: CAD982416141

Shipment Date: 19971002
Creation Date: 7/23/1998 0:00:00
Receipt Date: 19971006
Manifest ID: 96851840
Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CA0000084517
Trans Name: Not reported
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code: F002
Meth Code: H01 - Transfer Station
Quantity Tons: 0.0975
Waste Quantity: 195
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 19970707
Creation Date: 12/4/1997 0:00:00
Receipt Date: 19970714
Manifest ID: 96859423
Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CA0000084517
Trans Name: Not reported
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code: F002
Meth Code: H01 - Transfer Station
Quantity Tons: 0.195
Waste Quantity: 390
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Shipment Date:	19970516
Creation Date:	7/17/1997 0:00:00
Receipt Date:	19970521
Manifest ID:	96631371
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19970321
Creation Date:	6/26/1997 0:00:00
Receipt Date:	19970326
Manifest ID:	96366259
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19970219
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19970221
Manifest ID:	96469135
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19970123
Creation Date:	6/26/1997 0:00:00
Receipt Date:	19970124
Manifest ID:	96375022
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2000
Gen EPA ID:	CAD982416141

Shipment Date:	20000216
Creation Date:	8/9/2000 0:00:00
Receipt Date:	20000225
Manifest ID:	99705167
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	CAD076548635
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD981397417
TSDF Alt Name:	Not reported
Waste Code Description:	211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

RCRA Code:	F002
Meth Code:	R01 - Recycler
Quantity Tons:	0.0667
Waste Quantity:	16
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20000216
Creation Date:	8/9/2000 0:00:00
Receipt Date:	20000225
Manifest ID:	99705167
Trans EPA ID:	CAR000030841
Trans Name:	Not reported
Trans 2 EPA ID:	CAD076548635
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981397417
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD981397417
TSDF Alt Name:	Not reported
Waste Code Description:	211 - Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.
RCRA Code:	F002
Meth Code:	R01 - Recycler
Quantity Tons:	0
Waste Quantity:	0
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	EXCEL CLEANERS
Address:	1082 E EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94087
Site ID:	467034
CERS ID:	110002411284
CERS Description:	US EPA Air Emission Inventory System (EIS)

HWTS:

Name:	EXCEL CLEANERS
Address:	1082 E EL CAMINO REAL
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000
EPA ID:	CAL000224689
Inactive Date:	06/30/2001
Create Date:	12/26/2000
Last Act Date:	04/19/2002
Mailing Name:	Not reported
Mailing Address:	1082 E EL CAMINO REAL
Mailing Address 2:	Not reported

COAST DISCOUNT CLEANERS INC (Continued) **1000387171**

Mailing City,State,Zip:	SUNNYVALE, CA 940873780
Owner Name:	XAY LEE
Owner Address:	1082 E EL CAMINO REAL
Owner Address 2:	Not reported
Owner City,State,Zip:	SUNNYVALE, CA 940873780
Contact Name:	XAY LEE-OWNER
Contact Address:	1082 E EL CAMINO REAL
Contact Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000

NAICS:

EPA ID:	CAL000224689
Create Date:	2002-03-14 16:36:29.000
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
Issued EPA ID Date:	2000-12-26 00:00:00
Inactive Date:	2001-06-30 00:00:00
Facility Name:	EXCEL CLEANERS
Facility Address:	1082 E EL CAMINO REAL
Facility Address 2:	Not reported
Facility City:	SUNNYVALE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	940870000

Name:	COAST DISCOUNT CLEANERS INC
Address:	1082 E EL CAMINO REAL
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000
EPA ID:	CAD982416141
Inactive Date:	06/30/1998
Create Date:	03/01/1988
Last Act Date:	04/19/2002
Mailing Name:	Not reported
Mailing Address:	1082 E EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SUNNYVALE, CA 940873780
Owner Name:	HOANH NGUYEN
Owner Address:	1082 E EL CAMINO REAL
Owner Address 2:	Not reported
Owner City,State,Zip:	SUNNYVALE, CA 940873780
Contact Name:	UNDELIVERABLE SURVEY 1-28-95JV
Contact Address:	INACT PER 98VQ FINAL NOTICE
Contact Address 2:	- BATCH 4/27
City,State,Zip:	SUNNYVALE, CA 940873780

I32 **EXCEL CLEANERS** **CUPA Listings** **S121471285**
NNE **1082 E EL CAMINO REAL #1** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.207 mi.
1094 ft. **Site 3 of 3 in cluster I**

Relative:
Lower

Actual:
110 ft.

CUPA SANTA CLARA:

Name:	EXCEL CLEANERS
Address:	1082 E EL CAMINO REAL #1
City,State,Zip:	SUNNYVALE, CA 94087
Region:	SANTA CLARA

EXCEL CLEANERS (Continued) **S121471285**

PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Program Identifier:	DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude:	37.352038
Longitude:	-122.002460
Record ID:	PR0330598
Facility ID:	FA0230553

---

33 **ICI PAINTS** **RCRA-SQG 1001085710**
NE **1450 HALFORD AVE.** **FINDS CAR000010348**
1/8-1/4 **SANTA CLARA, CA 95051** **ECHO**
0.214 mi.
1130 ft.

Relative: **Lower**

Actual: **109 ft.**

RCRA-SQG:

Date Form Received by Agency:	20140124
Handler Name:	GLIDDEN PROFESSIONAL PAINT CENTERS
Handler Address:	1450 HALFORD AVE
Handler City,State,Zip:	SANTA CLARA, CA 95051
EPA ID:	CAR000010348
Contact Name:	RHONDA J CROSS
Contact Address:	15885 SPRAGUE RD
Contact City,State,Zip:	STRONGSVILLE, OH 44136
Contact Telephone:	440-297-8431
Contact Fax:	440-297-4301
Contact Email:	RHONDA.CROSS@PPG.COM
Contact Title:	E H AND S MGR
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1450 HALFORD AVE
Mailing City,State,Zip:	SANTA CLARA, CA 95051
Owner Name:	GLIDDEN PROFESSIONAL PAINT CENTERS
Owner Type:	Private
Operator Name:	GLIDDEN PROFESSIONAL PAINT CENTERS
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported

ICI PAINTS (Continued) **1001085710**

Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20140129
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D018
Waste Description:	BENZENE

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	THE GLIDDEN CO
Legal Status:	Private
Date Became Current:	Not reported

ICI PAINTS (Continued) **1001085710**

Date Ended Current:	Not reported
Owner/Operator Address:	925 EUCLID AVE STE 900
Owner/Operator City,State,Zip:	CLEVELAND, OH 44115
Owner/Operator Telephone:	216-344-8900
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	GLIDDEN PROFESSIONAL PAINT CENTERS
Legal Status:	Private
Date Became Current:	20130401
Date Ended Current:	Not reported
Owner/Operator Address:	ONE PPG PLACE
Owner/Operator City,State,Zip:	PITTSBURGH, PA 15272
Owner/Operator Telephone:	412-434-3131
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	GLIDDEN PROFESSIONAL PAINT CENTERS
Legal Status:	Private
Date Became Current:	20130401
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19960321
Handler Name: FULLER OBRIEN PAINTS	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	20140124
Handler Name: GLIDDEN PROFESSIONAL PAINT CENTERS	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported

ICI PAINTS (Continued) **1001085710**

Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44412
NAICS Description: PAINT AND WALLPAPER RETAILERS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110055667327

Click Here:

Environmental Interest/Information System:
STATE MASTER
Registry ID: 110055807051

Click Here:

Environmental Interest/Information System:
STATE MASTER
Registry ID: 110002910887

Click Here:

Environmental Interest/Information System:
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001085710
Registry ID: 110002910887
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002910887
Name: FULLER OBRIEN PAINTS
Address: 1450 HALFORD AVE
City,State,Zip: SANTA CLARA, CA 95051

34
WNW
1/8-1/4
0.215 mi.
1133 ft.

BHARADWAY, VIKRANT
1393 HAMPTON DRIVE
SUNNYVALE, CA 94087

RCRA NonGen / NLR

1027084126
CAC003156329

Relative:
Higher

Actual:
138 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20220111
Handler Name:	BHARADWAY, VIKRANT	
Handler Address:		1393 HAMPTON DRIVE
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003156329
Contact Name:		BHARADWAY, VIKRANT
Contact Address:		1393 HAMPTON DRIVE
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-515-8402
Contact Fax:		510-651-7702
Contact Email:		MICKIEL@PWSEI.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1393 HAMPTON DRIVE
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		BHARADWAY, VIKRANT
Owner Type:		Other
Operator Name:		BHARADWAY, VIKRANT
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

BHARADWAY, VIKRANT (Continued) **1027084126**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220113
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	BHARADWAY, VIKRANT
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1393 HAMPTON DRIVE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-515-8402
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BHARADWAY, VIKRANT
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1393 HAMPTON DRIVE
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-515-8402
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

BHARADWAY, VIKRANT (Continued) **1027084126**

Historic Generators:
Receive Date: 20220111
Handler Name: BHARADWAY, VIKRANT
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J35 **BELL PLAZA CHIROPRACTIC OFFICE** **CUPA Listings** **S113057677**
NNE **1052 E EL CAMINO REAL** **HAZNET** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087** **HWTS**
0.225 mi.
1188 ft. **Site 1 of 15 in cluster J**

Relative:
Lower

Actual:
112 ft.

CUPA SANTA CLARA:
Name: BELL PLAZA CHIROPRACTIC OFFICE
Address: 1052 E EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94087
Region: SANTA CLARA
PE#: 2272
Program Description: SILVER WASTE ONLY 100+ KG/YR & < 100 KG/MO
Program Identifier: DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude: 37.352010
Longitude: -122.004119
Record ID: PR0314748
Facility ID: FA0213283

HAZNET:
Name: BELL PLAZA CHIROPRACTIC OFFICE
Address: 1052 E EL CAMINO REAL
Address 2: Not reported
City,State,Zip: SUNNYVALE, CA 940870000
Contact: MARK GRAY-PRES
Telephone: 4082487960
Mailing Name: Not reported
Mailing Address: 1052 E EL CAMINO REAL

Year: 1999

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Gepaid: CAL000094083
TSD EPA ID: CA0000084517
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: H01 - Transfer Station
Tons: 0.125

Year: 1998
Gepaid: CAL000094083
TSD EPA ID: CA0000084517
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: H01 - Transfer Station
Tons: 0.25

Year: 1997
Gepaid: CAL000094083
TSD EPA ID: CA0000084517
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: H01 - Transfer Station
Tons: 0.4377

Year: 1996
Gepaid: CAL000094083
TSD EPA ID: CA0000084517
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: R01 - Recycler
Tons: 0.1251

Year: 1996
Gepaid: CAL000094083
TSD EPA ID: CA0000084517
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: H01 - Transfer Station
Tons: 0.3753

Year: 1995
Gepaid: CAL000094083
TSD EPA ID: CAD070148432
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: H01 - Transfer Station
Tons: 0.1251

Year: 1995
Gepaid: CAL000094083
TSD EPA ID: CAD070148432
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: R01 - Recycler
Tons: 0.1251

Year: 1995
Gepaid: CAL000094083
TSD EPA ID: CAD070148432
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: T03 - Treatment, Incineration
Tons: 0.1251

Year: 1994
Gepaid: CAL000094083

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

TSD EPA ID: CAD070148432
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: R01 - Recycler
Tons: 0.125

Year: 1994
Gepaid: CAL000094083
TSD EPA ID: CAD070148432
CA Waste Code: 541 - Photochemicals/photoprocessing waste
Disposal Method: T03 - Treatment, Incineration
Tons: 0.1876

Click this hyperlink while viewing on your computer to access
5 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:
Year: 1997
Gen EPA ID: CAL000094083

Shipment Date: 19971030
Creation Date: 7/23/1998 0:00:00
Receipt Date: 19971104
Manifest ID: 96788262
Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CA0000084517
Trans Name: Not reported
TSDF Alt EPA ID: CA0000084517
TSDF Alt Name: Not reported
Waste Code Description: 541 - Photochemicals / photo processing waste
RCRA Code: D011
Meth Code: H01 - Transfer Station
Quantity Tons: 0.0625
Waste Quantity: 15
Quantity Unit: G
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 19970915
Creation Date: 7/23/1998 0:00:00
Receipt Date: 19970918
Manifest ID: 96622599
Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CA0000084517
Trans Name: Not reported
TSDF Alt EPA ID: CA0000084517
TSDF Alt Name: Not reported
Waste Code Description: 541 - Photochemicals / photo processing waste

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19970707
Creation Date:	12/4/1997 0:00:00
Receipt Date:	19970714
Manifest ID:	96859511
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19970417
Creation Date:	6/26/1997 0:00:00
Receipt Date:	19970422
Manifest ID:	96445114
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Additional Code 5:	Not reported
Shipment Date:	19970219
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19970221
Manifest ID:	96465642
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1995
Gen EPA ID:	CAL000094083
Shipment Date:	19951129
Creation Date:	7/26/1996 0:00:00
Receipt Date:	19951201
Manifest ID:	95725587
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950810
Creation Date:	4/1/1996 0:00:00
Receipt Date:	19950816

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Manifest ID:	95682976
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	R01 - Recycler
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950412
Creation Date:	4/2/1996 0:00:00
Receipt Date:	19950424
Manifest ID:	92260298
Trans EPA ID:	CA0000239764
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD070148432
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1998
Gen EPA ID:	CAL000094083

Shipment Date:	19981030
Creation Date:	12/17/1998 0:00:00
Receipt Date:	19981105
Manifest ID:	98567944
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	Not reported

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19980713
Creation Date:	9/22/1998 0:00:00
Receipt Date:	19980720
Manifest ID:	98238420
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19980612
Creation Date:	8/3/1998 0:00:00
Receipt Date:	19980618
Manifest ID:	98173992
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19980218
Creation Date:	4/16/1998 0:00:00
Receipt Date:	19980220
Manifest ID:	97405673
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1996
Gen EPA ID:	CAL000094083
Shipment Date:	19961121
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19961127
Manifest ID:	96490428
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Additional Code 5:	Not reported
Shipment Date:	19960829
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960905
Manifest ID:	96500985
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960613
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960620
Manifest ID:	96081612
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	R01 - Recycler
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960320
Creation Date:	10/4/1996 0:00:00
Receipt Date:	19960325
Manifest ID:	96252778
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1999
Gen EPA ID:	CAL000094083
Shipment Date:	19990609
Creation Date:	7/30/1999 0:00:00
Receipt Date:	19990616
Manifest ID:	99225946
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19990219
Creation Date:	4/20/1999 0:00:00
Receipt Date:	19990223
Manifest ID:	98861000
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1994
Gen EPA ID:	CAL000094083
Shipment Date:	19941206
Creation Date:	10/19/1995 0:00:00
Receipt Date:	19941207
Manifest ID:	92260272
Trans EPA ID:	CA0000239764
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD070148432
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940524
Creation Date:	3/26/1996 0:00:00
Receipt Date:	19940526
Manifest ID:	92260221
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD070148432
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0625
Waste Quantity:	15

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940301
Creation Date:	9/15/1995 0:00:00
Receipt Date:	19940302
Manifest ID:	92260204
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	R01 - Recycler
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940118
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19940121
Manifest ID:	92260187
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD070148432
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	R01 - Recycler
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1993

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Gen EPA ID:	CAL000094083
Shipment Date:	19931130
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19931216
Manifest ID:	92260176
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	CAD070148432
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD070148432
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	R01 - Recycler
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931001
Creation Date:	9/12/1995 0:00:00
Receipt Date:	Not reported
Manifest ID:	92260160
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	- Not reported
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930720
Creation Date:	9/11/1995 0:00:00
Receipt Date:	19930721
Manifest ID:	92260131
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD070148432
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930525
Creation Date:	9/8/1995 0:00:00
Receipt Date:	19930616
Manifest ID:	92260108
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	CAD070148432
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD070148432
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930316
Creation Date:	8/31/1995 0:00:00
Receipt Date:	Not reported
Manifest ID:	92260082
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	D011
Meth Code:	- Not reported
Quantity Tons:	0.0625

BELL PLAZA CHIROPRACTIC OFFICE (Continued) **S113057677**

Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930202
Creation Date:	9/6/1995 0:00:00
Receipt Date:	19930208
Manifest ID:	92260066
Trans EPA ID:	CAL000045368
Trans Name:	Not reported
Trans 2 EPA ID:	CAD070148432
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD070148432
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD070148432
TSDF Alt Name:	Not reported
Waste Code Description:	171 - Metal sludge (see 121
RCRA Code:	D011
Meth Code:	R01 - Recycler
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	BELL PLAZA CHIROPRACTIC OFFICE
Address:	1052 E EL CAMINO REAL
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000
EPA ID:	CAL000094083
Inactive Date:	06/30/2014
Create Date:	06/09/1992
Last Act Date:	01/09/2015
Mailing Name:	Not reported
Mailing Address:	1052 E EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SUNNYVALE, CA 940873754
Owner Name:	MARK GRAY-PRESIDENT
Owner Address:	1052 E EL CAMINO REAL
Owner Address 2:	Not reported
Owner City,State,Zip:	SUNNYVALE, CA 940873754
Contact Name:	MARK GRAY-PRES
Contact Address:	1052 E EL CAMINO REAL
Contact Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940873754

J36 **GEARY'S QUALITY PHOTO LAB** **CUPA Listings** **S121470773**
NNE **1044 E EL CAMINO REAL** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.225 mi.
1188 ft. **Site 2 of 15 in cluster J**

Relative: **Lower**
Actual: **112 ft.**

CUPA SANTA CLARA:

Name:	GEARY'S QUALITY PHOTO LAB
Address:	1044 E EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94087
Region:	SANTA CLARA
PE#:	2272
Program Description:	SILVER WASTE ONLY 100+ KG/YR & < 100 KG/MO
Program Identifier:	DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude:	37.352003
Longitude:	-122.004477
Record ID:	PR0314114
Facility ID:	FA0213274

J37 **PAREDES AUTOWORKS** **RCRA NonGen / NLR** **1024815365**
NNE **1062 E EL CAMINO REAL SPC F** **CAL000313116**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 3 of 15 in cluster J**

Relative: **Lower**
Actual: **111 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20061031
Handler Name:	PAREDES AUTOWORKS	
Handler Address:		1062 E EL CAMINO REAL SPC F
Handler City,State,Zip:		SUNNYVALE, CA 94087-7944
EPA ID:		CAL000313116
Contact Name:		QUINTIN V PAREDES JR
Contact Address:		1062 E EL CAMINO REAL
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-244-1800
Contact Fax:		000-000-0000
Contact Email:		PAREDESAUTOWORKS@YAHOO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1062 E EL CAMINO REAL SPC F
Mailing City,State,Zip:		SUNNYVALE, CA 94087-7944
Owner Name:		QUINTIN V PAREDES JR
Owner Type:		Other
Operator Name:		QUINTIN V PAREDES JR
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No

PAREDES AUTOWORKS (Continued) **1024815365**

Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	QUINTIN V PAREDES JR
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1062 E EL CAMINO REAL

PAREDES AUTOWORKS (Continued) **1024815365**

Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-244-1800
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: QUINTIN V PAREDES JR
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1062 E EL CAMINO REAL SPC F
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087-7944
Owner/Operator Telephone: 408-244-1800
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20061031
Handler Name: PAREDES AUTOWORKS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J38 **PAREDES AUTOWORKS** **CERS HAZ WASTE** **S121744691**
NNE **1062 E EL CAMINO REAL STE F** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 4 of 15 in cluster J**

Relative: CERS HAZ WASTE:
Lower
Name: PAREDES AUTOWORKS
Actual: Address: 1062 E EL CAMINO REAL STE F
111 ft. City,State,Zip: SUNNYVALE, CA 94087
Site ID: 141669
CERS ID: 10502944
CERS Description: Hazardous Waste Generator

PAREDES AUTOWORKS (Continued) **S121744691**

Violations:

Site ID:	141669
Site Name:	Paredes Autoworks
Violation Date:	07-07-2020
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 08/19/2020. Portable waste oil container used for draining does not have a hazardous waste label. Hazardous waste label on used oil is missing the accumulation date.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,

Site ID:	141669
Site Name:	Paredes Autoworks
Violation Date:	07-07-2020
Citation:	HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description:	Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes:	Returned to compliance on 08/19/2020. Used oil filters have an accumulation date of 6/30/16.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,

Site ID:	141669
Site Name:	Paredes Autoworks
Violation Date:	05-24-2016
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 05/24/2016. Hazardous waste oil area-secondary containment contained waste oil and debris. CFC 5004.2 Not maintained clean and dry.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-06-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection

PAREDES AUTOWORKS (Continued) **S121744691**

Eval Date: 05-10-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-21-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 02-16-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Update CERS- completed on site.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-10-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-21-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Hazardous waste is labelled (see noted exceptions above). Containers are in good condition and secondaril contained. Containers are closed when not in use. Waste reciepts stored on site. No signature obtained due to COVID-19.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

PAREDES AUTOWORKS (Continued) **S121744691**

Eval Date:	05-06-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-24-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-24-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-12-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Hazardous waste is properly labeled and secondarily contained. CERS-OK. Oily rags contained in step cans. Waste receipts are maintained on site> 3 years. World Oil picks up waste oil.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-22-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-29-2021
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Hazardous waste is properly labeled. Accumulation dates - OK. Waste receipts stored on site - OK. No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

PAREDES AUTOWORKS (Continued) **S121744691**

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Sunnyvale Department of Public Safety
Entity Title:	Not reported
Affiliation Address:	505 W. Olive Avenue, Suite 150
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94086
Affiliation Phone:	(408) 730-7212,

Affiliation Type Desc:	Document Preparer
Entity Name:	Quintin Paredes
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Quintin Paredes
Entity Title:	Not reported
Affiliation Address:	1062 East El Camino real
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94087
Affiliation Phone:	,

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1062 E El Camino Real Ste F
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94087
Affiliation Phone:	,

Affiliation Type Desc:	Identification Signer
Entity Name:	Quintin Paredes
Entity Title:	Owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	Quintin Parefes
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported

PAREDES AUTOWORKS (Continued) **S121744691**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(408) 244-1800,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Paredesautowoks
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Quintin Paredes Jr
Entity Title:	Not reported
Affiliation Address:	1062 East El Camino real Space F
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94087
Affiliation Phone:	(408) 244-1800,

J39 **JC AUTO REPAIR** **CUPA Listings** **S121470783**
NNE **1062 E EL CAMINO REAL I** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 5 of 15 in cluster J**

Relative: CUPA SANTA CLARA:
Lower

Name:	JC AUTO REPAIR
Address:	1062 E EL CAMINO REAL I
City,State,Zip:	SUNNYVALE, CA 94087
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Program Identifier:	DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude:	37.352018
Longitude:	-122.003671
Record ID:	PR0317182
Facility ID:	FA0213299

Actual:
111 ft.

J40 **IVY TRUMAN AUTOMOTIVE** **CERS HAZ WASTE** **S121741495**
NNE **1062 E EL CAMINO REAL # C** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 6 of 15 in cluster J**

Relative: CERS HAZ WASTE:
Lower

Name:	IVY TRUMAN AUTOMOTIVE
Address:	1062 E EL CAMINO REAL # C
City,State,Zip:	SUNNYVALE, CA 94087
Site ID:	124830
CERS ID:	10473175

Actual:
111 ft.

IVY TRUMAN AUTOMOTIVE (Continued) **S121741495**

CERS Description: Hazardous Waste Generator

Violations:

Site ID: 124830
Site Name: ivy truman automotive
Violation Date: 05-24-2016
Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description: Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes: Returned to compliance on 06/06/2016. Hazardous waste oil area-secondary containment contained waste oil and debris. CFC 5004.2 Not maintained clean and dry.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Site ID: 124830
Site Name: ivy truman automotive
Violation Date: 07-26-2021
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 10/14/2021. Black, red and yellow oil caddies do not have a hazardous waste label posted.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Site ID: 124830
Site Name: ivy truman automotive
Violation Date: 06-10-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 06/12/2019. The business failed to electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA on or before the annual due date. Electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA within 30 days. On an ongoing basis, electronically submit and certify the business plan annually on or before the annual due date.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 124830
Site Name: ivy truman automotive
Violation Date: 07-07-2020
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description: Failure to meet the following container management requirements: (a) A

IVY TRUMAN AUTOMOTIVE (Continued) **S121741495**

container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

Violation Notes: Returned to compliance on 08/22/2020. Used oil filters (paper, metal, and mixed container) are open when not in use.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Site ID: 124830
Site Name: ivy truman automotive
Violation Date: 07-07-2020
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 08/22/2020. Labels on waste oil are faded and no longer legible. One portable oil draining container does not have hazardous waste label, the other portable container has faded writing and is no longer legible.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Site ID: 124830
Site Name: ivy truman automotive
Violation Date: 01-22-2015
Citation: HSC 6.11 25404(e)(4) - California Health and Safety Code, Chapter 6.11, Section(s) 25404(e)(4)
Violation Description: Failure to report program data electronically.
Violation Notes: Returned to compliance on 02/05/2015. Submit ALL applicable program information to cers.calepa.ca.gov
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 124830
Site Name: ivy truman automotive
Violation Date: 04-14-2016
Citation: HSC 6.11 25404(e)(4) - California Health and Safety Code, Chapter 6.11, Section(s) 25404(e)(4)
Violation Description: Failure to report program data electronically.
Violation Notes: Returned to compliance on 04/19/2016. Failed to submit Hazmat Business Plan (Inventory & ERP) in CERS. All submittal elements must be submitted annually.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-10-2017

IVY TRUMAN AUTOMOTIVE (Continued) **S121741495**

Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-10-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-24-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Oil and antifreeze only, properly labeled and secondarily contained.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Other/Unknown
Eval Date:	06-10-2019
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Other/Unknown
Eval Date:	01-22-2015
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-06-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-21-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported

IVY TRUMAN AUTOMOTIVE (Continued) **S121741495**

Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-12-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Hazardous materials are properly labeled and secondarily contained. HMBP submitted on CERS at time of inspection.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Other/Unknown
Eval Date:	04-14-2016
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Hazmat Business Plan
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-06-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-21-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-22-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-07-2020
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Discussed maintaining clearance around hazardous waste containers for accessibility. Waste receipts present. Accumulation times within limits. No signature obtained due to COVID-19.

IVY TRUMAN AUTOMOTIVE (Continued) **S121741495**

Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-22-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-24-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: HW properly labeled and secondarily contained. Manifests- OK
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-12-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Hazardous waste is properly labeled and secondarily contained. Maintained clean. Containers kept closed when not transferring liquids. Oily rags contained in step cans. Waste receipts are maintained on site> 3 years. RCA Oil Recovery picks up waste oil. Safety Kleen maintains parts washer.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-26-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Waste receipts were not available at time of inspection. Facility to email records to inspector within 3 business days. (7/29/21 - Inspector verified manifests during site visit - OK. MK) No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Sunnyvale Department of Public Safety
Entity Title: Not reported
Affiliation Address: 505 W. Olive Avenue, Suite 150
Affiliation City: Sunnyvale
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94086
Affiliation Phone: (408) 730-7212,

IVY TRUMAN AUTOMOTIVE (Continued) **S121741495**

Affiliation Type Desc:	Document Preparer
Entity Name:	Quang Nguyen
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	quang nguyen
Entity Title:	Not reported
Affiliation Address:	1062 E El Camino Real # C
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94087
Affiliation Phone:	,

Affiliation Type Desc:	Identification Signer
Entity Name:	quang nguyen
Entity Title:	manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	ivy truman automotive
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	quang nguyen
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(408) 557-9975,

Affiliation Type Desc:	Legal Owner
Entity Name:	ivy valero auto
Entity Title:	Not reported
Affiliation Address:	1062 e el camino real suite c
Affiliation City:	sunnyvale
Affiliation State:	CA
Affiliation Country:	United States

IVY TRUMAN AUTOMOTIVE (Continued) **S121741495**

Affiliation Zip:	94087
Affiliation Phone:	(408) 557-9975,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1062 e el camino real suite a,b,c,d
Affiliation City:	sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94087
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	Paul Bogomilsky
Entity Title:	Not reported
Affiliation Address:	542 lakeside dr suite 2a
Affiliation City:	sunnyvale
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94086
Affiliation Phone:	(408) 206-2781,

J41 **AUTO ELECT & RADIATOR SPEC** **CUPA Listings** **S121470780**
NNE **1062 E EL CAMINO REAL A** **N/A**
1/8-1/4 **SUNNYVALE, CA 94086**
0.226 mi.
1192 ft. **Site 7 of 15 in cluster J**

Relative: CUPA SANTA CLARA:
Lower

Name:	AUTO ELECT & RADIATOR SPEC
Address:	1062 E EL CAMINO REAL A
City,State,Zip:	SUNNYVALE, CA 94086
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Program Identifier:	DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude:	37.352018
Longitude:	-122.003671
Record ID:	PR0314117
Facility ID:	FA0213296

Actual:
111 ft.

J42 **IVY & TRUMAN AUTOMOTIVE** **RCRA NonGen / NLR** **1025868096**
NNE **1062 E EL CAMINO REAL STE C** **CAL000350286**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 8 of 15 in cluster J**

Relative: RCRA NonGen / NLR:
Lower

Date Form Received by Agency:	20100223
Handler Name:	IVY & TRUMAN AUTOMOTIVE
Handler Address:	1062 E EL CAMINO REAL STE C
Handler City,State,Zip:	SUNNYVALE, CA 94087-7944
EPA ID:	CAL000350286
Contact Name:	QUANG NGUYEN

Actual:
111 ft.

IVY & TRUMAN AUTOMOTIVE (Continued) **1025868096**

Contact Address:	1062 E EL CAMINO REAL STE C
Contact City,State,Zip:	SUNNYVALE, CA 94087-7944
Contact Telephone:	408-557-9975
Contact Fax:	408-557-9929
Contact Email:	IVYTRUMANAUTOMOTIVE@YAHOO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1062 E EL CAMINO REAL STE C
Mailing City,State,Zip:	SUNNYVALE, CA 94087-7944
Owner Name:	QUANG NGUYEN
Owner Type:	Other
Operator Name:	QUANG NGUYEN
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	Yes
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking

IVY & TRUMAN AUTOMOTIVE (Continued) **1025868096**

Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190628
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	QUANG NGUYEN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1619 INDIGO OAK LN
Owner/Operator City,State,Zip:	SAN JOSE, CA 95121-1983
Owner/Operator Telephone:	408-307-9951
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	QUANG NGUYEN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1062 E EL CAMINO REAL STE C
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-7944
Owner/Operator Telephone:	408-557-9975
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20100223
Handler Name: IVY & TRUMAN AUTOMOTIVE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	Not reported
Recognized Trader Exporter:	Not reported
Spent Lead Acid Battery Importer:	Not reported
Spent Lead Acid Battery Exporter:	Not reported

IVY & TRUMAN AUTOMOTIVE (Continued) **1025868096**

Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J43 **IVY & TRUMAN AUTOMOTIVE** **RCRA NonGen / NLR** **1025871539**
NNE **1062 E EL CAMINO REAL STE C** **CAL000444654**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 9 of 15 in cluster J**

Relative: **Lower**
Actual: **111 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20190322
Handler Name: IVY & TRUMAN AUTOMOTIVE
Handler Address: 1062 E EL CAMINO REAL STE C
Handler City,State,Zip: SUNNYVALE, CA 94087-7944
EPA ID: CAL000444654
Contact Name: QUANG NGUYEN
Contact Address: 1062 E EL CAMINO REAL STE C
Contact City,State,Zip: SUNNYVALE, CA 94087-7944
Contact Telephone: 408-557-9975
Contact Fax: 408-557-9929
Contact Email: IVYTRUMANAUTOMOTIVE@YAHOO.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: 1062 E EL CAMINO REAL STE C
Mailing City,State,Zip: SUNNYVALE, CA 94087-7944
Owner Name: NGA HOANG DINH
Owner Type: Other
Operator Name: QUANG NGUYEN
Operator Type: Other
Short-Term Generator Activity: No
Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility Activity: No
Recycler Activity with Storage: Yes
Small Quantity On-Site Burner Exemption: No

IVY & TRUMAN AUTOMOTIVE (Continued) **1025871539**

Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190628
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	QUANG NGUYEN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1062 E EL CAMINO REAL STE C

IVY & TRUMAN AUTOMOTIVE (Continued) **1025871539**

Owner/Operator City,State,Zip: SUNNYVALE, CA 94087-7944
Owner/Operator Telephone: 408-557-9975
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: NGA HOANG DINH
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1619 INDIGO OAK LN
Owner/Operator City,State,Zip: SAN JOSE, CA 95121-1983
Owner/Operator Telephone: 408-300-8692
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20190322
Handler Name: IVY & TRUMAN AUTOMOTIVE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J44 **JC AUTO REPAIR** **RCRA-SQG** **1000984937**
NNE **1062 E EL CAMINO REAL NO 1** **FINDS** **CAR000000463**
1/8-1/4 **SUNNYVALE, CA 94087** **ECHO**
0.226 mi.
1192 ft. **Site 10 of 15 in cluster J**

Relative: RCRA-SQG:
Lower
Date Form Received by Agency: 19950223
Actual: Handler Name: JC AUTO REPAIR
111 ft. Handler Address: 1062 E EL CAMINO REAL NO 1
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAR000000463
Contact Name: SUNG CHI

JC AUTO REPAIR (Continued) **1000984937**

Contact Address:	1062 E EL CAMINO REAL NO 1
Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	408-247-6443
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	E EL CAMINO REAL NO 1
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	CHI SUNG NAM
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking

JC AUTO REPAIR (Continued) **1000984937**

Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20000915
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CHI SUNG NAM
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1062 E EL CAMINO REAL NO 1
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-247-6443
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19950223
Handler Name: JC AUTO REPAIR	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

JC AUTO REPAIR (Continued) **1000984937**

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002904395

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000984937
Registry ID:	110002904395
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002904395
Name:	JC AUTO REPAIR
Address:	1062 E EL CAMINO REAL NO 1
City,State,Zip:	SUNNYVALE, CA 94087

J45 **MAZDA MASTERS** **CUPA Listings** **S121470782**
NNE **1062 E EL CAMINO REAL F** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 11 of 15 in cluster J**

Relative: **Lower**
Actual: **111 ft.**

CUPA SANTA CLARA:

Name:	MAZDA MASTERS
Address:	1062 E EL CAMINO REAL F
City,State,Zip:	SUNNYVALE, CA 94087
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Program Identifier:	DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude:	37.352018
Longitude:	-122.003671
Record ID:	PR0316551
Facility ID:	FA0213298

J46 **QUALITY AUTO CENTER** **CERS HAZ WASTE** **S121745485**
NNE **1062 E EL CAMINO REAL STE H** **HWTS** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 12 of 15 in cluster J**

Relative:
Lower

Actual:
111 ft.

CERS HAZ WASTE:

Name:	QUALITY AUTO CENTER
Address:	1062 E EL CAMINO REAL STE H
City,State,Zip:	SUNNYVALE, CA 94087
Site ID:	145525
CERS ID:	10599529
CERS Description:	Hazardous Waste Generator

Violations:

Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	07-26-2021
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 11/29/2021. No label is posted on two 55 gallon drums of used oil in rear of shop. Label on 55-gallon of used antifreeze is faded and no longer legible. Two red oil caddies do not have a hazardous waste label.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,

Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	06-12-2019
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 11/25/2019. Drums of waste oil, antifreeze and oil filters located in the back of the shop was observed without a hazardous waste label. Submit a photo to the CUPA demonstrating that the container listed above has been properly labeled.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,

Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	07-26-2021
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 07/26/2021. The business failed to

QUALITY AUTO CENTER (Continued) **S121745485**

electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA on or before the required due date. Last CERS submission was 7/7/2020. - CORRECTED ON SITE.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 145525
Site Name: Quality Auto Center
Violation Date: 07-07-2020
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes: Returned to compliance on 08/20/2020. 2 55 gallon drums containing used oil filters (metal and paper) are overflowing, with no lid. Filters have been accumulating for > 1 year.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Site ID: 145525
Site Name: Quality Auto Center
Violation Date: 06-12-2019
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
Violation Notes: Returned to compliance on 11/25/2019. Drums of waste oil located in the back of the shop were observed open. Submit photos to the CUPA demonstrating that the container listed above has been properly closed.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Site ID: 145525
Site Name: Quality Auto Center
Violation Date: 11-17-2021
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 11/29/2021. Second Notice of Violation - No label is posted on two 55 gallon drums of used oil in rear of shop. Label on 55-gallon of used antifreeze is faded and no longer legible. Two red oil caddies do not have a hazardous waste label.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

QUALITY AUTO CENTER (Continued) **S121745485**

Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	05-06-2015
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 06/18/2015. Drums containing waste oil, antifreeze, and oil filters had faded or missing labels with the required elements.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,

Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	07-07-2020
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 07/07/2020. The business failed to electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA on or before the annual due date. - Corrected on site.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	04-06-2017
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 04/11/2017. Failed to annually submit Business Plan in CERS.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	06-10-2019
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 06/12/2019. The business failed to electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA on or before the annual due

QUALITY AUTO CENTER (Continued) **S121745485**

	date. Electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA within 30 days. On an ongoing basis, electronically submit and certify the business plan annually on or before the annual due date.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	05-10-2017
Citation:	40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description:	Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
Violation Notes:	Returned to compliance on 07/26/2017. Waste oil and coolant drums were not capped, while not in use.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,
Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	05-24-2016
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 09/22/2016. Waste oil storage area- Waste oil is not properly labeled with the required elements and the secondary containment has oil and debris. CFC 5004.2 Maintain secondary containment, clean and dry.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,
Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	07-07-2020
Citation:	40 CFR 1 265.171 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.171
Violation Description:	Failure to accumulate hazardous waste in a container that is in good condition.
Violation Notes:	Returned to compliance on 08/20/2020. Failure to accumulate hazardous waste in a container that is in good condition. - Secondary containment is leaking, causing oil to spill onto floor.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,
Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	07-07-2020

QUALITY AUTO CENTER (Continued) **S121745485**

Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 08/20/2020. Two used oil containers, waste antifreeze, and two portable oil collection bins were observed without labelling.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,
Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	11-17-2021
Citation:	HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description:	Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes:	Returned to compliance on 11/29/2021. Second Notice of Violation - Used oil filters are stored in various containers without a lid (55-gallon drum, 5 gallon drum, mop bucket). :: Last used filter pickup was >1 year ago: 9/24/2020 (per receipt record). :: Paper and oil filters are stored together in a 55 gallon bucket and a 5 gallon bucket.
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,
Site ID:	145525
Site Name:	Quality Auto Center
Violation Date:	07-26-2021
Citation:	HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description:	Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes:	Returned to compliance on 11/29/2021. Used oil filters are stored in various containers without a lid (55-gallon drum, 5 gallon drum, mop bucket). Last used filter pickup was 3/28/17 (per receipt record).
Violation Division:	Sunnyvale Department of Public Safety
Violation Program:	HW
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-10-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-22-2018

QUALITY AUTO CENTER (Continued) **S121745485**

Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-24-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-24-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-12-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Hazardous materials are properly labeled. Discussed keeping secondary containment clean and dry. Notice to comply to submit Hazardous Materials Business Plan on cers.calepa.ca.gov initiated 6/10/2019.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-06-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-10-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-26-2021
Violations Found:	Yes

QUALITY AUTO CENTER (Continued) **S121745485**

Eval Type:	Routine done by local agency
Eval Notes:	Oil stored on site is below permit threshold. Inspector to initiate paperwork to remove SQ1-2 permit. CERS submitted at time of inspection. No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-26-2021
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Receipts are stored on site- OK. No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-06-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Other/Unknown
Eval Date:	06-10-2019
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-07-2020
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	CERS submitted on site. Hazardous material business plan accessible on site. No signature obtained due to COVID-19.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Other/Unknown
Eval Date:	02-16-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Updated CERS- completed on-site.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Other/Unknown

QUALITY AUTO CENTER (Continued) **S121745485**

Eval Date:	04-06-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-22-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-12-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Oily rags contained in step cans. Waste receipts are maintained on site> 3 years.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-07-2020
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Waste receipts present on site. Oil pickup scheduled for 7/8/2020. No signature obtained due to COVID-19.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-17-2021
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,
Eval General Type:	Other/Unknown
Eval Date:	11-25-2019
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Hazardous waste labels were placed on each container, two waste oil drums and one antifreeze drum. All containers were maintained closed when not transferring materials. Housekeeping is good.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

QUALITY AUTO CENTER (Continued) **S121745485**

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Sunnyvale Department of Public Safety
Entity Title:	Not reported
Affiliation Address:	505 W. Olive Avenue, Suite 150
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94086
Affiliation Phone:	(408) 730-7212,

Affiliation Type Desc:	Document Preparer
Entity Name:	Jeong hoon Ryoo
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	Jeong Hoon Ryoo
Entity Title:	Not reported
Affiliation Address:	1062 E El Camino Real Ste H
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94087
Affiliation Phone:	(408) 489-0657,

Affiliation Type Desc:	Parent Corporation
Entity Name:	Quality Auto Center
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Jeong Hoon Ryoo
Entity Title:	Not reported
Affiliation Address:	1062 E El Camino Real Ste H
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94087
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	Quality Auto Center
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported

QUALITY AUTO CENTER (Continued) **S121745485**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(669) 248-9429,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1062 E El Camino Real Ste H
Affiliation City:	SUNNYVALE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94087
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Jeong hoon Ryoo
Entity Title:	owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

HWTS:

Name:	QUALITY AUTO CENTER
Address:	1062 E EL CAMINO REAL STE H
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940873756
EPA ID:	CAL000327328
Inactive Date:	06/30/2013
Create Date:	11/30/2007
Last Act Date:	03/26/2014
Mailing Name:	Not reported
Mailing Address:	1062 E EL CAMINO REAL STE H
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SUNNYVALE, CA 940873756
Owner Name:	JEONG HOON RYOO
Owner Address:	900 PEPPER TREE LN APT 522
Owner Address 2:	Not reported
Owner City,State,Zip:	SANTA CLARA, CA 950515277
Contact Name:	JEONG HOON RYOO
Contact Address:	2518 PALMDALE CT
Contact Address 2:	Not reported
City,State,Zip:	SANTA CLARA, CA 950510000

NAICS:

EPA ID:	CAL000327328
Create Date:	2007-11-30 15:06:44.493
NAICS Code:	811111
NAICS Description:	General Automotive Repair
Issued EPA ID Date:	2007-11-30 15:06:44.47700
Inactive Date:	2013-06-30 00:00:00
Facility Name:	QUALITY AUTO CENTER
Facility Address:	1062 E EL CAMINO REAL STE H
Facility Address 2:	Not reported

QUALITY AUTO CENTER (Continued) **S121745485**

Facility City:	SUNNYVALE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	940873756

J47 **J C AUTO REPAIR** **RCRA NonGen / NLR** **1027090721**
NNE **1062 E EL CAMINO REAL #1** **CAL000120949**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1192 ft. **Site 13 of 15 in cluster J**

Relative: **Lower**
Actual: **111 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20221228
Handler Name:	J C AUTO REPAIR	
Handler Address:		1062 E EL CAMINO REAL #1
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAL000120949
Contact Name:		SUNG N CHI
Contact Address:		E EL CAMINO REAL #1
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-247-6443
Contact Fax:		Not reported
Contact Email:		JCAUTO52@YAHOO.COM
Contact Title:		OWNER
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		E EL CAMINO REAL #1
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		SUNG NAM CHI
Owner Type:		Other
Operator Name:		SUNG NAM CHI
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported

J C AUTO REPAIR (Continued) **1027090721**

Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20221230
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SUNG NAM CHI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1062 E EL CAMINO REAL #1
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-234-8077
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SUNG NAM CHI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported

J C AUTO REPAIR (Continued) **1027090721**

Owner/Operator Address:	1062 E EL CAMINO REAL #1
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-234-8077
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20221228
Handler Name: J C AUTO REPAIR	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

J48 **WOLFGANG VW REPAIR & SERVICE** **CUPA Listings** **S121470781**
NNE **1062 E EL CAMINO REAL D** **N/A**
1/8-1/4 **SUNNYVALE, CA 94086**
0.226 mi.
1192 ft. **Site 14 of 15 in cluster J**

Relative: **Lower**

Actual: **111 ft.**

CUPA SANTA CLARA:

Name:	WOLFGANG VW REPAIR & SERVICE
Address:	1062 E EL CAMINO REAL D
City,State,Zip:	SUNNYVALE, CA 94086
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Program Identifier:	DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude:	37.352018
Longitude:	-122.003671
Record ID:	PR0314116
Facility ID:	FA0213297

K49 **YING LIU** **RCRA NonGen / NLR** **1026715734**
WSW **917 EXMOOR WAY** **CAC003104175**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1193 ft. **Site 1 of 3 in cluster K**

Relative: **Higher**

Actual: **141 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20210204
Handler Name:	YING LIU	
Handler Address:		917 EXMOOR WAY
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003104175
Contact Name:		YING LIU
Contact Address:		917 EXMOOR WAY
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		650-704-8028
Contact Fax:		Not reported
Contact Email:		CYNTHIA.CODY@CSAA.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		917 EXMOOR WAY
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		YING LIU
Owner Type:		Other
Operator Name:		YING LIU
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

YING LIU (Continued) **1026715734**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210226
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	YING LIU
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	917 EXMOOR WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	650-704-8028
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	YING LIU
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	917 EXMOOR WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	650-704-8028
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

YING LIU (Continued) **1026715734**

Historic Generators:
Receive Date: 20210204
Handler Name: YING LIU
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

L50 **DON AND JOHN'S AUTOMOTIVE** **RCRA NonGen / NLR** **1024798343**
NNE **1080 E EL CAMINO REAL** **CAL000200538**
1/8-1/4 **SUNNYVALE, CA 94086**
0.226 mi.
1194 ft. **Site 1 of 3 in cluster L**

Relative: **Lower**
Actual: **110 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 19990324
Handler Name: DON AND JOHN'S AUTOMOTIVE
Handler Address: 1080 E EL CAMINO REAL
Handler City,State,Zip: SUNNYVALE, CA 94086-0000
EPA ID: CAL000200538
Contact Name: SUSAN GORDON
Contact Address: 1080-E EL CAMINO REAL
Contact City,State,Zip: SUNNYVALE, CA 94087
Contact Telephone: 408-739-1119
Contact Fax: 408-244-1564
Contact Email: 4SUSANGORDON@COMCAST.NET
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: 1080-E EL CAMINO REAL
Mailing City,State,Zip: SUNNYVALE, CA 94087-0000
Owner Name: ANTHONY & SUSAN GORDON

DON AND JOHN'S AUTOMOTIVE (Continued) **1024798343**

Owner Type:	Other
Operator Name:	SUSAN GORDON
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

DON AND JOHN'S AUTOMOTIVE (Continued) **1024798343**

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: SUSAN GORDON
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1080-E EL CAMINO REAL
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-739-1119
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: ANTHONY & SUSAN GORDON
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 145-JOHNSON AVE
Owner/Operator City,State,Zip: LOS GATOS, CA 95030-0000
Owner/Operator Telephone: 408-739-1119
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19990324
Handler Name: DON AND JOHN'S AUTOMOTIVE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

L51 **DON & JOHN'S AUTOMOTIVE** **CERS HAZ WASTE** **S121755230**
NNE **1080 E EL CAMINO REAL** **CERS** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.226 mi.
1194 ft. **Site 2 of 3 in cluster L**

Relative:
Lower

Actual:
110 ft.

CERS HAZ WASTE:
Name: DON & JOHN'S AUTOMOTIVE
Address: 1080 E EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94087
Site ID: 26029
CERS ID: 10449439
CERS Description: Hazardous Waste Generator

CERS:
Name: DON & JOHN'S AUTOMOTIVE
Address: 1080 E EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94087
Site ID: 26029
CERS ID: 10449439
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 26029
Site Name: Don & John's Automotive
Violation Date: 07-21-2021
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 10/18/2021. Portable oil collection containers, and 55-gallon drums in rear storage area do not have the facility, or facility address written on hazardous waste labels.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Site ID: 26029
Site Name: Don & John's Automotive
Violation Date: 07-14-2020
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 07/20/2020. Label on portable on 2 used oil collection containers are faded and no longer legible. One portable used oil collection container is missing a label. Waste labels (all) are faded and no longer legible.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

DON & JOHN'S AUTOMOTIVE (Continued) **S121755230**

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-25-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-05-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-19-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Hazardous waste is properly labeled and secondarily contained. Containers in good condition. Maintained closed when not transferring materials. Time limits- OK Receipts maintained on site > 3 years. Evergreen picks up
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-03-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-03-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-25-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,

DON & JOHN'S AUTOMOTIVE (Continued) **S121755230**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-05-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-11-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-11-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-14-2020
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Hazardous waste reciepts are kept on site. Accumulation times - OK. Containers are in good condition and closed when ont in use. No signature obtained due to COVID-19.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-21-2021
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Bill of Ladings stored on site. Accumulation dates - OK. No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-08-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Sunnyvale Department of Public Safety
Eval Program:	HW
Eval Source:	CERS,

DON & JOHN'S AUTOMOTIVE (Continued) **S121755230**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-19-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: HMBP was submitted on CERS 2/28/2019. Hazardous materials are properly labeled and secondarily contained. Training- OK, conducted monthly on various topics through out the year.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-14-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Hazardous material information is up to date on CERS. Discussed maintaining the Hazardous Material Business Plan on site and maintaining training records.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-08-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-21-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Flammable liquids stored on site fall below permit thresholds. Inspector to initiate FL2 permit removal. Facility to call inspector to review CERS updates that may be required. CERS was last submitted 3/9/3021. No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 26029
Facility Name: Don & John's Automotive
Env Int Type Code: HWG
Program ID: 10449439
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 37.351660
Longitude: -122.002900

Affiliation:
Affiliation Type Desc: CUPA District

DON & JOHN'S AUTOMOTIVE (Continued) **S121755230**

Entity Name:	Sunnyvale Department of Public Safety
Entity Title:	Not reported
Affiliation Address:	505 W. Olive Avenue, Suite 150
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94086
Affiliation Phone:	(408) 730-7212,
Affiliation Type Desc:	Document Preparer
Entity Name:	Susan Gordon
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Anthony Gordon
Entity Title:	Not reported
Affiliation Address:	1080 E. El Camino Real
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94087
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1080 E. El Camino Real
Affiliation City:	Sunnyvale
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94087
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Anthony B. Gordon
Entity Title:	Not reported
Affiliation Address:	145 Johnson Ave.
Affiliation City:	Los Gatos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95030
Affiliation Phone:	(408) 838-5514,
Affiliation Type Desc:	Operator
Entity Name:	Anthony B Gordon
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported

DON & JOHN'S AUTOMOTIVE (Continued) **S121755230**

Affiliation Phone:	(408) 739-1119,
Affiliation Type Desc:	Property Owner
Entity Name:	Y3L Holdings LLC
Entity Title:	Not reported
Affiliation Address:	761 Helen Drive
Affiliation City:	Ripon
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95366
Affiliation Phone:	(925) 570-3438,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Don & John's Automotive
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Susan Gordon
Entity Title:	Vice President
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

L52 **DON & JOHN'S AUTOMOTIVE** **CUPA Listings** **S121470785**
NNE **1080 E EL CAMINO REAL** **N/A**
1/8-1/4 **SUNNYVALE, CA 94086**
0.226 mi.
1194 ft. **Site 3 of 3 in cluster L**

Relative: **Lower**

Actual: **110 ft.**

CUPA SANTA CLARA:

Name:	DON & JOHN'S AUTOMOTIVE
Address:	1080 E EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94086
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Program Identifier:	DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude:	37.352080
Longitude:	-122.002543
Record ID:	PR0314113
Facility ID:	FA0213318

M53 **TIBET MIMAROGLU** **RCRA NonGen / NLR** **1024750298**
South **1040 GLOUCESTER CT.,** **CAC002970088**
1/8-1/4 **SUNNYVALE, CA 94087**
0.228 mi.
1203 ft. **Site 1 of 2 in cluster M**

Relative: **Higher**

Actual: **134 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20180710
Handler Name:	TIBET MIMAROGLU	
Handler Address:		1040 GLOUCESTER CT.,
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC002970088
Contact Name:		TIBET MIMAROGLU
Contact Address:		1040 GLOUCESTER CT.,
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		650-489-8797
Contact Fax:		Not reported
Contact Email:		ZCONSSI@AOL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1040 GLOUCESTER CT.,
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		TIBET MIMAROGLU
Owner Type:		Other
Operator Name:		TIBET MIMAROGLU
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

TIBET MIMAROGLU (Continued) **1024750298**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TIBET MIMAROGLU
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1040 GLOUCESTER CT.,
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	650-489-8797
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TIBET MIMAROGLU
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1040 GLOUCESTER CT.,
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	650-489-8797
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

TIBET MIMAROGLU (Continued) **1024750298**

Historic Generators:
- Receive Date: 20180710
- Handler Name: TIBET MIMAROGLU
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Code: 56299
- NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

M54 **TIBET MIMAROGHU** **RCRA NonGen / NLR** **1025831390**
South **1040 GLOUCESTER CT** **CAC003010949**
1/8-1/4 **SUNNYVALE, CA 94087**
0.228 mi.
1203 ft. **Site 2 of 2 in cluster M**

Relative: **Higher**
Actual: **134 ft.**

RCRA NonGen / NLR:
- Date Form Received by Agency: 20190418
- Handler Name: TIBET MIMAROGHU
- Handler Address: 1040 GLOUCESTER CT
- Handler City,State,Zip: SUNNYVALE, CA 94087
- EPA ID: CAC003010949
- Contact Name: TIBET MIMAROGHU
- Contact Address: 1040 GLOUCESTER CT
- Contact City,State,Zip: SUNNYVALE, CA 94087
- Contact Telephone: 650-489-8797
- Contact Fax: Not reported
- Contact Email: TIBET@MIMAROGHU.COM
- Contact Title: Not reported
- EPA Region: 09
- Land Type: Not reported
- Federal Waste Generator Description: Not a generator, verified
- Non-Notifier: Not reported
- Biennial Report Cycle: Not reported
- Accessibility: Not reported
- Active Site Indicator: Handler Activities
- State District Owner: Not reported
- State District: Not reported
- Mailing Address: 1040 GLOUCESTER CT
- Mailing City,State,Zip: SUNNYVALE, CA 94087
- Owner Name: TIBET MIMAROGHU

TIBET MIMAROGHU (Continued) **1025831390**

Owner Type:	Other
Operator Name:	TIBET MIMAROGHU
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190626
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

TIBET MIMAROGHU (Continued) **1025831390**

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: TIBET MIMAROGHU
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1040 GLOUCESTER CT
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 650-489-8797
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: TIBET MIMAROGHU
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1040 GLOUCESTER CT
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 650-489-8797
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20190418
Handler Name: TIBET MIMAROGHU
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

N55 **SAIGON CLEANERS** **DRYCLEANERS** **S126395425**
North **1034 E EL CAMINO REAL STE A** **HWTS** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.228 mi.
1205 ft. **Site 1 of 8 in cluster N**

Relative:
Lower

Actual:
114 ft.

DRYCLEANERS:

Name:	SAIGON CLEANERS
Address:	1034 E EL CAMINO REAL STE A
City,State,Zip:	SUNNYVALE, CA 94087
EPA Id:	CAL000257973
NAICS Code:	812320
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	08/20/2002
Facility Active:	Yes
Inactive Date:	Not reported
Facility Addr2:	Not reported
Owner Name:	PHUC HUYNH
Owner Address:	1034 E EL CAMINO REAL STE A
Owner Address 2:	Not reported
Owner Telephone:	4088300094
Contact Name:	PHUC HUYNH
Contact Address:	1034 E EL CAMINO REAL STE A
Contact Address 2:	Not reported
Contact Telephone:	4088300094
Contact Fax:	Not reported
Mailing Name:	Not reported
Mailing Address 1:	1034 E EL CAMINO REAL STE A
Mailing Address 2:	Not reported
Mailing City:	SUNNYVALE
Mailing State:	CA
Mailing Zip:	94087
Owner Fax:	Not reported
Region Code:	2
Latitude:	37.352134
Longitude:	-122.005864

HWTS:

Name:	SAIGON CLEANERS
Address:	1034 E EL CAMINO REAL STE A
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 94087
EPA ID:	CAL000257973
Inactive Date:	Not reported
Create Date:	08/20/2002
Last Act Date:	10/07/2020
Mailing Name:	Not reported
Mailing Address:	1034 E EL CAMINO REAL STE A
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	PHUC HUYNH
Owner Address:	1034 E EL CAMINO REAL STE A
Owner Address 2:	Not reported
Owner City,State,Zip:	SUNNYVALE, CA 94087
Contact Name:	PHUC HUYNH
Contact Address:	1034 E EL CAMINO REAL STE A
Contact Address 2:	Not reported

SAIGON CLEANERS (Continued) **S126395425**

City,State,Zip: SUNNYVALE, CA 94087

NAICS:

EPA ID: CAL000257973
Create Date: 2020-10-07 14:20:19.490
NAICS Code: 812320
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
Issued EPA ID Date: 2002-08-20 15:50:04.64000
Inactive Date: Not reported
Facility Name: SAIGON CLEANERS
Facility Address: 1034 E EL CAMINO REAL STE A
Facility Address 2: Not reported
Facility City: SUNNYVALE
Facility County: Not reported
Facility State: CA
Facility Zip: 94087

EPA ID: CAL000257973
Create Date: 2020-10-07 14:20:19.490
NAICS Code: 812320
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
Issued EPA ID Date: 2002-08-20 15:50:04.64000
Inactive Date: Not reported
Facility Name: SAIGON CLEANERS
Facility Address: 1034 E EL CAMINO REAL STE A
Facility Address 2: Not reported
Facility City: SUNNYVALE
Facility County: Not reported
Facility State: CA
Facility Zip: 94087

N56 **VELMA DRY CLEANERS** **RCRA-SQG** **1000905224**
North **1034 E EL CAMINO REAL UNIT A** **CA0000372201**
1/8-1/4 **SUNNYVALE, CA 94087**
0.228 mi.
1205 ft. **Site 2 of 8 in cluster N**

Relative: **Lower**
Actual: **114 ft.**

RCRA-SQG:

Date Form Received by Agency: 19940615
Handler Name: VELMA DRY CLEANERS
Handler Address: 1034 E EL CAMINO REAL UNIT A
Handler City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CA0000372201
Contact Name: CLAUDE STALLINGS
Contact Address: 1034 E EL CAMINO REAL UNIT A
Contact City,State,Zip: SUNNYVALE, CA 94807
Contact Telephone: 408-746-0199
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Private
Federal Waste Generator Description: Small Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities

VELMA DRY CLEANERS (Continued) **1000905224**

State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1034 E EL CAMINO REAL UNIT A
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	CLAUDE STALLINGS
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No

VELMA DRY CLEANERS (Continued) **1000905224**

Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CLAUDE STALLINGS
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1034 EL CAMINO REAL UNIT A
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94086
Owner/Operator Telephone:	408-746-0199
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19940615
Handler Name: VELMA DRY CLEANERS	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

N57 **J PHOTO CENTER** **CUPA Listings S121471992**
North **1018 E EL CAMINO REAL** **HWTS N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.228 mi.
1205 ft. **Site 3 of 8 in cluster N**

Relative: **Lower**

Actual: **114 ft.**

CUPA SANTA CLARA:

Name:	J PHOTO CENTER
Address:	1018 E EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94087

J PHOTO CENTER (Continued) **S121471992**

Region: SANTA CLARA
PE#: 2272
Program Description: SILVER WASTE ONLY 100+ KG/YR & < 100 KG/MO
Program Identifier: DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude: 37.351951
Longitude: -122.006525
Record ID: PR0366134
Facility ID: FA0251862

HWTS:
Name: J PHOTO CENTER
Address: 1018 E EL CAMINO REAL
Address 2: Not reported
City,State,Zip: SUNNYVALE, CA 94087
EPA ID: CAL000313100
Inactive Date: 01/30/2009
Create Date: 10/30/2006
Last Act Date: 01/30/2009
Mailing Name: Not reported
Mailing Address: 1018 E EL CAMINO REAL
Mailing Address 2: Not reported
Mailing City,State,Zip: SUNNYVALE, CA 94087
Owner Name: PETER W CHUNG
Owner Address: 1018 E EL CAMINO REAL
Owner Address 2: Not reported
Owner City,State,Zip: SUNNYVALE, CA 94087
Contact Name: PETER WOO CHUNG OWNER
Contact Address: 1018 E EL CAMINO REAL
Contact Address 2: Not reported
City,State,Zip: SUNNYVALE, CA 94087

NAICS:
EPA ID: CAL000313100
Create Date: 2006-10-30 14:25:50.803
NAICS Code: 812922
NAICS Description: One-Hour Photofinishing
Issued EPA ID Date: 2006-10-30 14:25:50.77300
Inactive Date: 2009-01-30 00:00:00
Facility Name: J PHOTO CENTER
Facility Address: 1018 E EL CAMINO REAL
Facility Address 2: Not reported
Facility City: SUNNYVALE
Facility County: Not reported
Facility State: CA
Facility Zip: 94087

N58 **SAIGON CLEANERS** **RCRA NonGen / NLR** **1026489554**
North **1034 E EL CAMINO REAL STE A** **CAL000257973**
1/8-1/4 **SUNNYVALE, CA 94087**
0.228 mi.
1205 ft. **Site 4 of 8 in cluster N**

Relative: RCRA NonGen / NLR:
Lower
Date Form Received by Agency: 20201005
Actual: Handler Name: SAIGON CLEANERS
114 ft. Handler Address: 1034 E EL CAMINO REAL STE A
Handler City,State,Zip: SUNNYVALE, CA 94087

SAIGON CLEANERS (Continued) **1026489554**

EPA ID:	CAL000257973
Contact Name:	PHUC HUYNH
Contact Address:	E EL CAMINO REAL STE A
Contact City,State,Zip:	SUNNYVALE, CA 94087
Contact Telephone:	408-830-0094
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	E EL CAMINO REAL STE A
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	PHUC HUYNH
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No

SAIGON CLEANERS (Continued) **1026489554**

TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20201007
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	PHUC HUYNH
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1034 E EL CAMINO REAL STE A
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-830-0094
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20201005
Handler Name: SAIGON CLEANERS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	812320
NAICS Description:	DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPERATED)

Facility Has Received Notices of Violations:

SAIGON CLEANERS (Continued) **1026489554**

Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

N59 **SAIGON'S DRY CLEANERS** **CUPA Listings** **S121470765**
North **1034 E EL CAMINO REAL A** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087**
0.228 mi.
1205 ft. **Site 5 of 8 in cluster N**

Relative: CUPA SANTA CLARA:
Lower
Actual: Name: SAIGON'S DRY CLEANERS
114 ft. Address: 1034 E EL CAMINO REAL A
City,State,Zip: SUNNYVALE, CA 94087
Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Program Identifier: DEH PERMIT-HAZ WASTE GENERATOR PROGRAM
Latitude: 37.351991
Longitude: -122.005541
Record ID: PR0314115
Facility ID: FA0213259

N60 **ALPHA DENTAL CARE** **RCRA NonGen / NLR** **1024795997**
North **1024 E EL CAMINO REAL** **CAL000171898**
1/8-1/4 **SUNNYVALE, CA 94087**
0.228 mi.
1205 ft. **Site 6 of 8 in cluster N**

Relative: RCRA NonGen / NLR:
Lower
Date Form Received by Agency: 19980210
Actual: Handler Name: ALPHA DENTAL CARE
114 ft. Handler Address: 1024 E EL CAMINO REAL
Handler City,State,Zip: SUNNYVALE, CA 94087-0000
EPA ID: CAL000171898
Contact Name: CAU THAI OFF MGR
Contact Address: 1024 E EL CAMINO REAL #1
Contact City,State,Zip: SUNNYVALE, CA 94087
Contact Telephone: 408-736-7000
Contact Fax: 000-000-0000
Contact Email: ALPHADENTALCARE@GMAIL.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: 1024 E EL CAMINO REAL #1
Mailing City,State,Zip: SUNNYVALE, CA 94087-0000
Owner Name: AMANDA NGUYEN DDS

ALPHA DENTAL CARE (Continued) **1024795997**

Owner Type:	Other
Operator Name:	CAU THAI OFF MGR
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

ALPHA DENTAL CARE (Continued) **1024795997**

Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	CAU THAI OFF MGR
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1024 E EL CAMINO REAL #1
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-736-7000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	AMANDA NGUYEN DDS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1024 E EL CAMINO REAL #1
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-0000
Owner/Operator Telephone:	408-736-7000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19980210
Handler Name: ALPHA DENTAL CARE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

N61 **SAIGON CLEANERS** **CERS HAZ WASTE** **S121789639**
North **1034 E. EL CAMINO REAL** **CERS** **N/A**
1/8-1/4 **SUNNYVALE, CA 94086**
0.228 mi.
1205 ft. **Site 7 of 8 in cluster N**

Relative:
Lower

Actual:
114 ft.

CERS HAZ WASTE:
Name: SAIGON CLEANERS
Address: 1034 E. EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94086
Site ID: 64084
CERS ID: 10082449
CERS Description: Hazardous Waste Generator

CERS:
Name: SAIGON CLEANERS
Address: 1034 E. EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94086
Site ID: 64084
CERS ID: 10082449
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 64084
Site Name: Saigon Cleaners
Violation Date: 08-26-2020
Citation: 22 CCR 12 66262.34(e) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(e)
Violation Description: Failure to meet the following conditions of satellite accumulation regulations: Accumulate up to 55 gallons of hazardous waste or one quart of acute hazardous waste at or near the initial point of accumulation which was under the control of the operator. Total time hazardous waste can be accumulated onsite in any generator accumulation area is one year, i.e., the combined accmulation time at a satellite accumulation point and at a 90/180/270 accumulation area (depending on size of generator and distance transported), whichever comes first. The generator complies with section 66265.171, 66265.172, and 66265.173(a). The container must be clearly marked with the initial date that hazardous waste is first placed in the container and labelled with the words Hazardous Waste including specified information Container must be labelled with the date the satellite accumulation limit is reached and moved within three days after reaching the 55 gallon (or one quart) limit to a 90 day accumulation area 55 gallons (or one quart of acute hazardous waste) of waste per process may be accumulated
Violation Notes: Returned to compliance on 09/24/2020. Hazardous waste has been stored on site since 1/28/2019 (>1 year). Ensure that all hazardous wastes being accumulated pursuant to satellite accumulation meet all applicable requirements and submit documentation of compliance to the CUPA.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Site ID: 64084
Site Name: Saigon Cleaners
Violation Date: 08-09-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

SAIGON CLEANERS (Continued) **S121789639**

Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 08/13/2019. The business failed to electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA on or before the annual due date. Electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA within 30 days. On an ongoing basis, electronically submit and certify the business plan annually on or before the annual due date.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 64084
Site Name: Saigon Cleaners
Violation Date: 09-12-2017
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 09/12/2017. Waste hydrocarbon drum was not labeled with required elements. Corrected on site at time of inspection.
Violation Division: Sunnyvale Department of Public Safety
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-21-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Manifests are stored on site & complete. Accumulation times - OK. Hazardous waste container is labeled. No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-13-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Hazardous waste is properly labeled and secondarily contained. Time limits- OK. Containers in good condition. Manifests maintained on-site > 3 years. Technichem picks up waste petroleum distillates. Training- OK.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-14-2014

SAIGON CLEANERS (Continued) **S121789639**

Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-24-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Hydrocarbon is properly labeled and secondarily contained.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-13-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-14-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 03-31-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Operator submitted HMBP online. HW receipts-OK.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 08-09-2019
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-24-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Technichem picks up hazardous waste. Manifests maintained on-site.

SAIGON CLEANERS (Continued) **S121789639**

Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-12-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-12-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-13-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-21-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: CERS was last submitted 8/26/2020 (certified during site visit). CERS submittal is accessible on site. No signature obtained due to COVID-19 protocols. Verbal consent to inspect granted.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-13-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: HMBP updated on CERS at time of inspection. Training- OK
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-26-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Hazardous material business plan updated at time of inspection. Training - OK. Hazardous material business plan available on site. No

SAIGON CLEANERS (Continued) **S121789639**

signature obtained due to COVID-19. Verbal permission to inspect granted.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-26-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: No waste pickup since last inspection. Manifests on site for > 3 years. Containers in good condition. No signature obtained due to COVID-19. Verbal permission to inspect granted.
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-30-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-30-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Sunnyvale Department of Public Safety
Eval Program: HW
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Sunnyvale Department of Public Safety
Entity Title: Not reported
Affiliation Address: 505 W. Olive Avenue, Suite 150
Affiliation City: Sunnyvale
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94086
Affiliation Phone: (408) 730-7212,

Affiliation Type Desc: Identification Signer
Entity Name: Phuc Huynh
Entity Title: Owner
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Operator

SAIGON CLEANERS (Continued) **S121789639**

Entity Name:	Phuc Huynh
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(408) 830-0094,
Affiliation Type Desc:	Document Preparer
Entity Name:	Phuc Huynh
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Phuc Huynh
Entity Title:	Not reported
Affiliation Address:	1034 E. EL CAMINO REAL
Affiliation City:	SUNNYVALE
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94086
Affiliation Phone:	(408) 830-0094,
Affiliation Type Desc:	Property Owner
Entity Name:	David Bider
Entity Title:	Not reported
Affiliation Address:	3000 Sand Hill Road, Building 1, Suite 50
Affiliation City:	Menlo Park
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94025
Affiliation Phone:	(650) 854-4154,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Phuc Huynh
Entity Title:	Not reported
Affiliation Address:	1034 E. EL CAMINO REAL
Affiliation City:	SUNNYVALE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94086
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1034 E. EL CAMINO REAL
Affiliation City:	SUNNYVALE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94086

SAIGON CLEANERS (Continued) **S121789639**

Affiliation Phone: ,

Affiliation Type Desc: Parent Corporation
Entity Name: Saigon Cleaners
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

N62 **SAIGON CLEANERS** **FINDS** **1008152973**
North **1034 E EL CAMINO REAL UNIT A** **ECHO** **N/A**
1/8-1/4 **SUNNYVALE, CA 94087** **DRYCLEANERS**
0.228 mi.
1205 ft. **Site 8 of 8 in cluster N**

Relative: **Lower**

Actual: **114 ft.**

FINDS:
Registry ID: 110018972441

Click Here:

Environmental Interest/Information System:
AIR EMISSIONS CLASSIFICATION UNKNOWN
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
HAZARDOUS AIR POLLUTANT MAJOR
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1008152973
Registry ID: 110018972441
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110018972441
Name: SAIGON CLEANERS
Address: 1034 E EL CAMINO REAL UNIT A
City,State,Zip: SUNNYVALE, CA 94087

DRYCLEANERS:
Name: SAIGON CLEANERS
Address: 1034 E EL CAMINO REAL UNIT A
City,State,Zip: SUNNYVALE, CA 940873759
EPA Id: CA0000372201
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211

SAIGON CLEANERS (Continued) **1008152973**

SIC Description:	Power Laundries, Family and Commercial
Create Date:	12/08/1995
Facility Active:	No
Inactive Date:	06/30/2007
Facility Addr2:	Not reported
Owner Name:	SAIGON CLEANERS
Owner Address:	1034 EL CAMINO REAL UNIT A
Owner Address 2:	Not reported
Owner Telephone:	4087460199
Contact Name:	ENVIRONMENTAL MANAGER
Contact Address:	1034 E EL CAMINO REAL UNIT A
Contact Address 2:	Not reported
Contact Telephone:	4087460199
Contact Fax:	Not reported
Mailing Name:	Not reported
Mailing Address 1:	1034 E EL CAMINO REAL UNIT A
Mailing Address 2:	Not reported
Mailing City:	SUNNYVALE
Mailing State:	CA
Mailing Zip:	940873759
Owner Fax:	Not reported
Region Code:	2
Latitude:	37.352134
Longitude:	-122.005864

O63 **JULIE WADE** **RCRA NonGen / NLR** **1025829406**
SSW **1563 PATRIDGE COURT** **CAC003008960**
1/8-1/4 **SUNNYVALE, CA 94087**
0.233 mi.
1230 ft. **Site 1 of 2 in cluster O**

Relative: **Higher**
Actual: **138 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20190405
Handler Name:	JULIE WADE	
Handler Address:		1563 PATRIDGE COURT
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003008960
Contact Name:		JULIE WADE
Contact Address:		1563 PATRIDGE COURT
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-693-5808
Contact Fax:		Not reported
Contact Email:		ALEJANDRAMALDONADO@ALLIANCE-ENVIRO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1563 PATRIDGE COURT
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		JULIE WADE
Owner Type:		Other
Operator Name:		JULIE WADE

JULIE WADE (Continued) **1025829406**

Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190626
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

JULIE WADE (Continued) **1025829406**

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JULIE WADE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1563 PATRIDGE COURT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-693-5808
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JULIE WADE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1563 PATRIDGE COURT
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-693-5808
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20190405
Handler Name: JULIE WADE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

O64 **JULIE WADE** **RCRA NonGen / NLR** **1025827798**
SSW **1563 PARTRIDGE CT.** **CAC003007350**
1/8-1/4 **SUNNYVALE, CA 94087**
0.233 mi.
1230 ft. **Site 2 of 2 in cluster O**

Relative: **Higher**
Actual: **138 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20190326
Handler Name:	JULIE WADE	
Handler Address:		1563 PARTRIDGE CT.
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC003007350
Contact Name:		JULIE WADE
Contact Address:		1563 PARTRIDGE CT.
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		408-693-5808
Contact Fax:		Not reported
Contact Email:		LILIAN.RAMOS@SYNERGYCOMPANIES.ORG
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1563 PARTRIDGE CT.
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		JULIE WADE
Owner Type:		Other
Operator Name:		JULIE WADE
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

JULIE WADE (Continued) **1025827798**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190626
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JULIE WADE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1563 PARTRIDGE CT.
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-693-5808
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JULIE WADE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1563 PARTRIDGE CT.
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	408-693-5808
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

JULIE WADE (Continued) **1025827798**

Historic Generators:
Receive Date: 20190326
Handler Name: JULIE WADE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

K65 **KIKU AND DOUG MURAKAMI** **RCRA NonGen / NLR** **1026041694**
WSW **913 EXMOOR WAY** **CAC003047832**
1/8-1/4 **SUNNYVALE, CA 94087**
0.234 mi.
1236 ft. **Site 2 of 3 in cluster K**

Relative: **Higher**
Actual: **142 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20191218
Handler Name: KIKU AND DOUG MURAKAMI
Handler Address: 913 EXMOOR WAY
Handler City,State,Zip: SUNNYVALE, CA 94087-4928
EPA ID: CAC003047832
Contact Name: KIKU AND DOUG MURAKAMI
Contact Address: 913 EXMOOR WAY
Contact City,State,Zip: SUNNYVALE, CA 94087-4928
Contact Telephone: 408-738-4140
Contact Fax: Not reported
Contact Email: RUTH.DELGADILLO@SYNERGYCOMPANIES.ORG
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Not reported
State District Owner: Not reported
State District: Not reported
Mailing Address: 913 EXMOOR WAY
Mailing City,State,Zip: SUNNYVALE, CA 94087-4928
Owner Name: KIKU AND DOUG MURAKAMI

KIKU AND DOUG MURAKAMI (Continued) **1026041694**

Owner Type:	Other
Operator Name:	KIKU AND DOUG MURAKAMI
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200210
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

KIKU AND DOUG MURAKAMI (Continued) **1026041694**

Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	KIKU AND DOUG MURAKAMI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	913 EXMOOR WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-4928
Owner/Operator Telephone:	408-738-4140
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	KIKU AND DOUG MURAKAMI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	913 EXMOOR WAY
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087-4928
Owner/Operator Telephone:	408-738-4140
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20191218
Handler Name: KIKU AND DOUG MURAKAMI	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

66
ENE
1/8-1/4
0.239 mi.
1261 ft.

STATION 101 APARTMENTS
3700 LILLICK DR
SANTA CLARA, CA 95051

RCRA NonGen / NLR **1024808657**
CAL000280911

Relative:
Lower

Actual:
112 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20040409
Handler Name:	STATION 101 APARTMENTS	
Handler Address:		3700 LILLICK DR
Handler City,State,Zip:		SANTA CLARA, CA 95051
EPA ID:		CAL000280911
Contact Name:		SAMAREEB AL JANABI
Contact Address:		333 W MAUDE AVE STE 218
Contact City,State,Zip:		SUNNYVALE, CA 94085
Contact Telephone:		408-241-4341
Contact Fax:		000-000-0000
Contact Email:		MARLENE@S101MANAGEMENT.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		333 W MAUDE AVE STE 218
Mailing City,State,Zip:		SUNNYVALE, CA 94085-0000
Owner Name:		BOYTON GARDENS PARTNERSHIP
Owner Type:		Other
Operator Name:		SAMAREEB AL JANABI
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

STATION 101 APARTMENTS (Continued) **1024808657**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SAMAREEB AL JANABI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	333 W MAUDE AVE STE 218
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94085
Owner/Operator Telephone:	408-241-4341
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BOYTON GARDENS PARTNERSHIP
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	333 W MAUDE AVE STE 218
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94085-0000
Owner/Operator Telephone:	408-730-9981
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

STATION 101 APARTMENTS (Continued) **1024808657**

Historic Generators:
- Receive Date: 20040409
- Handler Name: STATION 101 APARTMENTS
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Code: 53111
- NAICS Description: LESSORS OF RESIDENTIAL BUILDINGS AND DWELLINGS

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

P67 **HIROSHI MIYANO** **RCRA NonGen / NLR** **1025839948**
SE **960 WOOD DUCK AVE** **CAC003019548**
1/8-1/4 **SANTA CLARA, CA 95051**
0.239 mi.
1263 ft. **Site 1 of 2 in cluster P**

Relative: **Higher**
Actual: **125 ft.**

RCRA NonGen / NLR:
- Date Form Received by Agency: 20190613
- Handler Name: HIROSHI MIYANO
- Handler Address: 960 WOOD DUCK AVE
- Handler City,State,Zip: SANTA CLARA, CA 95051
- EPA ID: CAC003019548
- Contact Name: HIROSHI MIYANO
- Contact Address: 960 WOOD DUCK AVE
- Contact City,State,Zip: SANTA CLARA, CA 95051
- Contact Telephone: 408-881-4264
- Contact Fax: Not reported
- Contact Email: JENNI.MILLER@SYNERGYCOMPANIES.ORG
- Contact Title: Not reported
- EPA Region: 09
- Land Type: Not reported
- Federal Waste Generator Description: Not a generator, verified
- Non-Notifier: Not reported
- Biennial Report Cycle: Not reported
- Accessibility: Not reported
- Active Site Indicator: Handler Activities
- State District Owner: Not reported
- State District: Not reported
- Mailing Address: 960 WOOD DUCK AVE
- Mailing City,State,Zip: SANTA CLARA, CA 95051
- Owner Name: HIROSHI MIYANO

HIROSHI MIYANO (Continued) **1025839948**

Owner Type:	Other
Operator Name:	HIROSHI MIYANO
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

HIROSHI MIYANO (Continued) **1025839948**

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: HIROSHI MIYANO
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 960 WOOD DUCK AVE
Owner/Operator City,State,Zip: SANTA CLARA, CA 95051
Owner/Operator Telephone: 408-881-4264
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: HIROSHI MIYANO
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 960 WOOD DUCK AVE
Owner/Operator City,State,Zip: SANTA CLARA, CA 95051
Owner/Operator Telephone: 408-881-4264
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20190613
Handler Name: HIROSHI MIYANO
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

68
ESE
1/8-1/4
0.241 mi.
1272 ft.

MARINSHAW, JOHN
1004 WOOD DUCK AVENUE
SANTA CLARA, CA 95051

RCRA NonGen / NLR

1024775548
CAC002995479

Relative:
Lower

Actual:
122 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20190107
Handler Name:	MARINSHAW, JOHN	
Handler Address:		1004 WOOD DUCK AVENUE
Handler City,State,Zip:		SANTA CLARA, CA 95051
EPA ID:		CAC002995479
Contact Name:		MARINSHAW, JOHN
Contact Address:		1004 WOOD DUCK AVENUE
Contact City,State,Zip:		SANTA CLARA, CA 95051
Contact Telephone:		408-248-7897
Contact Fax:		510-651-7702
Contact Email:		MICKIEL@PWSEI.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1004 WOOD DUCK AVENUE
Mailing City,State,Zip:		SANTA CLARA, CA 95051
Owner Name:		MARINSHAW, JOHN
Owner Type:		Other
Operator Name:		MARINSHAW, JOHN
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

MARINSHAW, JOHN (Continued) **1024775548**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190222
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MARINSHAW, JOHN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1004 WOOD DUCK AVENUE
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051
Owner/Operator Telephone:	408-248-7897
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MARINSHAW, JOHN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1004 WOOD DUCK AVENUE
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051
Owner/Operator Telephone:	408-248-7897
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

MARINSHAW, JOHN (Continued) **1024775548**

Historic Generators:
- Receive Date: 20190107
- Handler Name: MARINSHAW, JOHN
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Code: 56299
- NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

K69 **PIERO CASSARA** **RCRA NonGen / NLR** **1026815916**
WSW **912 EXMOOR WAY** **CAC003128606**
1/8-1/4 **SUNNYVALE, CA 94087**
0.249 mi.
1314 ft. **Site 3 of 3 in cluster K**

Relative: **Higher**
Actual: **143 ft.**

RCRA NonGen / NLR:
- Date Form Received by Agency: 20210709
- Handler Name: PIERO CASSARA
- Handler Address: 912 EXMOOR WAY
- Handler City,State,Zip: SUNNYVALE, CA 94087
- EPA ID: CAC003128606
- Contact Name: PIERO CASSARA
- Contact Address: 912 EXMOOR WAY
- Contact City,State,Zip: SUNNYVALE, CA 94087
- Contact Telephone: 408-674-9247
- Contact Fax: Not reported
- Contact Email: PETER@PETERCASSARACLOTHIERS.COM
- Contact Title: Not reported
- EPA Region: 09
- Land Type: Not reported
- Federal Waste Generator Description: Not a generator, verified
- Non-Notifier: Not reported
- Biennial Report Cycle: Not reported
- Accessibility: Not reported
- Active Site Indicator: Not reported
- State District Owner: Not reported
- State District: Not reported
- Mailing Address: 912 EXMOOR WAY
- Mailing City,State,Zip: SUNNYVALE, CA 94087
- Owner Name: PIERO CASSARA

PIERO CASSARA (Continued) **1026815916**

Owner Type:	Other
Operator Name:	PIERO CASSARA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210709
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

PIERO CASSARA (Continued) **1026815916**

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: PIERO CASSARA
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 912 EXMOOR WAY
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-674-9247
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: PIERO CASSARA
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 912 EXMOOR WAY
Owner/Operator City,State,Zip: SUNNYVALE, CA 94087
Owner/Operator Telephone: 408-674-9247
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20210709
Handler Name: PIERO CASSARA
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J70 **VELMA CLEANERS** **RCRA-SQG** **1000294712**
North **1059 EL CAMINO REAL** **FINDS** **CAD981582117**
1/8-1/4 **SUNNYVALE, CA 94087** **ECHO**
0.249 mi. **HAZNET**
1315 ft. **Site 15 of 15 in cluster J** **HWTS**

Relative: **Lower**
Actual: **112 ft.**

RCRA-SQG:

Date Form Received by Agency:		19960901
Handler Name:	VELMA CLEANERS	
Handler Address:		1059 EL CAMINO REAL
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAD981582117
Contact Name:		Not reported
Contact Address:		Not reported
Contact City,State,Zip:		Not reported
Contact Telephone:		Not reported
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		CA
State District:		2
Mailing Address:		EL CAMINO REAL
Mailing City,State,Zip:		SUNNYVALE, CA 94087
Owner Name:		VELMA DEAL
Owner Type:		Private
Operator Name:		NOT REQUIRED
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		NN
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

VELMA CLEANERS (Continued) **1000294712**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20000915
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	VELMA DEAL
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

VELMA CLEANERS (Continued) **1000294712**

Historic Generators:
Receive Date: 19960901
Handler Name: VELMA CLEANERS
Federal Waste Generator Description: Small Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002722867

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000294712
Registry ID: 110002722867
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002722867
Name: VELMA CLEANERS
Address: 1059 EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94087

HAZNET:
Name: VELMA CLEANERS
Address: 1059 EL CAMINO REAL
Address 2: Not reported
City,State,Zip: SUNNYVALE, CA 940870000
Contact: DEACT PER CLUADE STALLINGS V93
Telephone: 4087460199

VELMA CLEANERS (Continued) **1000294712**

Mailing Name: Not reported
Mailing Address: 1059 EL CAMINO REAL

Year: 1994
Gepaid: CAD981582117
TSD EPA ID: CAT000613893
CA Waste Code: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: -
Tons: 0.0975

Year: 1994
Gepaid: CAD981582117
TSD EPA ID: CAT000613893
CA Waste Code: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.0975

Year: 1993
Gepaid: CAD981582117
TSD EPA ID: CAT000613893
CA Waste Code: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.8775

Additional Info:
Year: 1994
Gen EPA ID: CAD981582117

Shipment Date: 19940223
Creation Date: 9/15/1995 0:00:00
Receipt Date: 19940301
Manifest ID: 93193224
Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: ILD984908202
Trans 2 Name: Not reported
TSDF EPA ID: CAT000613893
Trans Name: Not reported
TSDF Alt EPA ID: CAT000613893
TSDF Alt Name: Not reported
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code: F002
Meth Code: H01 - Transfer Station
Quantity Tons: 0.0975
Waste Quantity: 195
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 19940124
Creation Date: 10/5/1995 0:00:00
Receipt Date: Not reported
Manifest ID: 93022121

VELMA CLEANERS (Continued) **1000294712**

Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	- Not reported
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1993
Gen EPA ID:	CAD981582117
Shipment Date:	19931223
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19931228
Manifest ID:	93021766
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613893
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931103
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19931109
Manifest ID:	93027809
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893

VELMA CLEANERS (Continued) **1000294712**

Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19931006
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19931012
Manifest ID:	93093681
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930910
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19930914
Manifest ID:	93036321
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P

VELMA CLEANERS (Continued) **1000294712**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930810
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19930812
Manifest ID:	93216504
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930713
Creation Date:	9/11/1995 0:00:00
Receipt Date:	19930715
Manifest ID:	92565645
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613893
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930616
Creation Date:	9/8/1995 0:00:00
Receipt Date:	19930622

VELMA CLEANERS (Continued) **1000294712**

Manifest ID:	92623082
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613893
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930518
Creation Date:	9/9/1995 0:00:00
Receipt Date:	19930525
Manifest ID:	92571075
Trans EPA ID:	ILD051060408
Trans Name:	Not reported
Trans 2 EPA ID:	ILD051060408
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613893
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	VELMA CLEANERS
Address:	1059 EL CAMINO REAL
Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000
EPA ID:	CAD981582117
Inactive Date:	06/01/1993
Create Date:	04/10/1987
Last Act Date:	06/12/1997
Mailing Name:	Not reported
Mailing Address:	1059 EL CAMINO REAL
Mailing Address 2:	Not reported

VELMA CLEANERS (Continued) **1000294712**

Mailing City,State,Zip:	SUNNYVALE, CA 940870000
Owner Name:	VELMA/CLAUDE STALLINGS
Owner Address:	858 BING DR #1
Owner Address 2:	Not reported
Owner City,State,Zip:	SANTA CLARA, CA 950510000
Contact Name:	DEACT PER CLUADE STALLINGS V93
Contact Address:	-PH
Contact Address 2:	Not reported
City,State,Zip:	SUNNYVALE, CA 940870000

P71 **ARIE MATSLIAH** **RCRA NonGen / NLR** **1025851962**
ESE **967 WOOD DUCK AVE** **CAC003032099**
1/8-1/4 **SANTA CLARA, CA 95051**
0.249 mi.
1315 ft. **Site 2 of 2 in cluster P**

Relative: **Higher**
Actual: **124 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20190903
Handler Name:	ARIE MATSLIAH	
Handler Address:		967 WOOD DUCK AVE
Handler City,State,Zip:		SANTA CLARA, CA 95051-4510
EPA ID:		CAC003032099
Contact Name:		ARIE MATSLIAH
Contact Address:		967 WOOD DUCK AVE
Contact City,State,Zip:		SANTA CLARA, CA 95051-4510
Contact Telephone:		650-933-7485
Contact Fax:		Not reported
Contact Email:		ARIE.MATSLIAH@GMAIL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		967 WOOD DUCK AVE
Mailing City,State,Zip:		SANTA CLARA, CA 95051-4510
Owner Name:		ARIE MATSLIAH
Owner Type:		Other
Operator Name:		ARIE MATSLIAH
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported

ARIE MATSLIAH (Continued) **1025851962**

Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190910
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ARIE MATSLIAH
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	967 WOOD DUCK AVE
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051-4510
Owner/Operator Telephone:	650-933-7485
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator

ARIE MATSLIAH (Continued) **1025851962**

Owner/Operator Name:	ARIE MATSLIAH
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	967 WOOD DUCK AVE
Owner/Operator City,State,Zip:	SANTA CLARA, CA 95051-4510
Owner/Operator Telephone:	650-933-7485
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20190903
Handler Name: ARIE MATSLIAH	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

72
NNW
1/8-1/4
0.250 mi.
1320 ft.

ST ANTONE **RCRA NonGen / NLR** **1024748068**
1008 E. EL CAMINO REAL **CAC002967846**
SUNNYVALE, CA 94087

Relative:
Lower

Actual:
117 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20180622
Handler Name:	ST ANTONE	
Handler Address:		1008 E. EL CAMINO REAL
Handler City,State,Zip:		SUNNYVALE, CA 94087
EPA ID:		CAC002967846
Contact Name:		ST ANTON
Contact Address:		1008 E. EL CAMINO REAL
Contact City,State,Zip:		SUNNYVALE, CA 94087
Contact Telephone:		916-288-5516
Contact Fax:		510-651-7702
Contact Email:		MICKIEL@PWSEI.COM
Contact Title:		Not reported
EPA Region:		09

ST ANTONE (Continued) **1024748068**

Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1008 E. EL CAMINO REAL
Mailing City,State,Zip:	SUNNYVALE, CA 94087
Owner Name:	ST ANTONE
Owner Type:	Other
Operator Name:	ST ANTON
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No

ST ANTONE (Continued) **1024748068**

Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180831
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ST ANTON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1008 E. EL CAMINO REAL
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	916-288-5516
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ST ANTONE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1008 E. EL CAMINO REAL
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94087
Owner/Operator Telephone:	916-288-5516
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20180622
Handler Name: ST ANTONE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

ST ANTONE (Continued) **1024748068**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

73
ENE
1/4-1/2
0.280 mi.
1480 ft.

ESSEX SANTA CLARA SQUARE
3700 EL CAMINO REAL
SANTA CLARA, CA 95051

CPS-SLIC **S120762611**
CERS **N/A**

Relative:
Lower

Actual:
106 ft.

CPS-SLIC:

Name:	ESSEX SANTA CLARA SQUARE
Address:	3700 EL CAMINO REAL
City,State,Zip:	SANTA CLARA, CA 95051
Region:	STATE
Facility Status:	**Open - Verification Monitoring**
Status Date:	01/22/2019
Global Id:	T10000010352
Lead Agency:	SANTA CLARA COUNTY LOP
Lead Agency Case Number:	2017-09s
Latitude:	37.35099
Longitude:	-121.99828
Case Type:	Cleanup Program Site
Case Worker:	GOR
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affected:	Soil
Potential Contaminants of Concern:	DDD / DDE / DDT, Other Insecticides / Pesticide / Fumigants / Herbicides, Arsenic, Lead
Site History:	"Gateway Village is an approximately 12.5-acre residential apartment/retail project currently under development at 3610 and 3700 El Camino Real, which is located at the southwestern corner of El Camino Real and the Lawrence Expressway, in Santa Clara, California (the Site). The development by Essex Santa Clara Square, LLC (Essex) is proceeding in two phases, beginning with residential development, consisting of approximately 420 units, to be constructed in the southern half of the Site. Commercial development on the northern half of the Site will follow completion of the residential portion. Organochlorine Pesticides (OCPs) and metals arsenic and lead have been reported above applicable screening levels. Portions of contaminated soil have been brined beneath the parking garage, and other portions will be covered with an 18" soil cap. A deed restriction is required to manage contamination and engineering controls long term.

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	ESSEX SANTA CLARA SQUARE
Address:	3700 EL CAMINO REAL
City,State,Zip:	SANTA CLARA, CA 95051
Site ID:	421561

ESSEX SANTA CLARA SQUARE (Continued) **S120762611**

CERS ID: T10000010352
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: AARON COSTA - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089181954,

---

74 **E Z RENTS** **LUST** **S101304350**
NW **954 E EL CAMINO REAL** **HIST LUST** **N/A**
1/4-1/2 **SUNNYVALE, CA 94087** **Cortese**
0.287 mi. **HIST CORTESE**
1518 ft. **CERS**

Relative: Higher
Actual: 126 ft.

LUST:
Name: E Z RENTS
Address: 954 E EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94087
Lead Agency: SANTA CLARA COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608500537
Global Id: T0608500537
Latitude: 37.374165
Longitude: -122.05702
Status: Completed - Case Closed
Status Date: 02/09/2001
Case Worker: UST
RB Case Number: Not reported
Local Agency: SANTA CLARA COUNTY LOP
File Location: All Files are on GeoTracker or in the Local Agency Database
Local Case Number: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0608500537
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608500537
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported

E Z RENTS (Continued) **S101304350**

Phone Number: 4089183400

LUST:

Global Id: T0608500537
Action Type: ENFORCEMENT
Date: 03/08/1993
Action: Notice of Responsibility - #39626

Global Id: T0608500537
Action Type: ENFORCEMENT
Date: 07/30/1990
Action: Staff Letter - #22787

Global Id: T0608500537
Action Type: ENFORCEMENT
Date: 08/31/1997
Action: Staff Letter - #22790

Global Id: T0608500537
Action Type: ENFORCEMENT
Date: 07/20/1999
Action: Staff Letter - #22797

Global Id: T0608500537
Action Type: ENFORCEMENT
Date: 08/01/2000
Action: Staff Letter - #22802

Global Id: T0608500537
Action Type: ENFORCEMENT
Date: 09/28/1999
Action: Staff Letter - #22799

Global Id: T0608500537
Action Type: Other
Date: 11/14/1985
Action: Leak Reported

Global Id: T0608500537
Action Type: RESPONSE
Date: 08/01/1997
Action: Soil and Water Investigation Report

Global Id: T0608500537
Action Type: RESPONSE
Date: 10/25/1985
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608500537
Action Type: RESPONSE
Date: 12/31/1996
Action: Other Workplan

Global Id: T0608500537
Action Type: REMEDIATION
Date: 11/14/1985
Action: Excavation

E Z RENTS (Continued) **S101304350**

Global Id: T0608500537
Action Type: RESPONSE
Date: 11/05/1997
Action: Monitoring Report - Quarterly

Global Id: T0608500537
Action Type: RESPONSE
Date: 01/01/1990
Action: Correspondence

Global Id: T0608500537
Action Type: RESPONSE
Date: 09/15/2000
Action: Monitoring Report - Quarterly

Global Id: T0608500537
Action Type: RESPONSE
Date: 10/15/1997
Action: Monitoring Report - Quarterly

Global Id: T0608500537
Action Type: RESPONSE
Date: 01/31/1999
Action: Monitoring Report - Quarterly

Global Id: T0608500537
Action Type: RESPONSE
Date: 07/15/1999
Action: Monitoring Report - Quarterly

Global Id: T0608500537
Action Type: RESPONSE
Date: 09/15/1999
Action: Monitoring Report - Quarterly

Global Id: T0608500537
Action Type: RESPONSE
Date: 06/03/2005
Action: Other Report / Document

Global Id: T0608500537
Action Type: RESPONSE
Date: 06/03/2005
Action: Other Report / Document

Global Id: T0608500537
Action Type: RESPONSE
Date: 03/11/1996
Action: Other Report / Document

Global Id: T0608500537
Action Type: ENFORCEMENT
Date: 06/03/2005
Action: Other Report

Global Id: T0608500537
Action Type: RESPONSE

E Z RENTS (Continued) **S101304350**

Date: 12/15/1999
Action: Monitoring Report - Quarterly

Global Id: T0608500537
Action Type: RESPONSE
Date: 01/28/1996
Action: Soil and Water Investigation Workplan

LUST:
Global Id: T0608500537
Status: Open - Case Begin Date
Status Date: 09/30/1985

Global Id: T0608500537
Status: Open - Site Assessment
Status Date: 09/30/1985

Global Id: T0608500537
Status: Completed - Case Closed
Status Date: 02/09/2001

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 07S1W06K01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 9/30/1985
Pollution Characterization Began: 9/30/1985
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Name: E Z RENTS
Address: 954 E EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA
Region: SANTA CLARA
SCVWD ID: 07S1W06K01F
Date Closed: 02/09/2001
EDR Link ID: 07S1W06K01F

HIST LUST SANTA CLARA:
Name: E Z Rents
Address: 954 E El Camino Real
City: Sunnyvale
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 07S1W06K01

E Z RENTS (Continued) **S101304350**

Oversite Agency: SCVWD
Date Listed: 1986-01-01 00:00:00
Closed Date: 2001-02-09 00:00:00

CORTESE:

Name:	E Z RENTS
Address:	954 E EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94087
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0608500537
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	EZ RENTS
edr_fadd1:	954 EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94087
Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-0491

CERS:

Name:	E Z RENTS
Address:	954 E EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94087
Site ID:	196552
CERS ID:	T0608500537
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title:	Not reported
Affiliation Address:	1515 CLAY ST SUITE 1400
Affiliation City:	OAKLAND
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported

E Z RENTS (Continued) **S101304350**

Affiliation Phone: ,

Affiliation Type Desc: Local Agency Caseworker
Entity Name: UST CASE WORKER - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089183400,

Q75 **CHEVRON** **HIST CORTESE** **S110060546**
NE **3740 EL CAMINO REAL** **N/A**
1/4-1/2 **SANTA CLARA, CA 95054**
0.290 mi.
1532 ft. **Site 1 of 4 in cluster Q**

Relative: **Lower**
Actual: **105 ft.**

HIST CORTESE:
edr_fname: CHEVRON
edr_fadd1: 3740 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA 95054
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0322

Q76 **CHEVRON #9-0243** **LUST** **S105030499**
NE **3740 EL CAMINO REAL** **HIST LUST** **N/A**
1/4-1/2 **SANTA CLARA, CA 95054** **SWEEPS UST**
0.290 mi. **Cortese**
1532 ft. **Site 2 of 4 in cluster Q**

Relative: **Lower**
Actual: **105 ft.**

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Pollution Characterization
Case Number: 07S1W05L01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 2/27/1989
Pollution Characterization Began: 3/1/1999
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Name: Chevron #9-0243
Address: 3740 El Camino Real
City: Santa Clara
Region: SANTA CLARA

CHEVRON #9-0243 (Continued) **S105030499**

Region Code: 2
SCVWD ID: 07S1W05L01
Oversite Agency: SCVWD
Date Listed: 1992-05-20 00:00:00
Closed Date: 2004-11-15 00:00:00

SWEEPS UST:
Name: D & L CHEVRON
Address: 3740 EL CAMINO REAL
City: SANTA CLARA
Status: Active
Comp Number: 91125
Number: 3
Board Of Equalization: 44-026351
Referral Date: 01-11-91
Action Date: 01-11-91
Created Date: 05-24-89
Owner Tank Id: 91125T001
SWRCB Tank Id: 43-010-091125-000001
Tank Status: A
Capacity: 10000
Active Date: 10-15-90
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 3

Name: D & L CHEVRON
Address: 3740 EL CAMINO REAL
City: SANTA CLARA
Status: Active
Comp Number: 91125
Number: 3
Board Of Equalization: 44-026351
Referral Date: 01-11-91
Action Date: 01-11-91
Created Date: 05-24-89
Owner Tank Id: 91125T002
SWRCB Tank Id: 43-010-091125-000002
Tank Status: A
Capacity: 10000
Active Date: 10-15-90
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: D & L CHEVRON
Address: 3740 EL CAMINO REAL
City: SANTA CLARA
Status: Active
Comp Number: 91125
Number: 3
Board Of Equalization: 44-026351
Referral Date: 01-11-91
Action Date: 01-11-91
Created Date: 05-24-89

CHEVRON #9-0243 (Continued) **S105030499**

Owner Tank Id: 91125T003
SWRCB Tank Id: 43-010-091125-000003
Tank Status: A
Capacity: 10000
Active Date: 10-15-90
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

CORTESE:
Name: CHEVRON #9-0243
Address: 3740 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA 95054
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0608500379
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

Q77 **D&L CHEVRON** **LUST** **S101594406**
NE **3740 EL CAMINO REAL** **CA FID UST** **N/A**
1/4-1/2 **SANTA CLARA, CA 95051** **CERS**
0.290 mi.
1532 ft. **Site 3 of 4 in cluster Q**

Relative: **Lower**
Actual: **105 ft.**

LUST SANTA CLARA:
Name: CHEVRON #9-0243
Address: 3740 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA
Region: SANTA CLARA
SCVWD ID: 07S1W05L01F
Date Closed: 11/15/2004
EDR Link ID: 07S1W05L01F

CA FID UST:
Facility ID: 43000518
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported

D&L CHEVRON (Continued) **S101594406**

Facility Phone: Not reported
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: SANTA CLARA 95051
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CERS:
Name: CHEVRON #9-0243
Address: 3740 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA 95054
Site ID: 218629
CERS ID: T0608500379
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: UST CASE WORKER - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089183400,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Q78 **CHEVRON #9-0243** **LUST** **U001601846**
NE **3740 EL CAMINO REAL** **HIST UST** **N/A**
1/4-1/2 **SANTA CLARA, CA 95054**
0.290 mi.
1532 ft. **Site 4 of 4 in cluster Q**

Relative: **Lower**
Actual: **105 ft.**

LUST:
Name: CHEVRON #9-0243
Address: 3740 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA 95054
Lead Agency: SANTA CLARA COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608500379
Global Id: T0608500379
Latitude: 37.351876

CHEVRON #9-0243 (Continued) **U001601846**

Longitude: -121.99872
Status: Completed - Case Closed
Status Date: 11/15/2004
Case Worker: UST
RB Case Number: Not reported
Local Agency: SANTA CLARA COUNTY LOP
File Location: All Files are on GeoTracker or in the Local Agency Database
Local Case Number: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0608500379
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608500379
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

LUST:
Global Id: T0608500379
Action Type: RESPONSE
Date: 06/03/2005
Action: Other Report / Document

Global Id: T0608500379
Action Type: RESPONSE
Date: 10/09/2008
Action: Preliminary Site Assessment Report

Global Id: T0608500379
Action Type: RESPONSE
Date: 04/19/1989
Action: Unauthorized Release Form

Global Id: T0608500379
Action Type: ENFORCEMENT
Date: 01/16/1996
Action: Notice of Responsibility - #39620

Global Id: T0608500379
Action Type: ENFORCEMENT
Date: 05/28/1997
Action: Staff Letter - #22906

CHEVRON #9-0243 (Continued) **U001601846**

Global Id: T0608500379
Action Type: ENFORCEMENT
Date: 07/06/1992
Action: Staff Letter - #22904

Global Id: T0608500379
Action Type: ENFORCEMENT
Date: 05/21/1999
Action: Staff Letter - #22910

Global Id: T0608500379
Action Type: ENFORCEMENT
Date: 01/01/1991
Action: Staff Letter - #22902

Global Id: T0608500379
Action Type: Other
Date: 01/01/1991
Action: Leak Reported

Global Id: T0608500379
Action Type: RESPONSE
Date: 06/03/2005
Action: Other Report / Document

Global Id: T0608500379
Action Type: RESPONSE
Date: 11/27/2002
Action: Soil and Water Investigation Report

Global Id: T0608500379
Action Type: RESPONSE
Date: 12/17/1992
Action: Correspondence

Global Id: T0608500379
Action Type: RESPONSE
Date: 11/15/2004
Action: Well Destruction Report

Global Id: T0608500379
Action Type: RESPONSE
Date: 07/28/1999
Action: Other Workplan

Global Id: T0608500379
Action Type: ENFORCEMENT
Date: 06/03/2005
Action: Other Report

Global Id: T0608500379
Action Type: RESPONSE
Date: 07/05/1999
Action: Other Report / Document

Global Id: T0608500379
Action Type: RESPONSE

CHEVRON #9-0243 (Continued) **U001601846**

Date: 07/09/1997
Action: Other Report / Document

Global Id: T0608500379
Action Type: RESPONSE
Date: 07/06/1992
Action: Other Report / Document

Global Id: T0608500379
Action Type: RESPONSE
Date: 12/17/1999
Action: Other Report / Document

Global Id: T0608500379
Action Type: RESPONSE
Date: 01/27/2003
Action: Other Report / Document

Global Id: T0608500379
Action Type: RESPONSE
Date: 03/10/1989
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608500379
Action Type: RESPONSE
Date: 05/28/1997
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608500379
Action Type: RESPONSE
Date: 07/08/1992
Action: Other Report / Document

LUST:
Global Id: T0608500379
Status: Open - Case Begin Date
Status Date: 02/27/1989

Global Id: T0608500379
Status: Open - Site Assessment
Status Date: 02/27/1989

Global Id: T0608500379
Status: Open - Site Assessment
Status Date: 03/01/1999

Global Id: T0608500379
Status: Completed - Case Closed
Status Date: 11/15/2004

HIST UST:
Name: 90243
Address: 3740 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA 95051
File Number: 0002CFD4

CHEVRON #9-0243 (Continued) **U001601846**

URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CFD4.pdf
Region:	STATE
Facility ID:	00000061763
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	MEISENHEIMER, DICK
Telephone:	4082464237
Owner Name:	CHEVRON U.S.A. INC.
Owner Address:	575 MARKET
Owner City,St,Zip:	SAN FRANCISCO, CA 94105
Total Tanks:	0004
Tank Num:	001
Container Num:	0000000001
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	0000000002
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	0000000003
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	0000000004
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

79
North
1/4-1/2
0.294 mi.
1551 ft.

EL CAMINO PLAZA
1053 EL CAMINO REAL, SUITE 7
SUNNYVALE, CA 94087

CPS-SLIC **S122356496**
CERS **N/A**

Relative:
Lower

Actual:
110 ft.

CPS-SLIC:

Name:	EL CAMINO PLAZA
Address:	1053 EL CAMINO REAL, SUITE 7
City,State,Zip:	SUNNYVALE, CA 94087
Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	08/20/2018
Global Id:	T10000011653
Lead Agency:	SANTA CLARA COUNTY LOP
Lead Agency Case Number:	2018-15s
Latitude:	37.35294
Longitude:	-122.00413
Case Type:	Cleanup Program Site
Case Worker:	TLF
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil, Soil Vapor
Potential Contaminants of Concern:	Tetrachloroethylene (PCE), Trichloroethylene (TCE), Vinyl chloride
Site History:	A former dry cleaner operated in Suite 7 from XX to XX. Subsurface investigations have reported PCE in soil vapor beneath the former dry cleaner suite at a max concentration of 23,000 micrograms per cubic meter. Additional assessment is required to define the extent of contamination and develop a remedial strategy.

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	EL CAMINO PLAZA
Address:	1053 EL CAMINO REAL, SUITE 7
City,State,Zip:	SUNNYVALE, CA 94087
Site ID:	438692
CERS ID:	T10000011653
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	AARON COSTA - SANTA CLARA COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	1555 Berger Drive, Suite 300
Affiliation City:	SAN JOSE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	4089181954,

R80 **EXXON #7-3850** **LUST** **S101309440**
NE **3725 EL CAMINO REAL** **CHMIRS** **N/A**
1/4-1/2 **SANTA CLARA, CA 95050** **HIST CORTESE**
0.335 mi.
1771 ft. **Site 1 of 2 in cluster R**

Relative: **Lower**

Actual: **103 ft.**

LUST:

Name:	EXXON #7-3850
Address:	3725 EL CAMINO REAL
City,State,Zip:	SANTA CLARA, CA 95050
Lead Agency:	SANTA CLARA COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501405
Global Id:	T0608501405
Latitude:	37.352835189
Longitude:	-121.998730487
Status:	Open - Verification Monitoring
Status Date:	01/27/2015
Case Worker:	TLF
RB Case Number:	05-039
Local Agency:	SANTA CLARA COUNTY LOP
File Location:	All Files are on GeoTracker or in the Local Agency Database
Local Case Number:	07S1W05F01f
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	MTBE / TBA / Other Fuel Oxygenates, Gasoline
Site History:	In August 1992, an initial subsurface investigation was performed at the site and 4 groundwater monitoring wells were installed. Between March and May 1994, 2 additional groundwater monitoring wells and a groundwater recovery well were installed. In October, 1994, 2 vapor extraction wells and an air sparge well were installed and utilized for a vapor extraction and air sparge pilot test. In December, the USTs and associated product lines were replaced at the site. Approximately 54 cubic yards of soil were removed at this time. Free product (FP) has been found in wells MW1, MW2, MW4 and RW1 and skimming operations were conducted between 1994-1999. It is estimated that 30 gallons of FP were removed. Vapor extraction along with groundwater extraction systems ran onsite from February 1996 through December 1999. Groundwater extraction continued through April 2002. Between 1995 and 2006, additional monitoring wells and vapor extraction wells were installed on and offsite and additional investigations were conducted. FP was measured in well RW2 in August 2003 (after remediation system shut off) and am absorbent sock was installed in the well. The sock was removed in November 2003. Groundwater elevation rose across the site approximately 25 feet since investigations commenced in 1993. An investigation of shallower groundwater was conducted in 2007. It was reported that groundwater was first encountered at depths between 33.5 and 50 feet bgs and the average depth to water in wells at the site was 20 feet bgs; it appears the confining conditions exist in the subsurface. Groundwater extraction activities re-commenced in December 2008.

LUST:

Global Id:	T0608501405
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

EXXON #7-3850 (Continued) **S101309440**

Global Id: T0608501405
Contact Type: Local Agency Caseworker
Contact Name: TRAVIS L. FLORA
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Dr.
City: SAN JOSE
Email: travis.flora@cep.sccgov.org
Phone Number: 4089183486

LUST:
Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 06/03/2005
Action: Other Report

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 12/17/2019
Action: Staff Letter

Global Id: T0608501405
Action Type: Other
Date: 09/13/1993
Action: Leak Discovery

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/28/2008
Action: Well Installation Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 11/04/1997
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 09/10/2007
Action: Soil and Water Investigation Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 12/15/2006
Action: CAP/RAP - Final Remediation / Design Plan

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/31/2000
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 04/30/1999
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE

EXXON #7-3850 (Continued) **S101309440**

Date:	11/14/2001
Action:	Monitoring Report - Quarterly
Global Id:	T0608501405
Action Type:	RESPONSE
Date:	12/01/2001
Action:	Soil and Water Investigation Workplan
Global Id:	T0608501405
Action Type:	RESPONSE
Date:	03/20/2009
Action:	Remedial Progress Report
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	12/24/2007
Action:	Staff Letter - #704221
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	04/04/2006
Action:	Staff Letter - #060404
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	09/19/2007
Action:	Staff Letter - #70919
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	06/08/2006
Action:	Staff Letter - #6086
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	01/25/2007
Action:	Staff Letter - #70521
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	05/01/2007
Action:	Staff Letter - #70150
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	10/27/1993
Action:	Notice of Responsibility - #39616
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	01/21/1997
Action:	Staff Letter - #22964
Global Id:	T0608501405
Action Type:	ENFORCEMENT
Date:	10/30/1997
Action:	Staff Letter - #22969

EXXON #7-3850 (Continued) **S101309440**

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 03/16/1999
Action: Staff Letter - #22831

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 06/24/1999
Action: Staff Letter - #22953

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 12/17/2000
Action: Staff Letter - #22845

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 11/01/2001
Action: Staff Letter - #22851

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 11/02/2001
Action: Staff Letter - #22955

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 12/31/2001
Action: Staff Letter - #22853

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 06/02/2008
Action: Staff Letter - #8062

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 09/16/2008
Action: Staff Letter - #80619

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 05/22/2009
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 07/06/2009
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 04/13/2010
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT

EXXON #7-3850 (Continued) **S101309440**

Date: 06/05/2014
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 12/10/2013
Action: Email Correspondence

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 12/13/2017
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 08/20/2019
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 07/20/2020
Action: Email Correspondence

Global Id: T0608501405
Action Type: Other
Date: 10/05/1993
Action: Leak Reported

Global Id: T0608501405
Action Type: RESPONSE
Date: 10/30/2010
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2011
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 04/30/2011
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2011
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 06/03/2005
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 05/14/2004
Action: Request for Closure

EXXON #7-3850 (Continued) **S101309440**

Global Id: T0608501405
Action Type: RESPONSE
Date: 06/13/2001
Action: Other Workplan

Global Id: T0608501405
Action Type: RESPONSE
Date: 05/07/2012
Action: CAP/RAP - Feasibility Study Report - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2015
Action: Remedial Progress Report - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2016
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2019
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2019
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 11/22/2019
Action: Site Assessment Report - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2018
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2020
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2021
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2017
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0608501405
Action Type: REMEDIATION

EXXON #7-3850 (Continued) **S101309440**

Date: 04/01/2002
Action: Monitored Natural Attenuation

Global Id: T0608501405
Action Type: REMEDIATION
Date: 02/05/1996
Action: Soil Vapor Extraction (SVE)

Global Id: T0608501405
Action Type: REMEDIATION
Date: 02/05/1996
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608501405
Action Type: REMEDIATION
Date: 11/01/1994
Action: Free Product Removal

Global Id: T0608501405
Action Type: REMEDIATION
Date: 12/17/2008
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 02/19/2010
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 01/04/2012
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 01/27/2015
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 07/24/2019
Action: Staff Letter

Global Id: T0608501405
Action Type: RESPONSE
Date: 04/15/2013
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 04/09/1997
Action: CAP/RAP - Other Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2022
Action: Monitoring Report - Semi-Annually

EXXON #7-3850 (Continued) **S101309440**

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/12/1994
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 10/12/2001
Action: NPDES / WDR Reports

Global Id: T0608501405
Action Type: RESPONSE
Date: 10/27/2011
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2017
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2020
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 02/21/1996
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2018
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 12/14/2006
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 05/13/2011
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 08/14/2006
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 06/18/2004
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE

EXXON #7-3850 (Continued) **S101309440**

Date: 07/30/2021
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 08/06/2021
Action: Correspondence

Global Id: T0608501405
Action Type: RESPONSE
Date: 09/27/2019
Action: Other Workplan - Regulator Responded

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 09/18/2012
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 10/27/2016
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 01/31/2019
Action: Staff Letter

Global Id: T0608501405
Action Type: Other
Date: 12/21/1994
Action: Leak Stopped

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 04/12/2010
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 08/31/2012
Action: Remedial Progress Report

EXXON #7-3850 (Continued) **S101309440**

Global Id: T0608501405
Action Type: RESPONSE
Date: 02/01/2013
Action: Well Installation Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2014
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 05/29/2008
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 10/05/1993
Action: Unauthorized Release Form

Global Id: T0608501405
Action Type: RESPONSE
Date: 05/04/2012
Action: CAP/RAP - Feasibility Study Report

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 04/28/2011
Action: Warning Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 08/04/2011
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 10/25/2010
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 05/23/2012
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 06/23/2017
Action: Staff Letter

Global Id: T0608501405
Action Type: ENFORCEMENT
Date: 02/12/2021
Action: Staff Letter

Global Id: T0608501405
Action Type: RESPONSE

EXXON #7-3850 (Continued) **S101309440**

Date: 01/30/2010
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 06/18/2009
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/02/2009
Action: Other Workplan

Global Id: T0608501405
Action Type: RESPONSE
Date: 10/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/28/2008
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/31/2001
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 12/21/2007
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 05/19/2006
Action: Risk Assessment Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 04/30/2007
Action: Other Workplan

Global Id: T0608501405
Action Type: RESPONSE
Date: 10/31/1999
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/31/1999
Action: Monitoring Report - Quarterly

EXXON #7-3850 (Continued) **S101309440**

Global Id: T0608501405
Action Type: RESPONSE
Date: 04/01/2002
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 02/18/1997
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/1999
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 10/30/2011
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2012
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2012
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 10/30/2014
Action: Remedial Progress Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 07/30/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0608501405
Action Type: RESPONSE
Date: 01/01/1993
Action: Correspondence

Global Id: T0608501405
Action Type: RESPONSE

EXXON #7-3850 (Continued) **S101309440**

Date: 12/30/1993
Action: Monitoring Report - Quarterly

Global Id: T0608501405
Action Type: RESPONSE
Date: 02/16/1995
Action: Interim Remedial Action Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 11/17/1995
Action: Other Report / Document

Global Id: T0608501405
Action Type: RESPONSE
Date: 09/13/1993
Action: Soil and Water Investigation Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 02/20/1995
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 03/06/1995
Action: Well Installation Report

Global Id: T0608501405
Action Type: RESPONSE
Date: 03/06/2008
Action: Monitoring Report - Quarterly

LUST:
Global Id: T0608501405
Status: Open - Case Begin Date
Status Date: 08/09/1993

Global Id: T0608501405
Status: Open - Site Assessment
Status Date: 08/09/1993

Global Id: T0608501405
Status: Open - Site Assessment
Status Date: 10/27/1993

Global Id: T0608501405
Status: Open - Remediation
Status Date: 02/05/1996

Global Id: T0608501405
Status: Open - Verification Monitoring
Status Date: 04/02/2002

Global Id: T0608501405
Status: Open - Remediation
Status Date: 04/04/2006

EXXON #7-3850 (Continued) **S101309440**

Global Id: T0608501405
Status: Open - Remediation
Status Date: 12/24/2008

Global Id: T0608501405
Status: Open - Verification Monitoring
Status Date: 01/27/2015

CHMIRS:

Name:	Not reported
Address:	3725 EL CAMINO REAL
City,State,Zip:	SANTA CLARA, CA
OES Incident Number:	358
OES notification:	Not reported
OES Date:	11/23/1994
OES Time:	09:21:04 AM
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	YES
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	exxon /pvt cont
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	1994
Agency:	exxon
Incident Date:	11/22/94 1200
Admin Agency:	Not reported
Amount:	6 7 gal

EXXON #7-3850 (Continued) **S101309440**

Contained:	NO
Site Type:	Not reported
E Date:	Not reported
Substance:	unleaded gasoline
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	NO
Number of Injuries:	NO
Number of Fatalities:	NO
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	underground pipe failure

HIST CORTESE:

edr_fname:	EXXON
edr_fadd1:	3725 EL CAMINO REAL
City,State,Zip:	SANTA CLARA, CA
Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1433

R81 **EXXON #7-3850** **LUST** **S101594585**
NE **3725 EL CAMINO REAL** **HIST LUST** **N/A**
1/4-1/2 **SANTA CLARA, CA 95050** **SWEEPS UST**
0.335 mi. **CA FID UST**
1771 ft. **Site 2 of 2 in cluster R** **Cortese**
CERS

Relative:
Lower

Actual:
103 ft.

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Pollution Characterization
Case Number:	07S1W05F01f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	8/9/1993
Pollution Characterization Began:	10/27/1993
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Name:	EXXON #7-3850

EXXON #7-3850 (Continued) **S101594585**

Address: 3725 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA
Region: SANTA CLARA
SCVWD ID: 07S1W05F01F
Date Closed: Not reported
EDR Link ID: 07S1W05F01F

HIST LUST SANTA CLARA:
Name: Exxon #7-3850
Address: 3725 El Camino Real
City: Santa Clara
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 07S1W05F01
Oversite Agency: SCCDEH
Date Listed: 1993-10-26 00:00:00
Closed Date: Not reported

SWEEPS UST:
Name: EXXON RAS #7-3850
Address: 3725 EL CAMINO REAL
City: SANTA CLARA
Status: Active
Comp Number: 23997
Number: 1
Board Of Equalization: 44-000285
Referral Date: 06-04-92
Action Date: 06-04-92
Created Date: 06-14-89
Owner Tank Id: 23997T001
SWRCB Tank Id: 43-010-023997-000001
Tank Status: A
Capacity: 6000
Active Date: 06-04-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 4

Name: EXXON RAS #7-3850
Address: 3725 EL CAMINO REAL
City: SANTA CLARA
Status: Active
Comp Number: 23997
Number: 1
Board Of Equalization: 44-000285
Referral Date: 06-04-92
Action Date: 06-04-92
Created Date: 06-14-89
Owner Tank Id: 23997T002
SWRCB Tank Id: 43-010-023997-000002
Tank Status: A
Capacity: 8000
Active Date: 06-04-92
Tank Use: M.V. FUEL
STG: P

EXXON #7-3850 (Continued) **S101594585**

Content: LEADED
Number Of Tanks: Not reported

Name: EXXON RAS #7-3850
Address: 3725 EL CAMINO REAL
City: SANTA CLARA
Status: Active
Comp Number: 23997
Number: 1
Board Of Equalization: 44-000285
Referral Date: 06-04-92
Action Date: 06-04-92
Created Date: 06-14-89
Owner Tank Id: 23997T003
SWRCB Tank Id: 43-010-023997-000003
Tank Status: A
Capacity: 10000
Active Date: 06-04-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: EXXON RAS #7-3850
Address: 3725 EL CAMINO REAL
City: SANTA CLARA
Status: Active
Comp Number: 23997
Number: 1
Board Of Equalization: 44-000285
Referral Date: 06-04-92
Action Date: 06-04-92
Created Date: 06-14-89
Owner Tank Id: 23997T004
SWRCB Tank Id: 43-010-023997-000004
Tank Status: A
Capacity: 1000
Active Date: 06-04-92
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 43008852
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4082468889
Mail To: Not reported
Mailing Address: 4550 DACOMA, 3RD FLOOR
Mailing Address 2: Not reported
Mailing City,St,Zip: SANTA CLARA 95051
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported

EXXON #7-3850 (Continued) **S101594585**

NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CORTESE:
Name: EXXON #7-3850
Address: 3725 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA 95050
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0608501405
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: OPEN - VERIFICATION MONITORING
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:
Name: EXXON #7-3850
Address: 3725 EL CAMINO REAL
City,State,Zip: SANTA CLARA, CA 95050
Site ID: 223847
CERS ID: T0608501405
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: TRAVIS L. FLORA - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Dr.
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089183486,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported

EXXON #7-3850 (Continued) **S101594585**

Affiliation Zip: Not reported
Affiliation Phone: ,

S82 **UNOCAL** **HIST CORTESE** **S104397051**
NW **898 FREMONT** **N/A**
1/4-1/2 **SUNNYVALE, CA 94596**
0.380 mi.
2004 ft. **Site 1 of 7 in cluster S**

Relative: **Higher**
Actual: **132 ft.**

HIST CORTESE:
edr_fname: UNOCAL
edr_fadd1: 898 FREMONT
City,State,Zip: SUNNYVALE, CA 94596
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1580

S83 **UNOCAL** **LUST** **S101304362**
WNW **898 E FREMONT AVE** **HIST LUST** **N/A**
1/4-1/2 **SUNNYVALE, CA 94087** **Cortese**
0.381 mi.
2012 ft. **Site 2 of 7 in cluster S**

Relative: **Higher**
Actual: **134 ft.**

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 07S1W06F01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 4/15/1987
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

Region: 2
Facility Id: Not reported
Facility Status: Pollution Characterization
Case Number: 07S1W06F04f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 11/15/1993
Pollution Characterization Began: 5/5/1999
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported

UNOCAL (Continued) **S101304362**

Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:

Name:	Unocal
Address:	898 E Fremont Ave
City:	Sunnyvale
Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	07S1W06F01
Oversite Agency:	SCVWD
Date Listed:	1990-01-01 00:00:00
Closed Date:	1991-04-24 00:00:00

Name:	Unocal
Address:	898 E Fremont Ave
City:	Sunnyvale
Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	07S1W06F04
Oversite Agency:	SCCDEH
Date Listed:	1993-11-04 00:00:00
Closed Date:	Not reported

CORTESE:

Name:	UNOCAL
Address:	898 E FREMONT AVE
City,State,Zip:	SUNNYVALE, CA 94087
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0608502281
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

S84 **UNOCAL** **LUST** **U003942654**
WNW **898 E FREMONT AVE** **SWEEPS UST** **N/A**
1/4-1/2 **SUNNYVALE, CA 94087** **HIST UST**
0.381 mi. **CERS**
2012 ft. **Site 3 of 7 in cluster S**

Relative:
Higher

Actual:
134 ft.

LUST SANTA CLARA:

Name:	UNOCAL
Address:	898 E FREMONT AVE
City,State,Zip:	SUNNYVALE, CA
Region:	SANTA CLARA
SCVWD ID:	07S1W06F04F
Date Closed:	Not reported
EDR Link ID:	07S1W06F04F

Name:	UNOCAL
Address:	898 E FREMONT AVE
City,State,Zip:	SUNNYVALE, CA
Region:	SANTA CLARA
SCVWD ID:	07S1W06F01F
Date Closed:	04/24/1991
EDR Link ID:	07S1W06F01F

SWEEPS UST:

Name:	UNOCAL #4848
Address:	898 E FREMONT AVE
City:	SUNNYVALE
Status:	Active
Comp Number:	1282
Number:	9
Board Of Equalization:	Not reported
Referral Date:	04-05-91
Action Date:	04-05-91
Created Date:	07-27-90
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-007-001282-128204
Tank Status:	A
Capacity:	12000
Active Date:	04-05-91
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	3

Name:	UNOCAL #4848
Address:	898 E FREMONT AVE
City:	SUNNYVALE
Status:	Active
Comp Number:	1282
Number:	9
Board Of Equalization:	Not reported
Referral Date:	04-05-91
Action Date:	04-05-91
Created Date:	07-27-90
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-007-001282-128205
Tank Status:	A
Capacity:	12000
Active Date:	04-05-91

UNOCAL (Continued) **U003942654**

Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: UNOCAL #4848
Address: 898 E FREMONT AVE
City: SUNNYVALE
Status: Active
Comp Number: 1282
Number: 9
Board Of Equalization: Not reported
Referral Date: 04-05-91
Action Date: 04-05-91
Created Date: 07-27-90
Owner Tank Id: Not reported
SWRCB Tank Id: 43-007-001282-128206
Tank Status: A
Capacity: 550
Active Date: 04-05-91
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

HIST UST:
Name: UNION OIL SS 4848
Address: 898 EAST FREMONT AVENUE
City,State,Zip: SUNNYVALE, CA 94086
File Number: 00020A36
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00020A36.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported

UNOCAL (Continued) **U003942654**

Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

CERS:
Name: UNOCAL
Address: 898 E FREMONT AVE
City,State,Zip: SUNNYVALE, CA 94087
Site ID: 192328
CERS ID: T0608501540
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: UST CASE WORKER - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089183400,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Name: UNOCAL
Address: 898 E FREMONT AVE
City,State,Zip: SUNNYVALE, CA 94087
Site ID: 192328
CERS ID: T0608502281
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: UST CASE WORKER - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089183400,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND

UNOCAL (Continued) **U003942654**

Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

S85 **UNOCAL** **LUST** **U001594936**
WNW **898 E. FREMONT AVENUE** **HIST UST** **N/A**
1/4-1/2 **SUNNYVALE, CA 94087** **Cortese**
0.381 mi.
2012 ft. **Site 4 of 7 in cluster S**

Relative: **Higher**
Actual: **134 ft.**

LUST:

Name:	UNOCAL
Address:	898 E. FREMONT AVENUE
City,State,Zip:	SUNNYVALE, CA 94087
Lead Agency:	SANTA CLARA COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501540
Global Id:	T0608501540
Latitude:	37.352001577
Longitude:	-122.014407347
Status:	Completed - Case Closed
Status Date:	02/10/2015
Case Worker:	Not reported
RB Case Number:	21-082
Local Agency:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Local Case Number:	07S1W06F04f
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	MTBE / TBA / Other Fuel Oxygenates, Gasoline
Site History:	Previous fuel leak case at this site that was closed on 4/24/91. The case was closed with residual soil contamination of 1 parts per million (ppm) Total Petroleum Hydrocarbons (TPH) as Gasoline (TPHg), 1 ppm TPH as Diesel (TPHd), and 30 ppm Total Oil and Grease (TOG). 1993 In September, 11 soil borings (UB through UL) were advanced to depths of 5-50 ft bgs onsite. 3 soil vapor extraction wells (UV1 through UV3) were also installed to 60-85 ft bgs. 51 soil samples were collected and reported to contain maximum concentrations of 13,000 ppm TPHg, 150 ppm Benzene, 1,200 ppm Toluene, 250 ppm Ethylbenzene, and 1,500 ppm Xylenes. The 3 soil samples collected in borings UG and UL were also analyzed for TPHd, TOG, Volatile Organic Compounds (VOCs), and Semi-Volatile Organic Compounds (SVOCs), which were not reported to be present above the laboratory reporting limits. The highest concentrations were reported for soil samples collected from borings UB and UV2 advanced in the area of the former USTs. 1994 In January, a soil vapor extraction (SVE) test was conducted on wells UV1 and UV2. Based on the results of the test, it was recommended to utilize SVE to remediate the site. In March, 2 soil borings (UM and UN) were advanced to depths of 46.5 ft bgs on- and offsite. 12 soil samples were collected and reported to have maximum concentrations of 0.067 ppm Benzene, 0.024 ppm Toluene, 0.01 ppm Ethylbenzene, and 0.047 ppm Xylenes. TPHg was not reported to be present in the samples above the laboratory reporting limits. No work was conducted between 1994 and 1997. In June 1996 following a meeting with the Santa Clara Valley Water District (oversight agency at that time), it was again recommended that SVE be implemented at the site. 1997 In October, a waste oil UST and a clarifier were removed from

UNOCAL (Continued) **U001594936**

the site. 2 soil samples were collected from the waste oil UST excavation at 8 ft bgs and were reported to contain a maximum concentration of 2.1 ppm TPHd. VOCs, HVOCs and TOG were not reported to be present above the laboratory reporting limtis. 1998 In June, the dispensers and some piping were replaced. 6 soil samples were collected from 3.5-4 ft bgs and were not reported to have concentrations of the Constituents of Concern (COCs), except for one detection of Benzene (0.006 ppm) and Methyl tert Butyl Ether (MtBE) (0.15 ppm) in sample P1. 1999 In February, 3 borings (GP1 through GP3) were advanced onsite in the area of the dispensers to depths of 15-49 ft bgs. Groundwater was encountered at 41 ft bgs in boring GP1 during drilling. 9 soil samples were collected and reported to contain maximum concentrations of 740 ppm TPHg, 5.2 ppm Benzene, 12 ppm Toluene, 7.1 ppm Ethylbenzene, 45 ppm Xylenes, and 5.82 ppm MtBE in the sample collected from 40.5-41 ft bgs in GP1. A grab groundwater sample was collected from GP1 and was reported to contain 310,000 parts per billion (ppb) TPHg, 24,000 ppb Benzene, 45,000 ppb Toluene, 7,000 ppb Ethylbenzene, 37,000 ppb Xylenes, and 57,000 ppb MtBE. In April, 3 monitoring wells (MW1 through MW3) were installed onsite to 60.5 ft bgs. 9 soil samples were collected and reported to have low to non-detectable concentrations of the COCs. Following completion of the wells, groundwater was reported to be present between 43-44 ft bgs. Periodic groundwater monitoring began at the site. The highest concentrations of COCs in groundwater were reported for well MW1, which is located just north of the existing USTs. In August, during groundwater monitoring, free product (FP) was reported to be present in well MW1 and was measured to be approximately 1.21 feet thick. Weekly bailing of FP started in September and continued through April 2004. In October, FP was measured in well MW3 (located west of the dispenser islands) in addition to in well MW1. In September, a slug test was conducted and a 5-day dual phase extraction test was conducted. 2000 In March, 5 monitoring wells (MW4 through MW8) were installed on and offsite. The report of this investigation was not found in the file. In a later report, it is noted that 15 soil samples were collected and that there was only one detection of 0.006 ppm Toluene in the sample collected at 30 ft bgs in MW7 located along the southern boundary of the property. The wells were added to the groundwater monitoring program. In May, a Corrective Action Plan (CAP) proposing soil vapor extraction and groundwater extraction to remediate the site. In June, 3 groundwater extraction wells (EW1 through EW3) were installed onsite to 60 ft bgs around the existing USTs. 9 soil samples were collected and reported to have maximum concentrations of 25 ppm TPHg, 0.47 ppm Benzene, 1.6 ppm Toluene, 0.4 ppm Ethylbenzene, 2.6 ppm Xylenes, and 2.7 ppm MtBE. In July, FP was measured to be present in new well EW3. Between 2000 and 2004, only groundwater monitoring and FP bailing occurred at the site. 2004 In April, SVE system was started onsite. The groundwater extraction (GWE) system was not started due to electrical problems. The SVE system was shut down in July due to noise complaints. In November, a dual phase extraction (DPE) event was conducted for 55 hours on well MW1. The event removed approximately 6,500 gallons of groundwater and 7.1 gallons of TPH. 2005 In February, 4 soil borings (SB1 through SB4) were advanced onsite to 55 ft bgs. A report of this investigation was not found in the file. A later report notes that 6 soil samples were collected between 40-55 ft bgs and were reported to contain low to non-detectable concentrations of the COCs. In April, the SVE system was restarted and operated for less than 2 weeks when

UNOCAL (Continued) **U001594936**

it was shut down again due to noise complaints. The system was restarted in May and set to run only during the day. It operated for approximately 13 days before it was found off again. The system was restarted at the end of June. In September, 2 monitoring wells (MW9 and MW10) were installed offsite and extraction well EW4 was installed onsite. 6 soil samples were collected and reported to contain maximum concentrations of 120 ppm TPHg, 1.3 ppm Benzene, 2.3 ppm Toluene, 1.5 ppm Ethylbenzene, 7.8 ppm Xylenes, and 1.9 ppm MtBE in samples collected in well EW4. The wells were added to the groundwater monitoring program. Between 2005 and 2007, SVE continued and routine groundwater monitoring continued at the site. 2007 In December, 6 ozone sparge wells (OS1 through OS6) were installed onsite to depths of 60-67 ft bgs. 16 soil samples were collected and reported to contain maximum concentrations of 3,000 ppm TPHg, 14 ppm Benzene, 260 ppm Toluene, 49 ppm Ethylbenzene, 500 ppm Xylenes, 1.9 ppm MtBE, and 0.44 ppm Tert Butyl Alcohol (TBA) in the sample collected at 45 ft bgs in OS6. 2009 In May, 3 monitoring wells (MW11 through MW13) were installed onsite to 60 ft bgs. 9 soil samples were collected and reported to have maximum concentrations 15 ppm TPHd, 320 ppm TPHg, 0.59 ppm Benzene, 15 ppm Toluene, 9.3 ppm Ethylbenzene, 48 ppm Xylenes, 0.13 ppm MtBE, and 0.13 ppm TBA. The new wells were added to the groundwater monitoring program. In June, bi-weekly groundwater extraction events from well MW1 using a bailer were reported to have been conducted and continued through January 2010 to remove FP. Records of this work were not found and the total volume of groundwater and FP removed were not documented. It is estimated that overall, from 1999 through 2010, 112 gallons of FP was removed from the site. In September, two air sparge feasibility tests were conducted at the site. The results of the test indicated that sparging could be effectively implemented at the site. Oxygen injection commenced around this time. Oxygen was injected instead of ozone due to high influent vapor phase petroleum hydrocarbon concentrations. 2010 In August, damaged wells OS4 through OS6 were destroyed and replaced with wells OS4R through OS6R. 2011 In April, the SVE and air sparge systems were shut down. It is estimated that the system removed 43,260 pounds TPHg, 372 pounds Benzene, and 34 pounds of MtBE. In July, another CAP was submitted that recommended Monitored Natural Attenuation (MNA). Groundwater monitoring continued through 2013. 2013 In November, the final round of groundwater monitoring was conducted and reported maximum concentrations of 8,200 ppb TPHg, 930 ppb Benzene, 2.9 ppb Toluene, 480 ppb Ethylbenzene, 25 ppb Xylenes, 760 ppb MtBE, and 1,000 ppb TBA. Considerations and/or Variances: There is one active irrigation well located approximately 640 feet from the plume boundary. The consultant concluded that Based on the limited lateral extent (less than 100 feet) of the dissolved-phase petroleum hydrocarbon plume as defined by the groundwater monitoring well network, the distance of the irrigation well from the Site, and the depth of the screen interval of the irrigation well compared to depth-to-groundwater, it is unlikely that the irrigation well would be impacted by the dissolved-phase petroleum hydrocarbon plume associated with the Site. Multiple attempts were made to obtain access to sample the irrigation well and were not successful.

LUST:
Global Id: T0608501540
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board

UNOCAL (Continued) **U001594936**

Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

LUST:

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 07/01/2010
Action: Staff Letter

Global Id: T0608501540
Action Type: Other
Date: 09/24/1993
Action: Leak Discovery

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 04/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 10/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/08/2011
Action: CAP/RAP - Other Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 03/10/2014
Action: Other Report / Document

UNOCAL (Continued) **U001594936**

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/08/2011
Action: CAP/RAP - Other Report

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 02/19/2008
Action: Staff Letter - #80912

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 03/30/2005
Action: Staff Letter - #50033

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 05/23/2005
Action: Staff Letter - #50325

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 10/30/1996
Action: Notice of Responsibility - #39625

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 02/17/2009
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 12/24/2008
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 02/12/2009
Action: Notice of Responsibility

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 05/27/2009
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 09/20/2013
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 08/08/2013
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT

UNOCAL (Continued) **U001594936**

Date: 02/18/2009
Action: Other Report

Global Id: T0608501540
Action Type: Other
Date: 11/30/1993
Action: Leak Reported

Global Id: T0608501540
Action Type: RESPONSE
Date: 12/31/2013
Action: CAP/RAP - Other Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 02/11/2009
Action: Other Workplan

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/28/2008
Action: Well Installation Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 09/24/2010
Action: Well Destruction Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 12/19/2013
Action: Request for Closure - Regulator Responded

Global Id: T0608501540
Action Type: RESPONSE
Date: 10/14/2014
Action: Correspondence - Regulator Responded

Global Id: T0608501540
Action Type: REMEDIATION
Date: 09/27/2007
Action: Free Product Removal

Global Id: T0608501540
Action Type: REMEDIATION
Date: 04/05/2004
Action: Soil Vapor Extraction (SVE)

Global Id: T0608501540
Action Type: REMEDIATION
Date: 11/18/2005
Action: Free Product Removal

Global Id: T0608501540
Action Type: REMEDIATION
Date: 09/03/1999
Action: Free Product Removal

UNOCAL (Continued) **U001594936**

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 10/17/2014
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 03/29/2011
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 05/28/2014
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 08/29/2013
Action: Other Report

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 02/10/2015
Action: Closure/No Further Action Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 03/26/2014
Action: Notification - Public Notice of Case Closure

Global Id: T0608501540
Action Type: RESPONSE
Date: 12/20/1999
Action: Other Report / Document

Global Id: T0608501540
Action Type: RESPONSE
Date: 06/23/1994
Action: Unauthorized Release Form

Global Id: T0608501540
Action Type: RESPONSE
Date: 03/23/1993
Action: Unauthorized Release Form

Global Id: T0608501540
Action Type: RESPONSE
Date: 09/20/1993
Action: Soil and Water Investigation Workplan

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2000
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE

UNOCAL (Continued) **U001594936**

Date: 02/11/2000
Action: CAP/RAP - Other Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 09/24/1999
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 06/23/1995
Action: Interim Remedial Action Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 05/03/1994
Action: Preliminary Site Assessment Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2004
Action: Other Report / Document

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/1999
Action: Soil and Water Investigation Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2004
Action: Remedial Progress Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 12/18/2003
Action: Sensitive Receptor Survey Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 06/18/2011
Action: Remedial Progress Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/20/2009
Action: Other Report / Document

Global Id: T0608501540
Action Type: RESPONSE
Date: 10/23/2009
Action: CAP/RAP - Feasibility Study Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 04/27/2005
Action: Other Report / Document

UNOCAL (Continued) **U001594936**

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 07/13/2011
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 01/09/2014
Action: Staff Letter

Global Id: T0608501540
Action Type: Other
Date: 04/14/1987
Action: Leak Stopped

Global Id: T0608501540
Action Type: RESPONSE
Date: 11/09/2009
Action: CAP/RAP - Feasibility Study Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2010
Action: Remedial Progress Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 04/30/2010
Action: Remedial Progress Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/30/2010
Action: Remedial Progress Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 10/30/2010
Action: Remedial Progress Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2011
Action: Remedial Progress Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 08/10/2009
Action: Pilot Study / Treatability Workplan

Global Id: T0608501540
Action Type: RESPONSE
Date: 10/04/2010
Action: Well Installation Report

Global Id: T0608501540
Action Type: RESPONSE

UNOCAL (Continued) **U001594936**

Date: 07/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/19/2009
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 05/16/2005
Action: Soil and Water Investigation Workplan

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2002
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/1996
Action: Other Report / Document

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2008
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 08/04/1998
Action: Other Report / Document

Global Id: T0608501540
Action Type: RESPONSE
Date: 10/29/1999
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2005
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/04/2000
Action: Interim Remedial Action Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2000
Action: Remedial Progress Report

UNOCAL (Continued) **U001594936**

Global Id: T0608501540
Action Type: RESPONSE
Date: 08/09/1999
Action: Soil and Water Investigation Workplan

Global Id: T0608501540
Action Type: RESPONSE
Date: 06/19/2014
Action: Correspondence

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/24/2000
Action: Well Installation Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2014
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2001
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 03/23/2005
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 12/20/2013
Action: Request for Closure

Global Id: T0608501540
Action Type: RESPONSE
Date: 11/21/2005
Action: Soil and Water Investigation Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/18/2005
Action: Remedial Progress Report

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 08/06/2012
Action: Staff Letter

Global Id: T0608501540
Action Type: RESPONSE
Date: 06/26/2009
Action: Soil and Water Investigation Report

Global Id: T0608501540
Action Type: RESPONSE

UNOCAL (Continued) **U001594936**

Date: 01/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 02/16/2009
Action: Soil and Water Investigation Workplan

Global Id: T0608501540
Action Type: RESPONSE
Date: 04/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/30/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 05/16/2005
Action: Soil and Water Investigation Workplan

Global Id: T0608501540
Action Type: RESPONSE
Date: 11/23/2005
Action: Soil and Water Investigation Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2006
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2003
Action: Monitoring Report - Quarterly

UNOCAL (Continued) **U001594936**

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2014
Action: Correspondence

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/2004
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 04/13/2010
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 02/12/1999
Action: Other Report / Document

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/01/1993
Action: Soil and Water Investigation Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 01/30/2015
Action: Well Destruction Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 10/07/2010
Action: Monitoring Report - Quarterly

Global Id: T0608501540
Action Type: RESPONSE
Date: 07/19/1996
Action: Interim Remedial Action Plan

Global Id: T0608501540
Action Type: RESPONSE
Date: 02/16/1994
Action: CAP/RAP - Feasibility Study Report

Global Id: T0608501540
Action Type: RESPONSE
Date: 04/14/1994
Action: Other Report / Document

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 06/22/2009
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT

UNOCAL (Continued) **U001594936**

Date: 07/29/2009
Action: Staff Letter

Global Id: T0608501540
Action Type: ENFORCEMENT
Date: 10/27/2009
Action: Staff Letter

LUST:
Global Id: T0608501540
Status: Open - Case Begin Date
Status Date: 02/17/1993

Global Id: T0608501540
Status: Open - Site Assessment
Status Date: 11/15/1993

Global Id: T0608501540
Status: Open - Remediation
Status Date: 04/05/2004

Global Id: T0608501540
Status: Open - Remediation
Status Date: 04/05/2004

Global Id: T0608501540
Status: Open - Verification Monitoring
Status Date: 04/07/2011

Global Id: T0608501540
Status: Open - Eligible for Closure
Status Date: 03/24/2014

Global Id: T0608501540
Status: Completed - Case Closed
Status Date: 02/10/2015

Name: UNOCAL
Address: 898 E FREMONT AVE
City,State,Zip: SUNNYVALE, CA 94087
Lead Agency: SANTA CLARA COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608502281
Global Id: T0608502281
Latitude: 37.351779
Longitude: -122.014653
Status: Completed - Case Closed
Status Date: 04/24/1991
Case Worker: UST
RB Case Number: Not reported
Local Agency: SANTA CLARA COUNTY LOP
File Location: All Files are on GeoTracker or in the Local Agency Database
Local Case Number: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

UNOCAL (Continued) **U001594936**

LUST:
Global Id: T0608502281
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608502281
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

LUST:
Global Id: T0608502281
Action Type: RESPONSE
Date: 03/11/1991
Action: Other Report / Document

Global Id: T0608502281
Action Type: ENFORCEMENT
Date: 03/11/1991
Action: Notice of Responsibility - #39624

Global Id: T0608502281
Action Type: Other
Date: 05/06/1989
Action: Leak Reported

Global Id: T0608502281
Action Type: REMEDIATION
Date: 05/06/1989
Action: Excavation

Global Id: T0608502281
Action Type: ENFORCEMENT
Date: 04/24/1991
Action: Closure/No Further Action Letter

LUST:
Global Id: T0608502281
Status: Open - Case Begin Date
Status Date: 04/15/1987

Global Id: T0608502281
Status: Open - Site Assessment
Status Date: 04/15/1987

Global Id: T0608502281
Status: Completed - Case Closed

UNOCAL (Continued) **U001594936**

Status Date: 04/24/1991

HIST UST:

Name:	UNION OIL SS#4848
Address:	898 E FREMONT AVE
City,State,Zip:	SUNNYVALE, CA 94086
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000021111
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	JAMES HAWKINS
Telephone:	4087320899
Owner Name:	UNION OIL CO.
Owner Address:	1 CALIFORNIA ST. SUITE 2700
Owner City,St,Zip:	SAN FRANCISCO, CA 94111
Total Tanks:	0006
Tank Num:	001
Container Num:	4848-1-1
Year Installed:	1962
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10
Tank Num:	002
Container Num:	4848-2-1
Year Installed:	1962
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10
Tank Num:	003
Container Num:	4848-4-1
Year Installed:	Not reported
Tank Capacity:	00000280
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	4848-1-1
Year Installed:	1962
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10
Tank Num:	005

UNOCAL (Continued) **U001594936**

Container Num:	4848-2-1
Year Installed:	1962
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10
Tank Num:	006
Container Num:	4848-4-1
Year Installed:	Not reported
Tank Capacity:	00000280
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

CORTESE:

Name:	UNOCAL
Address:	898 E. FREMONT AVENUE
City,State,Zip:	SUNNYVALE, CA 94087
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0608501540
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

S86 **SOUTHLAND CORP PROPERTY** **HIST CORTESE** **S104025438**
NW **895 FREMONT** **N/A**
1/4-1/2 **SUNNYVALE, CA**
0.390 mi.
2061 ft. **Site 5 of 7 in cluster S**

Relative: **Higher**
Actual: **132 ft.**

HIST CORTESE:

edr_fname:	SOUTHLAND CORP PROPERTY
edr_fadd1:	895 FREMONT
City,State,Zip:	SUNNYVALE, CA
Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-2105

S87
NW
1/4-1/2
0.414 mi.
2185 ft.

SOUTHLAND CORPORATION PROPERTY
895 E FREMONT AVE
SUNNYVALE, CA 94087

Site 6 of 7 in cluster S

LUST **S100928710**
HIST LUST **N/A**
Cortese
CERS

Relative:
Higher

Actual:
133 ft.

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	07S1W06F02f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

HIST LUST SANTA CLARA:

Name:	Southland Corporation Property
Address:	895 E Fremont Ave
City:	Sunnyvale
Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	07S1W06F02
Oversite Agency:	SCVWD
Date Listed:	1991-01-01 00:00:00
Closed Date:	1996-01-04 00:00:00

CORTESE:

Name:	SOUTHLAND CORPORATION PROPERTY
Address:	895 E FREMONT AVE
City,State,Zip:	SUNNYVALE, CA 94087
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0608501933
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported

SOUTHLAND CORPORATION PROPERTY (Continued) **S100928710**

File Name: Active Open

CERS:
Name: SOUTHLAND CORPORATION PROPERTY
Address: 895 E FREMONT AVE
City,State,Zip: SUNNYVALE, CA 94087
Site ID: 198196
CERS ID: T0608501933
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Local Agency Caseworker
Entity Name: UST CASE WORKER - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089183400,

S88 **SOUTHLAND CORPORATION PROPERTY** **LUST** **S103473192**
NW **895 E FREMONT AVE** **N/A**
1/4-1/2 **SUNNYVALE, CA 94087**
0.414 mi.
2185 ft. **Site 7 of 7 in cluster S**

Relative:
Higher

Actual:
133 ft.

LUST:
Name: SOUTHLAND CORPORATION PROPERTY
Address: 895 E FREMONT AVE
City,State,Zip: SUNNYVALE, CA 94087
Lead Agency: SANTA CLARA COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501933
Global Id: T0608501933
Latitude: 37.3525222330445
Longitude: -122.014632225037
Status: Completed - Case Closed
Status Date: 01/04/1996
Case Worker: UST
RB Case Number: Not reported
Local Agency: SANTA CLARA COUNTY LOP
File Location: All Files are on GeoTracker or in the Local Agency Database
Local Case Number: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

SOUTHLAND CORPORATION PROPERTY (Continued) **S103473192**

LUST:
Global Id: T0608501933
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608501933
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

LUST:
Global Id: T0608501933
Action Type: ENFORCEMENT
Date: 11/04/1996
Action: Closure/No Further Action Letter

Global Id: T0608501933
Action Type: Other
Date: 01/01/1990
Action: Leak Reported

Global Id: T0608501933
Action Type: RESPONSE
Date: 11/04/1996
Action: Other Report / Document

LUST:
Global Id: T0608501933
Status: Open - Case Begin Date
Status Date: 01/01/1990

Global Id: T0608501933
Status: Completed - Case Closed
Status Date: 01/04/1996

LUST SANTA CLARA:
Name: SOUTHLAND CORPORATION PROPERTY
Address: 895 E FREMONT AVE
City,State,Zip: SUNNYVALE, CA
Region: SANTA CLARA
SCVWD ID: 07S1W06F02F
Date Closed: 01/04/1996
EDR Link ID: 07S1W06F02F

T89 **SHELL** **LUST** **S105193349**
NW **905 EL CAMINO REAL** **HIST LUST** **N/A**
1/4-1/2 **SUNNYVALE, CA 94087**
0.419 mi.
2210 ft. **Site 1 of 2 in cluster T**

Relative:
Higher

Actual:
129 ft.

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Pollution Characterization
Case Number:	07S1W06G01f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	7/1/2001
Pollution Characterization Began:	7/11/2001
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

HIST LUST SANTA CLARA:

Name:	Shell
Address:	905 El Camino Real
City:	Sunnyvale
Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	07S1W06G01
Oversite Agency:	SCVWD
Date Listed:	2001-08-24 00:00:00
Closed Date:	Not reported

T90 **SHELL - 905 EL CAMINO** **LUST** **S106091049**
NW **905 EL CAMINO REAL** **Cortese** **N/A**
1/4-1/2 **SUNNYVALE, CA 94087** **CERS**
0.422 mi.
2226 ft. **Site 2 of 2 in cluster T**

Relative:
Higher

Actual:
127 ft.

LUST:

Name:	SHELL - 905 EL CAMINO
Address:	905 EL CAMINO REAL
City,State,Zip:	SUNNYVALE, CA 94087
Lead Agency:	SANTA CLARA COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608587185
Global Id:	T0608587185
Latitude:	37.3533409685254
Longitude:	-122.013430595398
Status:	Completed - Case Closed
Status Date:	09/25/2015
Case Worker:	Not reported
RB Case Number:	14-634
Local Agency:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Local Case Number:	07S1W06G01f
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline

SHELL - 905 EL CAMINO (Continued) **S106091049**

Site History:

Previous investigations at the site have been conducted by EMCON Associates, Inc. (EMCON), Pacific Environmental Group, Inc. (PEG), Toxichem Management Systems, Inc. (Toxichem), Shaw Environmental & Infrastructure (Shaw), Cambria Environmental Technology, Inc. (Cambria), and Conestoga-Rovers & Associates (CRA). A summary of these investigations is provided below. 1984 Soil Investigation: On September 7, 1984, EMCON installed one 3-inch-diameter well (EW-1) on the northeast side of the underground storage tank (UST) complex in service at that time. Six soil samples were collected, and no total petroleum hydrocarbons as gasoline (TPHg) were detected in the soil samples. 1991 Soil Investigation: Seven exploratory borings (S-A through S-G) were drilled and sampled by PEG on April 3, 1991. The borings were drilled in anticipation of the replacement of the USTs. The borings were located in the vicinity of the UST complex in service at that time and in the location of the proposed new UST complex. Details of this investigation were presented in PEGs May 6, 1991 site assessment report. 1999 Soil Investigation: Cambria drilled and sampled four exploratory borings (SB-1 through SB-4) in January 1999. Details of the investigation are presented in Cambrias March 22, 1999 Phase II Subsurface Investigation Report. 1999 UST Replacement: During May 1999, the USTs and associated product piping were replaced. Details of the investigation are presented in Cambrias August 26, 1999 Underground storage Tank and Product Piping Removal Closure Report. 1999 Well Destruction: Cambria destroyed well EW-1 located immediately northeast of the UST complex. Details of the well destruction are presented in Cambrias August 26, 1999 Well Abandonment Report. 2001 Site Assessment: Toxichem drilled two cone penetration test (CPT) borings (CPT-1 and CPT-2) and one hand-auger boring (HA-1) in the down-gradient groundwater direction from the USTs and product islands. Methyl tertiary-butyl ether (MTBE) concentrations of up to 16 milligrams per kilogram (mg/kg) were encountered in boring CPT-1 at 29 feet below grade (fbg). Details of the investigation are presented in Toxichems October 24, 2001 Site Assessment Report and Additional Site Investigation Work Plan. 2002 Additional Site Assessments: On April 29 and 30, 2002, Toxichem installed three groundwater monitoring wells (MW-1, MW-2, and MW-3). MTBE was detected in the soil samples from all three monitoring wells at depths of 20 to 45 fbg. Maximum concentrations of 130,000 micrograms per liter (g/L) MTBE and 29,000 g/L tertiary butyl alcohol (TBA) were detected in the initial groundwater sample collected from MW-1. Between May 13 and 20, 2002, Toxichem drilled seven CPT borings (CPT-3 through CPT-9) in various depths and locations across the site. Borings CPT-3 to CPT-6 were drilled off site to depths ranging from 55 to 90 fbg. Borings CPT-7 to CPT-9 were drilled on site to depths ranging from 80 to 90 fbg. MTBE was detected in the soil sample from CPT-9 at 31 fbg. Maximum concentrations of 15,000 g/L MTBE and 400 g/L TBA were detected in the grab groundwater sample collected from CPT-3. A half-mile radius well survey was obtained from the Santa Clara Valley Water District (SCVWD). Three water-production wells and three extraction wells were identified within the survey radius. The closest water-producing well is located approximately 500 feet west-southwest of the site (upgradient). Details of this well survey and site assessment are documented in Toxichems July 15, 2002 Additional Site Assessment Report. 2002 Additional Site Assessment: On October 24 through 25, 2002, Toxichem drilled seven CPT borings (CPT-10 through CPT-16) in various depths and locations across the site. Borings CPT 10 through CPT-12 were

SHELL - 905 EL CAMINO (Continued) **S106091049**

advanced on site to approximately 75 fbg. Borings CPT 13 through CPT-16 were drilled off site to approximately 35 to 40 fbg. MTBE concentrations of 1.9 mg/kg and 3.8 mg/kg were detected in the soil samples from CPT-11 and CPT-12, respectively. MTBE concentrations were detected in all grab groundwater samples, with a maximum concentration of 21,000 g/L at boring CPT 15. Details of this site assessment are documented in Toxichems December 12, 2002 Additional Site Assessment Report and Work Plan. 2003 Additional Site Assessment: Between February 3 and 5, 2003, Toxichem drilled and installed five monitoring wells (MW-4, MW-5, MW-6, MW-7A, and MW-7B). Wells MW-4 through MW-6 and MW-7A were installed to approximately 40 fbg. Well MW-7B was installed to approximately 60 fbg and is screened in the deeper water-bearing zone. MTBE concentrations were detected in soil samples from all wells with a maximum concentration of 13 mg/kg at MW 5. Only well MW-7B had a sufficient amount of groundwater for sampling, which yielded an MTBE concentration of 23 g/L. Details of this site assessment are documented in Toxichems June 2, 2003 Additional Site Assessment and First Quarter 2003 Groundwater Monitoring Report. 2003 Feasibility Study: In July and August 2003, Shaw conducted a feasibility study at the subject site that included the consecutive performance of a groundwater extraction (GWE) test, a soil vapor extraction (SVE) test, and a simultaneous GWE and SVE test referred to as a dual-phase extraction (DPE) test on both shallow (perched) and deeper water bearing zones. Approximately 9.4 pounds of TPHg and 0.45 pounds of MTBE were removed from the vadose zone beneath the site. GWE activities removed approximately 0.006 pounds of MTBE from the groundwater in both the shallow (perched) and deeper water-bearing zones underneath the site. Based on the results of the tests, Shaw concluded that DPE would be a viable interim remedial method for the shallow water-bearing zone, while GWE would be a feasible remedial strategy in the deeper water-bearing zone. Details of the feasibility study are documented in Shaws April 14, 2004 Remedial Feasibility Testing Report. 2003 Soil and Groundwater Investigation: Shaw installed two additional wells (MW-8 and MW-9) to monitor groundwater in the shallow and deeper water-bearing zones. Details of the installation are presented in Shaws October 17, 2003 Well Installation Report. 2004 Interim Semi-monthly SVE: Starting on July 8, 2004, Shaw began implementing a periodic mobile SVE program on selected wells in the shallow water-bearing zone. On September 27, 2004, Shaw discontinued the periodic SVE events due to low hydrocarbon mass recovery. 2004 Corrective Action Plan (CAP): Shaw submitted a CAP to the SCVWD on August 24, 2004. The SCVWD approved implementation of the CAP; however, Shaw had not implemented the recommended GWE system prior to transfer of the site to Cambria in November 2006. Site concentrations are significantly reduced since the time the CAP was prepared. 2004 Off-Site Groundwater Investigation: On October 28 and 29, 2004, Shaw advanced five CPT borings (CPT-17 through CPT-21) in various locations off site which were drilled to approximately 60 fbg. Details of the installation are reported in Shaws March 8, 2005 Off-Site Exploratory Borings. 2005 Soil and Groundwater Investigation: Shaw installed three additional off-site wells (MW-10, MW-11, and MW-12) to monitor groundwater in the deeper water-bearing zone. The wells were installed down gradient of the site to continue assessment of the plume. Details of the installation are presented in Shaws September 1, 2005 Off-site Well Installation and Second Quarter 2005 Groundwater Monitoring and Sampling Report. 2006 Well Destruction: Shaw destroyed wells MW-2 and

SHELL - 905 EL CAMINO (Continued) **S106091049**

MW-5 located northeast of the UST complex. Details of the well destructions are presented in Shaws November 6, 2006 Well Destruction Report. 2008 Well Installation: CRA installed one on-site well (MW-13) to monitor groundwater in the deeper water-bearing zone. The well was installed down gradient of the UST complex to continue assessment in the potential source area. Details of the installation are presented in CRAs June 20, 2008 Subsurface Investigation Report. 2011 Site Conceptual Model (SCM): On July 29, 2011, CRA prepared and submitted an SCM for this site and requested case closure. Groundwater Monitoring Program: There are currently nine monitoring wells on site (MW 1, MW-3, MW-4, MW-6, MW-7A, MW-7B, MW-8, MW-9, and MW-13) and three off site monitoring wells (MW-10 through MW-12) located northeast of the site in Aloha Mobile Home Park. Groundwater sampling was suspended per Santa Clara County Department of Environmental Healths June 23, 2009 letter granting no further action pending a case closure review. As CRA recommended, we conducted a one-time groundwater monitoring event during the first quarter 2014. Wells MW-3, MW-7B, MW-9, MW-10, MW-11, MW-12, and MW 13 were redeveloped. Wells MW-1, MW-4, MW-6, MW-7A, and MW-8 were not redeveloped due to insufficient water. Wells MW-1, MW-3, MW-7B, MW-9, MW-10, MW-11, MW-12, and MW-13 were gauged and sampled on January 23, 2014. Wells MW-4, MW-6, MW-7A, and MW-8 could not be sampled due to insufficient water. Only 55 g/L TPHg were detected in well MW-3. No other constituents of concern were detected in any groundwater samples from any of the well. 2014 Soil and Groundwater Investigation: CRA advanced one direct push boring and five cone penetration test borings to evaluate subsurface conditions on site near well MW-6 and down gradient of the site. Groundwater was not present in any boring location from 35 to 40 fbg, at depths consistent with the shallow-screened wells. CRA collected soil samples from borings CPT-22 through CPT-27 at depths correlating with historical impacts in shallow-screened wells. No COCs were detected. Details of the installation are presented in CRAs August 5, 2014 Subsurface Investigation Report and Closure Request.

LUST:

Global Id:	T0608587185
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0608587185
Action Type:	ENFORCEMENT
Date:	05/02/2014
Action:	Staff Letter
Global Id:	T0608587185
Action Type:	Other
Date:	07/24/2001
Action:	Leak Discovery
Global Id:	T0608587185

SHELL - 905 EL CAMINO (Continued) **S106091049**

Action Type: RESPONSE
Date: 08/05/2014
Action: Site Assessment Report

Global Id: T0608587185
Action Type: RESPONSE
Date: 01/16/2014
Action: Correspondence

Global Id: T0608587185
Action Type: RESPONSE
Date: 03/14/2002
Action: Other Workplan

Global Id: T0608587185
Action Type: RESPONSE
Date: 05/22/2013
Action: Correspondence

Global Id: T0608587185
Action Type: RESPONSE
Date: 01/22/2014
Action: Correspondence

Global Id: T0608587185
Action Type: RESPONSE
Date: 07/19/2013
Action: Other Report / Document

Global Id: T0608587185
Action Type: RESPONSE
Date: 08/22/1984
Action: Other Report / Document

Global Id: T0608587185
Action Type: RESPONSE
Date: 09/03/2004
Action: Verbal Communication

Global Id: T0608587185
Action Type: RESPONSE
Date: 11/17/2011
Action: Other Report / Document

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 03/19/2008
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 02/27/2013
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 02/25/2013

SHELL - 905 EL CAMINO (Continued) **S106091049**

Action: Notice of Responsibility

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 02/23/2015
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 02/07/2014
Action: Email Correspondence

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 07/29/2014
Action: Notice of Responsibility

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 05/02/2014
Action: Staff Letter

Global Id: T0608587185
Action Type: Other
Date: 11/25/2001
Action: Leak Reported

Global Id: T0608587185
Action Type: RESPONSE
Date: 07/19/2013
Action: Other Workplan

Global Id: T0608587185
Action Type: RESPONSE
Date: 11/25/2001
Action: Unauthorized Release Form

Global Id: T0608587185
Action Type: RESPONSE
Date: 01/22/2014
Action: Correspondence

Global Id: T0608587185
Action Type: RESPONSE
Date: 04/14/2004
Action: CAP/RAP - Feasibility Study Report

Global Id: T0608587185
Action Type: RESPONSE
Date: 05/24/2004
Action: Soil and Water Investigation Workplan

Global Id: T0608587185
Action Type: RESPONSE
Date: 06/27/2007
Action: Well Installation Workplan

SHELL - 905 EL CAMINO (Continued) **S106091049**

Global Id: T0608587185
Action Type: RESPONSE
Date: 08/24/2004
Action: CAP/RAP - Other Report

Global Id: T0608587185
Action Type: RESPONSE
Date: 02/25/2013
Action: Correspondence

Global Id: T0608587185
Action Type: RESPONSE
Date: 11/17/2011
Action: Site Assessment Report - Regulator Responded

Global Id: T0608587185
Action Type: RESPONSE
Date: 04/12/2013
Action: Correspondence - Regulator Responded

Global Id: T0608587185
Action Type: RESPONSE
Date: 10/04/2013
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0608587185
Action Type: RESPONSE
Date: 07/19/2013
Action: Request for Closure - Regulator Responded

Global Id: T0608587185
Action Type: RESPONSE
Date: 04/12/2013
Action: Request for Closure - Regulator Responded

Global Id: T0608587185
Action Type: RESPONSE
Date: 08/05/2014
Action: Request for Closure - Regulator Responded

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 12/18/2014
Action: Notification - Public Notice of Case Closure

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 06/11/2015
Action: Staff Letter

Global Id: T0608587185
Action Type: RESPONSE
Date: 01/22/2014
Action: Email Correspondence

Global Id: T0608587185
Action Type: RESPONSE

SHELL - 905 EL CAMINO (Continued) **S106091049**

Date: 06/20/2008
Action: Soil and Water Investigation Report

Global Id: T0608587185
Action Type: RESPONSE
Date: 10/04/2013
Action: Other Workplan

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 08/25/2011
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 01/22/2014
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 09/30/2014
Action: Staff Letter

Global Id: T0608587185
Action Type: RESPONSE
Date: 05/02/2014
Action: Correspondence

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 05/25/2011
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 08/12/2013
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 05/22/2013
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 10/08/2013
Action: Staff Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 09/25/2015
Action: Closure/No Further Action Letter

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 03/20/2014
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

SHELL - 905 EL CAMINO (Continued) **S106091049**

Global Id: T0608587185
Action Type: RESPONSE
Date: 06/20/2008
Action: Well Installation Report

Global Id: T0608587185
Action Type: RESPONSE
Date: 05/05/2014
Action: Correspondence

Global Id: T0608587185
Action Type: RESPONSE
Date: 09/19/2015
Action: Well Destruction Report

Global Id: T0608587185
Action Type: RESPONSE
Date: 09/01/2005
Action: Well Installation Report

Global Id: T0608587185
Action Type: RESPONSE
Date: 10/24/2001
Action: Other Workplan

Global Id: T0608587185
Action Type: RESPONSE
Date: 11/06/2006
Action: Well Destruction Report

Global Id: T0608587185
Action Type: RESPONSE
Date: 08/29/2002
Action: Other Report / Document

Global Id: T0608587185
Action Type: RESPONSE
Date: 02/02/2009
Action: Monitoring Report - Quarterly

Global Id: T0608587185
Action Type: ENFORCEMENT
Date: 06/23/2009
Action: Staff Letter

LUST:
Global Id: T0608587185
Status: Open - Case Begin Date
Status Date: 07/01/2001

Global Id: T0608587185
Status: Open - Site Assessment
Status Date: 07/01/2001

Global Id: T0608587185
Status: Open - Site Assessment
Status Date: 07/11/2001

SHELL - 905 EL CAMINO (Continued) **S106091049**

Global Id: T0608587185
Status: Open - Verification Monitoring
Status Date: 07/11/2001

Global Id: T0608587185
Status: Open - Eligible for Closure
Status Date: 01/09/2013

Global Id: T0608587185
Status: Open - Verification Monitoring
Status Date: 01/09/2013

Global Id: T0608587185
Status: Open - Verification Monitoring
Status Date: 05/21/2013

Global Id: T0608587185
Status: Open - Eligible for Closure
Status Date: 09/29/2014

Global Id: T0608587185
Status: Completed - Case Closed
Status Date: 09/25/2015

LUST SANTA CLARA:
Name: SHELL
Address: 905 EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA
Region: SANTA CLARA
SCVWD ID: 07S1W06G01F
Date Closed: Not reported
EDR Link ID: 07S1W06G01F

CORTESE:
Name: SHELL - 905 EL CAMINO
Address: 905 EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94087
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0608587185
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported

SHELL - 905 EL CAMINO (Continued) **S106091049**

Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:
Name: SHELL - 905 EL CAMINO
Address: 905 EL CAMINO REAL
City,State,Zip: SUNNYVALE, CA 94087
Site ID: 209836
CERS ID: T0608587185
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Local Agency Caseworker
Entity Name: AARON COSTA - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089181954,

91
South
1/2-1
0.598 mi.
3159 ft.

Relative:
Higher

Actual:
147 ft.

SIEMENS-19000 HOMESTEAD RD **ENVIROSTOR** **S104573904**
19000 HOMESTEAD **CPS-SLIC** **N/A**
CUPERTINO, CA 94014 **DEED**
Cortese
ENF
HIST CORTESE
CIWQS
CERS

ENVIROSTOR:
Name: SIEMENS COMPONENTS, INC., OPTO ELECTRONICS
Address: 19000 HOMESTEAD ROAD
City,State,Zip: CUPERTINO, CA 95014
Facility ID: 71002455
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported

SIEMENS-19000 HOMESTEAD RD (Continued) **S104573904**

Supervisor: Not reported
Division Branch: Cleanup Berkeley
Assembly: 28
Senate: 15
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.33675
Longitude: -122.0045
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD053236212
Alias Type: EPA Identification Number
Alias Name: 71002455
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CPS-SLIC:
Name: SIEMENS (SMI HOLDING LLC)
Address: 19000 HOMESTEAD ROAD
City,State,Zip: CUPERTINO, CA 95014-0716
Region: STATE
Facility Status: **Open - Remediation**
Status Date: 06/01/1983
Global Id: SL721101218
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.336634
Longitude: -122.004595
Case Type: Cleanup Program Site
Case Worker: RWP
Local Agency: SANTA CLARA VALLEY WATER DISTRICT
RB Case Number: 43S0110
File Location: Regional Board
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: 1,1,1-Trichloroethane (TCA), Trichloroethylene (TCE)
Site History: The Siemens property is a two property Superfund site property along

SIEMENS-19000 HOMESTEAD RD (Continued) **S104573904**

with the adjacent upgradient former Intersil /DTKM. Similar to the Teledyne-Spectraphysics North Bayshore Area, there is also the "Intersil/Siemens" off-property area to the north of the Siemens property. Siemens collects groundwater from the off-property area and pumps it through the on-property groundwater extraction and treatment (GWET) system. Underground storage tank removal, soil excavation and soil vapor extraction have substantially decreased groundwater-CVOC levels at the former Siemens property. Siemens curtailed their vapor extraction system in 2004 after removing approximately 19,000 pounds of volatile organic compounds from the vadose zone alone.. Since that time they voluntarily performed a pilot study testing the feasibility of enhanced reductive dechlorination on the north side of the property and proceeded without Water Board oversight to expand ERD pilot study that was interrupted several years ago by lowered groundwater levels. Results of the pilot study have not been submitted to the Regional Water Board. Since that time they voluntarily performed an enhanced reductive dechlorination (ERD) pilot study on the north side of the property and proceeded without Water Board oversight to expand ERD pilot study that was interrrupted several years ago by lowered groundwater levels. Results of the ERD pilot study have not been submitted to the Water Board. Groundwater extraction and treatment along north and south margins of the site has hydraulically contained groundwater contaminants for over 20 years. The water-bearing zones of concern were recently re-designated A2, A3, and A4 Zones within the A aquifer. During the 1990s, above-average rainfall raised groundwater levels by 50 feet to create a resaturated zone, currently designated as the A2 And A3 Zones. Based on results of soil cleanup confirmation sampling in the south portion of the property,Siemens encountered groundwater-TCE up to 3,000 parts per billion (ppb) in the A2 Zone. After reporting these results to the Regional Water Board, we required the Responsible Party for former Intersil (GE) to re-characterize their side of the A2 Zone where they detected groundwater-TCE levels up to 9,000 ppb. Siemen has been conducting followup on-property ERD pilot studies that showed promising results indicating TCE levels lowered by at least a factor of 10. On-property vapor intrusion (VI) concerns arose within the last five years, when on-property Kaiser employees were mis-informed by Kaiser management that they were not working on a Superfund site property, Indoor air sampling was then conducted in the building and based on indoor air CVOC levels similar to ambient air levels, the vapor intrusion evaluation concluded that vapor intrusion is not occurring. However, the employees no longer trusted anything management after misinforming them about the contaminated nature of the property. When Kaiser engaged the Regional Water Board, we issued a fact sheet summarizing Indoor air sampling results in the context of toxicological principles, the Kaiser employees were reportedly satisfied. Off-property vapor intrusion evaluation has been completed across the on- and off-property areas and indicated that no vapor intrusion is occurring above levels of concern. Subsequent and very thorough re-evaluation of on- and off-property residential VI verified ND levels of TCE in the off-property residential IA and below-ESL levels in the on-property commercial buildings.

Click here to access the California GeoTracker records for this facility:

SIEMENS-19000 HOMESTEAD RD (Continued) **S104573904**

DEED:
Name: SIEMENS (SMI HOLDING LLC)
Address: 19000 HOMESTEAD ROAD
City,State,Zip: CUPERTINO, CA
Envirostor ID: SL721101218
Area: Not reported
Sub Area: Not reported
Site Type: SLIC
Status: OPEN - REMEDIATION
Agency: SWRCB
Covenant Uploaded: Y
Deed Date(s): 04/14/2000
File Name: Geotracker Land Use/Deed Restrictions

Name: SIEMENS (SMI HOLDING LLC)
Address: 19000 HOMESTEAD ROAD
City,State,Zip: CUPERTINO, CA
Envirostor ID: SL721101218
Area: Not reported
Sub Area: Not reported
Site Type: SLIC
Status: OPEN - REMEDIATION
Agency: SWRCB
Covenant Uploaded: Y
Deed Date(s): 12/14/2009
File Name: Geotracker Land Use/Deed Restrictions

CORTESE:
Name: SIEMENS-19000 HOMESTEAD RD
Address: 19000 HOMESTEAD
City,State,Zip: CUPERTINO, CA 94014
Region: CORTESE
Envirostor Id: Not reported
Global ID: Not reported
Site/Facility Type: Not reported
Cleanup Status: Not reported
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: CORTESE
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Cease Desist Orders & Cleanup Abatement Orders

ENF:
Name: SIEMENS-19000 HOMESTEAD RD
Address: 19000 HOMESTEAD

SIEMENS-19000 HOMESTEAD RD (Continued) **S104573904**

City,State,Zip:	CUPERTINO, CA 94014
Region:	2
Facility Id:	256876
Agency Name:	Not reported
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	3674
SIC Desc 1:	Semiconductors and Related Devices
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported

SIEMENS-19000 HOMESTEAD RD (Continued) **S104573904**

WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	222537
Region:	2
Order / Resolution Number:	90-11902
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	08/15/1990
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	Enforcement - 2 438124N01
Description:	SCR-& REMEDIAL ACTION PLAN
Program:	ENFCAO
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HIST CORTESE:

edr_fname:	SCR-SIEMENS-19000 HOMESTE
edr_fadd1:	19000 HOMESTEAD
City,State,Zip:	CUPERTINO, CA 95014
Region:	CORTESE
Facility County Code:	43
Reg By:	WBC&D
Reg Id:	2 438124NO1

CIWQS:

Name:	SIEMENS-19000 HOMESTEAD RD
Address:	19000 HOMESTEAD
City,State,Zip:	CUPERTINO, CA 94014
Agency:	SMI Holding LLC
Agency Address:	170 South Wood Avenue 6th Flr, A&R, Iselin, NJ 08830
Place/Project Type:	Other
SIC/NAICS:	3674
Region:	2
Program:	UNREGS
Regulatory Measure Status:	Historical
Regulatory Measure Type:	WDR
Order Number:	86-048
WDID:	2 438124N01
NPDES Number:	Not reported
Adoption Date:	06/18/1986

SIEMENS-19000 HOMESTEAD RD (Continued) **S104573904**

Effective Date:	06/18/1986
Termination Date:	Not reported
Expiration/Review Date:	06/18/1989
Design Flow:	0.0001
Major/Minor:	Not reported
Complexity:	A
TTWQ:	1
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

CERS:

Name:	SIEMENS (SMI HOLDING LLC)
Address:	19000 HOMESTEAD ROAD
City,State,Zip:	CUPERTINO, CA 95014-0716
Site ID:	190039
CERS ID:	SL721101218
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	Roger Papler - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title:	Not reported
Affiliation Address:	1515 CLAY STREET, SUITE 1500
Affiliation City:	OAKLAND
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	GEORGE COOK - SANTA CLARA VALLEY WATER DISTRICT
Entity Title:	Not reported
Affiliation Address:	5750 ALMADEN EXPRESSWAY
Affiliation City:	SAN JOSE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	4082652607,

U92 **EMCON ASSOCIATES** **EMI** **S103656305**
SSE **3800 HOMESTEAD ROAD** **HWP** **N/A**
1/2-1 **SANTA CLARA, CA 95051**
0.642 mi.
3389 ft. **Site 1 of 2 in cluster U**

Relative:
Higher

Actual:
145 ft.

EMI:

Name:	EMCON ASSOCIATES
Address:	3800 HOMESTEAD ROAD
City,State,Zip:	SANTA CLARA, CA 950510000
Year:	1990
County Code:	43
Air Basin:	SF
Facility ID:	5889
Air District Name:	BA
SIC Code:	3671

EMCON ASSOCIATES (Continued) **S103656305**

Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HWP:

EPA ID:	CAD046491577
Name:	AMERICAN MICRO SYSTEMS INCORPORATED
Address:	3800 HOMESTEAD ROAD
Cleanup Status:	CLOSED
Latitude:	37.33644
Longitude:	-122.0010
Facility Type:	Historical - Non-Operating
Facility Size:	Not reported
Supervisor:	Not reported
Site Code:	Not reported
Senate District:	10
Assembly District:	25
Public Information Officer:	Not reported
Commercial Offsite Facility Types:	Not reported
Quarterly Update:	3/20/2017- This facility is being closed in the Permitting Envirostor database because it was never regulated as a toxic substance disposal facility. There were no permitting files found for this facility. The 2006 fact sheet show that this facility is regulated by the California Regional Water Quality Control Board.
Project Manager Lead:	Not reported
Project Manager:	Not reported
Permit Type:	Lower Tier
Permit Effective Date:	Not reported
Permit Expiration Date:	Not reported
Calenviroscreen Score:	16-20%
Total Planned Hours:	Not reported
Total Planned Amount:	Not reported
Total Actual Hours:	Not reported

Closure:

EPA ID:	CAD046491577
Facility Type:	Historical - Non-Operating
Facility Name:	AMERICAN MICRO SYSTEMS INCORPORATED
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Facility Size:	Not reported
Facility Status:	CLOSED
Activity Type:	Closure Administrative
Final Date:	Not reported
Type:	LWTR
Title Description:	Administative Closure of a non TSDF Facilty
Due Date:	Not reported
Comments:	This facility was never regulated as a TSDF.
Unit Names:	Unit1

EMCON ASSOCIATES (Continued) **S103656305**

Event Description: Closure Administrative - ISSUE CLOSURE VERIFICATION
Actual Date: 03/20/2017

U93 **3800 HOMESTEAD RD, AMI** **RESPONSE** **S102423592**
SSE **3800 HOMESTEAD** **ENVIROSTOR** **N/A**
1/2-1 **SANTA CLARA, CA 95051** **LUST**
0.642 mi. **CPS-SLIC**
3389 ft. **Site 2 of 2 in cluster U** **DEED**
Cortese
Relative: Higher **ENF**
HIST CORTESE
Actual: 145 ft. **NPDES**
CIWQS
CERS

RESPONSE:

Name:	AMERICAN MICROSYSTEMS, INC
Address:	3800 HOMESTEAD RD
City,State,Zip:	SANTA CLARA, CA 95051
Facility ID:	43360031
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0
National Priorities List:	NO
Cleanup Oversight Agencies:	RWQCB 2 - San Francisco Bay
Lead Agency Description:	RWQCB 2 - San Francisco Bay
Project Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Berkeley
Site Code:	Not reported
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	25
Senate:	10
Special Program Status:	Not reported
Status:	Refer: RWQCB
Status Date:	11/23/1987
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	37.33609
Longitude:	-122.0014
APN:	316-09-045
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC :	Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description:	OTH, SOIL
Alias Name:	GOULD AMI SEMICONDUCTORS
Alias Type:	Alternate Name
Alias Name:	316-09-045
Alias Type:	APN
Alias Name:	CAD980892954
Alias Type:	EPA Identification Number
Alias Name:	110006188384
Alias Type:	EPA (FRS #)
Alias Name:	43360031
Alias Type:	Envirostor ID Number

Completed Info:

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Discovery
Completed Date:	08/11/1981
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Assessment Report
Completed Date:	11/25/1987
Comments:	RWQCB IS LEAD AGENCY AND IS OVERSEEING GRD WTR MONITORING

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	02/28/2006
Comments:	Fact Sheet issued by the San Francisco Water Board.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Name:	AMERICAN MICROSYSTEMS, INC
Address:	3800 HOMESTEAD RD
City,State,Zip:	SANTA CLARA, CA 95051
Facility ID:	43360031
Status:	Refer: RWQCB
Status Date:	11/23/1987
Site Code:	Not reported
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	0
NPL:	NO
Regulatory Agencies:	RWQCB 2 - San Francisco Bay
Lead Agency:	RWQCB 2 - San Francisco Bay
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Berkeley
Assembly:	25
Senate:	10
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.33609
Longitude:	-122.0014
APN:	316-09-045
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Potential Description: OTH, SOIL
Alias Name: GOULD AMI SEMICONDUCTORS
Alias Type: Alternate Name
Alias Name: 316-09-045
Alias Type: APN
Alias Name: CAD980892954
Alias Type: EPA Identification Number
Alias Name: 110006188384
Alias Type: EPA (FRS #)
Alias Name: 43360031
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 08/11/1981
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 11/25/1987
Comments: RWQCB IS LEAD AGENCY AND IS OVERSEEING GRD WTR MONITORING

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 02/28/2006
Comments: Fact Sheet issued by the San Francisco Water Board.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Name: AMI
Address: 3800 HOMESTEAD RD
City,State,Zip: SANTA CLARA, CA 95051
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608591800
Global Id: T0608591800
Latitude: 37.3377
Longitude: -121.9945
Status: Completed - Case Closed
Status Date: 01/11/2011
Case Worker: UUU
RB Case Number: 43-1980
Local Agency: Not reported
File Location: Not reported

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Local Case Number: Not reported
Potential Media Affect: Not reported
Potential Contaminants of Concern: * Solvents
Site History: Not reported

LUST:
Global Id: T0608591800
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0608591800
Action Type: Other
Date: 05/11/1988
Action: Leak Reported

LUST:
Global Id: T0608591800
Status: Open - Case Begin Date
Status Date: 05/11/1988

Global Id: T0608591800
Status: Open - Inactive
Status Date: 05/11/1988

Global Id: T0608591800
Status: Completed - Case Closed
Status Date: 01/11/2011

CPS-SLIC:
Name: AMERICAN MICROSYSTEMS INC.
Address: 3800 HOMESTEAD RD
City,State,Zip: SANTA CLARA, CA 95051
Region: STATE
Facility Status: **Open - Long Term Management**
Status Date: 07/15/2021
Global Id: SL20290907
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.3372375317259
Longitude: -122.001714706421
Case Type: Cleanup Program Site
Case Worker: RWP
Local Agency: SANTA CLARA VALLEY WATER DISTRICT
RB Case Number: 43S0003
File Location: Regional Board
Potential Media Affected: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: 1,1,1-Trichloroethane (TCA), * * 1,2-DICHLOROBENZENE, * * 1,4-DICHLOROBENZENE, Other Solvent or Non-Petroleum Hydrocarbon, Freon, Tetrachloroethylene (PCE), Trichloroethylene (TCE), Xylene

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Site History: This site is adjacent to and cross gradient from the Siemens property of the Intersil-Siemens Superfund site. AMI conducted groundwater extraction until achieving asymptotic removal rates. Then AMI implemented an on-property in-situ chemical oxidation to further reduce chlorinated volatile organic compound (CVOC) levels in groundwater. Subsequent monitoring appears to indicate that on- and off-property groundwater-CVOC levels have continued to decrease and the site is currently under an informal monitored natural attenuation program. Although the groundwater-CVOC levels are below our May 2008 environmental screening levels (ESLs) for potential indoor air (IA) vapor intrusion (VI), the ESLs presume what may be an excessively high attenuation factor of 1,000; and our draft revised ESLs are still out for public comment. Although there has been no IA VI evaluation at the site to definitely indicate that IA VI is not occurring, we are currently in the process of directing the Responsible Parties for the adjacent Intersil-Siemens Superfund site to IA test the former AMi Building 700/800 that is west of and adjacent to the buildings over the former AMI source area. IA testing at Building 700/800 cleared it of VI issues.

Click here to access the California GeoTracker records for this facility:

DEED:
Name: AMERICAN MICROSYSTEMS INC.
Address: 3800 HOMESTEAD RD
City,State,Zip: SANTA CLARA, CA 95051
Envirostor ID: SL20290907
Area: Not reported
Sub Area: Not reported
Site Type: SLIC
Status: OPEN - LONG TERM MANAGEMENT
Agency: SWRCB
Covenant Uploaded: Y
Deed Date(s): 12/13/2007
File Name: Geotracker Land Use/Deed Restrictions

Name: AMERICAN MICROSYSTEMS INC.
Address: 3800 HOMESTEAD RD
City,State,Zip: SANTA CLARA, CA 95051
Envirostor ID: SL20290907
Area: Not reported
Sub Area: Not reported
Site Type: SLIC
Status: OPEN - LONG TERM MANAGEMENT
Agency: SWRCB
Covenant Uploaded: Y
Deed Date(s): 11/08/1999
File Name: Geotracker Land Use/Deed Restrictions

CORTESE:
Name: AMI
Address: 3800 HOMESTEAD RD
City,State,Zip: SANTA CLARA, CA 95051
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0608591800

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

Name:	3800 HOMESTEAD RD, AMI
Address:	3800 HOMESTEAD
City,State,Zip:	SANTA CLARA, CA 95051
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	Not reported
Site/Facility Type:	Not reported
Cleanup Status:	Not reported
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	CORTESE
Order No:	R2-2004-0055
Waste Discharge System No:	Not reported
Effective Date:	01/25/1995
Region 2:	2
WID Id:	2 438182001
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Cease Desist Orders & Cleanup Abatement Orders

Name:	AMI-3800 HOMESTEAD
Address:	3800 HOMESTEAD
City,State,Zip:	SANTA CLARA, CA 95051
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	Not reported
Site/Facility Type:	Not reported
Cleanup Status:	Not reported
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Enf Type:	Not reported
Swat R:	Not reported
Flag:	CORTESE
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	2
WID Id:	2 438182N01
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Cease Desist Orders & Cleanup Abatement Orders

ENF:

Name:	AMI-3800 HOMESTEAD
Address:	3800 HOMESTEAD
City,State,Zip:	SANTA CLARA, CA 95051
Region:	2
Facility Id:	205606
Agency Name:	American Microsystems Inc AMI
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	37.337791
Place Longitude:	-122.000691
SIC Code 1:	3674
SIC Desc 1:	Semiconductors and Related Devices
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	UNREGS
Program Category1:	UNREGS
Program Category2:	UNREGS
# Of Programs:	1
WDID:	2 438182N01
Reg Measure Id:	162346
Reg Measure Type:	Unregulated
Region:	2
Order #:	Not reported

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/21/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	222948
Region:	2
Order / Resolution Number:	95-140
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	06/21/1995
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	Enforcement - 2 438182N01
Description:	SCR-
Program:	UNREGS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	3800 HOMESTEAD RD, AMI
Address:	3800 HOMESTEAD
City,State,Zip:	SANTA CLARA, CA 95051
Region:	2
Facility Id:	202530
Agency Name:	American Microsystems Inc AMI
Place Type:	Facility
Place Subtype:	Groundwater Cleanup Site
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Place Latitude:	37.337791
Place Longitude:	-122.000691
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.2016
Threat To Water Quality:	2
Complexity:	B
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDNONMUNIPRCS
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	2 438182001
Reg Measure Id:	183038
Reg Measure Type:	Enrollee
Region:	2
Order #:	R2-2004-0055
Npdes# CA#:	CAG912003
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	1000
Status:	Historical
Status Date:	08/13/2012
Effective Date:	01/25/1995
Expiration/Review Date:	07/20/1999
Termination Date:	06/16/2005
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	15 - WDRs pending rescission
Direction/Voice:	Passive
Enforcement Id(EID):	235651
Region:	2

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Order / Resolution Number:	R2-1999-0002
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	01/27/1999
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	Enforcement - 2 438182001
Description:	The facility used trichloroethene in its transistor and other electronic manufacturing operations. Volatile organic chemicals such as trichloroethene, freons, and trichloroethane were used in the manufacturing operations, and released to soil and groundwa
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HIST CORTESE:

edr_fname:	SCR-AMI-3800 HOMESTEAD
edr_fadd1:	3800 HOMESTEAD
City,State,Zip:	SANTA CLARA, CA 95051
Region:	CORTESE
Facility County Code:	43
Reg By:	WBC&D
Reg Id:	2 438182N01

NPDES:

Name:	KAISER PARKING LOT
Address:	3800 HOMESTEAD ROAD
City,State,Zip:	SANTA CLARA, CA 95051
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	2 43C373534
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	11/30/2017
Operator Name:	Kaiser Foundation Health Plan
Operator Address:	284 Hospital Pkwy
Operator City:	San Jose
Operator State:	California
Operator Zip:	95119

NPDES as of 03/2018:

NPDES Number:	CAS000002
Status:	Terminated
Agency Number:	0
Region:	2
Regulatory Measure ID:	455831
Order Number:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	2 43C373534
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/27/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	11/30/2017
Discharge Name:	Kaiser Foundation Health Plan
Discharge Address:	284 Hospital Pkwy
Discharge City:	San Jose
Discharge State:	California
Discharge Zip:	95119
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	455831
Order Number:	Not reported
Regulatory Measure Type:	Construction
Place ID:	Not reported
WDID:	2 43C373534
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	06/10/2015
Processed Date:	07/27/2015
Status:	Active
Status Date:	07/27/2015
Place Size:	4.5
Place Size Unit:	Acres
Contact:	Lea Ann Knight
Contact Title:	Senior Project Manager
Contact Phone:	408-363-4499

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Contact Phone Ext:	Not reported
Contact Email:	lea.ann.knight@kp.org
Operator Name:	Kaiser Foundation Health Plan
Operator Address:	284 Hospital Pkwy
Operator City:	San Jose
Operator State:	California
Operator Zip:	95119
Operator Contact:	Lea Ann Knight
Operator Contact Title:	Senior Project Manager
Operator Contact Phone:	408-363-4499
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	lea.ann.knight@kp.org
Operator Type:	Other
Developer:	Whiting Turner Contracting Company
Developer Address:	4690 Chabot Drive #120
Developer City:	Pleasanton
Developer State:	California
Developer Zip:	94588
Developer Contact:	Viktor Gabriel Ferreras
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	N
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	N
Constype Below Ground Ind:	N
Constype Cable Line Ind:	N
Constype Comm Line Ind:	N
Constype Commertial Ind:	Y
Constype Electrical Line Ind:	N
Constype Gas Line Ind:	N
Constype Industrial Ind:	N
Constype Other Description:	Not reported
Constype Other Ind:	N
Constype Recons Ind:	N
Constype Residential Ind:	N
Constype Transport Ind:	N
Constype Utility Description:	Not reported
Constype Utility Ind:	N
Constype Water Sewer Ind:	N
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Not reported
Certifier:	Lee Ann Knight
Certifier Title:	Senior Project Manager
Certification Date:	10-JUN-15
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

CIWQS:

Name:	KAISER PARKING LOT
Address:	3800 HOMESTEAD ROAD
City,State,Zip:	SANTA CLARA, CA 95051
Agency:	Kaiser Foundation Health Plan
Agency Address:	284 Hospital Pkwy Building K, San Jose, CA 95119
Place/Project Type:	Construction - Commercial
SIC/NAICS:	Not reported

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Region:	2
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	2 43C373534
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	07/27/2015
Termination Date:	11/30/2017
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	37.33609
Longitude:	-122.00146

Name:	3800 HOMESTEAD RD, AMI
Address:	3800 HOMESTEAD
City,State,Zip:	SANTA CLARA, CA 95051
Agency:	American Microsystems Inc AMI
Agency Address:	2300 Buckskin Road, Pocatello, ID 83201
Place/Project Type:	Groundwater Cleanup Site
SIC/NAICS:	Not reported
Region:	2
Program:	NPDNONMUNIPRCS
Regulatory Measure Status:	Historical
Regulatory Measure Type:	Enrollee
Order Number:	R2-2004-0055
WDID:	2 438182001
NPDES Number:	CAG912003
Adoption Date:	01/25/1995
Effective Date:	01/25/1995
Termination Date:	06/16/2005
Expiration/Review Date:	07/20/1999
Design Flow:	0.2016
Major/Minor:	Minor
Complexity:	B
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	37.337791
Longitude:	-122.000691

CERS:

Name:	AMI
Address:	3800 HOMESTEAD RD
City,State,Zip:	SANTA CLARA, CA 95051
Site ID:	258895
CERS ID:	T0608591800
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Name: AMERICAN MICROSYSTEMS INC.
Address: 3800 HOMESTEAD RD
City,State,Zip: SANTA CLARA, CA 95051
Site ID: 224104
CERS ID: 110006188384
CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: GEORGE COOK - SANTA CLARA VALLEY WATER DISTRICT
Entity Title: Not reported
Affiliation Address: 5750 ALMADEN EXPRESSWAY
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4082652607,

Affiliation Type Desc: Local Agency Caseworker
Entity Name: GEORGE COOK SANTA CLARA VLY WTR DIST
Entity Title: Not reported
Affiliation Address: 5750 ALMADEN EXPRESSWAY
Affiliation City: SANJOSE
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: ROGER PAPLER SAN FRANCISCO BAY RWQCB REGN 2ND
Entity Title: Not reported
Affiliation Address: 1515 CLAY STREETNA SUITE 1500
Affiliation City: OAKLAND
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Roger Papler - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY STREET, SUITE 1500
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Name: AMERICAN MICROSYSTEMS INC.
Address: 3800 HOMESTEAD RD
City,State,Zip: SANTA CLARA, CA 95051
Site ID: 224104
CERS ID: SL20290907
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: GEORGE COOK - SANTA CLARA VALLEY WATER DISTRICT
Entity Title: Not reported
Affiliation Address: 5750 ALMADEN EXPRESSWAY
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4082652607,

Affiliation Type Desc: Local Agency Caseworker
Entity Name: GEORGE COOK SANTA CLARA VLY WTR DIST
Entity Title: Not reported
Affiliation Address: 5750 ALMADEN EXPRESSWAY
Affiliation City: SANJOSE
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: ROGER PAPLER SAN FRANCISCO BAY RWQCB REGN 2ND
Entity Title: Not reported
Affiliation Address: 1515 CLAY STREETNA SUITE 1500
Affiliation City: OAKLAND
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Roger Papler - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY STREET, SUITE 1500
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Name: 3800 HOMESTEAD RD, AMI
Address: 3800 HOMESTEAD
City,State,Zip: SANTA CLARA, CA 95051
Site ID: 348369
CERS ID: 202530
CERS Description: NPDES Wastewater and Stormwater

Violations:
Site ID: 348369

3800 HOMESTEAD RD, AMI (Continued) **S102423592**

Site Name:	3800 Homestead Rd, AMI
Violation Date:	01-01-1995
Citation:	California Water Code
Violation Description:	Not reported
Violation Notes:	The facility used trichloroethene in its transistor and other electronic manufacturing operations. Volatile organic chemicals such as trichloroethene, freons, and trichloroethane were used in the manufacturing operations, and released to soil and groundwa
Violation Division:	Water Boards
Violation Program:	NPDNONMUNI
Violation Source:	CIWQS,

Enforcement Action:

Site ID:	348369
Site Name:	3800 Homestead Rd, AMI
Site Address:	3800 HOMESTEAD
Site City:	SANTA CLARA
Site Zip:	95051
Enf Action Date:	01-27-1999
Enf Action Type:	Clean-up and Abatement Order
Enf Action Description:	Clean-up and Abatement Order
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	UNSPEC
Enf Action Source:	CIWQS,

94
South
1/2-1
0.722 mi.
3810 ft.

INTERSIL/SIEMENS **CA BOND EXP. PLAN** **S105960443**
(INTERSIL) 10900 TANTAU AVE., (SIEMENS) 19000 HOME **N/A**
CUPERTINO, CA 95014

Relative:
Higher

Actual:
154 ft.

CA BOND EXP. PLAN:

Reponsible Party:	RWQCB REFERRAL SITE
Project Revenue Source Company:	Not reported
Project Revenue Source Addr:	Not reported
Project Revenue Source City,St,Zip:	Not reported
Project Revenue Source Desc:	The Intersil/Siemens site is being proposed for the NPL. The RWQCB will continue to have lead responsibility for monitoring the RPs' remedial activities. Until such time as the RWQCB refers the site to DHS for follow-up using Bond funds, no money will be budgeted from the fund for this site.
Site Description:	A manufacturer of microwave electronic equipment has been in operation at the site since 1963. Manufacturing processes included use of acids and solvents. Contamination at the site appears to be primarily associated with a neutralization sump and a chemical storage shed. The facility is located within the Hillview Porter Region.
Hazardous Waste Desc:	Soil contaminants detected to date include trichloroethene (TCE), dichloroethene (DCE), trichloroethane (TCA) and chlorobenzenes. Ground water contaminants include TCE at 910 parts per billion (ppb), 1,1,-DCE at 92 ppb, chloroform at 100 ppb and Freon at 63 ppb.
Threat To Public Health & Env:	There are seven private wells and a creek downgradient of the site. The maximum level of TCE detected in the creek to date is 18 ppb. There are two backup municipal supply wells within 1 1/2 miles of the site. Inhabitants of the residential area downgradient from the site are potential receptors for ground water and surface water contamination.
Site Activity Status:	Releases of chemicals occurred at both Companies' underground waste handling

INTERSIL/SIEMENS (Continued) **S105960443**

facilities. The data available indicate that the contaminants in the ground water may be moving offsite. Current activities required of Intersil and Siemens were outlined by the RWQCB Waste Discharge Requirements dated June, 1986. They include: 1) installation of onsite interim remediation of VOCs in the soil and Aquifer A; 2) participation in further characterization and remediation of the combined chemical plumes; and 3) evaluation of possible conduits connecting the shallow and deep aquifers. Due to disagreement over the source of contamination in the B Aquifers, Intersil is not cooperating in investigations nor remediation of that contamination. However, the RWQCB has determined that contamination from both sites has migrated to the B and C aquifers.

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95 SW 1/2-1 0.772 mi. 4074 ft. **CUPERTINO VILLAGE CLEANERS** **ENVIROSTOR S108054446**
10989 NORTH WOLFE ROAD **VCP N/A**
CUPERTINO, CA 95014 **CERS**

Relative: Higher

Actual: 173 ft.

ENVIROSTOR:

Name:	CUPERTINO VILLAGE CLEANERS
Address:	10989 NORTH WOLFE ROAD
City,State,Zip:	CUPERTINO, CA 95014
Facility ID:	60000385
Status:	Active
Status Date:	03/01/2007
Site Code:	201671
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	12.51
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Moises Carvalho
Supervisor:	John Karachewski
Division Branch:	Cleanup Berkeley
Assembly:	28
Senate:	15
Special Program:	CLRRA Liability Immunity (AB 389)
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.33610
Longitude:	-122.0153
APN:	316-05-050, 316-05-051, 316-05-052, 316-05-053, 316-05-056, 316-05-072, 316-45-017
Past Use:	DRY CLEANING
Potential COC:	Tetrachloroethylene (PCE
Confirmed COC:	Tetrachloroethylene (PCE
Potential Description:	SOIL, SV
Alias Name:	Cupertino Village Shopping Center
Alias Type:	Alternate Name
Alias Name:	316-05-050
Alias Type:	APN
Alias Name:	316-05-051
Alias Type:	APN
Alias Name:	316-05-052
Alias Type:	APN
Alias Name:	316-05-053

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Alias Type: APN
Alias Name: 316-05-056
Alias Type: APN
Alias Name: 316-05-072
Alias Type: APN
Alias Name: 316-45-017
Alias Type: APN
Alias Name: 110002732598
Alias Type: EPA (FRS #)
Alias Name: 110021144260
Alias Type: EPA (FRS #)
Alias Name: 201671
Alias Type: Project Code (Site Code)
Alias Name: 60000385
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: AB 389 Response Plan
Completed Date: 02/24/2014
Comments: The response action selected in the Response Plan is continued operation of the existing soil vapor extraction system that is on the Site. The system was installed as part of a pilot test. The Response Plan established both residential and commercial cleanup goals for tetrachloroethylene in subsurface and sub-slab soil vapor. PCE in soil vapor will be reduced to the extent practicable. A Land Use Covenant will be put in place to restrict any portion of the Site where the residential or unrestricted use cleanup goals are not achieved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 10/03/2011
Comments: Fact sheet informing local community about upcoming pilot testing of a soil vapor extraction (SVE) system at the Cupertino Village Cleaners Site (Site), located at 10989 Wolfe Road in Cupertino, CA, within the Cupertino Village Shopping Center.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 09/23/2011
Comments: SVE Pilot Work Plan approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 05/07/2012
Comments: The Status Report was prepared to document the installation and initial operation of the soil vapor extraction (SVE) pilot system installed at the Site to determine remediation technology appropriateness. The Status Report summarizes the performance of the SVE system during the initial three months of operation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Completed Document Type: Well Installation Workplan
Completed Date: 04/12/2013
Comments: Work Plan outlines procedures for the installation of soil vapor monitoring probes at the Former Cupertino Village Cleaners, located at 10989 North Wolfe Road, Cupertino, California.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/26/2013
Comments: The public notice announces the public comment period for the Draft Response Plan, which runs from January 6, 2014 through February 5, 2014. The Draft Response Plan proposes the continued operation of the pilot test soil vapor extraction system as the final response action for the Site. The public notice is scheduled to run in the Cupertino Courier on January 3, 2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 03/03/2014
Comments: The report documents the implementation of the Soil Vapor Extraction (SVE) System Pilot Test Work Plan, and describes the SVE system design and installation, describes the startup monitoring results, describes the pilot testing procedures, and presents the results and conclusions of the pilot testing program . DTSC agreed in its approval letter that soil vapor extraction is a feasible technology for the Site and directed that it be the remedy proposed in a Draft Response Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/22/2014
Comments: The Report summarizes the interim results of rebound testing being implemented to determine if the operation of the soil vapor extraction (SVE) system from November 2011 to March 2014 effectively remediated the subsurface volatile organic compound (VOC) contamination. The rebound test sampling results showed a generally increasing concentration trend for tetrachloroethylene across the Site, but soil gas concentrations continued to be below the site-specific commercial cleanup goals. The increasing VOC concentrations indicated that equilibrium has not been reached and rebound testing is to continue. The SVE system may need to be restarted if an increasing concentration trend is observed during the next sampling event.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/03/2015
Comments: Report summarizes the results of rebound testing performed during shutdown of the soil vapor extraction (SVE) system according to 2014 Response Plan for the former Cupertino Village Cleaners Site located at 10989 North Wolfe Road, Cupertino, California.

Completed Area Name: PROJECT WIDE

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 04/26/2016
Comments: Cupertino Village LP plans to restart the soil vapor extraction (SVE) system due to high concentrations of tetrachloroethylene in soil gas after rebound testing. The Work Plan describes the procedures to reconnect and restart the SVE system; the operation, maintenance, and monitoring of the SVE system; and the rebound testing and reporting of results. The SVE system will operate for three months and system monitor will occur monthly. Following 3 months of SVE system operation, the system will be shut down for rebound testing with soil gas sampling at 1, 2, and 3 month intervals.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/13/2019
Comments: The Report documents the implementation of the Soil Vapor Extraction System Restart Work Plan; and summarizes results of 18-months of soil vapor extraction (SVE) "pulse" operation and maintenance, including soil vapor monitoring and statistical analysis of analytical results since restart of the SVE system in 2017. DTSC concurred with the Report’s recommendation to continue operation of the SVE system on a "pulse" operation mode for an additional six months, with soil vapor sampling on a bimonthly frequency basis, from January 2019 through July 2019.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation and Maintenance Report
Completed Date: 04/29/2021
Comments: Soil Vapor Extraction Extended Pulse Operation Report (Report) summarizes results of sampling and analysis of a soil vapor extraction treatment system installed at the Former Cupertino Village Cleaners site, between January 2019 and December 2020. Report recommends continuing the approved rebound test program in accordance with the March 14, 2014 Reponses Action Plan, the April 11, 2016 Soil Vapor Extraction System Restart Work Plan and the requirement set forth by the Department of Toxic Substances Control (DTSC) on December 9, 2020 regarding the November 16, 2020 Cupertino Village Cleaners Extended Pulse SVE operation Interim Data Submittal

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/09/2020
Comments: DTSC concurs with Cupertino Village Cleaners recommendations to shutting down the soil vapor extraction (SVE) system and initiating a rebound assessment in accordance with the approved Soil Vapor Extraction System Restart Work Plan (Northgate, 2016), and recommendations provided in the DTSC s Proven Technologies and Remedies Guidance - Remediation of Chlorinated Volatile Organic Compounds in Vadose Zone Soil (DTSC, 2010). The purpose of the rebound assessment is to evaluate whether the Cupertino Village Cleaners site s soil gas remedial action objectives (RAOs) have been achieved.

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/05/2021
Comments: The Technical Memorandum discuss the presence of tetrahydrofuran (THF) in soil vapor samples collected from soil vapor monitoring points and its association with the soil vapor extraction (SVE) system s polyvinyl chloride (PVC) piping off-gassing or a potential subsurface source at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/08/2020
Comments: The Technical Memorandum summarizes the accessibility and current condition of existing soil vapor monitoring points (SMPs) at the Site. DTSC concurs with the Technical Memorandum s recommendations of inclusion of SMPs VMW-1A and VMP-1AA as part of the Cupertino Village soil vapor extraction rebound testing program.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 12/08/2021
Comments: The Revised Final Work Plan provides the sampling methodology of indoor air quality (IAQ) sampling activities to be conducted at two commercial buildings (Buildings) located in the vicinity of the Site. One building is currently occupied by the 99 Ranch Market and the other by Good Samaritan United Methodist Church and associated Pre-School (Church Facility).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 12/16/2021
Comments: Soil gas samples collected as planned.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/22/2008
Comments: Letter sent to adjacent property notifying them of the date, time, and locations of the soil vapor samples planned to be collected along the fence line.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: California Land Reuse and Revitalization Agreement
Completed Date: 03/01/2007
Comments: DTSC entered into a CLRRA agreement

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/24/2018
Comments: DTSC annual oversight estimated cost of $21,649 is based on the cleanup activities that are expected to occur at the Site during the

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

fiscal year 18/19.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Project Management
Completed Date: 06/30/2021
Comments: Activity completed on June 30, 2021.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/21/2020
Comments: DTSC oversight cost estimate fiscal year 2020/2021.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/30/2019
Comments: In accordance with California Health and Safety Code Section 25269.5, the DTSC provided to the responsible party(s) a cost estimate and schedule for cleanup activities that are anticipated to the Site. The cost estimate is for the fiscal year 2019/2020 which started July 1, 2019 and ends June 30, 2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 08/27/2021
Comments: DTSC FY 21/22 Oversight Cost Estimate

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/22/2016
Comments: DTSC letter with oversight cost estimate for project activities for fiscal year 2016/2017. The anticipated project activities include the Soil Vapor Extraction Status Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/15/2006
Comments: Under the criteria of the Cal/EPA MOA, DTSC was determined the appropriate lead agency for the Cupertino Village Cleaners Project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/05/2006
Comments: As part of the AB 389 Process the appropriate agencies, including the host jurisdiction must be notified DTSC is negotiating a CLRRA Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 02/15/2006

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Comments:	The purpose of the Environmental Site Assessment Phase I is to identify recognized environmental conditions in connection with the Cupertino Village Cleaners site. The term recognized environmental conditions, as defined in ASTM Standard Practice E-1527-00, means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures, onto the property, or in the ground, groundwater, or surface water of the property.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Application
Completed Date:	10/31/2006
Comments:	Project is eligible for the AB 389 Process
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Workplan
Completed Date:	12/24/2007
Comments:	Investigation Workplan approved. Supplemental soil, soil vapor, and groundwater sampling will be conducted to further characterize contamination at the Site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Community Profile
Completed Date:	10/03/2008
Comments:	Community Profile completed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	01/05/2006
Comments:	Report was completed before DTSC involvement. Report submitted to DTSC as existing information.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice
Completed Date:	01/17/2008
Comments:	Work notice informing local community about soil and soil gas sampling at the Cupertino Village Cleaners Site, a former dry cleaner, located at 10989 Wolfe Road, Cupertino.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	02/29/2008
Comments:	February 2008 round of fieldwork completed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	01/28/2011
Comments:	Site Assessment Report indicates that PCE vapor plume at the Site

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

presents an elevated risk to human health and safety and the environment at the Site and PCE is migrating offsite. Further action will be required to remediate the contamination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 09/15/2008
Comments: Work Plan approved. Supplemental soil sampling is scheduled for September 30, 2008.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 12/26/2013
Comments: The fact sheet announces the public comment period for the Draft Response Plan, which runs from January 6, 2014 through February 5, 2014. The fact also describes the proposed response action for the Site, which is the continued operation of the pilot test soil vapor extraction.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 09/15/2008
Comments: Supplemental Soil Sampling scheduled for September 30, 2008.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/03/2009
Comments: Soil Vapor Sampling Work Plan approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 07/09/2009
Comments: Work Notice completed and will be mailed out on July 15, 2009.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/07/2013
Comments: Revised Response Plan submitted requested due to need to re-evaluate proposed remedy due to potential new future land uses.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/10/2014
Comments: Pursuant to California Health and Safety Code section 25395.96(c)(2), DTSC notified the host jurisdiction and other interested local agencies of the February 24,2014 approval of the Final Response Plan for the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Completed Document Type: Correspondence
Completed Date: 05/02/2013
Comments: Request to change the locations of two soil vapor probes due to potential disruptions to the 99 Ranch Market business and DTSC response that proposed new locations would not provide soil vapor data in the area where it is needed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/15/2012
Comments: Estimated fiscal year 2012-2013 annual DTSC oversight costs are $36,657.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/14/2013
Comments: Community representatives inquired about the status and schedule of the Response Action at the Site as well as the potential impact contamination at the Site may have on the proposed redevelopment of the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/02/2013
Comments: The estimated annual oversight cost for the 2013/14 fiscal year is $24,079.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/24/2014
Comments: Cupertino Village REW FY 14/15

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/22/2015
Comments: DTSC oversight annual oversight cost estimate fiscal year 2015/2016

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 02/24/2014
Comments: California Environmental Quality Act Notice of Exemption. Exception Status: Class 30 Categorical Exemption: California Code of Regulations title 14, section 15330.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/16/2011
Comments: Annual Oversight Cost Estimate completed.

Future Area Name: PROJECT WIDE

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Future Sub Area Name:	Not reported
Future Document Type:	Land Use Restriction
Future Due Date:	2023
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Certification
Future Due Date:	2023
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Removal Action Completion Report
Future Due Date:	2022
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Access Agreement
Schedule Due Date:	04/24/2022
Schedule Revised Date:	Not reported

VCP:

Name:	CUPERTINO VILLAGE CLEANERS
Address:	10989 NORTH WOLFE ROAD
City,State,Zip:	CUPERTINO, CA 95014
Facility ID:	60000385
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	12.51
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Moises Carvalho
Supervisor:	John Karachewski
Division Branch:	Cleanup Berkeley
Site Code:	201671
Assembly:	28
Senate:	15
Special Programs Code:	CLRRA Liability Immunity (AB 389)
Status:	Active
Status Date:	03/01/2007
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.33610 / -122.0153
APN:	316-05-050, 316-05-051, 316-05-052, 316-05-053, 316-05-056, 316-05-072, 316-45-017
Past Use:	DRY CLEANING
Potential COC:	30022
Confirmed COC:	30022
Potential Description:	SOIL, SV
Alias Name:	Cupertino Village Shopping Center
Alias Type:	Alternate Name
Alias Name:	316-05-050
Alias Type:	APN
Alias Name:	316-05-051
Alias Type:	APN
Alias Name:	316-05-052
Alias Type:	APN
Alias Name:	316-05-053

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Alias Type: APN
Alias Name: 316-05-056
Alias Type: APN
Alias Name: 316-05-072
Alias Type: APN
Alias Name: 316-45-017
Alias Type: APN
Alias Name: 110002732598
Alias Type: EPA (FRS #)
Alias Name: 110021144260
Alias Type: EPA (FRS #)
Alias Name: 201671
Alias Type: Project Code (Site Code)
Alias Name: 60000385
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: AB 389 Response Plan
Completed Date: 02/24/2014
Comments: The response action selected in the Response Plan is continued operation of the existing soil vapor extraction system that is on the Site. The system was installed as part of a pilot test. The Response Plan established both residential and commercial cleanup goals for tetrachloroethylene in subsurface and sub-slab soil vapor. PCE in soil vapor will be reduced to the extent practicable. A Land Use Covenant will be put in place to restrict any portion of the Site where the residential or unrestricted use cleanup goals are not achieved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 10/03/2011
Comments: Fact sheet informing local community about upcoming pilot testing of a soil vapor extraction (SVE) system at the Cupertino Village Cleaners Site (Site), located at 10989 Wolfe Road in Cupertino, CA, within the Cupertino Village Shopping Center.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 09/23/2011
Comments: SVE Pilot Work Plan approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 05/07/2012
Comments: The Status Report was prepared to document the installation and initial operation of the soil vapor extraction (SVE) pilot system installed at the Site to determine remediation technology appropriateness. The Status Report summarizes the performance of the SVE system during the initial three months of operation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Completed Document Type: Well Installation Workplan
Completed Date: 04/12/2013
Comments: Work Plan outlines procedures for the installation of soil vapor monitoring probes at the Former Cupertino Village Cleaners, located at 10989 North Wolfe Road, Cupertino, California.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/26/2013
Comments: The public notice announces the public comment period for the Draft Response Plan, which runs from January 6, 2014 through February 5, 2014. The Draft Response Plan proposes the continued operation of the pilot test soil vapor extraction system as the final response action for the Site. The public notice is scheduled to run in the Cupertino Courier on January 3, 2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 03/03/2014
Comments: The report documents the implementation of the Soil Vapor Extraction (SVE) System Pilot Test Work Plan, and describes the SVE system design and installation, describes the startup monitoring results, describes the pilot testing procedures, and presents the results and conclusions of the pilot testing program . DTSC agreed in its approval letter that soil vapor extraction is a feasible technology for the Site and directed that it be the remedy proposed in a Draft Response Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/22/2014
Comments: The Report summarizes the interim results of rebound testing being implemented to determine if the operation of the soil vapor extraction (SVE) system from November 2011 to March 2014 effectively remediated the subsurface volatile organic compound (VOC) contamination. The rebound test sampling results showed a generally increasing concentration trend for tetrachloroethylene across the Site, but soil gas concentrations continued to be below the site-specific commercial cleanup goals. The increasing VOC concentrations indicated that equilibrium has not been reached and rebound testing is to continue. The SVE system may need to be restarted if an increasing concentration trend is observed during the next sampling event.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/03/2015
Comments: Report summarizes the results of rebound testing performed during shutdown of the soil vapor extraction (SVE) system according to 2014 Response Plan for the former Cupertino Village Cleaners Site located at 10989 North Wolfe Road, Cupertino, California.

Completed Area Name: PROJECT WIDE

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 04/26/2016
Comments: Cupertino Village LP plans to restart the soil vapor extraction (SVE) system due to high concentrations of tetrachloroethylene in soil gas after rebound testing. The Work Plan describes the procedures to reconnect and restart the SVE system; the operation, maintenance, and monitoring of the SVE system; and the rebound testing and reporting of results. The SVE system will operate for three months and system monitor will occur monthly. Following 3 months of SVE system operation, the system will be shut down for rebound testing with soil gas sampling at 1, 2, and 3 month intervals.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/13/2019
Comments: The Report documents the implementation of the Soil Vapor Extraction System Restart Work Plan; and summarizes results of 18-months of soil vapor extraction (SVE) "pulse" operation and maintenance, including soil vapor monitoring and statistical analysis of analytical results since restart of the SVE system in 2017. DTSC concurred with the Report's recommendation to continue operation of the SVE system on a "pulse" operation mode for an additional six months, with soil vapor sampling on a bimonthly frequency basis, from January 2019 through July 2019.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation and Maintenance Report
Completed Date: 04/29/2021
Comments: Soil Vapor Extraction Extended Pulse Operation Report (Report) summarizes results of sampling and analysis of a soil vapor extraction treatment system installed at the Former Cupertino Village Cleaners site, between January 2019 and December 2020. Report recommends continuing the approved rebound test program in accordance with the March 14, 2014 Reponses Action Plan, the April 11, 2016 Soil Vapor Extraction System Restart Work Plan and the requirement set forth by the Department of Toxic Substances Control (DTSC) on December 9, 2020 regarding the November 16, 2020 Cupertino Village Cleaners Extended Pulse SVE operation Interim Data Submittal

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/09/2020
Comments: DTSC concurs with Cupertino Village Cleaners recommendations to shutting down the soil vapor extraction (SVE) system and initiating a rebound assessment in accordance with the approved Soil Vapor Extraction System Restart Work Plan (Northgate, 2016), and recommendations provided in the DTSC s Proven Technologies and Remedies Guidance - Remediation of Chlorinated Volatile Organic Compounds in Vadose Zone Soil (DTSC, 2010). The purpose of the rebound assessment is to evaluate whether the Cupertino Village Cleaners site s soil gas remedial action objectives (RAOs) have been achieved.

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/05/2021
Comments: The Technical Memorandum discuss the presence of tetrahydrofuran (THF) in soil vapor samples collected from soil vapor monitoring points and its association with the soil vapor extraction (SVE) system s polyvinyl chloride (PVC) piping off-gassing or a potential subsurface source at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/08/2020
Comments: The Technical Memorandum summarizes the accessibility and current condition of existing soil vapor monitoring points (SMPs) at the Site. DTSC concurs with the Technical Memorandum s recommendations of inclusion of SMPs VMW-1A and VMP-1AA as part of the Cupertino Village soil vapor extraction rebound testing program.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 12/08/2021
Comments: The Revised Final Work Plan provides the sampling methodology of indoor air quality (IAQ) sampling activities to be conducted at two commercial buildings (Buildings) located in the vicinity of the Site. One building is currently occupied by the 99 Ranch Market and the other by Good Samaritan United Methodist Church and associated Pre-School (Church Facility).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 12/16/2021
Comments: Soil gas samples collected as planned.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/22/2008
Comments: Letter sent to adjacent property notifying them of the date, time, and locations of the soil vapor samples planned to be collected along the fence line.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: California Land Reuse and Revitalization Agreement
Completed Date: 03/01/2007
Comments: DTSC entered into a CLRRA agreement

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/24/2018
Comments: DTSC annual oversight estimated cost of $21,649 is based on the cleanup activities that are expected to occur at the Site during the

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

fiscal year 18/19.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Project Management
Completed Date: 06/30/2021
Comments: Activity completed on June 30, 2021.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/21/2020
Comments: DTSC oversight cost estimate fiscal year 2020/2021.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/30/2019
Comments: In accordance with California Health and Safety Code Section 25269.5, the DTSC provided to the responsible party(s) a cost estimate and schedule for cleanup activities that are anticipated to the Site. The cost estimate is for the fiscal year 2019/2020 which started July 1, 2019 and ends June 30, 2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 08/27/2021
Comments: DTSC FY 21/22 Oversight Cost Estimate

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/22/2016
Comments: DTSC letter with oversight cost estimate for project activities for fiscal year 2016/2017. The anticipated project activities include the Soil Vapor Extraction Status Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/15/2006
Comments: Under the criteria of the Cal/EPA MOA, DTSC was determined the appropriate lead agency for the Cupertino Village Cleaners Project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/05/2006
Comments: As part of the AB 389 Process the appropriate agencies, including the host jurisdiction must be notified DTSC is negotiating a CLRRA Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 02/15/2006

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Comments:	The purpose of the Environmental Site Assessment Phase I is to identify recognized environmental conditions in connection with the Cupertino Village Cleaners site. The term recognized environmental conditions, as defined in ASTM Standard Practice E-1527-00, means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures, onto the property, or in the ground, groundwater, or surface water of the property.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Application
Completed Date:	10/31/2006
Comments:	Project is eligible for the AB 389 Process
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Workplan
Completed Date:	12/24/2007
Comments:	Investigation Workplan approved. Supplemental soil, soil vapor, and groundwater sampling will be conducted to further characterize contamination at the Site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Community Profile
Completed Date:	10/03/2008
Comments:	Community Profile completed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	01/05/2006
Comments:	Report was completed before DTSC involvement. Report submitted to DTSC as existing information.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice
Completed Date:	01/17/2008
Comments:	Work notice informing local community about soil and soil gas sampling at the Cupertino Village Cleaners Site, a former dry cleaner, located at 10989 Wolfe Road, Cupertino.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	02/29/2008
Comments:	February 2008 round of fieldwork completed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	01/28/2011
Comments:	Site Assessment Report indicates that PCE vapor plume at the Site

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

presents an elevated risk to human health and safety and the environment at the Site and PCE is migrating offsite. Further action will be required to remediate the contamination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 09/15/2008
Comments: Work Plan approved. Supplemental soil sampling is scheduled for September 30, 2008.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 12/26/2013
Comments: The fact sheet announces the public comment period for the Draft Response Plan, which runs from January 6, 2014 through February 5, 2014. The fact also describes the proposed response action for the Site, which is the continued operation of the pilot test soil vapor extraction.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 09/15/2008
Comments: Supplemental Soil Sampling scheduled for September 30, 2008.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/03/2009
Comments: Soil Vapor Sampling Work Plan approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 07/09/2009
Comments: Work Notice completed and will be mailed out on July 15, 2009.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/07/2013
Comments: Revised Response Plan submitted requested due to need to re-evaluate proposed remedy due to potential new future land uses.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/10/2014
Comments: Pursuant to California Health and Safety Code section 25395.96(c)(2), DTSC notified the host jurisdiction and other interested local agencies of the February 24,2014 approval of the Final Response Plan for the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Completed Document Type: Correspondence
Completed Date: 05/02/2013
Comments: Request to change the locations of two soil vapor probes due to potential disruptions to the 99 Ranch Market business and DTSC response that proposed new locations would not provide soil vapor data in the area where it is needed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/15/2012
Comments: Estimated fiscal year 2012-2013 annual DTSC oversight costs are $36,657.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/14/2013
Comments: Community representatives inquired about the status and schedule of the Response Action at the Site as well as the potential impact contamination at the Site may have on the proposed redevelopment of the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/02/2013
Comments: The estimated annual oversight cost for the 2013/14 fiscal year is $24,079.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/24/2014
Comments: Cupertino Village REW FY 14/15

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/22/2015
Comments: DTSC oversight annual oversight cost estimate fiscal year 2015/2016

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 02/24/2014
Comments: California Environmental Quality Act Notice of Exemption. Exception Status: Class 30 Categorical Exemption: California Code of Regulations title 14, section 15330.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/16/2011
Comments: Annual Oversight Cost Estimate completed.

Future Area Name: PROJECT WIDE

CUPERTINO VILLAGE CLEANERS (Continued) **S108054446**

Future Sub Area Name:	Not reported
Future Document Type:	Land Use Restriction
Future Due Date:	2023
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Certification
Future Due Date:	2023
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Removal Action Completion Report
Future Due Date:	2022
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Access Agreement
Schedule Due Date:	04/24/2022
Schedule Revised Date:	Not reported

CERS:

Name:	CUPERTINO VILLAGE CLEANERS
Address:	10989 NORTH WOLFE ROAD
City,State,Zip:	CUPERTINO, CA 95014-0619
Site ID:	502090
CERS ID:	110002732598
CERS Description:	US EPA Air Emission Inventory System (EIS)

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SUNNYVALE	S106112802	CONOCOPHILLIPS # 11213	1198 EL CAMINO REAL	94087	LUST, HIST LUST, Cortese
SUNNYVALE	S103473191	SHELL	925 FREMONT AVE	94087	LUST, HIST LUST, Cortese, HIST CORTESE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 84

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/01/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 9

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/22/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/08/2021
Date Data Arrived at EDR: 11/09/2021
Date Made Active in Reports: 01/28/2022
Number of Days to Update: 80

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 03/02/2022
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/15/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 09/14/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 11/23/2021
Number of Days to Update: 12

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 11/16/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/16/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 12/10/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/25/2022
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 84

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 84

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/17/2021
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/01/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/18/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/19/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/20/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/12/2021
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/29/2021
Date Data Arrived at EDR: 08/24/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 87

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/04/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/28/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/08/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 70

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/03/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/02/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/14/2021
Date Data Arrived at EDR: 12/15/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 85

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/04/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 95

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/22/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 78
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/16/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 77

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/17/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 84

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 80

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 80

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 11/09/2021
Date Made Active in Reports: 01/27/2022
Number of Days to Update: 79
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/14/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 79
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/09/2022
Next Scheduled EDR Contact: 06/26/2022
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/03/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/24/2022
Number of Days to Update: 79

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29
Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/13/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 84
Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 11/01/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 79

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/26/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 12/01/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 77

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 82

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 82

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/04/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 8

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 83

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/21/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/13/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 11

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/14/2021
Number of Days to Update: 89

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/24/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 01/26/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 01/14/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/08/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/14/2022
Date Data Arrived at EDR: 02/01/2022
Date Made Active in Reports: 04/18/2022
Number of Days to Update: 76

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/02/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 85

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/18/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 11/02/2021
Number of Days to Update: 90

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/02/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 77

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 79

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/23/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 81

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/24/2022
Number of Days to Update: 79

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/26/2022
Date Data Arrived at EDR: 01/27/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 77

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/11/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 81

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/07/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/14/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PATRICK HENRY AND PETERSON CAMPUS PHASE I ESA
1095 DUNFORD WAY
SUNNYVALE, CA 94087

TARGET PROPERTY COORDINATES

Latitude (North):	37.347049 - 37ˆ 20’ 49.38’’
Longitude (West):	122.005558 - 122ˆ 0’ 20.01’’
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	588081.1
UTM Y (Meters):	4133632.5
Elevation:	124 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12016429 CUPERTINO, CA
Version Date:	2018
Southeast Map:	12021561 SAN JOSE WEST, CA
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

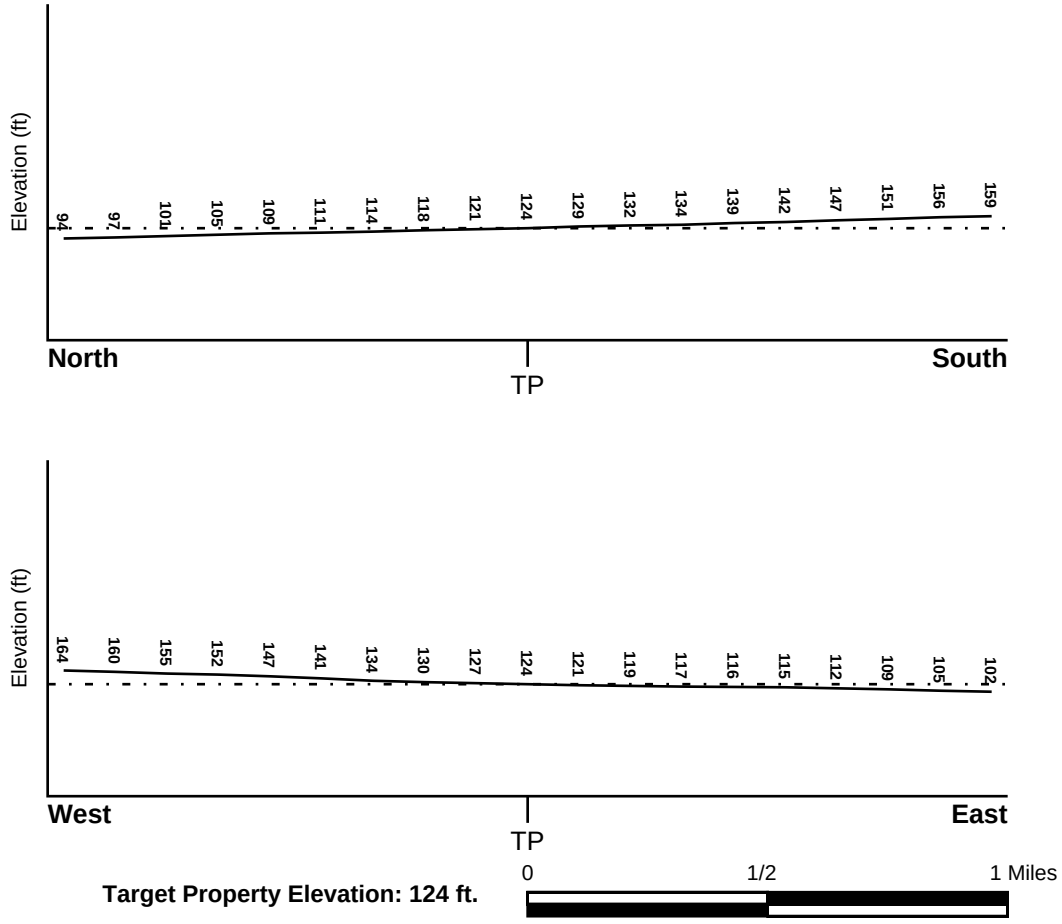
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06085C0207H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06085C0226H	FEMA FIRM Flood data
06085C0209H	FEMA FIRM Flood data
06085C0228H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CUPERTINO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1/2 - 1 Mile South
Site Name:	Siemens Component
Site EPA ID Number:	CAD980884217
Groundwater Flow Direction:	NOT AVAILABLE.
Inferred Depth to Water:	75 feet.
Hydraulic Connection:	The surficial and lower aquifers are hydraulically connected.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information is inferred in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	BOTELLA
Soil Surface Texture:	clay loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	MODERATE
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
2	9 inches	41 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60
3	41 inches	76 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: No Other Soil Types

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
R138	USGS40000182389	1/2 - 1 Mile West

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CADWR0000038191	0 - 1/8 Mile NNE
A2	CADDW0000020533	1/8 - 1/4 Mile SW
A3	CALLNL000001383	1/8 - 1/4 Mile SW
4	CAEDF0000070010	1/4 - 1/2 Mile SSW
B5	CAEDF0000086702	1/4 - 1/2 Mile South
B6	CAEDF0000129627	1/4 - 1/2 Mile South
7	CAEDF0000097886	1/4 - 1/2 Mile SSE
8	CAEDF0000037424	1/4 - 1/2 Mile South
C9	7725	1/4 - 1/2 Mile East
C10	CADDW0000005436	1/4 - 1/2 Mile East
C11	CALLNL000001166	1/4 - 1/2 Mile East
12	CADWR0000023229	1/4 - 1/2 Mile NE
D13	CAEDF0000056723	1/4 - 1/2 Mile South
D14	CAEDF0000084547	1/4 - 1/2 Mile South
E15	CAEDF0000074271	1/4 - 1/2 Mile SSE
16	CADWR0000032303	1/4 - 1/2 Mile SSW
F17	CADWR9000035096	1/4 - 1/2 Mile SE
G18	CAEDF0000084545	1/4 - 1/2 Mile South
G19	CAEDF0000119859	1/4 - 1/2 Mile South
F20	CADWR9000035094	1/4 - 1/2 Mile SE
F21	CADWR9000035095	1/4 - 1/2 Mile SE
F22	CADWR9000035093	1/4 - 1/2 Mile SE
D23	CAEDF0000111607	1/4 - 1/2 Mile South
H24	CAEDF0000106424	1/4 - 1/2 Mile NE
H25	CAEDF0000000905	1/4 - 1/2 Mile NE
I26	CAEDF0000103464	1/4 - 1/2 Mile SSW
H27	CAEDF0000012782	1/2 - 1 Mile NE
H28	CAEDF0000003374	1/2 - 1 Mile NE
E29	CAEDF0000086724	1/2 - 1 Mile SSE
J30	CAEDF0000075586	1/2 - 1 Mile SSE
J31	CAEDF0000141755	1/2 - 1 Mile SSE
H32	CAEDF0000065479	1/2 - 1 Mile NE
33	CAEDF0000069413	1/2 - 1 Mile SSE
H34	CAEDF0000137132	1/2 - 1 Mile NE
H35	CAEDF0000108637	1/2 - 1 Mile NE
H36	CAEDF0000125917	1/2 - 1 Mile NE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
37	CADWR0000010364	1/2 - 1 Mile West
J38	CAEDF0000070114	1/2 - 1 Mile South
J39	CAEDF0000064777	1/2 - 1 Mile South
J40	CAEDF0000137797	1/2 - 1 Mile South
J41	CAEDF0000127854	1/2 - 1 Mile South
H42	CAEDF0000035262	1/2 - 1 Mile NE
43	CADWR0000004518	1/2 - 1 Mile East
H44	CAEDF0000130846	1/2 - 1 Mile NE
H45	CAEDF0000072411	1/2 - 1 Mile NE
H46	CAEDF0000142431	1/2 - 1 Mile NE
H47	CAEDF0000047613	1/2 - 1 Mile NE
H48	CAEDF0000070766	1/2 - 1 Mile NE
H49	CAEDF0000066638	1/2 - 1 Mile NE
H50	CAEDF0000035301	1/2 - 1 Mile NE
H51	CAEDF0000079215	1/2 - 1 Mile NE
H52	CAEDF0000100093	1/2 - 1 Mile NE
H53	CAEDF0000084603	1/2 - 1 Mile NE
H54	CAEDF0000017922	1/2 - 1 Mile NE
H55	CAEDF0000141405	1/2 - 1 Mile NE
H56	CAEDF0000140870	1/2 - 1 Mile NE
H57	CAEDF0000127296	1/2 - 1 Mile NE
I58	CAEDF0000063702	1/2 - 1 Mile South
I59	CAEDF0000024399	1/2 - 1 Mile South
H60	CAEDF0000126411	1/2 - 1 Mile NE
H61	CAEDF0000062095	1/2 - 1 Mile NE
K62	CAEDF0000035540	1/2 - 1 Mile NE
L63	CAEDF0000084538	1/2 - 1 Mile NW
K64	CAEDF0000035319	1/2 - 1 Mile NE
L65	CAEDF0000119562	1/2 - 1 Mile NW
L66	CAEDF0000108990	1/2 - 1 Mile NW
K67	CAEDF0000058521	1/2 - 1 Mile NE
K68	CAEDF0000060765	1/2 - 1 Mile NE
L69	CAEDF0000136600	1/2 - 1 Mile WNW
M70	CAEDF0000008869	1/2 - 1 Mile South
M71	CAEDF0000076910	1/2 - 1 Mile South
M72	CAEDF0000121387	1/2 - 1 Mile South
L73	CAEDF0000121167	1/2 - 1 Mile NW
L74	CAEDF0000082350	1/2 - 1 Mile NW
L75	CAEDF0000015273	1/2 - 1 Mile NW
L76	CAEDF0000132510	1/2 - 1 Mile WNW
L77	CAEDF0000080372	1/2 - 1 Mile WNW
K78	CAEDF0000000647	1/2 - 1 Mile NE
L79	CAEDF0000098397	1/2 - 1 Mile NW
L80	CAEDF0000033393	1/2 - 1 Mile NW
L81	CAEDF0000070654	1/2 - 1 Mile NW
M82	CAEDF0000135025	1/2 - 1 Mile South
83	CADWR0000032326	1/2 - 1 Mile North
L84	CAEDF0000113694	1/2 - 1 Mile NW
L85	CAEDF0000052335	1/2 - 1 Mile NW
N86	CAEDF0000036185	1/2 - 1 Mile NW
87	CAEDF0000143009	1/2 - 1 Mile NE
N88	CAEDF0000014613	1/2 - 1 Mile NW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
M89	CAEDF0000124559	1/2 - 1 Mile South
M90	CAEDF0000116911	1/2 - 1 Mile South
M91	CAEDF0000086599	1/2 - 1 Mile South
M92	CAEDF0000143316	1/2 - 1 Mile South
N93	CAEDF0000076639	1/2 - 1 Mile NW
M94	CAEDF0000070353	1/2 - 1 Mile South
M95	CAEDF0000047649	1/2 - 1 Mile South
L96	CAEDF0000021861	1/2 - 1 Mile WNW
97	CAEDF0000096812	1/2 - 1 Mile South
N98	CAEDF0000063072	1/2 - 1 Mile NW
L99	CAEDF0000073221	1/2 - 1 Mile WNW
L100	CAEDF0000047188	1/2 - 1 Mile NW
M101	CAEDF0000113692	1/2 - 1 Mile South
O102	CAEDF0000090297	1/2 - 1 Mile SSE
O103	CAEDF0000013900	1/2 - 1 Mile SSE
M104	CAEDF0000014037	1/2 - 1 Mile South
M105	CAEDF0000060145	1/2 - 1 Mile South
M106	CAEDF0000007531	1/2 - 1 Mile South
P107	CAEDF0000043827	1/2 - 1 Mile South
P108	CAEDF0000132061	1/2 - 1 Mile South
109	CADWR0000019077	1/2 - 1 Mile NNE
P110	CAEDF0000085347	1/2 - 1 Mile South
P111	CAEDF0000121811	1/2 - 1 Mile South
M112	CAEDF0000052193	1/2 - 1 Mile South
M113	CAEDF0000084961	1/2 - 1 Mile South
P114	CAEDF0000034620	1/2 - 1 Mile South
Q115	CAEDF0000130681	1/2 - 1 Mile South
Q116	CAEDF0000110223	1/2 - 1 Mile South
P117	CAEDF0000122475	1/2 - 1 Mile South
P118	CAEDF0000091760	1/2 - 1 Mile South
P119	CAEDF0000132809	1/2 - 1 Mile South
P120	CAEDF0000054419	1/2 - 1 Mile South
P121	CAEDF0000015469	1/2 - 1 Mile South
P122	CAEDF0000003112	1/2 - 1 Mile South
P123	CAEDF0000056020	1/2 - 1 Mile South
P124	CAEDF0000020055	1/2 - 1 Mile South
P125	CAEDF0000064721	1/2 - 1 Mile South
P126	CAEDF0000043138	1/2 - 1 Mile South
P127	CAEDF0000001398	1/2 - 1 Mile South
128	CADPR0000004809	1/2 - 1 Mile SW
P129	CAEDF0000016042	1/2 - 1 Mile South
P130	CAEDF0000124595	1/2 - 1 Mile South
P131	CAEDF0000019758	1/2 - 1 Mile South
P132	CAEDF0000133775	1/2 - 1 Mile South
Q133	CAEDF0000059291	1/2 - 1 Mile South
Q134	CAEDF0000088811	1/2 - 1 Mile South
P135	CAEDF0000000730	1/2 - 1 Mile South
P136	CAEDF0000016748	1/2 - 1 Mile South
R137	CAUSGSN00018640	1/2 - 1 Mile West
P139	CAEDF0000032325	1/2 - 1 Mile South
Q140	CAEDF0000075262	1/2 - 1 Mile South
Q141	CAEDF0000031245	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
R142	CADDW0000005629	1/2 - 1 Mile West
R143	CALLNL000001472	1/2 - 1 Mile West
Q144	CAEDF0000114083	1/2 - 1 Mile South
Q145	CAEDF0000036101	1/2 - 1 Mile South
P146	CAEDF0000029729	1/2 - 1 Mile South
P147	CAEDF0000091223	1/2 - 1 Mile South
P148	CAEDF0000017003	1/2 - 1 Mile South
P149	CAEDF0000013954	1/2 - 1 Mile South
P150	CAEDF0000138104	1/2 - 1 Mile South
Q151	CAEDF0000110449	1/2 - 1 Mile South
P152	CAEDF0000108204	1/2 - 1 Mile South
Q153	CAEDF0000110884	1/2 - 1 Mile South
Q154	CAEDF0000080742	1/2 - 1 Mile South
P155	CAEDF0000065166	1/2 - 1 Mile South
P156	CAEDF0000075183	1/2 - 1 Mile South
P157	CAEDF0000141077	1/2 - 1 Mile South
P158	CAEDF0000140285	1/2 - 1 Mile South
159	7728	1/2 - 1 Mile WNW
Q160	CAEDF0000002171	1/2 - 1 Mile South
S161	CAEDF0000009052	1/2 - 1 Mile South
S162	CAEDF0000064935	1/2 - 1 Mile South
Q163	CAEDF0000055071	1/2 - 1 Mile South
S164	CAEDF0000105857	1/2 - 1 Mile South
Q165	CAEDF0000005742	1/2 - 1 Mile South
S166	CAEDF0000068203	1/2 - 1 Mile South
S167	CAEDF0000082602	1/2 - 1 Mile South
S168	CAEDF0000050738	1/2 - 1 Mile South
S169	CAEDF0000082831	1/2 - 1 Mile South
R170	CADWR0000028371	1/2 - 1 Mile West
S171	CAEDF0000104302	1/2 - 1 Mile South
S172	CAEDF0000089800	1/2 - 1 Mile South
S173	CAEDF0000011690	1/2 - 1 Mile South
S174	CAEDF0000081285	1/2 - 1 Mile South
S175	CAEDF0000069604	1/2 - 1 Mile South
S176	CAEDF0000058931	1/2 - 1 Mile South
T177	CAEDF0000120111	1/2 - 1 Mile South
S178	CAEDF0000106962	1/2 - 1 Mile South
179	CADDW0000017448	1/2 - 1 Mile SW
T180	CAEDF0000129245	1/2 - 1 Mile South
T181	CAEDF0000122329	1/2 - 1 Mile South
T182	CAEDF0000122190	1/2 - 1 Mile South
T183	CAEDF0000040962	1/2 - 1 Mile South
T184	CAEDF0000127960	1/2 - 1 Mile South
S185	CAEDF0000045926	1/2 - 1 Mile South
S186	CAEDF0000050337	1/2 - 1 Mile South
S187	CAEDF0000128440	1/2 - 1 Mile South
T188	CAEDF0000143334	1/2 - 1 Mile South
T189	CAEDF0000136655	1/2 - 1 Mile South
T190	CAEDF0000002485	1/2 - 1 Mile South
T191	CAEDF0000065466	1/2 - 1 Mile South
T192	CAEDF0000086329	1/2 - 1 Mile South
T193	CAEDF0000065545	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

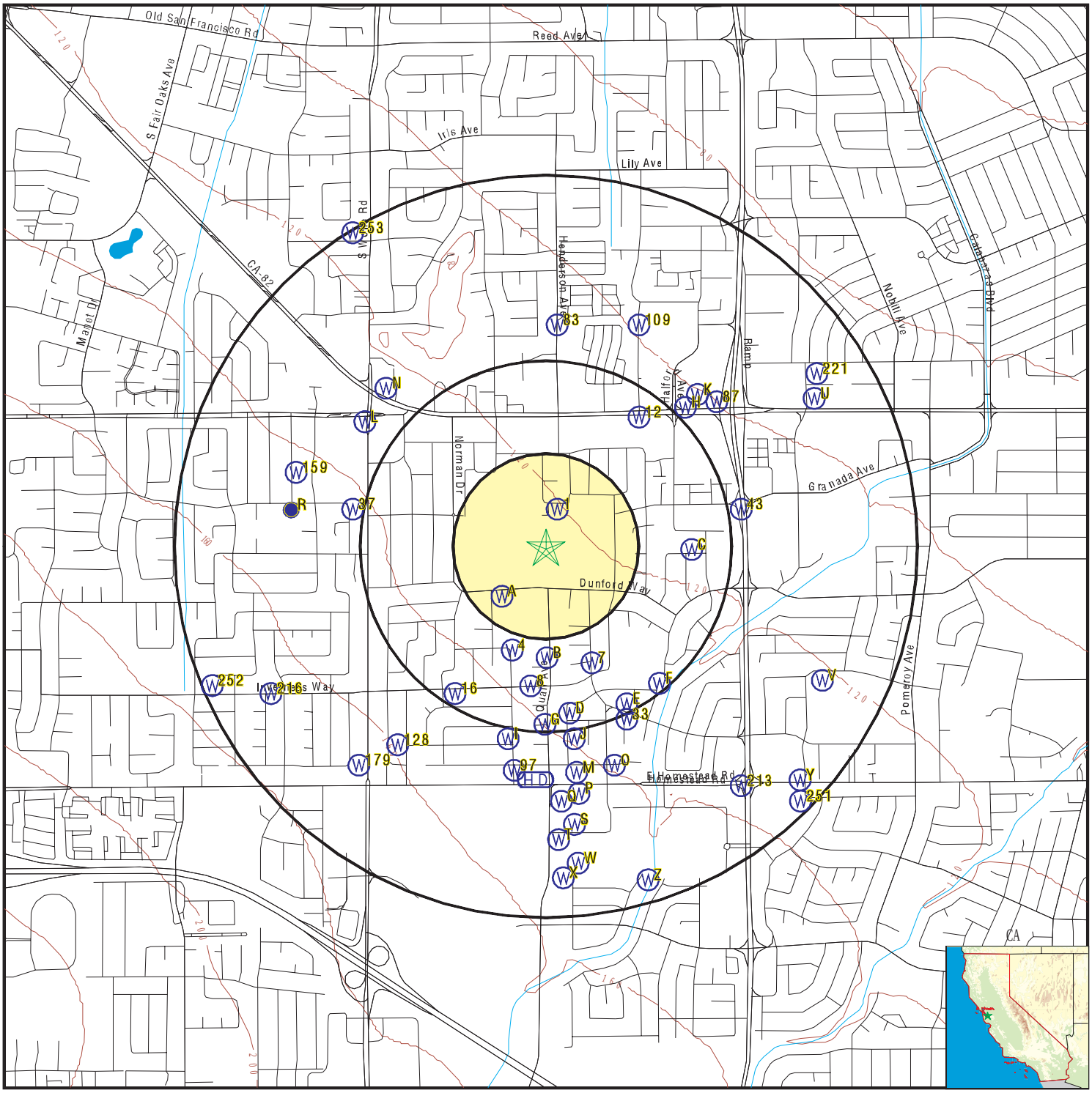
MAP ID	WELL ID	LOCATION FROM TP
T194	CAEDF0000075802	1/2 - 1 Mile South
U195	CAEDF0000090800	1/2 - 1 Mile ENE
U196	CAEDF0000041723	1/2 - 1 Mile ENE
U197	CAEDF0000111026	1/2 - 1 Mile ENE
U198	CAEDF0000067759	1/2 - 1 Mile ENE
T199	CAEDF0000046658	1/2 - 1 Mile South
U200	CAEDF0000074990	1/2 - 1 Mile ENE
U201	CAEDF0000021550	1/2 - 1 Mile ENE
V202	7730	1/2 - 1 Mile ESE
T203	CAEDF0000069056	1/2 - 1 Mile South
T204	CAEDF0000140485	1/2 - 1 Mile South
U205	CAEDF0000097457	1/2 - 1 Mile ENE
V206	CALLNL000001393	1/2 - 1 Mile ESE
W207	CAEDF0000070530	1/2 - 1 Mile South
V208	CAUSGSN00016238	1/2 - 1 Mile ESE
V209	CAUSGS000000740	1/2 - 1 Mile ESE
U210	CAEDF0000036922	1/2 - 1 Mile ENE
U211	CAEDF0000127232	1/2 - 1 Mile ENE
U212	CAEDF0000053441	1/2 - 1 Mile ENE
213	CADWR0000027889	1/2 - 1 Mile SE
V214	CADDW0000015925	1/2 - 1 Mile ESE
U215	CAEDF0000140451	1/2 - 1 Mile ENE
216	CADWR0000035721	1/2 - 1 Mile WSW
W217	CAEDF0000048361	1/2 - 1 Mile South
V218	CADWR0000032774	1/2 - 1 Mile ESE
U219	CAEDF0000067199	1/2 - 1 Mile ENE
U220	CAEDF0000003869	1/2 - 1 Mile ENE
221	CAEDF0000048049	1/2 - 1 Mile ENE
W222	CAEDF0000088582	1/2 - 1 Mile South
W223	CAEDF0000094647	1/2 - 1 Mile South
X224	CAEDF0000044033	1/2 - 1 Mile South
X225	CAEDF0000104020	1/2 - 1 Mile South
Y226	CAEDF0000122632	1/2 - 1 Mile SE
Y227	CAEDF0000052415	1/2 - 1 Mile SE
Y228	CAEDF0000080349	1/2 - 1 Mile SE
Y229	CAEDF0000116796	1/2 - 1 Mile SE
Y230	CAEDF0000011366	1/2 - 1 Mile SE
Y231	CAEDF0000063541	1/2 - 1 Mile SE
Y232	CAEDF0000131538	1/2 - 1 Mile SE
Y233	CAEDF0000062017	1/2 - 1 Mile SE
Y234	CAEDF0000059529	1/2 - 1 Mile SE
Y235	CAEDF0000050784	1/2 - 1 Mile SE
Y236	CAEDF0000119075	1/2 - 1 Mile SE
Y237	CAEDF0000085223	1/2 - 1 Mile SE
Y238	CAEDF0000062594	1/2 - 1 Mile SE
Y239	CAEDF0000102208	1/2 - 1 Mile SE
Y240	CAEDF0000033175	1/2 - 1 Mile SE
Z241	CALLNL000001145	1/2 - 1 Mile SSE
Z242	CADDW0000002998	1/2 - 1 Mile SSE
Z243	CAUSGS000002634	1/2 - 1 Mile SSE
Z244	CAUSGSN00011925	1/2 - 1 Mile SSE
Y245	CAEDF0000142389	1/2 - 1 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Z246	7732	1/2 - 1 Mile SSE
Y247	CAEDF0000056345	1/2 - 1 Mile SE
Y248	CAEDF0000095773	1/2 - 1 Mile SE
Y249	CAEDF0000049840	1/2 - 1 Mile SE
Y250	CAEDF0000122208	1/2 - 1 Mile SE
251	CAEDF0000108786	1/2 - 1 Mile SE
252	7842	1/2 - 1 Mile WSW
253	CADWR0000031769	1/2 - 1 Mile NNW

PHYSICAL SETTING SOURCE MAP - 6951305.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Patrick Henry and Peterson Campus Phase I ESA	CLIENT:	ARCADIS U.S., Inc.
ADDRESS:	1095 Dunford Way Sunnyvale CA 94087	CONTACT:	Divya Mehta
LAT/LONG:	37.347049 / 122.005558	INQUIRY #:	6951305.2s
		DATE:	April 22, 2022 10:16 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
NNE
0 - 1/8 Mile
Lower

CA WELLS **CADWR0000038191**

Well ID:	07S01W05N002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W05N002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W05N002M&store_num=		
GeoTracker Data:	Not Reported		

A2
SW
1/8 - 1/4 Mile
Higher

CA WELLS **CADDW0000020533**

Well ID:	4310014-008	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	RAYNOR WELL	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4310014-008&store_num=		
GeoTracker Data:	Not Reported		

A3
SW
1/8 - 1/4 Mile
Higher

CA WELLS **CALLNL000001383**

Well ID:	101185	Well Type:	MUNICIPAL
Source:	Lawrence Livermore National Laboratory		
Other Name:	07S/01W-06R02 M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	Not Reported		
GeoTracker Data:	Not Reported		

Chemical:	Helium-4	Results:	.000000171804
Units:	cm3STP/g	Date:	08/13/2002
Chemical:	Krypton	Results:	.000000120807
Units:	cm3STP/g	Date:	08/13/2002
Chemical:	Argon	Results:	.000648901
Units:	cm3STP/g	Date:	08/13/2002
Chemical:	Xenon	Results:	.0000000149668
Units:	cm3STP/g	Date:	08/13/2002
Chemical:	Helium-3/Helium-4	Results:	.00000147585
Units:	atom ratio	Date:	08/13/2002

Chemical:	Neon	Results:	.000000689705
Units:	cm3STP/g	Date:	08/13/2002
Chemical:	Tritium (Hydrogen 3)	Results:	7
Units:	pCi/L	Date:	01/07/2002

4
SSW **CA WELLS** **CAEDF0000070010**
1/4 - 1/2 Mile
Higher

Well ID:	SL720641214-PG-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	PG-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=PG-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=PG-1B		

B5
South **CA WELLS** **CAEDF0000086702**
1/4 - 1/2 Mile
Higher

Well ID:	SL720641214-S-3B	Well Type:	MONITORING
Source:	EDF	Other Name:	S-3B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=S-3B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=S-3B		

B6
South **CA WELLS** **CAEDF0000129627**
1/4 - 1/2 Mile
Higher

Well ID:	SL720641214-S-4C	Well Type:	MONITORING
Source:	EDF	Other Name:	S-4C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=S-4C&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=S-4C		

7
SSE **CA WELLS** **CAEDF0000097886**
1/4 - 1/2 Mile
Higher

Well ID:	SL720641214-LH-1C	Well Type:	MONITORING
Source:	EDF	Other Name:	LH-1C
GAMA PFAS Testing:	Not Reported		

Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=LH-1C&store_num=
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=LH-1C

8
South **CA WELLS** **CAEDF0000037424**
1/4 - 1/2 Mile
Higher

Well ID:	SL720641214-IQ-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	IQ-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=IQ-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=IQ-1B		

C9
East **CA WELLS** **7725**
1/4 - 1/2 Mile
Lower

Seq:	7725	Prim sta c:	07S/01W-05P02 M
Frds no:	4310012026	County:	43
District:	05	User id:	HEN
System no:	4310012	Water type:	G
Source nam:	WELL 24	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372049.0	Longitude:	1215951.0
Precision:	5	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4310012	System nam:	City Of Santa Clara
Hqname:	Not Reported	Address:	1500 WARBURTON AVE
City:	SANTA CLARA	State:	CA
Zip:	95050	Zip ext:	Not Reported
Pop serv:	94925	Connection:	23702
Area serve:	SANTA CLARA CITY		

Sample date:	16-AUG-17	Finding:	3.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	28-SEP-16	Finding:	74.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	28-SEP-16	Finding:	3.7
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	28-SEP-16	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		

Sample date:	28-SEP-16	Finding:	1.4
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	28-SEP-16	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	28-SEP-16	Finding:	720.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	240.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	290.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	3.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	28-SEP-16	Finding:	280.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	24.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	32.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	1.3
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	57.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	31.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	28-SEP-16	Finding:	0.16
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	28-SEP-16	Finding:	440.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	28-SEP-16	Finding:	1.1
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported

Dlr:	0.		
Sample date:	22-AUG-16	Finding:	3.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-APR-13	Finding:	690.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	11-APR-13	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-APR-13	Finding:	220.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	280.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	290.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	76.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	24.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	34.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	1.5
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	51.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	28.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	11-APR-13	Finding:	0.13
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	11-APR-13	Finding:	7.5
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	11-APR-13	Finding:	3.1
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

Sample date:	11-APR-13	Finding:	1.3
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	420.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	1.2
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-APR-13	Finding:	0.35
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	11-APR-13	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-APR-13	Finding:	3800.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-APR-13	Finding:	3.
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	11-APR-13	Finding:	3.
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	3.
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	230.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	280.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	300.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	80.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	25.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	34.
Chemical:	SODIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	14-JAN-13	Finding:	1.4
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	53.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	28.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	14-JAN-13	Finding:	0.13
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	14-JAN-13	Finding:	2.6
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	1.
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	410.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	1.
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	9500.
Chemical:	CARBON DIOXIDE	Report units:	UG/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	0.76
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	14-JAN-13	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	3800.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-JAN-13	Finding:	3.
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database	EDR ID Number
CA WELLS	**CADDW0000005436**

C10
East
1/4 - 1/2 Mile
Lower

Well ID:	4310012-026	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 24	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4310012-026&store_num=		
GeoTracker Data:	Not Reported		

Database	EDR ID Number
CA WELLS	**CALLNL000001166**

C11
East
1/4 - 1/2 Mile
Lower

Well ID:	101017	Well Type:	MUNICIPAL
Source:	Lawrence Livermore National Laboratory		
Other Name:	07S/01W-05P02 M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	Not Reported		
GeoTracker Data:	Not Reported		

Chemical:	Krypton	Results:	.000000113374
Units:	cm3STP/g	Date:	10/03/2001
Chemical:	Xenon	Results:	.0000000101761
Units:	cm3STP/g	Date:	10/03/2001
Chemical:	Argon	Results:	.00051781
Units:	cm3STP/g	Date:	10/03/2001
Chemical:	Helium-3/Helium-4	Results:	.00000147087
Units:	atom ratio	Date:	10/03/2001
Chemical:	Neon	Results:	.000000726747
Units:	cm3STP/g	Date:	10/03/2001
Chemical:	Helium-4	Results:	.00000018103
Units:	cm3STP/g	Date:	10/03/2001
Chemical:	Tritium (Hydrogen 3)	Results:	7.7
Units:	pCi/L	Date:	04/17/2002

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

12
NE
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR0000023229**

Well ID:	07S01W05L001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W05L001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W05L001M&store_num=		
GeoTracker Data:	Not Reported		

D13
South
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000056723**

Well ID:	SL720641214-RK-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	RK-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=RK-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=RK-1B		

D14
South
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000084547**

Well ID:	SL720641214-RK-2C	Well Type:	MONITORING
Source:	EDF	Other Name:	RK-2C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=RK-2C&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=RK-2C		

E15
SSE
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000074271**

Well ID:	SL720641214-KB-2B	Well Type:	MONITORING
Source:	EDF	Other Name:	KB-2B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=KB-2B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=KB-2B		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

16
SSW
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR0000032303**

Well ID:	07S01W07H001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W07H001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W07H001M&store_num=		
GeoTracker Data:	Not Reported		

F17
SE
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR9000035096**

State Well #:	07S01W08C003M	Station ID:	47636
Well Name:	07S01W08C003	Basin Name:	Santa Clara
Well Use:	Observation	Well Type:	Single Well
Well Depth:	398	Well Completion Rpt #:	268801

G18
South
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000084545**

Well ID:	SL720641214-LQ-2B	Well Type:	MONITORING
Source:	EDF	Other Name:	LQ-2B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=LQ-2B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=LQ-2B		

G19
South
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000119859**

Well ID:	SL720641214-LQ-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	LQ-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=LQ-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=LQ-1B		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F20
SE
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR9000035094**

State Well #:	07S01W08D001M	Station ID:	47637
Well Name:	07S01W08D001	Basin Name:	Santa Clara
Well Use:	Observation	Well Type:	Single Well
Well Depth:	480	Well Completion Rpt #:	202483

F21
SE
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR9000035095**

State Well #:	07S01W08D003M	Station ID:	47639
Well Name:	07S01W08D003	Basin Name:	Santa Clara
Well Use:	Observation	Well Type:	Single Well
Well Depth:	440	Well Completion Rpt #:	202482

F22
SE
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR9000035093**

State Well #:	07S01W08D002M	Station ID:	47638
Well Name:	07S01W08D002	Basin Name:	Santa Clara
Well Use:	Observation	Well Type:	Single Well
Well Depth:	345	Well Completion Rpt #:	202481

D23
South
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000111607**

Well ID:	SL720641214-KR-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	KR-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=KR-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=KR-1B		

H24
NE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000106424**

Well ID:	T0608500379-MW-B	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500379&assigned_name=MW-B&store_num=		

GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500379&assigned_name=MW-B

H25
NE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000000905**

Well ID:	T0608500379-MW-A	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500379&assigned_name=MW-A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500379&assigned_name=MW-A		

I26
SSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000103464**

Well ID:	SL720641214-KP-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	KP-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=KP-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=KP-1B		

H27
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000012782**

Well ID:	T0608500379-MW-C	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500379&assigned_name=MW-C&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500379&assigned_name=MW-C		

H28
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000003374**

Well ID:	T0608500379-MW-D	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500379&assigned_name=MW-D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500379&assigned_name=MW-D		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E29
SSE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000086724**

Well ID:	SL720641214-S-5B	Well Type:	MONITORING
Source:	EDF	Other Name:	S-5B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=S-5B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=S-5B		

J30
SSE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000075586**

Well ID:	SL720641214-MW-OS-5A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-5A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-5A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-5A3		

J31
SSE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000141755**

Well ID:	SL721101218-MW-OS-5A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-5A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-5A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-5A3		

H32
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000065479**

Well ID:	T0608500379-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500379&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500379&assigned_name=MW-1		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

33
SSE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000069413**

Well ID:	SL720641214-S-6C	Well Type:	MONITORING
Source:	EDF	Other Name:	S-6C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=S-6C&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=S-6C		

H34
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000137132**

Well ID:	T0608501405-MW7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW7		

H35
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000108637**

Well ID:	T0608501405-MW1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW1		

H36
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000125917**

Well ID:	T0608501405-DTB13	Well Type:	MONITORING
Source:	EDF	Other Name:	DTB13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=DTB13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=DTB13		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

37
West
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000010364**

Well ID:	07S01W06Q001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W06Q001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W06Q001M&store_num=		
GeoTracker Data:	Not Reported		

J38
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000070114**

Well ID:	SL720641214-MW-OS-4A4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-4A4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-4A4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-4A4		

J39
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000064777**

Well ID:	SL721101218-MW-OS-4A4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-4A4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-4A4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-4A4		

J40
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000137797**

Well ID:	SL721101218-MW-OS-4A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-4A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-4A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-4A3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

J41
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000127854**

Well ID:	SL720641214-MW-OS-4A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-4A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-4A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-4A3		

H42
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000035262**

Well ID:	T0608501405-MW3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW3		

43
East
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000004518**

Well ID:	07S01W05Q002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W05Q002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W05Q002M&store_num=		
GeoTracker Data:	Not Reported		

H44
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000130846**

Well ID:	T0608501405-RW4	Well Type:	MONITORING
Source:	EDF	Other Name:	RW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=RW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=RW4		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H45
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000072411**

Well ID:	T0608501405-DTB14	Well Type:	MONITORING
Source:	EDF	Other Name:	DTB14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=DTB14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=DTB14		

H46
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000142431**

Well ID:	T0608501405-RW5	Well Type:	MONITORING
Source:	EDF	Other Name:	RW5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=RW5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=RW5		

H47
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000047613**

Well ID:	T0608501405-DTB12	Well Type:	MONITORING
Source:	EDF	Other Name:	DTB12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=DTB12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=DTB12		

H48
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000070766**

Well ID:	T0608501405-RW1	Well Type:	MONITORING
Source:	EDF	Other Name:	RW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=RW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=RW1		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H49
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000066638**

Well ID:	T0608501405-VE1	Well Type:	MONITORING
Source:	EDF	Other Name:	VE1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=VE1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=VE1		

H50
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000035301**

Well ID:	T0608501405-AS1	Well Type:	MONITORING
Source:	EDF	Other Name:	AS1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=AS1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=AS1		

H51
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000079215**

Well ID:	T0608501405-VE2	Well Type:	MONITORING
Source:	EDF	Other Name:	VE2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=VE2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=VE2		

H52
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000100093**

Well ID:	T0608501405-DTB15	Well Type:	MONITORING
Source:	EDF	Other Name:	DTB15
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=DTB15&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=DTB15		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H53
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000084603**

Well ID:	T0608501405-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW2		

H54
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000017922**

Well ID:	T0608501405-DTB16	Well Type:	MONITORING
Source:	EDF	Other Name:	DTB16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=DTB16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=DTB16		

H55
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000141405**

Well ID:	T0608501405-VE3	Well Type:	MONITORING
Source:	EDF	Other Name:	VE3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=VE3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=VE3		

H56
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000140870**

Well ID:	T0608501405-RW3	Well Type:	MONITORING
Source:	EDF	Other Name:	RW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=RW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=RW3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H57
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000127296**

Well ID:	T0608501405-RW2	Well Type:	MONITORING
Source:	EDF	Other Name:	RW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=RW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=RW2		

I58
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000063702**

Well ID:	SL720641214-PL-2C	Well Type:	MONITORING
Source:	EDF	Other Name:	PL-2C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=PL-2C&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=PL-2C		

I59
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000024399**

Well ID:	SL720641214-PL-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	PL-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=PL-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=PL-1B		

H60
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000126411**

Well ID:	T0608501405-MW4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW4		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H61
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000062095**

Well ID:	T0608501405-VE4	Well Type:	MONITORING
Source:	EDF	Other Name:	VE4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=VE4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=VE4		

K62
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000035540**

Well ID:	T0608501405-MW10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW10		

L63
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000084538**

Well ID:	T0608501540-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-4		

K64
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000035319**

Well ID:	T0608501405-MW5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L65
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000119562**

Well ID:	T0608501540-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-5		

L66
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000108990**

Well ID:	T0608501540-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-10		

K67
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000058521**

Well ID:	T0608501405-MW6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW6		

K68
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000060765**

Well ID:	T0608501405-MW11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW11		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L69
WNW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000136600**

Well ID:	T0608501540-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-7		

M70
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000008869**

Well ID:	SL720641214-S-1A	Well Type:	MONITORING
Source:	EDF	Other Name:	S-1A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=S-1A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=S-1A		

M71
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000076910**

Well ID:	SL720641214-S-2B	Well Type:	MONITORING
Source:	EDF	Other Name:	S-2B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=S-2B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=S-2B		

M72
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000121387**

Well ID:	SL720641214-LR-3C	Well Type:	MONITORING
Source:	EDF	Other Name:	LR-3C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=LR-3C&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=LR-3C		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L73
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000121167**

Well ID:	T0608501540-EW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	EW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=EW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=EW-4		

L74
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000082350**

Well ID:	T0608501540-MW-13	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-13		

L75
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000015273**

Well ID:	T0608501540-EW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	EW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=EW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=EW-1		

L76
WNW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000132510**

Well ID:	T0608501540-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-2		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L77
WNW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000080372**

Well ID:	T0608501540-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-12		

K78
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000000647**

Well ID:	T0608501405-MW9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW9		

L79
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000098397**

Well ID:	T0608501540-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-1		

L80
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000033393**

Well ID:	T0608501540-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-6		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L81
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000070654**

Well ID:	T0608501540-EW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	EW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=EW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=EW-3		

M82
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000135025**

Well ID:	SL720641214-LR-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	LR-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=LR-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=LR-1B		

83
North
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000032326**

Well ID:	07S01W05E001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W05E001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W05E001M&store_num=		
GeoTracker Data:	Not Reported		

L84
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000113694**

Well ID:	T0608501540-EW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	EW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=EW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=EW-2		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L85
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000052335**

Well ID:	T0608501540-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-11		

N86
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000036185**

Well ID:	T0608587185-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608587185&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608587185&assigned_name=MW-3		

87
NE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000143009**

Well ID:	T0608501405-MW8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501405&assigned_name=MW8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501405&assigned_name=MW8		

N88
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000014613**

Well ID:	T0608587185-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608587185&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608587185&assigned_name=MW-1		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M89
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000124559**

Well ID:	SL721101218-MW-OS-3A4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-3A4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-3A4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-3A4		

M90
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000116911**

Well ID:	SL720641214-MW-OS-3A4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-3A4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-3A4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-3A4		

M91
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000086599**

Well ID:	SL720641214-MW-OS-3A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-3A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-3A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-3A3		

M92
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000143316**

Well ID:	SL721101218-MW-OS-3A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-3A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-3A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-3A3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

N93
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000076639**

Well ID:	T0608587185-MW-13	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608587185&assigned_name=MW-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608587185&assigned_name=MW-13		

M94
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000070353**

Well ID:	SL721101218-MW-OS-3A1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-3A1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-3A1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-3A1		

M95
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000047649**

Well ID:	SL720641214-MW-OS-3A1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-3A1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-3A1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-3A1		

L96
WNW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000021861**

Well ID:	T0608501540-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

97
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000096812**

Well ID:	SL720641214-PH-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	PH-1B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=PH-1B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=PH-1B		

N98
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000063072**

Well ID:	T0608587185-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608587185&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608587185&assigned_name=MW-2		

L99
WNW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000073221**

Well ID:	T0608501540-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-8		

L100
NW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000047188**

Well ID:	T0608501540-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501540&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501540&assigned_name=MW-9		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M101
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000113692**

Well ID:	SL720641214-QH-1A	Well Type:	MONITORING
Source:	EDF	Other Name:	QH-1A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=QH-1A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=QH-1A		

O102
SSE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000090297**

Well ID:	SL720641214-LS-2B	Well Type:	MONITORING
Source:	EDF	Other Name:	LS-2B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=LS-2B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=LS-2B		

O103
SSE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000013900**

Well ID:	SL720641214-LS-1A	Well Type:	MONITORING
Source:	EDF	Other Name:	LS-1A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=LS-1A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=LS-1A		

M104
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000014037**

Well ID:	SL721101218-MW-OS-1A1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-1A1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-1A1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-1A1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M105
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000060145**

Well ID:	SL720641214-MW-OS-2A1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-2A1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-2A1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-2A1		

M106
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000007531**

Well ID:	SL721101218-MW-OS-2A1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-2A1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-2A1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-2A1		

P107
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000043827**

Well ID:	SL720641214-MW-OS-2A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-2A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-2A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-2A3		

P108
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000132061**

Well ID:	SL721101218-MW-OS-2A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-2A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-2A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-2A3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

109
NNE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000019077**

Well ID:	07S01W05F001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W05F001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W05F001M&store_num=		
GeoTracker Data:	Not Reported		

P110
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000085347**

Well ID:	SL720641214-MW-OS-2A4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-2A4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=MW-OS-2A4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=MW-OS-2A4		

P111
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000121811**

Well ID:	SL721101218-MW-OS-2A4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-2A4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-2A4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-2A4		

M112
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000052193**

Well ID:	SL721101218-VM-5D	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-5D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-5D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-5D		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M113
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000084961**

Well ID:	SL721101218-VM-5S	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-5S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-5S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-5S		

P114
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000034620**

Well ID:	SL721101218-2-EP	Well Type:	MONITORING
Source:	EDF	Other Name:	2-EP
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=2-EP&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=2-EP		

Q115
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000130681**

Well ID:	SL721101218-H-5B	Well Type:	MONITORING
Source:	EDF	Other Name:	H-5B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=H-5B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=H-5B		

Q116
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000110223**

Well ID:	SL721101218-P-1A	Well Type:	MONITORING
Source:	EDF	Other Name:	P-1A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=P-1A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=P-1A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P117
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000122475**

Well ID:	SL721101218-P-3A	Well Type:	MONITORING
Source:	EDF	Other Name:	P-3A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=P-3A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=P-3A		

P118
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000091760**

Well ID:	SL721101218-LF-12A	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-12A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-12A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-12A		

P119
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000132809**

Well ID:	SL721101218-LF-5B	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-5B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-5B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-5B		

P120
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000054419**

Well ID:	SL721101218-LF-6A	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-6A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-6A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-6A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P121
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000015469**

Well ID:	SL721101218-LF-13A	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-13A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-13A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-13A		

P122
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000003112**

Well ID:	SL721101218-H-1A	Well Type:	MONITORING
Source:	EDF	Other Name:	H-1A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=H-1A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=H-1A		

P123
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000056020**

Well ID:	SL721101218-P-4A	Well Type:	MONITORING
Source:	EDF	Other Name:	P-4A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=P-4A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=P-4A		

P124
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000020055**

Well ID:	SL721101218-2-EPA	Well Type:	MONITORING
Source:	EDF	Other Name:	2-EPA
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=2-EPA&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=2-EPA		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P125
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000064721**

Well ID:	SL721101218-H-2A-S	Well Type:	MONITORING
Source:	EDF	Other Name:	H-2A-S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=H-2A-S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=H-2A-S		

P126
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000043138**

Well ID:	SL721101218-VM-6S	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-6S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-6S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-6S		

P127
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000001398**

Well ID:	SL721101218-VM-6D	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-6D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-6D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-6D		

128
SW
1/2 - 1 Mile
Higher

CA WELLS **CADPR0000004809**

Well ID:	81957	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	81957	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=81957&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P129
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000016042**

Well ID:	SL721101218-VM-4S	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-4S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-4S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-4S		

P130
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000124595**

Well ID:	SL721101218-VM-4D	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-4D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-4D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-4D		

P131
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000019758**

Well ID:	SL721101218-H-4C	Well Type:	MONITORING
Source:	EDF	Other Name:	H-4C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=H-4C&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=H-4C		

P132
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000133775**

Well ID:	SL721101218-H-3B	Well Type:	MONITORING
Source:	EDF	Other Name:	H-3B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=H-3B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=H-3B		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Q133
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000059291**

Well ID:	SL721101218-VM-2S	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-2S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-2S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-2S		

Q134
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000088811**

Well ID:	SL721101218-VM-2D	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-2D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-2D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-2D		

P135
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000000730**

Well ID:	SL721101218-VM-3D	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-3D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-3D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-3D		

P136
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000016748**

Well ID:	SL721101218-VM-3S	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-3S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-3S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-3S		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

R137
West
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00018640**

Well ID:	USGS-372054122010301	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-372054122010301	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-372054122010301&store_num=		
GeoTracker Data:	Not Reported		

R138
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000182389**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007S001W06P001M	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19580930	Well Depth:	706
Well Depth Units:	ft	Well Hole Depth:	812
Well Hole Depth Units:	ft		

P139
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000032325**

Well ID:	SL721101218-VM-7D	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-7D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-7D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-7D		

Q140
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000075262**

Well ID:	SL721101218-P-2A	Well Type:	MONITORING
Source:	EDF	Other Name:	P-2A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=P-2A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=P-2A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Q141
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000031245**

Well ID:	SL721101218-P-5B	Well Type:	MONITORING
Source:	EDF	Other Name:	P-5B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=P-5B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=P-5B		

R142
West
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000005629**

Well ID:	4310001-012	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 020-01 - INACTIVE	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4310001-012&store_num=		
GeoTracker Data:	Not Reported		

R143
West
1/2 - 1 Mile
Higher

CA WELLS **CALLNL000001472**

Well ID:	100968	Well Type:	MUNICIPAL
Source:	Lawrence Livermore National Laboratory		
Other Name:	07S/01W-06P01 M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	Not Reported		
GeoTracker Data:	Not Reported		

Chemical:	Tritium (Hydrogen 3)	Results:	4.12
Units:	pCi/L	Date:	02/28/2002
Chemical:	Helium-3/Helium-4	Results:	.00000137424
Units:	atom ratio	Date:	07/03/2002
Chemical:	Neon	Results:	.00000087114
Units:	cm3STP/g	Date:	07/03/2002
Chemical:	Krypton	Results:	.00000012533
Units:	cm3STP/g	Date:	07/03/2002
Chemical:	Xenon	Results:	.0000000156132
Units:	cm3STP/g	Date:	07/03/2002

Chemical:	Argon	Results:	.000717428
Units:	cm3STP/g	Date:	07/03/2002
Chemical:	Helium-4	Results:	.000000180138
Units:	cm3STP/g	Date:	07/03/2002

Q144
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000114083**

Well ID:	SL721101218-LF-7B	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-7B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-7B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-7B		

Q145
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000036101**

Well ID:	SL721101218-G-1A	Well Type:	MONITORING
Source:	EDF	Other Name:	G-1A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=G-1A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=G-1A		

P146
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000029729**

Well ID:	SL721101218-2B-S	Well Type:	MONITORING
Source:	EDF	Other Name:	2B-S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=2B-S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=2B-S		

P147
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000091223**

Well ID:	SL721101218-LF-1B	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-1B
GAMA PFAS Testing:	Not Reported		

Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-1B&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-1B

P148
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000017003**

Well ID: SL721101218-LF-2A
Well Type: MONITORING
Source: EDF
Other Name: LF-2A
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-2A&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-2A

P149
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000013954**

Well ID: SL721101218-VM-7S
Well Type: MONITORING
Source: EDF
Other Name: VM-7S
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-7S&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-7S

P150
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000138104**

Well ID: SL721101218-H-XA-S
Well Type: MONITORING
Source: EDF
Other Name: H-XA-S
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=H-XA-S&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=H-XA-S

Q151
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000110449**

Well ID: SL721101218-LF-11A
Well Type: MONITORING
Source: EDF
Other Name: LF-11A
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-11A&store_num=

GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-11A

P152
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000108204**

Well ID:	SL721101218-P-6B	Well Type:	MONITORING
Source:	EDF	Other Name:	P-6B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=P-6B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=P-6B		

Q153
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000110884**

Well ID:	SL721101218-VM-1D	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-1D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-1D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-1D		

Q154
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000080742**

Well ID:	SL721101218-1H-S	Well Type:	MONITORING
Source:	EDF	Other Name:	1H-S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=1H-S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=1H-S		

P155
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000065166**

Well ID:	SL721101218-4-BP	Well Type:	MONITORING
Source:	EDF	Other Name:	4-BP
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=4-BP&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=4-BP		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P156
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000075183**

Well ID:	SL721101218-LF-10A	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-10A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-10A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-10A		

P157
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000141077**

Well ID:	SL721101218-VM-8D	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-8D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-8D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-8D		

P158
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000140285**

Well ID:	SL721101218-VM-8S	Well Type:	MONITORING
Source:	EDF	Other Name:	VM-8S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=VM-8S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=VM-8S		

159
WNW
1/2 - 1 Mile
Higher

CA WELLS **7728**

Seq:	7728	Prim sta c:	07S/01W-07F01 M
Frds no:	4310014013	County:	43
District:	05	User id:	HEN
System no:	4310014	Water type:	G
Source nam:	WOLFE ROAD - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372100.0	Longitude:	1220100.0
Precision:	8	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported

Comment 7:	Not Reported		
System no:	4310014	System nam:	City Of Sunnyvale
Hqname:	Not Reported	Address:	P.O. BOX 3707
City:	SUNNYVALE	State:	CA
Zip:	94086	Zip ext:	Not Reported
Pop serv:	120000	Connection:	27673
Area serve:	SUNNYVALE CITY		

Q160
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000002171**

Well ID:	SL721101218-3-XA	Well Type:	MONITORING
Source:	EDF	Other Name:	3-XA
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=3-XA&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=3-XA		

S161
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000009052**

Well ID:	SL721101218-LF-4A	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-4A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-4A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-4A		

S162
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000064935**

Well ID:	SL720641214-LF-8A	Well Type:	MONITORING
Source:	EDF	Other Name:	LF-8A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=LF-8A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=LF-8A		

Q163
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000055071**

Well ID:	SL721101218-3-EB	Well Type:	MONITORING
Source:	EDF	Other Name:	3-EB

GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=3-EB&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=3-EB

S164
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000105857**

Well ID: SL721101218-LF-3B
Source: EDF
Well Type: MONITORING
Other Name: LF-3B
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-3B&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-3B

Q165
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000005742**

Well ID: SL721101218-SW-3
Source: EDF
Well Type: MONITORING
Other Name: SW-3
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=SW-3&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=SW-3

S166
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000068203**

Well ID: SL721101218-HMSA-1S
Source: EDF
Well Type: MONITORING
Other Name: HMSA-1S
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=HMSA-1S&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=HMSA-1S

S167
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000082602**

Well ID: SL721101218-W-20B
Source: EDF
Well Type: MONITORING
Other Name: W-20B
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=W-20B&store_num=

GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=W-20B

S168
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000050738**

Well ID: SL721101218-SW-7
Well Type: MONITORING
Source: EDF
Other Name: SW-7
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=SW-7&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=SW-7

S169
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000082831**

Well ID: SL721101218-W-21A
Well Type: MONITORING
Source: EDF
Other Name: W-21A
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=W-21A&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=W-21A

R170
West
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000028371**

Well ID: 07S01W06P001M
Well Type: UNK
Source: Department of Water Resources
Other Name: 07S01W06P001M
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W06P001M&store_num=
GeoTracker Data: Not Reported

S171
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000104302**

Well ID: SL721101218-LF-9A
Well Type: MONITORING
Source: EDF
Other Name: LF-9A
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=LF-9A&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=LF-9A

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

S172
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000089800**

Well ID:	SL721101218-HMSA-2S	Well Type:	MONITORING
Source:	EDF	Other Name:	HMSA-2S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=HMSA-2S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=HMSA-2S		

S173
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000011690**

Well ID:	SL721101218-W-22A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-22A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=W-22A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=W-22A		

S174
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000081285**

Well ID:	SL721101218-W-19B	Well Type:	MONITORING
Source:	EDF	Other Name:	W-19B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=W-19B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=W-19B		

S175
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000069604**

Well ID:	SL721101218-SW-5S	Well Type:	MONITORING
Source:	EDF	Other Name:	SW-5S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=SW-5S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=SW-5S		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

S176
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000058931**

Well ID:	SL721101218-SW-6S	Well Type:	MONITORING
Source:	EDF	Other Name:	SW-6S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=SW-6S&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=SW-6S		

T177
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000120111**

Well ID:	SL721101218-T-2A	Well Type:	MONITORING
Source:	EDF	Other Name:	T-2A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=T-2A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=T-2A		

S178
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000106962**

Well ID:	SL721101218-F-1A	Well Type:	MONITORING
Source:	EDF	Other Name:	F-1A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=F-1A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=F-1A		

179
SW
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000017448**

Well ID:	4310014-013	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WOLFE ROAD - ABANDONED	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4310014-013&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T180
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000129245**

Well ID:	SL721101218-MW-OS-11A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-11A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-11A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-11A3		

T181
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000122329**

Well ID:	SL721101218-MW-OS-11A1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-11A1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-11A1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-11A1		

T182
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000122190**

Well ID:	SL721101218-MW-OS-10A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-10A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-10A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-10A3		

T183
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000040962**

Well ID:	SL721101218-MW-OS-10A1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-10A1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-10A1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-10A1		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T184
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000127960**

Well ID:	SL721101218-MW-OS-12A3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-12A3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-12A3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-12A3		

S185
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000045926**

Well ID:	SL720641214-W-11B	Well Type:	MONITORING
Source:	EDF	Other Name:	W-11B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-11B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-11B		

S186
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000050337**

Well ID:	SL720641214-W-12A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-12A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-12A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-12A		

S187
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000128440**

Well ID:	SL720641214-E-17A	Well Type:	MONITORING
Source:	EDF	Other Name:	E-17A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=E-17A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=E-17A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T188
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000143334**

Well ID:	SL721101218-MW-OS-12A1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-OS-12A1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL721101218&assigned_name=MW-OS-12A1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL721101218&assigned_name=MW-OS-12A1		

T189
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000136655**

Well ID:	SL720641214-W-8B	Well Type:	MONITORING
Source:	EDF	Other Name:	W-8B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-8B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-8B		

T190
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000002485**

Well ID:	SL720641214-E-9AR	Well Type:	MONITORING
Source:	EDF	Other Name:	E-9AR
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=E-9AR&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=E-9AR		

T191
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000065466**

Well ID:	SL720641214-W-10A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-10A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-10A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-10A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T192
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000086329**

Well ID:	SL720641214-W-18B	Well Type:	MONITORING
Source:	EDF	Other Name:	W-18B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-18B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-18B		

T193
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000065545**

Well ID:	SL720641214-W18MA	Well Type:	MONITORING
Source:	EDF	Other Name:	W18MA
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W18MA&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W18MA		

T194
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000075802**

Well ID:	SL720641214-W-15A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-15A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-15A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-15A		

U195
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000090800**

Well ID:	T0608501525-U-5	Well Type:	MONITORING
Source:	EDF	Other Name:	U-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-5		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

U196
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000041723**

Well ID:	T0608501525-U-1	Well Type:	MONITORING
Source:	EDF	Other Name:	U-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-1		

U197
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000111026**

Well ID:	T0608501525-U-2	Well Type:	MONITORING
Source:	EDF	Other Name:	U-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-2		

U198
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000067759**

Well ID:	T0608501525-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=MW-1		

T199
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000046658**

Well ID:	SL720641214-W-4A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-4A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-4A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-4A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

U200
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000074990**

Well ID:	T0608501525-U-4	Well Type:	MONITORING
Source:	EDF	Other Name:	U-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-4		

U201
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000021550**

Well ID:	T0608501525-U-3	Well Type:	MONITORING
Source:	EDF	Other Name:	U-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-3		

V202
ESE
1/2 - 1 Mile
Lower

CA WELLS **7730**

Seq:	7730	Prim sta c:	07S/01W-08B02 M
Frds no:	4310012018	County:	43
District:	05	User id:	HEN
System no:	4310012	Water type:	G
Source nam:	WELL 17-02	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372031.0	Longitude:	1215928.0
Precision:	5	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4310012	System nam:	City Of Santa Clara
Hqname:	Not Reported	Address:	1500 WARBURTON AVE
City:	SANTA CLARA	State:	CA
Zip:	95050	Zip ext:	Not Reported
Pop serv:	94925	Connection:	23702
Area serve:	SANTA CLARA CITY		

Sample date:	14-FEB-18	Finding:	5.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	20-NOV-17	Finding:	5.5
Chemical:	NITRATE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	17-AUG-17	Finding:	4.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	25-MAY-17	Finding:	4.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-AUG-16	Finding:	0.16
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	15-AUG-16	Finding:	31.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	15-AUG-16	Finding:	59.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	33.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	20.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	80.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	280.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-AUG-16	Finding:	260.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	210.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	690.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		

Sample date:	15-AUG-16	Finding:	400.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	1.3
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	5.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-AUG-16	Finding:	1.4
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-15	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-SEP-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-AUG-13	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	4800.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-AUG-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-AUG-13	Finding:	0.89
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	380.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	65.
Chemical:	ALUMINUM	Report units:	UG/L
Dlr:	50.		
Sample date:	21-AUG-13	Finding:	0.15
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	21-AUG-13	Finding:	28.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	21-AUG-13	Finding:	50.
Chemical:	CHLORIDE	Report units:	MG/L

Dlr:	0.		
Sample date:	21-AUG-13	Finding:	1.2
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	30.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	18.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	69.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	240.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	240.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	630.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	21-AUG-13	Finding:	0.19
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	14-FEB-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-NOV-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	31-MAY-12	Finding:	24.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-FEB-12	Finding:	24.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T203
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000069056**

Well ID:	SL720641214-W-13A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-13A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-13A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-13A		

T204
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000140485**

Well ID:	SL720641214-W-6B	Well Type:	MONITORING
Source:	EDF	Other Name:	W-6B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-6B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-6B		

U205
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000097457**

Well ID:	T0608501525-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=MW-10		

V206
ESE
1/2 - 1 Mile
Lower

CA WELLS **CALLNL000001393**

Well ID:	101016	Well Type:	MUNICIPAL
Source:	Lawrence Livermore National Laboratory		
Other Name:	07S/01W-08B02 M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	Not Reported		
GeoTracker Data:	Not Reported		

Chemical:	Argon	Results:	.000518303
Units:	cm3STP/g	Date:	10/04/2001

Chemical:	Helium-4	Results:	.000000175908
Units:	cm3STP/g	Date:	10/04/2001
Chemical:	Helium-3/Helium-4	Results:	.00000146175
Units:	atom ratio	Date:	10/04/2001
Chemical:	Tritium (Hydrogen 3)	Results:	7.62
Units:	pCi/L	Date:	06/10/2002
Chemical:	Krypton	Results:	.000000117892
Units:	cm3STP/g	Date:	10/04/2001
Chemical:	Xenon	Results:	.00000000772514
Units:	cm3STP/g	Date:	10/04/2001
Chemical:	Neon	Results:	.000000703971
Units:	cm3STP/g	Date:	10/04/2001

W207
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000070530**

Well ID:	SL720641214-W-5A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-5A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-5A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-5A		

V208
ESE
1/2 - 1 Mile
Lower

CA WELLS **CAUSGSN00016238**

Well ID:	USGS-372031121593101	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-372031121593101	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-372031121593101&store_num=		
GeoTracker Data:	Not Reported		

V209
ESE
1/2 - 1 Mile
Lower

CA WELLS **CAUSGS000000740**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

U210
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000036922**

Well ID:	T0608501525-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=MW-11		

U211
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000127232**

Well ID:	T0608501525-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=MW-9		

U212
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000053441**

Well ID:	T0608501525-U-11	Well Type:	MONITORING
Source:	EDF	Other Name:	U-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-11		

213
SE
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000027889**

Well ID:	07S01W08K001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W08K001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W08K001M&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

V214
ESE
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000015925**

Well ID:	4310012-018	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 17-02	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4310012-018&store_num=		
GeoTracker Data:	Not Reported		

U215
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000140451**

Well ID:	T0608501525-U-7	Well Type:	MONITORING
Source:	EDF	Other Name:	U-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-7		

216
WSW
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000035721**

Well ID:	07S01W07F001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W07F001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W07F001M&store_num=		
GeoTracker Data:	Not Reported		

W217
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000048361**

Well ID:	SL720641214-W-2A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-2A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-2A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-2A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

V218
ESE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000032774**

Well ID:	07S01W08H001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W08H001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W08H001M&store_num=		
GeoTracker Data:	Not Reported		

U219
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000067199**

Well ID:	T0608501525-U-10	Well Type:	MONITORING
Source:	EDF	Other Name:	U-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-10		

U220
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000003869**

Well ID:	T0608501525-U-8	Well Type:	MONITORING
Source:	EDF	Other Name:	U-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-8		

221
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000048049**

Well ID:	T0608501525-U-12	Well Type:	MONITORING
Source:	EDF	Other Name:	U-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501525&assigned_name=U-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501525&assigned_name=U-12		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

W222
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000088582**

Well ID:	SL720641214-W-14A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-14A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-14A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-14A		

W223
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000094647**

Well ID:	SL720641214-W-14B	Well Type:	MONITORING
Source:	EDF	Other Name:	W-14B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-14B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-14B		

X224
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000044033**

Well ID:	SL720641214-W-7A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-7A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-7A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-7A		

X225
South
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000104020**

Well ID:	SL720641214-W-3A	Well Type:	MONITORING
Source:	EDF	Other Name:	W-3A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL720641214&assigned_name=W-3A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL720641214&assigned_name=W-3A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Y226
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000122632**

Well ID:	T0608501441-MW-20	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-20
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-20&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-20		

Y227
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000052415**

Well ID:	T0608501441-MW-25	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-25
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-25&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-25		

Y228
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000080349**

Well ID:	T0608501441-MW-18	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-18
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-18&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-18		

Y229
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000116796**

Well ID:	T0608501441-MW-14	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-14		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Y230
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000011366**

Well ID:	T0608501441-MW-17	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-17
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-17&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-17		

Y231
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000063541**

Well ID:	T0608501441-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-12		

Y232
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000131538**

Well ID:	T0608501441-MW-16	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-16		

Y233
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000062017**

Well ID:	T0608501441-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Y234
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000059529**

Well ID:	T0608501441-MW-13	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-13		

Y235
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000050784**

Well ID:	T0608501441-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-10		

Y236
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000119075**

Well ID:	T0608501441-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-9		

Y237
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000085223**

Well ID:	T0608501441-MW-26	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-26
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-26&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-26		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Y238
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000062594**

Well ID:	T0608501441-MW-15	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-15
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608501441&assigned_name=MW-15&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608501441&assigned_name=MW-15		

Y239
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000102208**

Well ID:	T0608500378-C-9	Well Type:	MONITORING
Source:	EDF	Other Name:	C-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500378&assigned_name=C-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500378&assigned_name=C-9		

Y240
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000033175**

Well ID:	T0608500378-C-5	Well Type:	MONITORING
Source:	EDF	Other Name:	C-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500378&assigned_name=C-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500378&assigned_name=C-5		

Z241
SSE
1/2 - 1 Mile
Higher

CA WELLS **CALLNL000001145**

Well ID:	101033	Well Type:	MUNICIPAL
Source:	Lawrence Livermore National Laboratory		
Other Name:	07S/01W-08N01 M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	Not Reported		
GeoTracker Data:	Not Reported		

Chemical:	Helium-3/Helium-4	Results:	.0000014987
Units:	atom ratio	Date:	10/04/2001

Chemical:	Tritium (Hydrogen 3)	Results:	10.24
Units:	pCi/L	Date:	01/08/2002
Chemical:	Neon	Results:	.000000696641
Units:	cm3STP/g	Date:	10/04/2001
Chemical:	Helium-4	Results:	.000000173133
Units:	cm3STP/g	Date:	10/04/2001
Chemical:	Argon	Results:	.000484812
Units:	cm3STP/g	Date:	10/04/2001
Chemical:	Krypton	Results:	.000000094699
Units:	cm3STP/g	Date:	10/04/2001

Z242
SSE
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000002998**

Well ID:	4310012-016	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 15	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4310012-016&store_num=		
GeoTracker Data:	Not Reported		

Z243
SSE
1/2 - 1 Mile
Higher

CA WELLS **CAUSGS000002634**

Z244
SSE
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00011925**

Well ID:	USGS-372002122000201	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-372002122000201	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-372002122000201&store_num=		
GeoTracker Data:	Not Reported		

Y245
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000142389**

Well ID:	T0608500378-C-3	Well Type:	MONITORING
Source:	EDF	Other Name:	C-3

GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500378&assigned_name=C-3&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500378&assigned_name=C-3

Z246
SSE
1/2 - 1 Mile
Lower

CA WELLS 7732

Seq:	7732	Prim sta c:	07S/01W-08N01 M
Frds no:	4310012016	County:	43
District:	05	User id:	HEN
System no:	4310012	Water type:	G
Source nam:	WELL 15	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372003.0	Longitude:	1215956.0
Precision:	5	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310012	System nam:	City Of Santa Clara
Hqname:	Not Reported	Address:	1500 WARBURTON AVE
City:	SANTA CLARA	State:	CA
Zip:	95050	Zip ext:	Not Reported
Pop serv:	94925	Connection:	23702
Area serve:	SANTA CLARA CITY		
Sample date:	07-FEB-18	Finding:	4.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-NOV-17	Finding:	5.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	16-AUG-17	Finding:	4.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	25-MAY-17	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-AUG-16	Finding:	0.14
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	15-AUG-16	Finding:	32.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	15-AUG-16	Finding:	69.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	1.4
Chemical:	POTASSIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	15-AUG-16	Finding:	23.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	89.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	320.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	5.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-AUG-16	Finding:	2.4
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	290.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	240.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	760.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	460.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	1.5
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-AUG-16	Finding:	5.1
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-AUG-16	Finding:	33.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-15	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	25-SEP-14	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-AUG-13	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	5200.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	13-AUG-13	Finding:	8500.
Chemical:	CARBON DIOXIDE	Report units:	UG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-AUG-13	Finding:	1.1
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	450.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	0.16
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	13-AUG-13	Finding:	29.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	13-AUG-13	Finding:	66.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	35.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	24.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	91.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	320.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	260.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L

Dlr:	0.		
Sample date:	13-AUG-13	Finding:	220.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	740.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	0.13
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	14-FEB-13	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-NOV-12	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-FEB-12	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Y247
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000056345**

Well ID:	T0608500378-C-2	Well Type:	MONITORING
Source:	EDF	Other Name:	C-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500378&assigned_name=C-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500378&assigned_name=C-2		

Y248
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000095773**

Well ID:	T0608500378-C-6	Well Type:	MONITORING
Source:	EDF	Other Name:	C-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500378&assigned_name=C-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500378&assigned_name=C-6		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Y249
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000049840**

Well ID:	T0608500378-C-4	Well Type:	MONITORING
Source:	EDF	Other Name:	C-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500378&assigned_name=C-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500378&assigned_name=C-4		

Y250
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000122208**

Well ID:	T0608500378-C-10	Well Type:	MONITORING
Source:	EDF	Other Name:	C-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500378&assigned_name=C-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500378&assigned_name=C-10		

251
SE
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000108786**

Well ID:	T0608500378-C-7	Well Type:	MONITORING
Source:	EDF	Other Name:	C-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608500378&assigned_name=C-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608500378&assigned_name=C-7		

252
WSW
1/2 - 1 Mile
Higher

CA WELLS **7842**

Seq:	7842	Prim sta c:	07S/02W-12A01 M
Frds no:	4310014007	County:	43
District:	05	User id:	HEN
System no:	4310014	Water type:	G
Source nam:	ORTEGA WELL 11	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	372030.0	Longitude:	1220115.0
Precision:	2	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported

Comment 7:	Not Reported		
System no:	4310014	System nam:	City Of Sunnyvale
Hqname:	Not Reported	Address:	P.O. BOX 3707
City:	SUNNYVALE	State:	CA
Zip:	94086	Zip ext:	Not Reported
Pop serv:	120000	Connection:	27673
Area serve:	SUNNYVALE CITY		
Sample date:	07-MAR-17	Finding:	5.86
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-MAR-16	Finding:	6.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-FEB-15	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-FEB-15	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	0.4
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	430.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	61.
Chemical:	ZINC	Report units:	UG/L
Dlr:	50.		
Sample date:	11-FEB-15	Finding:	0.16
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	11-FEB-15	Finding:	31.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	11-FEB-15	Finding:	68.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	42.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	35.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	72.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	320.

Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	310.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	250.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-FEB-15	Finding:	740.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	05-MAR-14	Finding:	0.22
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAR-14	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-MAR-14	Finding:	1.64
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	690.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	41.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	34.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	65.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	300.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	280.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	230.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		

Sample date:	22-FEB-12	Finding:	23.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	22-FEB-12	Finding:	0.24
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	22-FEB-12	Finding:	390.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	22-FEB-12	Finding:	26.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-FEB-12	Finding:	62.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

253
NNW
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000031769**

Well ID:	07S01W06B001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07S01W06B001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07S01W06B001M&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94087	64	8

Federal EPA Radon Zone for SANTA CLARA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94087

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.450 pCi/L	50%	50%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

Appendix C

Historical Records

Patrick Henry and Peterson Campus Phase I ESA

1095 Dunford Way

Sunnyvale, CA 94087

Inquiry Number: 6951305.11

April 22, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/22/22

Site Name:

Patrick Henry and Peterson Ca
1095 Dunford Way
Sunnyvale, CA 94087
EDR Inquiry # 6951305.11

Client Name:

ARCADIS U.S., Inc.
200 South Michigan Avenue Suite 2000
Chicago, IL 60604
Contact: Divya Mehta

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Flight Date: August 27, 1998	USDA
1993	1"=500'	Acquisition Date: January 01, 1993	USGS/DOQQ
1991	1"=500'	Acquisition Date: January 01, 1991	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1974	1"=500'	Flight Date: June 26, 1974	USGS
1968	1"=500'	Flight Date: June 14, 1968	USGS
1963	1"=500'	Flight Date: July 10, 1963	EDR Proprietary Aerial Viewpoint
1956	1"=500'	Flight Date: June 09, 1956	USDA
1950	1"=500'	Flight Date: April 01, 1950	USDA
1948	1"=500'	Acquisition Date: January 01, 1948	USGS/DOQQ
1939	1"=500'	Flight Date: July 31, 1939	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.


INQUIRY #: 6951305.11
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 6951305.11
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 6951305.11
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 6951305.11
YEAR: 2006
= 500'
N
EDR


INQUIRY #: 6951305.11
YEAR: 1998
= 500'
N
EDR

INQUIRY #: 6951305.11

YEAR: 1993

= 500'

N

EDR


INQUIRY #: 6951305.11
YEAR: 1991
= 500'
N
EDR

INQUIRY #: 6951305.11

YEAR: 1982

= 500'

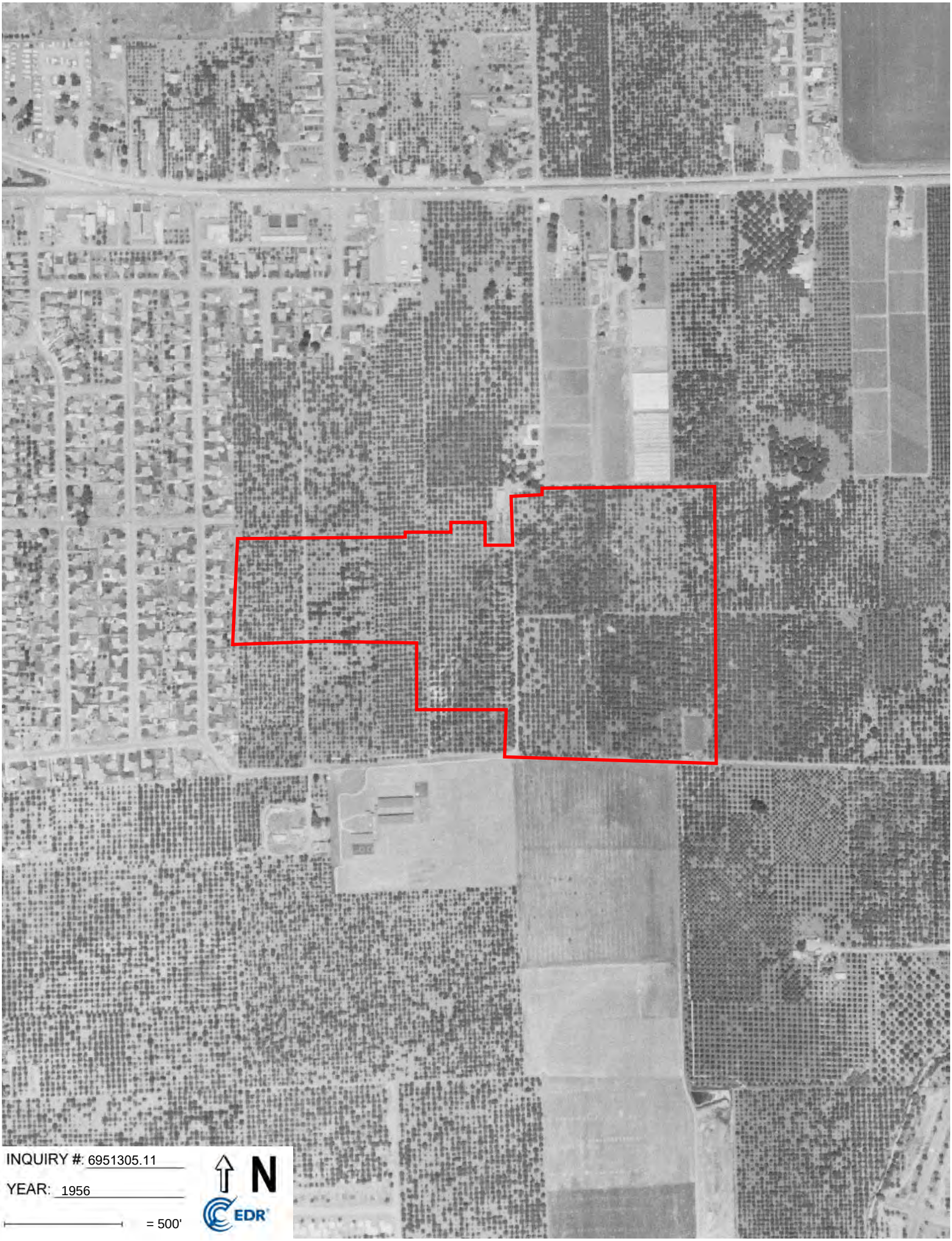
N

EDR


INQUIRY #: 6951305.11
YEAR: 1974
= 500'
N
EDR


INQUIRY #: 6951305.11
YEAR: 1968
= 500'
N
EDR


INQUIRY #: 6951305.11
YEAR: 1963
= 500'
N
EDR


INQUIRY #: 6951305.11
YEAR: 1956
= 500'
N
EDR


INQUIRY #: 6951305.11
YEAR: 1950
= 500'
N
EDR

INQUIRY #: 6951305.11

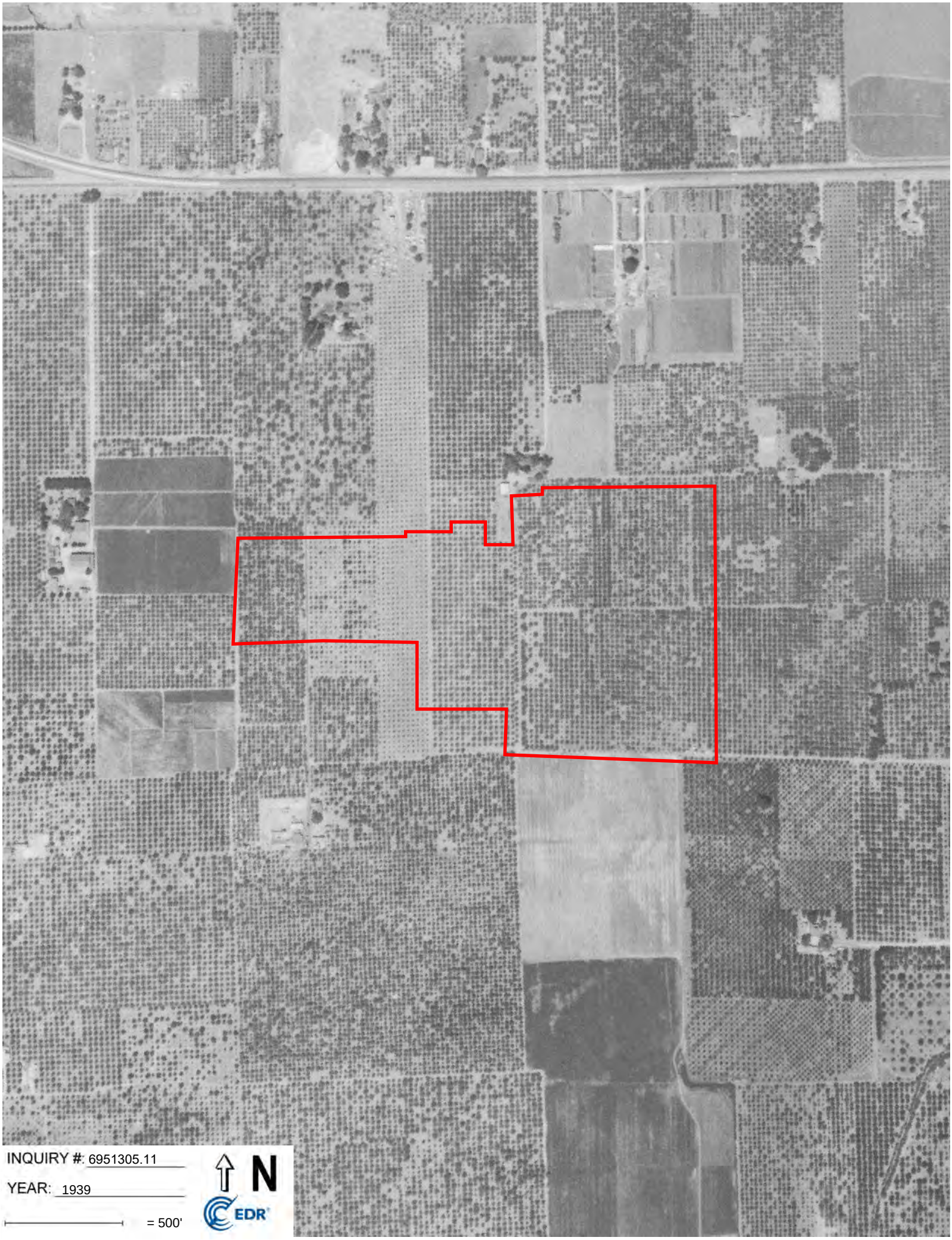
YEAR: 1948

= 500'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.


INQUIRY #: 6951305.11
YEAR: 1939
= 500'
N
EDR

Patrick Henry and Peterson Campus Phase I ESA

1095 Dunford Way

Sunnyvale, CA 94087

Inquiry Number: 6951305.4

April 22, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/22/22

Site Name:

Patrick Henry and Peterson Ca
1095 Dunford Way
Sunnyvale, CA 94087
EDR Inquiry # 6951305.4

Client Name:

ARCADIS U.S., Inc.
200 South Michigan Avenue Suite 2000
Chicago, IL 60604
Contact: Divya Mehta

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by ARCADIS U.S., Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 30126698
Project: 30126698

Coordinates:

Latitude:	37.347049 37° 20' 49" North
Longitude:	-122.005558 -122° 0' 20" West
UTM Zone:	Zone 10 North
UTM X Meters:	588078.96
UTM Y Meters:	4133836.49
Elevation:	124.00' above sea level

Maps Provided:

2018	1953
2015	1948
2012	1947
1995	1943
1980	1902
1973	1899
1968	1897
1961	1889

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets

Cupertino
2018
7.5-minute, 24000

San Jose West
2018
7.5-minute, 24000

2015 Source Sheets

Cupertino
2015
7.5-minute, 24000

San Jose West
2015
7.5-minute, 24000

2012 Source Sheets

Cupertino
2012
7.5-minute, 24000

San Jose West
2012
7.5-minute, 24000

1995 Source Sheets

Cupertino
1995
7.5-minute, 24000
Aerial Photo Revised 1991

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1980 Source Sheets

Cupertino
1980
7.5-minute, 24000
Aerial Photo Revised 1979

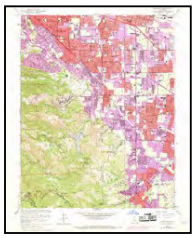
San Jose West
1980
7.5-minute, 24000
Aerial Photo Revised 1979

1973 Source Sheets

Cupertino
1973
7.5-minute, 24000
Aerial Photo Revised 1973

San Jose West
1973
7.5-minute, 24000
Aerial Photo Revised 1973

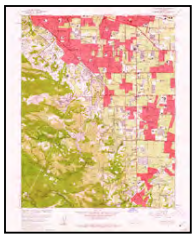
1968 Source Sheets



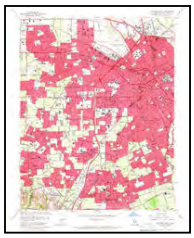
Cupertino
1968
7.5-minute, 24000
Aerial Photo Revised 1968

San Jose West
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1961 Source Sheets



Cupertino
1961
7.5-minute, 24000
Aerial Photo Revised 1960



San Jose West
1961
7.5-minute, 24000
Aerial Photo Revised 1960

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953 Source Sheets

Cupertino
1953
7.5-minute, 24000
Aerial Photo Revised 1948

San Jose West
1953
7.5-minute, 24000
Aerial Photo Revised 1948

1948 Source Sheets

Palo Alto
1948
15-minute, 62500
Aerial Photo Revised 1948

1947 Source Sheets

PALO ALTO
1947
15-minute, 50000

1943 Source Sheets

Palo Alto
1943
15-minute, 62500
Aerial Photo Revised 1940

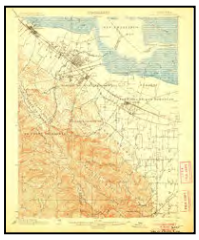
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

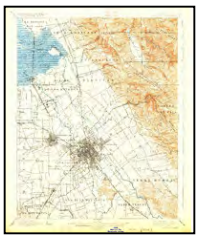
1902 Source Sheets

Santa Cruz
1902
30-minute, 125000

1899 Source Sheets



Palo Alto
1899
15-minute, 62500



San Jose
1899
15-minute, 62500

1897 Source Sheets

Palo Alto
1897
15-minute, 62500

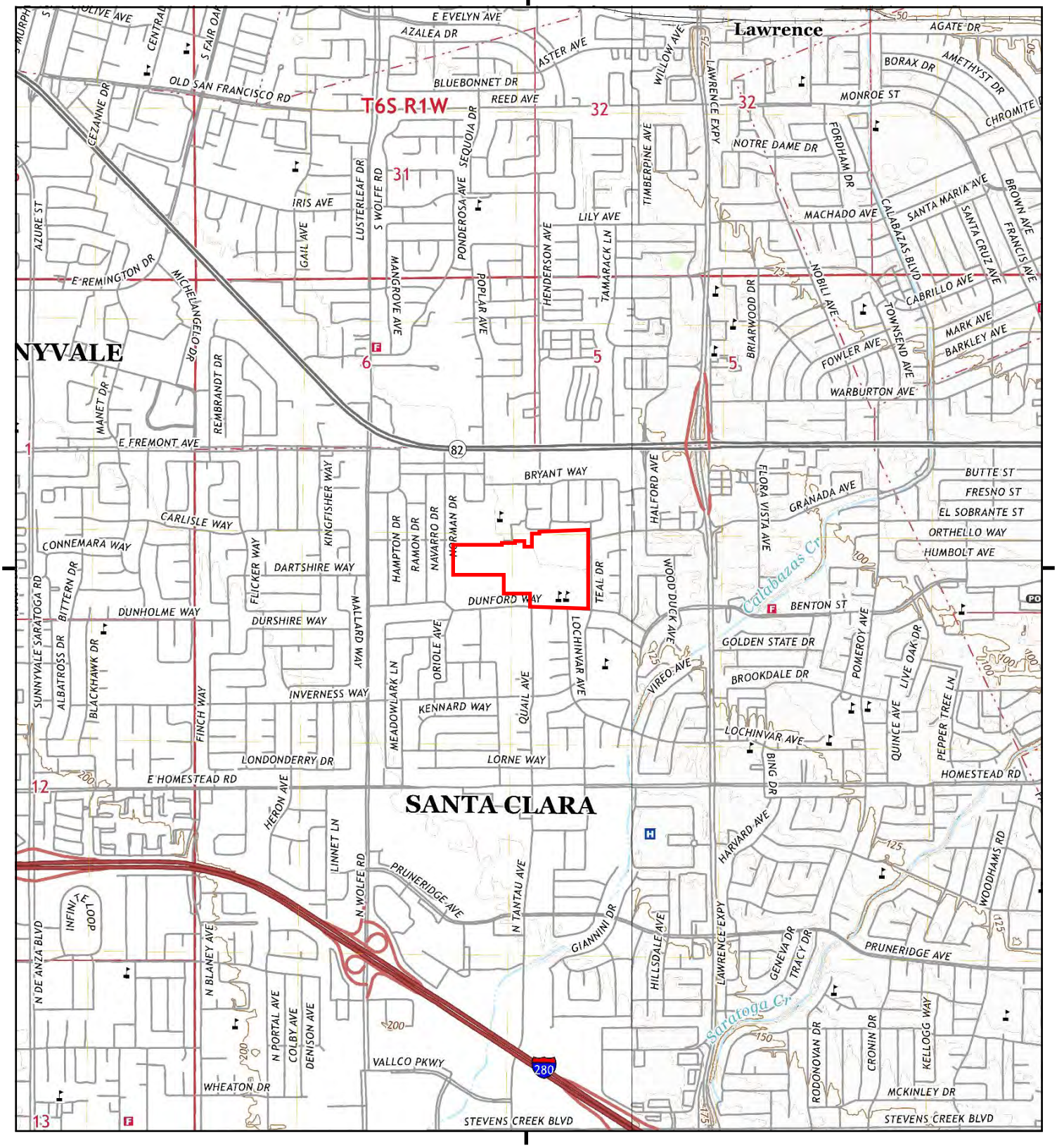
San Jose
1897
15-minute, 62500

1889 Source Sheets

San Jose
1889
15-minute, 62500

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

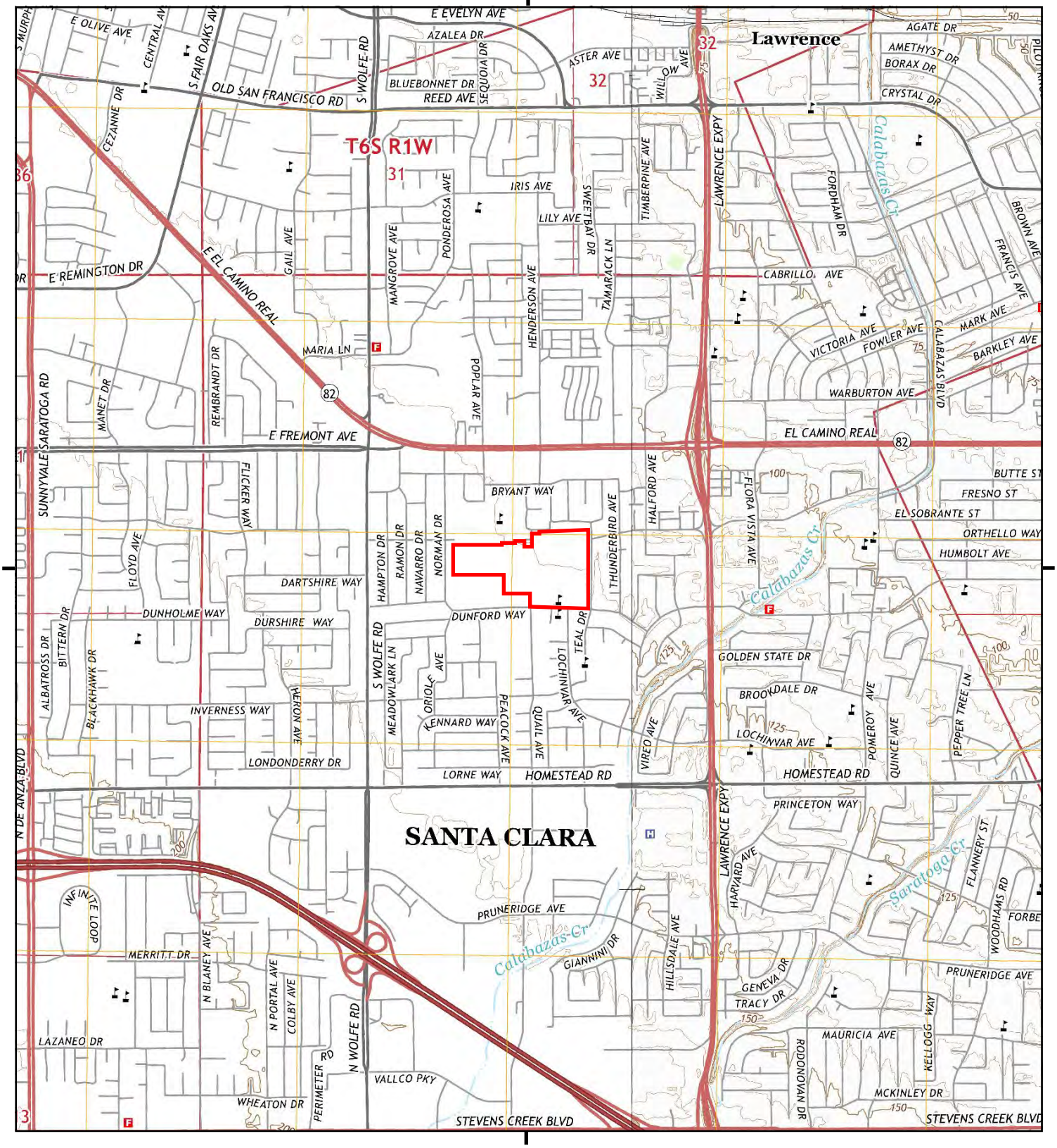
TP, Cupertino, 2018, 7.5-minute
SE, San Jose West, 2018, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Cupertino, 2015, 7.5-minute
SE, San Jose West, 2015, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N

Historical Topo Map

2012

This report includes information from the following map sheet(s).

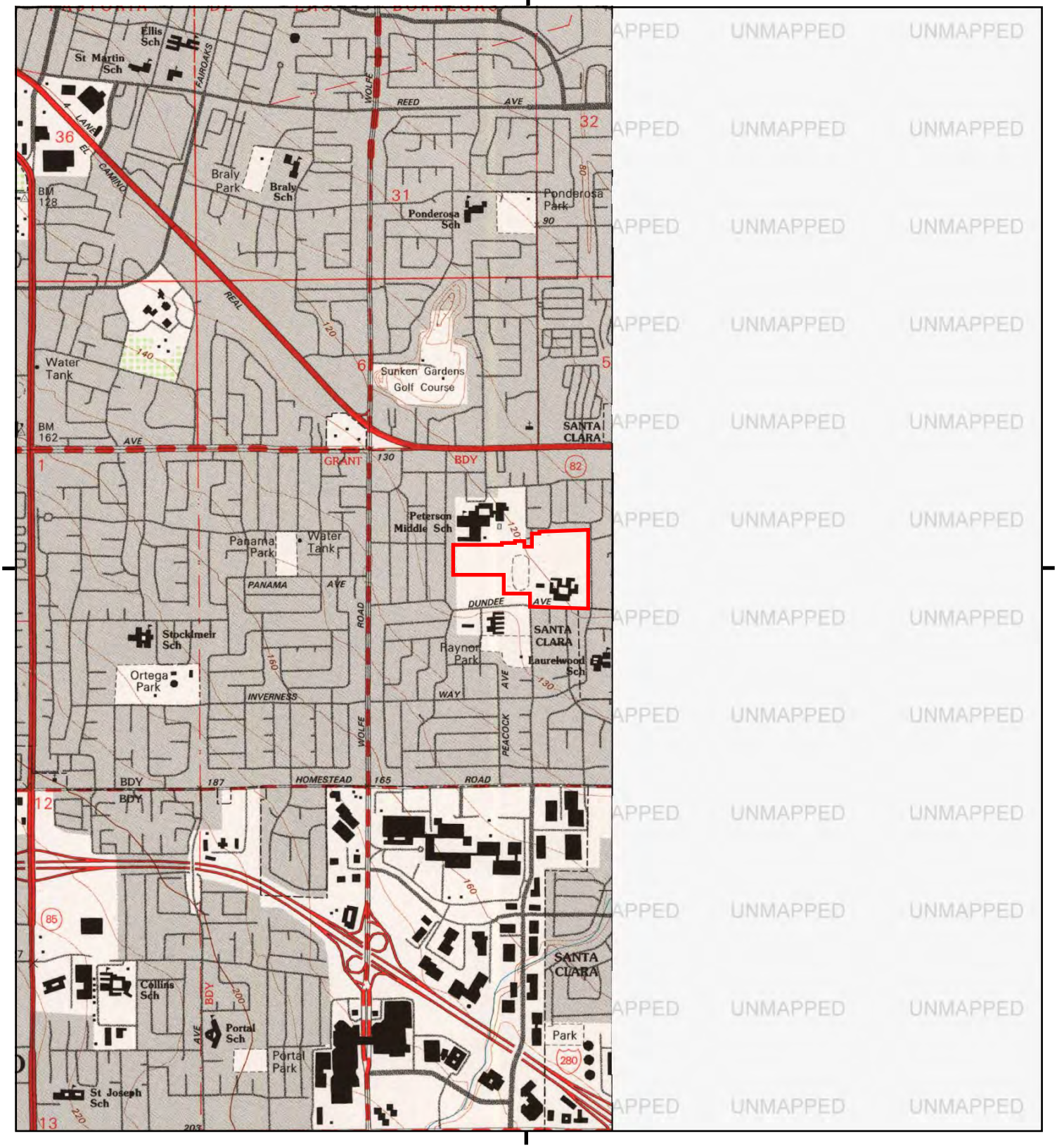
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Cupertino, 2012, 7.5-minute
SE, San Jose West, 2012, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

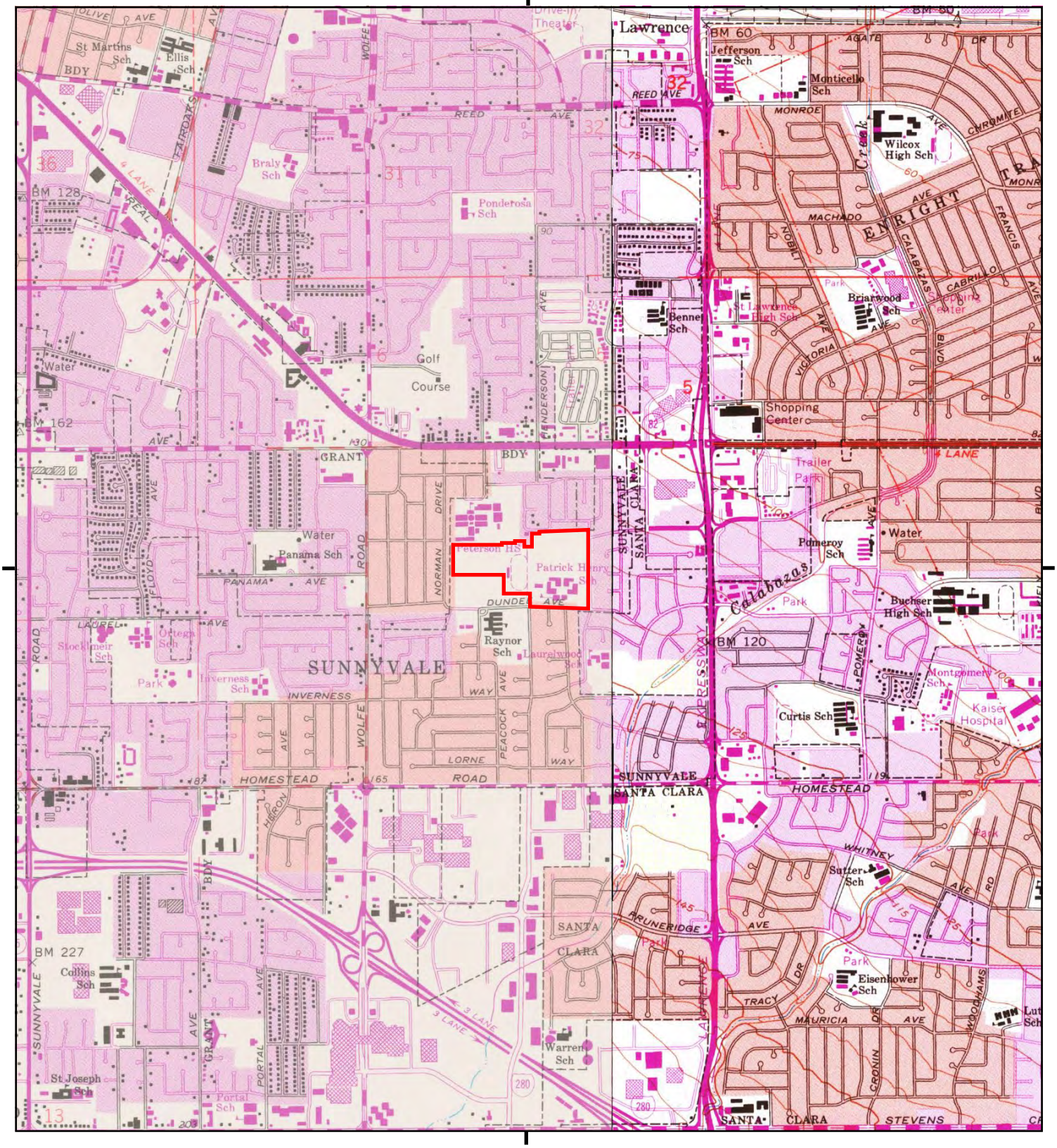
TP, Cupertino, 1995, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N

Historical Topo Map

1980



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

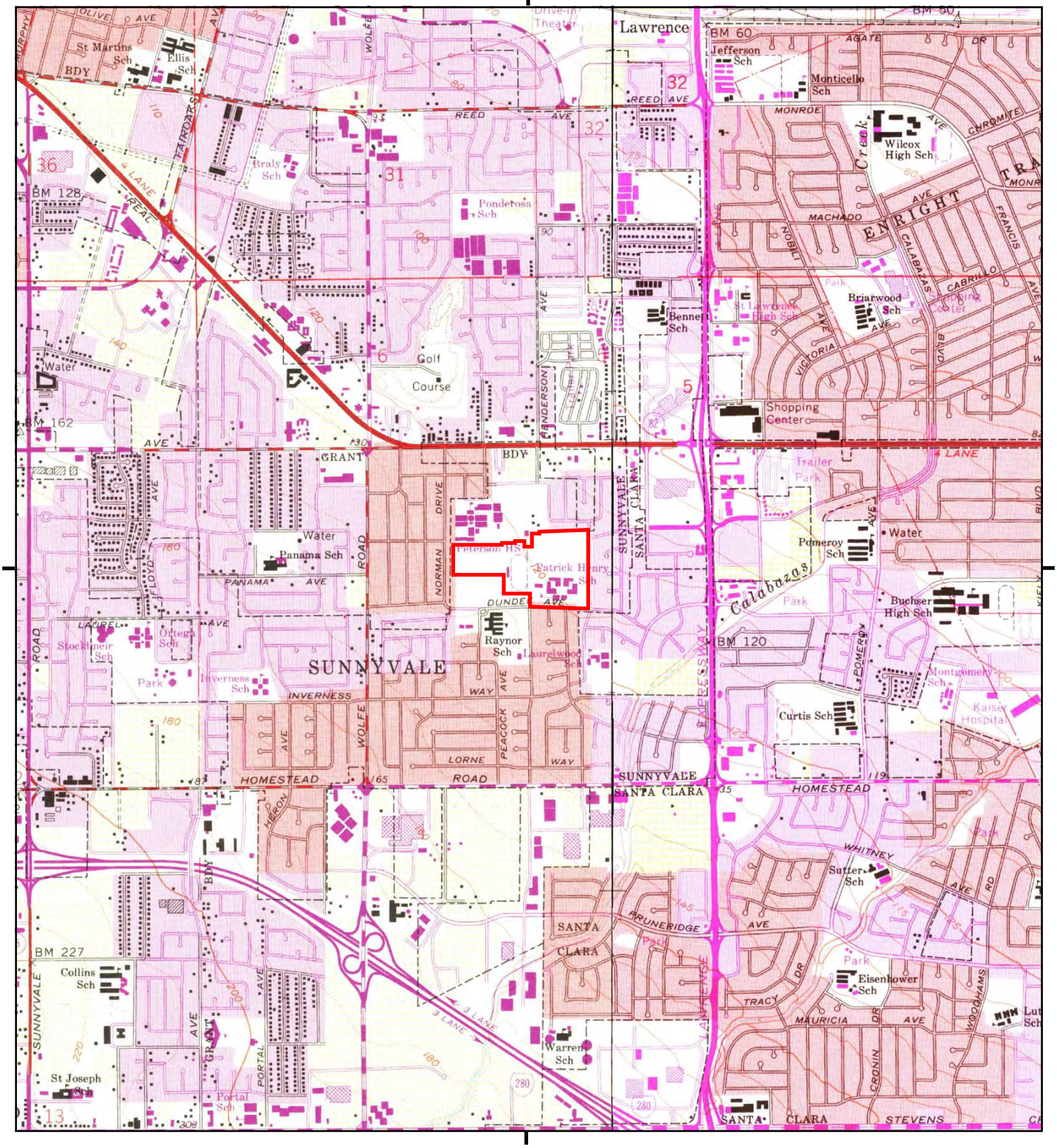
TP, Cupertino, 1980, 7.5-minute
SE, San Jose West, 1980, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

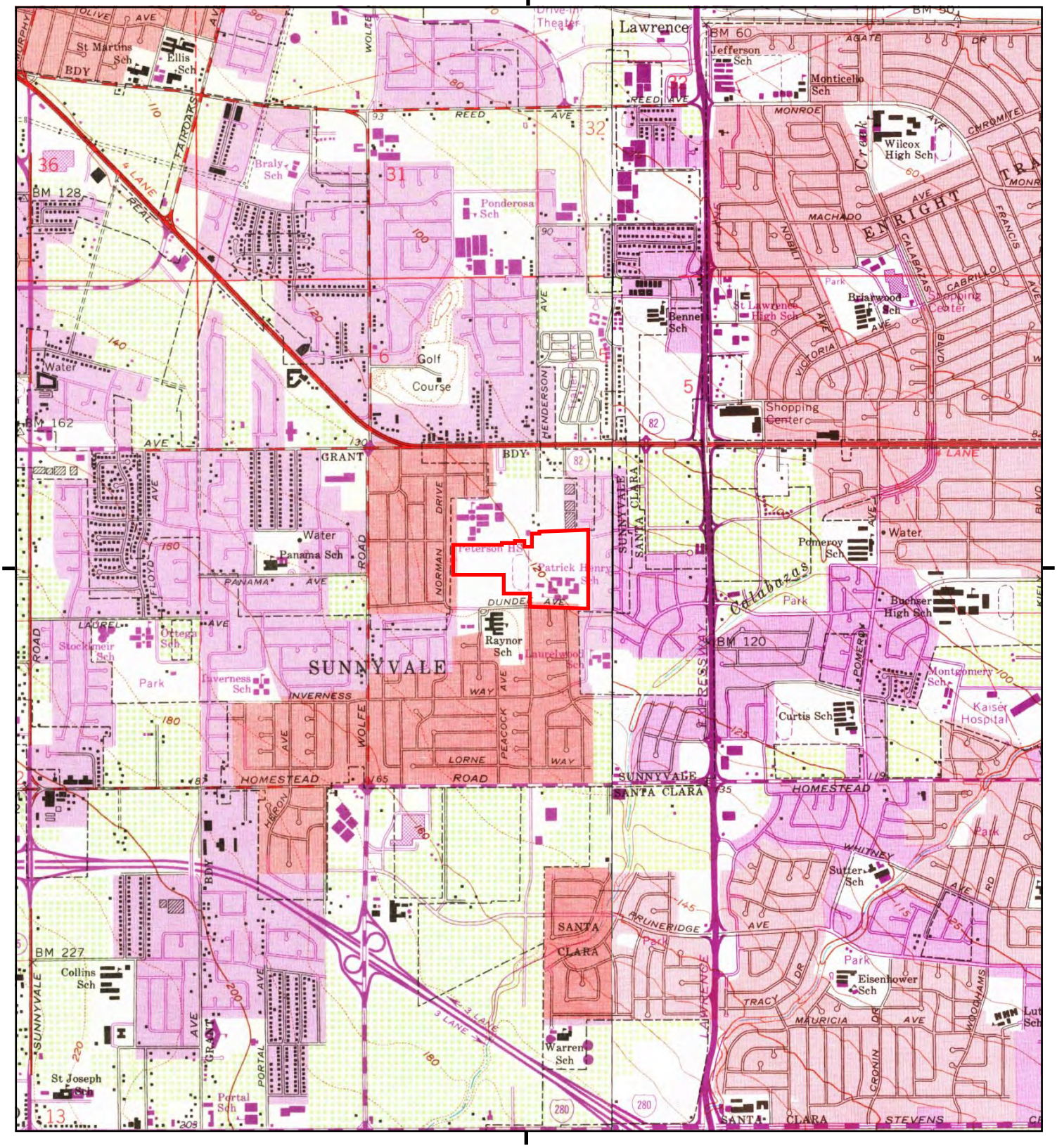
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Cupertino, 1973, 7.5-minute
SE, San Jose West, 1973, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

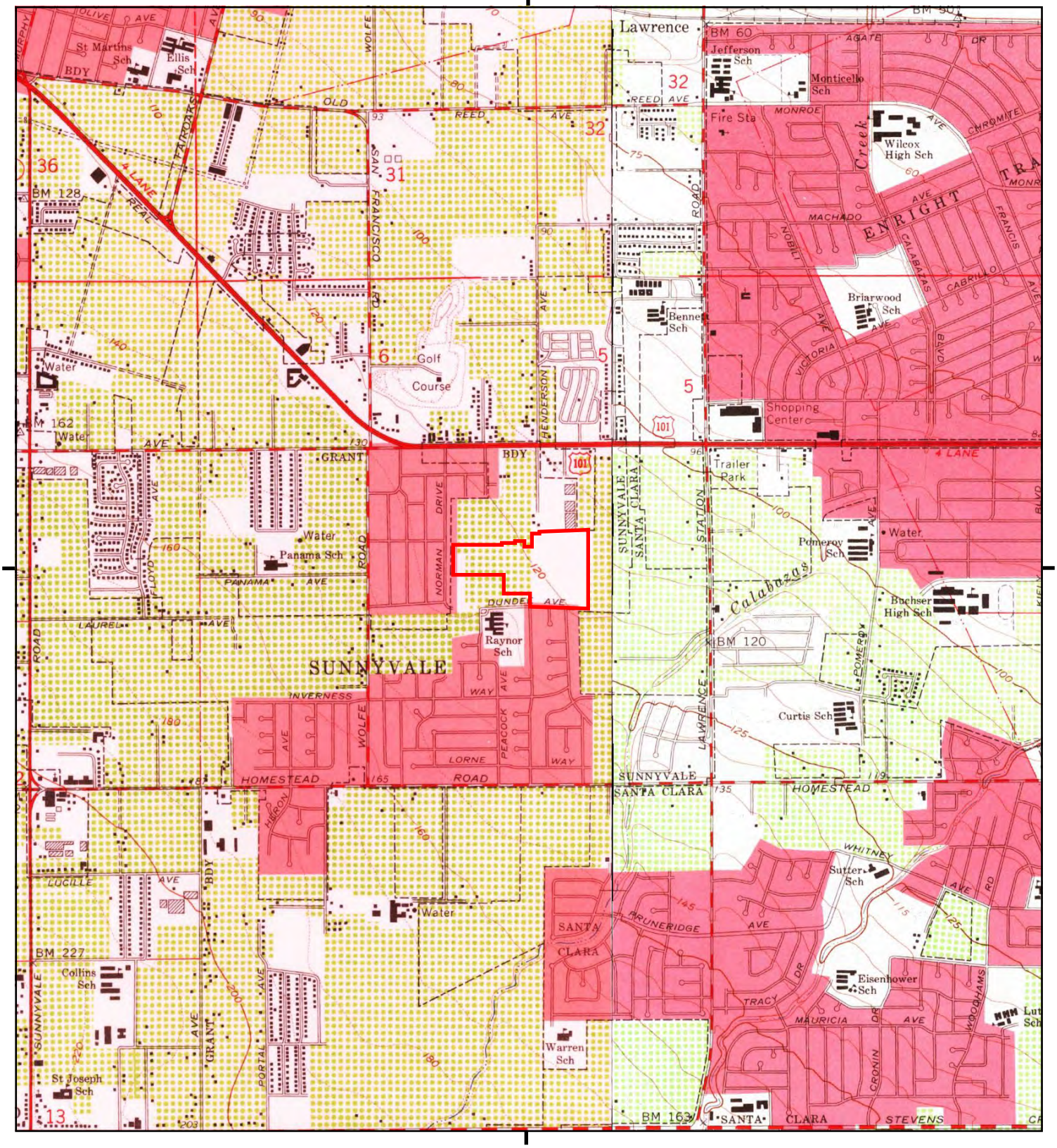
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Cupertino, 1968, 7.5-minute
SE, San Jose West, 1968, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

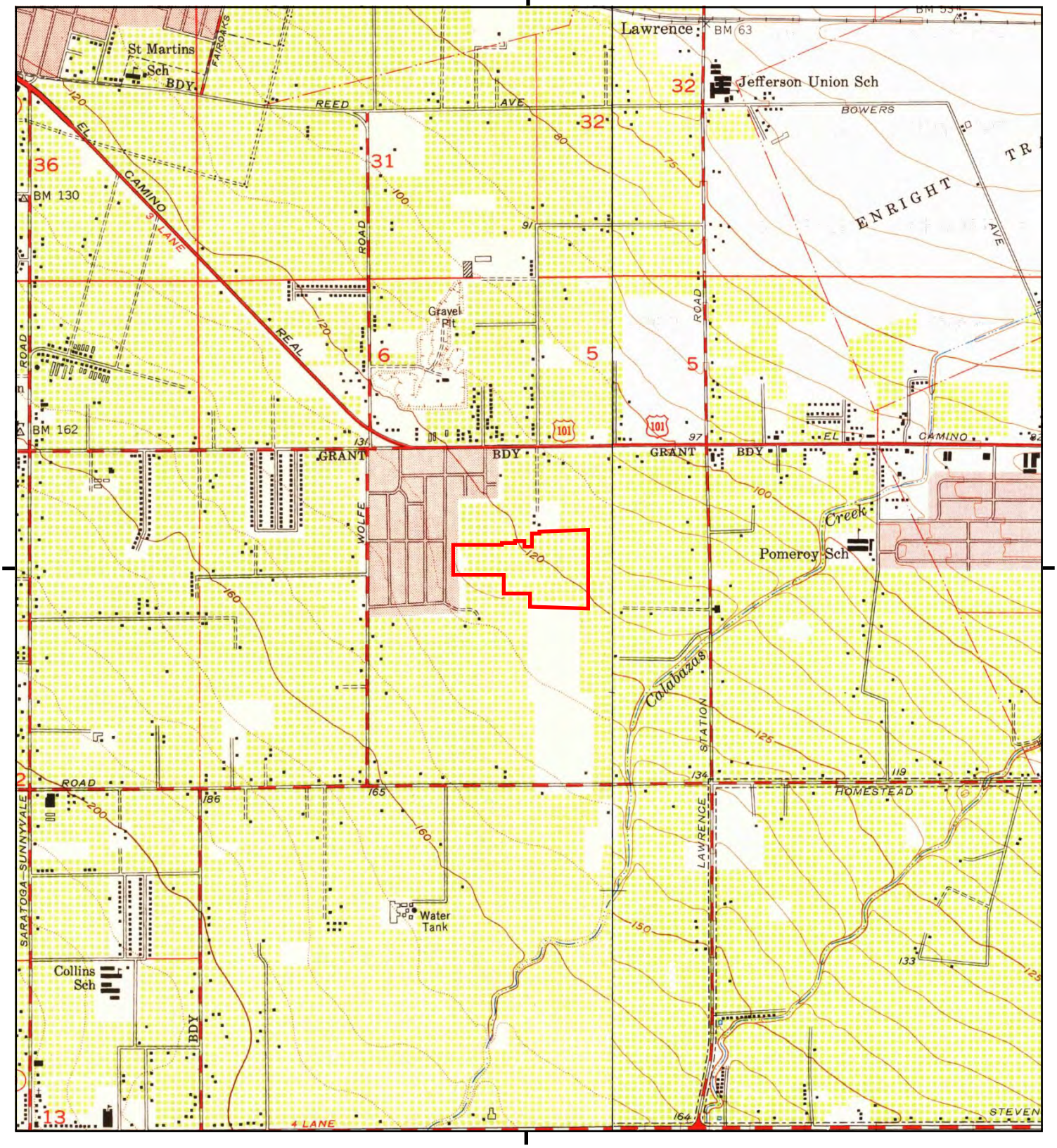
TP, Cupertino, 1961, 7.5-minute
SE, San Jose West, 1961, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N

Historical Topo Map

1953



This report includes information from the following map sheet(s).

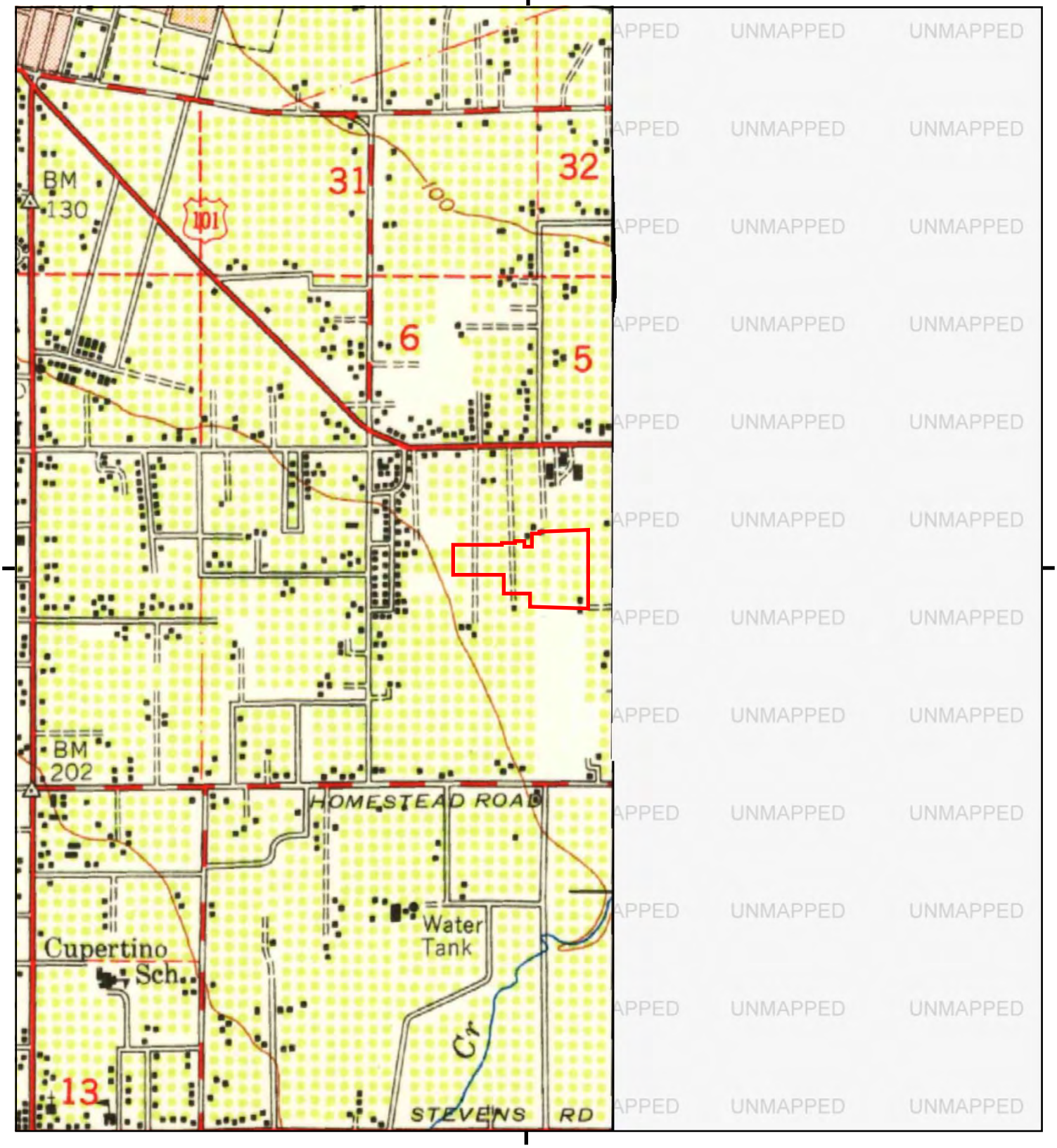
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Cupertino, 1953, 7.5-minute
SE, San Jose West, 1953, 7.5-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

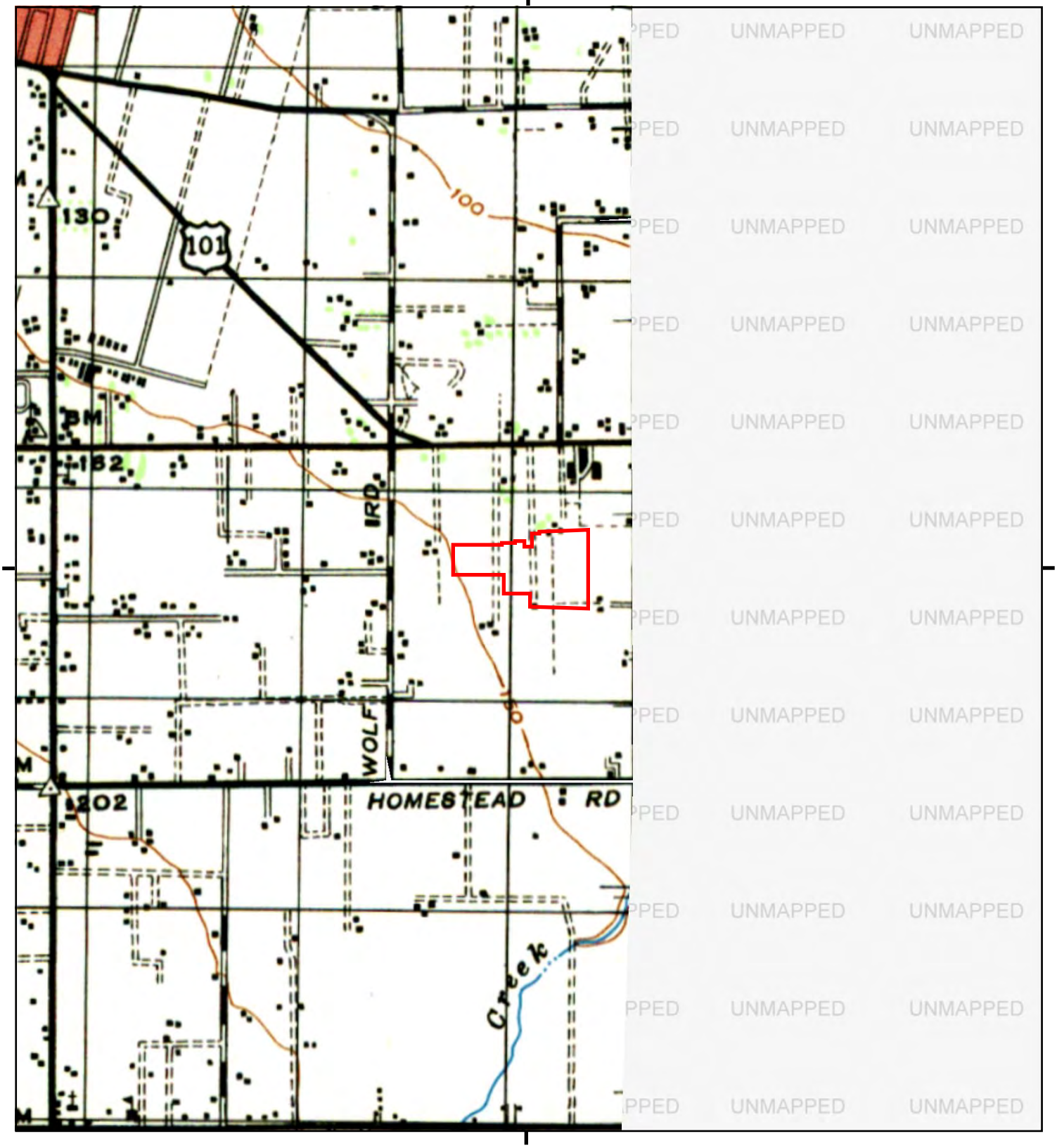
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1948, 15-minute

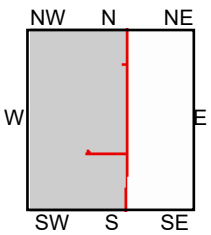
SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

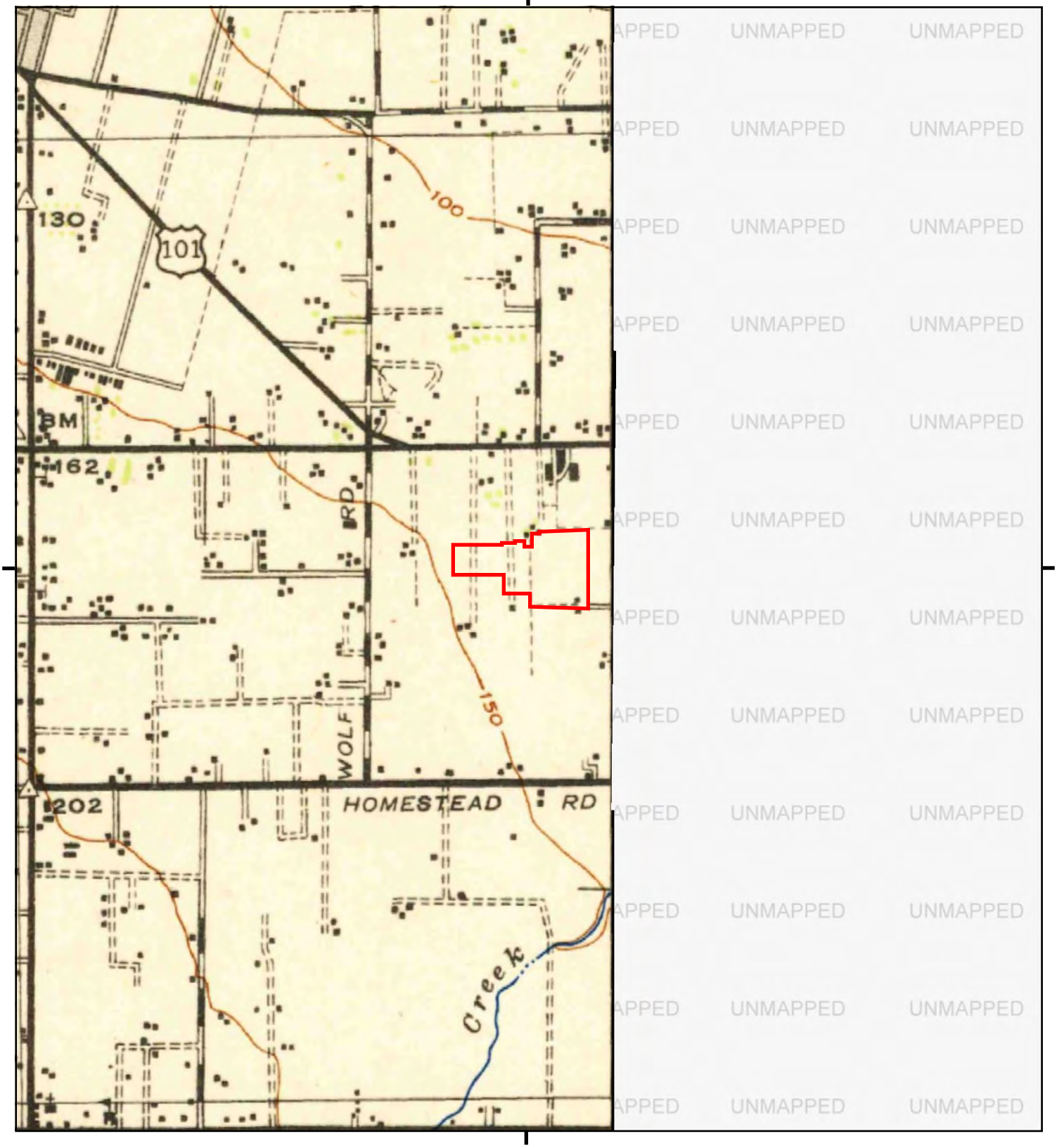
0 Miles 0.25 0.5 1 1.5



TP, PALO ALTO, 1947, 15-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

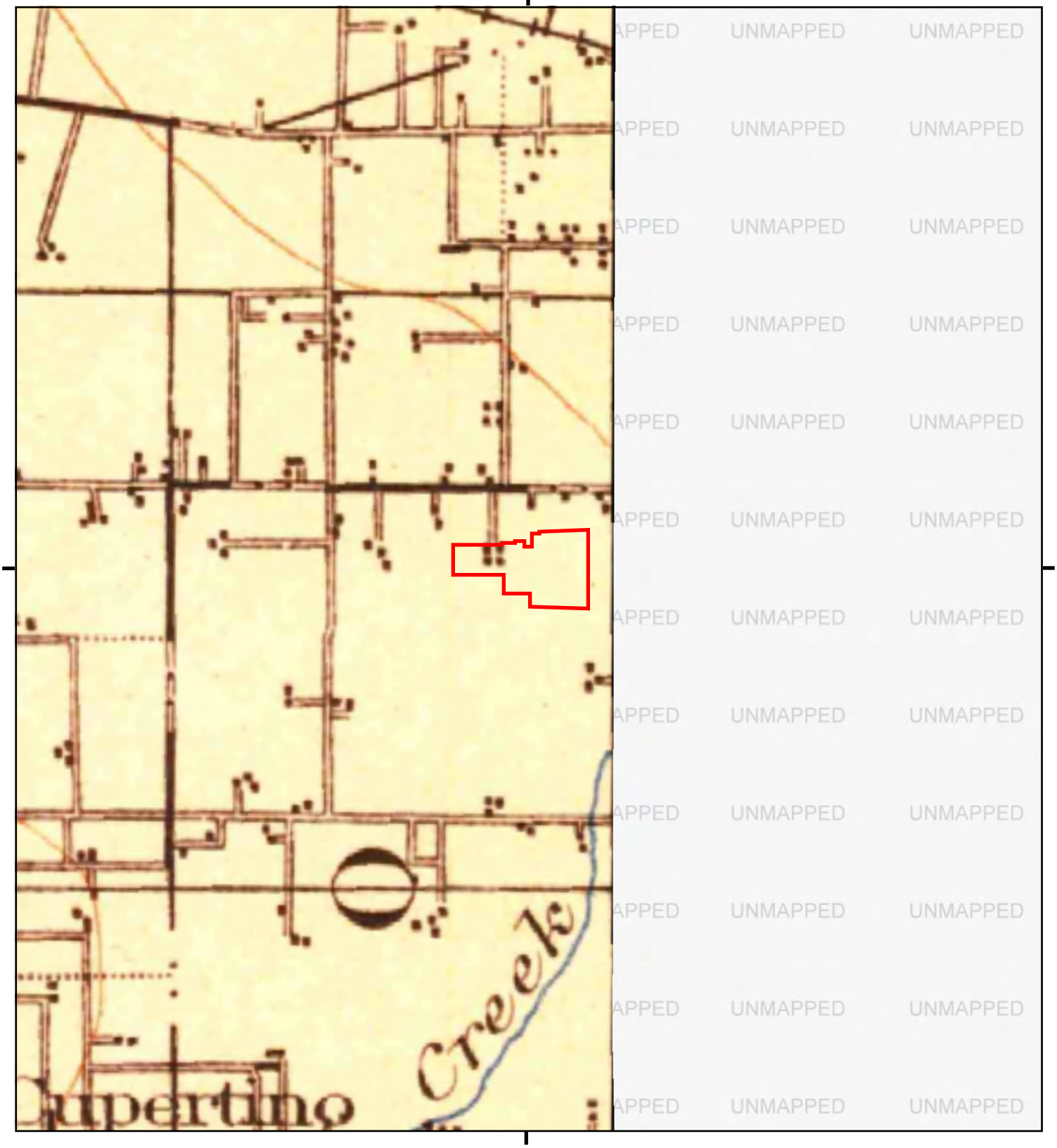
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1943, 15-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

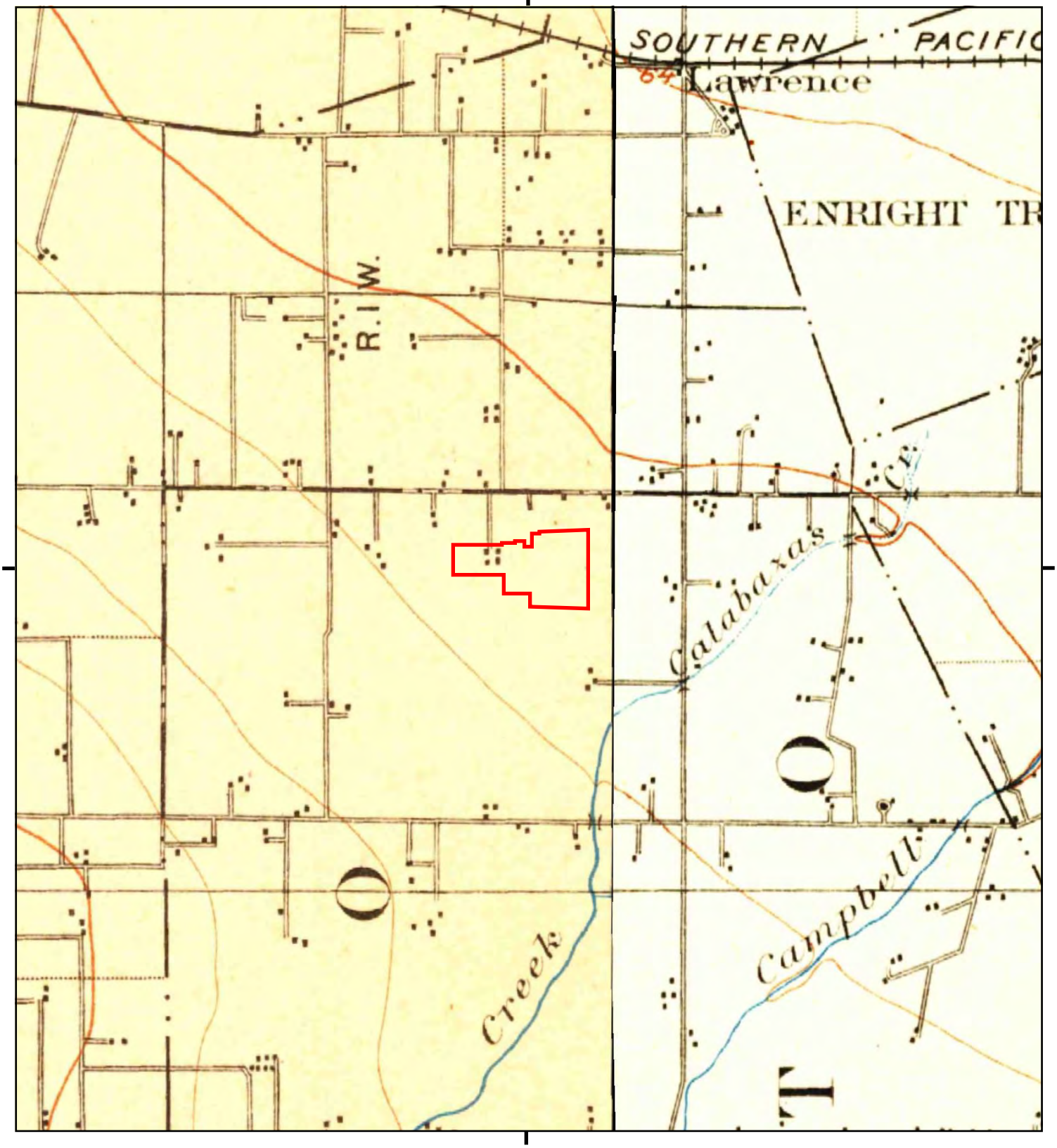
TP, Santa Cruz, 1902, 30-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N

Historical Topo Map

1899



This report includes information from the following map sheet(s).

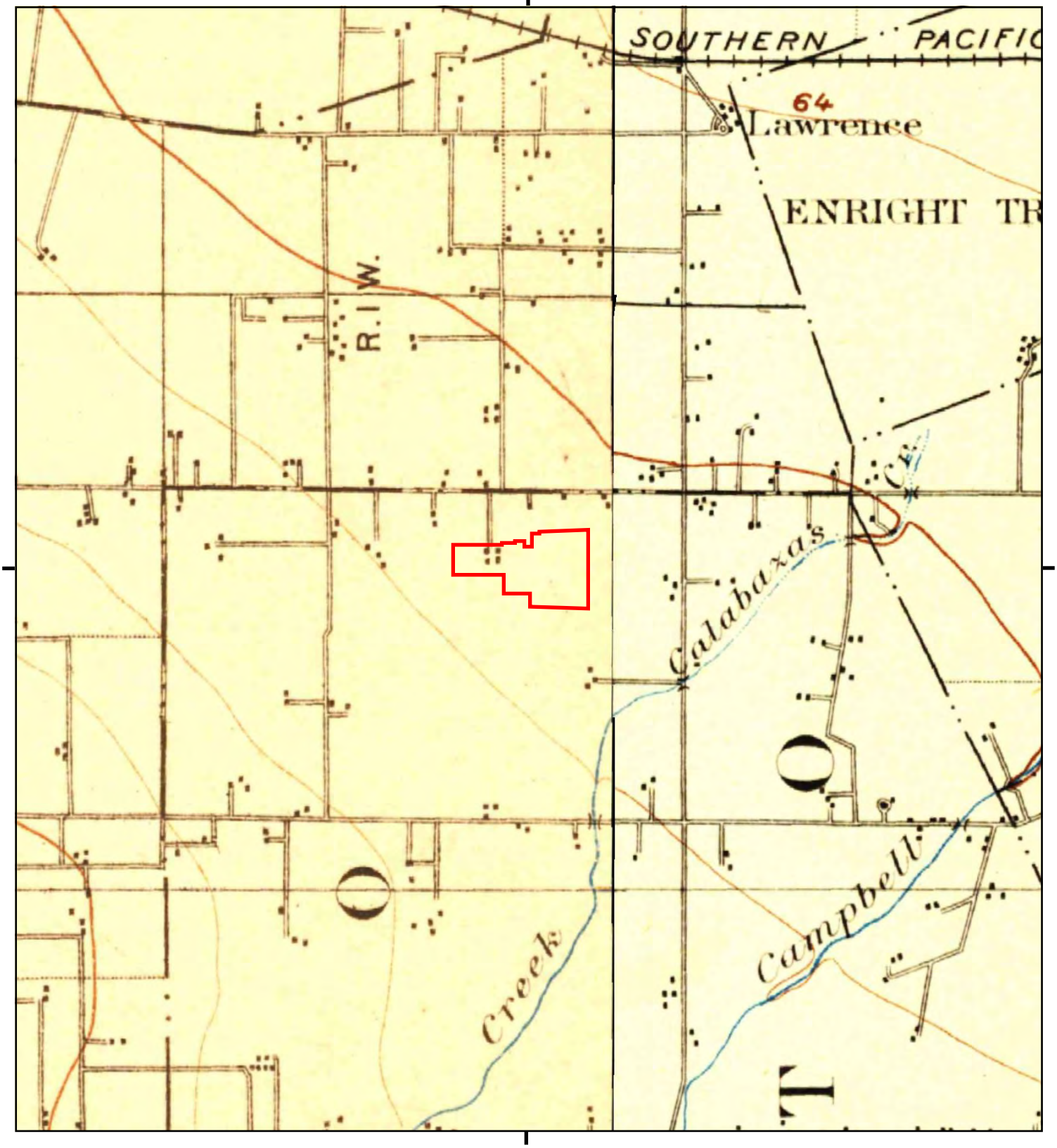
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1899, 15-minute
E, San Jose, 1899, 15-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

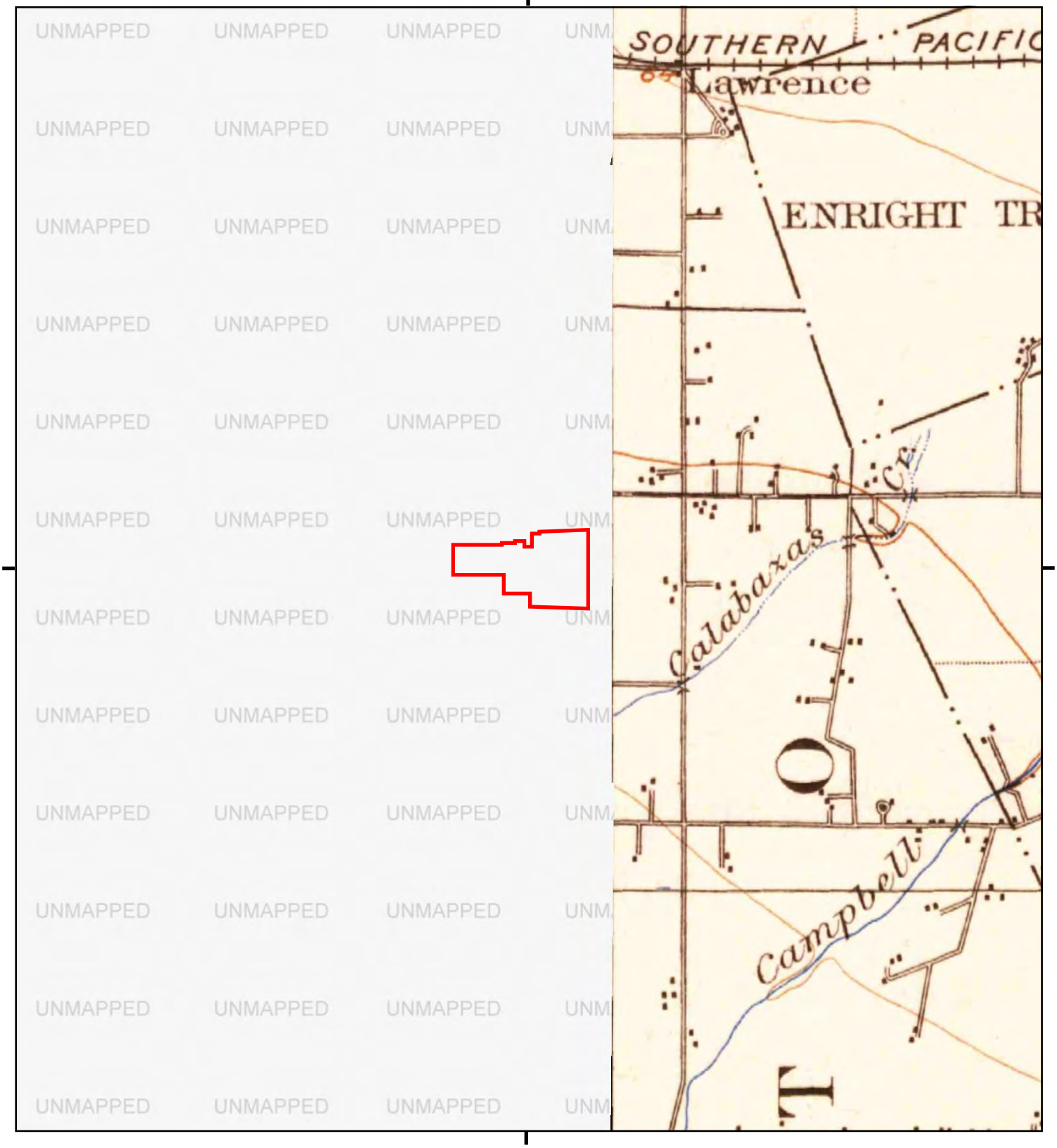
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1897, 15-minute
E, San Jose, 1897, 15-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

E, San Jose, 1889, 15-minute

SITE NAME: Patrick Henry and Peterson Campus Pha
ADDRESS: 1095 Dunford Way
Sunnyvale, CA 94087
CLIENT: ARCADIS U.S., Inc.

N

Patrick Henry and Peterson Campus Phase I ESA

1095 Dunford Way

Sunnyvale, CA 94087

Inquiry Number: 6951305.3

April 22, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/22/22

Site Name:

Patrick Henry and Peterson Ca
1095 Dunford Way
Sunnyvale, CA 94087
EDR Inquiry # 6951305.3

Client Name:

ARCADIS U.S., Inc.
200 South Michigan Avenue Suite 2000
Chicago, IL 60604
Contact: Divya Mehta

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by ARCADIS U.S., Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # DD28-4501-8A38

PO # 30126698

Project 30126698

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: DD28-4501-8A38

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Patrick Henry and Peterson Campus Phase I ESA
1095 Dunford Way
Sunnyvale, CA 94087

Inquiry Number: 6951305.5
April 23, 2022

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through 2017. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2017	Cole Information Services	-	X	X	-
2014	Cole Information Services	-	X	X	-
2009	Cole Information Services	-	X	X	-
2006	Haines Company, Inc.	-	-	-	-
2004	Cole Information Services	-	X	X	-
2001	Haines Company, Inc.	X	X	X	-
2000	Haines Company	-	-	-	-
1999	Cole Information Services	-	X	X	-
1996	Pacific Bell	-	-	-	-
1994	Cole Information Services	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1991	PACIFIC BELL WHITE PAGES	X	X	X	-
1986	Pacific Bell	X	X	X	-
1985	Pacific Bell	X	X	X	-
1982	Pacific Telephone	X	X	X	-
1980	Pacific Telephone	-	X	X	-
1978	R. L. Polk & Co.	-	-	-	-
1975	Pacific Telephone	X	X	X	-
1974	R. L. Polk Co.	-	-	-	-
1970	R. L. Polk Co.	-	-	-	-
1968	R. L. Polk Co.	X	X	X	-
1966	R. L. POLK	-	-	-	-
1965	R. L. Polk Co.	-	-	-	-
1964	R. L. Polk Co.	X	X	X	-
1963	Pacific Telephone	X	X	X	-
1962	R. L. Polk & Co.	-	-	-	-
1960	R. L. Polk Co.	-	-	-	-
1957	R. L. Polk Co.	-	-	-	-
1955	R.L. Polk and Co Publishers	-	-	-	-
1950	R. L. Polk Co.	-	-	-	-
1946	R. L. Polk Co.	-	-	-	-
1945	R. L. Polk Co.	-	-	-	-
1942	R.L. Polk	-	-	-	-
1940	R. L. Polk Co.	-	-	-	-
1936	R. L. Polk Co.	-	-	-	-
1935	R. L. Polk Co.	-	-	-	-
1931	R. L. Polk Co.	-	-	-	-
1930	R. L. Polk Co. of California	-	-	-	-
1926	R. L. Polk Co.	-	-	-	-
1925	R. L. Polk Co.	-	-	-	-
1922	R. L. Polk Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

1095 Dunford Way
Sunnyvale, CA 94087

FINDINGS DETAIL

Target Property research detail.

DUNFORD WAY

1095 DUNFORD WAY

Year	*Uses*	*Source*
2001	ACADEMY	Haines Company, Inc.
	APPLESEED	Haines Company, Inc.
	CHRISTIAN CHURCH SCLARSC PATRICK	Haines Company, Inc.
	HENRY SOLAR SC 9 TA	Haines Company, Inc.
	MONTESSORISCHOOL DARULHIKMA	Haines Company, Inc.
	RIVER OF LIFE	Haines Company, Inc.
	SILICON VALLEY	Haines Company, Inc.
1991	College Clinic	PACIFIC BELL WHITE PAGES
	Palmer College Of Chiropractic West	PACIFIC BELL WHITE PAGES
	PALMER COLLEGE OF CHIROPRACTIC-WEST	PACIFIC BELL WHITE PAGES
1986	Campus Clinic	Pacific Bell
	College	Pacific Bell
	PALMER	Pacific Bell
	PALMER COLLEGE OF	Pacific Bell
	SIMPLY DELICIOUS	Pacific Bell
1985	CAMPUS CLINIC	Pacific Bell
	PALMER COLLEGE F CHIROPRACTICWEST	Pacific Bell
	SIMPLY DELICIOUS	Pacific Bell
1982	Palmer College Of Chiropractic West	Pacific Telephone
	Palmer College Of Chiropractic West Clinic	Pacific Telephone
	Simply Delicious	Pacific Telephone
1975	Patrick Henry	Pacific Telephone

FINDINGS

Year	Uses	Source
1975	PATRICK HENRY SCHOOL	Pacific Telephone
	SANTA CLARA UNIFIED SCHOOL DISTRICT Board Of Education Administration Building	Pacific Telephone
	SUTTER JOHN	Pacific Telephone
1968	HENRY PATRICK SCHOOL	R. L. Polk Co.
1964	Patrick Henry Sch	R. L. Polk Co.
1963	Jefferson School	Pacific Telephone
	Patrick Henry School	Pacific Telephone
	Supervisor of Nurses	Pacific Telephone

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CASTLETON TER

1030 CASTLETON TER

Year	*Uses*	*Source*
2017	ABHIJIT KALAMKAR	Cole Information Services
	STEVEN COGSWELL	Cole Information Services
	FATEMEH AMIRI	Cole Information Services
	YAN ZHANG	Cole Information Services
	MARIKO WATANABE	Cole Information Services
	FEN LIU	Cole Information Services
2014	REZA SALEHI	Cole Information Services
	YAN ZHANG	Cole Information Services
	FEN LIU	Cole Information Services
	SUBRAMANIAM VASUDEVAN	Cole Information Services
	STEVEN COGSWELL	Cole Information Services
	ABHIJIT KALAMKAR	Cole Information Services
2009	REZA SALEHI	Cole Information Services
	RAJEEV BHARDWAJ	Cole Information Services
	MANOJ MATHEW	Cole Information Services
	NOEL VARGESE	Cole Information Services
	YANG ZHANG	Cole Information Services
	ABHIJIT KALAMKAR	Cole Information Services
	SABYASACHI DAS	Cole Information Services
2004	MANOJ MATHEW	Cole Information Services
	RAJEEV BHARDWAJ	Cole Information Services
	YAN DONG	Cole Information Services
	GREEN BANNER	Cole Information Services
	MARESH SRINIVASAN	Cole Information Services
	REZA SALEHI	Cole Information Services
	RAMAN THIARA	Cole Information Services

FINDINGS

Year	Uses	Source
2001	FERGUSQN Francme	Haines Company, Inc.
	HENDERSONHank	Haines Company, Inc.
	MONTGOMERYJef S	Haines Company, Inc.
	MONTGOMERY Sheal	Haines Company, Inc.
	WATKINSPa Ul V	Haines Company, Inc.
1999	REZA SALEHI	Cole Information Services
	SABYASACHI DAS	Cole Information Services
	ABHIJIT KALAMKAR	Cole Information Services
	YANG ZHANG	Cole Information Services
	NOEL VARGESE	Cole Information Services
	ROBERT HARVANCIK	Cole Information Services
	RAJEEV BHARDWAJ	Cole Information Services
	MANOJ MATHEW	Cole Information Services
1991	A VARADARJAN D R	PACIFIC BELL WHITE PAGES
	C TUN MYA MYAT	PACIFIC BELL WHITE PAGES
	F HAZEMI KAZ	PACIFIC BELL WHITE PAGES
	H FLETCHER WARNER & JUDY	PACIFIC BELL WHITE PAGES
1986	Scheff John	Pacific Bell
	Shani Amos & Liora	Pacific Bell
	Burd John	Pacific Bell
	Kusaka Tom	Pacific Bell
	Parks Sheldon L	Pacific Bell
	Wolken Peter & Judith	Pacific Bell
	Walklns R	Pacific Bell
1982	Buel Tom RJr	Pacific Telephone

1035 CASTLETON TER

Year	Uses	Source
2017	CHARLES BAUTISTA	Cole Information Services
	BEN SHEU	Cole Information Services
	BARBARA SMITH	Cole Information Services
	SUSAN SANDSTROM	Cole Information Services
	YUNG CHIEN	Cole Information Services

FINDINGS

Year	Uses	Source
2017	ALINA MAMROT	Cole Information Services
	MERVAT ALY	Cole Information Services
	JAYARAMAN IYER	Cole Information Services
2014	BOGDAN SZAFRANTEC	Cole Information Services
	SUSAN SANDSTROM	Cole Information Services
	SACHIN GAD	Cole Information Services
	JAY IYER	Cole Information Services
	YUNG CHIEN	Cole Information Services
	JIANER BAO	Cole Information Services
	BARBARA SMITH	Cole Information Services
	CHARLES BAUTISTA	Cole Information Services
2009	CHARLES BAUTISTA	Cole Information Services
	BARBARA BRAVO	Cole Information Services
	YUNG CHIEN	Cole Information Services
	JAYARAMAN IYER	Cole Information Services
	SACHIN GAD	Cole Information Services
	SUSAN SANDSTROM	Cole Information Services
	BOGDAN SZAFRANTEC	Cole Information Services
	ROSE GROUP	Cole Information Services
2004	CHARLES BAUTISTA	Cole Information Services
	BOGDAN SZAFRANTEC	Cole Information Services
	YUNG CHIEN	Cole Information Services
	PRABHUDEV VONTI	Cole Information Services
	CRAIG LAVERONE	Cole Information Services
	BARBARA BRAITHWAITE	Cole Information Services
	JAYARAMAN IYER	Cole Information Services
1999	SUSAN SANDSTROM	Cole Information Services
	WING MAK	Cole Information Services
	BOGDAN SZAFRANTEC	Cole Information Services
	BARBARA BRAVO	Cole Information Services
	YUNG CHIEN	Cole Information Services
	JAYARAMAN IYER	Cole Information Services

FINDINGS

Year	Uses	Source
1999	SACHIN GAD	Cole Information Services
	CHARLES BAUTISTA	Cole Information Services
1991	H ORTMANN MANFRED W & PATRICIA M	PACIFIC BELL WHITE PAGES
	F GUPTA ALOK	PACIFIC BELL WHITE PAGES
1986	Braithwaite R Kelly	Pacific Bell
	Ortmann Manfred W & Patricia M	Pacific Bell
	Wrieden Chas O	Pacific Bell
	Merkel PA	Pacific Bell
	Lewis John H	Pacific Bell
	i Gupta Alok	Pacific Bell
	Gupta Abha &Subhash	Pacific Bell
	Carlson K L	Pacific Bell
1982	Eyrich S	Pacific Telephone
	Wrieden Chas O	Pacific Telephone

DUNFORD WAY

1000 DUNFORD WAY

Year	Uses	Source
1991	Messersmith Aida Z	PACIFIC BELL WHITE PAGES
	MESSERSMITH AIDA Z	PACIFIC BELL WHITE PAGES

1048 DUNFORD WAY

Year	Uses	Source
2017	ADAM COSTA	Cole Information Services
2014	MARY COSTA	Cole Information Services
2001	COSTAMary	Haines Company, Inc.
1986	MANRUBIA EDW	Pacific Bell
	Manrubia Edw	Pacific Bell
	Manrubia Edw	Pacific Bell
1985	MANRUBIA EDW	Pacific Bell
1982	Manrublla Edw	Pacific Telephone
1980	IA anrubia Edw	Pacific Telephone
	Manriquen Ralph	Pacific Telephone

FINDINGS

Year	Uses	Source
1968	VACANT	R. L. Polk Co.
1964	Willis Kenneth A	R. L. Polk Co.
1963	Willis Kenneth A	Pacific Telephone

1056 DUNFORD WAY

Year	Uses	Source
2017	EDWARD LEA	Cole Information Services
2014	EDWARD LEA	Cole Information Services
2009	REBECCA LEA	Cole Information Services
2004	REBECCA LEA	Cole Information Services
2001	LEA Edward Christopher	Haines Company, Inc.
	LEA Rebecca	Haines Company, Inc.
1999	REBECCA LEA	Cole Information Services
1991	Moretta John A	PACIFIC BELL WHITE PAGES
	MORETTA JOHN A	PACIFIC BELL WHITE PAGES
	MORETTA JOHN A	PACIFIC BELL WHITE PAGES
1986	Moretta John A	Pacific Bell
1985	MORETTA JOHN A	Pacific Bell
1982	Moretta John A	Pacific Telephone
1975	Moretta John A	Pacific Telephone
1968	MORETTA JOHN A CH	R. L. Polk Co.
1964	Moretta John A	R. L. Polk Co.
1963	Moretta John A	Pacific Telephone

1064 DUNFORD WAY

Year	Uses	Source
2017	MARK BEYER	Cole Information Services
2014	MARK BEYER	Cole Information Services
2001	SBEYERMark	Haines Company, Inc.
1982	Brown Walter J	Pacific Telephone
1975	BROWN WAITER J	Pacific Telephone
	Brown Walter J	Pacific Telephone
1968	BROWN WALTER J	R. L. Polk Co.
1964	Brown Walter J	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1963	Brow n Walter J	Pacific Telephone

1072 DUNFORD WAY

Year	Uses	Source
2017	BRIAN HAYWARD	Cole Information Services
2014	BRIAN HAYWARD	Cole Information Services
2009	BRIAN HAYWARD	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	HAYWARDB rian K	Haines Company, Inc.
	OTAYLOR Ralph	Haines Company, Inc.
1999	BRIAN HAYWARD	Cole Information Services
1968	TAYLOR RALPH L	R. L. Polk Co.
	SANDPIPER CT	R. L. Polk Co.
1964	Taylor Ralph L	R. L. Polk Co.
1963	Taylor Ralph L	Pacific Telephone

1080 DUNFORD WAY

Year	Uses	Source
2017	LYCIA MESSERSMITH	Cole Information Services
2014	Z AIDA	Cole Information Services
2009	AIDA MESSERSMITH	Cole Information Services
2004	AIDA MESSERSMITH	Cole Information Services
2001	SMESSERSMITHAlda Z	Haines Company, Inc.
1999	AIDA MESSERSMITH	Cole Information Services
1994	MESSERSMITH, AIDA Z	Cole Information Services
1991	WASHBURN RONALD	PACIFIC BELL WHITE PAGES
	MESSERSMITH ALDA Z	PACIFIC BELL WHITE PAGES
1986	MESSERSMITH AIDS Z	Pacific Bell
	Messersmith Aids Z	Pacific Bell
	Messersmith Alda Z	Pacific Bell
1985	MESSERMITH AIDA Z	Pacific Bell
1975	MESSERSMITH FRANK L	Pacific Telephone
1968	MESSERSMITH FRANK	R. L. Polk Co.
1964	Steinw achs Karl	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1963	Steinw achs Karl D	Pacific Telephone

E CASTLETON TER

1035 E CASTLETON TER

Year	Uses	Source
1982	Braithw aite R Kelly	Pacific Telephone

E ROAD RUNNER TER

1360 E ROAD RUNNER TER

Year	Uses	Source
1975	Mindigo Richard	Pacific Telephone

QUAIL AVE

1502 QUAIL AVE

Year	Uses	Source
2017	MEADOW IP	Cole Information Services
2009	LANCE CAMPBELL	Cole Information Services
2004	LANCE CAMPBELL	Cole Information Services
2001	CAMPBELLLance	Haines Company, Inc.
1999	LANCE CAMPBELL	Cole Information Services
1980	Quillman Robt	Pacific Telephone
1968	BEARDSLEY RICHD D	R. L. Polk Co.
1964	Vacant	R. L. Polk Co.
1963	Haddox Harold	Pacific Telephone

ROAD RUNNER TER

1360 ROAD RUNNER TER

Year	Uses	Source
2017	JINSOO CHOI	Cole Information Services
	CAROLINE ANTONIO	Cole Information Services
	DAVID BOYANICH	Cole Information Services
	ROY WOLF	Cole Information Services
	JAMES ALVEY	Cole Information Services

FINDINGS

Year	Uses	Source
2017	JOZSEF DIHEN	Cole Information Services
	KRISHNARAM KENTHAPADI	Cole Information Services
	SAMEER KULKARNI	Cole Information Services
2014	ROGER RIFFENBURGH	Cole Information Services
	TERRE CHOCHOLATY	Cole Information Services
	BYRON BROUSSARD	Cole Information Services
	ROY WOLF	Cole Information Services
	JAMES ALVEY	Cole Information Services
	CAROLINE ANTONIO	Cole Information Services
	RAJ ARUDE	Cole Information Services
	JOZSEF DIHEN	Cole Information Services
	SUBHASHINI THULASIRAM	Cole Information Services
2009	BYRON BROUSSARD	Cole Information Services
	TERESA CHOCHOLATY	Cole Information Services
	RICHARD JOY	Cole Information Services
	ALBERT THEIS	Cole Information Services
	JAMES ALVEY	Cole Information Services
	JOZSEF DIHEN	Cole Information Services
	RAJ ARUDE	Cole Information Services
	ASHUTOSH AGHARKAR	Cole Information Services
	ROGER RIFFENBURGH	Cole Information Services
	ROY WOLF	Cole Information Services
2004	JAMES ALVEY	Cole Information Services
	ALBERT THEIS	Cole Information Services
	LIN PARKER	Cole Information Services
	DARLENE BOYANICH	Cole Information Services
	TERESA CHOCHOLATY	Cole Information Services
	RICHARD ELLIOTT	Cole Information Services
	ROY WOLF	Cole Information Services
	BYRON BROUSSARD	Cole Information Services
	ASHUTOSH AGHARKAR	Cole Information Services
1999	JAMES ALVEY	Cole Information Services

FINDINGS

Year	Uses	Source
1999	ALBERT THEIS	Cole Information Services
	UMA MAHADEVAN	Cole Information Services
	RICHARD JOY	Cole Information Services
	TERESA CHOCHOLATY	Cole Information Services
	JOZSEF DIHEN	Cole Information Services
	ROY WOLF	Cole Information Services
	ROGER RIFFENBURGH	Cole Information Services
	ASHUTOSH AGHARKAR	Cole Information Services
	RAJ ARUDE	Cole Information Services
	BYRON BROUSSARD	Cole Information Services
1994	ALVEY, JAMES L	Cole Information Services
	ELLISON, JAMES	Cole Information Services
	BOYANICH, D	Cole Information Services
1991	G ALVEY JAMES L	PACIFIC BELL WHITE PAGES
1986	HICKEY W L SONS INC pimbng contrs	Pacific Bell
	Hicks Jerry	Pacific Bell
	Murphy Gao J	Pacific Bell
	Robinson David	Pacific Bell
	CAMBRIDGE PROPERTIES	Pacific Bell
	Taira Tsuyoshi	Pacific Bell
1982	Baytel Tron Inc	Pacific Telephone
	Robinson David	Pacific Telephone
	Taira Tsuyoshi	Pacific Telephone
1975	Mc Sweeney Michael M	Pacific Telephone
	Lin Shing	Pacific Telephone
	Boyanich D M	Pacific Telephone

ROADRUNNER TER

1360 ROADRUNNER TER

Year	Uses	Source
1986	KENNETH MIRON	Pacific Bell
	CAMBRIDGE PROPERTIES	Pacific Bell

FINDINGS

Year	*Uses*	*Source*
1986	TAIRA TSUYOSHI	Pacific Bell
	ROBINSON DAVID	Pacific Bell
	HICKS JERRY	Pacific Bell

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1000 DUNFORD WAY	2017, 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1030 CASTLETON TER	2017, 2014, 2009, 2006, 2004, 2000, 1999, 1996, 1994, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1030 CASTLETON TER	2006, 2001, 2000, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1035 CASTLETON TER	2006, 2001, 2000, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1035 CASTLETON TER	2017, 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1035 E CASTLETON TER	2017, 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1991, 1986, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1048 DUNFORD WAY	2017, 2014, 2009, 2006, 2004, 2000, 1999, 1996, 1994, 1991, 1978, 1975, 1974, 1970, 1966, 1965, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1048 DUNFORD WAY	2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1056 DUNFORD WAY	2006, 2001, 2000, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1056 DUNFORD WAY	2017, 2014, 2009, 2006, 2004, 2000, 1999, 1996, 1994, 1980, 1978, 1974, 1970, 1966, 1965, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1064 DUNFORD WAY	2017, 2014, 2009, 2006, 2004, 2000, 1999, 1996, 1994, 1991, 1986, 1985, 1980, 1978, 1974, 1970, 1966, 1965, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1064 DUNFORD WAY	2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1072 DUNFORD WAY	2006, 2001, 2000, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1072 DUNFORD WAY	2017, 2014, 2009, 2006, 2004, 2000, 1999, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1966, 1965, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
1080 DUNFORD WAY	2017, 2014, 2009, 2006, 2004, 2000, 1999, 1996, 1994, 1982, 1980, 1978, 1974, 1970, 1966, 1965, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1080 DUNFORD WAY	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1360 E ROAD RUNNER TER	2017, 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1360 ROAD RUNNER TER	2017, 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1985, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1360 ROAD RUNNER TER	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1360 ROADRUNNER TER	2017, 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1502 QUAIL AVE	2017, 2014, 2009, 2006, 2004, 2000, 1999, 1996, 1994, 1991, 1986, 1985, 1982, 1978, 1975, 1974, 1970, 1966, 1965, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
1502 QUAIL AVE	2014, 2006, 2001, 2000, 1996, 1994, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
1095 Dunford Way	2017, 2014, 2009, 2006, 2004, 2000, 1999, 1996, 1994, 1980, 1978, 1974, 1970, 1966, 1965, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

CONDITION OF TITLE

Issued By:

Fidelity National Title Insurance Company

Guarantee Number:

FSBC-TO16000188

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, AND THE GUARANTEE CONDITIONS ATTACHED HERETO AND MADE A PART OF THIS GUARANTEE,

FIDELITY NATIONAL TITLE INSURANCE COMPANY
a corporation, herein called the Company

GUARANTEES

the Assured named in Schedule A of this Guarantee

against loss or damage not exceeding the Amount of Liability stated in Schedule A sustained by the Assured by reason of any incorrectness in the Assurances set forth in Schedule A.

Fidelity National Title Company
675 N. First Street, 4th Floor
San Jose, CA 95112

Countersigned By:

Authorized Officer or Agent

Fidelity National Title Insurance Company

By:

President

Attest:

Secretary

ISSUING OFFICE:
Title Officer: Ellen Bragg
Fidelity National Title Company
675 N. First Street, 4th Floor
San Jose, CA 95112
Phone: 408-436-2715 x225 Fax: 408-295-3975
Main Phone: (408)436-2700
Email: Ellen.Bragg@titlegroup.fntg.com

SCHEDULE A

Amount of Liability	Fee	Title Officer
$5,000.00	$750.00	Ellen Bragg

Date of Guarantee: February 12, 2016 at 07:30 AM

1. Name of Assured: Santa Clara Unified School District, Michael Healy

2. The estate or interest in the Land which is covered by this Guarantee is:

   A Fee

3. The Land referred to in this Guarantee is described as follows:

   SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

4. ASSURANCES:

   According to the Public Records as of the Date of Guarantee,

   a. Title to the estate or interest in the Land is vested in:

      Santa Clara Union High School District of Santa Clara County, as to Parcels One and Two, and Jefferson Union School District of Santa Clara County as to Parcels Three and Four

   b. Title to the estate or interest is subject to defects, liens or encumbrances shown in Schedule B which are not necessarily shown in the order of their priority.

END OF SCHEDULE A

EXHIBIT "A"

Legal Description

For APN/Parcel ID(s): 313-10-004

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF SUNNYVALE, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE:

BEGINNING AT THE SOUTHWEST CORNER OF LOT 41 OF TRACT 622 AS SAID TRACT IS RECORDED IN BOOK 22 OF MAPS PAGE 50 SANTA CLARA COUNTY RECORDS, SAID POINT BEING ALSO ON THE EASTERLY BOUNDARY OF TRACT 700, RECORDED IN BOOK 26 OF MAPS PAGES 40 AND 41; THENCE SOUTHERLY ALONG THE EASTERLY LINE OF TRACT 700 S. 0° 25' 20" E. 1796.87 FEET TO THE NORHTERLY LINE OF THAT 10.853 ACRE PARCEL OF LAND CONVEYED BY I. & R. CASTELLO TO JEFFERSON SCHOOL DISTRICT OF SANTA CLARA COUNTY BY DEED RECORDED AUGUST 23, 1955 IN BOOK 3261 O.R. PAGE 194, SANTA CLARA COUNTY RECORDS; THENCE EASTERLY ALONG THE NORTHERLY BOUNDARY OF SAID 10.853 ACRE PARCEL N. 86° 05' E. 1215.40 FEET TO THE WESTERLY LINE OF THE 13.518 ACRE PARCEL OF LAND CONVEYED BY DOMENIC CIRRINCIONE, ET AL, TO THE JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY BY DEED RECORDED APRIL 26, 1960 IN BOOK 4775 O.R. PAGE 347, SANTA CLARA COUNTY RECORDS; THENCE NORTHERLY ALONG THE WESTERLY LINE OF SAID 13.518 ACRE PARCEL N. 0° 14' 15" W. 591.21 FEET TO THE SOUTHWEST CORNER OF THAT 11.817 ACRE PARCEL OF LAND CONVEYED BY FRANK L. TERESI, ET AL, TO JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY BY DEED RECORDED APRIL 8, 1960 IN BOOK 4757 O.R. PAGE 472, SANTA CLARA COUNTY RECORDS; THENCE NORTHERLY ON AND ALONG THE WESTERLY LINE OF SAID 11.817 ACRE PARCEL N. 0° 14' 15" W. 326.91 FEET TO A POINT; THENCE AT RIGHT ANGLES TO THE WESTERLY LINE OF SAID 11.817 ACRE PARCEL S. 89° 45' 45" W. 120.81 FEET TO A POINT; THENCE AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE N. 0° 14' 15" W. A DISTANCE OF 964.62 FEET TO THE EASTERLY PROLONGATION OF THE CENTERLINE OF BRYANT WAY AS SAID STREET IS SHOWN ON MAP OF SAID TRACT 622; THENCE WESTERLY ALONG THE EASTERLY PROLONGATION OF THE CENTERLINE OF BRYANT WAY S. 89° 34' 40" W. A DISTANCE OF 478.40 FEET, MORE OR LESS, TO THE INTERSECTION OF THE NORTHERLY PROLONGATION OF THE EASTERLY LINE OF LOTS 11 AND 12 TRACT 622; THENCE SOUTHERLY ALONG THE NORTHERLY PROLONGATION OF EASTERLY LINE OF SAID LOTS 11 AND 12, S. 0° 25' 20" E. 180.00 FEET TO THE SOUTHEAST CORNER OF SAID LOT 12; THENCE CONTINUING ALONG THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF SAID LOTS 11 AND 12 S. 0° 25' 20" E. 15.33 FEET TO A POINT; THENCE PARALLEL TO THE SOUTHERLY LINE OF SAID LOT 12 S. 89° 34' 40" W. 310.00 FEET TO A POINT LYING ON THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF LOT 30 OF SAID TRACT 622; THENCE NORTHERLY ALONG THE SOUTHERLY PROLONGATION OF SAID LOT 30 N. 0° 25' 20" W. 35.00 FEET TO THE SOUTHEAST CORNER OF SAID LOT 30; THENCE WESTERLY ALONG THE SOUTHERLY LINE OF SAID LOT 30 AND ITS WESTERN PROLONGATION AND THE SOUTHERLY LINE OF LOT 41 OF SAID TRACT 622, S. 89° 34' 40" W. 310.00 FEET TO THE POINT OF BEGINNING.

PARCEL TWO:

BEGINNING AT THE POINT OF INTERSECTION OF THE WESTERLY LINE OF HAM AVENUE WITH THE WESTERLY PROLONGATION OF THE SOUTHERLY LINE OF LOT 12 AS SAID HAM AVENUE AND LOT 12 ARE SHOWN UPON THAT CERTAIN MAP ENTITLED, "TRACT NO. 622, I. & R. CASTELLO TRACT UNIT NO. 1", AS RECORDED IN BOOK 22 OF MAPS, AT PAGE 50, SANTA CLARA COUNTY RECORDS; THENCE EASTERLY ALONG THE WESTERLY PROLONGATION OF SAID LOT 12 NORTH 89° 32' 13" EAST 60.00 FEET TO THE INTERSECTION THEREOF WITH THE EASTERLY LINE OF SAID HAM AVENUE; THENCE SOUTHERLY ALONG THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF SAID HAM AVENUE SOUTH 0° 28' 04" EAST 15.33 FEET TO THE POINT OF INTERSECTION THEREOF WITH THE NORTHERLY LINE OF THAT CERTAIN 48.40 ACRE PARCEL OF LAND DESCRIBED IN THE DEED TO THE SANTA CLARA UNION HIGH SCHOOL DISTRICT OF SANTA CLARA COUNTY, AS RECORDED FEBRUARY 6, 1962 IN BOOK 5471 OF OFFICIAL RECORDS AT PAGE 705, RECORDS OF SANTA CLARA COUNTY, CALIFORNIA; THENCE ALONG THE NORTHERLY LINE OF SAID 48.40 ACRE PARCEL OF LAND SOUTH 89° 32' 13" WEST 60.00 FEET TO THE POINT OF INTERSECTION THEREOF WITH THE SOUTHERLY PROLONGATION OF THE WESTERLY LINE OF HAM AVENUE; THENCE NORTHERLY ALONG THE SOUTHERLY PROLONGATION OF SAID HAM AVENUE NORTH 0° 28' WEST 15.33 FEET TO THE POINT OF BEGINNING.

EXHIBIT "A"

Legal Description

PARCEL THREE:

BEGINNING AT A POINT IN THE WESTERLY LINE OF THAT CERTAIN 79.01 ACRE PARCEL CONVEYED BY AUGUELLO TO ENGLAND BY DEED RECORDED IN BOOK 17 OF DEEDS AT PAGE 22, SANTA CLARA COUNTY RECORDS, SAID WESTERLY LINE ALSO BEING THE EASTERLY LINE OF THAT CERTAIN 75.04 ACRE TRACT CONVEYED TO WILCOX BY DEED RECORDED IN BOOK 15 OF DEEDS AT PAGE 445, SANTA CLARA COUNTY RECORDS, SAID POINT BEING THE WESTERLY CORNER COMMON TO THE 20.00 ACRE TRACT CONVEYED TO HAYSLIP BY DEED RECORDED IN BOOK 218 OF DEEDS AT PAGE 62 AND THAT CERTAIN 21.741 ACRE TRACT CONVEYED TO WILLIAMS, ET AL, BY DEED RECORDED IN BOOK 441 OF DEEDS AT PAGE 345, SANTA CLARA COUNTY RECORDS; THENCE FROM SAID POINT OF BEGINNING NORTH 89° 37' 50" EAST 918.00 FEET ALONG THE LINE DIVIDING SAID 20.0 ACRE AND SAID 21.741 ACRE TRACT TO A POINT; THENCE SOUTH 0° 32' 40" EAST 661.39 FEET TO THE SOUTHERLY LINE OF THE 79.01 ACRE TRACT HEREINABOVE MENTIONED; THENCE ALONG SAID SOUTHERLY LINE NORTH 89° 43' 25" WEST 243.34 FEET TO AN IRON PIPE AT THE NORTHEASTERLY CORNER OF TRACT NO.1830, LA LINDA MEADOWS, UNIT NO. 2, THE MAP OF SAID TRACT BEING RECORDED IN BOOK 84 OF MAPS AT PAGES 28 AND 29, SANTA CLARA COUNTY RECORDS; THENCE ALONG A NORTHERLY BOUNDARY OF SAID TRACT NORTH 87° 39' 25" WEST 681.75 FEET TO A CORNER IS SAID BOUNDARY; THENCE ALONG AN EASTERLY BOUNDARY OF SAID TRACT NORTH 0° 26' 35" EAST 11.88 FEET TO THE NORTHEASTERLY TERMINUS OF QUAIL AVENUE, AS SAID AVENUE IF SHOWN UPON SAID MAP, SAID NORTHEASTERLY TERMINUS BEING IN THE WESTERLY BOUNDARY OF THE 79.01 ACRE TRACT HEREINABOVE MENTIONED; THENCE ALONG SAID WESTERLY BOUNDARY NORTH 0° 02' 35" WEST 605.75 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION OF SAID LAND AS CONVEYED TO THE CITY OF SUNNYVALE BY DEED RECORDED MAY 26, 1964 IN BOOK 6516, PAGE 280, SANTA CLARA COUNTY RECORDS.

PARCEL FOUR:

BEGINNING AT A POINT IN THE WESTERLY LINE OF THAT CERTAIN 79.01 ACRE PARCEL CONVEYED BY ARGUELLO TO ENGLAND BY DEED RECORDED IN BOOK 17 OF DEEDS AT PAGE 22, SANTA CLARA COUNTY RECORDS, SAID WESTERLY LINE ALSO BEING THE EASTERLY LINE OF THAT CERTAIN 75.04 ACRE TRACT CONVEYED TO WILCOX BY DEED RECORDED IN BOOK 15 OF DEEDS AT PAGE 445, SANTA CLARA COUNTY RECORDS, SAID POINT BEING THE WESTERLY CORNER COMMON TO THE 20.00 ACRE TRACT CONVEYED TO HAYSLIP BY DEED RECORDED IN BOOK 218 OF DEEDS AT PAGE 62 AND THAT CERTAIN 71.741 ACRE TRACT CONVEYED TO WILLIAMS, ET AL, BY DEED RECORDED IN BOOK 441 OF DEEDS AT PAGE 345, SANTA CLARA COUNTY RECORDS; THENCE FROM SAID POINT OF BEGINNING NORTH 89° 37' 50" EAST 918.00 FEET ALONG THE LINE DIVIDING SAID 20.00 ACRE AND SAID 21.741 ACRE TRACTS TO A POINT; THENCE NORTH 0° 32' 40" WEST 566.97 FEET TO THE NORTHERLY BOUNDARY OF SADI 20.00 ACRE TRACT; THENCE ALONG SAID NORTHERLY BOUNDARY SOUTH 89° 37' 33" WEST 777.46 FEET TO A 1 1/2 INCH IRON PIPE FOUND IN A NORTHWESTERLY CORNER THEREOF; THENCE ALONG A WESTERLY BOUNDARY OF SAID 20.00 ACRE PARCEL SOUTH 9° 02' 35" 31.95 FEET TO AN ANGLE POINT THEREIN; THENCE ALONG A NORTHERLY BOUNDARY OF SAID PARCEL SOUTH 89° 57' 25" WEST 135.58 FEET TO A REDWOOD STAKE SET IN THE EASTERLY BOUNDARY BOUNDARY OF THE HEREINABOVE MENTIONED 75.04 ACRE TRACT AND THE WESTERLY BOUNDARY OF SAID 20.00 ACRE PARCEL; THENCE ALONG THE WESTERLY BOUNDARY SOUTH 0° 02' 35" EAST 535.74 FEET TO THE POINT OF BEGINNING, BEING A PORTION OF THE QUITO RANCHO.

EXCEPTING THEREFROM THAT PORTION OF SAID LAND AS CONVEYED TO THE CITY OF SUNNYVALE BY DEED RECORDED MAY 26, 1964 IN BOOK 6516, PAGE 280, SANTA CLARA COUNTY RECORDS.

SCHEDULE B

1. OWNERSHIP OF THE INTEREST IS IN THE NAME OF:

2. REAL ESTATE TAXES:

a. No assessments have been levied for the tax year 2015-2016 and no delinquencies exist as of the date hereof.

Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.

b. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.

c. Any liens or other assessments, bonds, or special district liens including without limitation, Community Facility Districts, that arise by reason of any local, City, Municipal or County Project or Special District.

3. THE FOLLOWING DEFECTS, LIENS AND ENCUMBRANCES (WHICH ARE NOT NECESSARILY SHOWN IN THEIR ORDER OF PRIORITY) AGAINST THE INTEREST:

a. Water rights, claims or title to water, whether or not disclosed by the public records.

b. Rights of the public to any portion of the Land lying within the area commonly known as

Dunford Way.

c. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	Pacific Gas and Electric Company
Purpose:	Single line of poles
Recording Date:	March 12, 1913
Recording No.:	Book 401, Page 74 of Deeds
Affects:	The exact location and extent of said easement is not disclosed of record.

d. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	Pacific Gas and Electric Company
Purpose:	Single line of poles
Recording Date:	April 28, 1931
Recording No.:	Book 563, Page 421, of Official Records
Affects:	As described in said document

SCHEDULE B
(continued)

e. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: May 12, 1949
Recording No.: Book 1786, Page 200, of Official Records

f. Matters contained in that certain document

Entitled: Notice Permitting for Extension of Public Utilities
Dated: October 20, 1952
Executed by: Ignazio Castello and Rosalia Castello, husband and wife
Recording Date: October 21, 1952
Recording No.: Book 2511, Page 297, of Official Records

Reference is hereby made to said document for full particulars.

g. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document;

Reserved by: Frank L. Teresi and Pearl Teresi, his wife, Salvatore Teresi, Jr. and Pauline Teresi, his wife
Purpose: Installation, maintenance and repair of an irrigation pipe line
Recording Date: April 8, 1960
Recording No.: Book 4757, Page 472, of Official Records
Affects: As described in said document

h. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: The City of Sunnyvale
Purpose: Public utility
Recording Date: January 27, 1965
Recording No.: Book 6829, Page 597, of Official Records
Affects: As described in said document

i. Matters contained in that certain document

Entitled: Use Permit City of Sunnyvale
Dated: May 17, 2001
Executed by: The City of Sunnyvale and Santa Clara Unified School District
Recording Date: May 17, 2001
Recording No.: 15683591, of Official Records

Reference is hereby made to said document for full particulars.

SCHEDULE B
(continued)

j. Matters contained in that certain document

Entitled:	Use Permit City of Sunnyvale
Dated:	March 16, 2004
Executed by:	The City of Sunnyvale and Santa Clara Unified School District
Recording Date:	March 17, 2004
Recording No.:	17666920, of Official Records

Reference is hereby made to said document for full particulars.

k. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

l. Any easements not disclosed by the public records as to matters affecting title to real property, whether or not said easements are visible and apparent.

m. Matters which may be disclosed by an inspection and/or by a correct ALTA/ACSM Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.

n. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below.

Name of Corporation: Santa Clara Union High School District of Santa Clara County

a. A Copy of the corporation By-laws and Articles of Incorporation.

b. An original or certified copy of a resolution authorizing the transaction contemplated herein.

c. If the Articles and/or By-laws require approval by a ‘parent’ organization, a copy of the Articles and By-laws of the parent.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

SCHEDULE B
(continued)

o. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below.

Name of Corporation: Jefferson Union School District of Santa Clara County

a. A Copy of the corporation By-laws and Articles of Incorporation.

b. An original or certified copy of a resolution authorizing the transaction contemplated herein.

c. If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

p. Please be advised that our search did not disclose any open Deeds of Trust of record. If you should have knowledge of any outstanding obligation, please contact the Title Department immediately for further review prior to closing.

4. THE FOLLOWING MATTERS ARE DISCLOSED BY NAME ONLY AND THE COMPANY, WITHOUT ADDITIONAL INFORMATION, IS UNABLE TO DETERMINE WHETHER ANY OR ALL OF THESE MATTERS ARE DEFECTS, LIENS OR ENCUMBRANCES AGAINST THE INTEREST:

a. None

END OF SCHEDULE B

EXCLUSIONS FROM COVERAGE

Except as expressly provided by the assurances in Schedule A, the Company assumes no liability for loss or damage by reason of the following:

(a) Defects, liens, encumbrances, adverse claims or other matters affecting the title to any property beyond the lines of the Land.

(b) Defects, liens, encumbrances, adverse claims or other matters, whether or not shown by the Public Records (1) that are created, suffered, assumed or agreed to by one or more of the Assureds; or (2) that result in no loss to the Assured.

(c) Defects, liens, encumbrances, adverse claims or other matters not shown by the Public Records.

(d) The identity of any party shown or referred to in any of the schedules of this Guarantee.

(e) The validity, legal effect or priority of any matter shown or referred to in any of the schedules of this Guarantee.

(f) (1) Taxes or assessments of any taxing authority that levies taxes or assessments on real property; or (2) proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not the matters excluded under (1) or (2) are shown by the records of the taxing authority or by the Public Records.

(g) (1) Unpatented mining claims; (2) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (3) water rights, claims or title to water, whether or not the matters excluded under (1), (2) or (3) are shown by the Public Records.

GUARANTEE CONDITIONS

1. DEFINITION OF TERMS

The following terms when used in the Guarantee mean:

(a) the "Assured": the party or parties named as the Assured in Schedule A, or on a supplemental writing executed by the Company.

(b) "Land": the Land described or referred to in Schedule A, and improvements affixed thereto which by law constitute real property. The term "Land" does not include any property beyond the lines of the area described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways.

(c) "Mortgage": mortgage, deed of trust, trust deed, or other security instrument.

(d) "Public Records": those records established under California statutes at Date of Guarantee for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge.

(e) "Date of Guarantee": the Date of Guarantee set forth in Schedule A.

(f) "Amount of Liability": the Amount of Liability as stated in Schedule A.

2. NOTICE OF CLAIM TO BE GIVEN BY ASSURED

The Assured shall notify the Company promptly in writing in case knowledge shall come to the Assured of any assertion of facts, or claim of title or interest that is contrary to the assurances set forth in Schedule A and that might cause loss or damage for which the Company may be liable under this Guarantee. If prompt notice shall not be given to the Company, then all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of the Assured under this Guarantee unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

3. NO DUTY TO DEFEND OR PROSECUTE

The Company shall have no duty to defend or prosecute any action or proceeding to which the Assured is a party, notwithstanding the nature of any allegation in such action or proceeding.

4. COMPANY'S OPTION TO DEFEND OR PROSECUTE ACTIONS; DUTY OF ASSURED TO COOPERATE

Even though the Company has no duty to defend or prosecute as set forth in Paragraph 3 above:

(a) The Company shall have the right, at its sole option and cost, to institute and prosecute any action or proceeding, interpose a defense, as limited in Paragraph 4 (b), or to do any other act which in its opinion may be necessary or desirable to establish the correctness of the assurances set forth in Schedule A or to prevent or reduce loss or damage to the Assured. The Company may take any appropriate action under the terms of this Guarantee, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this Guarantee. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(b) If the Company elects to exercise its options as stated in Paragraph 4 (a) the Company shall have the right to select counsel of its choice (subject to the right of the Assured to object for reasonable cause) to represent the Assured and shall not be liable for and will not pay the fees of any other counsel, nor will the Company pay any fees, costs or expenses incurred by an Assured in the defense of those causes of action which allege matters not covered by this Guarantee.

(c) Whenever the Company shall have brought an action or interposed a defense as permitted by the provisions of this Guarantee, the Company may pursue any litigation to final determination by a court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from an adverse judgment or order.

(d) In all cases where this Guarantee permits the Company to prosecute or provide for the defense of any action or proceeding, the Assured shall secure to the Company the right to so prosecute or provide for the defense of any action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the Assured for this purpose. Whenever requested by the Company, the Assured, at the Company's expense, shall give the Company all reasonable aid in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or lawful act which in the opinion of the Company may be necessary or desirable to establish the correctness of the assurances set forth in Schedule A or to prevent or reduce loss or damage to the Assured. If the Company is prejudiced by the failure of the Assured to furnish the required cooperation, the Company's obligations to the Assured under the Guarantee shall terminate.

(continued)

5. PROOF OF LOSS OR DAMAGE

(a) In the event the Company is unable to determine the amount of loss or damage, the Company may, at its option, require as a condition of payment that the Assured furnish a signed proof of loss. The proof of loss must describe the defect, lien, encumbrance, or other matter that constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage.

(b) In addition, the Assured may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Guarantee, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the Assured shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the Assured provided to the Company pursuant to this paragraph shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the Assured to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in the above paragraph, unless prohibited by law or governmental regulation, shall terminate any liability of the Company under this Guarantee to the Assured for that claim.

6. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS: TERMINATION OF LIABILITY

In case of a claim under this Guarantee, the Company shall have the following additional options:

(a) To pay or tender payment of the Amount of Liability together with any costs, attorneys' fees, and expenses incurred by the Assured that were authorized by the Company up to the time of payment or tender of payment and that the Company is obligated to pay.

(b) To pay or otherwise settle with the Assured any claim assured against under this Guarantee. In addition, the Company will pay any costs, attorneys' fees, and expenses incurred by the Assured that were authorized by the Company up to the time of payment or tender of payment and that the Company is obligated to pay; or

(c) To pay or otherwise settle with other parties for the loss or damage provided for under this Guarantee, together with any costs, attorneys' fees, and expenses incurred by the Assured that were authorized by the Company up to the time of payment and that the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in 6 (a), (b) or (c) of this paragraph the Company's obligations to the Assured under this Guarantee for the claimed loss or damage, other than the payments required to be made, shall terminate, including any duty to continue any and all litigation initiated by the Company pursuant to Paragraph 4.

7. LIMITATION OF LIABILITY

(a) This Guarantee is a contract of Indemnity against actual monetary loss or damage sustained or incurred by the Assured claimant who has suffered loss or damage by reason of reliance upon the assurances set forth in Schedule A and only to the extent herein described, and subject to the Exclusions From Coverage of this Guarantee.

(b) If the Company, or the Assured under the direction of the Company at the Company's expense, removes the alleged defect, lien, or encumbrance or cures any other matter assured against by this Guarantee in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(c) In the event of any litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom.

(d) The Company shall not be liable for loss or damage to the Assured for liability voluntarily assumed by the Assured in settling any claim or suit without the prior written consent of the Company.

8. REDUCTION OF LIABILITY OR TERMINATION OF LIABILITY

All payments under this Guarantee, except payments made for costs, attorneys' fees and expenses pursuant to Paragraph 4 shall reduce the Amount of Liability under this Guarantee pro tanto.

9. PAYMENT OF LOSS

(a) No payment shall be made without producing this Guarantee for endorsement of the payment unless the Guarantee has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

(b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions, the loss or damage shall be payable within thirty (30) days thereafter.

10. SUBROGATION UPON PAYMENT OR SETTLEMENT

Whenever the Company shall have settled and paid a claim under this Guarantee, all right of subrogation shall vest in the Company unaffected by any act of the Assured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the Assured would have had against any person or property in respect to the claim had this Guarantee not been issued. If requested by the Company, the Assured shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The Assured shall permit the Company to sue, compromise or settle in the name of the Assured and to use the name of the Assured in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the Assured the Company shall be subrogated to all rights and remedies of the Assured after the Assured shall have recovered its principal, interest, and costs of collection.

(continued)

11. ARBITRATION

Either the Company or the Assured may demand that the claim or controversy shall be submitted to arbitration pursuant to the Title Insurance Arbitration Rules of the American Land Title Association ("Rules"). Except as provided in the Rules, there shall be no joinder or consolidation with claims or controversies of other persons. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the Assured arising out of or relating to this Guarantee, any service of the Company in connection with its issuance or the breach of a Guarantee provision, or to any other controversy or claim arising out of the transaction giving rise to this Guarantee. All arbitrable matters when the amount of liability is Two Million And No/100 Dollars ($2,000,000) or less shall be arbitrated at the option of either the Company or the Assured. All arbitrable matters when the amount of liability is in excess of Two Million And No/100 Dollars ($2,000,000) shall be arbitrated only when agreed to by both the Company and the Assured. Arbitration pursuant to this Guarantee and under the Rules shall be binding upon the parties. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court of competent jurisdiction.

12. LIABILITY LIMITED TO THIS GUARANTEE; GUARANTEE ENTIRE CONTRACT

(a) This Guarantee together with all endorsements, if any, attached hereto by the Company is the entire Guarantee and contract between the Assured and the Company. In interpreting any provision of this Guarantee, this Guarantee shall be construed as a whole.

(b) Any claim of loss or damage, whether or not based on negligence, or any action asserting such claim, shall be restricted to this Guarantee.

(c) No amendment of or endorsement to this Guarantee can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validating officer or authorized signatory of the Company.

13. SEVERABILITY

In the event any provision of this Guarantee, in whole or in part, is held invalid or unenforceable under applicable law, the Guarantee shall be deemed not to include that provision or such part held to be invalid, but all other provisions shall remain in full force and effect.

14. CHOICE OF LAW; FORUM

(a) Choice of Law: The Assured acknowledges the Company has underwritten the risks covered by this Guarantee and determined the premium charged therefor in reliance upon the law affecting interests in real property and applicable to the interpretation, rights, remedies, or enforcement of Guaranties of the jurisdiction where the Land is located.

Therefore, the court or an arbitrator shall apply the law of the jurisdiction where the Land is located to determine the validity of claims that are adverse to the Assured and to interpret and enforce the terms of this Guarantee. In neither case shall the court or arbitrator apply its conflicts of law principles to determine the applicable law.

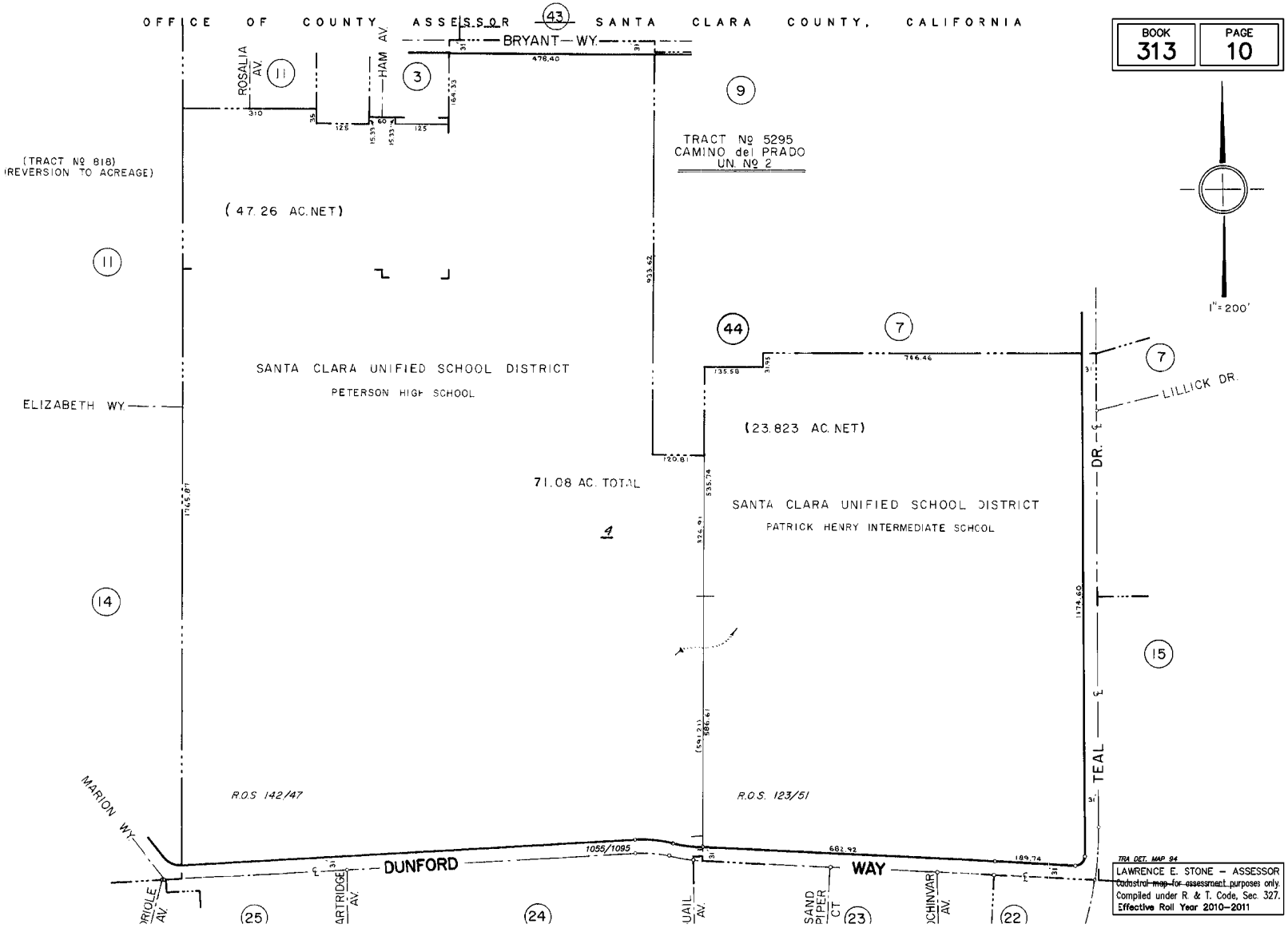
(b) Choice of Forum: Any litigation or other proceeding brought by the Assured against the Company must be filed only in a state or federal court within the United States of America or its territories having appropriate jurisdiction.

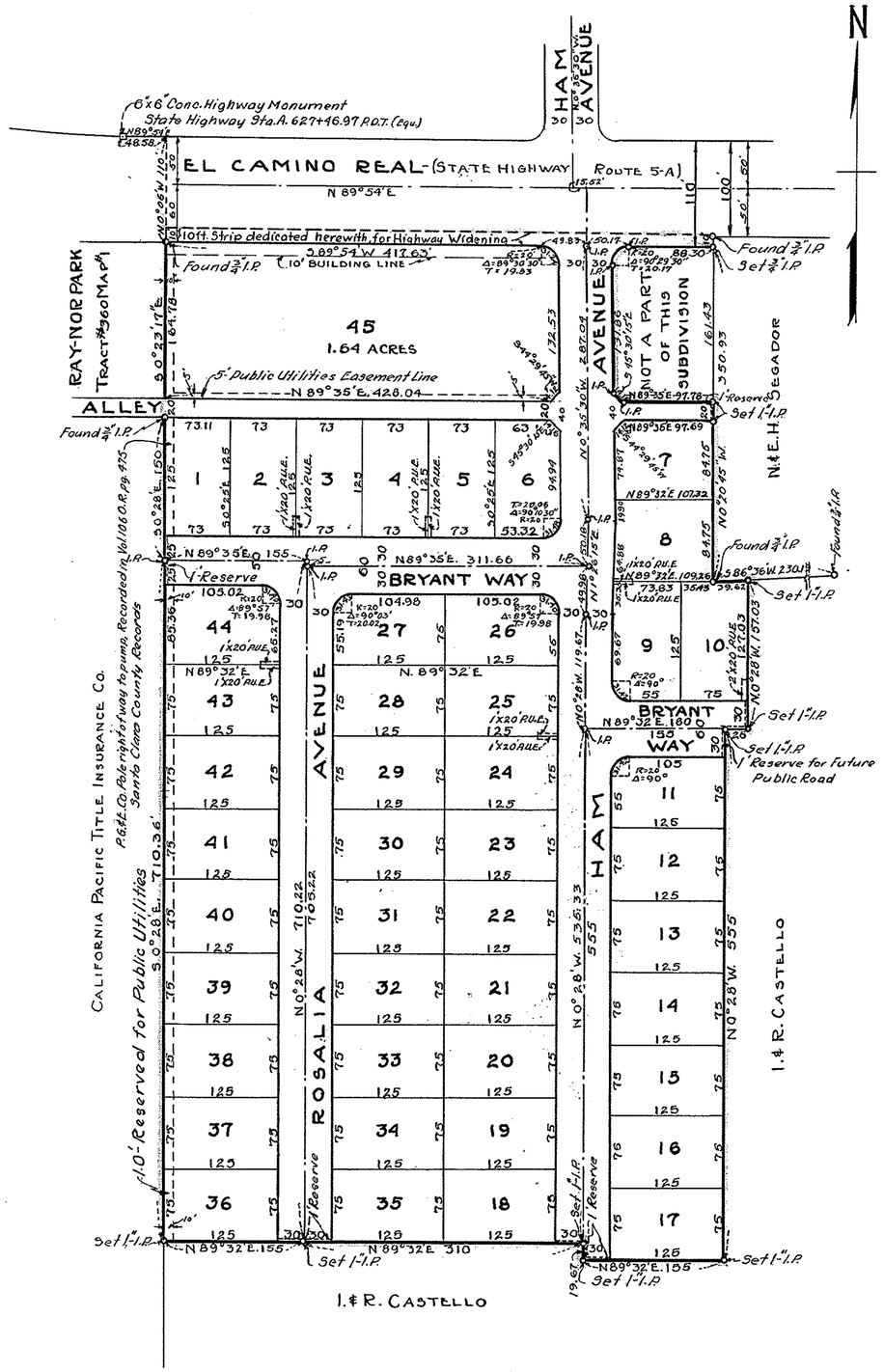
15. NOTICES, WHERE SENT

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this Guarantee and shall be addressed to the Company at:

Fidelity National Title Insurance Company
P.O. Box 45023
Jacksonville, FL 32232-5023
Attn: Claims Department

END OF CONDITIONS





TRACT Nº 622

I. & R. CASTELLO TRACT

UNIT Nº 1

BEING A PORTION OF THE QUITO RANCHO
SANTA CLARA COUNTY, CALIFORNIA. MARCH. 1949
SURVEYED BY FRANK E. PISANO - CIVIL ENGINEER
SCALE — 1 IN. = 100 FT.

OWNERS CERTIFICATE

This is to certify that we are the owners of or have some right, title, or interest in and to the real property included within the subdivison shown upon this map within the blue border, and that we are the only persons whose consent is necessary to pass a clear title to said real property, and we consent to the making of said map and subdivison; and we hereby dedicate to public use all the avenues, ways, roads and alleys shown upon said map within said subdivison. We also hereby dedicate for the use of public utilities an easement over those certain strips of land designated on said map as "Reserved for Public Utilities", we hereby dedicate for public use those certain strips of land designated as "Reserved for future public road, being 1 foot in width across the end of Ham Ave, Rosalia Ave, Bryant Way and public Alley, reserved exclusively for the owners of Lots in said subdivision, until an additional strip of land adjoining it for the extension of said avenues etc. is accepted by the Board of Supervisors of the County of Santa Clara.

Ignazio Castello — Signature
Rosolia Castello — Signature

State of California } S.S.
County of Santa Clara }

On this 29th day of APRIL 1949 before me JAMES V. SERGI, a Notary Public in and for the County of Santa Clara, State of California, residing therein duly commissioned and sworn, personally appeared Ignazio Castello and Rosolia Castello, known to me to be the persons that executed the within instrument, and acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

James V. Sergi
Notary Public in and for the County of Santa Clara, State of California.

CERTIFICATE OF ENGINEER

I hereby certify that I am a Registered Civil Engineer, that this map, consisting of one sheet, correctly represents a survey made by me in March, 1949; that the survey is true and complete as shown; that all stakes, pipes and monuments are of the character and occupy the positions indicated, and are sufficient to enable the survey to be re-traced.

Frank E. Pisano
Registered Civil Engineer Nº 6296

BASIS OF BEARING AND NOTES:

The bearing of the El Camino Real or State Highway, Route 5-A. was taken as the basis of bearings shown upon this map.

The blue border indicates the boundary of the subdivision as shown hereon

All distances are shown in feet and decimals thereof.

I.P. indicates iron pipe as set

2"x3" Redwood stakes set at all lot corners, and curve extremities, unless otherwise shown.

CERTIFICATE OF CLERK OF BOARD OF SUPERVISORS

It is hereby ordered that the map of Tract Nº 622 Castello Tract, Unit Nº 1, be and the same is hereby approved; that all the streets, lanes, alleys, roads and other parcels of land shown on said map and therein offered for dedication be and the same are Not hereby accepted for the purposes for which the same are offered for dedication.

The Clerk of this Board is directed to endorse upon the face of said map a copy of this order authenticated by the seal of the Board of Supervisiors at a meeting of said Board held May 9, ——1949.

Albert J. Newlin, County Clerk and Ex-Officio Clerk of the Board of Supervisors of the County of Santa Clara, State of California.

By Richard Olson
Deputy

CERTIFICATE OF COUNTY SURVEYOR

This is to certify that I have examined the final map of Tract Nº 622, I & R. Castello Tract, Unit Nº 1, and that the subdivison as shown thereon is substantially the same as it appeared on the tentative map thereof with any approved alterations; that all provisions of the 1937 Map Act and any local ordinances applicable at the time of approval of the tentative map, have been complied with; and that I am satisfied that said map is technically correct. Robert B. Chandler, County Surveyor of Santa Clara County, California.

Dated May 9 1949 By: J. B. Enochs
Deputy

572274

CERTIFICATE OF COUNTY RECORDER

Accepted for record and recorded in Book 22 of Maps, Page 50 in the office of the County Recorder of the County of Santa Clara this 9 day of May, 1949 at 2:43 P.M.

Chas. A. Payne, County Recorder.
$5.00
By: Lyl Connelly
Deputy Recorder

22/50

We hereby certify that we are the owners of or have some right, title or interest in and to the real property included within the subdivision shown upon this map, and that we are the only persons whose consent is necessary to pass a clear title to said property, and we consent to the making of said map and subdivision as shown within the border lines and hereby dedicate to public use all the ways and drives shown upon said map within said subdivision.

We also hereby dedicate for public use easements for public utilities under, on or over those certain strips of land designated on said map as "PUBLIC UTILITIES EASEMENT" or "P.U.E.

We also hereby dedicate for public use easements for light and air under, on or over those certain strips of land lying between the lines of ways and drives and the lines each designated as "BUILDING LINE," as shown on said map within said subdivision; such strips of land to be kept open and free from buildings and structures of any kind, excepting irrigation and sprinkling systems and appurtenances thereto.

We also hereby dedicate for public use those certain strips of land designated as "Reserve for future road," being one foot in width across the end of ELIZABETH WAY and MARION WAY, reserved exclusively for the owners of lots in said subdivision, until an additional strip of land adjoining it for the extension of said ways is accepted by the Board of Supervisors of the County of Santa Clara.

CALIFORNIA PACIFIC TITLE INSURANCE COMPANY, A CORPORATION:

Geo. B. Myren
MANAGER

B.M. Blanchard
ASSISTANT SECRETARY

STATE OF CALIFORNIA } SS.
COUNTY OF SANTA CLARA }

On this 6th day of MARCH, 1950, before me, James V. Sergi, a Notary Public in and for the County of Santa Clara, State of California, residing therein, duly commissioned and sworn, personally appeared Geo B. Myren known to me to be the Manager, and B.M. Blanchard known to me to be the Assistant Secretary of the California Pacific Title Insurance Company; the corporation that executed the within instrument and known to me to be the persons who executed the same upon behalf of the corporation named therein, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

James V. Sergi
NOTARY PUBLIC IN AND FOR THE COUNTY OF SANTA CLARA, STATE OF CALIFORNIA.

I hereby certify that I have examined the final map of Tract No. 700; that the subdivision as shown thereon is substantially the same as it appeared on the tentative map thereof and any approved alterations; that all the provisions of the Map Act of 1937 and of any local ordinance applicable at the time of the approval of the tentative map have been complied with, and that I am satisfied that said map is technically correct.

Robert B. Chandler, County Surveyor,
Santa Clara County, California.

By J.B. Enochs
DEPUTY

Dated March 6, 1950.

It is ordered that the map of Tract No. 700 be and the same is hereby approved; that all roads, ways, drives, avenues and alleys and other parcels of land shown upon said map and therein offered for dedication be and the same are NOT hereby accepted for the purposes for which the same are offered for dedication.

The Clerk of this Board is directed to endorse upon the face of said map a copy of this order authenticated by the seal of the Board of Supervisors.

I hereby certify that the foregoing order was adopted by the Board of Supervisors at a meeting of said Board held

Albert J. Newlin
County Clerk and Ex-Officio Clerk of the Board of Supervisors of the County of Santa Clara, State of California

By Richard Olson
DEPUTY

I, Willis G. Frost, hereby certify that I am a Registered Civil Engineer of the State of California, that this map consisting of two (2) sheets, correctly represents a survey made under my supervision during January, 1950; that the survey is true and complete as shown; that all of the monuments shown thereon, consisting of iron pipes, actually exist and their positions are correctly shown and that said monuments are sufficient to enable the survey to be retraced.

Willis George Frost
REGISTERED CIVIL ENGINEER-CERTIFICATE NO. 362.

624199

Accepted for record and recorded in Book 26 of Maps, Pages 40 & 41 in the office of the County Recorder of the County of Santa Clara this 6th day of March, 1950, at 2:50 o'clock P.M.

$5.00

CHAS. A. Payne
COUNTY RECORDER OF THE COUNTY OF SANTA CLARA
By Hyl E. Tully, Deputy

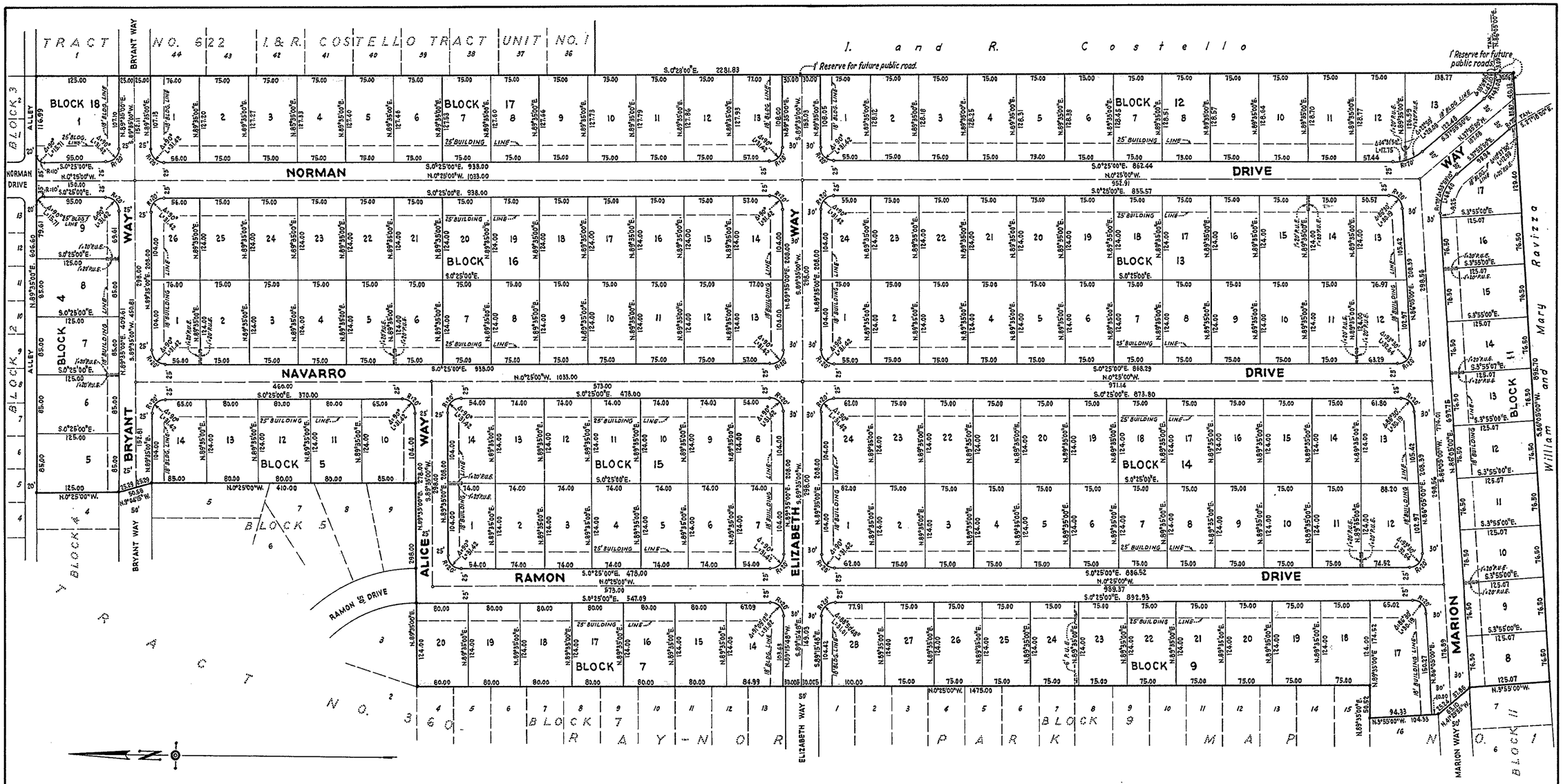
TRACT NO. 700
RAY-NOR PARK
MAP NO. 2

BEING A PORTION OF THE QUITO RANCHO.

SANTA CLARA COUNTY, CALIFORNIA.

FROST & BRIAN
CIVIL ENGINEERS
REDWOOD CITY, CALIFORNIA.

SHEET ONE (1) OF TWO (2) SHEETS.



LEGEND

- ○ *Iron Pipe Monument set.*
- ● *Iron Pipe Monument found.*

NOTES

The bearing of the easterly boundary of the subdivision as shown upon the map entitled "Tract No.360 Ray-Nor Park Map No.1, Santa Clara County, California", recorded in Book 11 of Maps, Pages 42 and 43, was taken as basis of bearings shown upon this map.

All distances and dimensions are shown in feet and decimals thereof.

The blue border indicates the boundary of the land subdivided by this map.

TRACT NO. 700
RAY-NOR PARK
MAP NO. 2

SANTA CLARA COUNTY, CALIFORNIA.

SCALE: 1"=100'

FEBRUARY, 1950.

FROST & BRIAN
CIVIL ENGINEERS
REDWOOD CITY, CALIFORNIA.

624199 - 3/6/50 - 26/40-41

SHEET TWO (2) OF TWO (2) SHEETS.

26/41

D. H.

BOOK 3261 PAGE 194 1120891

RESOLUTION ACCEPTING DEED

WHEREAS, IGNAZIO CASTELLO and ROSALIA CASTELLO, husband and wife, as joint tenants, have tendered to JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY a Grant Deed, which Deed is sufficient in form to convey good and merchantable title to that certain real property situate and being in the County of Santa Clara, State of California, more particularly described hereinbelow, to said JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY:

That certain real property situate in the County of Santa Clara, State of California, described as follows:

That portion of that certain 38.723 acre tract in the Quito Rancho, designated as Parcel 2 in the Deed from Nancy Schermerhorn et al to Ignazio Castello and Rosalia Castello, his wife, dated October 16, 1946 and recorded November 7, 1946 in Book 1399 of Official Records at page 289, in the office of the County Recorder of Santa Clara County, which portion is more particularly described as follows, to-wit:

Beginning at the Northeast corner of Parcel 2, described in aforesaid deed; thence South 1° 20' 00" East along the Easterly line of said parcel for a distance of 584.20 feet to a point in said Easterly line; thence at a right angle South 88° 40' 00" West for a distance of 808.33 feet; thence at a right angle North 1° 20' 00" West for a distance of 523.60 feet to a point which is Southerly 30 feet at right angles to the Northerly line of the aforesaid parcel hereinabove referred to; thence Westerly along a line parallel to and 30 feet Southerly of the said Northerly line South 86° 30' West for a distance of 418.03 feet to a point in the Westerly line of said parcel 2 as described in aforesaid deed; thence North 1° 20' West along said Westerly line for a distance of 30.02 feet to the Northwest corner of said Parcel 2; thence North 86° 30' East along the Northerly line of said Parcel 2 for a distance of 1226.94 feet to the point of beginning.

NOW, THEREFORE, IT IS HEREBY RESOLVED that said Jefferson Union School District of Santa Clara County accept said Deed so tendered to it; and

IT IS HEREBY FURTHER ORDERED that the Clerk of the Board of Trustees of Jefferson Union School District of Santa Clara County be and he is hereby authorized to record said Deed.

= = = = = = = = = = = = =

The foregoing is a full, true and complete copy of a Resolution passed by the Board of Trustees of Jefferson Union School District of Santa Clara County at a regular meeting thereof held by it on June 9th, 1955, and the following named members thereof were present and voted at said meeting: Mr. L. O. Wilcox, Mr. George Brown and Mr. J. K. Bennett

J. K. Bennett
Clerk

REH:hmf
6-15-55:4c

APPLICATION No. 62085.A

GRANT DEED

BOOK 3261 PAGE 196

IGNAZIO CASTELLO and ROSALIA CASTELLO, husband and wife,

hereby do GRANT to

JEFFERSON SCHOOL DISTRICT OF SANTA CLARA COUNTY

all that real property situated in the

County of Santa Clara State of California, described as follows:

That portion of that certain 38.723 acre tract in the Quito Rancho designated as Parcel 2 in the Deed from Nancy Schermerhorn, et al, to Ignazio Castello and Rosalia Castello, his wife, dated October 16, 1946 and recorded November 7, 1946 in Book 1399 of Official Records at page 289, in the office of the County Recorder of Santa Clara County, which portion is more particularly described as follows, to-wit:

BEGINNING at the Northeast corner of Parcel 2 described in aforesaid deed; thence South 1° 20' 00" East along the Easterly line of said parcel for a distance of 584.20 feet to a point in said Easterly line; thence at a right angle South 88° 40' 00" West for a distance of 808.33 feet; thence at a right angle North 1° 20' 00" West for a distance of 523.60 feet to a point which is Southerly 30 feet at right angles to the Northerly line of the aforesaid parcel hereinabove referred to; thence Westerly along a line parallel to and 30 feet Southerly of the said Northerly line South 86° 30' West for a distance of 418.03 feet to a point in the Westerly line of said parcel 2 as described in aforesaid deed; thence North 1° 20' West along said Westerly line for a distance of 30.02 feet to the Northwest corner of said Parcel 2; thence North 86° 30' East along the Northerly line of said Parcel 2 for a distance of 1226.94 feet to the point of beginning.

Dated: May 11, 1955

Ignazio Castello
Ignazio Castello

Rosalia Castello
Rosalia Castello

1120891

SOLELY FOR RECORDERS USE

BOOK 3261 PAGE 194

FILED FOR RECORD
AT REQUEST OF
Jefferson School Dist. 175 Co.
AUG 23 1:48 PM 1955
OFFICIAL RECORDS
SANTA CLARA CO. CALIF.
Thos. E. Kelley
RECORDER
E. H.

STATE OF CALIFORNIA
COUNTY OF Santa Clara } ss.

On May 11, 1955 before me, R. Simoni a Notary Public in and for said Santa Clara County and State, personally appeared Ignazio Castello and Rosalia Castello

known to me to be the person whose name subscribed to the within instrument and acknowledged that executed the same

WITNESS my hand and official seal

(SEAL) Notary Public

My Commission Expires: November 1, 1955

PENINSULA TITLE GUARANTY COMPANY

1806195

4

Application No. 341450 BOOK 4775 PAGE 347

I.R.S.

Grant Deed Individual

also known as Dominico Cirrincione

DOMENIC CIRRINCIONE and LENA CIRRINCIONE, husband and wife, and SALVATORE CIRRINCIONE, Jr., and ROSIE CIRRINCIONE, husband and wife,

the first parties, hereby GRANT TO

THE JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY

the second party, all that real property situated in the

City of Sunnyvale

County of Santa Clara, State of California, described as follows:

Western Title Guaranty Company

BOOK 4775 PAGE 347

1806195

Above space for Recorder

BEGINNING at a point in the Westerly line of that certain 79.01 acre parcel conveyed by Arguello to England by Deed recorded in Book 17 of Deeds at page 22, Santa Clara County Records, said Westerly line also being the Easterly line of that certain 75.04 acre tract conveyed to Wilcox by Deed recorded in Book 50 of Deeds at page 445, Santa Clara County Records, said point being the Westerly corner common to the 20.00 acre tract conveyed to Hayslip by Deed recorded in Book 218 of Deeds at page 62 and that certain 21.741 acre Tract conveyed to Williams, et al, by Deed recorded in Book 441 of Deeds at page 345, Santa Clara County Records; thence from said point of beginning North 89° 37' 50" East 918.00 feet along the line dividing said 20.0 acre and said 21.741 acre tract to a point; thence South 0° 32' 40" East 661.39 feet to the Southerly line of the 79.01 acre Tract hereinabove mentioned; thence along said Southerly line North 87° 43' 25" West 243.34 feet to an iron pipe at the Northeasterly corner of Tract No. 1830, La Linda Meadows, Unit No. 2, the map of said Tract being recorded in Book 84 of Maps at pages 28 and 29, Santa Clara County Records; thence along a Northerly boundary of said Tract North 87° 39' 25" West 681.75 feet to a corner in said boundary; thence along an easterly boundary of said Tract North 0° 26' 35" East 11.88 feet to the Northeasterly terminus of Quail Avenue, as said Avenue is shown upon said Map, said Northeasterly terminus being in the Westerly boundary of the 79.01 acre Tract hereinabove mentioned; thence along said Westerly boundary North 0° 02' 35" West 605.75 feet to the point of beginning, containing 13.518 acres and being a portion of the Quito Rancho.

WITNESS our hands this 20 day of December, 19 59

Dominic Cirrincione

Lena Cirrincione

Rosie Cirrincione

Salvatore Cirrincione

STATE OF CALIFORNIA
COUNTY OF SANTA CLARA } ss.

On this 20 day of December, 1959, before me, Peter J. Mancuso a Notary Public in and for said County and State, personally appeared DOMENIC CIRRINCIONE and LENA CIRRINCIONE, husband and wife, and SALVATORE CIRRINCIONE, Jr. and ROSIE CIRRINCIONE, husband and wife, also known as ROSE CIRRINCIONE, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same.

Peter J. Mancuso
Notary Public

Peter J. Mancuso

RESOLUTION ACCEPTING DEED

WHEREAS, DOMENIC CIRRINCIONE and LENA CIRRINCIONE, SALVATORE CIRRINCIONE, JR., and ROSIE CIRRINCIONE

have tendered to JEFFERSON UNION SCHOOL DISTRICT

a Grant Deed, which Deed is sufficient in form to convey good and merchantable title to that certain real property situate and being in the County of Santa Clara, State of California, more particularly described hereinbelow, to said JEFFERSON UNION SCHOOL DISTRICT

BEGINNING at a point in the Westerly line of that certain 79.01 acre parcel conveyed by Arguello to England by Deed recorded in Book 17 of Deeds at page 22, Santa Clara County Records, said Westerly line also being the Easterly line of that certain 75.04 acre tract conveyed to Wilcox by Deed recorded in Book 50 of Deeds at page 445, Santa Clara County Records, said point being the Westerly corner common to the 20.00 acre tract conveyed to Hayslip by Deed recorded in Book 218 of Deeds at page 62 and that certain 21.741 acre tract conveyed to Williams, et al., by Deed recorded in Book 441 of Deeds at page 345, Santa Clara County Records; thence from said point of beginning North 89° 37' 50" East 918.00 feet along the line dividing said 20.00 acre and said 21.741 acre tract to a point; thence South 0° 32' 40" East 661.39 feet to the Southerly line of the 79.01 acre tract hereinabove mentioned; thence along said Southerly line North 87° 43' 25" West 243.34 feet to an iron pipe at the Northeasterly corner of tract No. 1830, La Linda Meadows, Unit No. 2, the map of said tract being recorded in Book 84 of Maps at pages 28 and 29, Santa Clara County Records; thence along a Northerly boundary of said tract North 87° 39' 25" West 681.75 feet to a corner in said boundary; thence along an Easterly boundary of said tract North 0° 26' 35" East 11.88 feet to the Northeasterly terminus of Quail Avenue, as said Avenue is shown upon said map, said Northeasterly terminus being in the Westerly boundary of the 79.01 acre tract hereinabove mentioned; thence along said Westerly boundary North 0° 02' 35" West 605.75 feet to the point of beginning, containing 13.518 acres and being a portion of the Quito Rancho.

NOW, THEREFORE, IT IS HEREBY RESOLVED that said JEFFERSON UNION SCHOOL DISTRICT

accept said Deed so tendered to it; and

IT IS HEREBY FURTHER ORDERED that the WESTERN TITLE GUARANTY COMPANY (Escrow No. 341450-A)

be, and he is hereby authorized to record said Deed.

PASSED AND ADOPTED by the Board of Education

of JEFFERSON UNION SCHOOL DISTRICT

on March 15, 1960, by the following vote:

AYES: 5

NOES: 0

ABSENT: 0

George M. Brown
President

W. J. Inman

ATTEST: Berryle Stidger

Frank A. Wilson
Clerk/Secretary

The foregoing instrument is a correct copy of the original on file in this office.

ATTEST: Frank A. Wilson
Clerk/Secretary

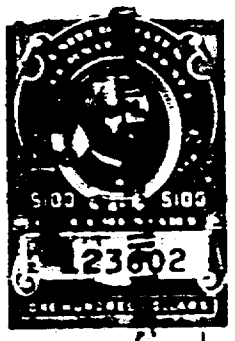
Dated: March 15, 1960

D.H. 1797590

SECURITY TITLE & GUARANTY COMPANY

GRANT DEED

STGC No.



Book 4757 Page 472

By this instrument dated March 1, 1960, for a valuable consideration,

FRANK L. TERESI and PEARL TERESI, his wife,
SALVATORE TERESI, JR. and PAULINE TERESI, his wife,

hereby GRANTS to JEFFERSON UNION SCHOOL DISTRICT of Santa Clara County

The following described Real Property in the State of California, County of Santa Clara,

A parcel of land situate in the City of Sunnyvale, County of Santa Clara, State of California, being more particularly described as follows:

BEGINNING at a point in the Westerly line of that certain 79.01 acre parcel conveyed by Arguello to England by Deed recorded in Book 17 of Deeds at page 22, Santa Clara County Records, said Westerly line also being the Easterly line of that certain 75.04 acre tract conveyed to Wilcox by Deed recorded in Book 50 of Deeds at page 445, Santa Clara County Records, said point being the Westerly corner common to the 20.00 acre tract conveyed to Hayslip by Deed recorded in Book 218 of Deeds at page 62 and that certain 21.741 acre tract conveyed to Williams, et al., by Deed recorded in Book 441 of Deeds at page 345, Santa Clara County Records; thence from said point of beginning North 89° 37' 50" East 918.00 feet along the line dividing said 20.00 acre and said 21.741 acre tracts to a point; thence North 0° 32' 40" West 566.97 feet to the Northerly boundary of said 20.00 acre tract; thence along said Northerly boundary South 89° 37' 33" West 777.46 feet to a 1-1/2 inch iron pipe found in a Northwesterly corner thereof; thence along a Westerly boundary of said 20.00 acre parcel South 0° 02' 35" East 31.95 feet to an angle point therein; thence along a Northerly boundary of said parcel South 89° 57' 25" West 139.58 feet to a redwood stake set in the Easterly boundary of the hereinabove mentioned 75.04 acre tract and the Westerly boundary of said 20.00 acre parcel; thence along said Westerly boundary South 0° 02' 35" East 535.74 feet to the point of beginning, containing 11.817 acres and being a portion of the Quito Rancho.

Reserving and excepting therefrom an easement ten feet in width for the purpose of installation, maintenance and repair of an irrigation pipe line under, on or over that certain parcel of land situate in the City of Sunnyvale, County of Santa Clara, State of California, the Northerly and Easterly lines of said easement being more particularly described as follows:

BEGINNING at the Southwesterly corner of that certain 7.95 acre parcel conveyed by Albert E. Buhot, et ux, to Frank L. Teresi, et al, by Deed recorded in Book 1196 at page 407, Santa Clara County Official Records, said Southwesterly corner being in the Northerly line of that certain 20.00 acre tract conveyed to Hayslip by Deed recorded in Book 218 of Deeds at page 62, Santa Clara County Records; thence from said point of beginning along the line dividing said 20.00 acre tract and said 7.95 acre parcel North 89° 37' 33" East 212.88 feet; thence leaving said dividing line South 0° 32' 40" East 566.97 feet to the Southerly line of said 20.00 acre tract.

Said easement to remain in existence for so long as a water supply is necessary for the agricultural use and development of the remaining property of the grantors, and which said easement shall expire ipso facto without further action at such time as subdivision or other development of the grantor's remaining property changes its use from that of agriculture to some other use.

Frank L. Teresi
Pearle Teresi
Salvadore Teresi, Jr.
Pauline Teresi

BOOK 4757 PAGE 473

FOR RECORDER'S USE

1797590

BOOK 4757 PAGE 472

Recorded at the request of
California Pacific Title Insurance Co.
APR 8 1960 7:30 AM
SYL C. TULLY, Recorder,
Santa Clara County, Official Records

D.H.

(MORE)

STATE OF CALIFORNIA
COUNTY OF Santa Clara } ss.

On March 1, 1960 before me,
Victor J. O'Neill, a Notary Public
in and for said County and State,
personally appeared Frank L. Teresi and Pearl Teresi, his wife, and Salvadore Teresi, Jr. and Pauline Teresi, his wife,

known to me to be the person s whose name s are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

(SEAL) Victor J. O'Neill (Victor J. O'Neill) Notary Public

My Commission Expires: August 12, 1960

FORM 6 2M

SURETY TITLE & GUARANTY COMPANY
39 NORTH FIRST STREET, SAN JOSE, CALIFORNIA
1795 W. SAN CARLOS STREET, SAN JOSE, CALIFORNIA
1275 LINCOLN AVENUE, SAN JOSE, CALIFORNIA

BOOK 4757 PAGE 474

RESOLUTION ACCEPTING DEED

WHEREAS, FRANK L. TERESI and PEARL TERESI, his wife; SALVADORE TERESI, JR., and PAULINE TERESI, his wife have tendered to JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY a Grant Deed, which Deed is sufficient in form to convey good and merchantable title to that certain real property situate and being in the County of Santa Clara, State of California, more particularly described hereinbelow, to said JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY

A parcel of land situate in the City of Sunnyvale, County of Santa Clara, State of California, being more particularly described as follows:

BEGINNING at a point in the Westerly line of that certain 79.01 acre parcel conveyed by Argüello to England by Deed recorded in Book 17 of Deeds at page 22, Santa Clara County Records, said Westerly line also being the Easterly line of that certain 75.04 acre tract conveyed to Wilcox by Deed recorded in Book 50 of Deeds at page 445, Santa Clara County Records, said point being the Westerly corner common to the 21.0[illegible] acre tract conveyed to Hayslip by Deed recorded in Book 218 of Deeds at page 69 and that certain 21.741 acre tract conveyed to Williams, et al., by Deed recorded in Book 441 of Deeds at page 345, Santa Clara County Records; thence from said point of beginning North 89° 37' 50" East 918.0[illegible] feet along the line dividing said 20.[illegible] acre and said 21.741 acre tracts to a point; thence North 0° 32' 4" West 566.97 feet to the Northerly boundary of said 20.0[illegible] acre tract; thence along said Northerly boundary South 89° 37' 33" West 777.46 feet to a 1½ inch iron pipe found in a Northwesterly corner thereof; thence along a Westerly boundary of said 2[illegible].0[illegible] acre parcel South 0° [illegible]2' 35" East 31.[illegible]5 feet to an angle point therein; thence along a Northerly boundary of said parcel South 89° 57' 25" West 135.58 feet to a redwood stake set in the Easterly boundary of the hereinabove mentioned 75.04 acre tract and the Westerly boundary of said 2[illegible]. acre parcel; thence along said Westerly boundary South [illegible]° [illegible]2' 35" East 535.74 feet to the point of beginning, containing 11.917 acres and being a portion of the Quito Rancho.

NOW, THEREFORE, IT IS HEREBY RESOLVED that said JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY accept said Deed so tendered to it; and

IT IS HEREBY FURTHER ORDERED that the Clerk of the Board of Education be, and he is hereby authorized to record said Deed.

PASSED AND ADOPTED by the Board of Education of JEFFERSON UNION SCHOOL DISTRICT of SANTA CLARA COUNTY on March 15, 1960, by the following vote:

AYES: 5

NOES: 0

ABSENT: 0

President

ATTEST:

Clerk

The foregoing instrument is a correct copy of the original on file in this office.

ATTEST:

Clerk

Dated:

5471 705

2143876 BOOK 5471 PAGE 705

Application No. WTG 358154-A

I.R.S. $1.10

Grant Deed Individual

IGNAZIO CASTELLO and ROSALIA CASTELLO, his wife,

the first part ies, hereby GRANT TO

SANTA CLARA UNION HIGH SCHOOL DISTRICT OF SANTA CLARA COUNTY

the second part y, all that real property situated in the

City of Sunnyvale,

County of Santa Clara, State of California, described as follows:

2143876
BOOK 5471 PAGE 705
Recorded at the request of
Western Title Guaranty Co.
SANTA CLARA COUNTY DIVISION
FEB 19 1962 11:08 AM
PAUL R. TEILH, Recorder
Santa Clara County Official Records

D. H

Above space for Recorder

Beginning at the southwest corner of lot 41 of Tract 622 as said tract is recorded in Book 22 of Maps page 50 Santa Clara County records, said point being also on the easterly boundary of Tract 700, recorded in Book 26 of Maps pages 40 and 41;

thence southerly along the easterly line of Tract 700 S. 0° 25' 20" E. 1796.87 feet to the northerly line of that 10.853 acre parcel of land conveyed by I. & R. Castello to Jefferson School District of Santa Clara County by deed recorded August 23, 1955 in Book 3261 O.R. page 194, Santa Clara County records;

thence easterly along the northerly boundary of said 10.853 acre parcel N. 86° 05' E. 1215.40 feet to the westerly line of the 13.518 acre parcel of land conveyed by Domenic Cirrincione, et al. to the Jefferson Union School District of Santa Clara County by deed recorded April 26, 1960 in Book 4775 O. R. page 347, Santa Clara County records;

thence northerly along the westerly line of said 13.518 acre parcel N. 0° 14' 15" W. 591.21 feet to the southwest corner of that 11.817 acre parcel of land conveyed by Frank L. Teresi, et al. to Jefferson Union School District of Santa Clara County by deed recorded April 8, 1960 in Book 4757 O.R. page 472, Santa Clara County records;

thence northerly on and along the westerly line of said 11.817 acre parcel N. 0° 14' 15" W. 326.91 feet to a point;

thence at right angles to the westerly line of said 11.817 acre parcel S. 89° 45' 45" W. 120.81 feet to a point;

thence at right angles to the last described course N. 0° 14' 15" W. a distance of 964.62 feet to the easterly prolongation of the centerline of Bryant Way as said street is shown on map of said Tract 622;

thence westerly along the easterly prolongation of the centerline of Bryant Way S. 89° 34' 40" W. a distance of 478.40 feet, more or less, to the intersection of the northerly prolongation of the easterly line of lots 11 and 12 Tract 622;

thence southerly along the northerly prolongation of easterly line of said lots 11 and 12, S. 0° 25' 20" E. 180.00 feet to the southeast corner of said lot 12;

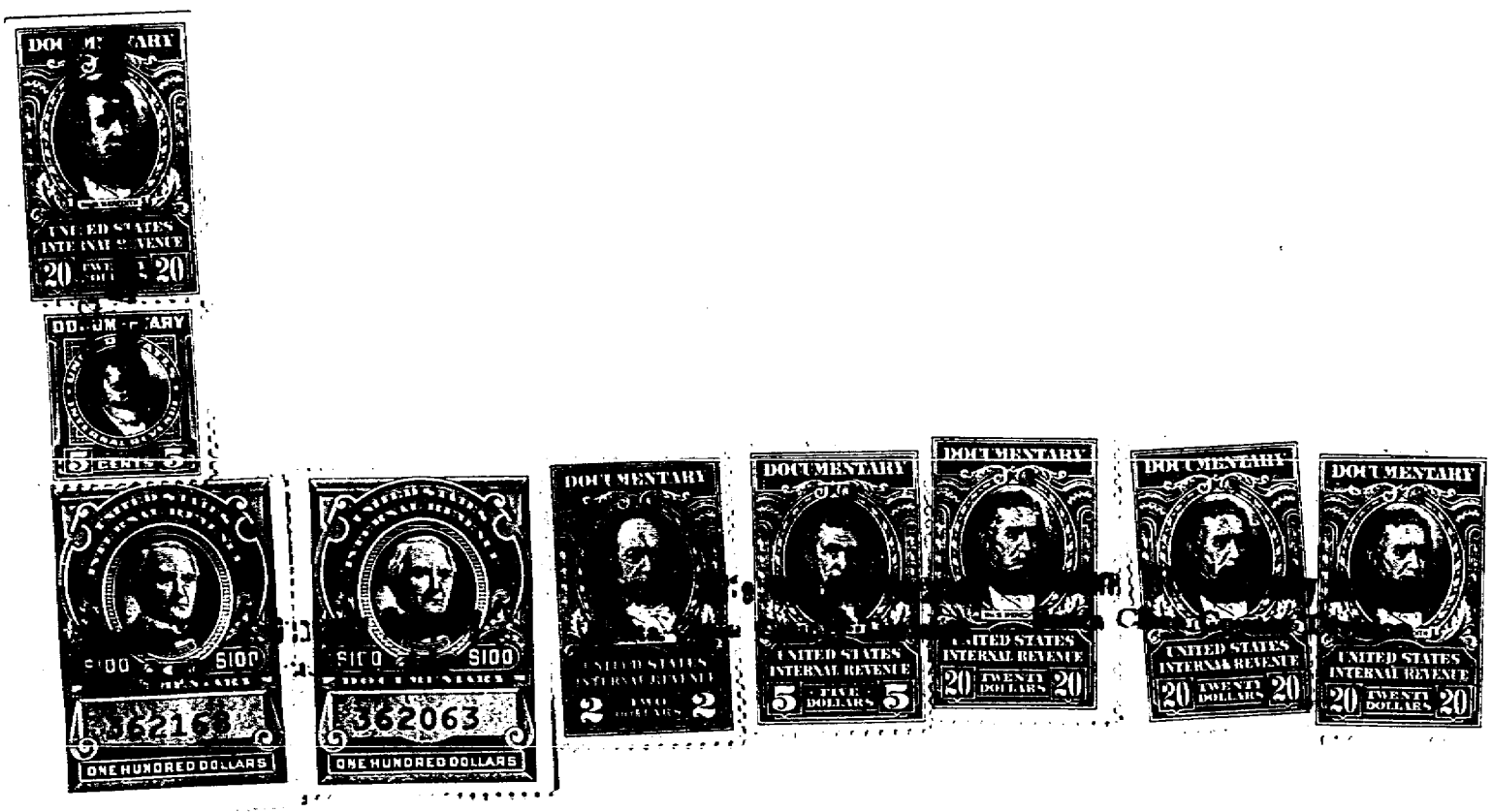
thence continuing southerly along the southerly prolongation of the easterly line of said lots 11 and 12 S. 0° 25' 20" E. 15.33 feet to a point;

thence parallel to the southerly line of said lot 12 S. 89° 34' 40" W. 310.00 feet to a point lying on the southerly prolongation of the easterly line of lot 30 of said Tract 622;

thence northerly along the southerly prolongation of said lot 30 N. 0° 25' 20" W. 35.00 feet to the southeast corner of said lot 30;

thence westerly along the southerly line of said lot 30 and its western prolongation and the southerly line of lot 41 of said Tract 622, S. 89° 34' 40" W. 310.00 feet to the point of beginning.

Containing 48.400 acres, as surveyed by Mission Engineers, Santa Clara, and being a portion of the Quito Rancho.



WITNESS our hand s this 16th day of February , 19 62

Ignazio Castello

Rosalia Castello

STATE OF CALIFORNIA }
COUNTY OF SANTA CLARA } ss.

On this 16th day of February , 1962, before me, the undersigned a Notary Public in and for said County and State, personally appeared Ignazio Castello and Rosalia Castello known to me to be the person s whose name s are subscribed to the foregoing instrument, and acknowledged to me that they executed the same.

My commission expires: 2/16/64 A. D. SMITH Notary Public

2x

RESOLUTION ACCEPTING DEED

WHEREAS, Ignazio and Rosalia Castello

ha ve tendered to Santa Clara Union High School District of Santa Clara County, a Grant Deed, which Deed is sufficient in form to convey good and merchantable title to that certain real property situate and being in the County of Santa Clara, State of California, more particularly described hereinbelow, to said Santa Clara Union High School District.

Beginning at the southwest corner of lot 41 of Tract 622 as said tract is recorded in Book 22 of Maps page 50 Santa Clara County records, said point being also on the easterly boundary of Tract 700, recorded in Book 26 of Maps pages 40 and 41;

thence southerly along the easterly line of Tract 700 S. 0° 25' 20" E. 1796.87 feet to the northerly line of that 10.853 acre parcel of land conveyed by I. & R. Castello to Jefferson Union School District of Santa Clara County by deed recorded August 23, 1955 in Book 3861 O.R. page 194, Santa Clara County records;

thence easterly along the northerly boundary of said 10.853 acre parcel N. 86° 05' E. 1215.40 feet to the westerly line of the 13.518 acre parcel of land conveyed by Domenic Cirrincione, et al., to the Jefferson Union School District of Santa Clara County by deed recorded April 26, 1960 in Book 4775 O.R. page 347, Santa Clara County records;

thence northerly along the westerly line of said 13.518 acre parcel N. 0° 14' 15" W. 591.21 feet to the southwest corner of that 11.817 acre parcel of land conveyed by Frank L. Teresi, et al., to Jefferson Union Schod District of Santa Clara County by deed recorded April 8, 1960 in Book 4757 O.R. page 472, Santa Clara County records;

thence northerly on and along the westerly line of said 11.817 acre parcel N. 0° 14' 15" W. 326.91 feet to a point;

thence at right angles to the westerly line of said 11.817 acre parcel S. 89° 45' 45" W. 120.81 feet to a point;

thence at right angles to the last described course N. 0° 14' 15" W. a distance of 964.62 feet to the easterly prolongation of the centerline of Bryant Way as said street is shown on map of said Tract 622;

thence westerly along the easterly prolongation of the centerline of Bryant Way S.89° 34' 40" W. a distance of 478.40 feet, more or less, to the intersection of the northerly prolongation of the easterly line of lots 11 and 12, Tract 622;

thence southerly along the northerly prolongation of easterly line of said lots 11 and 12, S. 0° 25' 20" E. 180.00 feet to the southeast corner of said lot 12;

thence continuing southerly along the southerly prolongation of the easterly line of said lots 11 and 12, S. 0° 25' 20" E. 15.33 feet to a point;

thence parallel to the southerly line of said lot 12, S. 89° 34' 40" W. 310.00 feet to a point lying on the southerly prolongation of the easterly line of lot 30 of said Tract 622;

thence northerly along the southerly prolongation of said lot 30 N. 0° 25' 20" W. 35.00 feet to the southeast corner of said lot 30;

thence westerly along the southerly line of said lot 30 and its western prolongation and the southerly line of lot 41 of said Tract 622, S. 89° 34' 40" W. 310.00 feet to the point of beginning.

Containing 48.400 acres, as surveyed by Mission Engineers, Santa Clara, and being a portion of the Quito Rancho.

NOW, THEREFORE, IT IS HEREBY RESOLVED that said Santa Clara Union High School District accept said Deed so tendered to it; and

IT IS HEREBY FURTHER ORDERED that the Western Title Guaranty Company (Escrow No. 358154-A) be, and he is hereby authorized to record said Deed.

PASSED AND ADOPTED by the Board of Trustees of Santa Clara Union High School District of Santa Clara County on February 13, 1962, by the following vote:

AYES: Trustees A. C. Wilcox, Theodore Keech, Donald Campbell, Robert E. Carlson and Wm. A. Wilson

NOES: NONE

ABSENT: NONE

Wm. A. Wilson
Chairman

ATTEST:
Eleanor L. Jantzen
Clerk/Secretary

Robert E Carlson

D Campbell

A. C. Wilcox

Theodore Keech

The foregoing instrument is a correct copy of the original on file in this office.

ATTEST: Eleanor L. Jantzen
Clerk/Secretary

DATED: February 14, 1962

RSH:bn 2-13-62

Certificate first above written ——— J H Tyson ———

——— Notary Public ———

Seal

Recorded at the Request of J C Black Esq^r February 28^th AD1870 at 33 min past 11 Oclock AM ———

——— Jos. R. Johnson Recorder by Henry Whitcomb Dep^y

Soledad O de Arguello Et al To Beverly A England

United States Revenue Stamps 50^ Cancelled

This Indenture made the Twenty Eighth day of February in the Year of our Lord One Thousand Eight Hundred and Seventy Between Soledad O de Arguello and J R Arguello of the Town and County of Santa Clara and State of California parties of the first part and Beverly A England of the same place the party of the second part Witnesseth That the said parties of the first part for and in consideration of the sum of One Dollar in Coin of the United States of America to them in hand paid by the said party of the second part the receipt whereof is hereby acknowledged ha- granted bargained and sold conveyed and confirmed and by these presents doth grant bargain and sell convey and confirm unto the said party of the second part and to his heirs and assigns forever——— All that certain lot piece or parcel of land situated lying and being in the County of Santa Clara State of California and bounded & particularly described as follows to wit: All that certain piece or parcel of land forming a portion of the Rancho Commonly known as the "Quito Rancho" Situated in the County of Santa Clara State aforesaid which according to a Survey made thereof by C S Daly Surveyor on — day of December AD1865 is bounded and described as follows. Commencing at a post marked "YY 4." at the South East Corner of Lands of Milliken in the Center of the Alviso Road; thence South one half degree East Nineteen Chains and Eighty links to a Stake marked "YY 3." at the North East Corner of Lands of A Patterson; thence North Eighty Eight degrees West forty two Chains and fifteen links to a post marked "Y 3." thence North Seventeen

Chains and fifty links along the East line of Lands of F Farmer to a post marked "Z 9" thence East two chains and six links to a post marked "Z 8" thence North thirty eight links to a stake marked "Z 7" thence North Eighty nine and a half degrees East thirty nine chains and Seventy links to the place of Beginning Containing Seventy Nine and One hundredths acres of Land Courses by true meridian Magnetic Variation being Sixteen degrees East

Together with all and singular the tenements hereditaments and appurtenances thereunto belonging or in any wise appertaining and the reversion and reversions remainder and remainders rents issues and profits thereof and also all the estate right title interest in Homestead property possession claim and demand whatsoever as well in law as in equity of the said parties of the first part of in or to the said premises and every part and parcel thereof with the appurtenances. To Have and To Hold all and singular the said premises together with the appurtenances unto the said party of the second part his heirs and assigns forever And this Indenture is made by said parties of the first part for the purpose of quieting and removing certain doubts as to the validity of a certain deed of Conveyance Executed to said party of the second part by S M Mezes, acting as the Attorney in fact for said parties of the first part dated February 22d 1867, Recorded in Liber X of deeds pages 206, 207 & 208 Records of Santa Clara County M Leaneuvorth Recorder by K Hoffman Deputy

In Witness Whereof the said parties of the first part have hereunto set their hands and seals the day and year first above written

S O de Argüello (Seal)

by her Attorney in fact J R Argüello

J R Argüello (Seal)

Signed Sealed and Delivered in the Presence of

State of California } ss
County of Santa Clara }

On this Twenty Eighth day of February AD One Thousand Eight Hundred & Seventy before me John Ertsen a Notary Public in and for said County personally appeared J R Argüello personally known to me to be the same

person described in and who Executed by Power of Attorney the annexed Instrument as the Attorney in fact of Soledad O de Arguello named in the annexed Instrument as a party thereto and therein described as the party Executing the same by his said Attorney and the said J R Arguello acknowledged to me that he Executed the same freely and voluntarily as and for the act and deed of the said Soledad O de Arguello and for the uses and purposes therein mentioned In

Seal

Witness Whereof I have hereunto set my hand and affixed my official Seal the day and year first above written ——— John Ertson ——— Notary Public

State of California } ss
County of Santa Clara }

On this Twenty Eighth day of February AD One Thousand Eight Hundred and Seventy before me John Ertson a Notary Public in and for said Santa Clara County duly commissioned and sworn personally appeared the within named J R Arguello whose name is subscribed to the annexed Instrument as a party thereto personally known to me to be the individual described in and who Executed the said annexed Instrument and on Examination acknowledged to me that he Executed the same freely and voluntarily and for the uses and purposes therein mentioned In Witness Whereof I have hereunto set my hand and affixed my official Seal in said County the day and Year in this Certificate first above written ——— John Ertson ——— Notary Public ———

Seal

Recorded at Request of B A England February 28 AD 1870 at 25 min past 1. oclk P.M. Jos. P. Johnson Recorder by Henry Ashbrook Deputy

---

D W Stoody Etal To Louis Darveaut

United States Revenue Stamps 5¢ Cancelled

This Indenture made the Fourteenth day of February in the Year of our Lord One Thousand Eight Hundred and Seventy (1870) Between D W Stoody and James Kilderbrand of Monterey County and State of California parties of the first part and Louis Darveaut of the County of Santa Clara and State aforesaid the party of the second part Witnesseth That the said parties of the first

mentioned and described premises together with the appurtenances unto the said party of the second part his heirs and assigns forever
In Witness Whereof the said party of the first part has hereunto set his hand and seal the day and year first above written
S O Houghton Seal
Signed Sealed and delivered in presence of
State of California } ss
County of Santa Clara } On this Twenty Second day of March AD One Thousand eight Hundred and Sixty nine before me James R Lenefer a Notary Public in and for said County of Santa Clara duly commissioned sworn and qualified personally appeared the within named S O Houghton whose name is subscribed to the annexed instrument as a party thereto personally known to me to be the individual described in and who executed the said annexed Instrument as a party thereto and who duly acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned. In Witness Whereof I have hereunto set my hand and affixed my official Seal the day and year in this Certificate first above written James R Lenefer
Seal
Notary Public
In and for said County of Santa Clara State of California
Recorded at Request of Grantee October 25th AD 1869 at 37 minutes past 12. o'clk M. Jos. R. Johnson Recorder

S O de Arguello Et al to William Wilcox

VS IR
Stamp
1.50
Cancelled

This Indenture made the Twenty Second day of October in the Year of our Lord One Thousand Eight Hundred and Sixty nine Between S O de Arguello Jose Ramon Arguello of Santa Clara County State of California and Soledad Arguello of San Mateo County parties of the first part and William Wilcox of Santa Clara County the party of the second part
Witnesseth That the said parties of the first part for and

in Consideration of the Sum of Twenty five Hundred and Sixty Nine 96/100 Dollars Gold Coin of the United States of America to them in hand paid by the said party of the second part the receipt whereof is hereby acknowledged Have granted bargained and sold Conveyed and confirmed and by these presents Do grant bargain and sell Convey and confirm unto the said party of the second part and to his heirs and assigns forever _____ All that certain tract of land situated in Santa Clara County State of California and being a part of the Tract of land known here as Ranchodulce bounded and described as follows. Commencing at a point marked V S Standing on the North boundary of the Dulce Rancho as finally surveyed by the United States and running thence South Thirty eight Chains and Seventy two links to a post marked B B S at the South East corner of land of one Ryan; thence North Eighty Six and a half degrees East Eighteen Chains and thirty eight links to a post marked D 1; thence North Seventeen Chains & Thirty two links to a Stake marked D 9 at the North West Corner of land of one Johnson; thence East two chains and six links to a Stake marked D 8 thence North Twenty Chains and Twenty Seven links to a Stake marked V I in the Center of the San Francisco Road on the North boundary of the Dulce Rancho; thence West along said Road and boundary Twenty Chains and Forty five links to the place of beginning Containing Seventy five and five one hundredths acres of land Courses by true Meridian Magnetic Variation being Sixteen degrees East — _____ Together with all and singular the tenements hereditaments and appurtenances thereunto belonging or in any wise appertaining and the reversion and reversions remainder and remainders rents issues and profits thereof And also all the estate right title interest property possession claim and demand both at law and in equity of the said parties of the first part of in or to the said premises and every part and parcel thereof with the appurtenances To Have and To Hold all and singular the said premises together with the appurtenances unto the said party of the second part his heirs and assigns forever In Witness Whereof the said parties of the

first part have hereunto set their hands and seals the day and year first above written ____ S Ode Arguello ____ Seal

____ by her Attorney in fact Sidney E Johnson

____ J R Arguello ____ Seal

____ by his attorney in fact Sidney E Johnson

____ S M Mezes ____ Seal

____ by his Attorney in fact Sidney E Johnson

Signed Sealed and Delivered in the Presence of . the word "Chairs" Struck out and the word "Locks" interlined before signing ____

Edward Janin

State of California } ss On this twenty second day
City and County of San Francisco } of October AD one thousand eight hundred and sixty nine personally appeared before me E V Sutter a Notary public in and for said City and County Sidney E Johnson personally known to me to be the same person described in and who Executed the Power of Attorney the annexed Instrument as the attorney in fact of S Ode Arguello Jose Ramon Arguello and S M Mezes named in the annexed Instrument as parties thereto and therein described as the parties executing the same by their said attorney and the said Sidney E Johnson acknowledged to me that he executed the same freely and voluntarily as and for the act and deed of the said S Ode Arguello Jose Ramon Arguello & S M Mezes and for the uses and purposes therein mentioned. In Witness Whereof I have hereunto set my hand and affixed my official Seal the day and year in this Certificate first above written.

Seal

E V Sutter Notary Public

Recorded at Request of Grantee Oct 23d AD 1869 at 30 min past 1. Oclock P.M. Jos. R. Johnson Recorder

---

A J Sittleton To Jas L Sargent

This Indenture made the Twenty second day of October in the Year of our Lord One Thousand eight hundred and

U S R Stamps 15c Cancelled

Corporation, the Pacific Manufacturing Company, be and they are hereby authorized and directed to make execute and deliver in the name of this Corporation and as its act and deed to A. H. Buehren a deed for the following described lot, piece, parcel or tract of land situate, lying and being in the City of San Jose, County of Santa Clara, State of California, to wit:

Being all of Lot 7 in Block 64 of Reeds Addition to the City of San Jose according to the Map of same of record in Book C of Miscell. aneous Records page 322 in the office of the County Recorder of the County of Santa Clara, State of California;

for and in consideration of the sum of Twelve Hundred Dollars ($1200.00).

In Witness Whereof, I have hereunto set my hand and affixed the seal of this Company this 28th day of February 1899.

R. T. Pierce Secretary

Corporate Seal

Pacific Manufacturing Company.

Recorded at the Request of Morehouse & Hambly Feby. 28 A.D. 1899 at 51 min past 4 o'clock P. M.

Chas. P. Owen Recorder.

D & E

J. H. Johnson et al To Ellison Hayslip

U. S. D. R. Stamps $3.50 Cancelled

This Indenture, Made this First day of March in the year of our Lord one thousand eight hundred and ninety-nine, Between J. H. Johnson, Elizabeth P. Johnson his wife and John Kidney each and all of the County of Santa Clara, State of California, the parties of the first part, and Ellison Hayslip of the County of Santa Clara

State of California, the party of the second part, Witnesseth: That the said parties of the first part, for and in consideration of the sum of Three Thousand one hundred fifty Dollars Gold Coin of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained and sold, conveyed and confirmed and by these presents do grant bargain and sell convey and confirm, unto the said party of the second part, and to his heirs and assigns forever, all that certain lot, piece or parcel of land situate, lying and being in the County of Santa Clara State of California and bounded and particularly described as follows, to wit:-

A portion of the tract owned by J. K. Johnson fronting on the Saratoga and Alviso Road, being also a portion of the Quito Rancho and more particularly described as follows: Beginning at a point in the North line of the said Johnson's land about 1158 feet from the northeast corner thereof, said north-east corner being in the center of the Saratoga and Alviso road; and running thence along said north line S. 89 deg. 30 min West 1467 feet to the lands of Wilcox; thence along the boundary line of said Wilcox's land South 25 feet and East 136 feet and South 542½ feet; thence North 89 deg. 30 min. East 1585 feet; thence North 1 deg. 45 min. East 567½ feet to the place of beginning. Containing 20 Acres.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders rents, issues and profits thereof.

To Have and to Hold, all and singular the said

premises together with the appurtenances unto the said party of the second part and to his heirs and assigns forever.

In Witness Whereof the said parties of the first part have hereunto set their hands and seals the day and year first above written.

Signed Sealed and Delivered in the Presence of F. S. Kidney

J. M. Johnson (Seal)
Elizabeth P. Johnson (Seal)
John Kidney (Seal)

State of California }
County of Santa Clara } ss. On this First day of March in the year of our Lord one thousand eight hundred and ninety-nine before me, F. S. Kidney a Notary Public in and for said County of Santa Clara, State of California, residing therein, duly commissioned and sworn, personally appeared J. M. Johnson, Elizabeth P. Johnson his wife and John Kidney known to me to be the persons described in and whose names are subscribed to the within instrument, and acknowledged that they executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

(Seal)

F. S. Kidney Notary Public in and for Santa Clara County, State of California.

Recorded at the Request of Grantee, March 3 A.D. 1899 at 45 min. past 2 o'clock P. M.

Chas. P. Owen Recorder.

By J. D. Canelo Deputy Recorder.

F 62

Mrs Mary J. Abbott etal To B. S. Litle

This Indenture, Made this 3rd day of March

the within instrument, and acknowledged to me that they executed the same.

WITNESS my hand and official seal, at my office in said County of Santa Clara, the day and year first above written.

(NOTARIAL SEAL) Luis G. Fatjo, Notary Public, in and for Santa Clara County, State of California.

My commission expires June 26th, 1918.

STATE OF CALIFORNIA)
COUNTY OF ALAMEDA.) SS

On this 1st day of May in the year of our Lord One Thousand Nine Hundred and Sixteen, before me, Ina M. Baird, a Notary Public in and for the County of Alameda, State of California, residing therein, duly commissioned and sworn, personally appeared Cora A. Johnson, known to me to be the person described in and whose name is subscribed to the within instrument, and she acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal, the day and year in this certificate first above written.

(NOTARIAL SEAL) Ina M. Baird, Notary Public in and for the said County of Alameda, State of California.

My commission expires Apr. 3, 1919.

STATE OF WASHINGTON,)
COUNTY OF SPOKANE) SS.

On this 8th day of May A. D. Nineteen Hundred and Sixteen, before me, H. M. Howard, a Notary Public in and for the said County of Spokane, State of Washington, residing therein, duly commissioned and sworn, personally appeared Mrs. C. E. Mallette, also called Mary A. Mallette, and C. E. Mallette, her husband, known to me to be the persons described in, whose names are subscribed to, and who executed the within instrument, and they duly acknowledged to me that they executed the same.

WITNESS my hand and Official Seal, at my office in said County of Spokane, the day and year in this certificate first above written.

(NOTARIAL SEAL) H. M. Howard, Notary Public in and for said County of Spokane, State of Washington.

Recorded at the Request of Robert A. Fatjo, May 12, 1916, at 27 min. past 11 o'clock A. M.

D. J. FLANNERY, COUNTY RECORDER

By M. Atkinson, Deputy

MSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMSMS

MRS. C. E. MALLETTE, ET AL, TO ELIZABETH E. WILLIAMS, ET AL,

****

$7.00 U. S. INT. REV. STAMP CANCELLED

THIS INDENTURE, Made the 28th day of April, in the year of our Lord, nineteen hundred and sixteen, Between Mrs. C. E. Mallette, also called Mary A. Mallette, and C. E. Mallette, her husband, J. B. Johnson and Catherine Johnson, his wife, Mrs. Richard Atherton, also called Kittie L. Atherton, and Richard Atherton, her husband, Chas. W. Johnson and Pearl Johnson, his wife, Cora A. Johnson, W. R. Johnson and Eliza C. Johnson, his wife, the parties of the first part, and Elizabeth E. Williams and Edward A. Williams, of the County of Santa Clara, State of California, the parties of the second part;

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of Ten Dollars Gold Coin of the United States of America, to them in hand paid by the said parties of the second part, the receipt whereof is hereby acknowledged, do by these presents grant, bargain, sell, convey and confirm unto the said

parties of the second part, and to their heirs and assigns forever all that certain lot, piece or parcel of land, situate, lying and being in the County of Santa Clara, State of California, and bounded and particularly described as follows, to-wit:

Beginning at a point in the Northerly line of a private roadway 19 feet wide running Westerly from the Saratoga and Alviso Road, said point of beginning being 20 feet North of the Southerly line of a tract of 79.10 acres conveyed by S. O. De Arguello et al to Beverly A. England by deed dated February 23, 1867, and recorded same day in Liber X of Deeds at page 206, et seq., in the office of the County Recorder of said Santa Clara County, California, and North 87° 48' West 1287.3 feet from the center line of the said Saratoga and Alviso Road, said point of beginning being also the South Westerly corner of the 10.23 acre tract of land conveyed by W. R. Johnson and wife to J. B. Johnson by deed dated March 17, 1916, and recorded same date in Liber 442 of Deeds, page 93, in the office of the County Recorder of said Santa Clara County, California, from said point of beginning running North 663.6 feet to the South line of land now or formerly of Ellison Hayslip; thence along the Southerly line of said land of Hayslip South 89 1/2° West 1508.7 feet to the West line of the original 79.10 acre tract conveyed by Arguello et al to England; thence South and along said Westerly line of the original England Tract 592.5 feet to the Northerly line of said 19 foot private roadway, said point being 20 feet North of a stake marked Z.9. set for the South Westerly corner of said England Tract; thence along the Northerly line of said 19 foot private roadway, South 87° 48' East 1514 feet to the point of beginning.

EXCEPTING from the above described tract of land all that portion thereof described as follows, to wit:

Commencing at a point in the Northerly side of the private roadway above described, running between the lands now or formerly of W. R. Johnson and lands above described on the North and lands now or formerly of Perriman on the South, said point of beginning being Westerly 676 feet distant from the South Westerly corner of the land now or formerly of said W. R. Johnson; running thence Northerly at right angles to said private roadway 10 feet; thence Westerly and parallel to said private roadway 40 feet; thence Southerly 10 feet to the Northerly line of said private roadway; thence Easterly along the Northerly line of said private roadway 40 feet to the place of beginning. Containing 0.009 acres.

The premises hereby conveyed containing 21.741 acres and being a part of the original England Tract in the Quito Rancho.

ALSO a right of way over that certain private roadway Nineteen feet wide extending Westerly from the Westerly line of the Saratoga and Alviso Road to the Westerly line of the said original England Tract, said 19 foot private roadway being bounded on the North by the 21.741 acres above described and land now or formerly of W. R. Johnson and on the South by a strip of land 1 foot wide adjoining the Southerly line of the original England Tract on the South.

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in any wise appertaining.

TO HAVE AND TO HOLD, all and singular the said premises, together with the appurtenances, unto the said parties of the second part, and to their heirs and assigns forever.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set

their hands the day and year first above written.

Mrs. C. E. Mallette
C. E. Mallette
J. B. Johnson
Catherine Johnson
Mrs. Richard Atherton
Richard Atherton
Chas W. Johnson
Pearl Johnson
Cora A. Johnson
W. R. Johnson
Eliza C. Johnson

STATE OF CALIFORNIA,)
(SS.
COUNTY OF SANTA CLARA.)

On this 29th. day of April in the year A. D. 1916, before me, Luis G. Fatjo, a Notary Public, in and for the said County of Santa Clara, residing therein, duly commissioned and sworn, personally appeared J. B. Johnson and Catherine Johnson, his wife, Mrs. Richard Atherton, also called Kittie L. Atherton, and Richard Atherton, her husband, and Chas. W. Johnson and Pearl Johnson, his wife, W. R. Johnson and Eliza C. Johnson, his wife, known to me to be the persons described in, whose names are subscribed to, and who executed the within instrument, and acknowledged to me that they executed the same.

WITNESS my hand and official seal, at my office in said County of Santa Clara, the day and year first above written.

(NOTARIAL SEAL)

Luis G. Fatjo, Notary Public in and for Santa Clara County, State of California.

My commission expires June 26th, 1918.

STATE OF CALIFORNIA,)
(SS.
COUNTY OF ALAMEDA.)

On this 1st day of May in the year of our Lord One Thousand Nine Hundred and Sixteen, before me, Ina M. Baird, a Notary Public in and for the County of Alameda, State of California, residing therein, duly commissioned and sworn, personally appeared Cora A. Johnson, known to me to be the person described in and whose name is subscribed to the within instrument, and she acknowledged to me that she executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal, the day and year in this certificate first above written.

(NOTARIAL SEAL)

Ina M. Baird, Notary Public in and for the said County of Alameda, State of California.

My commission expires Apr. 3, 1919.

STATE OF WASHINGTON, (
) SS.
COUNTY OF SPOKANE (

On this 8th day of May, A. D. Nineteen Hundred and Sixteen, before me, H. M. Howard, a Notary Public in and for the said County of Spokane, State of Washington, residing therein, duly commiesioned and sworn, personally appeared Mrs. C. E. Mallette, also called Mary A. Mallette, and C. E. Mallette, her husband, known to me to be the persons described in, whose names are subscribed to, and who executed the within instrument, and they duly acknowledged to me that they executed the same.

WITNESS my hand and Official Seal, at my office in said County of Spokane the day and year in this certificate first above written.

(NOTARIAL SEAL)

H. M. Howard, Notary Public in and for the County of Spokane, State of Washington.

Recorded at the Request of Robert A. Fatjo, May 12, 1916, at 31 min. past 11 o'clock A.M.

D. J. FLANNERY, COUNTY RECORDER
By M. Atkinson, Deputy

TRACT Nº 1830
LA LINDA MEADOWS UNIT Nº 2

BEING A PART OF THE QUITO RANCHO

LYING WITHIN THE

CITY OF SUNNYVALE

SANTA CLARA COUNTY, CALIFORNIA

JUNE 1957

HUNT ENGINEERING CO.

SAN JOSE CALIFORNIA

SURVEYOR'S CERTIFICATE

I, Wm M. Hunt, hereby certify that I am a Licensed Surveyor of the State of California; that this map consisting of two sheets, correctly represents a survey made under my supervision in June, 1957; that the survey is true and complete as shown; that all of the monuments shown thereon actually exist and their positions are correctly shown and that said monuments are sufficient to enable the survey to be retraced.

Wm. M. Hunt
Licensed Land Surveyor Cert. #2388

CITY ENGINEER'S CERTIFICATE

I hereby certify that I have examined the final map of Tract Nº 1830; that the subdivision as shown thereon is substantially the same as it appeared on the tentative map thereof and any approved alterations; that all the provisions of the Map Act and of any local ordinance applicable at the time of the approval of the tentative map have been complied with and that I am satisfied that said map is technically correct.

Donald M. Somers 7-17-57
City Engineer of the city of Sunnyvale

1363720

COUNTY RECORDER'S CERTIFICATE

Accepted for record and recorded in Book 84 of Maps, pages 28 and 29, in the office of the County Recorder of the County of Santa Clara this 23rd day of July, 1957, at 11:21 AM.

Syl C. Tully, County Recorder of the County of Santa Clara

$5.00

By E. B. O'Brien deputy

CITY PLANNING COMMISSION'S CERTIFICATE

I hereby certify that the map shown hereon was duly approved by the Planning Commission of the City of Sunnyvale at a meeting held on the 12 day of November, 1956.

Arthur L. Spencer
Secretary of the Planning Commission of the City of Sunnyvale

State of California }
County of Santa Clara } ss.

On this 9th day of July, 1957, before me I.E. Wallis, a Notary Public in and for the County of Santa Clara, State of California, residing therein, duly commissioned and sworn, personally appeared Thos. J. Martin, known to me to be the general partner of the partnership that executed the within instrument and acknowledged to me that such partnership executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

I.E. Wallis
Notary Public in and for the County of Santa Clara, State of California

OWNER'S CERTIFICATE

We hereby certify that we are the owners of or have some right, title or interest in and to the real property included within the subdivision shown upon this map; that we are the only persons whose consent is necessary to pass a clear title to said property and that we consent to the making of said map and subdivision as shown within the border lines and hereby dedicate to public use, all streets and parts of streets shown on said map within said subdivision.

We also hereby dedicate to public use, those strips of land designated as P.U.E. for public utilities, such strips of land are to be kept open and free of structures of any kind.

We also hereby dedicate to public use those strips of land, one foot in width, designated as "1' reservation", said reservations are reserved exclusively for the owners of Lots in said subdivision until additional strips of land adjoining said 1' reservations are accepted by the City Council for the extension of and, or the widening of streets shown on said map of Tract Nº 1830.

T. J. Martin & Co., a partnership

By Thos. J. Martin
General Partner

CITY CLERK'S CERTIFICATE

I hereby certify that the City Council of the City of Sunnyvale at its regular meeting held on the 16th day of July, 1957, duly approved the map of Tract Nº 1830, authorized its recordation and accepted on behalf of the public, all streets and parts of streets offered for dedication for public use.

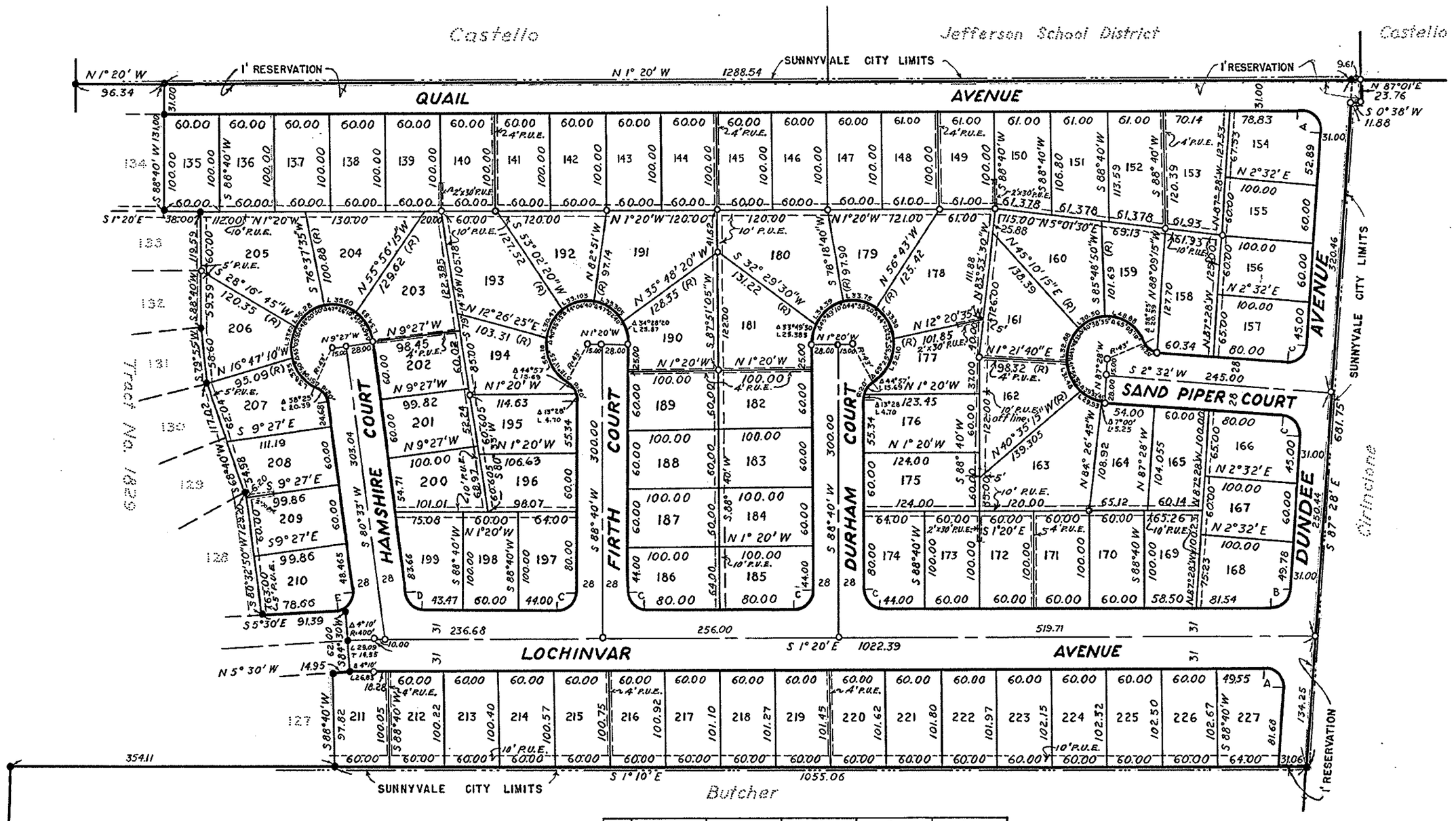
Miriam Krodel
City Clerk of the City of Sunnyvale

SHEET 1 OF 2 SHEETS

84/28

28

28
29



	A	B	C	D	E
Δ	93°52'	86°08'	90°00'	81°53'	93°57'
R	20.00	20.00	20.00	20.00	20.00
T	21.40	18.69	20.00	17.35	21.43
L	32.765	30.065	31.415	28.58	32.795

BASIS OF BEARINGS AND NOTES

The center line of Quail Ave. (N1°20'W) as said avenue is shown on Tract No 1829, La Linda Meadows Unit No 1 as said Tract is recorded in Book 76 of Maps at pages 10 and 11, Records of Santa Clara County, was taken as the basis of bearings for this survey.

All distances and dimensions are shown in feet and decimals thereof.

The blue border indicates the boundaries of the land subdivided by this map.

Iron pipe is set at all Lot corners and points of intersection.

- • Indicates 1" iron pipe found.
- o Indicates 1" iron pipe set.

Public utility easements are equally divided by Lot lines except where dimensioned otherwise.

TRACT No 1830
LA LINDA MEADOWS UNIT No 2

BEING A PART OF THE QUITO RANCHO

LYING WITHIN THE

CITY OF SUNNYVALE

SANTA CLARA COUNTY, CALIFORNIA

SCALE 1"=100' JUNE, 1957

HUNT ENGINEERING CO.

SAN JOSE CALIFORNIA

7-22-57 # 1363720 84 BL Pages 28+29

SHEET 2 OF 2 SHEETS

84/29

29

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O.R. BOOK 6516 PAGE

BOOK 6516 PAGE 280

2635278

FILED FOR RECORD
AT REQUEST OF
City of Sunnyvale
MAY 26 8 56 AM 1964
OFFICIAL RECORDS
SANTA CLARA COUNTY
PAUL R. TEILH
RECORDER

BOOK 6516 PAGE 280

DEED OF DEDICATION FOR PUBLIC STREET PURPOSES

JEFFERSON UNION SCHOOL DISTRICT of Santa Clara County, for valuable consideration, the adequacy and receipt whereof are hereby acknowledged, does hereby dedicate and grant to CITY OF SUNNYVALE for public street purposes said real property belonging to said District which is located in the County of Santa Clara, State of California, described as follows:

(See Exhibit "A" attached)

Upon the following terms and conditions:

The CITY OF SUNNYVALE shall fully maintain and repair the streets as necessary and shall pay all costs of legal advertising.

The provisions hereof shall inure to the benefit of and bind the heirs, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF the said District by and through the duly authorized Clerk of this Board of Education has executed this **Deed of Dedication** this 23rd day of April, 19XX64.

JEFFERSON UNION SCHOOL DISTRICT

By R S Edinger
Clerk of the Board of Education

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA CLARA)

On this 23rd day of April, 19 64, before me, a Notary Public, in and for said County and State, residing therein, duly commissioned and sworn, personally appeared Raymond Edinger, known to me to be the Clerk of the Board of Education of JEFFERSON UNION SCHOOL DISTRICT, Governing Board of said District, whose name is subscribed to and who executed the within instrument on behalf of said School District, and he acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal, day and year and the certificate first above written.

Vasco Lucchesi
Notary Public in and for the County of Santa Clara, State of California.

4/62
jr

VASCO LUCCHESI
NOTARY PUBLIC
Santa Clara County, Calif.
VASCO LUCCHESI
My Commission Expires Nov. 14, 1965

EXHIBIT "A"

All that real property situate in the City of Sunnyvale, County of Santa Clara, State of California, more particularly described as follows:

Beginning at the Southeasterly corner of that certain 25.340 Acre parcel as shown upon that certain Map entitled "Record of Survey, Being a Portion of Quito Rancho", recorded in Book 123 of Maps at page 51, in the Office of the Recorder of said County;

Thence North 87°32'00" West, along the Southerly boundary of said 25.340 Acre parcel, 243.33 feet to an iron pipe;

Thence North 87°28' 00" West, continuing along said Southerly boundary, 681.75 feet to the Westerly boundary of said 25.340 Acre parcel;

Thence North 0°38'00" East, along said Westerly boundary, 11.88 feet to an iron pipe;

Thence North 0°10'05" East, continuing along said Westerly boundary, 19.14 feet to a line running parallel with and distant 31.00 feet Northerly, measured at right angles from said Southerly boundary;

Thence South 87°28'00" East, along said parallel line, 682.92 feet;

Thence South 87°32'00" East, continuing along said parallel line 189.74 feet to the beginning of a tangent curve to the left;

Thence along said curve, having a radius of 20.00 feet, a central angle of 92°49'15", an arc length of 32.40 feet, tangent to a line bearing North 0°21'15" West;

Thence North 0°21'15" West, along a line running parallel with and distant 31.00 feet Westerly, measured at right angles from the Easterly boundary of said 25.340 parcel, 1174.60 feet to the Northerly boundary at said 25.340 parcel;

Thence North 89°48'58" East, along said Northerly boundary 31.00 feet to the said Easterly boundary;

Thence South 0°21'15" East, along said Easterly boundary, 1228.08 feet to the point of Beginning.

Containing 1.512 Acres more or less.

O.R. BOOK 6516 PAGE

BOOK 6516 PAGE 283

RESOLUTION NO. 64-13

RESOLUTION AUTHORIZING AND DIRECTING EXECUTION OF DEED OF DEDICATION FOR PUBLIC STREET PURPOSES TO CITY OF SUNNYVALE

Pursuant to Sections 16251 through 16254 of the Education Code of the State of California.

WHEREAS, the Board of Education of THE JEFFERSON UNION SCHOOL DISTRICT of Santa Clara County, State of California, on the 9th day of April, 1964, in regular open meeting, adopted a resolution declaring its intention to dedicate to CITY OF SUNNYVALE for Public Street purposes, certain real property more particularly described as follows:

See Exhibit "A" attached

EXHIBIT "A"

All that real property situate in the City of Sunnyvale, County of Santa Clara, State of California, more particularly described as follows:

Beginning at the Southeasterly corner of that certain 25.340 Acre parcel as shown upon that certain Map entitled "Record of Survey, Being a Portion of Quito Rancho", recorded in Book 123 of Maps at page 51, in the Office of the Recorder of said County;

Thence North 87°32'00" West, along the Southerly boundary of said 25.340 Acre parcel, 243.33 feet to an iron pipe;

Thence North 87°28' 00" West, continuing along said Southerly boundary, 681.75 feet to the Westerly boundary of said 25.340 Acre parcel;

Thence North 0°38'00" East, along said Westerly boundary, 11.88 feet to an iron pipe;

Thence North 0°10'05" East, continuing along said Westerly boundary, 19.14 feet to a line running parallel with and distant 31.00 feet Northerly, measured at right angles from said Southerly boundary;

Thence South 87°28'00" East, along said parallel line, 682.92 feet;

Thence South 87°32'00" East, continuing along said parallel line 189.74 feet to the beginning of a tangent curve to the left;

Thence along said curve, having a radius of 20.00 feet, a central angle of 92°49'15", an arc length of 32.40 feet, tangent to a line bearing North 0°21'15" West;

Thence North 0°21'15" West, along a line running parallel with and distant 31.00 feet Westerly, measured at right angles from the Easterly boundary of said 25.340 parcel, 1174.60 feet to the Northerly boundary at said 25.340 parcel;

Thence North 89°48'58" East, along said Northerly boundary 31.00 feet to the said Easterly boundary;

Thence South 0°21'15" East, along said Easterly boundary, 1228.08 feet to the point of Beginning.

Containing 1.512 Acres more or less.

RESOLUTION NO. 6482

RESOLUTION ACCEPTING DEED OF DEDICATION AND ORDERING RECORDATION THEREOF, AND ACCEPTING STREET IMPROVEMENTS AS COMPLETED

BE IT RESOLVED AS FOLLOWS:

That a certain Deed of Dedication of the real property described in Exhibit "A" attached hereto and incorporated herein by reference, for public street purposes, executed on behalf of the Jefferson Union School District of Santa Clara County and in which Deed the City of Sunnyvale, a municipal corporation, is named as Grantee, be and the same hereby is accepted, and the duly authorized officer of the City of Sunnyvale be and he hereby is directed and ordered to cause said Deed to be recorded in the Office of the Recorder of the County of Santa Clara, State of California.

That the street improvements constructed on the real property described in Exhibit "A" be and the same hereby are accepted as completed.

That the Deed of Dedication is accepted upon the conditions that the City of Sunnyvale fully maintain and repair the street improvements constructed upon the real property described in Exhibit "A" as necessary, and that the City of Sunnyvale pay all costs of legal advertising in connection with the aforesaid dedication of real property by the Board of Education of the Jefferson Union School District of Santa Clara County.

O.R. BOOK 6516 PAGE 8

That the Director of Finance is authorized and directed to pay necessary funds of the City of Sunnyvale in connection with payment of costs of legal advertising as aforesaid.

PASSED AND ADOPTED by the City Council of the City of Sunnyvale at a regular meeting held on the 19th day of May, 1964, by the following called vote:

AYES: Councilmen: Brown, Conrardy, Fernandez, Koreski, Logan, McDaniel and Jones

NOES: Councilmen: None

ABSENT: Councilmen: None

APPROVED:

Walter L Jones
Mayor

ATTEST:

PERRY SCOTT, City Clerk

By _____
Deputy City Clerk

(SEAL)

Certified as a True Copy
PERRY SCOTT, City Clerk
by _____
Deputy Clerk of the City of Sunnyvale, Calif.

All that real property situate in the City of Sunnyvale, County of Santa Clara, State of California, more particularly described as follows:

BEGINNING at the Southeasterly corner of that certain 25.340 acre parcel as shown upon that certain Map entitled "Record of Survey, Being a Portion of Quito Rancho", recorded in Book 123 of Maps at page 51, in the Office of the Recorder of said County;

Thence North 87° 32' 00" West, along the Southerly boundary of said 25.340 acre parcel, 243.33 feet to an iron pipe;

Thence North 87° 28' 00" West, continuing along said Southerly boundary, 681.75 feet to the Westerly boundary of said 25.340 acre parcel;

Thence North 0° 38' 00" East, along said Westerly boundary, 11.88 feet to an iron pipe;

Thence North 0° 10' 05" East, continuing along said Westerly boundary, 19.14 feet to a line running parallel with and distant 31.00 feet Northerly, measured at right angles from said Southerly boundary;

Thence South 87° 28' 00" East, along said parallel line, 682.92 feet;

Thence South 87° 32' 00" East, continuing along said parallel line 189.74 feet to the beginning of a tangent curve to the left;

Thence along said curve, having a radius of 20.00 feet, a central angle of 92° 49' 15", an arc length of 32.40 feet, tangent to a line bearing North 0° 21' 15" West;

Thence North 0° 21' 15" West, along a line running parallel with and distant 31.00 feet Westerly, measured at right angles from the Easterly boundary of said 25.340 acre parcel, 1174.60 feet to the Northerly boundary at said 25.340 acre parcel;

Thence North 89° 48' 58" East, along said Northerly boundary 31.00 feet to the said Easterly boundary;

Thence South 0° 21' 15" East, along said Easterly boundary, 1228.08 feet to the Point of Beginning.

Containing 1.512 acres, more or less.

EXHIBIT "A"

and proper crossarms and braces and other fixtures for use in connection therewith, and also a right of way along said line of poles, together with the right of ingress thereto, and egress therefrom along said line, over and across my land situate in the County of Santa Clara, State of California, and more particularly described as follows:

27½ A. tract on the west side of the Alviso-Saratoga Road, adjoining on the North the 100 A. tract of the Kracker Estate, and being about a ¼ of a mile North of the Stevens Creek Road.

The route of said line of poles and wires across said land shall be as follows:

Along the westerly boundary. Poles to be set under the direction of the owner as regards their locations and this right of way is intended to cover the route thus established.

The said corporation is also hereby granted the right to trim any trees under owner's direction along said line of poles and wires whenever considered by it necessary for the complete enjoyment of the rights hereby granted.

IN WITNESS WHEREOF, I have executed these presents this 21st day of February, 1913.

CLARA B. SHORE

Executed in the presence of A.E. Caldwell. Witness:

STATE OF CALIFORNIA,)
COUNTY OF SANTA CLARA.) SS

On this 6th day of March A.D. 1913, before me, ROBERT M. WRIGHT, a Notary Public in and for said Santa Clara County, residing therein, duly commissioned and sworn, personally appeared A.E. Caldwell, known to me to be the same person whose name is subscribed to the within instrument, as a witness thereto, who, being by me duly sworn, deposed and said, that he resides in the County of Santa Clara, State of California, that he was present and saw Clara B. Shore, personally known to him to be the same person described in, whose name is subscribed to and who executed the said Instrument, as a party thereto, sign and execute the same; and that he the affiant, then and there subscribed his name to said Instrument as a witness:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office in the County of Santa Clara, the day and year in this certificate first above written.

ROBERT M. WRIGHT, Notary Public in and for the County of Santa Clara, State of California.

(NOTARIAL SEAL)

Filed for record at the request of Wells Fargo Co. Mar. 12, A.D. 1913, at 8 min. past 4 o'clock P.M.

D. J. FLANNERY, Recorder,
M. Atkinson Deputy Recorder.

RSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRS

J.W.JOHNSON TO PACIFIC GAS AND ELECTRIC COMPANY

J.W.JOHNSON of the County of Santa Clara, State of California, for and in consideration of the sum of One Dollar ($1.00) In lawful money of the United States of America, to me paid by the Pacific Gas and Electric Company, a corporation, duly

organized and existing under and by virtue of the laws of the State of California, the receipt whereof is acknowledged, do hereby grant unto the said corporation, its successors and assigns, the right and privilege of erecting, maintaining and using, for the transmission and distribution of electricity and for all purposes connected therewith, a single line of poles and wires suspended thereon and all necessary and proper crossarms and braces and other fixtures for use in connection therewith, and also a right of way along said line of poles, together with the right of ingress thereto and egress therefrom along said line, over and across my land situate in the County of Santa Clara, State of California, and more particularly described as follows:

37 Acre tract on the west side of Lawrence Road and about ½ mile South of San Francisco Road, west of and adjoining ten acre tract owned by W.R. Johnson and 10 acre tract, formerly owned by E. Connor, said tract including right-of-way strip leading to above property from Lawrence Road.

The route ofsaid line of poles and wires across said land shall be as follows:

Along Southern boundary westerly from Lawrence Road. Line to be run under direction of the owner, as regards location and this right of way is intended to cover the route thus established.

The said corporation is also hereby granted the right to trim any trees under owner's direction alongsaid line of poles and wires whenever considered by it necessary for the complete enjoyment of the rights hereby granted.

IN WITNESS WHEREOF, I have executed these presents this 20th day of February, 1913.

J.W.JOHNSON

Executed in the presence of A.E.Caldwell, Witness:

STATE OF CALIFORNIA,)
COUNTY OF SANTA CLARA.) SS

On this 6th day of March A.D. 1913 before me, ROBERT M. WRIGHT, a Notary Public in and for said Santa Clara County,, residing therein, duly commissioned and sworn, personally appeared A.E.Caldwell, known to me to be the same person whose name is subscribed to the within instrument, as a witness thereto, who, being by me duly sworn, deposed and said, that he resides in the County of Santa Clara, State of California, that he was present and saw J.W.Johnson, personally known to him to be the same person described in, whose name is subscribed to, and who executed the said instrument as a party thereto, sign and execute the same; and that he the affiant then and there subscribed his name to said Instrument as a witness.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office in the County of Santa Clara, the day and year in this certificate first above written.

ROBERT M.WRIGHT, Notary Public in and for the County of Santa Clara, State of California.

(NOTARIAL SEAL)

Filed for record at the request of Wells Fargo Co. Mar. 12, A.D. 1913, at 7 min.past 4 o'clock P.M.

D. J. FLANNERY, Recorder,
M. Atkinson Deputy Recorder.

RSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRSRS

which deed of trust was recorded in the office of the County Recorder of the County of Santa Clara, State of California, on the 4th day of August, 1926, in Liber 252 of Official Records at page 497 et seq; and

WHEREAS, the above deed of trust, promissory note and indebtedness was by written instrument of assignment dated May 28th, 1928, and recorded May 28th, 1928 in Liber 402 of Official Records, at page 322, Santa Clara County Records, assigned by said C. V. Fisher and Grace L. Fisher, husband and wife, to G. C. Stura;

NOW THIS INDENTURE WITNESSETH: That said G. C. Stura the said present owner and holder of said deed of trust, promissory note and indebtedness, in consideration of the sum of Four Thousand Fifty-nine and 86/100 dollars, to him in hand paid by said C.V. Fisher and Grace L. Fisher, the receipt whereof is hereby acknowledged, does by these presents, assign, transfer, and set over unto the said C. V. Fisher and Grace L. Fisher the said deed of trust, and all his right, title and interest in and to the real property thereby conveyed, together with the promissory note therein mentioned and all moneys due or that may hereafter become due thereunder, subject only to the provisions in said deed of trust specified.

IN WITNESS WHEREOF, I have hereunto set my hand this 27th day of April in the year one thousand nine hundred and thirty one.

G. C. Stura

Signed and delivered in the presence of W. R. Biaggi: Georgia Scanlon

STATE OF CALIFORNIA (
COUNTY OF SANTA CLARA(SS On this 27th day of April one thousand nine hundred and thirty one before me, Georgia Scanlon, a Notary Public in and for said County of Santa Clara, State of California, personally appeared G. C. Stura known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

(NOTARIAL SEAL) Georgia Scanlon, Notary Public in and for the County of Santa Clara, State of California.

FILING NO. J-8214

Filed for record at the request of San Jose Abstract and Title Insurance Co. Apr 28 1931 at 24 min past 1 o'clock P.M.

CHAS. A. PAYNE RECORDER
Wright Emlen Deputy Recorder

fee 1.00 5f
compared doc. A. Le Gate compared book [illegible]
JBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJB

VLAHO KRESALJA TO P.G.& E. CO.

"("

209-68

VOL - 563
Pg - 421

GRANT OF RIGHT OF WAY
FOR ELECTRIC TRANSMISSION LINE

Vlaho Kresalja, of the County of Santa Clara, State of California hereinafter called the "grantor" for and in consideration of the sum of one dollar ($1.00) in lawful money of the United States of America paid by the Pacific Gas and Electric Company, a corporation duly organized and existing under and by virtue of the laws of the State of California, hereinafter called the "Grantee" the receipt whereof is acknowledged, does hereby grant unto the said grantee, its successors, or assigns, the right and privilege of erecting, maintaining and using, for the transmission and distribution of electricity and for all purposes connected therewith, a single line of poles and wires suspended thereon and all necessary and proper guys, cross-arms and braces and other fixtures for use in connection therewith, and also a right of way along said line of poles, together with the right of ingress thereto and egress therefrom along said line, over and across the grantor's land situate in the County of Santa Clara, State of California, and more particularly described as follows:

That certain 21.741 acre tract of land conveyed by Antone Vitkovich to Vlaho Kresalja by deed dated November 15, 1927 and recorded in the office of the County Recorder of Santa Clara County, State of California in Book 360 of Official Records at page 140; being situated westerly from the Saratoga-Alviso or Lawrence Road, and southerly from the San Francisco-San Jose State Highway.

The route of said line of poles and wires across said land shall be as follows:

Beginning at a point in the southerly boundary line of said tract of land north 87 degrees 48 minutes west 560.0 feet distant from the southeasterly corner thereof and running thence north parallel to the easterly boundary line of said tract of land to the land now or formerly owned by B. Matasci.

The grantee is also hereby granted the right to trim any trees along said line of poles and wires whenever considered by it necessary for the complete enjoyment of the rights hereby granted.

IN WITNESS WHEREOF, the grantor has executed these presents this 30th day of March 1931.

Vlaho Kresalja

Executed in the presence of

Witness

STATE OF CALIFORNIA (
COUNTY OF SANTA CLARA(SS On this 15th day of April in the year A.D.1931 before me, Victor A. Chargin a Notary Public in and for the said County of Santa Clara, residing therein, duly commissioned and sworn, personally Vlaho Kresalja known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

WITNESS my hand and official seal, at my office in said County of Santa Clara, the day and year in this certificate first above written.

(NOTARIAL SEAL) Victor A. Chargin, Notary Public in and for said County of Santa Clara, State of California.

My commission expires Oct. 27, 1933

FILING NO. J-8218

Filed for record at the request of Railway Express Agency, Inc. Apr 28 1931 at 36 min past 2 o'clock P.M.

CHAS. A. PAYNE RECORDER
E. B. O'Brien Deputy Recorder

fee 1.00 5f
compared doc. A LeGate compared book [signature]

JBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJBJ JBJBJBJBJBJBJBJBBJ

F. W. HACKETT TO P.G.& E. CO.

"("

210-136

GRANT OF RIGHT OF WAY
FOR ELECTRIC TRANSMISSION LINE

F. W. Hackett hereinafter called the "Grantor," for and in consideration of the sum of one dollar ($1.00) in lawful money of the United States of America paid by the Pacific Gas and Electric Company, a corporation duly organized and existing under and by virtue of the laws of the State of California, hereinafter called the "Grantee," the receipt whereof is acknowledged, does hereby grant unto the said grantee, its successors, or assigns, the right and privilege of erecting, maintaining and using, for the transmission and distribution of electricity and for all purposes connected therwith, a single line of poles and wires suspended thereon and all necessary and proper guys, cross-arms and braces and other fixtures for use in connection therewith, and also a right of way along said line of poles, together with the right of ingress thereto and egress therefrom along said line, over and across the grantor's land situate in the County of Santa Clara, State of California, and more particularly described as follows:

Sierra Vista Avenue, San Ramon Avenue, San Luis Avenue, Montecito Avenue and Hackett Avenue, as said Avenues are shown upon that certain map entitled "Map of Oro Loma Acres being a subdivision of part of lot 2 of the Subdivision of the Property of Messers. Castro and Calderon as recorded in Book "A" of Maps, page 28, Pastoria de las Borregas. Santa Clara County - Calif." and recorded in Book "Y" of Maps, at pages 18 and 19, records of said Santa Clara County.

The following notice is pursuant to Subdivision (b) of Section 12956.1 of the California Government Code

Notice

If this document contains any restriction based on race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, familial status, marital status, disability, genetic information, national origin, source of income as defined in subdivision (p) of Section 12955, or ancestry, that restriction violates state and federal fair housing laws and is void, and may be removed pursuant to Section 12956.2 of the Government Code. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status.

Amended January 1, 2012

BOOK 1786 PAGE 200

DECLARATION OF RESTRICTIONS

THIS DECLARATION made and dated this 10th day of May, 1949 by Ignazio Castello and Rosalia Castello, his wife.

WHEREAS, said parties are the owners of a certain tract of land situate in the County of Santa Clara, State of California, described as follows:

Lots 1 to 44 inclusive as shown upon that certain map entitled, Tract No. 622 I. & R. Castello Tract Unit No. 1, which Map was filed for record in the office of the recorder of the County of Santa Clara, State of California, on May 9, 1949, in Book 22 of Maps, at page 50, to which said Map and the said record thereof, reference is hereby made, and

WHEREAS, said parties are about to sell Lots 1 to 44 inclusive shown on said Map, which they desire to subject to certain restrictions, conditions, covenants, and agreements between themselves and the purchasers of said property, as hereinafter set forth:

NOW THEREFORE, said parties declare that Lots 1 to 44 inclusive shown on the Map of Tract No. 622 is held and shall be conveyed subject to restrictions, conditions, covenants, charges and agreements set forth in the Declaration, to-wit:

DEFINITION: The word "Lot" as herein used refers to one of the numbered lots as delineated upon the original recorded Map of the Tract within which the above described real property is located.

The word "Plots" as herein used refers to an individual site for a residence, together with the grounds in connection therewith, whether composed of one or more "lots" or portions or combinations thereof, as said "Lots" are above defined.

a. All of the Lots, Plots and Parcels hereinbefore described are declared to be residential in character and no structure shall be erected on any building plot other than one detached single family dwelling, not to exceed two stories in height, with a private garage and other out-buildings incident to the residential use of the plot, except that multiple family dwellings may be erected on Lots 1, 2, 3, 4, 5, 6, 7 and 8.

b. No dwelling shall be erected on any building plot which contains an area of less than 9000 square feet, nor a width or frontage of less than 73 feet.

c. No dwelling shall be erected on any building plot nearer than Twenty-five (25) feet to the front property line nor nearer than Twelve and one-half (12½) feet to a side street line. No dwelling or structure shall be erected nearer than five (5) feet to any property line.

d. All of said lots are held and owned and shall be conveyed subject to the express condition that said real property shall not be used or occupied by any person of African, Japanese, Chinese, Mongolian or Malay descent, provided however, that said restrictions shall not be construed as prohibiting persons of such descent from residing upon said property while in the employment as servants of the persons occupying the said property.

e. No trailers, basement, tent, shack, garage, barn or other out-buildings shall at any time be used as a residence, temporarily or permanently, nor shall any structure of a temporary character be permitted.

f. No dwelling house having a ground floor area of less than 800 square feet, exclusive of garage, open porches, terraces and other appurtenances, shall be erected upon any building plot within the area subject to these restrictions.

g. No commercial or manufacturing enterprise shall be carried on upon any plot nor shall anything be done which may be or become an annoyance or nuisance to the neighborhood.

h. No livestock rabbits nor creatures of any kind shall be kept or bred upon any lot for commercial purposes. Nothing herein contained shall be construed as restricting the right to keep household pets upon said premises.

i. No structure shall be moved onto any building plot without prior approval in writing by the subdivider's, their heirs or assigns.

j. All of the restrictions, conditions, covenants and agreements shall affect all of the lots as hereinabove set forth and are made for the direct and reciprocal benefit thereof, and in furtherance of a general plan for the improvement of said Tract, and the covenants shall attach to and run with the land. Said restrictions, conditions and covenants shall be binding on all parties and all persons claiming under them until June 1, 1969 at which time they shall be automatically extended for successive periods of five years, provided, however that such restrictions, conditions, covenants and agreements, or any of them, may be changed, rescinded or annulled in any or all particulars at any time by a majority of the then individual property owners in said Tract, evidenced by an instrument in writing executed by the said owners in the manner provided by law for the conveyance of real property, and duly recorded in the office of the Recorder aforesaid, and upon such recordation shall be valid and binding upon the Sellers and owners of the said lots in said tract, and upon all other persons.

k. If the parties hereto, or their successors or assigns shall violate or attempt to violate any of the covenants herein before June 1, 1969, or during any of the extended periods for which they are in force, it shall be lawful for any person owning any real property subject thereto, to prosecute any proceedings at law or in equity against the person or persons violating or attempting to violate any such covenants, and either to prevent him or them from so doing or to recover damages or other dues for such violation.

l. It is further provided that a breach of any of the conditions contained herein or of any re-entry by reason of such breach, shall not defeat or render invalid the lien of any Mortgage or Deed of Trust made in good faith and for value as to said premises or any part thereof; but said conditions shall be binding upon and effective against any owner of said premises whose title thereto is acquired by foreclosure, trustee's sale or otherwise.

m. Invalidation of any one or more of these covenants by judgment or court order shall in no wise affect any of the other provisions which shall remain in full force and effect.

IN WITNESS WHEREOF, the undersigned has hereunto set their hands and seals the day and year first hereinabove written.

Ignacio Castello

Rosalia Castello

STATE OF CALIFORNIA
COUNTY OF SANTA CLARA } ss.

On this 12th day of May in the year one thousand nine hundred and forty nine

before me, S. T. PEREIRA a Notary Public in and for the County of Santa Clara, State of California, personally appeared

IGNAZIO CASTELLO AND ROSALIA CASTELLO, HIS WIFE

known to me to be the person s whose name s are subscribed to the within instrument and acknowledged that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at my office in the County of Santa Clara, the day and year in this certificate first above written.

S. T. Pereira

(General) Notary Public in and for the County of Santa Clara, State of California

My Commission Expires Jan. 8, 1950

BOOK 1786 PAGE 202

FILED FOR RECORD AT REQUEST OF

1949 MAY 12 PM 1:35

BOOK 1786 PAGE 200

SANTA CLARA COUNTY RECORDER

I. & R. Castello
Tract No. 622

BOOK 2511 PAGE 297

832678

BOOK 2511 PAGE 297
FILED FOR RECORD
AT REQUEST OF
Ignazio Castello
Oct 27 4 27 PM 1952
OFFICIAL RECORDS
SANTA CLARA COUNTY
Chas. A. Pierce
RECORDER

1
Ignazio Castello
1/50
3

TO WHOM IT MAY CONCERN:

IGNAZIO CASTELLO and ROSALIA CASTELLO, husband and wife, owners of real property located immediately east of Tract No. 622 Unit I of the I & R Castello Tract hereby agree to permit the public utility companies to extend their service easterly and across the easterly extremity of Bryant Way for a distance of approximately fifty (50) feet to provide public utility service to our employees' houses, and further agree that the permission for ingress and egress be conferred upon such public utility companies for the purpose of laying their conduit and for the repairs or replacement thereof, and more particularly over a strip of land as if it were the easterly prolongation of said Bryant Way within the bounds of our property located easterly thereof.

IN WITNESS WHEREOF we have hereunto set our hands this 20th day of October, A.D. 1952.

Ignazio Castello

Rosalia Castello

STATE OF CALIFORNIA,
County of Santa Clara. } SS.

On this 21st day of October, A.D. 1952, before me, _____ a Notary Public in and for said County, personally appeared IGNAZIO CASTELLO and ROSALIA CASTELLO, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same.

WITNESS my hand and Official Seal.

O. H. Spreinkle

Notary Public in and for the County of Santa Clara, State of California.

O.R. BOOK 6829 PAGE

BOOK 6829 PAGE 597

2785264

GRANT OF EASEMENT

JEFFERSON UNION SCHOOL DISTRICT of Santa Clara County, for valuable consideration, the adequacy and receipt whereof are hereby acknowledged, does hereby grant to CITY OF SUNNYVALE an Easement for PUBLIC UTILITY purposes, over, upon, through and across said real property belonging to said District which is located in the County of Santa Clara, State of California, described as follows:

See Exhibit "A" attached.

2785264

BOOK 6829 PAGE 597

FILED FOR RECORD
AT REQUEST OF
City Of Sunnyvale
JAN 27 2 27 PM 1965
OFFICIAL RECORDS
SANTA CLARA COUNTY
PAUL R. TEILH
RECORDER
D.H.

GoE-3a

O.R., BOOK 6829 PAGE

Upon the following terms and conditions:

1. Costs of legal advertising for purposes of this dedication to be borne by the CITY OF SUNNYVALE.
2. Any excavation made pursuant to this easement must be restored to ground level following installation.
3. Existing improvements shall not be damaged.
4. Surface rights are retained by the District.

The provisions hereof shall inure to the benefit of and bind the heirs, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF the said District by and through the duly authorized Clerk of this Board of Education has executed this Grant of Easement this 14th day of January, 19 65.

JEFFERSON UNION SCHOOL DISTRICT

By _____
Acting Clerk of the Board of Education

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA CLARA)

On this 14th day of January, 19 65, before me, a Notary Public, in and for said County and State, residing therein, duly commissioned and sworn, personally appeared ROSS S. TRIGG, known to me to be the Acting Clerk of the Board of Education of JEFFERSON UNION SCHOOL DISTRICT, Governing Board of said District, whose name is subscribed to and who executed the within instrument on behalf of said School District, and he acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal, day and year and the certificate first above written.

_____
Notary Public in and for the County of Santa Clara, State of California.

VASCO LUCCHESI
NOTARY PUBLIC
Santa Clara County, Cal.

GoE-3b

My Commission Expires Nov. 14, 1965

O.R., BOOK 6829 PAGE

EXHIBIT "A"

All that real property situate in the City of Sunnyvale, County of Santa Clara, State of California, being a strip of land 10.00 feet in width, measured at right angles, lying contiguous to and Southeasterly of the following described line:

Beginning at a 1½" iron pipe in the most Northerly line of that certain 25.340 acre parcel of land as said parcel is shown upon that certain map entitled "Record of Survey" recorded in Book 123 of Maps at page 51 in the office of the Recorder of said County, said Point of Beginning being distant S. 89°48'58" W. 777.46 feet from the most Northeasterly corner of said 25.340 acre parcel;

Thence South 0°08'50" West, along a Westerly line of said 25.340 acre parcel, 31.95 feet to the beginning of a tangent curve to the right;

Thence Southwesterly along said curve having a radius of 255.00 feet a central angle of 62°05'45", an arc length of 276.36 feet to the most Westerly line of said 25.340 acre parcel.

Containing an area of 3083 square feet more or less.

O.R. BOOK 6829 PAGE

CERTIFICATION OF ACCEPTANCE

THIS IS TO CERTIFY that the interest in real property conveyed by the Deed or Grant, dated January 14, 1965, from JEFFERSON UNION SCHOOL DISTRICT OF SANTA CLARA COUNTY,

to the City of Sunnyvale, a municipal corporation, is hereby accepted by order of the undersigned officer or agent on behalf of the City Council of the City of Sunnyvale pursuant to authority conferred by Resolution No. 2256 of the City Council, adopted on January 29, 1957, and the Grantee consents to recordation thereof by its duly authorized officer.

DATED: January 25, 1965.

CITY OF SUNNYVALE

By Thomas L. Sweeney
Director of Finance

O.R. BOOK 6829 PAGE

RESOLUTION NO. 2256

RESOLUTION AUTHORIZING THE DIRECTOR OF FINANCE ON BEHALF OF THE CITY OF SUNNYVALE TO ACCEPT ALL DEEDS AND GRANTS CONVEYING ANY INTEREST IN OR EASEMENT UPON REAL ESTATE TO THE CITY OF SUNNYVALE AND TO CONSENT TO THEIR RECORDATION

WHEREAS, Sec. 27281 of the Government Code of the State of California provides that deeds or grants conveying any interest in or easement upon real estate to a political corporation or governmental agency for public purposes shall not be acceptable for recordation without the consent of the grantee evidenced by the resolution of acceptance attached to said deed or grant deed; and

WHEREAS, said section further provides that an officer or agent of a municipal corporation may, by resolution, be authorized to consent to such deeds or grants;

NOW, THEREFORE, the Council of the City of Sunnyvale does resolve as follows:

1. That the Director of Finance be and he hereby is authorized and directed to accept, for and on behalf of the City of Sunnyvale, all deeds and grants conveying any interest in or easement upon real estate to the City of Sunnyvale, and to consent to their recordation.

2. That the City Clerk certify to the adoption of this resolution and that a copy thereof be attached to each such deed or grant presented for recordation.

The above and foregoing resolution was duly and regularly introduced and passed by the Council of the City of Sunnyvale at a regular meeting held on Tuesday, the 19th day of January, 1957, by the following called vote:

AYES: Councilmen: Boomer, Gilmore, Johnson, Jones and Ryan

NOES: Councilmen: None

ABSENT: Councilmen: Theller and Stout

APPROVED:

/s/ R. B. Gilmore
Mayor Pro Tem

ATTEST:
/s/ Eugenia J. Brown
Acting City Clerk

I, THOMAS H. SWEENEY, City Clerk of the City of Sunnyvale, do hereby certify that the above is a true and correct copy of Resolution No. 2256, adopted by the Council of the City of Sunnyvale on January 29, 1957.

DATED: January 26 1957

THOMAS H. SWEENEY, City Clerk

By [signature]
Deputy City Clerk

DOCUMENT: 15683591

Titles: 1 / Pages: 4

Fees.... 16.00
Taxes...
Copies..
AMT PAID 16.00

00015683591

Recording Requested By
City of Sunnyvale

When Recorded Return To:

City of Sunnyvale
Planning Division
P. O. Box 3707
Sunnyvale, CA 94088-3707

BRENDA DAVIS
SANTA CLARA COUNTY RECORDER
Recorded at the request of
City

RDE # 102
5/17/2001
3:45 PM

2001-0097
Administrative Hearing: March 28, 2001

USE PERMIT
CITY OF SUNNYVALE

Pursuant to action of the City Council of the City of Sunnyvale, a Special Development Permit is hereby granted to Santa Clara Unified School District, herein called "Permittee", to use the following described real property located in the City of Sunnyvale, County of Santa Clara, State of California:

All that real property commonly known as 1095 Dunford Way , Sunnyvale, California, APN: 313-10-004, more fully described in the legal description attached reference as Exhibit "A."

This Permit is granted to allow a modular classroom building and related outdoor training facilities at an existing school site.
, subject to the Conditions of Approval set forth herein. This Permit shall be signed by Permittee, notarized and filed with the Department of Community Development of the City of Sunnyvale.

Conditions of Approval: In addition to complying with all applicable City, County, State and Federal Statutes, Codes, Ordinances, Resolutions and Regulations, Permittee expressly accepts and agrees to comply with the Approved Conditions set forth for this Permit. A copy of the approved Conditions of Approval can be obtained from the Department of Community Development of the City of Sunnyvale.

Dated: May 17, 2001

CITY OF SUNNYVALE

All signatures require notarization

By: _____
Trudi Ryan, Planning Officer

The undersigned does (do) hereby accept this Permit subject to all terms and conditions herein set forth.

Dated: April 16, 2001

By: _____
Wayne M. Hooper, Assistant Supervisor
Business Services
Santa Clara Unified School District

Attachments

PATRICK HENRY JUNIOR HIGH SCHOOL
PROPERTY DESCRIPTION

Property Description of lot here known as the *Patrick Henry Junior High School*, located in the City of Sunnyvale , recorded August 1960 in the County of Santa Clara in County Records Page 51 of Book 123, is based on the ***Record of Survey*** (being a portion of Quito Ranch in which the bearing N87°28'00''W of the northerly line of Tract No.1830, La Linda Meadows Unit No.2 recorded in Book 84 of Maps of page 29 Santa Clara County Official Records was taken as the basis of all bearings shown on this map.).Said description is as follows: POINT OF BEGINNING on centerline of Lawrence Station Road, presently known as Teal Drive (Iron Pipe found in 1960), henceforth 25.03 feet N87°32'00''W to the South-East lot corner ; from the POINT OF BEGINNING N87°32'00''W 1863.86 feet to the ¾ "iron pipe set in 1960, henceforth 243.33 feet to the ¾ " iron pipe found in 1960 at the right-of-way line of Dundee Avenue , hence N87°28'00"W 681.75 feet to the South-West lot corner, hence N0°38"00"E 11.88 feet to the junction of the northerly right-of-way of Quail Avenue , hence 1141.48 feet N0°10"05"E to the North-West lot corner, hence S89°51'10"E 135.58 feet to the ¾" iron pipe set in 1960, then N0°08"50"E 31.95 feet to the most northerly intermediate lot corner at the 1 ½" iron pipe found in 1960, hence N89°48'58"E 777.46 feet to the ¾ " iron pipe set in 1960, henceforth 1836.62 feet to the North-East lot corner at the ¾" iron pipe found in 1960, hence southerly on the Lawrence Station Road westerly right-of-way line to the South-East lot corner, hence 25.03 feet S87°32'00"E to the POINT OF BEGINNING

ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Santa Clara

On April 16, 2001 (Date) before me, Gary Denbigh Kaefer, Notary Public (Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Wayne M. Hooper (Name(s) of Signer(s)),

☐ personally known to me - **OR** - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

CCS1 GARY D. KAEFER CCS1
COMM. #1283818
NOTARY PUBLIC - CALIFORNIA
SAN MATERO COUNTY
My Commission Expires 11-12-04

WITNESS my hand and official seal.

Gary Denbigh Kaefer
Signature of Notary Public

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Use Permit City of Sunnyvale

Document Date: April 16, 2001 Number of Pages: 1

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: Wayne M. Hooper	Signer's Name: _____
☑ Individual	☐ Individual
☐ Corporate Officer	☐ Corporate Officer
Title(s): _____	Title(s): _____
☐ Partner - ☐ Limited ☐ General	☐ Partner - ☐ Limited ☐ General
☐ Attorney-in-Fact	☐ Attorney-in-Fact
☐ Trustee	☐ Trustee
☐ Guardian or Conservator	☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
RIGHT THUMBPRINT OF SIGNER Top of thumb here	RIGHT THUMBPRINT OF SIGNER Top of thumb here
Signer Is Representing: Santa Clara Unified School District	Signer Is Representing: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

STATE OF CALIFORNIA
COUNTY OF Santa Clara

On May 17, 2001, before me, Katrina L. Ardina, Notary Public

Personally appeared Trudi Ryan Personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity (ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____

(This area is for official notarial seal.)

KATRINA L. ARDINA
COMM. # 1233027
NOTARY PUBLIC-CALIFORNIA
SANTA CLARA COUNTY
COMM. EXP. AUG. 26, 2003

Recording Requested By
City of Sunnyvale

When Recorded Return To:

City of Sunnyvale
Planning Division
P. O. Box 3707
Sunnyvale, CA 94088-3707

DOCUMENT: 17666920

Pages: 6

Fees . . + No Fees
Taxes . .
Copies
AMT PAID

BRENDA DAVIS
SANTA CLARA COUNTY RECORDER
Recorded at the request of
City

RDE # 011
3/17/2004
3:56 PM

File: 2003-0634
City Council: January 6, 2004

USE PERMIT
CITY OF SUNNYVALE

Pursuant to action of the City Council of the City of Sunnyvale, a Special Development Permit is hereby granted to Santa Clara Unified School District, herein called "Permittee", to use the following described real property located in the City of Sunnyvale, County of Santa Clara, State of California:

All that real property commonly known as **1095 Dunford Avenue**, Sunnyvale, California, APN: 313-10-004, more fully described in the legal description attached reference as Exhibit "A."

This Permit is granted to allow a tent cover over the San Jose Sabercats practice field from January 1 through May 15 for a two year period, subject to the Conditions of Approval set forth herein. This Permit shall be signed by Permittee, notarized and filed with the Department of Community Development of the City of Sunnyvale.

Conditions of Approval: In addition to complying with all applicable City, County, State and Federal Statutes, Codes, Ordinances, Resolutions and Regulations, Permittee expressly accepts and agrees to comply with the Approved Conditions set forth for this Permit. A copy of the approved Conditions of Approval can be obtained from the Department of Community Development of the City of Sunnyvale.

Dated: 3-16-04

CITY OF SUNNYVALE

All signatures require notarization

By: _____
Trudi Ryan, Planning Officer

The undersigned does (do) hereby accept this Permit subject to all terms and conditions herein set forth.

Dated: 2-13-04

By: _____
Jim Luyau, Assistant Superintendent
Santa Clara Unified School District

Attachments

EXHIBIT A

The land referred to herein is situated in the State of California, County of Santa Clara, City of Sunnyvale (and is described as follows:)

PARCEL ONE:

BEGINNING at a point in the Westerly line of that certain 79.01 acre parcel conveyed by Arguello to England by Deed recorded in Book 17 of Deeds at page 22, Santa Clara County Records, said Westerly line also being the Easterly line of that certain 75.04 acre tract conveyed to Wilcox by Deed recorded in Book 50 of Deeds at page 445, Santa Clara County Records, said point being the Westerly corner common to the 20.00 acre tract conveyed to Hayslip by Deed recorded in Book 218 of Deeds at page 62 and that certain 21.741 acre tract conveyed to Williams, et al., by Deed recorded in Book 441 of Deeds at page 345, Santa Clara County Records; thence from said point of beginning North 89° 37' 50" East 918.00 feet along the line dividing said 20.00 acre and said 21.741 acre tract to a point; thence South 0° 32' 40" East 661.39 feet to the Southerly line of the 79.01 acre tract hereinabove mentioned; thence along said Southerly line North 87° 43' 25" West 243.34 feet to an iron pipe at the Northeasterly corner of tract No. 1830 La Linda Meadows, Unit No. 2, the map of said tract being recorded in Book 84 of Maps at pages 28 and 29, Santa Clara County Records; thence along a Northerly boundary of said tract North 87° 39' 25" West 681.75 feet to a corner in said boundary; thence along an Easterly boundary of said tract North 0° 26' 35" East 11.88 feet to the Northeasterly terminus of Quail Avenue, as said Avenue is shown upon said Map, said Northeasterly terminus being in the Westerly boundary of the 79.01 acre tract hereinabove mentioned; thence along said Westerly boundary North 0° 02' 35" West 605.75 feet to the point of beginning, being a portion of the Quito Rancho.

PARCEL TWO:

BEGINNING at a point in the Westerly line of that certain 79.01 acre parcel conveyed by Arguello to England by Deed recorded in Book 17 of Deeds at page 22, Santa Clara County Records, said Westerly line also being the Easterly line of that certain 75.04 acre tract conveyed to Wilcox by Deed recorded in Book 50 of Deeds at page 445, Santa Clara County Records, said point being the Westerly corner common to the 20.00 acre tract conveyed to Hayslip by Deed recorded in Book 218 of Deeds at page 62 and that certain 21.741 acre tract conveyed to Williams, et al., by Deed recorded in Book 441 of Deeds at page 345, Santa Clara County Records; thence

EXHIBIT A

from said point of beginning North 89° 37' 50" East 918.00 feet along the line dividing said 20.00 acre and said 21.741 acre tract to a point; thence North 0° 32' 40" West 566.97 feet to the Northerly boundary of said 20.00 acre tract; thence along said Northerly boundary South 89° 37' 33" West 777.46 feet to a 1 1/2 inch iron pipe found in a Northwesterly corner thereof; thence along a Westerly boundary of said 20.00 acre parcel South 9° 02' 35" East 31.95 feet to an angle point therein; thence along a Northerly boundary of said parcel South 89° 57' 25" West 135.58 feet to a redwood stake set in the Easterly boundary of the hereinabove mentioned 75.04 acre tract and the Westerly boundary of said 20.00 acre parcel; thence along said Westerly boundary South 0° 02' 35" East 535.74 feet to the point of beginning, being a portion of the Quito Rancho.

Excepting from Parcels One and Two above the following:

Beginning at the Southeasterly corner of that certain 25.340 acre parcel as shown upon that certain Map entitled, "Record of Survey, Being a portion of Quito Rancho", recorded in Book 123 of Maps at page 51, in the office of the Recorder of said County; thence North 87° 32' 00" West, along the Southerly boundary of said 25.340 acre parcel, 243.33 feet to an iron pipe; thence North 87° 28' 00" West, continuing along said Southerly boundary, 681.75 feet to the Westerly boundary of said 25.340 acre parcel; thence North 0° 38' 00" East, along said Westerly boundary, 11.88 feet to an iron pipe; thence North 0° 10' 05" East, continuing along said Westerly boundary, 19.14 feet to a line running parallel with and distant 31.00 feet Northerly, measured at right angles from said Southerly boundary; thence South 87° 28' 00" East, along said parallel line, 682.92 feet; thence South 87° 32' 00" East, continuing along said parallel line 189.74 feet to the beginning of a tangent curve to the left; thence along said curve, having a radius of 20.00 feet, a central angle of 92° 49' 15", an arc length of 32.40 feet, tangent to a line bearing North 0° 21' 15" West; thence North 0° 21' 15" West, along a line running parallel wiht and distant 31.00 feet Westerly, measured at right angles from the Easterly boundary of said 25.340 parcel, 1174.60 feet to the Northerly boundary at said 25.340 parcel; thence North 89° 48' 58" East, along said Northerly boundary 31.00 feet to the said Easterly boundary; thence South 0° 21' 15" East, along said Easterly boundary, 1228.08 feet to the point of beginning.

3-6-91-SJV3-5A
CCG/TR/ltc

4-8-91 8-9

Approved Conditions for Use Permit Number 2003-0634 located at 1095 Dunford Avenue per City Council on January 6, 2004.

In addition to complying with all applicable City, County, State and Federal Statutes, Codes, Ordinances, Resolutions and Regulations, Permittee expressly accepts and agrees to comply with the following conditions of approval of this Permit:

1. Obtain Building Permits prior to construction.
2. The conditions of approval shall be reproduced on the cover page of the plans submitted for a Building permit for this project.
3. The Use Permit shall expire if the use is discontinued for a period of one year.
4. The Use Permit shall return to City Council for review in the Fall 2005 prior to the 2006 season.
5. Obtain a business license from the City of Sunnyvale Revenue Division prior to commencement of use.
6. Submit a detailed recycling and solid waste disposal plan to the Director of Community Development for approval.
7. All recycling and solid waste shall be confined to approved receptacles and enclosures.
8. Signs require a separate sign permit.
9. Secure canvas tent at all times to prevent noise. Monitor tent canopy during windy weather.
10. Prepare a landscape plan, which will address the area around the tent site and tree species shall be at the recommendation of the City Arborist. The landscape plans shall be reviewed and approved by the Director of Community Development prior to issuance of building permits.
11. The Sabercats shall meet with the neighbors to address neighborhood concerns.
12. Install a camouflage screen over the tent, southern elevation along Dunford Avenue

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Santa Clara } ss.

On Feb. 13, 2004 (Date) before me, Catherine A. VanPernis, Notary Public (Name and Title of Officer (e g , "Jane Doe, Notary Public"))

personally appeared Jim Luyau (Name(s) of Signer(s)),

☒ personally known to me
☐ proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

CATHERINE A. VAN PERNIS
Commission # 1441838
Notary Public - California
Santa Clara County
My Comm. Expires Sep 25, 2007

WITNESS my hand and official seal.

Catherine A. VanPernis
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Use Permit-Special Development/City of Sunnyvale

Document Date: January 6, 2004 Number of Pages: 2

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer

Signer's Name: Jim Luyau

☐ Individual
☒ Corporate Officer — Title(s): Assistant Superintendent, Business
☐ Partner — ☐ Limited ☐ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: Santa Clara Unified School District

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

STATE OF CALIFORNIA
COUNTY OF Santa Clara

On March 16, 2004, before me, Katrina L. Ardina, Notary Public

Personally appeared Trudi Ryan Personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity (ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____

(This area is for official notarial seal.)

KATRINA L. ARDINA
Commission # 1432936
Notary Public - California
Santa Clara County
My Comm. Expires Aug 26, 2007

Appendix D

Environmental Reports

(Text of Reports and Pertinent Appendices Only)

HazMat Doc *Environmental Consulting & Management Services*

SIX-MONTH SURVEILLANCE AHERA REPORT

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE) 1095 DUNFORD WAY SUNNYVALE, CA 94087

PREPARED FOR:

SANTA CLARA UNIFIED SCHOOL DISTRICT 1889 LAWRENCE ROAD SANTA CLARA, CA 95051

INSPECTED ON:
JUNE 12, 2020

HAZMAT DOC PROJECT #20-075

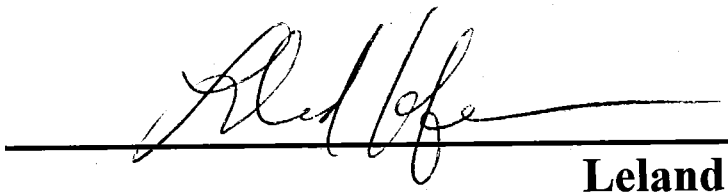
PREPARED BY:
HAZMAT DOC
3080 OLCOTT STREET • SUITE D135
SANTA CLARA, CA 95054
Tel: 408.748.0055

SANTA CLARA UNIFIED SCHOOL DISTRICT

PATRICK HENRY SCHOOL CAMPUS
(LEASE SITE)

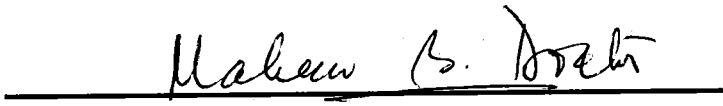
INSPECTED ON:
JUNE 12, 2020

INSPECTED BY:



Leland Kafeyan
Cal/OSHA Certified Site Surveillance Technician
Certification Number 06-4110

REPORTED BY:



Maheen B. Doctor
Cal/OSHA Certified Asbestos Consultant
Certification Number 95-1798

CONTENTS

LEGEND

THE FOLLOWING IS A LIST OF ABBREVIATIONS USED IN THIS REPORT:

Asbestos Sample Types

AC	=	ACTINOLITE
AM	=	AMOSITE
AN	=	ANTHOPHYLLITE
CH	=	CHRYSOTILE
CR	=	CROCIDOLITE
TR	=	TREMOLITE
ND	=	NONE DETECTED
NS	=	NO SAMPLE

Measurements

APPROX.	=	APPROXIMATELY
EA	=	EACH
I	=	INCHES
LF	=	LINEAR FEET
N	=	NUMBER
O.D.	=	OUTSIDE DIAMETER
SF	=	SQUARE FEET
TBD	=	TO BE DETERMINED

LIST OF BUILDINGS AT

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME BUILDING USED AS (#FLOORS) CONSTRUCTION	BUILDING AREA (APPROXIMATE)
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)	
Offices, Classroom	3,640 SF
(1) Wood, Stucco, Metal (1960)	
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)	
Classrooms	18,279 SF
(1) Wood, Stucco, Metal (1960)	
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)	
Classrooms	11,862 SF
(1) Wood, Stucco, Metal (1960)	
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)	
Classrooms	12,180 SF
(1) Wood, Stucco, Metal, Concrete (1960)	
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)	
Classrooms	12,676 SF
(1) Wood, Stucco, Metal (1960)	
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100	
Locker Rooms	5,720 SF
(1) Wood, Stucco, Metal, Concrete (1962)	
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)	
Offices, Classrooms	9,172 SF
(1) Wood, Stucco, Metal (1962)	
METAL STORAGE CONTAINERS	
Storage	2,112 SF
(1) Metal	
WOOD SHED	
Storage	390 SF
(1) Wood	

Total Number Of Buildings : 9 **(Approximate) Total Sq Ft. : 76,031**

End Of Report, Total Of 1 Pages

SURVEY REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

10/31/2018 BUILDING NOTE:

10/31/2018 Building Currently Unoccupied.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CHINESE CLASSROOM AND CLASSROOM 12

SUSPENDED CEILING TILE 510 SF

05/18/2015 2'x4' Suspended Ceiling Tile. Chinese Classroom has 2 Tiles broken. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Additional Damage Observed. 5 Tiles with Physical Damage and 4 Tiles with Water Damage in Chinese Classroom. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CHINESE CLASSROOM AND OFFICES

CHALK BOARD 88 SF

05/18/2015 Cementitious Chalkboard. (3 EA). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Material Re-Assessed. 2 of the 3 Cementitious Chalkboards are now White Boards and the Remaining one is now Green Chalkboard. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CHINESE CLASSROOM AND OFFICES

WALL MASTIC 88 SF

05/18/2015 Mastic/Adhesive for Cementitious Chalkboard (May still exist under new Material). (3 EA). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Material Re-Assessed. This material may still exist under the New 2 White Baseboards. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER

BASEBOARD MASTIC 210 LF

05/18/2015 Mastic/Adhesive for Brown Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Damage Observed. <5% Physical Damage - in the form of 50 SF of Water Damage in the closet. Material Condition changed from GOOD to FAIR. Friability changed from NON to LOW. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER

CARPET MASTIC 1,100 SF

05/18/2015 Mastic/Adhesive for Blue/Green Carpet. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM 12

BASEBOARD MASTIC 150 LF

05/18/2015 Mastic/Adhesive for 4" Gray Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

SURVEY REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM 12

SUSPENDED CEILING TILE 740 SF

05/18/2015 4'x4' Suspended Ceiling Tile. 3 SF damaged. <10% water stains and <5% Physical Damage observed. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM 12

VINYL FLOOR TILE 510 SF

05/18/2015 12"x12" Multi-colored (Biege and Peach) Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks in 4 Floor Tiles in Classroom 12. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM 12

VINYL FLOOR TILE MASTIC 510 SF

05/18/2015 Mastic/Adhesive for 12"x12" Multi-colored (Biege and Peach) Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks in 4 Floor Tiles in Classroom 12. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION 105 SF

05/18/2015 Fire Door Core Insulation. (5 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

DOORS - INTERIOR

FIRE DOOR CORE INSULATION 378 SF

05/18/2015 Fire Door Core Insulation. (18 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ELECTRICAL ROOM

BASEBOARD MASTIC 20 LF

05/18/2015 Mastic/Adhesive for 4" Black Baseboard. 9 LF of Baseboard missing and Brown Mastic/Adhesive is exposed. <50% Physical Damage. This Material is in POOR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY

VINYL FLOOR TILE 610 SF

05/18/2015 9"x9" Brown Vinyl Floor Tile, under Carpet in some locations. In the Office by the Mechanical Room some Tiles are broken and 5 Tiles are broken in the Electrical Room. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Black Mastic is now exposed and 2 LF of Yellow Mastic exposed at the door od the office. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY

VINYL FLOOR TILE MASTIC 610 SF

05/18/2015 Mastic/Adhesive for 9"x9" Brown Vinyl Floor Tile, under Carpet in some locations. In the Office by the Mechanical Room some Tiles are broken and 5 Tiles are broken in the Electrical Room. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Black Mastic is now exposed and 2 LF of Yellow Mastic exposed at the door of the office. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL 2,460 SF

05/18/2015 Stucco on Exterior Walls and Overhangs. Damage observed in the form of 5 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-182AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING 2,460 SF

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Damage observed in the form of 5 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WINDOWS

CAULKING 400 LF

05/18/2015 Putty/Sealant on Exterior Windows. 1 LF of Window Putty/Caulking is damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-144AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

KIDS' RESTROOM IN CLASSROOM 12

VINYL SHEETING 72 SF

05/18/2015 Beige Vinyl Floor Sheeting. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

KIDS' RESTROOM IN CLASSROOM 12

VINYL SHEETING BACKING PAPER/MASTIC 72 SF

05/18/2015 Backing Paper/Adhesive for Beige Vinyl Floor Sheeting. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL 450 SF

05/18/2015 Rough Plaster Walls and Ceiling. 1 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL SURFACING 450 SF

05/18/2015 Skim Coat for Rough Plaster Walls and Ceiling. 1 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE FITTING INSULATION 50 LF

05/18/2015 Thermal System Insulation on Pipe Fittings. (50 EA observed in the Mechanical Room. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE RUN INSULATION 160 LF

05/18/2015 Thermal System Insulation on Pipe Runs. Material observed in the Mechanical Room and above Suspended Ceiling Tiles, and 1'x1' Ceiling Tiles. (This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.).This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G

BASEBOARD MASTIC 90 LF

05/18/2015 Mastic/Adhesive for 4" Cream Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G

MORTAR MISCELLANEOUS 332 SF

05/18/2015 Grout/Mortar for 16"x16" Ceramic Floor Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 Damage Osberved. <5% Physical Damage - in the form of 3 Missing Tiles at Entry. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G, CLASSROOM 12, KITCHEN, AND RESTROOM

FLOOR MASTIC 470 SF

05/18/2015 Mastic/Adhesive for Wood Floors. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER

SMOOTH WALL MISCELLANEOUS 6,000 SF

05/18/2015 Gypsum Wallboard System. The Electrical Room has 1 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Chinese Classroom has 12 LF of Physical Damage across the top of one Wall. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER

SMOOTH WALL SURFACING 6,000 SF

05/18/2015 Skim Coat for Gypsum Wallboard System. The Electrical Room has 1 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Chinese Classroom has 12 LF of Physical Damage across the top of one Wall. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G RESTROOM

PLASTER WALL 110 SF

05/18/2015 Plaster Walls and Ceiling. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G RESTROOM

PLASTER WALL SURFACING 110 SF

05/18/2015 Skim Coat for Plaster Walls and Ceiling. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G, STAFF RESTROOM, OFFICES, HALLWAY, AND ELECTRICAL ROOM

CEILING TILE 124 SF

05/18/2015 1'x1' Ceiling Tile. Tiles are nailed on. Some surfaces are damaged. In the Foyer 3 Tiles are missing. 3 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Repairs Observed. Damages repaired to missing Ceiling Tiles as of this date. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

STAFF RESTROOM

BASEBOARD MASTIC 10 LF

05/18/2015 Mastic/Adhesive for 4" Gray Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

STAFF RESTROOM

VINYL SHEETING 12 SF

05/18/2015 Off-white Vinyl Floor Sheeting. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

STAFF RESTROOM

VINYL SHEETING BACKING PAPER/MASTIC 12 SF

05/18/2015 Backing Paper/Adhesive for Off-White Vinyl Floor Sheeting. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

SURVEY REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
05/12/2016	This Material is unchanged as of this date.		
11/02/2016	This Material is unchanged as of this date.		
04/24/2017	This Material is unchanged as of this date.		
11/01/2017	This Material is unchanged as of this date.		
05/07/2018	This Material is unchanged as of this date.		
10/31/2018	This Material is unchanged as of this date.		
05/22/2019	This Material is unchanged as of this date.		
11/18/2019	This Material is unchanged as of this date.		
06/12/2020	This Material is unchanged as of this date.		
15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

SF=Sq. Ft, I=Inches, LF=Linear Ft., N=Number, EA=Each

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION 231 SF

05/18/2015 Fire Door Core Insulation. (11 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ELECTRICAL ROOM

VINYL FLOOR TILE 56 SF

05/18/2015 9"x9" Brown Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ELECTRICAL ROOM

VINYL FLOOR TILE MASTIC 56 SF

05/18/2015 Mastic/Adhesive for 9"x9" Brown Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS

SMOOTH WALL MISCELLANEOUS 27,830 SF

05/18/2015 Gypsum Wallboard System Walls and Ceilings. Material is also behind 1'x1' Ceiling Tile and Pressed Wood Wall Panels. 3 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS

SMOOTH WALL SURFACING 15,350 SF

05/18/2015 Skim Coat for Gypsum Wallboard System Walls and Ceilings. 3 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR KIDS' RESTROOM

VINYL FLOOR TILE 72 SF

05/18/2015 12"x12" Gray Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR KIDS' RESTROOM

VINYL FLOOR TILE MASTIC 72 SF

05/18/2015 Mastic/Adhesive for 12"x12" Gray Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR KIDS' RESTROOM

VINYL SHEETING 72 SF

05/18/2015 Cream Vinyl Floor Sheeting. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR KIDS' RESTROOM

VINYL SHEETING BACKING PAPER/MASTIC 72 SF

05/18/2015 Backing Paper/Adhesive for Cream Vinyl Floor Sheeting. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR KIDS' RESTROOM

VINYL WALL COVER 160 SF

05/18/2015 Hard Vinyl Wall Cover. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR KIDS' RESTROOM

VINYL WALL COVER MASTIC 160 SF

05/18/2015 Mastic/Adhesive for Hard Vinyl Wall Cover. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL 4,500 SF

05/18/2015 Stucco on Exterior Walls and Overhangs. Material has cracks in some areas. Approximatels 2 SF of damage. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING 4,500 SF

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Material has cracks in some areas. Approximatels 2 SF of damage. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WINDOWS

CAULKING 3,194 SF

05/18/2015 Putty/Sealant on Exterior Windows. 3 LF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-182AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

HALLWAY BETWEEN OFFICE AND ROOMS 1-6

CEILING TILE 4,110 SF

05/18/2015 1'x1' Ceiling and Wall Tiles. Approximately 5 SF of surface damage. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Additional Damage Observed. 35 Tiles with surface damages. 1 Tile missing Mastic Exposed. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. 45 Tiles now have surface Damages and 3 Tiles are now Loose. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

HALLWAY BETWEEN OFFICE AND ROOMS 1-6

CEILING TILE MASTIC 4,110 SF

05/18/2015 Mastic/Adhesive for 1'x1' Ceiling and Wall Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 1 Missing Tile in Hallway, Mastic Exposed. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS

BASEBOARD MASTIC 540 LF

11/01/2017 Mastic/Adhesive for 4" Black Baseboard. This Material is in GOOD condition as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

17-211.NS	NEW	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS

CARPET MASTIC 5,200 SF

11/01/2017 Mastic/Adhesive for Blue Carpet (Apparent New Material identified by the AHERA accredited Inspector). This Material is in GOOD condition as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

17-211.NS	NEW	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS AND OFFICES

BASEBOARD MASTIC 640 LF

05/18/2015 Mastic/Adhesive for 4" Brown Baseboard (Original Material may still exist under Replacement Material in the Hallways). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Material Partially Replaced. Original 'Mastic/Adhesive for 4" Brown Baseboard' Replaced with 'Mastic/Adhesive for 4" Black Baseboard' in the Hallways. Original Material may still exist in the Replaced Areas. No other changes as of this date (Original Entry Update).

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS AND OFFICES

CARPET MASTIC 6,790 SF

05/18/2015 Mastic/Adhesive for Brown Carpet (Original Material may still exist under Replacement Material in the Hallways). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Material Partially Replaced. Original 'Mastic/Adhesive for Brown Carpet' Replaced with 'Mastic/Adhesive for Blue Carpet' in the Hallways. Original Material may still exist in the Replaced Areas. No other changes as of this date (Original Entry Update).

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

INFANT ROOM

BASEBOARD MASTIC 132 LF

05/18/2015 Mastic/Adhesive for Blue Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL 710 SF

05/18/2015 Rough Plaster Walls and Ceilings. Several holes observed on the wall. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL SURFACING 710 SF

05/18/2015 Skim Coat for Rough Plaster Walls and Ceilings. Several holes observed on the wall <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS

PIPE FITTING INSULATION 110 EA

05/18/2015 Thermal System Insulation on Pipe Fittings. (110 EA Fittings). (This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS

PIPE RUN INSULATION 250 LF

05/18/2015 Thermal System Insulation on Pipe Runs. (This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOM 11

VINYL FLOOR TILE 170 SF

05/18/2015 12"x12" Beige Vinyl Floor Tile. This Material is in GOOD condition as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOM 11

VINYL FLOOR TILE MASTIC 170 SF

05/18/2015 Mastic/Adhesive for 12"x12" Beige Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOM 2

WALL TILE 440 SF

05/18/2015 1'x1' Wall Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOM 2

WALL TILE MASTIC 440 SF

05/18/2015 Mastic/Adhesive for 1'x1' Wall Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1, 2, 3, 4, 8A. 8B, 9, 11, ELECTRICAL ROOM, EXTRACURRICULAR ROOM, OFFICE, AND STAFF LOUNGE

SUSPENDED CEILING TILE 9,600 SF

05/18/2015 4'x4' Suspended Ceiling Tile. Approximately 4 SF Water Damaged. <10% Water Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Additional Damage observed. Ceiling Tiles Water Damaged are: 1 in Classrom 4, 1 in Lounge, 1 in Classroom 1 and 2 in Classroom 8A. One loose Tile observed in the Office. No other changes as of this date.

11/02/2016 Additional Damage Observed. 2 Tiles with Water Damage in Classroom 4. No other changes as of this date.

04/24/2017 Additional Damage Observed. 2 4"x4" Suspended Ceiling Tiles have Physical Damage in Classroom 3. 1 4"x4" Suspended Ceiling Tile is Loose in Classroom 1. 1 2"x2" Water Damage and 1 4"x4" Loose in Classroom 5. 1 4"x4" Suspended Ceiling Tile with Physical Damage in Classroom 9. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1-5 AND 7

VINYL FLOOR TILE 1,240 SF

05/18/2015 12"x12" Light-Brown Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 8 cracked Tiles in Classroom 7. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Classroom 6 now has 5 Cracked Tiles at the Entry. Material Re-Assessed. This material has been partially Replaced in various locations; Classroom 1 is all Wood, Classroom 2 now has an Off-White Vinyl Floor Tile (with Brown Speckles), Classrooms 3, 4 and 5 now have Off-White Vinyl Floor Tile (with Brown Speckles) and Classrooms 6 and 7 now have Off-White Vinyl Floor Tile (with Light Brown Speckles). No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1-5 AND 7

VINYL FLOOR TILE MASTIC 1,240 SF

05/18/2015 Mastic/Adhesive for 12"x12" Light-Brown Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 8 cracked Tiles in Classroom 7. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Classroom 6 now has 5 Cracked Tiles at the Entry. Material Re-Assessed. This material has been partially Replaced in various locations; Classroom 1 is all Wood, Classroom 2 now has an Off-White Vinyl Floor Tile (with Brown Speckles), Classrooms 3, 4 and 5 now have Off-White Vinyl Floor Tile (with Brown Speckles) and Classrooms 6 and 7 now have Off-White Vinyl Floor Tile (with Light Brown Speckles). No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1-7, 11 AND INFANT ROOM

PRESSED WOOD WALL PANEL MASTIC 5,900 SF

05/18/2015 Mastic/Adhesive for Pressed-Wood Wall Panel (with Vinyl Wall Cover). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1-7, 11 AND INFANT ROOM

VINYL WALL COVER 5,900 SF

05/18/2015 Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1-7, 11 AND INFANT ROOM

VINYL WALL COVER MASTIC 5,900 SF

05/18/2015 Mastic/Adhesive for Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1-7, 11 AND INFORMATION ROOM

PRESSED WOOD WALL PANEL 5,900 SF

05/18/2015 Pressed-Wood Wall Panel (with Vinyl Wall Cover). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 10 AND 11, ELECTRICAL ROOM, TEACHERS' LOUNGE, EXTRA-CURRICULAR ROOM, EXTERIOR RESTROOM, AND STORAGE

BASEBOARD MASTIC 400 LF

05/18/2015 Mastic/Adhesive for 4" Black Baseboard. In the Electrical Room there is 12 LF of Baseboard missing, exposing the Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 2-5

BASEBOARD MASTIC 230 LF

05/18/2015 Mastic/Adhesive for 4" Off-White Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 Damage Observed. <5% Physical Damage - in the form of 1 LF of Loose Baseboard on East Wall of Room 4. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 2-5

VINYL FLOOR TILE 482 SF

05/18/2015 12"x12" Off-White Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 2-5

VINYL FLOOR TILE MASTIC 482 SF

05/18/2015 Mastic/Adhesive for 12"x12" Off-White Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 4, 5, AND INFANT ROOM

CARPET MASTIC 1,510 SF

05/18/2015 Mastic/Adhesive for Blue Carpet. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 6, 7, 8A, 8B AND 9

FLOOR MASTIC 2,440 SF

05/18/2015 Mastic/Adhesive for Wood Floor. This Maaterial is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 6 AND 10

SUSPENDED CEILING TILE 1,920 SF

05/18/2015 2'x4' Suspended Ceiling Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 9-11 AND INFANT ROOM

VINYL FLOOR TILE 2,310 SF

05/18/2015 12"x12" Multi-colored Vinyl Floor Tile. Tiles are Peach, Red, Blue and Off-White. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks by the door in Classroom 10. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 9-11 AND INFANT ROOM

VINYL FLOOR TILE MASTIC 2,310 SF

05/18/2015 Mastic/Adhesive for 12"x12" Multi-colored Vinyl Floor Tile. Tiles are Peach, Red, Blue and Off-White. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks by the door in Classroom 10. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

STUDENT RESTROOMS

MORTAR MISCELLANEOUS 610 SF

05/18/2015 Grout/Mortar for 4"x4" Ceramic Wall Tiles. Boys' Restroom Material is Blue and Girl's Restroom is Yellow. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

STUDENT RESTROOMS

PLASTER WALL 2,500 SF

05/18/2015 Smooth Plaster Walls and Ceilings. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

STUDENT RESTROOMS

PLASTER WALL SURFACING 2,500 SF

05/18/2015 Skim Coat for Smooth Plaster Walls and Ceilings. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

STUDENT RESTROOMS

TERRAZZO FLOOR 670 SF

05/18/2015 Terrazzo Floor. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM

DUCT WRAP TAPE 420 SF

05/18/2015 Duct Wrap Tape. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM

ROUGH WALL SURFACING 415 SF

05/18/2015 Texture on Concrete Walls (Lower Walls). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM

PLASTER WALL 2,550 SF

05/18/2015 Rough Plaster Walls and Ceilings. 10 SF of Water Damage and 20 SF Physical Damage in the Boiler Room. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM

PLASTER WALL SURFACING 2,550 SF

05/18/2015 Skim Coat for Rough Plaster Walls and Ceilings. 10 SF of Water Damage and 20 SF Physical Damage in the Boiler Room. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE FITTING INSULATION 100 EA

05/18/2015 Pipe Fitting Insulation. Material observed above Ceiling Tiles. (This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.) This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE RUN INSULATION 450 LF

05/18/2015 Pipe Run Insulation. Material observed above Ceiling Tiles. (This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOYS' AND GIRLS' RESTROOM

MORTAR MISCELLANEOUS 810 SF

05/18/2015 Grout/Mortar for 4"x4" Ceramic Wall Tiles. Boys' Restroom has Blue Tiles and Girls' Restroom has White Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOYS' AND GIRLS' RESTROOMS

TERRAZZO FLOOR 810 SF

05/18/2015 Terrazzo Floor. This Material is in GOOD condition as of this date

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS

BASEBOARD MASTIC 160 LF

05/18/2015 Mastic/Adhesive for 4" Black Baseboard. This Material is in GOOD condition as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS

VINYL FLOOR TILE 830 SF

05/18/2015 12"x12" Beige Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 4 Tiels cracked and 2 SF of Tile missing black Mastic Exposed in Classroom C7. 1 Tile missing Yellow Mastic Exposed in Classroom C6. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 Material Re-assessed. Missing Tiles have been Replaced. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS

VINYL FLOOR TILE MASTIC 830 SF

05/18/2015 Mastic/Adhesive for 12"x12" Beige Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 4 Tiels cracked and 2 SF of Tile missing black Mastic Exposed in Classroom C7. 1 Tile missing Yellow Mastic Exposed in Classroom C6. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 Material Re-assessed. Missing Tiles have been Replaced. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C5, C7-C8, HALLWAY, AND STORAGE ROOMS OF C7

BASEBOARD MASTIC 996 LF

05/18/2015 Mastic/Adhesive for 4" Brown Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C7

PRESSED WOOD WALL PANEL 4,100 SF

05/18/2015 Pressed-Wood Wall Panel (with Vinyl Wall Cover). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C7

PRESSED WOOD WALL PANEL MASTIC 4,100 SF

05/18/2015 Mastic / Adhesive for Pressed-Wood Wall Panel (with Vinyl Wall Cover). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C7

VINYL WALL COVER 4,100 SF

05/18/2015 Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 2 LF damage to Vinyl Wall Cover in Classroom C3. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C7

VINYL WALL COVER MASTIC 4,100 SF

05/18/2015 Mastic/Adhesive for Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 2 LF damage to Vinyl Wall Cover in Classroom C3. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C8

SUSPENDED CEILING TILE 7,400 SF

05/18/2015 4'x4' Suspended Ceiling Tile (Fiber-glass Type). Several Tiles are water damaged in each Classroom. Approximately 10 SF of Physical Damage in the form of scattered small cuts. <5% Physical Damage and <10% Water Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 Additional Damage Observed. Water Damage present on 5 Tiles in Classroom 8. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082.NS	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C8, HALLWAY AND CLOSETS

VINYL FLOOR TILE 6,410 SF

05/18/2015 12"x12" Off-White with Brown Stripe Vinyl Floor Tile. Classroom C7 has 8 Tiles broken, exposing the Mastic/Adhesive. Most Classrooms have some cracked VInyl Floor Tiles. Hallway Entries have several Tiles cracked with missing pieces. Approximately 12 SF of damage. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks in 3 Floor Tiles in the Hallway. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Hallway now has 33 Cracked Floor Tiles. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C8, HALLWAY AND CLOSETS

VINYL FLOOR TILE MASTIC 6,410 SF

05/18/2015 Mastic/Adhesive for 12"x12" Off-White with Brown Stripe Vinyl Floor Tile. Classroom C7 has 8 Tiles broken, exposing the Black Mastic/Adhesive. Most Classrooms have some cracked VInyl Floor Tiles. Hallway Entries have several Tiles cracked with missing pieces. Approximately 12 SF of damage. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks in 3 Floor Tiles in the Hallway. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Hallway now has 33 Cracked Floor Tiles. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM

SMOOTH WALL MISCELLANEOUS 13,510 SF

05/18/2015 Gypsum Wallboard System. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM

SMOOTH WALL SURFACING 11,160 SF

05/18/2015 Skim Coat for Gypsum Wallboard System. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C7 AND C8 STORAGE ROOMS

SUSPENDED CEILING TILE 710 SF

05/18/2015 2'x4' Suspended Ceiling Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION 378 SF

05/18/2015 Fire Door Core Insulation. (18 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 Damage Observed. <5% Physical Damage - in the form of 2 Doors with Damage, 1 in C5 and 1 in C8. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Office Door now has 4 Open Holes due to Door Knob Replacement. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

DOORS - INTERIOR

FIRE DOOR CORE INSULATION 840 SF

05/18/2015 Fire Door Core Insulation. (20 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-083AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

EXTERIOR

ROUGH WALL SURFACING 4,850 SF

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Approximately 1 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 Additional Damage Observed. <5% Physical Damage in the form of 5 SF of Peeling Wall on West Side of the Building. Material Condition remains in FAIR condition overall. No other changes as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL 4,850 SF

05/18/2015 Stucco on Exterior Walls and Overhangs. Approximately 1 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 Additional Damage Observed. There is now 8 LF of Cracks. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 Additional Damage Observed. <5% Physical Damage in the form of 5 SF of Peeling Wall on West Side of the Building. Material Condition remains in FAIR condition overall. No other changes as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

EXTERIOR WINDOWS

CAULKING 1,900 LF

05/18/2015 Putty/Sealant on Exterior Windows. 1 LF is damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

HALLWAY

CEILING TILE 2,350 SF

05/18/2015 1'x1' Ceiling Tile, Material is also on Walls. Several Tiles are damaged and six are missing exposing Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Partial Repairs observed. Missing Tiles have been Replaced. No other changes as of this date.

11/02/2016 Additional Damage Observed. 1 Tile missing and 9 Tiles with Physical Damage, cracked. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

HALLWAY

CEILING TILE MASTIC 2,350 SF

05/18/2015 Mastic/Adhesive for 1'x1' Ceiling Tile, Material is also on walls. Several Tiles are damaged and six are missing exposing the Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Partial Repairs observed. Missing Tiles have been Replaced. No other changes as of this date.

11/02/2016 Additional Damage Observed. 1 Tile missing and 9 Tiles with Physical Damage, cracked. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

HALLWAY

VINYL FLOOR TILE 1,250 SF

05/18/2015 12"x12" Off-White and Light-Gray Vinyl Floor Tile. 7 Tiles are broken, exposing the Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

HALLWAY

VINYL FLOOR TILE MASTIC 1,250 SF

05/18/2015 Mastic/Adhesive for 12"x12" Off-White and Light-Gray Vinyl Floor Tile. 7 Tiles are broken exposing Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

MEN'S AND WOMEN'S RESTROOMS

MORTAR MISCELLANEOUS 270 SF

05/18/2015 Grout/Mortar for 1"x1" Light Blue and Gray Ceramic Floor Tiles. 1 SF of damage in the Women's Restroom. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 Additional Damage Observed. 1 SF of Missing Tile Grout/Mortar exposed, in Women's Restroom. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

MEN'S AND WOMEN'S RESTROOMS

MORTAR MISCELLANEOUS 380 SF

05/18/2015 Grout/Mortar for 1"x1" Ceramic Wall Tile. Tiles are multi-colored in the Women's Restroom and Light Blue in the Men's Restroom. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

OFFICES

BASEBOARD MASTIC 100 LF

05/18/2015 Mastic/Adhesive for 4" Off-White Baseboard. This Material is in GOOD condition as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

OFFICES

CARPET MASTIC 600 SF

05/18/2015 Mastic/Adhesive for Blue/Green Carpet. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-083	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
15-082	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS

PLASTER WALL 4,200 SF

05/18/2015 Smooth Plaster Walls. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS

PLASTER WALL SURFACING 4,200 SF

05/18/2015 Skim Coat for Smooth Plaster Walls. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

SURVEY REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
10/31/2018	This Material is unchanged as of this date.		
05/22/2019	This Material is unchanged as of this date.		
11/18/2019	This Material is unchanged as of this date.		
06/12/2020	This Material is unchanged as of this date.		
15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

SF=Sq. Ft, I=Inches, LF=Linear Ft., N=Number, EA=Each

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

03/07/2017 BUILDING NOTES:

05/18/2015 Building inaccessible for Inspection on of this date.

11/09/2015 Building accessible for Inspection with the exception of D7-D9 which were inaccessible as of this date.

05/12/2016 Classrooms D7-D9 are accessible as of this date.

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

D7 -D9

VINYL WALL COVER 3,600 SF

11/09/2015 Vinyl Wall Cover on Sheetrock. Material is in GOOD condition as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

05/11/2017 This Material is unchanged as of this date.

11/01/2017 Damage Observed. <5% Physical Damage - in the form of Small Hole cuts in Classroom D9. Material Condition changed from GOOD to FAIR. Friability changed from Non-Friable to Friable. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

16-105AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

D7-D9

VINYL WALL COVER MASTIC 3,600 SF

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/15/2016 Mastic/Adhesive for Vinyl Wall Cover on Sheetrock. Material is in GOOD condition as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Damage Observed. <5% Physical Damage - in the form of Small Hole cuts in Classroom D9. Material Condition changed from GOOD to FAIR. Friability changed from Non-Friable to Friable. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

16-105AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION 294 SF

11/09/2015 Fire Door Core Insulation. (8 EA Single Doors and 3 EA Double-Doors). This Material is in GOOD condition as of this date. Rooms D7-D9, which were inaccessable on of this date, are not included.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

DOORS - INTERIOR

FIRE DOOR CORE INSULATION 189 SF

11/09/2015 Fire Door Core Insulation. (9 EA Doors). This Material is in GOOD condition as of this date. Rooms D7-D9, which were inaccessable on of this date, are not included.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

EXTERIOR WALLS

ROUGH WALL 2,500 SF

11/09/2015 Stucco Exterior Walls. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

EXTERIOR WALLS

ROUGH WALL SURFACING 2,500 SF

11/09/2015 Skim Coat for Stucco Exterior Walls. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY

CEILING TILE 1,520 SF

11/09/2015 1'x1' Ceiling Tile (with a Pitted Mark Pattern). 12 EA Tiles on the access hatches have small cuts. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of 1 Tile missing exposing Mastic. Material is in FAIR condition overall. No other changes as of this date.

11/02/2016 Additional Damage Observed. 35 Tiles have Physical Damage to them in the form of scrapes and cuts. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 Partial Repairs Observed. Many of the Damaged Tiles have been Painted over. Material Remains in FAIR Condition as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 Additional Damage Observed. <5% Physical Damage in the form of 1 Tile Missing with Brown Mastic Exposed by South Entry. Material Condition remains in FAIR condition overall. No other changes as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY

CEILING TILE MASTIC 1,520 SF

11/09/2015 Mastic/Adhesive for 1'x1' Ceiling Tile (with a Pitted Mark Pattern). 12 EA Tiles on the access hatches have small cuts. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of 1 Tile missing exposing Mastic. Material is in FAIR condition overall. No other changes as of this date. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Partial Repairs Observed. Many of the Damaged Tiles have been Painted over. Material Remains in FAIR Condition as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 Additional Damage Observed. <5% Physical Damage in the form of 1 Tile Missing with Brown Mastic Exposed by South Entry. Material Condition remains in FAIR condition overall. No other changes as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA

VINYL FLOOR TILE 690 SF

11/09/2015 12"x12" Off-White with Blue Speckles Vinyl Floor Tile in Wet Areas. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 1 Tile cracked in Hallway, 5 more are broken in doorway. 1 Tile bubbled and cracked in Classroom D4 Doorway. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA

VINYL FLOOR TILE MASTIC 690 SF

11/09/2015 Mastic/Adhesive for 12"x12" Off-White with Blue Speckles Vinyl Floor Tile in Wet Areas. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 1 Tile cracked in Hallway, 5 more are broken in doorway. 1 Tile bubbled and cracked in Classroom D4 Doorway. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY (BY DRINKING FOUNTAIN)

MORTAR MISCELLANEOUS 32 SF

11/09/2015 Grout/Mortar for 6"x6" White and Blue Ceramic Wall Tiles. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

MECHANICAL ROOM

PLASTER WALL 500 SF

11/09/2015 Plaster Walls and Ceilings. 2 SF of cuts, holes, and cracks on the Walls and Ceiling. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

MECHANICAL ROOM

PLASTER WALL SURFACING 500 SF

11/09/2015 Skim Coat for Plaster Walls and Ceilings. 2 SF of cuts, holes, and cracks on the Walls and Ceiling. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

MECHANICAL ROOM AND CONCEALED LOCATIONS

PIPE FITTING INSULATION 12 LF

11/09/2015 Thermal System Insulation on Pipe Fittings. (12 EA observed in the Mechanical Room. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). Material condition is GOOD in the Mechanical Room and is TBD in other locations as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

MECHANICAL ROOM AND CONCEALED LOCATIONS

PIPE RUN INSULATION 50 LF

11/09/2015 Thermal System Insulation on Pipe Runs. (50 LF observed in the Mechanical Room. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). Material condition is GOOD in the Mechanical Room and is TBD in other locations as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1, D2, D4 CLOSET, AND STAFF RESTROOMS

SUSPENDED CEILING TILE 2,500 SF

11/09/2015 2'x4' Suspended Ceiling Tile. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <10% Water Damage - in the form of 2 Tiles with Water Damage in Room D1. 2 Tiles Water Damage in Room 2. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Material Re-Assessed. Classroom D4 Closet now has 4"x4" Suspended Ceiling Tiles. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D6

PRESSED WOOD WALL PANEL 1,250 SF

11/09/2015 Pressed-Wood Wall Panel (with Beige Vinyl Wall Cover). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D6

PRESSED WOOD WALL PANEL MASTIC 1,250 SF

11/09/2015 Mastic/Adhesive for Pressed-Wood Wall Panel (with Beige Vinyl Wall Cover). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D6

VINYL WALL COVER 1,250 SF

11/09/2015 Beige Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D6

VINYL WALL COVER MASTIC 1,250 SF

11/09/2015 Mastic/Adhesive for Beige Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D9, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET

BASEBOARD MASTIC 1,580 LF

11/09/2015 Mastic/Adhesive for 4" Blue Baseboard. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D9, HALLWAY, OFFICES, AND IDF ROOM

CARPET MASTIC 11,050 SF

11/09/2015 Mastic/Adhesive for Light Blue Carpet. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET

SMOOTH WALL MISCELLANEOUS 14,450 SF

11/09/2015 Gypsum Wallboard System Walls and Ceilings. This Material is behind Wood Wall Panels, and Pressed Wood Wall Panels in some locations. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 1 SF of scrape at Wall Corner in Room D3 Office. Material condition changed from GOOD to FAIR overall. Friability changed from Low to Moderate. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET

SMOOTH WALL SURFACING 14,450 SF

11/09/2015 Skim Coat for Gypsum Wallboard System Walls and Ceilings. This Material is behind Wood Wall Panels, and Pressed Wood Wall Panels in some locations. This Material is in GOOD condition as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 1 SF of scrape at Wall Corner in Room D3 Office. Material condition changed from GOOD to FAIR overall. Friability changed from Low to Moderate. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D2, D5, D6, D7, D8, AND D9

SUSPENDED CEILING TILE 6,100 SF

11/09/2015 4'X4' and 2'x4' Suspended Ceiling Tile (with a Smooth Surface). Approximately 95% are 4'x4' and 5% are 2'x'4'. This Material is in GOOD condition as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in Classrooms D7 and D9 2 Tiles are damaged. <10% Water Damage - in Classrooms D3 and D7 2 Tiles with Watrer Damage. No other changes as of this date.

11/02/2016 Additional Damage Observed. 2 2'x4' Tiles have Water Damage in Room D2. 2 4'x4' Tiles have Water Damage in Room D3. 5 4'x4' Tiles have Water Damage and 1 Tile with Physical Damage and another Tile is loose in Room D6. 4 4'x4' Tiles have Water Damage in Room D7. 4 4'x4' Tiles have Water Damage in Room D8. 1 4'x4' Tile has Water Damage, 1 Tile has Physical Damage and another is loose in Room D9. 1 2'x4' Tile have Physical Damage and 1 Tile is loose in Room D9.

04/24/2017 Damage Repaired in Classroom D7.
Additional Damage Observed. Physical Damage to 2 Tiles in Classroom D8. No other changes as of this date.

11/01/2017 Additional Damage Observed. Classroom D2 now has 4 Chipped and Scraped Tiles, Classroom D3 now has 2 Tiles with Physical Damage, Classroom D5 now has 1 Tile with Water Damage and 1 Tile with Physical Damage and Classroom D7 now has 7 Tiles with Physical Damage and 2 Tiles with Water Damage. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D3-D4

PRESSED WOOD WALL PANEL 760 SF

11/09/2015 Pressed-Wood Wall Panel (with Vinyl Wall Cover). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D3-D4

PRESSED WOOD WALL PANEL MASTIC 760 SF

11/09/2015 Mastic/Adhesive for Pressed-Wood Wall Panel (with Vinyl Wall Cover). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D3-D4

SMOOTH WALL SURFACING 760 SF

11/09/2015 Skim Coat on Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D3-D4

VINYL WALL COVER 760 SF

11/09/2015 Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D3-D4

VINYL WALL COVER MASTIC 760 SF

11/09/2015 Mastic/Adhesive for Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

STAFF RESTROOMS

VINYL SHEETING 190 SF

11/09/2015 Gray Vinyl Floor Sheeting. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

STAFF RESTROOMS

VINYL SHEETING BACKING PAPER/MASTIC 190 SF

11/09/2015 Backing Paper/Adhesive for Gray Vinyl Floor Sheeting. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

SURVEY REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
05/07/2018	This Material is unchanged as of this date.		
10/31/2018	This Material is unchanged as of this date.		
05/22/2019	This Material is unchanged as of this date.		
11/18/2019	This Material is unchanged as of this date.		
06/12/2020	This Material is unchanged as of this date.		
15-191AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

SF=Sq. Ft, I=Inches, LF=Linear Ft., N=Number, EA=Each

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS

MORTAR MISCELLANEOUS 570 SF

05/18/2015 Grout/Mortar for 4"x4" Multicolored Ceramic Wall Tiles, Girls' and Women's Restroom have Yellow Tile and Boys' and Men's Restroom have Beige Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS

PLASTER WALL 1,680 SF

05/18/2015 Smooth Plaster Walls and Ceilings. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS

PLASTER WALL SURFACING 1,680 SF

05/18/2015 Skim Coat for Smooth Plaster Walls and Ceilings. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS

TERRAZZO FLOOR 410 SF

05/18/2015 Terrazzo Floor. This Material is in GOOD condition as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 Damage Observed. <5% Physical Damage - in the form of 1 SF of Chipping near sinks in Girls Restrooms. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM C8 CLOSET

CEILING MASTIC 190 SF

05/18/2015 Mastic/Adhesive for Wood Ceiling. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E3 AND CLASSROOM E8 - THREE CLOSETS

WALL MASTIC 660 SF

05/18/2015 Mastic/Adhesive for Wood Wall. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E7 AND CLASSROOM E7 CLOSET

CARPET MASTIC 580 SF

05/18/2015 Mastic/Adhesive for Blue Carpet. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E7, CLASSROOM E7 CLOSET, AND HALLWAYS

BASEBOARD MASTIC 300 LF

05/18/2015 Mastic/Adhesive for 4" Blue Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E7 CLOSET

VINYL FLOOR TILE 216 SF

05/18/2015 12"x12" Beige and Black Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E7 CLOSET

VINYL FLOOR TILE MASTIC 216 SF

05/18/2015 Mastic/Adhesive for 12"x12" Beige and Black Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E8

CARPET MASTIC 1,780 SF

05/18/2015 Mastic/Adhesive for Blue/Grey Carpet. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E8 CLOSET

FLOOR MASTIC 50 SF

05/18/2015 Mastic/Adhesive for Wood Floor. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E8 CLOSET

VINYL SHEETING 102 SF

05/18/2015 Off-White Vinyl Floor Sheeting. 1 LF of the seam is separating. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E8 CLOSET

VINYL SHEETING BACKING PAPER/MASTIC 102 SF

05/18/2015 Backing Paper/Adhesive for Off-White Vinyl Floor Sheeting. 1 LF of the seam is separating. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS E2-E6 AND OFFICE

SUSPENDED CEILING TILE 5,952 SF

05/18/2015 4'x4' Suspended Ceiling Tile (Vinyl Covered Fiberglass). 4 SF are water damaged. <10% Water Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <10% Water Damage - in the form of stains in Classroom E6 6 Tiles have Water Damage. Also <5% Physical Damage - in Classroom E2 1 Tile is Damaged. Material condition changed from GOOD to FAIR overall. No other changes as of this date

11/02/2016 Additional Damage Observed. 1 broken TIle in Classroom E4. No other changes as of this date.

04/24/2017 Additional Damage Observed. 1 Tile with Physical Damage in Classroom E3

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 Additional Damage Observed. Classroom E4 now has 2 Tiles with Water Damage. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082.NS	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS E2-E7

FLOOR MASTIC 6,260 SF

05/18/2015 Mastic/Adhesive for Wood Floor. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS E2-E8, HALLWAYS, AND STUDENT RESTROOMS

SMOOTH WALL MISCELLANEOUS 17,510 SF

05/18/2015 Gypsum Wallboard System. Behind 1'x1' Ceiling and Wall Tiles in some locations. There is one hole on the wall in the Hallway. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage. <1 SF Physical Damge in Classroom E4. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additonal Damage Observed. 1 LF crack about the door by Classroom E7. 8 LF crack in the Wall between Classrooms E4 and E5. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS E2-E8, HALLWAYS AND STUDENT RESTROOMS

SMOOTH WALL SURFACING 10,510 SF

05/18/2015 Skim Coat for Gypsum Wallboard System. There is one hole on the wall in the Hallway. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage. <1 SF Physical Damge in Classroom E4. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additonal Damage Observed. 1 LF crack about the door by Classroom E7. 8 LF crack in the Wall between Classrooms E4 and E5. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 Additional Damage Observed. Several Cracks at Panel Seams in the Wall between Classrooms E4 and E5. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS E7 AND E8 STORAGES

SINK UNDERCOATING 6 SF

05/18/2015 Black and Grey Thermal Undercoating on Sink. (2 EA Sinks). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION 420 SF

05/18/2015 Fire Door Core Insulation. (20 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

DOORS - INTERIOR

FIRE DOOR CORE INSULATION 189 SF

05/18/2015 Fire Door Core Insulation. (9 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

E1 (MAIN OFFICE) AND OFFICES

BASEBOARD MASTIC 137 LF

05/18/2015 Mastic/Adhesive for 4" Brown Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

E1 (MAIN OFFICE) AND OFFICES

VINYL FLOOR TILE 992 SF

05/18/2015 9"x9" Brown Vinyl Floor Tile. 5 Tiles are broken exposing the Black Mastic/Adhesive and 3 are cracked. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks. 8 Tiles are cracked at the Doorways of the Office. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/02/2016 This Material is unchanged as of this date.

04/24/2017 Additioonal Damage Observed. 1 Tile Missing in Office. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

E1 (MAIN OFFICE) AND OFFICES

VINYL FLOOR TILE MASTIC 992 SF

05/18/2015 Mastic/Adhesive for 9"x9" Brown Vinyl Floor Tile. 5 Tiles are broken exposing the Black Mastic/Adhesive and 3 are cracked. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks. 8 Tiles are cracked at the Doorways of the Office. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 Additioonal Damage Observed. 1 Tile Missing in Office. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

E7 STORAGE

SUSPENDED CEILING TILE 456 SF

05/18/2015 2'x4' Suspended Ceiling Tile. One Tile is water stained. <10% Water Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL 3,110 SF

05/18/2015 Stucco on Exterior Walls and Overhangs. Approximately 5 SF of Stucco is cracked. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING 3,110 SF

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Approximately 5 SF of Stucco is cracked. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WINDOWS

CAULKING 990 LF

05/18/2015 Putty/Sealant on Exterior Windows. Material is damaged. <5% physical damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS

CARPET MASTIC 1,835 SF

05/18/2015 Mastic/Adhesive for Light Blue/Brown Carpet (over 9"x9" Vinyl Floor Tile). Carpet has 1 SF of Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS

VINYL FLOOR TILE 1,835 SF

05/18/2015 9"x9" Brown Vinyl Floor Tile (under Carpet). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS

VINYL FLOOR TILE MASTIC 1,835 SF

05/18/2015 Mastic/Adhesive for 9"x9" Brown Vinyl Floor Tile (under Carpet). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS, AND CLASSROOMS E7 AND E8

CEILING TILE 4,226 SF

05/18/2015 1'x1' Ceiling and Wall Tiles. Some surface damage observed on Tiles. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - 8 Tiles damaged on hatches. 1 Tile missing in Hallway. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Material Re-assessed. 1 Missing Tile has been replaced in Hallway.

03/07/2017 Additional Damage Observed. 23 Tiles on Hallway Ceiling have Physical Damage in the form of scrapes, cracks and broken edges. Classroom E7 also has 7 Tiles with surface damage, scrapes and wear. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Partial Repairs Observed. Some Damages have been Painted Over. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS, AND CLASSROOMS E7 AND E8

CEILING TILE MASTIC 4,226 SF

05/18/2015 Mastic/Adhesive for 1'x1' Ceiling and Wall Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - 8 Tiles damaged on hatches. 1 Tile missing in Hallway. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Material Re-assessed. 1 Missing Tile has been replaced in Hallway.

03/07/2017 Additional Damage Observed. 23 Tiles on Hallway Ceiling have Physical Damage in the form of scrapes, cracks and broken edges. Classroom E7 also has 7 Tiles with surface damage, scrapes and wear. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Partial Repairs Observed. Some Damages have been Painted Over. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL 780 SF

05/18/2015 Rough Plaster Walls and Ceilings. 2 SF of scattered holes, cuts and cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL SURFACING 780 SF

05/18/2015 Skim Coat for Rough Plaster Walls and Ceilings. 2 SF of scattered holes, cuts and cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE FITTING INSULATION 110 LF

05/18/2015 Thermal System Insulation on Pipe Fittings. (Material observed in the Mechanical Room, Classroom E8, and above Suspended Ceiling Tiles. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE RUN INSULATION 410 LF

05/18/2015 Thermal System Insulation on Pipe Runs. (Material observed in the Mechanical Room, Classroom E8, and above Suspended Ceiling Tiles. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM, TWO CLOSETS OF ROOM 27 AND THREE CLOSETS AT ROOM E8

BASEBOARD MASTIC 170 LF

05/18/2015 Mastic/Adhesive for 4" Black Baseboard. In the Center/Middle Closet of E8 there is 10 LF of Baseboard missing exposing Mastic/Adhesive. <10% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

STUDENT RESTROOM

MORTAR MISCELLANEOUS 224 SF

05/18/2015 Grout/Mortar for 12"x12" Beige/Cream Ceramic Wall Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

STUDENT RESTROOM

MORTAR MISCELLANEOUS 221 SF

05/18/2015 Grout/Mortar for 12"x12" Beige/Cream Ceramic Floor Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

SURVEY REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

SF=Sq. Ft, I=Inches, LF=Linear Ft., N=Number, EA=Each

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

05/18/2015 BUILDING NOTES:

05/18/2015 Building inaccessable for inspection on this date.

11/09/2015 Building accessible for inspection except for the Mechanical Room and Laundry Room on this date.

11/01/2017 Building Name changed from BUILDING F - OLD LOCKER ROOM - SUITE 100 to BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION 273 SF

11/09/2015 Fire Door Core Insulation. (11 EA Single Doors and 2 EA Double-Doors). This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

DOORS - INTERIOR

FIRE DOOR CORE INSULATION 252 SF

11/09/2015 Fire Door Core Insulation. (12 EA Doors). This Material is in GOOD condition as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING

PLASTER WALL 6,000 SF

11/09/2015 Plaster Walls and Ceilings (behind wood panels in some locations). Approximately 2 SF of holes and cuts in the Storage Room. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING

PLASTER WALL SURFACING 6,000 SF

11/09/2015 Skim Coat for Plaster Walls and Ceilings (behind wood panels in some locations). Approximately 2 SF of holes and cuts in the Storage Room. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING

SMOOTH WALL MISCELLANEOUS 3,000 SF

11/09/2015 Gypsum Wallboard System Walls and Ceilings. Behind Wood Wall and Ceiling Panels in some locations. This Material is in GOOD condition as of this date.

05/12/2016 Dmage Observed. <10% Water Damage - in the form of 4 SF. <5% Physical Damage - in the form of 8 SF in the Mechanical Room. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. The Lower Wall by the Entry to the Print Shop now has 1 SF of Physical Damage. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING

SMOOTH WALL SURFACING 3,000 SF

11/09/2015 Skim Coat for Gypsum Wallboard System Walls and Ceilings. Behind Wood Wall and Ceiling Panels in some locations. This Material is in GOOD condition as of this date.

05/12/2016 Dmage Observed. <10% Water Damage - in the form of 4 SF. <5% Physical Damage - in the form of 8 SF in the Mechanical Room. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. The Lower Wall by the Entry to the Print Shop now has 1 SF of Physical Damage. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING

WOOD WALL PANEL MASTIC 7,200 SF

11/09/2015 Mastic/Adhesive for Wood Wall and Ceiling Panels. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE FITTING INSULATION 27 EA

11/09/2015 Entire Building - Concealed Locations.

05/12/2016 Material Description changed. 27 Fittings visible in Mechanical Room. Original entry updated. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

03/07/2017 Thermal System Insulation on Pipe Fittings. (27 EA observed in the Mechanical Room. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). Material condition is TBD as of this date. (Original Entry updated on 05/12/16.)

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE RUN INSULATION 120 LF

11/09/2015 Entire Building - Concealed Locations.

05/12/2016 Damage observed. <5% Physical Damage - in the form 5 LF of Fiberglass with canvas wraps Damaged in the Mechanical Room. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. 120 LF visible in Mechanical Room Original Entry updated. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

03/07/2017 Thermal System Insulation on Pipe Runs. (120 LF observed in the Mechanical Room. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). Material condition is TBD as of this date. (Original Entry updated on 05/12/16.)

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

EXTERIOR WALLS

ROUGH WALL 2,600 SF

11/09/2015 Stucco on Exterior Walls and Overhangs. 1 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 Additional Damage Observed. 10 SF of Peeling Paint and Skim Coat. No other changes as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

EXTERIOR WALLS

ROUGH WALL SURFACING 2,600 SF

11/09/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. 1 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 Additional Damage Observed. 10 SF of Peeling Paint and Skim Coat. No other changes as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

LOCKER ROOMS, OFFICES, AND TRAINER ROOM

CARPET MASTIC 0 SF

11/09/2015 Mastic/Adhesive for 16"x16" Green Carpet Squares. This Material is in GOOD condition as of this date.

05/12/2016 This Material has been Removed and Replaced with New Blue Carpet in 2016. Material Quantity changed from 2,800 SF to 0 SF. Recommendation changed to reflect this fact. No other changes as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
16-105REM	REMOVED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

MECHANICAL ROOM

BOILER GASKET 22 LF

05/12/2016 Boiler Gasket. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

MECHANICAL ROOM

TANK (HIGH TEMP) INSULATION 100 SF

05/12/2016 Tank Blanket Insulation. Material is in Good condition. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

OFFICE

CEILING TILE 70 SF

11/09/2015 1'x1' Ceiling Tile. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

OFFICE

CEILING TILE MASTIC 70 SF

11/09/2015 Mastic/Adhesive for 1'x1' Ceiling Tile. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

PRINT SHOP

CAULKING 70 LF

11/09/2015 Putty/Sealant on Exterior Windows. 3 LF is cracked and has peeling paint. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

PRINT SHOP, OFFICES, AND STORAGE ROOMS

BASEBOARD MASTIC 270 LF

11/09/2015 Mastic/Adhesive for 6" Black Baseboard. This Material is in GOOD condition as of this date.

05/12/2016 Baseboard painted White. No other changes as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of baseboard near Print Shop doorway is damaged. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

RESTROOMS AND STORAGE ROOMS

HEAT SHIELD 11 SF

11/09/2015 Round Light Fixture Heat Shield. (11 EA). 2 EA are exposed. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-191AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

RESTROOMS, SHOWER ROOM, AND TRAINER ROOM

MORTAR MISCELLANEOUS 670 SF

11/09/2015 Grout/Mortar for 4"x4" Ceramic Wall Tiles. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

SURVEY REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
11/02/2016	This Material is unchanged as of this date.		
04/24/2017	This Material is unchanged as of this date.		
11/01/2017	This Material is unchanged as of this date.		
05/07/2018	This Material is unchanged as of this date.		
10/31/2018	This Material is unchanged as of this date.		
05/22/2019	This Material is unchanged as of this date.		
11/18/2019	This Material is unchanged as of this date.		
06/12/2020	This Material is unchanged as of this date.		
15-191AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

SF=Sq. Ft, I=Inches, LF=Linear Ft., N=Number, EA=Each

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BOYS' AND GIRLS' RESTROOMS BY ROOM B

HEAT SHIELD 8 SF

05/18/2015 Light Fixture Heat Shields. (5 EA Heat Shields.) This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BOYS' AND GIRLS' RESTROOMS BY ROOM B, AND STAFF RESTROOMS

MORTAR MISCELLANEOUS 320 SF

05/18/2015 Grout/Mortar for 12"x12" Ceramic Floor Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E

PLASTER WALL 1,940 SF

05/18/2015 Plaster Walls and Ceilings. 3 SF of damage on the wall. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form 6 LF cracked by the Door in Room E. 3 LF Cracked by the door in Room C. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additional Damage Observed. 30 LF of several cracks and skim coat peeling. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E

PLASTER WALL SURFACING 1,940 SF

05/18/2015 Skim Coat for Plaster Walls and Ceilings. 3 SF of damage on the wall. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form 6 LF cracked by the Door in Room E. 3 LF Cracked by the door in Room C. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additional Damage Observed. 30 LF of several cracks and skim coat peeling. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS A AND B, AND TWO CLOSETS

SUSPENDED CEILING TILE 1,800 SF

05/18/2015 2'x4' Suspended Ceiling Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <10% Water Damage - 4 Tiles Damaged and 1 loose in Classroom A. 4 Tiles Damaged in Classroom B. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additional Damage Observed. Classroom A has 5 Tiles with Water Damage and 2 Tiles with Physical Damage. Classroom B 7 Tiles have Water Damage 1 has Physical Damage. No other changes as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

04/24/2017 Additional Damage Observed. 1 Tile with Water Damage in Closet between CLassrooms A and B. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS A, B, C, AND D

FLOOR MASTIC 1,600 SF

05/18/2015 Mastic/Adhesive for Wood Floor. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS B AND E

WALL TILE 350 SF

05/18/2015 1'x1' Wall Tile. Some Tiles are damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS B AND E

WALL TILE MASTIC 350 SF

05/18/2015 Mastic/Adhesive for 1'x1' Wall Tile. Some Tiles are damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION 378 SF

05/18/2015 Fire Door Core Insulation. (18 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage. 1 Door is in POOR condition Leaking Water. 2 Doors have material exposed. Material condition changed from GOOD to POOR overall. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Partial Repairs Observed. Some of the Water Damages have been painted over. Material Condition changed from POOR to FAIR. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

DOORS - INTERIOR

FIRE DOOR CORE INSULATION 336 SF

05/18/2015 Fire Door Core Insulation. (16 EA Doors). This Material is in GOOD condition as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)

SMOOTH WALL MISCELLANEOUS 13,190 SF

05/18/2015 Gypsum Wallboard System Walls and Ceilings. (Under Skim Coat, 1'x1' Ceiling Tiles, 1'x1' Wall Tiles, and Vinyl Wall Covers in some locations.) 7 SF of Water Damage on the Multipurpose Room Ceiling. <10% Water Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)

SMOOTH WALL SURFACING 7,800 SF

05/18/2015 Skim Coat for Gypsum Wallboard System Walls and Ceilings. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL 7,310 SF

05/18/2015 Stucco on Exterior Walls and Overhangs. Material has 10 SF of damage. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING 7,310 SF

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Material has 10 SF of damage. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WINDOWS

CAULKING 340 LF

05/18/2015 Putty/Sealant on Exterior Windows. Some areas are damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS AND CLASSROOMS A, B AND C

VINYL FLOOR TILE 810 SF

05/18/2015 12"x12" Off-white Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS AND CLASSROOMS A, B AND C

VINYL FLOOR TILE MASTIC 810 SF

05/18/2015 Mastic/Adhesive for 12"x12" Off-White Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM AND CONCEALED LOCATIONS

PIPE FITTING INSULATION 15 LF

05/18/2015 Thermal System Insulation on Pipe Fittings. (15 EA observed in the Mechanical Room. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.) This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM AND CONCEALED LOCATIONS

PIPE RUN INSULATION 100 LF

05/18/2015 Thermal System Insulation on Pipe Runs. (100 LF observed in the Mechanical Room. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.) This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MULTIPURPOSE ROOM

CEILING TILE 2,630 SF

05/18/2015 1'x1' Textured Ceiling Tile. 7 Tiles are Water Damaged. <5% Physical Damage and <10% Water Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Additional Damage Observed. 9 Tiles now have Water Damage and 1 is loose. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MULTIPURPOSE ROOM

CEILING TILE MASTIC 2,630 SF

05/18/2015 Mastic/Adhesive for 1'x1' Textured Ceiling Tile. 7 Tiles have been Water Damage. <5% Physical Damage and <10% Water Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Additional Damage Observed. 9 Tiles now have Water Damage and 1 is loose. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MULTIPURPOSE ROOM

VINYL WALL COVER 1,120 SF

05/18/2015 Vinyl Wall Cover on Gypsum Wallboard System. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MULTIPURPOSE ROOM

VINYL WALL COVER MASTIC 1,120 SF

05/18/2015 Mastic/Adhesive for Vinyl Wall Cover on Gypsum Wallboard System. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MULTIPURPOSE ROOM, HALLWAY, CLOSET, STAIRS OF STAGE, STAFF LOUNGE, AND ROOM A AND B CLOSET

CARPET MASTIC 2,660 SF

05/18/2015 Mastic/Adhesive for Blue Green Carpet. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

RESTROOMS BY ROOM B (2 EA) AND RESTROOMS BY STAFF LOUNGE (2 EA)

MORTAR MISCELLANEOUS 560 SF

05/18/2015 Grout/Mortar for 12"x12" Ceramic Wall Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

ROOM C

VINYL FLOOR TILE 960 SF

05/18/2015 12"x12" Beige Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

ROOM C

VINYL FLOOR TILE MASTIC 960 SF

05/18/2015 Mastic/Adhesive for 12"x12" Beige Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

ROOMS A AND B, HALLWAYS, AND MULTIPURPOSE ROOM

BASEBOARD MASTIC 200 LF

05/18/2015 Mastic/Adhesive for 4" Green Blue Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE

CEILING TILE 800 SF

05/18/2015 1'x1' Ceiling Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE

CEILING TILE MASTIC 800 SF

05/18/2015 Mastic/Adhesive for 1'x1' Ceiling Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE

CURTAINS 630 SF

05/18/2015 Curtain. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE

FLOOR MASTIC 800 SF

05/18/2015 Mastic/Adhesive for Wood Floor. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE

VINYL WALL COVER 610 SF

05/18/2015 Vinyl Cover on Accordian Wall. 5 SF of Material is damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 Additional Damage Observed. 2 SF of Damaged Material by Switchboard on Wall. No other changes as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE

VINYL WALL COVER MASTIC 610 SF

05/18/2015 Mastic/Adhesive for Vinyl Cover on Accordian Wall. 5 SF of Material is damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 Additional Damage Observed. 2 SF of Damaged Material by Switchboard on Wall. No other changes as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE AND ENTRY TO STAGE

BASEBOARD MASTIC 90 LF

05/18/2015 Mastic/Adhesive for 4" Brown Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	**ASSUMED**	**NO SAMPLE**	**(NS)**

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

METAL STORAGE CONTAINERS

METAL STORAGE CONTAINERS

05/18/2015 BUILDING NOTES:

05/18/2015 Metal Storage Containers (8 EA Containers) located by the San Jose Sabercats Practice Field.

05/12/2016 Building name changed from METAL STORAGE CONTAINERS (8 EA Containers) to METAL STORAGE CONTAINERS (12 EA Containers).

11/02/2016 Building name changed from METAL STORAGE CONTAINERS (12 EA Containers) to METAL STORAGE CONTAINERS (22 EA Containers).

10/31/2018 Building name changed from METAL STORAGE CONTAINERS (22 EA Containers) to METAL STORAGE CONTAINERS (29 EA Containers). 23 are 40 SF EA. 5 are 20 SF EA. 1 is 10 SF EA. All are Located by Building F Music Storage and Print Shop.

METAL STORAGE CONTAINERS

METAL STORAGE CONTAINERS (22 EA)

STORAGE CONTAINER 8,240 SF

05/18/2015 Metal Storage Containers. 12 EA, approximately 280 SF EA.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Material Description changed from 'Metal Storage Containers. 8 EA.' to 'Metal Storage Containers.12 EA'. Material Quantity changed from 2,112 SF to 3,360 SF. No other changes as of this date.

11/02/2016 Material Description changed from 'Metal Storage Containers. 12 EA.' to 'Metal Storage Containers. 22 EA'. Material Quantity changed from 3,360 SF to 6,160 SF. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 Material Description changed from 'Metal Storage Containers. 12 EA.' to 'Metal Storage Containers. 29 EA'. Material Quantity changed from 6,160 SF to 8,240 SF. No other changes as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082.NS	ASSUMED	NO SAMPLE	(NS)

SF=Sq. Ft, I=Inches, LF=Linear Ft., N=Number, EA=Each

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE

WOOD SHED

WOOD SHED

05/18/2015 BUILDING NOTES:

05/18/2015 Wood Storage Shed (4 EA Sheds). 2 EA located by the Main Field (160 SF and 80 SF) and are used by the City of Sunnyvale Soccer, 1 EA located by the Metal Storage Containers (100 SF), and one located by Building B - Suite 500, by Room 5 (50 SF).

WOOD SHED

LARGE WOOD SHED BY THE MAIN FIELD

FIRE DOOR CORE INSULATION 21 SF

05/18/2015 Fire Door Core Insulation. 1 EA Door on the 160 SF Shed located by the Main Field. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

15-082AAA	ASSUMED	NO SAMPLE	(NS)

WOOD SHED

WOOD STORAGE SHEDS (4 EA)

STORAGE BUILDING 390 SF

05/18/2015 Apparent New Wood Constructions Structures Identified by the AHERA Accredited Inspector. This Materail is in GOOD Condition as of this date.

SURVEY REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE **QTY (APPROXIMATE)**
COMMENTS

SAMPLE NO.	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS CODE
11/09/2015	This Material is unchanged as of this date.		
05/12/2016	This Material is unchanged as of this date.		
11/02/2016	This Material is unchanged as of this date.		
04/24/2017	This Material is unchanged as of this date.		
11/01/2017	This Material is unchanged as of this date.		
05/07/2018	This Material is unchanged as of this date.		
10/31/2018	This Material is unchanged as of this date.		
05/22/2019	This Material is unchanged as of this date.		
11/18/2019	This Material is unchanged as of this date.		
06/12/2020	This Material is unchanged as of this date.		
15-082.NS	**NEW**	**NO SAMPLE**	**(NS)**

End Of Report, Total Of 159 Pages

SF=Sq. Ft, I=Inches, LF=Linear Ft., N=Number, EA=Each

HOMOGENEOUS MATERIALS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / MATERIAL CATEGORY / LOCATION	MATERIAL TYPE
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)	
MISCELLANEOUS MATERIAL	
CHINESE CLASSROOM AND CLASSROOM 12	SUSPENDED CEILING TILE
CHINESE CLASSROOM AND OFFICES	CHALK BOARD
CHINESE CLASSROOM AND OFFICES	WALL MASTIC
CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER	BASEBOARD MASTIC
CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER	CARPET MASTIC
CLASSROOM 12	BASEBOARD MASTIC
CLASSROOM 12	SUSPENDED CEILING TILE
CLASSROOM 12	VINYL FLOOR TILE
CLASSROOM 12	VINYL FLOOR TILE MASTIC
DOORS - EXTERIOR	FIRE DOOR CORE INSULATION
DOORS - INTERIOR	FIRE DOOR CORE INSULATION
ELECTRICAL ROOM	BASEBOARD MASTIC
ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY	VINYL FLOOR TILE
ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY	VINYL FLOOR TILE MASTIC
EXTERIOR WINDOWS	CAULKING
KIDS' RESTROOM IN CLASSROOM 12	VINYL SHEETING
KIDS' RESTROOM IN CLASSROOM 12	VINYL SHEETING BACKING PAPER/MASTIC
ROOM G	BASEBOARD MASTIC
ROOM G	MORTAR MISCELLANEOUS
ROOM G, CLASSROOM 12, KITCHEN, AND RESTROOM	FLOOR MASTIC
ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER	SMOOTH WALL MISCELLANEOUS
ROOM G, STAFF RESTROOM, OFFICES, HALLWAY, AND ELECTRICAL ROOM	CEILING TILE
STAFF RESTROOM	BASEBOARD MASTIC
STAFF RESTROOM	VINYL SHEETING
STAFF RESTROOM	VINYL SHEETING BACKING PAPER/MASTIC
SURFACING MATERIAL	
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL SURFACING
MECHANICAL ROOM	PLASTER WALL
MECHANICAL ROOM	PLASTER WALL SURFACING
ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER	SMOOTH WALL SURFACING
ROOM G RESTROOM	PLASTER WALL
ROOM G RESTROOM	PLASTER WALL SURFACING
THERMAL SYSTEM INSULATION	
MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS	PIPE FITTING INSULATION
MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS	PIPE RUN INSULATION
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)	

HOMOGENEOUS MATERIALS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / MATERIAL CATEGORY / LOCATION	MATERIAL TYPE
MISCELLANEOUS MATERIAL	
DOORS - EXTERIOR	FIRE DOOR CORE INSULATION
ELECTRICAL ROOM	VINYL FLOOR TILE
ELECTRICAL ROOM	VINYL FLOOR TILE MASTIC
ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS	SMOOTH WALL MISCELLANEOUS
EXTERIOR KIDS' RESTROOM	VINYL FLOOR TILE
EXTERIOR KIDS' RESTROOM	VINYL FLOOR TILE MASTIC
EXTERIOR KIDS' RESTROOM	VINYL SHEETING
EXTERIOR KIDS' RESTROOM	VINYL SHEETING BACKING PAPER/MASTIC
EXTERIOR KIDS' RESTROOM	VINYL WALL COVER
EXTERIOR KIDS' RESTROOM	VINYL WALL COVER MASTIC
EXTERIOR WINDOWS	CAULKING
HALLWAY BETWEEN OFFICE AND ROOMS 1-6	CEILING TILE
HALLWAY BETWEEN OFFICE AND ROOMS 1-6	CEILING TILE MASTIC
HALLWAYS	BASEBOARD MASTIC
HALLWAYS	CARPET MASTIC
HALLWAYS AND OFFICES	BASEBOARD MASTIC
HALLWAYS AND OFFICES	CARPET MASTIC
INFANT ROOM	BASEBOARD MASTIC
ROOM 11	VINYL FLOOR TILE
ROOM 11	VINYL FLOOR TILE MASTIC
ROOM 2	WALL TILE
ROOM 2	WALL TILE MASTIC
ROOMS 1, 2, 3, 4, 8A. 8B, 9, 11, ELECTRICAL ROOM, EXTRACURRICULAR ROOM, OFFICE, AND STAFF LOUNGE	SUSPENDED CEILING TILE
ROOMS 1-5 AND 7	VINYL FLOOR TILE
ROOMS 1-5 AND 7	VINYL FLOOR TILE MASTIC
ROOMS 1-7, 11 AND INFANT ROOM	PRESSED WOOD WALL PANEL MASTIC
ROOMS 1-7, 11 AND INFANT ROOM	VINYL WALL COVER
ROOMS 1-7, 11 AND INFANT ROOM	VINYL WALL COVER MASTIC
ROOMS 1-7, 11 AND INFORMATION ROOM	PRESSED WOOD WALL PANEL
ROOMS 10 AND 11, ELECTRICAL ROOM, TEACHERS' LOUNGE, EXTRA-CURRICULAR ROOM, EXTERIOR RESTROOM, AND STORAGE	BASEBOARD MASTIC
ROOMS 2-5	BASEBOARD MASTIC
ROOMS 2-5	VINYL FLOOR TILE
ROOMS 2-5	VINYL FLOOR TILE MASTIC
ROOMS 4, 5, AND INFANT ROOM	CARPET MASTIC
ROOMS 6, 7, 8A, 8B AND 9	FLOOR MASTIC
ROOMS 6 AND 10	SUSPENDED CEILING TILE
ROOMS 9-11 AND INFANT ROOM	VINYL FLOOR TILE
ROOMS 9-11 AND INFANT ROOM	VINYL FLOOR TILE MASTIC
STUDENT RESTROOMS	MORTAR MISCELLANEOUS
STUDENT RESTROOMS	TERRAZZO FLOOR

BUILDING NAME / MATERIAL CATEGORY / LOCATION	MATERIAL TYPE
SURFACING MATERIAL	
ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS	SMOOTH WALL SURFACING
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL SURFACING
MECHANICAL ROOM	PLASTER WALL
MECHANICAL ROOM	PLASTER WALL SURFACING
STUDENT RESTROOMS	PLASTER WALL
STUDENT RESTROOMS	PLASTER WALL SURFACING
THERMAL SYSTEM INSULATION	
MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS	PIPE FITTING INSULATION
MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS	PIPE RUN INSULATION
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)	
MISCELLANEOUS MATERIAL	
BOYS' AND GIRLS' RESTROOM	MORTAR MISCELLANEOUS
BOYS' AND GIRLS' RESTROOMS	TERRAZZO FLOOR
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS	BASEBOARD MASTIC
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS	VINYL FLOOR TILE
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS	VINYL FLOOR TILE MASTIC
CLASSROOMS C1-C5, C7-C8, HALLWAY, AND STORAGE ROOMS OF C7	BASEBOARD MASTIC
CLASSROOMS C1-C7	PRESSED WOOD WALL PANEL
CLASSROOMS C1-C7	PRESSED WOOD WALL PANEL MASTIC
CLASSROOMS C1-C7	VINYL WALL COVER
CLASSROOMS C1-C7	VINYL WALL COVER MASTIC
CLASSROOMS C1-C8	SUSPENDED CEILING TILE
CLASSROOMS C1-C8, HALLWAY AND CLOSETS	VINYL FLOOR TILE
CLASSROOMS C1-C8, HALLWAY AND CLOSETS	VINYL FLOOR TILE MASTIC
CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM	SMOOTH WALL MISCELLANEOUS
CLASSROOMS C7 AND C8 STORAGE ROOMS	SUSPENDED CEILING TILE
DOORS - EXTERIOR	FIRE DOOR CORE INSULATION
DOORS - INTERIOR	FIRE DOOR CORE INSULATION
EXTERIOR WINDOWS	CAULKING
HALLWAY	CEILING TILE
HALLWAY	CEILING TILE MASTIC
HALLWAY	VINYL FLOOR TILE
HALLWAY	VINYL FLOOR TILE MASTIC
MEN'S AND WOMEN'S RESTROOMS	MORTAR MISCELLANEOUS
MEN'S AND WOMEN'S RESTROOMS	MORTAR MISCELLANEOUS
OFFICES	BASEBOARD MASTIC
OFFICES	CARPET MASTIC
SURFACING MATERIAL	
BOILER ROOM	ROUGH WALL SURFACING
BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM	PLASTER WALL
BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM	PLASTER WALL SURFACING
CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM	SMOOTH WALL SURFACING
EXTERIOR	ROUGH WALL SURFACING

BUILDING NAME / MATERIAL CATEGORY / LOCATION	MATERIAL TYPE
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL
OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS	PLASTER WALL
OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS	PLASTER WALL SURFACING
THERMAL SYSTEM INSULATION	
BOILER ROOM	DUCT WRAP TAPE
BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS	PIPE FITTING INSULATION
BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS	PIPE RUN INSULATION
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)	
MISCELLANEOUS MATERIAL	
D7 -D9	VINYL WALL COVER
D7-D9	VINYL WALL COVER MASTIC
DOORS - EXTERIOR	FIRE DOOR CORE INSULATION
DOORS - INTERIOR	FIRE DOOR CORE INSULATION
HALLWAY	CEILING TILE
HALLWAY	CEILING TILE MASTIC
HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA	VINYL FLOOR TILE
HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA	VINYL FLOOR TILE MASTIC
HALLWAY (BY DRINKING FOUNTAIN)	MORTAR MISCELLANEOUS
ROOMS D1, D2, D4 CLOSET, AND STAFF RESTROOMS	SUSPENDED CEILING TILE
ROOMS D1-D6	PRESSED WOOD WALL PANEL
ROOMS D1-D6	PRESSED WOOD WALL PANEL MASTIC
ROOMS D1-D6	VINYL WALL COVER
ROOMS D1-D6	VINYL WALL COVER MASTIC
ROOMS D1-D9, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET	BASEBOARD MASTIC
ROOMS D1-D9, HALLWAY, OFFICES, AND IDF ROOM	CARPET MASTIC
ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET	SMOOTH WALL MISCELLANEOUS
ROOMS D2, D5, D6, D7, D8, AND D9	SUSPENDED CEILING TILE
ROOMS D3-D4	PRESSED WOOD WALL PANEL
ROOMS D3-D4	PRESSED WOOD WALL PANEL MASTIC
ROOMS D3-D4	VINYL WALL COVER
ROOMS D3-D4	VINYL WALL COVER MASTIC
STAFF RESTROOMS	VINYL SHEETING
STAFF RESTROOMS	VINYL SHEETING BACKING PAPER/MASTIC
SURFACING MATERIAL	
EXTERIOR WALLS	ROUGH WALL
EXTERIOR WALLS	ROUGH WALL SURFACING
MECHANICAL ROOM	PLASTER WALL
MECHANICAL ROOM	PLASTER WALL SURFACING
ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET	SMOOTH WALL SURFACING
ROOMS D3-D4	SMOOTH WALL SURFACING

BUILDING NAME / MATERIAL CATEGORY / LOCATION	MATERIAL TYPE
THERMAL SYSTEM INSULATION	
MECHANICAL ROOM AND CONCEALED LOCATIONS	PIPE FITTING INSULATION
MECHANICAL ROOM AND CONCEALED LOCATIONS	PIPE RUN INSULATION
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)	
MISCELLANEOUS MATERIAL	
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS	MORTAR MISCELLANEOUS
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS	TERRAZZO FLOOR
CLASSROOM C8 CLOSET	CEILING MASTIC
CLASSROOM E3 AND CLASSROOM E8 - THREE CLOSETS	WALL MASTIC
CLASSROOM E7 AND CLASSROOM E7 CLOSET	CARPET MASTIC
CLASSROOM E7, CLASSROOM E7 CLOSET, AND HALLWAYS	BASEBOARD MASTIC
CLASSROOM E7 CLOSET	VINYL FLOOR TILE
CLASSROOM E7 CLOSET	VINYL FLOOR TILE MASTIC
CLASSROOM E8	CARPET MASTIC
CLASSROOM E8 CLOSET	FLOOR MASTIC
CLASSROOM E8 CLOSET	VINYL SHEETING
CLASSROOM E8 CLOSET	VINYL SHEETING BACKING PAPER/MASTIC
CLASSROOMS E2-E6 AND OFFICE	SUSPENDED CEILING TILE
CLASSROOMS E2-E7	FLOOR MASTIC
CLASSROOMS E2-E8, HALLWAYS, AND STUDENT RESTROOMS	SMOOTH WALL MISCELLANEOUS
CLASSROOMS E7 AND E8 STORAGES	SINK UNDERCOATING
DOORS - EXTERIOR	FIRE DOOR CORE INSULATION
DOORS - INTERIOR	FIRE DOOR CORE INSULATION
E1 (MAIN OFFICE) AND OFFICES	BASEBOARD MASTIC
E1 (MAIN OFFICE) AND OFFICES	VINYL FLOOR TILE
E1 (MAIN OFFICE) AND OFFICES	VINYL FLOOR TILE MASTIC
E7 STORAGE	SUSPENDED CEILING TILE
EXTERIOR WINDOWS	CAULKING
HALLWAYS	CARPET MASTIC
HALLWAYS	VINYL FLOOR TILE
HALLWAYS	VINYL FLOOR TILE MASTIC
HALLWAYS, AND CLASSROOMS E7 AND E8	CEILING TILE
HALLWAYS, AND CLASSROOMS E7 AND E8	CEILING TILE MASTIC
MECHANICAL ROOM, TWO CLOSETS OF ROOM 27 AND THREE CLOSETS AT ROOM E8	BASEBOARD MASTIC
STUDENT RESTROOM	MORTAR MISCELLANEOUS
STUDENT RESTROOM	MORTAR MISCELLANEOUS
SURFACING MATERIAL	
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS	PLASTER WALL
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS	PLASTER WALL SURFACING
CLASSROOMS E2-E8, HALLWAYS AND STUDENT RESTROOMS	SMOOTH WALL SURFACING
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL SURFACING
MECHANICAL ROOM	PLASTER WALL
MECHANICAL ROOM	PLASTER WALL SURFACING

BUILDING NAME / MATERIAL CATEGORY / LOCATION	MATERIAL TYPE
THERMAL SYSTEM INSULATION	
MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS	PIPE FITTING INSULATION
MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS	PIPE RUN INSULATION
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100	
MISCELLANEOUS MATERIAL	
DOORS - EXTERIOR	FIRE DOOR CORE INSULATION
DOORS - INTERIOR	FIRE DOOR CORE INSULATION
ENTIRE BUILDING	SMOOTH WALL MISCELLANEOUS
ENTIRE BUILDING	WOOD WALL PANEL MASTIC
LOCKER ROOMS, OFFICES, AND TRAINER ROOM	CARPET MASTIC
OFFICE	CEILING TILE
OFFICE	CEILING TILE MASTIC
PRINT SHOP	CAULKING
PRINT SHOP, OFFICES, AND STORAGE ROOMS	BASEBOARD MASTIC
RESTROOMS AND STORAGE ROOMS	HEAT SHIELD
RESTROOMS, SHOWER ROOM, AND TRAINER ROOM	MORTAR MISCELLANEOUS
SURFACING MATERIAL	
ENTIRE BUILDING	PLASTER WALL
ENTIRE BUILDING	PLASTER WALL SURFACING
ENTIRE BUILDING	SMOOTH WALL SURFACING
EXTERIOR WALLS	ROUGH WALL
EXTERIOR WALLS	ROUGH WALL SURFACING
THERMAL SYSTEM INSULATION	
ENTIRE BUILDING - CONCEALED LOCATIONS	PIPE FITTING INSULATION
ENTIRE BUILDING - CONCEALED LOCATIONS	PIPE RUN INSULATION
MECHANICAL ROOM	BOILER GASKET
MECHANICAL ROOM	TANK (HIGH TEMP) INSULATION
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)	
MISCELLANEOUS MATERIAL	
BOYS' AND GIRLS' RESTROOMS BY ROOM B	HEAT SHIELD
BOYS' AND GIRLS' RESTROOMS BY ROOM B, AND STAFF RESTROOMS	MORTAR MISCELLANEOUS
CLASSROOMS A AND B, AND TWO CLOSETS	SUSPENDED CEILING TILE
CLASSROOMS A, B, C, AND D	FLOOR MASTIC
CLASSROOMS B AND E	WALL TILE
CLASSROOMS B AND E	WALL TILE MASTIC
DOORS - EXTERIOR	FIRE DOOR CORE INSULATION
DOORS - INTERIOR	FIRE DOOR CORE INSULATION
ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)	SMOOTH WALL MISCELLANEOUS
EXTERIOR WINDOWS	CAULKING
HALLWAYS AND CLASSROOMS A, B AND C	VINYL FLOOR TILE
HALLWAYS AND CLASSROOMS A, B AND C	VINYL FLOOR TILE MASTIC

HOMOGENEOUS MATERIALS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / MATERIAL CATEGORY / LOCATION	MATERIAL TYPE
MULTIPURPOSE ROOM	CEILING TILE
MULTIPURPOSE ROOM	CEILING TILE MASTIC
MULTIPURPOSE ROOM	VINYL WALL COVER
MULTIPURPOSE ROOM	VINYL WALL COVER MASTIC
MULTIPURPOSE ROOM, HALLWAY, CLOSET, STAIRS OF STAGE, STAFF LOUNGE, AND ROOM A AND B CLOSET	CARPET MASTIC
RESTROOMS BY ROOM B (2 EA) AND RESTROOMS BY STAFF LOUNGE (2 EA)	MORTAR MISCELLANEOUS
ROOM C	VINYL FLOOR TILE
ROOM C	VINYL FLOOR TILE MASTIC
ROOMS A AND B, HALLWAYS, AND MULTIPURPOSE ROOM	BASEBOARD MASTIC
STAGE	CEILING TILE
STAGE	CEILING TILE MASTIC
STAGE	CURTAINS
STAGE	FLOOR MASTIC
STAGE	VINYL WALL COVER
STAGE	VINYL WALL COVER MASTIC
STAGE AND ENTRY TO STAGE	BASEBOARD MASTIC
SURFACING MATERIAL	
BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E	PLASTER WALL
BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E	PLASTER WALL SURFACING
ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)	SMOOTH WALL SURFACING
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL
EXTERIOR WALLS AND OVERHANGS	ROUGH WALL SURFACING
THERMAL SYSTEM INSULATION	
MECHANICAL ROOM AND CONCEALED LOCATIONS	PIPE FITTING INSULATION
MECHANICAL ROOM AND CONCEALED LOCATIONS	PIPE RUN INSULATION
METAL STORAGE CONTAINERS	
MISCELLANEOUS MATERIAL	
METAL STORAGE CONTAINERS (22 EA)	STORAGE CONTAINER
WOOD SHED	
MISCELLANEOUS MATERIAL	
LARGE WOOD SHED BY THE MAIN FIELD	FIRE DOOR CORE INSULATION
WOOD STORAGE SHEDS (4 EA)	STORAGE BUILDING

End Of Report, Total Of 7 Pages

FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / LOCATION / MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)		
CHINESE CLASSROOM AND CLASSROOM 12		
SUSPENDED CEILING TILE	510 SF	Assumed
CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER		
BASEBOARD MASTIC	210 LF	Assumed
CLASSROOM 12		
SUSPENDED CEILING TILE	740 SF	Assumed
CLASSROOM 12		
VINYL FLOOR TILE	510 SF	Assumed
CLASSROOM 12		
VINYL FLOOR TILE MASTIC	510 SF	Assumed
DOORS - EXTERIOR		
FIRE DOOR CORE INSULATION	105 SF	Assumed
DOORS - INTERIOR		
FIRE DOOR CORE INSULATION	378 SF	Assumed
ELECTRICAL ROOM		
BASEBOARD MASTIC	20 LF	Assumed
ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY		
VINYL FLOOR TILE	610 SF	Assumed
ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY		
VINYL FLOOR TILE MASTIC	610 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL	2,460 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL SURFACING	2,460 SF	Assumed
EXTERIOR WINDOWS		
CAULKING	400 LF	Assumed
KIDS' RESTROOM IN CLASSROOM 12		
VINYL SHEETING	72 SF	Assumed
KIDS' RESTROOM IN CLASSROOM 12		
VINYL SHEETING BACKING PAPER/MASTIC	72 SF	Assumed
MECHANICAL ROOM		
PLASTER WALL	450 SF	Assumed
MECHANICAL ROOM		
PLASTER WALL SURFACING	450 SF	Assumed

S=Sq. Ft, I=Inches, L=Linear Ft., N=Number, EA=Each

FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / LOCATION / MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS		
PIPE FITTING INSULATION	50 LF	Assumed
MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS		
PIPE RUN INSULATION	160 LF	Assumed
ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER		
SMOOTH WALL MISCELLANEOUS	6,000 SF	Assumed
ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER		
SMOOTH WALL SURFACING	6,000 SF	Assumed
ROOM G RESTROOM		
PLASTER WALL	110 SF	Assumed
ROOM G RESTROOM		
PLASTER WALL SURFACING	110 SF	Assumed
ROOM G, STAFF RESTROOM, OFFICES, HALLWAY, AND ELECTRICAL ROOM		
CEILING TILE	124 SF	Assumed
STAFF RESTROOM		
VINYL SHEETING BACKING PAPER/MASTIC	12 SF	Assumed
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)		
DOORS - EXTERIOR		
FIRE DOOR CORE INSULATION	231 SF	Assumed
ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS		
SMOOTH WALL MISCELLANEOUS	27,830 SF	Assumed
ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS		
SMOOTH WALL SURFACING	15,350 SF	Assumed
EXTERIOR KIDS' RESTROOM		
VINYL SHEETING BACKING PAPER/MASTIC	72 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL	4,500 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL SURFACING	4,500 SF	Assumed
EXTERIOR WINDOWS		
CAULKING	3,194 SF	Assumed
HALLWAY BETWEEN OFFICE AND ROOMS 1-6		
CEILING TILE	4,110 SF	Assumed

FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
MECHANICAL ROOM		
PLASTER WALL	710 SF	Assumed
MECHANICAL ROOM		
PLASTER WALL SURFACING	710 SF	Assumed
MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS		
PIPE FITTING INSULATION	110 EA	Assumed
MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS		
PIPE RUN INSULATION	250 LF	Assumed
ROOM 2		
WALL TILE	440 SF	Assumed
ROOMS 1, 2, 3, 4, 8A. 8B, 9, 11, ELECTRICAL ROOM, EXTRACURRICULAR ROOM, OFFICE, AND STAFF LOUNGE		
SUSPENDED CEILING TILE	9,600 SF	Assumed
ROOMS 1-5 AND 7		
VINYL FLOOR TILE	1,240 SF	Assumed
ROOMS 1-5 AND 7		
VINYL FLOOR TILE MASTIC	1,240 SF	Assumed
ROOMS 1-7, 11 AND INFORMATION ROOM		
PRESSED WOOD WALL PANEL	5,900 SF	Assumed
ROOMS 10 AND 11, ELECTRICAL ROOM, TEACHERS' LOUNGE, EXTRA-CURRICULAR ROOM, EXTERIOR RESTROOM, AND STORAGE		
BASEBOARD MASTIC	400 LF	Assumed
ROOMS 2-5		
BASEBOARD MASTIC	230 LF	Assumed
ROOMS 6 AND 10		
SUSPENDED CEILING TILE	1,920 SF	Assumed
ROOMS 9-11 AND INFANT ROOM		
VINYL FLOOR TILE	2,310 SF	Assumed
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)		
BOILER ROOM		
DUCT WRAP TAPE	420 SF	Assumed
BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM		
PLASTER WALL	2,550 SF	Assumed
BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM		
PLASTER WALL SURFACING	2,550 SF	Assumed

FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS		
PIPE FITTING INSULATION	100 EA	Assumed
BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS		
PIPE RUN INSULATION	450 LF	Assumed
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS		
VINYL FLOOR TILE	830 SF	Assumed
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS		
VINYL FLOOR TILE MASTIC	830 SF	Assumed
CLASSROOMS C1-C7		
PRESSED WOOD WALL PANEL	4,100 SF	Assumed
CLASSROOMS C1-C7		
VINYL WALL COVER	4,100 SF	Assumed
CLASSROOMS C1-C7		
VINYL WALL COVER MASTIC	4,100 SF	Assumed
CLASSROOMS C1-C8		
SUSPENDED CEILING TILE	7,400 SF	Assumed
CLASSROOMS C1-C8, HALLWAY AND CLOSETS		
VINYL FLOOR TILE	6,410 SF	Assumed
CLASSROOMS C1-C8, HALLWAY AND CLOSETS		
VINYL FLOOR TILE MASTIC	6,410 SF	Assumed
CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM		
SMOOTH WALL MISCELLANEOUS	13,510 SF	Assumed
CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM		
SMOOTH WALL SURFACING	11,160 SF	Assumed
CLASSROOMS C7 AND C8 STORAGE ROOMS		
SUSPENDED CEILING TILE	710 SF	Assumed
DOORS - EXTERIOR		
FIRE DOOR CORE INSULATION	378 SF	Assumed
DOORS - INTERIOR		
FIRE DOOR CORE INSULATION	840 SF	Assumed
EXTERIOR		
ROUGH WALL SURFACING	4,850 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL	4,850 SF	Assumed

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FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
EXTERIOR WINDOWS		
CAULKING	1,900 LF	Assumed
HALLWAY		
CEILING TILE	2,350 SF	Assumed
HALLWAY		
CEILING TILE MASTIC	2,350 SF	Assumed
HALLWAY		
VINYL FLOOR TILE	1,250 SF	Assumed
HALLWAY		
VINYL FLOOR TILE MASTIC	1,250 SF	Assumed
MEN'S AND WOMEN'S RESTROOMS		
MORTAR MISCELLANEOUS	270 SF	Assumed
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)		
D7 -D9		
VINYL WALL COVER	3,600 SF	Assumed
D7-D9		
VINYL WALL COVER MASTIC	3,600 SF	Assumed
DOORS - EXTERIOR		
FIRE DOOR CORE INSULATION	294 SF	Assumed
DOORS - INTERIOR		
FIRE DOOR CORE INSULATION	189 SF	Assumed
HALLWAY		
CEILING TILE	1,520 SF	Assumed
HALLWAY		
CEILING TILE MASTIC	1,520 SF	Assumed
HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA		
VINYL FLOOR TILE	690 SF	Assumed
HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA		
VINYL FLOOR TILE MASTIC	690 SF	Assumed
MECHANICAL ROOM		
PLASTER WALL	500 SF	Assumed
MECHANICAL ROOM		
PLASTER WALL SURFACING	500 SF	Assumed
MECHANICAL ROOM AND CONCEALED LOCATIONS		
PIPE FITTING INSULATION	12 LF	Assumed

S=Sq. Ft, I=Inches, L=Linear Ft., N=Number, EA=Each

BUILDING NAME / LOCATION / MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
MECHANICAL ROOM AND CONCEALED LOCATIONS		
PIPE RUN INSULATION	50 LF	Assumed
ROOMS D1, D2, D4 CLOSET, AND STAFF RESTROOMS		
SUSPENDED CEILING TILE	2,500 SF	Assumed
ROOMS D1-D6		
PRESSED WOOD WALL PANEL	1,250 SF	Assumed
ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET		
SMOOTH WALL MISCELLANEOUS	14,450 SF	Assumed
ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET		
SMOOTH WALL SURFACING	14,450 SF	Assumed
ROOMS D2, D5, D6, D7, D8, AND D9		
SUSPENDED CEILING TILE	6,100 SF	Assumed
ROOMS D3-D4		
SMOOTH WALL SURFACING	760 SF	Assumed
STAFF RESTROOMS		
VINYL SHEETING BACKING PAPER/MASTIC	190 SF	Assumed
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)		
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS		
TERRAZZO FLOOR	410 SF	Assumed
CLASSROOM E8 CLOSET		
VINYL SHEETING	102 SF	Assumed
CLASSROOM E8 CLOSET		
VINYL SHEETING BACKING PAPER/MASTIC	102 SF	Assumed
CLASSROOMS E2-E6 AND OFFICE		
SUSPENDED CEILING TILE	5,952 SF	Assumed
CLASSROOMS E2-E8, HALLWAYS, AND STUDENT RESTROOMS		
SMOOTH WALL MISCELLANEOUS	17,510 SF	Assumed
CLASSROOMS E2-E8, HALLWAYS AND STUDENT RESTROOMS		
SMOOTH WALL SURFACING	10,510 SF	Assumed
DOORS - EXTERIOR		
FIRE DOOR CORE INSULATION	420 SF	Assumed
DOORS - INTERIOR		
FIRE DOOR CORE INSULATION	189 SF	Assumed
E1 (MAIN OFFICE) AND OFFICES		
VINYL FLOOR TILE	992 SF	Assumed

FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
E1 (MAIN OFFICE) AND OFFICES		
VINYL FLOOR TILE MASTIC	992 SF	Assumed
E7 STORAGE		
SUSPENDED CEILING TILE	456 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL	3,110 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL SURFACING	3,110 SF	Assumed
EXTERIOR WINDOWS		
CAULKING	990 LF	Assumed
HALLWAYS		
CARPET MASTIC	1,835 SF	Assumed
HALLWAYS, AND CLASSROOMS E7 AND E8		
CEILING TILE	4,226 SF	Assumed
HALLWAYS, AND CLASSROOMS E7 AND E8		
CEILING TILE MASTIC	4,226 SF	Assumed
MECHANICAL ROOM		
PLASTER WALL	780 SF	Assumed
MECHANICAL ROOM		
PLASTER WALL SURFACING	780 SF	Assumed
MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS		
PIPE FITTING INSULATION	110 LF	Assumed
MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS		
PIPE RUN INSULATION	410 LF	Assumed
MECHANICAL ROOM, TWO CLOSETS OF ROOM 27 AND THREE CLOSETS AT ROOM E8		
BASEBOARD MASTIC	170 LF	Assumed
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100		
DOORS - EXTERIOR		
FIRE DOOR CORE INSULATION	273 SF	Assumed
DOORS - INTERIOR		
FIRE DOOR CORE INSULATION	252 SF	Assumed
ENTIRE BUILDING		
PLASTER WALL	6,000 SF	Assumed
ENTIRE BUILDING		
PLASTER WALL SURFACING	6,000 SF	Assumed

S=Sq. Ft, I=Inches, L=Linear Ft., N=Number, EA=Each

FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
ENTIRE BUILDING		
SMOOTH WALL MISCELLANEOUS	3,000 SF	Assumed
ENTIRE BUILDING		
SMOOTH WALL SURFACING	3,000 SF	Assumed
ENTIRE BUILDING - CONCEALED LOCATIONS		
PIPE FITTING INSULATION	27 EA	Assumed
ENTIRE BUILDING - CONCEALED LOCATIONS		
PIPE RUN INSULATION	120 LF	Assumed
EXTERIOR WALLS		
ROUGH WALL	2,600 SF	Assumed
EXTERIOR WALLS		
ROUGH WALL SURFACING	2,600 SF	Assumed
MECHANICAL ROOM		
BOILER GASKET	22 LF	Assumed
MECHANICAL ROOM		
TANK (HIGH TEMP) INSULATION	100 SF	Assumed
OFFICE		
CEILING TILE	70 SF	Assumed
PRINT SHOP		
CAULKING	70 LF	Assumed
PRINT SHOP, OFFICES, AND STORAGE ROOMS		
BASEBOARD MASTIC	270 LF	Assumed
RESTROOMS AND STORAGE ROOMS		
HEAT SHIELD	11 SF	Assumed
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)		
BOYS' AND GIRLS' RESTROOMS BY ROOM B		
HEAT SHIELD	8 SF	Assumed
BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E		
PLASTER WALL	1,940 SF	Assumed
BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E		
PLASTER WALL SURFACING	1,940 SF	Assumed
CLASSROOMS A AND B, AND TWO CLOSETS		
SUSPENDED CEILING TILE	1,800 SF	Assumed
CLASSROOMS B AND E		
WALL TILE	350 SF	Assumed

S=Sq. Ft, I=Inches, L=Linear Ft., N=Number, EA=Each

FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
CLASSROOMS B AND E		
WALL TILE MASTIC	350 SF	Assumed
DOORS - EXTERIOR		
FIRE DOOR CORE INSULATION	378 SF	Assumed
DOORS - INTERIOR		
FIRE DOOR CORE INSULATION	336 SF	Assumed
ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)		
SMOOTH WALL MISCELLANEOUS	13,190 SF	Assumed
ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)		
SMOOTH WALL SURFACING	7,800 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL	7,310 SF	Assumed
EXTERIOR WALLS AND OVERHANGS		
ROUGH WALL SURFACING	7,310 SF	Assumed
EXTERIOR WINDOWS		
CAULKING	340 LF	Assumed
MECHANICAL ROOM AND CONCEALED LOCATIONS		
PIPE FITTING INSULATION	15 LF	Assumed
MECHANICAL ROOM AND CONCEALED LOCATIONS		
PIPE RUN INSULATION	100 LF	Assumed
MULTIPURPOSE ROOM		
CEILING TILE	2,630 SF	Assumed
MULTIPURPOSE ROOM		
CEILING TILE MASTIC	2,630 SF	Assumed
STAGE		
CEILING TILE	800 SF	Assumed
STAGE		
VINYL WALL COVER	610 SF	Assumed
STAGE		
VINYL WALL COVER MASTIC	610 SF	Assumed

FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
WOOD SHED		
LARGE WOOD SHED BY THE MAIN FIELD		
FIRE DOOR CORE INSULATION	21 SF	Assumed

End Of Report, Total Of 10 Pages

S=Sq. Ft, I=Inches, L=Linear Ft., N=Number, EA=Each

NON- FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / LOCATION / MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)		
CHINESE CLASSROOM AND OFFICES		
CHALK BOARD	88 SF	Assumed
CHINESE CLASSROOM AND OFFICES		
WALL MASTIC	88 SF	Assumed
CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER		
CARPET MASTIC	1,100 SF	Assumed
CLASSROOM 12		
BASEBOARD MASTIC	150 LF	Assumed
ROOM G		
BASEBOARD MASTIC	90 LF	Assumed
ROOM G		
MORTAR MISCELLANEOUS	332 SF	Assumed
ROOM G, CLASSROOM 12, KITCHEN, AND RESTROOM		
FLOOR MASTIC	470 SF	Assumed
STAFF RESTROOM		
BASEBOARD MASTIC	10 LF	Assumed
STAFF RESTROOM		
VINYL SHEETING	12 SF	Assumed
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)		
ELECTRICAL ROOM		
VINYL FLOOR TILE	56 SF	Assumed
ELECTRICAL ROOM		
VINYL FLOOR TILE MASTIC	56 SF	Assumed
EXTERIOR KIDS' RESTROOM		
VINYL FLOOR TILE	72 SF	Assumed
EXTERIOR KIDS' RESTROOM		
VINYL FLOOR TILE MASTIC	72 SF	Assumed
EXTERIOR KIDS' RESTROOM		
VINYL SHEETING	72 SF	Assumed
EXTERIOR KIDS' RESTROOM		
VINYL WALL COVER	160 SF	Assumed
EXTERIOR KIDS' RESTROOM		
VINYL WALL COVER MASTIC	160 SF	Assumed
HALLWAY BETWEEN OFFICE AND ROOMS 1-6		
CEILING TILE MASTIC	4,110 SF	Assumed
HALLWAYS		
BASEBOARD MASTIC	540 LF	New Material
HALLWAYS		
CARPET MASTIC	5,200 SF	New Material
HALLWAYS AND OFFICES		
BASEBOARD MASTIC	640 LF	Assumed

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NON- FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
HALLWAYS AND OFFICES		
CARPET MASTIC	6,790 SF	Assumed
INFANT ROOM		
BASEBOARD MASTIC	132 LF	Assumed
ROOM 11		
VINYL FLOOR TILE	170 SF	Assumed
ROOM 11		
VINYL FLOOR TILE MASTIC	170 SF	Assumed
ROOM 2		
WALL TILE MASTIC	440 SF	Assumed
ROOMS 1-7, 11 AND INFANT ROOM		
PRESSED WOOD WALL PANEL MASTIC	5,900 SF	Assumed
ROOMS 1-7, 11 AND INFANT ROOM		
VINYL WALL COVER	5,900 SF	Assumed
ROOMS 1-7, 11 AND INFANT ROOM		
VINYL WALL COVER MASTIC	5,900 SF	Assumed
ROOMS 2-5		
VINYL FLOOR TILE	482 SF	Assumed
ROOMS 2-5		
VINYL FLOOR TILE MASTIC	482 SF	Assumed
ROOMS 4, 5, AND INFANT ROOM		
CARPET MASTIC	1,510 SF	Assumed
ROOMS 6, 7, 8A, 8B AND 9		
FLOOR MASTIC	2,440 SF	Assumed
ROOMS 9-11 AND INFANT ROOM		
VINYL FLOOR TILE MASTIC	2,310 SF	Assumed
STUDENT RESTROOMS		
MORTAR MISCELLANEOUS	610 SF	Assumed
STUDENT RESTROOMS		
PLASTER WALL	2,500 SF	Assumed
STUDENT RESTROOMS		
PLASTER WALL SURFACING	2,500 SF	Assumed
STUDENT RESTROOMS		
TERRAZZO FLOOR	670 SF	Assumed
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)		
BOILER ROOM		
ROUGH WALL SURFACING	415 SF	Assumed
BOYS' AND GIRLS' RESTROOM		
MORTAR MISCELLANEOUS	810 SF	Assumed
BOYS' AND GIRLS' RESTROOMS		
TERRAZZO FLOOR	810 SF	Assumed

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NON- FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS		
BASEBOARD MASTIC	160 LF	Assumed
CLASSROOMS C1-C5, C7-C8, HALLWAY, AND STORAGE ROOMS OF C7		
BASEBOARD MASTIC	996 LF	Assumed
CLASSROOMS C1-C7		
PRESSED WOOD WALL PANEL MASTIC	4,100 SF	Assumed
MEN'S AND WOMEN'S RESTROOMS		
MORTAR MISCELLANEOUS	380 SF	Assumed
OFFICES		
BASEBOARD MASTIC	100 LF	Assumed
OFFICES		
CARPET MASTIC	600 SF	Assumed
OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS		
PLASTER WALL	4,200 SF	Assumed
OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS		
PLASTER WALL SURFACING	4,200 SF	Assumed
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)		
EXTERIOR WALLS		
ROUGH WALL	2,500 SF	Assumed
EXTERIOR WALLS		
ROUGH WALL SURFACING	2,500 SF	Assumed
HALLWAY (BY DRINKING FOUNTAIN)		
MORTAR MISCELLANEOUS	32 SF	Assumed
ROOMS D1-D6		
PRESSED WOOD WALL PANEL MASTIC	1,250 SF	Assumed
ROOMS D1-D6		
VINYL WALL COVER	1,250 SF	Assumed
ROOMS D1-D6		
VINYL WALL COVER MASTIC	1,250 SF	Assumed
ROOMS D1-D9, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET		
BASEBOARD MASTIC	1,580 LF	Assumed
ROOMS D1-D9, HALLWAY, OFFICES, AND IDF ROOM		
CARPET MASTIC	11,050 SF	Assumed
ROOMS D3-D4		
PRESSED WOOD WALL PANEL	760 SF	Assumed
ROOMS D3-D4		
PRESSED WOOD WALL PANEL MASTIC	760 SF	Assumed
ROOMS D3-D4		
VINYL WALL COVER	760 SF	Assumed
ROOMS D3-D4		
VINYL WALL COVER MASTIC	760 SF	Assumed

S=Sq. Ft, I=Inches, L=Linear Ft., N=Number, EA=Each

NON- FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
STAFF RESTROOMS		
VINYL SHEETING	190 SF	Assumed
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)		
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS		
MORTAR MISCELLANEOUS	570 SF	Assumed
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS		
PLASTER WALL	1,680 SF	Assumed
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS		
PLASTER WALL SURFACING	1,680 SF	Assumed
CLASSROOM C8 CLOSET		
CEILING MASTIC	190 SF	Assumed
CLASSROOM E3 AND CLASSROOM E8 - THREE CLOSETS		
WALL MASTIC	660 SF	Assumed
CLASSROOM E7 AND CLASSROOM E7 CLOSET		
CARPET MASTIC	580 SF	Assumed
CLASSROOM E7, CLASSROOM E7 CLOSET, AND HALLWAYS		
BASEBOARD MASTIC	300 LF	Assumed
CLASSROOM E7 CLOSET		
VINYL FLOOR TILE	216 SF	Assumed
CLASSROOM E7 CLOSET		
VINYL FLOOR TILE MASTIC	216 SF	Assumed
CLASSROOM E8		
CARPET MASTIC	1,780 SF	Assumed
CLASSROOM E8 CLOSET		
FLOOR MASTIC	50 SF	Assumed
CLASSROOMS E2-E7		
FLOOR MASTIC	6,260 SF	Assumed
CLASSROOMS E7 AND E8 STORAGES		
SINK UNDERCOATING	6 SF	Assumed
E1 (MAIN OFFICE) AND OFFICES		
BASEBOARD MASTIC	137 LF	Assumed
HALLWAYS		
VINYL FLOOR TILE	1,835 SF	Assumed
HALLWAYS		
VINYL FLOOR TILE MASTIC	1,835 SF	Assumed
STUDENT RESTROOM		
MORTAR MISCELLANEOUS	224 SF	Assumed
STUDENT RESTROOM		
MORTAR MISCELLANEOUS	221 SF	Assumed

NON- FRIABLE LOCATIONS IN

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / LOCATION / MATERIAL TYPE	QTY (APPROXIMATE)	ASBESTOS CONTENT
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100		
ENTIRE BUILDING		
WOOD WALL PANEL MASTIC	7,200 SF	Assumed
OFFICE		
CEILING TILE MASTIC	70 SF	Assumed
RESTROOMS, SHOWER ROOM, AND TRAINER ROOM		
MORTAR MISCELLANEOUS	670 SF	Assumed
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)		
BOYS' AND GIRLS' RESTROOMS BY ROOM B, AND STAFF RESTROOMS		
MORTAR MISCELLANEOUS	320 SF	Assumed
CLASSROOMS A, B, C, AND D		
FLOOR MASTIC	1,600 SF	Assumed
HALLWAYS AND CLASSROOMS A, B AND C		
VINYL FLOOR TILE	810 SF	Assumed
HALLWAYS AND CLASSROOMS A, B AND C		
VINYL FLOOR TILE MASTIC	810 SF	Assumed
MULTIPURPOSE ROOM		
VINYL WALL COVER	1,120 SF	Assumed
MULTIPURPOSE ROOM		
VINYL WALL COVER MASTIC	1,120 SF	Assumed
MULTIPURPOSE ROOM, HALLWAY, CLOSET, STAIRS OF STAGE, STAFF LOUNGE, AND ROOM A AND B CLOSET		
CARPET MASTIC	2,660 SF	Assumed
RESTROOMS BY ROOM B (2 EA) AND RESTROOMS BY STAFF LOUNGE (2 EA)		
MORTAR MISCELLANEOUS	560 SF	Assumed
ROOM C		
VINYL FLOOR TILE	960 SF	Assumed
ROOM C		
VINYL FLOOR TILE MASTIC	960 SF	Assumed
ROOMS A AND B, HALLWAYS, AND MULTIPURPOSE ROOM		
BASEBOARD MASTIC	200 LF	Assumed
STAGE		
CEILING TILE MASTIC	800 SF	Assumed
STAGE		
CURTAINS	630 SF	Assumed
STAGE		
FLOOR MASTIC	800 SF	Assumed
STAGE AND ENTRY TO STAGE		
BASEBOARD MASTIC	90 LF	Assumed

End Of Report, Total Of 5 Pages

S=Sq. Ft, I=Inches, L=Linear Ft., N=Number, EA=Each

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CHINESE CLASSROOM AND CLASSROOM 12

SUSPENDED CEILING TILE — 510 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CHINESE CLASSROOM AND OFFICES

CHALK BOARD — 88 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CHINESE CLASSROOM AND OFFICES

WALL MASTIC — 88 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER

BASEBOARD MASTIC — 210 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER

CARPET MASTIC — 1,100 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM 12

BASEBOARD MASTIC — 150 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM 12

SUSPENDED CEILING TILE — 740 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM 12

VINYL FLOOR TILE — 510 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)
CLASSROOM 12	
VINYL FLOOR TILE MASTIC	510 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
DOORS - EXTERIOR	
FIRE DOOR CORE INSULATION	105 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
DOORS - INTERIOR	
FIRE DOOR CORE INSULATION	378 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ELECTRICAL ROOM	
BASEBOARD MASTIC	20 LF
(a) Sample the material. If ACM include this material in the Operations and Maintenance (O & M) manual. Maintain the material in an intact and undamaged condition (b) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

S=Sq. Ft, I=Inches, L=Linear Ft., N=Number, EA=Each

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY

VINYL FLOOR TILE — 610 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY

VINYL FLOOR TILE MASTIC — 610 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL — 2,460 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING — 2,460 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

EXTERIOR WINDOWS

CAULKING — 400 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

KIDS' RESTROOM IN CLASSROOM 12

VINYL SHEETING — 72 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

KIDS' RESTROOM IN CLASSROOM 12

VINYL SHEETING BACKING PAPER/MASTIC — 72 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM

PLASTER WALL — 450 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

MECHANICAL ROOM

PLASTER WALL SURFACING — 450 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE FITTING INSULATION — 50 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE RUN INSULATION — 160 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM G

BASEBOARD MASTIC — 90 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

ROOM G

MORTAR MISCELLANEOUS — 332 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM G, CLASSROOM 12, KITCHEN, AND RESTROOM

FLOOR MASTIC — 470 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER

SMOOTH WALL MISCELLANEOUS — 6,000 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER

SMOOTH WALL SURFACING — 6,000 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
ROOM G RESTROOM	
PLASTER WALL	110 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM G RESTROOM	
PLASTER WALL SURFACING	110 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM G, STAFF RESTROOM, OFFICES, HALLWAY, AND ELECTRICAL ROOM	
CEILING TILE	124 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STAFF RESTROOM	
BASEBOARD MASTIC	10 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
STAFF RESTROOM	
VINYL SHEETING	12 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STAFF RESTROOM	
VINYL SHEETING BACKING PAPER/MASTIC	12 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

DOORS - EXTERIOR	
FIRE DOOR CORE INSULATION	231 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ELECTRICAL ROOM	
VINYL FLOOR TILE	56 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

ELECTRICAL ROOM

VINYL FLOOR TILE MASTIC — 56 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS

SMOOTH WALL MISCELLANEOUS — 27,830 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS

SMOOTH WALL SURFACING — 15,350 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR KIDS' RESTROOM

VINYL FLOOR TILE — 72 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)
EXTERIOR KIDS' RESTROOM	
VINYL FLOOR TILE MASTIC	72 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
EXTERIOR KIDS' RESTROOM	
VINYL SHEETING	72 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
EXTERIOR KIDS' RESTROOM	
VINYL SHEETING BACKING PAPER/MASTIC	72 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
EXTERIOR KIDS' RESTROOM	
VINYL WALL COVER	160 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

EXTERIOR KIDS' RESTROOM

VINYL WALL COVER MASTIC — 160 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL — 4,500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING — 4,500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WINDOWS

CAULKING — 3,194 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
HALLWAY BETWEEN OFFICE AND ROOMS 1-6	
CEILING TILE	4,110 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
HALLWAY BETWEEN OFFICE AND ROOMS 1-6	
CEILING TILE MASTIC	4,110 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
HALLWAYS	
BASEBOARD MASTIC	540 LF
(a) This is a replacement/new material. (b) The District should obtain documentation from the manufacturer/installer that no asbestos has been used in the manufacture or installation of this building material. (c) This documentation is to be maintained with the District's AHERA records.	
HALLWAYS	
CARPET MASTIC	5,200 SF
(a) This is a replacement/new material. (b) The District should obtain documentation from the manufacturer/installer that no asbestos has been used in the manufacture or installation of this building material. (c) This documentation is to be maintained with the District's AHERA records.	

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)
HALLWAYS AND OFFICES	
BASEBOARD MASTIC	640 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
HALLWAYS AND OFFICES	
CARPET MASTIC	6,790 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
INFANT ROOM	
BASEBOARD MASTIC	132 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
MECHANICAL ROOM	
PLASTER WALL	710 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

MECHANICAL ROOM

PLASTER WALL SURFACING — 710 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS

PIPE FITTING INSULATION — 110 EA

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS

PIPE RUN INSULATION — 250 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM 11

VINYL FLOOR TILE — 170 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

ROOM 11

VINYL FLOOR TILE MASTIC — 170 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM 2

WALL TILE — 440 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOM 2

WALL TILE MASTIC — 440 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS 1, 2, 3, 4, 8A. 8B, 9, 11, ELECTRICAL ROOM, EXTRACURRICULAR ROOM, OFFICE, AND STAFF LOUNGE

SUSPENDED CEILING TILE — 9,600 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

ROOMS 1-5 AND 7

VINYL FLOOR TILE — 1,240 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS 1-5 AND 7

VINYL FLOOR TILE MASTIC — 1,240 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS 1-7, 11 AND INFANT ROOM

PRESSED WOOD WALL PANEL MASTIC — 5,900 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS 1-7, 11 AND INFANT ROOM

VINYL WALL COVER — 5,900 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)
ROOMS 1-7, 11 AND INFANT ROOM	
VINYL WALL COVER MASTIC	5,900 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS 1-7, 11 AND INFORMATION ROOM	
PRESSED WOOD WALL PANEL	5,900 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS 10 AND 11, ELECTRICAL ROOM, TEACHERS' LOUNGE, EXTRA-CURRICULAR ROOM, EXTERIOR RESTROOM, AND STORAGE	
BASEBOARD MASTIC	400 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS 2-5	
BASEBOARD MASTIC	230 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
ROOMS 2-5	
VINYL FLOOR TILE	482 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS 2-5	
VINYL FLOOR TILE MASTIC	482 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS 4, 5, AND INFANT ROOM	
CARPET MASTIC	1,510 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS 6, 7, 8A, 8B AND 9	
FLOOR MASTIC	2,440 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

ROOMS 6 AND 10

SUSPENDED CEILING TILE — 1,920 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS 9-11 AND INFANT ROOM

VINYL FLOOR TILE — 2,310 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS 9-11 AND INFANT ROOM

VINYL FLOOR TILE MASTIC — 2,310 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STUDENT RESTROOMS

MORTAR MISCELLANEOUS — 610 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

STUDENT RESTROOMS

PLASTER WALL — 2,500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STUDENT RESTROOMS

PLASTER WALL SURFACING — 2,500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STUDENT RESTROOMS

TERRAZZO FLOOR — 670 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM

DUCT WRAP TAPE — 420 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BOILER ROOM

ROUGH WALL SURFACING — 415 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM

PLASTER WALL — 2,550 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM

PLASTER WALL SURFACING — 2,550 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS	
PIPE FITTING INSULATION	100 EA
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS	
PIPE RUN INSULATION	450 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
BOYS' AND GIRLS' RESTROOM	
MORTAR MISCELLANEOUS	810 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
BOYS' AND GIRLS' RESTROOMS	
TERRAZZO FLOOR	810 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME
LOCATION
MATERIAL TYPE — **QTY (APPROXIMATE)**
RECOMMENDATION

CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS

BASEBOARD MASTIC — 160 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS

VINYL FLOOR TILE — 830 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS

VINYL FLOOR TILE MASTIC — 830 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS C1-C5, C7-C8, HALLWAY, AND STORAGE ROOMS OF C7

BASEBOARD MASTIC — 996 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
CLASSROOMS C1-C7	
PRESSED WOOD WALL PANEL	4,100 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS C1-C7	
PRESSED WOOD WALL PANEL MASTIC	4,100 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS C1-C7	
VINYL WALL COVER	4,100 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS C1-C7	
VINYL WALL COVER MASTIC	4,100 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
CLASSROOMS C1-C8	
SUSPENDED CEILING TILE	7,400 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
CLASSROOMS C1-C8, HALLWAY AND CLOSETS	
VINYL FLOOR TILE	6,410 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
CLASSROOMS C1-C8, HALLWAY AND CLOSETS	
VINYL FLOOR TILE MASTIC	6,410 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM	
SMOOTH WALL MISCELLANEOUS	13,510 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM

SMOOTH WALL SURFACING — 11,160 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS C7 AND C8 STORAGE ROOMS

SUSPENDED CEILING TILE — 710 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION — 378 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

DOORS - INTERIOR

FIRE DOOR CORE INSULATION — 840 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)
EXTERIOR	
ROUGH WALL SURFACING	4,850 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
EXTERIOR WALLS AND OVERHANGS	
ROUGH WALL	4,850 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
EXTERIOR WINDOWS	
CAULKING	1,900 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
HALLWAY	
CEILING TILE	2,350 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
HALLWAY	
CEILING TILE MASTIC	2,350 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
HALLWAY	
VINYL FLOOR TILE	1,250 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
HALLWAY	
VINYL FLOOR TILE MASTIC	1,250 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
MEN'S AND WOMEN'S RESTROOMS	
MORTAR MISCELLANEOUS	270 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

MEN'S AND WOMEN'S RESTROOMS

MORTAR MISCELLANEOUS — 380 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

OFFICES

BASEBOARD MASTIC — 100 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

OFFICES

CARPET MASTIC — 600 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS

PLASTER WALL — 4,200 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS	
PLASTER WALL SURFACING	4,200 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)	
D7 -D9	
VINYL WALL COVER	3,600 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
D7-D9	
VINYL WALL COVER MASTIC	3,600 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
DOORS - EXTERIOR	
FIRE DOOR CORE INSULATION	294 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
DOORS - INTERIOR	
FIRE DOOR CORE INSULATION	189 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS	
ROUGH WALL	2,500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS	
ROUGH WALL SURFACING	2,500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAY	
CEILING TILE	1,520 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

HALLWAY

CEILING TILE MASTIC — 1,520 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA

VINYL FLOOR TILE — 690 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA

VINYL FLOOR TILE MASTIC — 690 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAY (BY DRINKING FOUNTAIN)

MORTAR MISCELLANEOUS — 32 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

MECHANICAL ROOM

PLASTER WALL — 500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM

PLASTER WALL SURFACING — 500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM AND CONCEALED LOCATIONS

PIPE FITTING INSULATION — 12 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM AND CONCEALED LOCATIONS

PIPE RUN INSULATION — 50 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

ROOMS D1, D2, D4 CLOSET, AND STAFF RESTROOMS

SUSPENDED CEILING TILE — 2,500 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS D1-D6

PRESSED WOOD WALL PANEL — 1,250 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS D1-D6

PRESSED WOOD WALL PANEL MASTIC — 1,250 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS D1-D6

VINYL WALL COVER — 1,250 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

ROOMS D1-D6

VINYL WALL COVER MASTIC — 1,250 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS D1-D9, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET

BASEBOARD MASTIC — 1,580 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS D1-D9, HALLWAY, OFFICES, AND IDF ROOM

CARPET MASTIC — 11,050 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET

SMOOTH WALL MISCELLANEOUS — 14,450 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET	
SMOOTH WALL SURFACING	14,450 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS D2, D5, D6, D7, D8, AND D9	
SUSPENDED CEILING TILE	6,100 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS D3-D4	
PRESSED WOOD WALL PANEL	760 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOMS D3-D4	
PRESSED WOOD WALL PANEL MASTIC	760 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

ROOMS D3-D4

SMOOTH WALL SURFACING — 760 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS D3-D4

VINYL WALL COVER — 760 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ROOMS D3-D4

VINYL WALL COVER MASTIC — 760 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STAFF RESTROOMS

VINYL SHEETING — 190 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
STAFF RESTROOMS	
VINYL SHEETING BACKING PAPER/MASTIC	190 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS	
MORTAR MISCELLANEOUS	570 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS	
PLASTER WALL	1,680 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS	
PLASTER WALL SURFACING	1,680 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS

TERRAZZO FLOOR — 410 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM C8 CLOSET

CEILING MASTIC — 190 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM E3 AND CLASSROOM E8 - THREE CLOSETS

WALL MASTIC — 660 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM E7 AND CLASSROOM E7 CLOSET

CARPET MASTIC — 580 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

CLASSROOM E7, CLASSROOM E7 CLOSET, AND HALLWAYS

BASEBOARD MASTIC — 300 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM E7 CLOSET

VINYL FLOOR TILE — 216 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM E7 CLOSET

VINYL FLOOR TILE MASTIC — 216 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM E8

CARPET MASTIC — 1,780 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

CLASSROOM E8 CLOSET

FLOOR MASTIC — 50 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM E8 CLOSET

VINYL SHEETING — 102 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOM E8 CLOSET

VINYL SHEETING BACKING PAPER/MASTIC — 102 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS E2-E6 AND OFFICE

SUSPENDED CEILING TILE — 5,952 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
CLASSROOMS E2-E7	
FLOOR MASTIC	6,260 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS E2-E8, HALLWAYS, AND STUDENT RESTROOMS	
SMOOTH WALL MISCELLANEOUS	17,510 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS E2-E8, HALLWAYS AND STUDENT RESTROOMS	
SMOOTH WALL SURFACING	10,510 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS E7 AND E8 STORAGES	
SINK UNDERCOATING	6 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
DOORS - EXTERIOR	
FIRE DOOR CORE INSULATION	420 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
DOORS - INTERIOR	
FIRE DOOR CORE INSULATION	189 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
E1 (MAIN OFFICE) AND OFFICES	
BASEBOARD MASTIC	137 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
E1 (MAIN OFFICE) AND OFFICES	
VINYL FLOOR TILE	992 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
E1 (MAIN OFFICE) AND OFFICES	
VINYL FLOOR TILE MASTIC	992 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
E7 STORAGE	
SUSPENDED CEILING TILE	456 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
EXTERIOR WALLS AND OVERHANGS	
ROUGH WALL	3,110 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
EXTERIOR WALLS AND OVERHANGS	
ROUGH WALL SURFACING	3,110 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

EXTERIOR WINDOWS

CAULKING — 990 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAYS

CARPET MASTIC — 1,835 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAYS

VINYL FLOOR TILE — 1,835 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAYS

VINYL FLOOR TILE MASTIC — 1,835 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

HALLWAYS, AND CLASSROOMS E7 AND E8

CEILING TILE — 4,226 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAYS, AND CLASSROOMS E7 AND E8

CEILING TILE MASTIC — 4,226 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM

PLASTER WALL — 780 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM

PLASTER WALL SURFACING — 780 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE FITTING INSULATION — 110 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE RUN INSULATION — 410 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM, TWO CLOSETS OF ROOM 27 AND THREE CLOSETS AT ROOM E8

BASEBOARD MASTIC — 170 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STUDENT RESTROOM

MORTAR MISCELLANEOUS — 224 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
STUDENT RESTROOM	
MORTAR MISCELLANEOUS	221 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100	
DOORS - EXTERIOR	
FIRE DOOR CORE INSULATION	273 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
DOORS - INTERIOR	
FIRE DOOR CORE INSULATION	252 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ENTIRE BUILDING	
PLASTER WALL	6,000 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

ENTIRE BUILDING

PLASTER WALL SURFACING — 6,000 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ENTIRE BUILDING

SMOOTH WALL MISCELLANEOUS — 3,000 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ENTIRE BUILDING

SMOOTH WALL SURFACING — 3,000 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ENTIRE BUILDING

WOOD WALL PANEL MASTIC — 7,200 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE FITTING INSULATION — 27 EA

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE RUN INSULATION — 120 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS

ROUGH WALL — 2,600 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS

ROUGH WALL SURFACING — 2,600 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

LOCKER ROOMS, OFFICES, AND TRAINER ROOM

CARPET MASTIC — 0 SF

The material has been removed. No further recommendation is required

MECHANICAL ROOM

BOILER GASKET — 22 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM

TANK (HIGH TEMP) INSULATION — 100 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

OFFICE

CEILING TILE — 70 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

RECOMMENDATIONS FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)
OFFICE	
CEILING TILE MASTIC	70 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
PRINT SHOP	
CAULKING	70 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
PRINT SHOP, OFFICES, AND STORAGE ROOMS	
BASEBOARD MASTIC	270 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
RESTROOMS AND STORAGE ROOMS	
HEAT SHIELD	11 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
RESTROOMS, SHOWER ROOM, AND TRAINER ROOM	
MORTAR MISCELLANEOUS	670 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BOYS' AND GIRLS' RESTROOMS BY ROOM B	
HEAT SHIELD	8 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BOYS' AND GIRLS' RESTROOMS BY ROOM B, AND STAFF RESTROOMS	
MORTAR MISCELLANEOUS	320 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E	
PLASTER WALL	1,940 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME
LOCATION
MATERIAL TYPE
RECOMMENDATION

QTY (APPROXIMATE)

BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E

PLASTER WALL SURFACING — 1,940 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS A AND B, AND TWO CLOSETS

SUSPENDED CEILING TILE — 1,800 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS A, B, C, AND D

FLOOR MASTIC — 1,600 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

CLASSROOMS B AND E

WALL TILE — 350 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
CLASSROOMS B AND E	
WALL TILE MASTIC	350 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

DOORS - EXTERIOR	
FIRE DOOR CORE INSULATION	378 SF

(a) Sample the material. If ACM include this material in the Operations and Maintenance (O & M) manual. Maintain the material in an intact and undamaged condition
(b) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

DOORS - INTERIOR	
FIRE DOOR CORE INSULATION	336 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)	
SMOOTH WALL MISCELLANEOUS	13,190 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME LOCATION MATERIAL TYPE RECOMMENDATION	QTY (APPROXIMATE)

ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)

SMOOTH WALL SURFACING — 7,800 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL — 7,310 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING — 7,310 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

EXTERIOR WINDOWS

CAULKING — 340 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

HALLWAYS AND CLASSROOMS A, B AND C

VINYL FLOOR TILE — 810 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

HALLWAYS AND CLASSROOMS A, B AND C

VINYL FLOOR TILE MASTIC — 810 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM AND CONCEALED LOCATIONS

PIPE FITTING INSULATION — 15 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

MECHANICAL ROOM AND CONCEALED LOCATIONS

PIPE RUN INSULATION — 100 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
MULTIPURPOSE ROOM	
CEILING TILE	2,630 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
MULTIPURPOSE ROOM	
CEILING TILE MASTIC	2,630 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
MULTIPURPOSE ROOM	
VINYL WALL COVER	1,120 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
MULTIPURPOSE ROOM	
VINYL WALL COVER MASTIC	1,120 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
MULTIPURPOSE ROOM, HALLWAY, CLOSET, STAIRS OF STAGE, STAFF LOUNGE, AND ROOM A AND B CLOSET	
CARPET MASTIC	2,660 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
RESTROOMS BY ROOM B (2 EA) AND RESTROOMS BY STAFF LOUNGE (2 EA)	
MORTAR MISCELLANEOUS	560 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOM C	
VINYL FLOOR TILE	960 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
ROOM C	
VINYL FLOOR TILE MASTIC	960 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
ROOMS A AND B, HALLWAYS, AND MULTIPURPOSE ROOM	
BASEBOARD MASTIC	200 LF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
STAGE	
CEILING TILE	800 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
STAGE	
CEILING TILE MASTIC	800 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	
STAGE	
CURTAINS	630 SF
(a) No abatement is necessary. (b) Maintain the material in an intact and undamaged condition. (c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos. (d) Include this material in the long term surveillance and re-inspection program (e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.	

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)
STAGE	
FLOOR MASTIC	800 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STAGE	
VINYL WALL COVER	610 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STAGE	
VINYL WALL COVER MASTIC	610 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

STAGE AND ENTRY TO STAGE	
BASEBOARD MASTIC	90 LF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

BUILDING NAME / LOCATION / MATERIAL TYPE / RECOMMENDATION	QTY (APPROXIMATE)

METAL STORAGE CONTAINERS

METAL STORAGE CONTAINERS (22 EA)

STORAGE CONTAINER — 8,240 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

WOOD SHED

LARGE WOOD SHED BY THE MAIN FIELD

FIRE DOOR CORE INSULATION — 21 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

WOOD STORAGE SHEDS (4 EA)

STORAGE BUILDING — 390 SF

(a) No abatement is necessary.
(b) Maintain the material in an intact and undamaged condition.
(c) Include this material in the Operations and Maintenance (O & M) program until it has been replaced with a material that does not contain Asbestos.
(d) Include this material in the long term surveillance and re-inspection program
(e) Remove the material if it becomes damaged or repairs and maintenance work may impact this material. Removal must be designed and performed by accredited personnel only.

End Of Report, Total Of 63 Pages

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CHINESE CLASSROOM AND CLASSROOM 12					
SUSPENDED CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CHINESE CLASSROOM AND OFFICES					
CHALK BOARD					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CHINESE CLASSROOM AND OFFICES					
WALL MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CHINESE CLASSROOM, HALLWAY, OFFICES, AND FOYER					
CARPET MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM 12					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM 12					
SUSPENDED CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM 12					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM 12					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
DOORS - EXTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
DOORS - INTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ELECTRICAL ROOM					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL					
15-182AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WINDOWS					
CAULKING					
15-144AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
KIDS' RESTROOM IN CLASSROOM 12					
VINYL SHEETING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
KIDS' RESTROOM IN CLASSROOM 12					
VINYL SHEETING BACKING PAPER/MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM					
PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM					
PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS					
PIPE FITTING INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM, AND ENTIRE BUILDING - CONCEALED LOCATIONS					
PIPE RUN INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ROOM G					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ROOM G					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ROOM G, CLASSROOM 12, KITCHEN, AND RESTROOM					
FLOOR MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER					
SMOOTH WALL MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER					
SMOOTH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ROOM G RESTROOM					
PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ROOM G RESTROOM					
PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
ROOM G, STAFF RESTROOM, OFFICES, HALLWAY, AND ELECTRICAL ROOM					
CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
STAFF RESTROOM					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
STAFF RESTROOM					
VINYL SHEETING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)					
STAFF RESTROOM					
VINYL SHEETING BACKING PAPER/MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
DOORS - EXTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ELECTRICAL ROOM					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ELECTRICAL ROOM					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS					
SMOOTH WALL MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS					
SMOOTH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR KIDS' RESTROOM					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR KIDS' RESTROOM					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR KIDS' RESTROOM					
VINYL SHEETING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR KIDS' RESTROOM					
VINYL SHEETING BACKING PAPER/MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR KIDS' RESTROOM					
VINYL WALL COVER					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR KIDS' RESTROOM					
VINYL WALL COVER MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WINDOWS					
CAULKING					
15-182AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
HALLWAY BETWEEN OFFICE AND ROOMS 1-6					
CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
HALLWAY BETWEEN OFFICE AND ROOMS 1-6					
CEILING TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS					
BASEBOARD MASTIC					
17-211.NS	11/1/2017	Negative	NEW MATERIAL	NO SAMPLE	NS
New Material Installed in 2017.					
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS					
CARPET MASTIC					
17-211.NS	11/1/2017	Negative	NEW MATERIAL	NO SAMPLE	NS
New Material Installed in 2017.					
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS AND OFFICES					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS AND OFFICES					
CARPET MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
INFANT ROOM					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) MECHANICAL ROOM PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) MECHANICAL ROOM PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS PIPE FITTING INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) MECHANICAL ROOM AND ENTIRE BUILDING IN CONCEALED LOCATIONS PIPE RUN INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOM 11 VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOM 11 VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOM 2 WALL TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ROOM 2					
WALL TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ROOMS 1, 2, 3, 4, 8A. 8B, 9, 11, ELECTRICAL ROOM, EXTRACURRICULAR ROOM, OFFICE, AND STAFF LOUNGE					
SUSPENDED CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ROOMS 1-5 AND 7					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ROOMS 1-5 AND 7					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ROOMS 1-7, 11 AND INFANT ROOM					
PRESSED WOOD WALL PANEL MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ROOMS 1-7, 11 AND INFANT ROOM					
VINYL WALL COVER					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)					
ROOMS 1-7, 11 AND INFANT ROOM					
VINYL WALL COVER MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 1-7, 11 AND INFORMATION ROOM PRESSED WOOD WALL PANEL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 10 AND 11, ELECTRICAL ROOM, TEACHERS' LOUNGE, EXTRA-CURRICULAR ROOM, EXTERIOR RESTROOM, AND STORAGE BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 2-5 BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 2-5 VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 2-5 VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 4, 5, AND INFANT ROOM CARPET MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 6, 7, 8A, 8B AND 9 FLOOR MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 6 AND 10 SUSPENDED CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 9-11 AND INFANT ROOM VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) ROOMS 9-11 AND INFANT ROOM VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) STUDENT RESTROOMS MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) STUDENT RESTROOMS PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) STUDENT RESTROOMS PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL) STUDENT RESTROOMS TERRAZZO FLOOR					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BOILER ROOM					
DUCT WRAP TAPE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BOILER ROOM					
ROUGH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM					
PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM					
PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS					
PIPE FITTING INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BOILER ROOM AND ENTIRE BUILDING - CONCEALED LOCATIONS					
PIPE RUN INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BOYS' AND GIRLS' RESTROOM					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
BOYS' AND GIRLS' RESTROOMS					
TERRAZZO FLOOR					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C5, C7-C8, HALLWAY, AND STORAGE ROOMS OF C7					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C7					
PRESSED WOOD WALL PANEL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C7					
PRESSED WOOD WALL PANEL MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C7					
VINYL WALL COVER					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C7					
VINYL WALL COVER MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C8					
SUSPENDED CEILING TILE					
15-082.NS	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C8, HALLWAY AND CLOSETS					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C8, HALLWAY AND CLOSETS					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM					
SMOOTH WALL MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C1-C8, STORAGE ROOMS, HALLWAY, STORAGE ROOM BETWEEN BOYS' RESTROOM AND GIRLS RESTROOM					
SMOOTH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
CLASSROOMS C7 AND C8 STORAGE ROOMS					
SUSPENDED CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
DOORS - EXTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
DOORS - INTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
EXTERIOR					
ROUGH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
EXTERIOR WINDOWS					
CAULKING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
HALLWAY					
CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
HALLWAY					
CEILING TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
HALLWAY					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
HALLWAY					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
MEN'S AND WOMEN'S RESTROOMS					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
MEN'S AND WOMEN'S RESTROOMS					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
OFFICES					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
OFFICES					
CARPET MASTIC					
15-082	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS					
PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)					
OFFICES, AND MEN'S, WOMEN'S, BOYS', AND GIRLS' RESTROOMS					
PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
D7 -D9					
VINYL WALL COVER					
16-105AAA	5/12/2016	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
D7-D9					
VINYL WALL COVER MASTIC					
16-105AAA	5/12/2016	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
DOORS - EXTERIOR					
FIRE DOOR CORE INSULATION					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
DOORS - INTERIOR					
FIRE DOOR CORE INSULATION					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
EXTERIOR WALLS					
ROUGH WALL					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
EXTERIOR WALLS					
ROUGH WALL SURFACING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
HALLWAY					
CEILING TILE					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
HALLWAY					
CEILING TILE MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA					
VINYL FLOOR TILE					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA					
VINYL FLOOR TILE MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
HALLWAY (BY DRINKING FOUNTAIN)					
MORTAR MISCELLANEOUS					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
MECHANICAL ROOM					
PLASTER WALL					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
MECHANICAL ROOM					
PLASTER WALL SURFACING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
MECHANICAL ROOM AND CONCEALED LOCATIONS					
PIPE FITTING INSULATION					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
MECHANICAL ROOM AND CONCEALED LOCATIONS					
PIPE RUN INSULATION					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1, D2, D4 CLOSET, AND STAFF RESTROOMS					
SUSPENDED CEILING TILE					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1-D6					
PRESSED WOOD WALL PANEL					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1-D6					
PRESSED WOOD WALL PANEL MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1-D6					
VINYL WALL COVER					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1-D6					
VINYL WALL COVER MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1-D9, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET					
BASEBOARD MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1-D9, HALLWAY, OFFICES, AND IDF ROOM					
CARPET MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET					
SMOOTH WALL MISCELLANEOUS					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET					
SMOOTH WALL SURFACING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D2, D5, D6, D7, D8, AND D9					
SUSPENDED CEILING TILE					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D3-D4					
PRESSED WOOD WALL PANEL					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D3-D4					
PRESSED WOOD WALL PANEL MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D3-D4					
SMOOTH WALL SURFACING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D3-D4					
VINYL WALL COVER					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
ROOMS D3-D4					
VINYL WALL COVER MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
STAFF RESTROOMS					
VINYL SHEETING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)					
STAFF RESTROOMS					
VINYL SHEETING BACKING PAPER/MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS					
PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS					
PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS					
TERRAZZO FLOOR					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM C8 CLOSET					
CEILING MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E3 AND CLASSROOM E8 - THREE CLOSETS					
WALL MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E7 AND CLASSROOM E7 CLOSET					
CARPET MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E7, CLASSROOM E7 CLOSET, AND HALLWAYS					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E7 CLOSET					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E7 CLOSET					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E8					
CARPET MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E8 CLOSET					
FLOOR MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E8 CLOSET					
VINYL SHEETING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOM E8 CLOSET					
VINYL SHEETING BACKING PAPER/MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS E2-E6 AND OFFICE					
SUSPENDED CEILING TILE					
15-082.NS	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS E2-E7					
FLOOR MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS E2-E8, HALLWAYS, AND STUDENT RESTROOMS					
SMOOTH WALL MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS E2-E8, HALLWAYS AND STUDENT RESTROOMS					
SMOOTH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS E7 AND E8 STORAGES					
SINK UNDERCOATING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
DOORS - EXTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
DOORS - INTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
E1 (MAIN OFFICE) AND OFFICES					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
E1 (MAIN OFFICE) AND OFFICES					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
E1 (MAIN OFFICE) AND OFFICES					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
E7 STORAGE					
SUSPENDED CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WINDOWS					
CAULKING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS					
CARPET MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS, AND CLASSROOMS E7 AND E8					
CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS, AND CLASSROOMS E7 AND E8					
CEILING TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM					
PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM					
PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS					
PIPE FITTING INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM, CLASSROOM E8, AND ENTIRE BUILDING - CONCEALED LOCATIONS					
PIPE RUN INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM, TWO CLOSETS OF ROOM 27 AND THREE CLOSETS AT ROOM E8					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
STUDENT RESTROOM					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)					
STUDENT RESTROOM					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
DOORS - EXTERIOR					
FIRE DOOR CORE INSULATION					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
DOORS - INTERIOR					
FIRE DOOR CORE INSULATION					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
ENTIRE BUILDING					
PLASTER WALL					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
ENTIRE BUILDING					
PLASTER WALL SURFACING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
ENTIRE BUILDING					
SMOOTH WALL MISCELLANEOUS					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
ENTIRE BUILDING					
SMOOTH WALL SURFACING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
ENTIRE BUILDING					
WOOD WALL PANEL MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
ENTIRE BUILDING - CONCEALED LOCATIONS					
PIPE FITTING INSULATION					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
ENTIRE BUILDING - CONCEALED LOCATIONS					
PIPE RUN INSULATION					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
EXTERIOR WALLS					
ROUGH WALL					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
EXTERIOR WALLS					
ROUGH WALL SURFACING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
LOCKER ROOMS, OFFICES, AND TRAINER ROOM					
CARPET MASTIC					
16-105REM	5/12/2016	Negative	REMOVED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
OFFICE					
CEILING TILE					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
OFFICE					
CEILING TILE MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
PRINT SHOP					
CAULKING					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
PRINT SHOP, OFFICES, AND STORAGE ROOMS					
BASEBOARD MASTIC					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
RESTROOMS AND STORAGE ROOMS					
HEAT SHIELD					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100					
RESTROOMS, SHOWER ROOM, AND TRAINER ROOM					
MORTAR MISCELLANEOUS					
15-191AAA	11/9/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
BOYS' AND GIRLS' RESTROOMS BY ROOM B					
HEAT SHIELD					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
BOYS' AND GIRLS' RESTROOMS BY ROOM B, AND STAFF RESTROOMS					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E					
PLASTER WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E					
PLASTER WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS A AND B, AND TWO CLOSETS					
SUSPENDED CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS A, B, C, AND D					
FLOOR MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS B AND E					
WALL TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
CLASSROOMS B AND E					
WALL TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
DOORS - EXTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
DOORS - INTERIOR					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)					
SMOOTH WALL MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)					
SMOOTH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WALLS AND OVERHANGS					
ROUGH WALL SURFACING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
EXTERIOR WINDOWS					
CAULKING					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS AND CLASSROOMS A, B AND C					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
HALLWAYS AND CLASSROOMS A, B AND C					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM AND CONCEALED LOCATIONS					
PIPE FITTING INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
MECHANICAL ROOM AND CONCEALED LOCATIONS					
PIPE RUN INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
MULTIPURPOSE ROOM					
CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
MULTIPURPOSE ROOM					
CEILING TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
MULTIPURPOSE ROOM					
VINYL WALL COVER					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
MULTIPURPOSE ROOM					
VINYL WALL COVER MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
MULTIPURPOSE ROOM, HALLWAY, CLOSET, STAIRS OF STAGE, STAFF LOUNGE, AND ROOM A AND B CLOSET					
CARPET MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
RESTROOMS BY ROOM B (2 EA) AND RESTROOMS BY STAFF LOUNGE (2 EA)					
MORTAR MISCELLANEOUS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
ROOM C					
VINYL FLOOR TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
ROOM C					
VINYL FLOOR TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
ROOMS A AND B, HALLWAYS, AND MULTIPURPOSE ROOM					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
STAGE					
CEILING TILE					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
STAGE					
CEILING TILE MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
STAGE					
CURTAINS					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
STAGE					
FLOOR MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
STAGE					
VINYL WALL COVER					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
STAGE					
VINYL WALL COVER MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)					
STAGE AND ENTRY TO STAGE					
BASEBOARD MASTIC					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
METAL STORAGE CONTAINERS					
METAL STORAGE CONTAINERS					
METAL STORAGE CONTAINERS (22 EA)					
STORAGE CONTAINER					
15-082.NS	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
Metal Storage Containers.					

SAMPLES REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE

SAMPLE NO. / COMMENTS	DATE	RESULT	ASBESTOS CONTENT	ASBESTOS NAME	ASBESTOS TYPE
WOOD SHED					
WOOD SHED					
LARGE WOOD SHED BY THE MAIN FIELD					
FIRE DOOR CORE INSULATION					
15-082AAA	5/18/2015	Positive	ASSUMED	NO SAMPLE	NS
WOOD SHED					
WOOD STORAGE SHEDS (4 EA)					
STORAGE BUILDING					
15-082.NS	5/18/2015	Negative	NEW MATERIAL	NO SAMPLE	NS
Apparent New Wood Strcutures.					

End Of Report, Total Of 39 Pages

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CHINESE CLASSROOM AND CLASSROOM 12

SUSPENDED CEILING TILE — 510 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015	2'x4' Suspended Ceiling Tile. Chinese Classroom has 2 Tiles broken. <5% Physical Damage. This Material is in FAIR condition overall as of this date.
11/09/2015	This Material is unchanged as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	Additional Damage Observed. 5 Tiles with Physical Damage and 4 Tiles with Water Damage in Chinese Classroom. No other changes as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	This Material is unchanged as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.
11/18/2019	This Material is unchanged as of this date.
06/12/2020	This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM 12

SUSPENDED CEILING TILE — 740 SF — **P:** Less Than 5% — **W:** <10% Stains or Flaking

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015	4'x4' Suspended Ceiling Tile. 3 SF damaged. <10% water stains and <5% Physical Damage observed. This Material is in FAIR condition as of this date.
11/09/2015	This Material is unchanged as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	This Material is unchanged as of this date.
05/07/2018	This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM 12

VINYL FLOOR TILE — 510 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 12"x12" Multi-colored (Biege and Peach) Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks in 4 Floor Tiles in Classroom 12. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM 12

VINYL FLOOR TILE MASTIC — 510 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Mastic/Adhesive for 12"x12" Multi-colored (Biege and Peach) Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks in 4 Floor Tiles in Classroom 12. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ELECTRICAL ROOM

BASEBOARD MASTIC

20 LF

P: Less Than 50% No Debris
W: No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 4" Black Baseboard. 9 LF of Baseboard missing and Brown Mastic/Adhesive is exposed. <50% Physical Damage. This Material is in POOR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY

VINYL FLOOR TILE — 610 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015	9"x9" Brown Vinyl Floor Tile, under Carpet in some locations. In the Office by the Mechanical Room some Tiles are broken and 5 Tiles are broken in the Electrical Room. <5% Physical Damage. This Material is in FAIR condition overall as of this date.
11/09/2015	This Material is unchanged as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	Additional Damage Observed. Black Mastic is now exposed and 2 LF of Yellow Mastic exposed at the door od the office. No other changes as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.
11/18/2019	This Material is unchanged as of this date.
06/12/2020	This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ELECTRICAL ROOM, OFFICE BY MECHANICAL ROOM, ENTRY TO MECHANICAL ROOM, AND HALLWAY

VINYL FLOOR TILE MASTIC — 610 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015	Mastic/Adhesive for 9"x9" Brown Vinyl Floor Tile, under Carpet in some locations. In the Office by the Mechanical Room some Tiles are broken and 5 Tiles are broken in the Electrical Room. <5% Physical Damage. This Material is in FAIR condition overall as of this date.
11/09/2015	This Material is unchanged as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	Additional Damage Observed. Black Mastic is now exposed and 2 LF of Yellow Mastic exposed at the door of the office. No other changes as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL — 2,460 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Stucco on Exterior Walls and Overhangs. Damage observed in the form of 5 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING — 2,460 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Damage observed in the form of 5 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WINDOWS

CAULKING — 400 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Putty/Sealant on Exterior Windows. 1 LF of Window Putty/Caulking is damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL — 450 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Rough Plaster Walls and Ceiling. 1 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL SURFACING — 450 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Rough Plaster Walls and Ceiling. 1 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER

SMOOTH WALL MISCELLANEOUS — 6,000 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Gypsum Wallboard System. The Electrical Room has 1 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Chinese Classroom has 12 LF of Physical Damage across the top of one Wall. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G, KITCHEN, ELECTRICAL ROOM, CLASSROOM 12, CHINESE CLASSROOM, RESTROOMS, ALL OFFICES, HALLWAY, AND FOYER

SMOOTH WALL SURFACING — 6,000 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Gypsum Wallboard System. The Electrical Room has 1 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Chinese Classroom has 12 LF of Physical Damage across the top of one Wall. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESEMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING A - OLD ADMINISTRATION - SUITE 600 (APPLESEED MONTESSORI SCHOOL)

ROOM G, STAFF RESTROOM, OFFICES, HALLWAY, AND ELECTRICAL ROOM

CEILING TILE — 124 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 1'x1' Ceiling Tile. Tiles are nailed on. Some surfaces are damaged. In the Foyer 3 Tiles are missing. 3 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Repairs Observed. Damages repaired to missing Ceiling Tiles as of this date. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS

SMOOTH WALL MISCELLANEOUS — 27,830 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015	Gypsum Wallboard System Walls and Ceilings. Material is also behind 1'x1' Ceiling Tile and Pressed Wood Wall Panels. 3 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.
11/09/2015	This Material is unchanged as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	This Material is unchanged as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.
11/18/2019	This Material is unchanged as of this date.
06/12/2020	This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ENTIRE BUILDING EXCEPT MECHANICAL ROOM AND STUDENT RESTROOMS

SMOOTH WALL SURFACING — 15,350 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015	Skim Coat for Gypsum Wallboard System Walls and Ceilings. 3 SF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.
11/09/2015	This Material is unchanged as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	This Material is unchanged as of this date.
05/07/2018	This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL — 4,500 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Stucco on Exterior Walls and Overhangs. Material has cracks in some areas. Approximatels 2 SF of damage. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING — 4,500 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Material has cracks in some areas. Approximatels 2 SF of damage. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WINDOWS

CAULKING — 3,194 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Putty/Sealant on Exterior Windows. 3 LF damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

HALLWAY BETWEEN OFFICE AND ROOMS 1-6

CEILING TILE — 4,110 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 1'x1' Ceiling and Wall Tiles. Approximately 5 SF of surface damage. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

BUILDING NAME / LOCATION / MATERIAL TYPE / RISK ASSESMENT CATEGORY / COMMENTS	QTY (APPROXIMATE)	PHYSICAL DAMAGE (P:) / WATER DAMAGE (W:)

11/02/2016 Additional Damage Observed. 35 Tiles with surface damages. 1 Tile missing Mastic Exposed. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. 45 Tiles now have surface Damages and 3 Tiles are now Loose. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL	710 SF	**P:** Less Than 5% **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Rough Plaster Walls and Ceilings. Several holes observed on the wall. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL SURFACING — 710 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Rough Plaster Walls and Ceilings. Several holes observed on the wall <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1, 2, 3, 4, 8A. 8B, 9, 11, ELECTRICAL ROOM, EXTRACURRICULAR ROOM, OFFICE, AND STAFF LOUNGE

SUSPENDED CEILING TILE — 9,600 SF — **P:** No Visible Damage — **W:** <10% Stains or Flaking

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 4'x4' Suspended Ceiling Tile. Approximately 4 SF Water Damaged. <10% Water Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Additional Damage observed. Ceiling Tiles Water Damaged are: 1 in Classrom 4, 1 in Lounge, 1 in Classroom 1 and 2 in Classroom 8A. One loose Tile observed in the Office. No other changes as of this date.

11/02/2016 Additional Damage Observed. 2 Tiles with Water Damage in Classroom 4. No other changes as of this date.

04/24/2017 Additional Damage Observed. 2 4"x4" Suspended Ceiling Tiles have Physical Damage in Classroom 3. 1 4"x4" Suspended Ceiling Tile is Loose in Classroom 1. 1 2"x2" Water Damage and 1 4"x4" Loose in Classroom 5. 1 4"x4" Suspended Ceiling Tile with Physical Damage in Classroom 9. No other changes as of this date.

BUILDING NAME / LOCATION / MATERIAL TYPE / RISK ASSESMENT CATEGORY / COMMENTS	QTY (APPROXIMATE)	PHYSICAL DAMAGE (P:) / WATER DAMAGE (W:)

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1-5 AND 7

VINYL FLOOR TILE — 1,240 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 12"x12" Light-Brown Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 8 cracked Tiles in Classroom 7. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Classroom 6 now has 5 Cracked Tiles at the Entry. Material Re-Assessed. This material has been partially Replaced in various locations; Classroom 1 is all Wood, Classroom 2 now has an Off-White Vinyl Floor Tile (with Brown Speckles), Classrooms 3, 4 and 5 now have Off-White Vinyl Floor Tile (with Brown Speckles) and Classrooms 6 and 7 now have Off-White Vinyl Floor Tile (with Light Brown Speckles). No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 1-5 AND 7

VINYL FLOOR TILE MASTIC — 1,240 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 12"x12" Light-Brown Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 8 cracked Tiles in Classroom 7. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Classroom 6 now has 5 Cracked Tiles at the Entry. Material Re-Assessed. This material has been partially Replaced in various locations; Classroom 1 is all Wood, Classroom 2 now has an Off-White Vinyl Floor Tile (with Brown Speckles), Classrooms 3, 4 and 5 now have Off-White Vinyl Floor Tile (with Brown Speckles) and Classrooms 6 and 7 now have Off-White Vinyl Floor Tile (with Light Brown Speckles). No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 10 AND 11, ELECTRICAL ROOM, TEACHERS' LOUNGE, EXTRA-CURRICULAR ROOM, EXTERIOR RESTROOM, AND STORAGE

BASEBOARD MASTIC — 400 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 4" Black Baseboard. In the Electrical Room there is 12 LF of Baseboard missing, exposing the Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 2-5

BASEBOARD MASTIC — 230 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 4" Off-White Baseboard. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 Damage Observed. <5% Physical Damage - in the form of 1 LF of Loose Baseboard on East Wall of Room 4. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

BUILDING B - SUITE 500 (APPLESEED MONTESSORI SCHOOL)

ROOMS 9-11 AND INFANT ROOM

VINYL FLOOR TILE — 2,310 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 12"x12" Multi-colored Vinyl Floor Tile. Tiles are Peach, Red, Blue and Off-White. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/12/2016	Damage Observed. <5% Physical Damage - in the form of cracks by the door in Classroom 10. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	This Material is unchanged as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.
11/18/2019	This Material is unchanged as of this date.
06/12/2020	This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM

PLASTER WALL — 2,550 SF — **P:** Less Than 5% — **W:** >10% Evident

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Rough Plaster Walls and Ceilings. 10 SF of Water Damage and 20 SF Physical Damage in the Boiler Room. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

BOILER ROOM AND BOYS' RESTROOM STORAGE ROOM

PLASTER WALL SURFACING — 2,550 SF — **P:** Less Than 5% — **W:** <10% Stains or Flaking

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Rough Plaster Walls and Ceilings. 10 SF of Water Damage and 20 SF Physical Damage in the Boiler Room. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME / LOCATION / MATERIAL TYPE / RISK ASSESMENT CATEGORY / COMMENTS	QTY (APPROXIMATE)	PHYSICAL DAMAGE (P:) / WATER DAMAGE (W:)

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS

VINYL FLOOR TILE — 830 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 12"x12" Beige Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 4 Tiels cracked and 2 SF of Tile missing black Mastic Exposed in Classroom C7. 1 Tile missing Yellow Mastic Exposed in Classroom C6. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 Material Re-assessed. Missing Tiles have been Replaced. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOM C6 AND STORAGE BETWEEN BOYS' AND GIRLS' RESTROOMS

VINYL FLOOR TILE MASTIC — 830 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 12"x12" Beige Vinyl Floor Tile. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 4 Tiels cracked and 2 SF of Tile missing black Mastic Exposed in Classroom C7. 1 Tile missing Yellow Mastic Exposed in Classroom C6. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 Material Re-assessed. Missing Tiles have been Replaced. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C7

VINYL WALL COVER — 4,100 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 2 LF damage to Vinyl Wall Cover in Classroom C3. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME / LOCATION / MATERIAL TYPE / RISK ASSESMENT CATEGORY / COMMENTS	QTY (APPROXIMATE)	PHYSICAL DAMAGE (P:) / WATER DAMAGE (W:)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C7

VINYL WALL COVER MASTIC — 4,100 SF — **P:** Less Than 5% / **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for Vinyl Wall Cover (on Pressed-Wood Wall Panel). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 2 LF damage to Vinyl Wall Cover in Classroom C3. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C8

SUSPENDED CEILING TILE — 7,400 SF — **P:** Less Than 5% / **W:** <10% Stains or Flaking

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 4'x4' Suspended Ceiling Tile (Fiber-glass Type). Several Tiles are water damaged in each Classroom. Approximately 10 SF of Physical Damage in the form of scattered small cuts. <5% Physical Damage and <10% Water Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 Additional Damage Observed. Water Damage present on 5 Tiles in Classroom 8. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C8, HALLWAY AND CLOSETS

VINYL FLOOR TILE — 6,410 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 12"x12" Off-White with Brown Stripe Vinyl Floor Tile. Classroom C7 has 8 Tiles broken, exposing the Mastic/Adhesive. Most Classrooms have some cracked VInyl Floor Tiles. Hallway Entries have several Tiles cracked with missing pieces. Approximately 12 SF of damage. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks in 3 Floor Tiles in the Hallway. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Hallway now has 33 Cracked Floor Tiles. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

CLASSROOMS C1-C8, HALLWAY AND CLOSETS

VINYL FLOOR TILE MASTIC — 6,410 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 12"x12" Off-White with Brown Stripe Vinyl Floor Tile. Classroom C7 has 8 Tiles broken, exposing the Black Mastic/Adhesive. Most Classrooms have some cracked VInyl Floor Tiles. Hallway Entries have several Tiles cracked with missing pieces. Approximately 12 SF of damage. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESSMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks in 3 Floor Tiles in the Hallway. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Hallway now has 33 Cracked Floor Tiles. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

DOORS - EXTERIOR

FIRE DOOR CORE INSULATION — 378 SF — **P:** No Visible Damage **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Fire Door Core Insulation. (18 EA Doors). This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of 2 Doors with Damage, 1 in C5 and 1 in C8. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Office Door now has 4 Open Holes due to Door Knob Replacement. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

EXTERIOR

ROUGH WALL SURFACING — 4,850 SF — **P:** Less Than 5% **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Approximately 1 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 Additional Damage Observed. <5% Physical Damage in the form of 5 SF of Peeling Wall on West Side of the Building. Material Condition remains in FAIR condition overall. No other changes as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL — 4,850 SF — **P:** Less Than 5% **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Stucco on Exterior Walls and Overhangs. Approximately 1 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. There is now 8 LF of Cracks. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/22/2019 This Material is unchanged as of this date.

11/18/2019 Additional Damage Observed. <5% Physical Damage in the form of 5 SF of Peeling Wall on West Side of the Building. Material Condition remains in FAIR condition overall. No other changes as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

EXTERIOR WINDOWS

CAULKING — 1,900 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Putty/Sealant on Exterior Windows. 1 LF is damaged. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

HALLWAY

CEILING TILE — 2,350 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 1'x1' Ceiling Tile, Material is also on Walls. Several Tiles are damaged and six are missing exposing Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Partial Repairs observed. Missing Tiles have been Replaced. No other changes as of this date.

11/02/2016 Additional Damage Observed. 1 Tile missing and 9 Tiles with Physical Damage, cracked. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

HALLWAY

CEILING TILE MASTIC — 2,350 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 1'x1' Ceiling Tile, Material is also on walls. Several Tiles are damaged and six are missing exposing the Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Partial Repairs observed. Missing Tiles have been Replaced. No other changes as of this date.

11/02/2016 Additional Damage Observed. 1 Tile missing and 9 Tiles with Physical Damage, cracked. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

HALLWAY

VINYL FLOOR TILE — 1,250 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 12"x12" Off-White and Light-Gray Vinyl Floor Tile. 7 Tiles are broken, exposing the Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME / LOCATION / MATERIAL TYPE / RISK ASSESMENT CATEGORY / COMMENTS	QTY (APPROXIMATE)	PHYSICAL DAMAGE (P:) / WATER DAMAGE (W:)

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

HALLWAY

VINYL FLOOR TILE MASTIC — 1,250 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 12"x12" Off-White and Light-Gray Vinyl Floor Tile. 7 Tiles are broken exposing Mastic/Adhesive. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING C - SUITE 400 (SILICON VALLEY ACADEMY)

MEN'S AND WOMEN'S RESTROOMS

MORTAR MISCELLANEOUS — 270 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015	Grout/Mortar for 1"x1" Light Blue and Gray Ceramic Floor Tiles. 1 SF of damage in the Women's Restroom. <5% Physical Damage. This Material is in FAIR condition overall as of this date.
11/09/2015	This Material is unchanged as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	Additional Damage Observed. 1 SF of Missing Tile Grout/Mortar exposed, in Women's Restroom. No other changes as of this date.
11/01/2017	This Material is unchanged as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.
11/18/2019	This Material is unchanged as of this date.
06/12/2020	This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

D7 -D9

VINYL WALL COVER — 3,600 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/09/2015	Vinyl Wall Cover on Sheetrock. Material is in GOOD condition as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
05/11/2017	This Material is unchanged as of this date.
11/01/2017	Damage Observed. <5% Physical Damage - in the form of Small Hole cuts in Classroom D9. Material Condition changed from GOOD to FAIR. Friability changed from Non-Friable to Friable. No other changes as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.
11/18/2019	This Material is unchanged as of this date.
06/12/2020	This Material is unchanged as of this date.

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

D7-D9

VINYL WALL COVER MASTIC — 3,600 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/02/2016	This Material is unchanged as of this date.
11/15/2016	Mastic/Adhesive for Vinyl Wall Cover on Sheetrock. Material is in GOOD condition as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	Damage Observed. <5% Physical Damage - in the form of Small Hole cuts in Classroom D9. Material Condition changed from GOOD to FAIR. Friability changed from Non-Friable to Friable. No other changes as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY

CEILING TILE — 1,520 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/09/2015 1'x1' Ceiling Tile (with a Pitted Mark Pattern). 12 EA Tiles on the access hatches have small cuts. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of 1 Tile missing exposing Mastic. Material is in FAIR condition overall. No other changes as of this date.

11/02/2016 Additional Damage Observed. 35 Tiles have Physical Damage to them in the form of scrapes and cuts. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Partial Repairs Observed. Many of the Damaged Tiles have been Painted over. Material Remains in FAIR Condition as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 Additional Damage Observed. <5% Physical Damage in the form of 1 Tile Missing with Brown Mastic Exposed by South Entry. Material Condition remains in FAIR condition overall. No other changes as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY

CEILING TILE MASTIC — 1,520 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/09/2015 Mastic/Adhesive for 1'x1' Ceiling Tile (with a Pitted Mark Pattern). 12 EA Tiles on the access hatches have small cuts. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of 1 Tile missing exposing Mastic. Material is in FAIR condition overall. No other changes as of this date. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/01/2017 Partial Repairs Observed. Many of the Damaged Tiles have been Painted over. Material Remains in FAIR Condition as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 Additional Damage Observed. <5% Physical Damage in the form of 1 Tile Missing with Brown Mastic Exposed by South Entry. Material Condition remains in FAIR condition overall. No other changes as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA

VINYL FLOOR TILE — 690 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/09/2015 12"x12" Off-White with Blue Speckles Vinyl Floor Tile in Wet Areas. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 1 Tile cracked in Hallway, 5 more are broken in doorway. 1 Tile bubbled and cracked in Classroom D4 Doorway. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

HALLWAY, BOOK STORAGE ROOM, AND ROOM D4 LUNCH AREA

VINYL FLOOR TILE MASTIC — 690 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/09/2015 Mastic/Adhesive for 12"x12" Off-White with Blue Speckles Vinyl Floor Tile in Wet Areas. This Material is in GOOD condition as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESEMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 1 Tile cracked in Hallway, 5 more are broken in doorway. 1 Tile bubbled and cracked in Classroom D4 Doorway. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

MECHANICAL ROOM

PLASTER WALL — 500 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

11/09/2015 Plaster Walls and Ceilings. 2 SF of cuts, holes, and cracks on the Walls and Ceiling. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

MECHANICAL ROOM

PLASTER WALL SURFACING — 500 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

11/09/2015 Skim Coat for Plaster Walls and Ceilings. 2 SF of cuts, holes, and cracks on the Walls and Ceiling. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING D - SUITE 200 (NEW CONCEPT CHINESE SCHOOL AND SCUSD DRC)

ROOMS D1-D9, STAFF RESTROOMS, BOOK STORAGE ROOM, OFFICES, IDF ROOM, AND CLOSET

SMOOTH WALL SURFACING — 14,450 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

11/09/2015 Skim Coat for Gypsum Wallboard System Walls and Ceilings. This Material is behind Wood Wall Panels, and Pressed Wood Wall Panels in some locations. This Material is in GOOD condition as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of 1 SF of scrape at Wall Corner in Room D3 Office. Material condition changed from GOOD to FAIR overall. Friability changed from Low to Moderate. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

BOYS', GIRLS', MEN'S, AND WOMEN'S RESTROOMS

TERRAZZO FLOOR — 410 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Terrazzo Floor. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 Damage Observed. <5% Physical Damage - in the form of 1 SF of Chipping near sinks in Girls Restrooms. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. No other changes as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E8 CLOSET

VINYL SHEETING — 102 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Off-White Vinyl Floor Sheeting. 1 LF of the seam is separating. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOM E8 CLOSET

VINYL SHEETING BACKING PAPER/MASTIC — 102 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Backing Paper/Adhesive for Off-White Vinyl Floor Sheeting. 1 LF of the seam is separating. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS E2-E6 AND OFFICE

SUSPENDED CEILING TILE — 5,952 SF — **P:** Less Than 5% — **W:** <10% Stains or Flaking

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 4'x4' Suspended Ceiling Tile (Vinyl Covered Fiberglass). 4 SF are water damaged. <10% Water Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <10% Water Damage - in the form of stains in Classroom E6 6 Tiles have Water Damage. Also <5% Physical Damage - in Classroom E2 1 Tile is Damaged. Material condition changed from GOOD to FAIR overall. No other changes as of this date

11/02/2016 Additional Damage Observed. 1 broken TIle in Classroom E4. No other changes as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

04/24/2017 Additional Damage Observed. 1 Tile with Physical Damage in Classroom E3

11/01/2017 Additional Damage Observed. Classroom E4 now has 2 Tiles with Water Damage. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS E2-E8, HALLWAYS, AND STUDENT RESTROOMS

SMOOTH WALL MISCELLANEOUS — 17,510 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Gypsum Wallboard System. Behind 1'x1' Ceiling and Wall Tiles in some locations. There is one hole on the wall in the Hallway. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage. <1 SF Physical Damge in Classroom E4. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additonal Damage Observed. 1 LF crack about the door by Classroom E7. 8 LF crack in the Wall between Classrooms E4 and E5. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS E2-E8, HALLWAYS AND STUDENT RESTROOMS

SMOOTH WALL SURFACING — 10,510 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Gypsum Wallboard System. There is one hole on the wall in the Hallway. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage. <1 SF Physical Damge in Classroom E4. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additonal Damage Observed. 1 LF crack about the door by Classroom E7. 8 LF crack in the Wall between Classrooms E4 and E5. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Additional Damage Observed. Several Cracks at Panel Seams in the Wall between Classrooms E4 and E5. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

E1 (MAIN OFFICE) AND OFFICES

VINYL FLOOR TILE — 992 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 9"x9" Brown Vinyl Floor Tile. 5 Tiles are broken exposing the Black Mastic/Adhesive and 3 are cracked. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks. 8 Tiles are cracked at the Doorways of the Office. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 Additioonal Damage Observed. 1 Tile Missing in Office. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME / LOCATION / MATERIAL TYPE / RISK ASSESMENT CATEGORY / COMMENTS	QTY (APPROXIMATE)	PHYSICAL DAMAGE (P:) / WATER DAMAGE (W:)

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

E1 (MAIN OFFICE) AND OFFICES

VINYL FLOOR TILE MASTIC — 992 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 9"x9" Brown Vinyl Floor Tile. 5 Tiles are broken exposing the Black Mastic/Adhesive and 3 are cracked. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form of cracks. 8 Tiles are cracked at the Doorways of the Office. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 Additioonal Damage Observed. 1 Tile Missing in Office. No other changes as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

E7 STORAGE

SUSPENDED CEILING TILE — 456 SF — **P:** No Visible Damage — **W:** <10% Stains or Flaking

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 2'x4' Suspended Ceiling Tile. One Tile is water stained. <10% Water Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL — 3,110 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Stucco on Exterior Walls and Overhangs. Approximately 5 SF of Stucco is cracked. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING — 3,110 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Approximately 5 SF of Stucco is cracked. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS

CARPET MASTIC — 1,835 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for Light Blue/Brown Carpet (over 9"x9" Vinyl Floor Tile). Carpet has 1 SF of Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS, AND CLASSROOMS E7 AND E8

CEILING TILE — 4,226 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 1'x1' Ceiling and Wall Tiles. Some surface damage observed on Tiles. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - 8 Tiles damaged on hatches. 1 Tile missing in Hallway. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Material Re-assessed. 1 Missing Tile has been replaced in Hallway.

03/07/2017 Additional Damage Observed. 23 Tiles on Hallway Ceiling have Physical Damage in the form of scrapes, cracks and broken edges. Classroom E7 also has 7 Tiles with surface damage, scrapes and wear. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Partial Repairs Observed. Some Damages have been Painted Over. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

HALLWAYS, AND CLASSROOMS E7 AND E8

CEILING TILE MASTIC — 4,226 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 1'x1' Ceiling and Wall Tiles. This Material is in GOOD condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - 8 Tiles damaged on hatches. 1 Tile missing in Hallway. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Material Re-assessed. 1 Missing Tile has been replaced in Hallway.

03/07/2017 Additional Damage Observed. 23 Tiles on Hallway Ceiling have Physical Damage in the form of scrapes, cracks and broken edges. Classroom E7 also has 7 Tiles with surface damage, scrapes and wear. No other changes as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

04/24/2017 This Material is unchanged as of this date.

11/01/2017 Partial Repairs Observed. Some Damages have been Painted Over. No other changes as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL — 780 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Rough Plaster Walls and Ceilings. 2 SF of scattered holes, cuts and cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM

PLASTER WALL SURFACING — 780 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Rough Plaster Walls and Ceilings. 2 SF of scattered holes, cuts and cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING E - SUITE 800 (APPLESEED MONTESSORI SCHOOL)

MECHANICAL ROOM, TWO CLOSETS OF ROOM 27 AND THREE CLOSETS AT ROOM E8

BASEBOARD MASTIC

170 LF

P: Less Than 10%
W: No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 4" Black Baseboard. In the Center/Middle Closet of E8 there is 10 LF of Baseboard missing exposing Mastic/Adhesive. <10% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESEMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING

PLASTER WALL — 6,000 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

11/09/2015	Plaster Walls and Ceilings (behind wood panels in some locations). Approximately 2 SF of holes and cuts in the Storage Room. <5% Physical Damage. This Material is in FAIR condition overall as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	This Material is unchanged as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.
11/18/2019	This Material is unchanged as of this date.
06/12/2020	This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING

PLASTER WALL SURFACING — 6,000 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

11/09/2015	Skim Coat for Plaster Walls and Ceilings (behind wood panels in some locations). Approximately 2 SF of holes and cuts in the Storage Room. <5% Physical Damage. This Material is in FAIR condition overall as of this date.
05/12/2016	This Material is unchanged as of this date.
11/02/2016	This Material is unchanged as of this date.
04/24/2017	This Material is unchanged as of this date.
11/01/2017	This Material is unchanged as of this date.
05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

ENTIRE BUILDING - CONCEALED LOCATIONS

PIPE RUN INSULATION — 120 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED THERMAL SYSTEM INSULATION ACM

11/09/2015 Entire Building - Concealed Locations.

05/12/2016 Damage observed. <5% Physical Damage - in the form 5 LF of Fiberglass with canvas wraps Damaged in the Mechanical Room. Material condition changed from GOOD to FAIR overall. Friability changed from Non-Friable to Friable. 120 LF visible in Mechanical Room Original Entry updated. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

03/07/2017 Thermal System Insulation on Pipe Runs. (120 LF observed in the Mechanical Room. This Material may also exist in Attic, Plenums, Wall/Ceiling cavities and other inaccessible locations.). Material condition is TBD as of this date. (Original Entry updated on 05/12/16.)

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

EXTERIOR WALLS

ROUGH WALL — 2,600 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

11/09/2015 Stucco on Exterior Walls and Overhangs. 1 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

BUILDING NAME / LOCATION / MATERIAL TYPE / RISK ASSESMENT CATEGORY / COMMENTS	QTY (APPROXIMATE)	PHYSICAL DAMAGE (P:) / WATER DAMAGE (W:)

11/01/2017 This Material is unchanged as of this date.

05/07/2018 Additional Damage Observed. 10 SF of Peeling Paint and Skim Coat. No other changes as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

EXTERIOR WALLS

ROUGH WALL SURFACING — 2,600 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

11/09/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. 1 SF of cracks. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 Additional Damage Observed. 10 SF of Peeling Paint and Skim Coat. No other changes as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

MECHANICAL ROOM

BOILER GASKET — 22 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED THERMAL SYSTEM INSULATION ACM

05/12/2016 Boiler Gasket. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

MECHANICAL ROOM

TANK (HIGH TEMP) INSULATION — 100 SF — **P:** No Visible Damage — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/12/2016 Tank Blanket Insulation. Material is in Good condition. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

PRINT SHOP

CAULKING — 70 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/09/2015 Putty/Sealant on Exterior Windows. 3 LF is cracked and has peeling paint. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

PRINT SHOP, OFFICES, AND STORAGE ROOMS

BASEBOARD MASTIC — 270 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/09/2015 Mastic/Adhesive for 6" Black Baseboard. This Material is in GOOD condition as of this date.

05/12/2016 Baseboard painted White. No other changes as of this date.

11/02/2016 Damage Observed. <5% Physical Damage - in the form of baseboard near Print Shop doorway is damaged. Material condition changed from GOOD to FAIR overall. Friability changed from Non to Low. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING F - MUSIC STORAGE AND PRINT SHOP - SUITE 100

RESTROOMS AND STORAGE ROOMS

HEAT SHIELD — 11 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

11/09/2015 Round Light Fixture Heat Shield. (11 EA). 2 EA are exposed. <5% Physical Damage. This Material is in FAIR condition overall as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/07/2018	This Material is unchanged as of this date.
10/31/2018	This Material is unchanged as of this date.
05/22/2019	This Material is unchanged as of this date.
11/18/2019	This Material is unchanged as of this date.
06/12/2020	This Material is unchanged as of this date.

DAMAGE REPORT FOR

PATRICK HENRY SCHOOL CAMPUS (LEASE SITE)

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E

PLASTER WALL — 1,940 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Plaster Walls and Ceilings. 3 SF of damage on the wall. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form 6 LF cracked by the Door in Room E. 3 LF Cracked by the door in Room C. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additional Damage Observed. 30 LF of several cracks and skim coat peeling. No other changes as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

BOYS' AND GIRLS' RESTROOMS BY ROOM B, HALLWAY AND ROOM E

PLASTER WALL SURFACING — 1,940 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Skim Coat for Plaster Walls and Ceilings. 3 SF of damage on the wall. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Damage Observed. <5% Physical Damage - in the form 6 LF cracked by the Door in Room E. 3 LF Cracked by the door in Room C. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 Additional Damage Observed. 30 LF of several cracks and skim coat peeling. No other changes as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS B AND E

WALL TILE — 350 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 1'x1' Wall Tile. Some Tiles are damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

CLASSROOMS B AND E

WALL TILE MASTIC — 350 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 1'x1' Wall Tile. Some Tiles are damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

ENTIRE BUILDING (EXCEPT RESTROOM BY BAND CLASSROOM, HALLWAY AND ROOM E)

SMOOTH WALL MISCELLANEOUS — 13,190 SF — **P:** No Visible Damage — **W:** <10% Stains or Flaking

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Gypsum Wallboard System Walls and Ceilings. (Under Skim Coat, 1'x1' Ceiling Tiles, 1'x1' Wall Tiles, and Vinyl Wall Covers in some locations.) 7 SF of Water Damage on the Multipurpose Room Ceiling. <10% Water Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL — 7,310 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Stucco on Exterior Walls and Overhangs. Material has 10 SF of damage. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WALLS AND OVERHANGS

ROUGH WALL SURFACING — 7,310 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED FRIABLE SURFACING ACM

05/18/2015 Skim Coat for Stucco on Exterior Walls and Overhangs. Material has 10 SF of damage. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

EXTERIOR WINDOWS

CAULKING — 340 LF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Putty/Sealant on Exterior Windows. Some areas are damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MULTIPURPOSE ROOM

CEILING TILE — 2,630 SF — **P:** Less Than 5% — **W:** >10% Evident

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 1'x1' Textured Ceiling Tile. 7 Tiles are Water Damaged. <5% Physical Damage and <10% Water Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Additional Damage Observed. 9 Tiles now have Water Damage and 1 is loose. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

BUILDING NAME / LOCATION / MATERIAL TYPE / RISK ASSESMENT CATEGORY / COMMENTS	QTY (APPROXIMATE)	PHYSICAL DAMAGE (P:) / WATER DAMAGE (W:)

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

MULTIPURPOSE ROOM

CEILING TILE MASTIC — 2,630 SF — **P:** Less Than 5% — **W:** <10% Stains or Flaking

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for 1'x1' Textured Ceiling Tile. 7 Tiles have been Water Damage. <5% Physical Damage and <10% Water Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 Additional Damage Observed. 9 Tiles now have Water Damage and 1 is loose. Material condition changed from GOOD to FAIR overall. No other changes as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

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05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 This Material is unchanged as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE

VINYL WALL COVER — 610 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Vinyl Cover on Accordian Wall. 5 SF of Material is damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

BUILDING NAME
LOCATION
MATERIAL TYPE
RISK ASSESMENT CATEGORY
COMMENTS

QTY (APPROXIMATE)

PHYSICAL DAMAGE (P:)
WATER DAMAGE (W:)

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

05/07/2018 This Material is unchanged as of this date.

10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 Additional Damage Observed. 2 SF of Damaged Material by Switchboard on Wall. No other changes as of this date.

BUILDING M - OLD CAFETERIA - SUITE 300 (APPLESEED MONTESSORI SCHOOL)

STAGE

VINYL WALL COVER MASTIC — 610 SF — **P:** Less Than 5% — **W:** No Evidence

DAMAGED OR SIGNIFICANTLY DAMAGED FRIABLE MISCELLANEOUS ACM

05/18/2015 Mastic/Adhesive for Vinyl Cover on Accordian Wall. 5 SF of Material is damaged. <5% Physical Damage. This Material is in FAIR condition as of this date.

11/09/2015 This Material is unchanged as of this date.

05/12/2016 This Material is unchanged as of this date.

11/02/2016 This Material is unchanged as of this date.

04/24/2017 This Material is unchanged as of this date.

11/01/2017 This Material is unchanged as of this date.

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10/31/2018 This Material is unchanged as of this date.

05/22/2019 This Material is unchanged as of this date.

11/18/2019 This Material is unchanged as of this date.

06/12/2020 Additional Damage Observed. 2 SF of Damaged Material by Switchboard on Wall. No other changes as of this date.

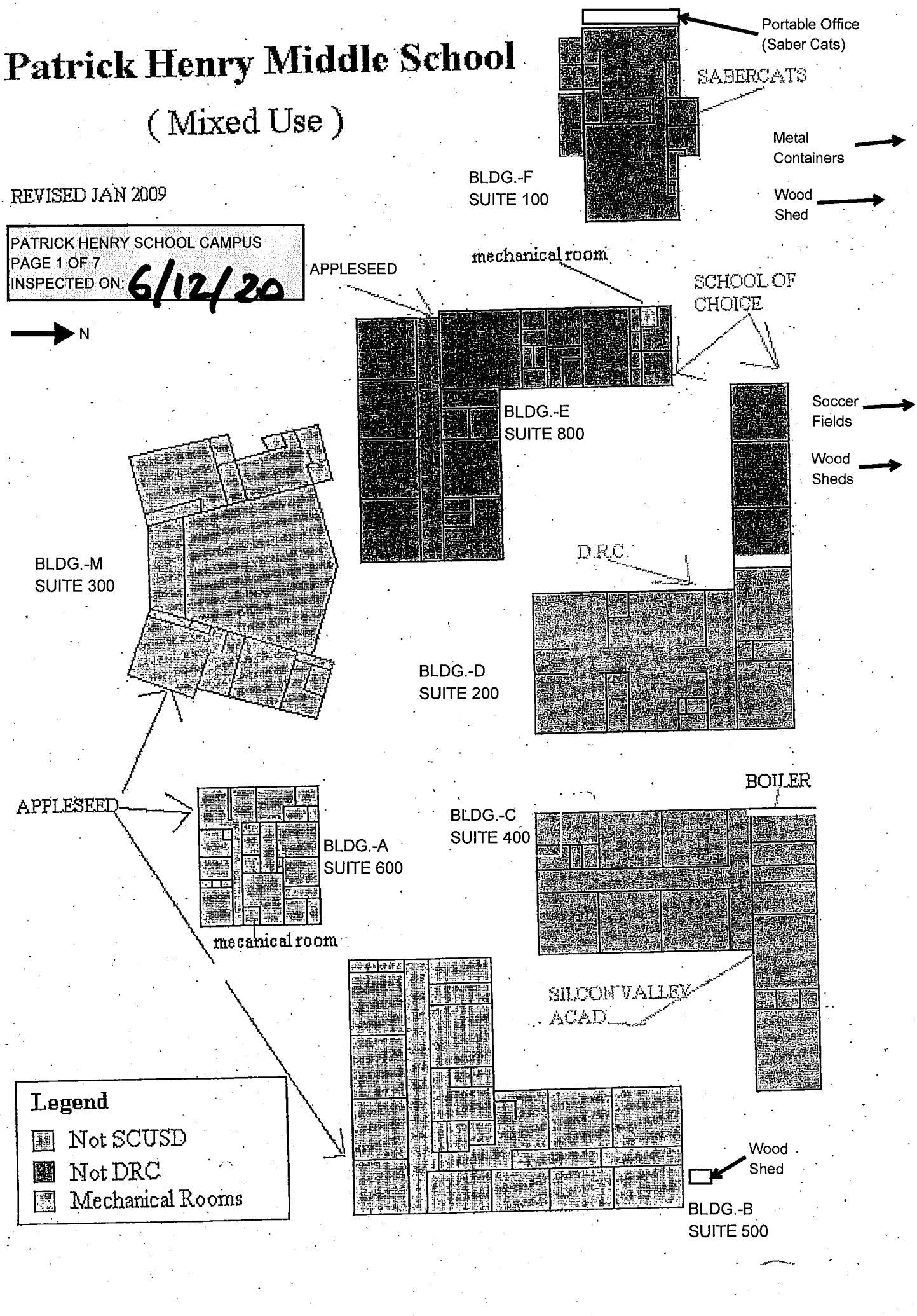
End Of Report, Total Of 58 Pages

Patrick Henry Middle School

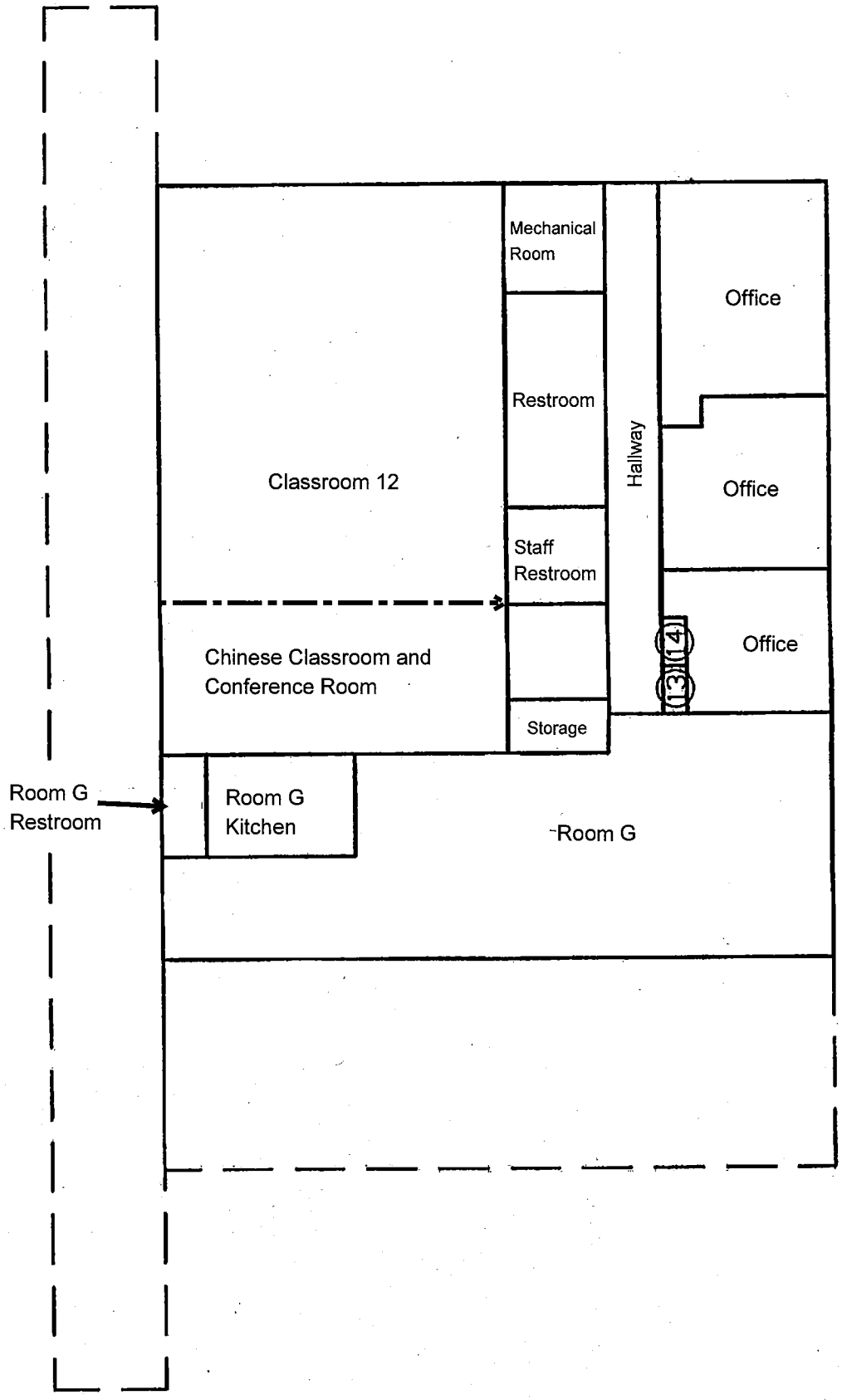
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: 6/12/20



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

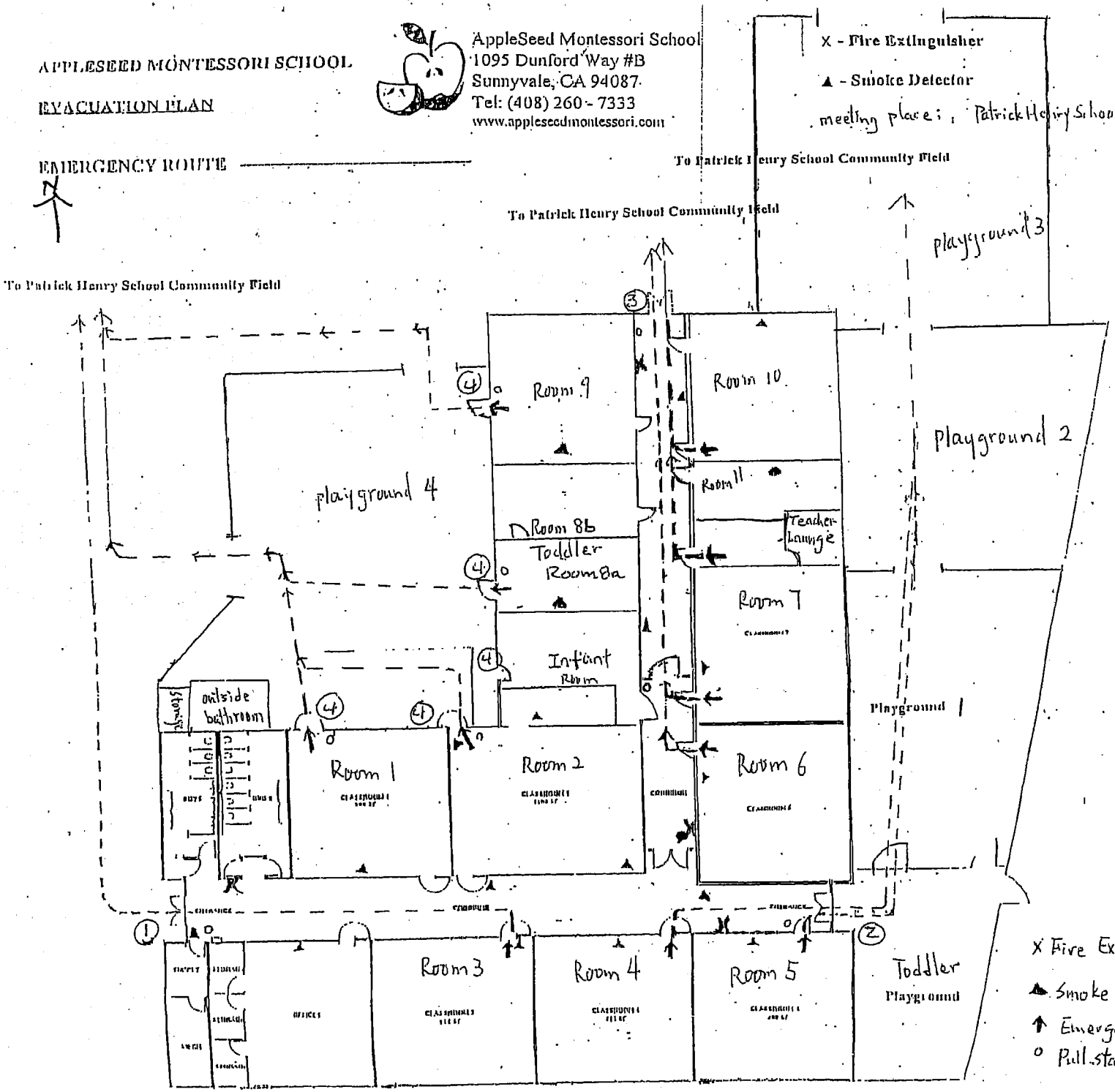
AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE ——————

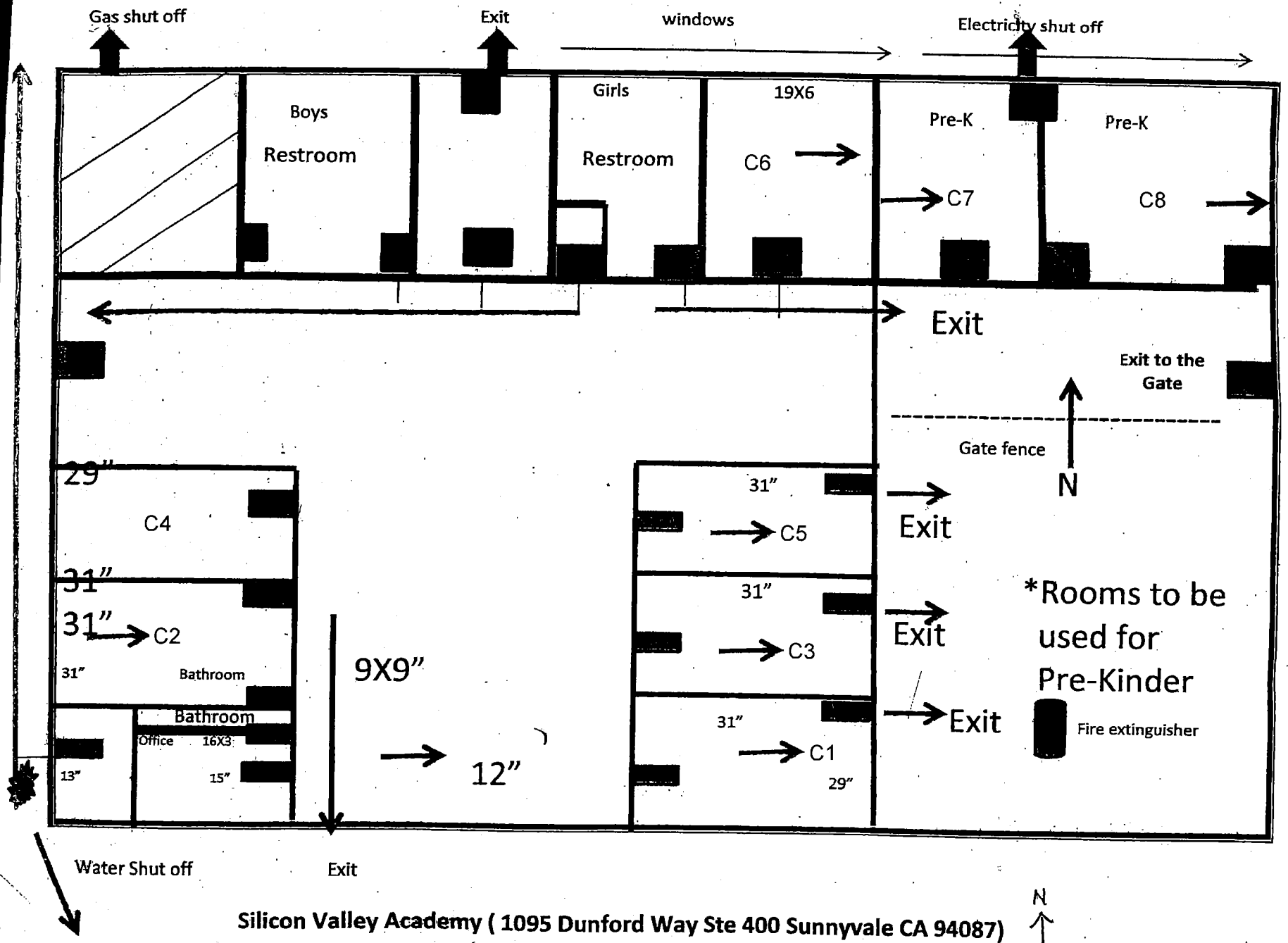
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School community field



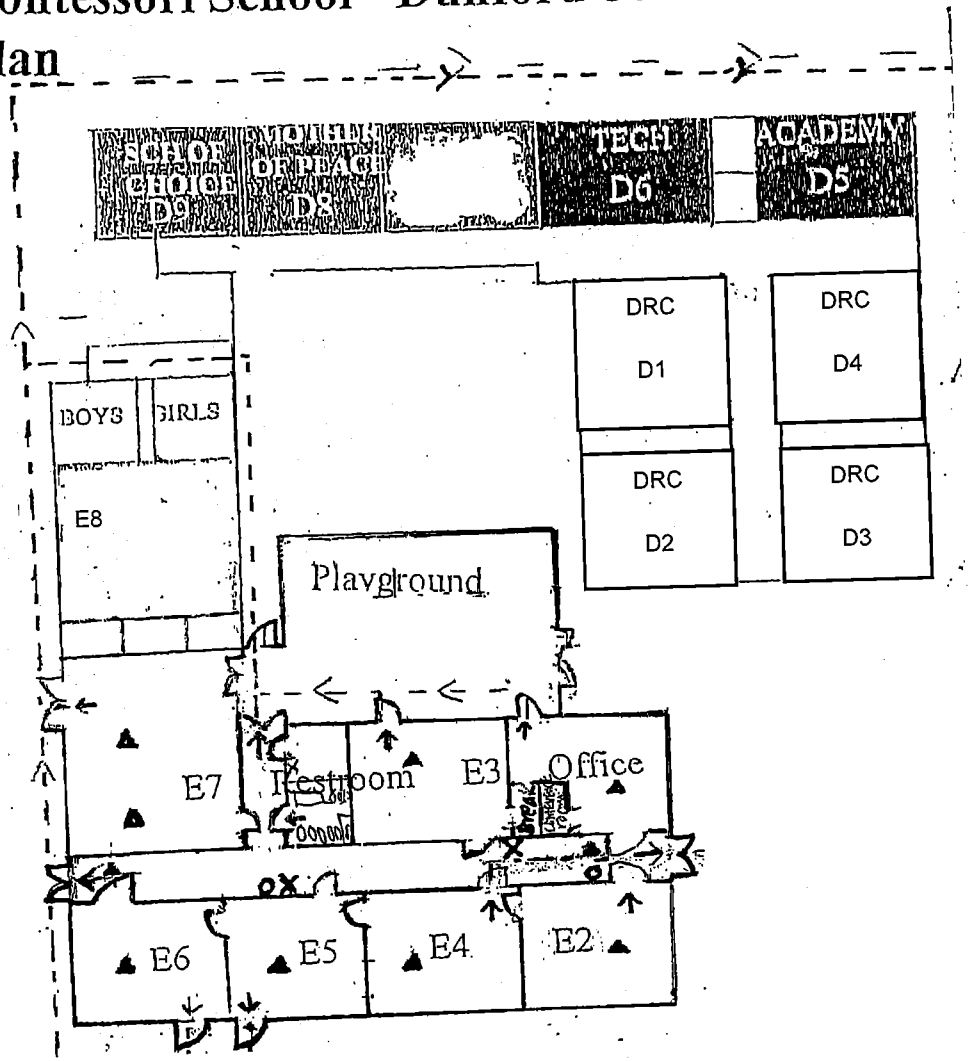
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

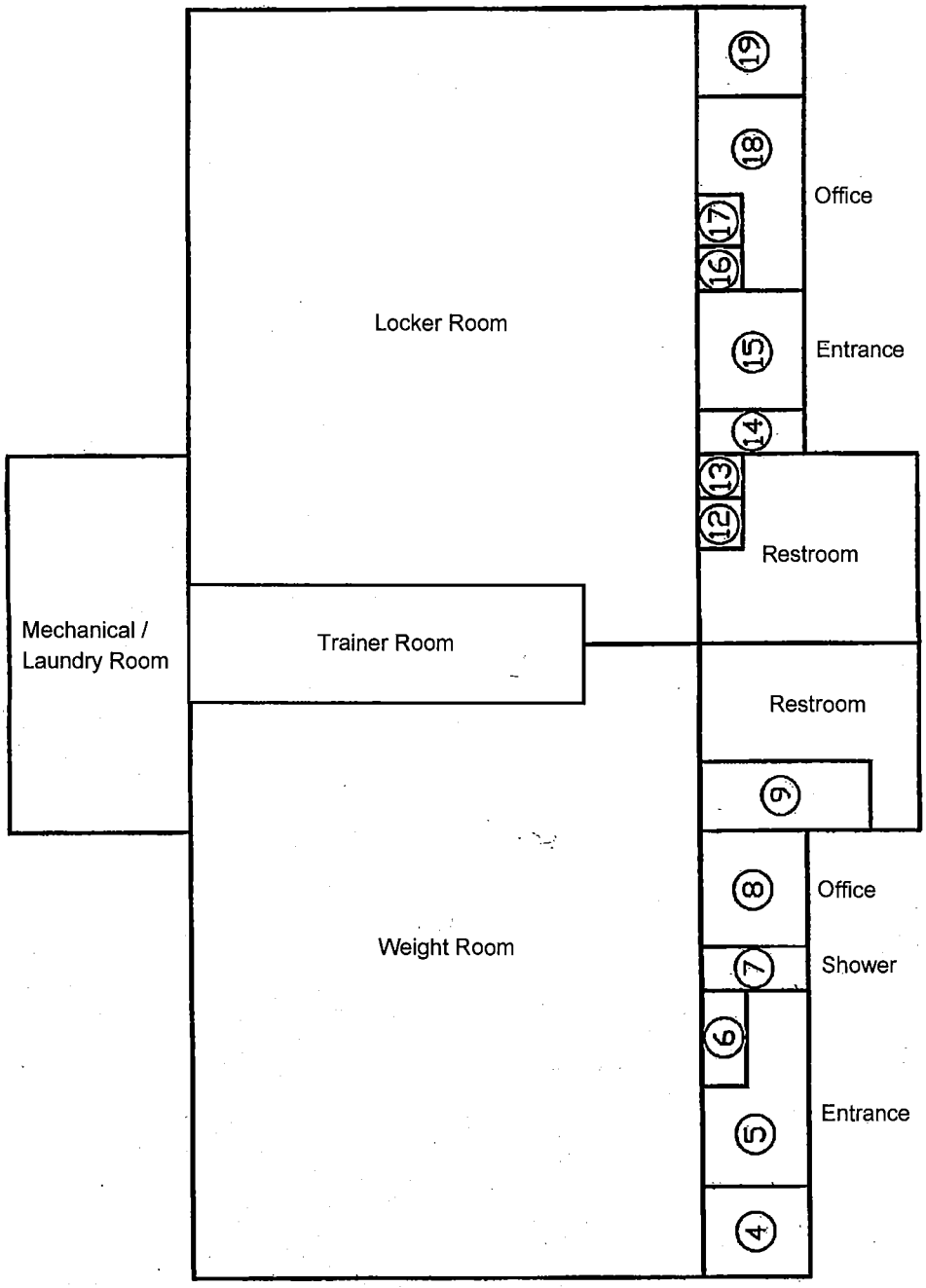
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100

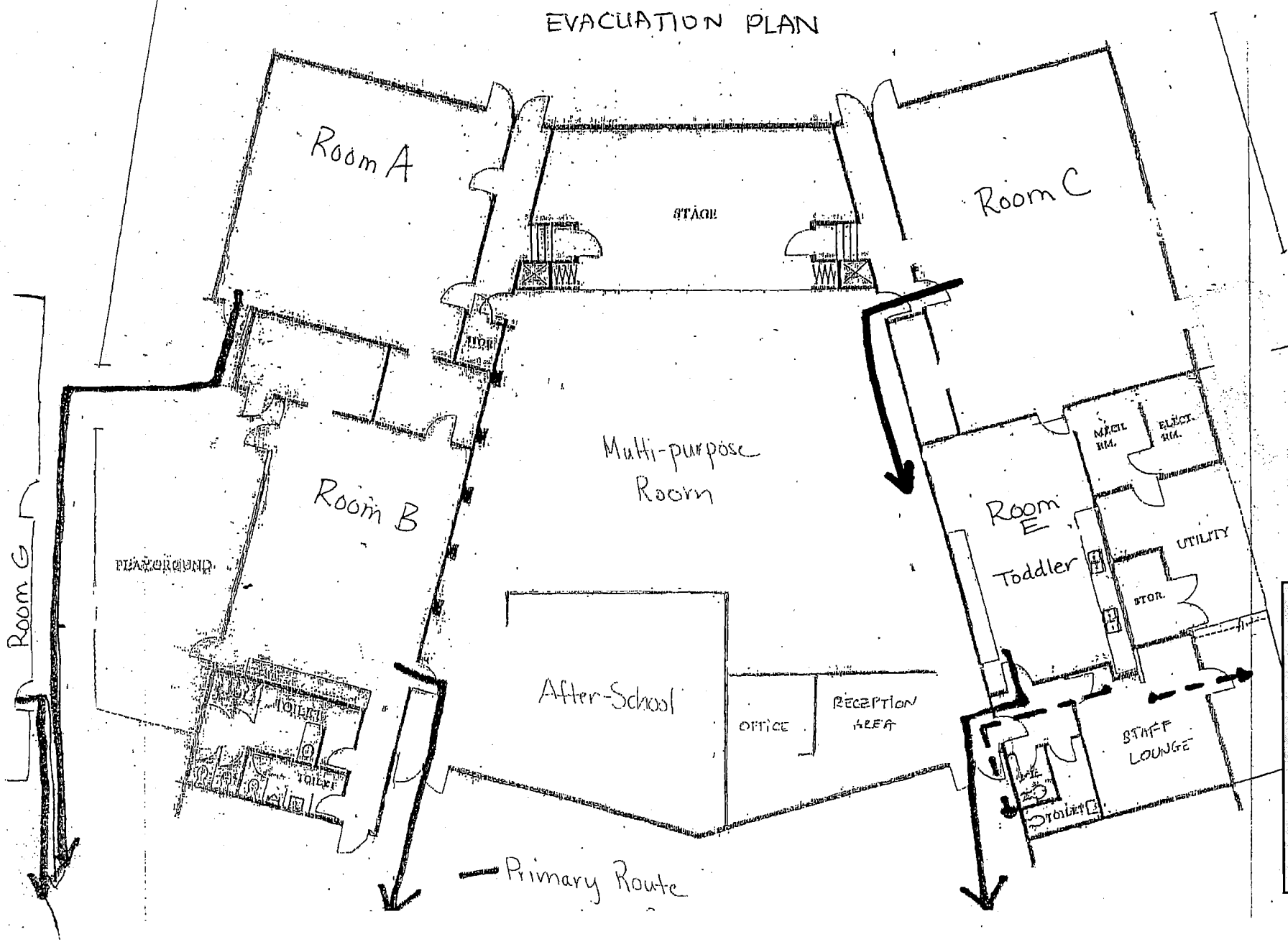


Storage Rooms
4, 6, 7, 9, 12, 13, 14, 16, 17, 19

AppleSeed International School
1095 Dunford Way, Ste. 300
Sunnyvale, CA 94087
Tel. No. (408) 260-9333
Fax. No. (408) 260-9933

AppleSeed

EVACUATION PLAN



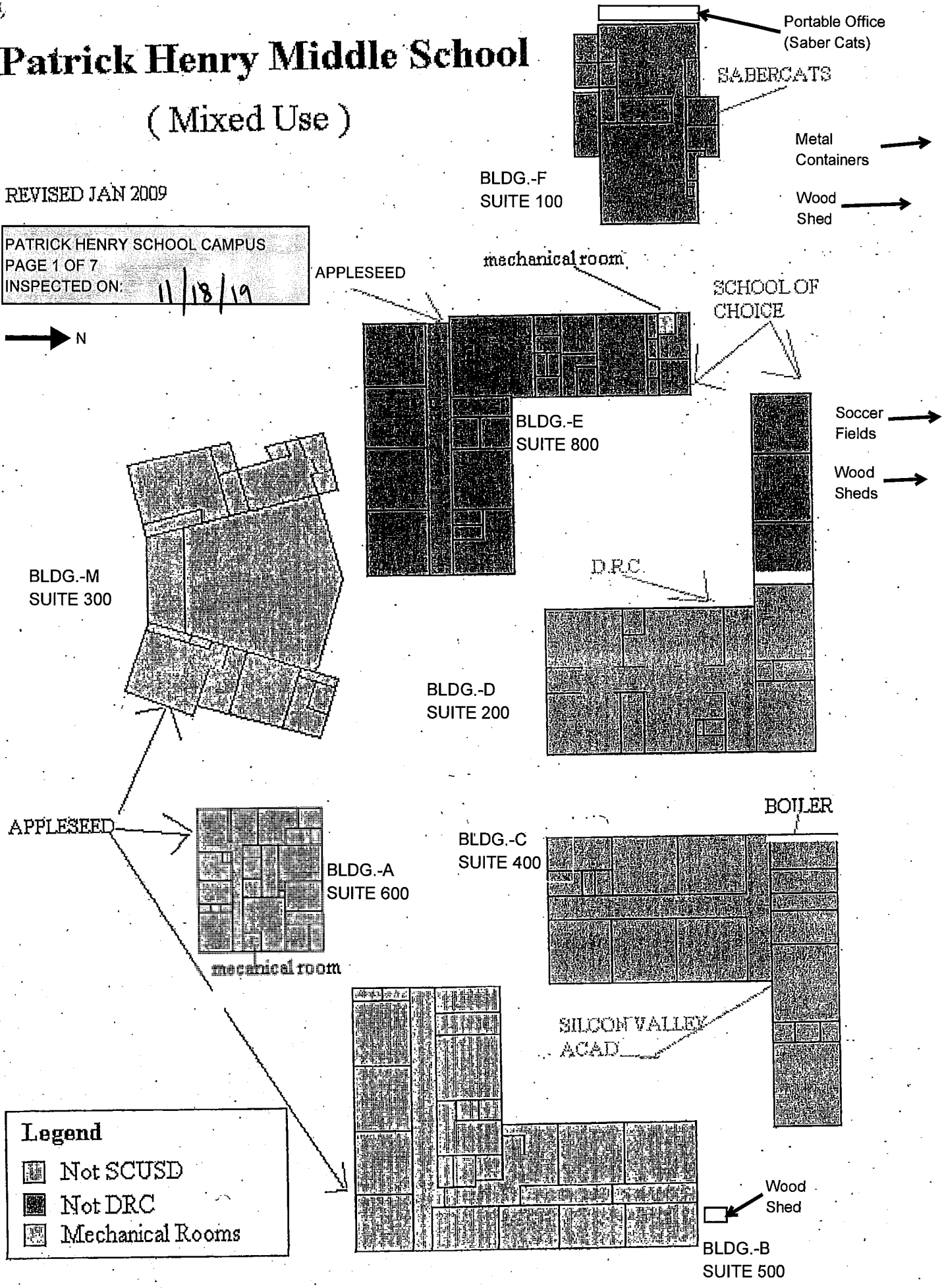
PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

Patrick Henry Middle School

(Mixed Use)

REVISED JAN 2009

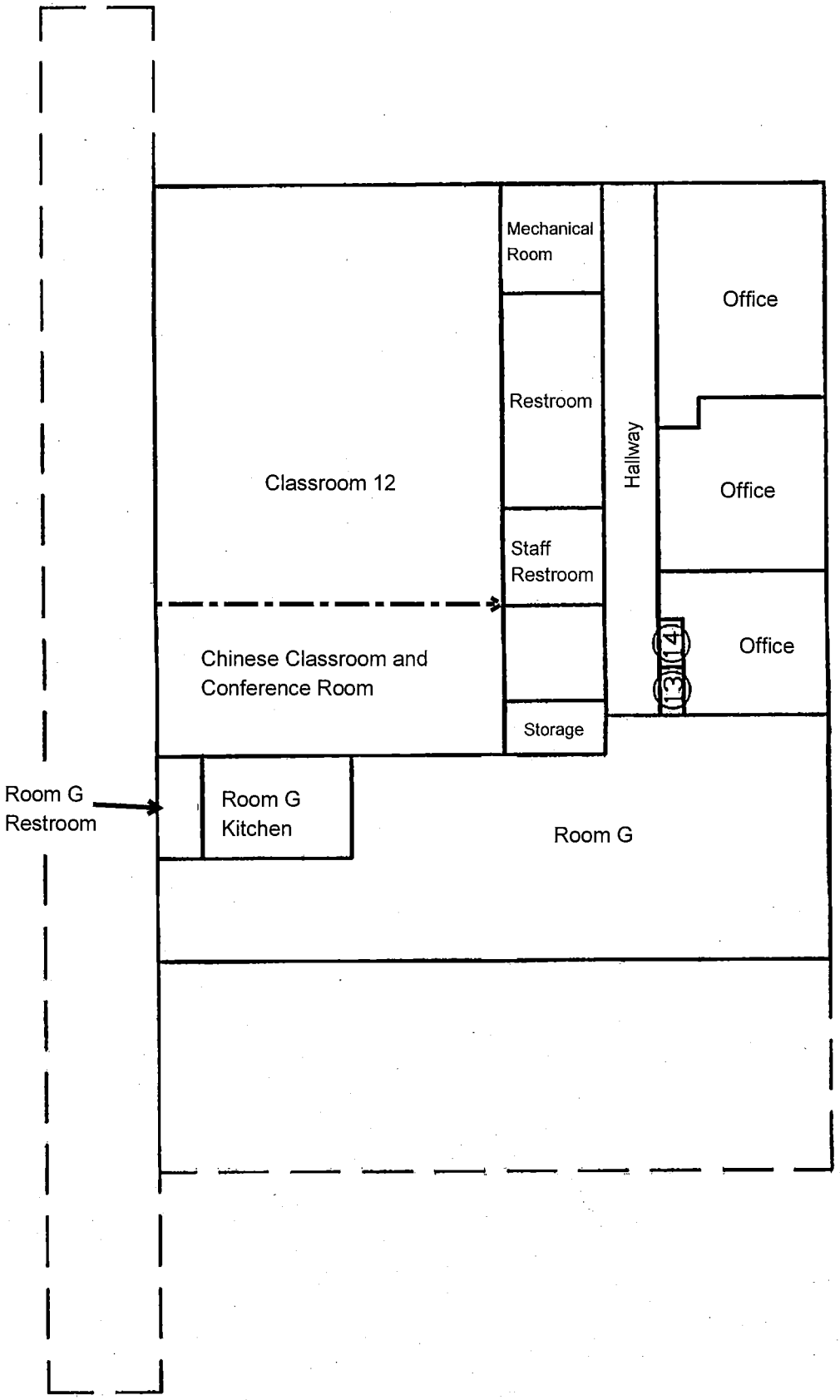
PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: 11/18/19



Legend

- Not SCUSD
- Not DRC
- Mechanical Rooms

PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

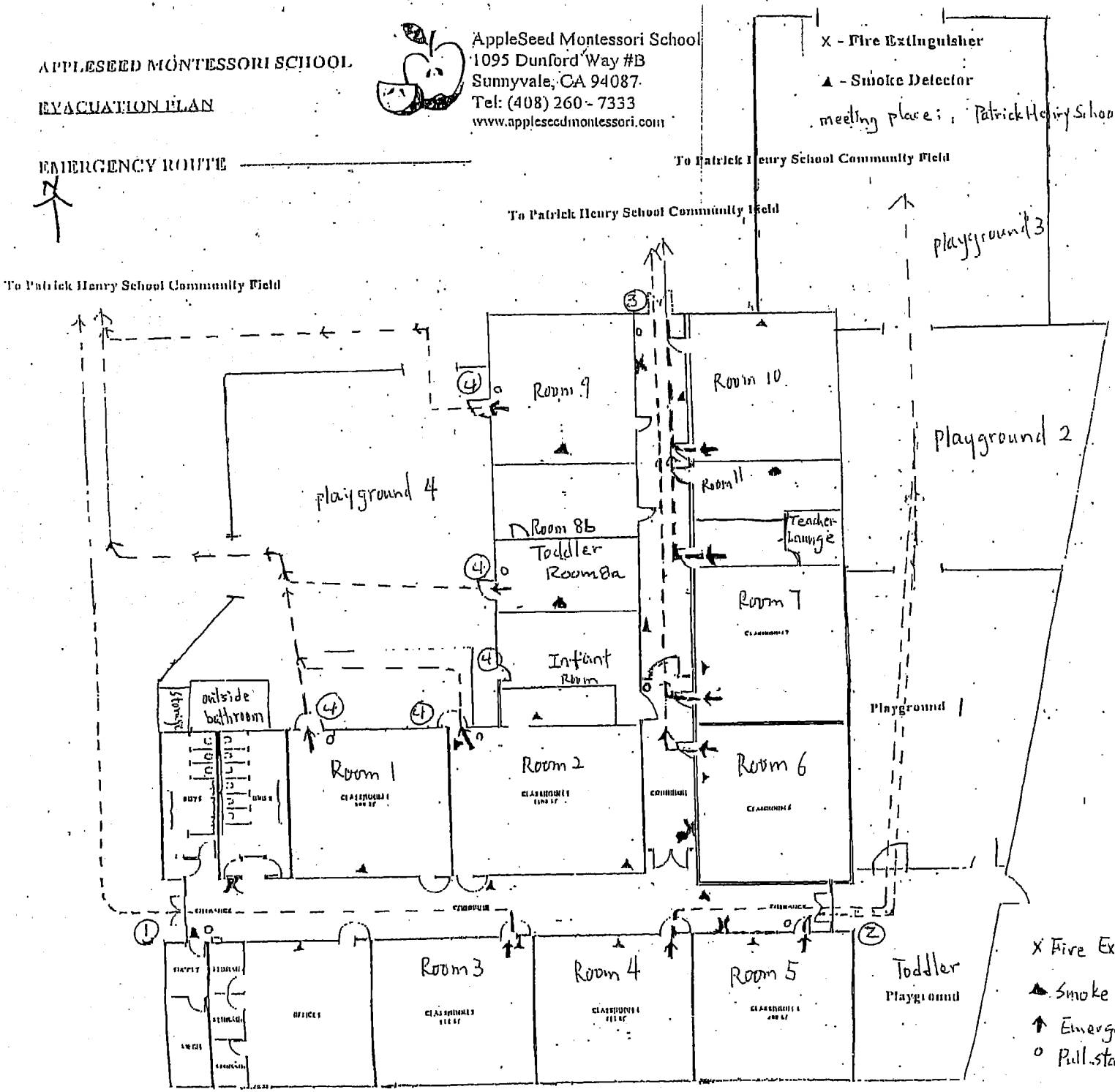
AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE ——————

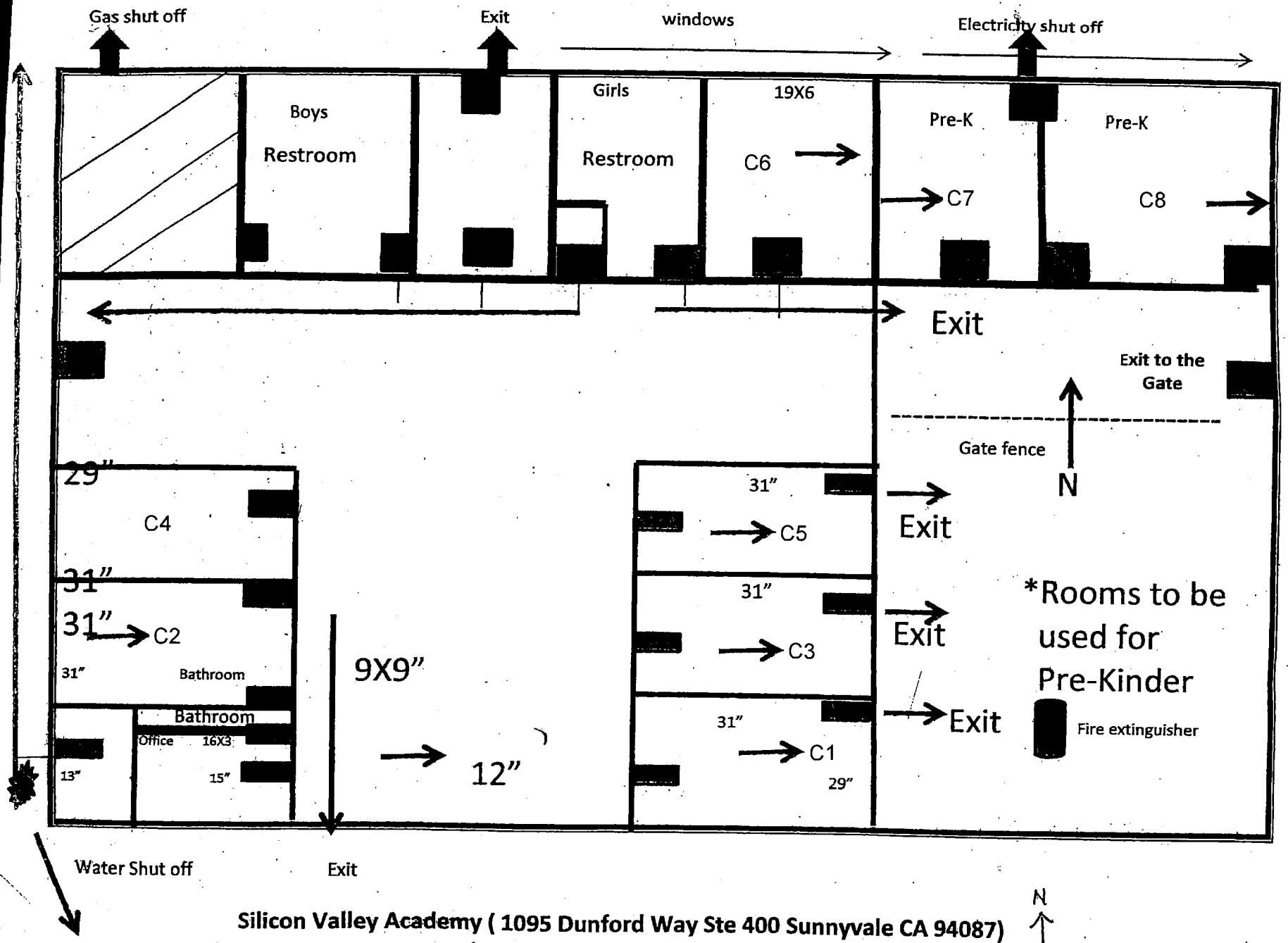
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School community field



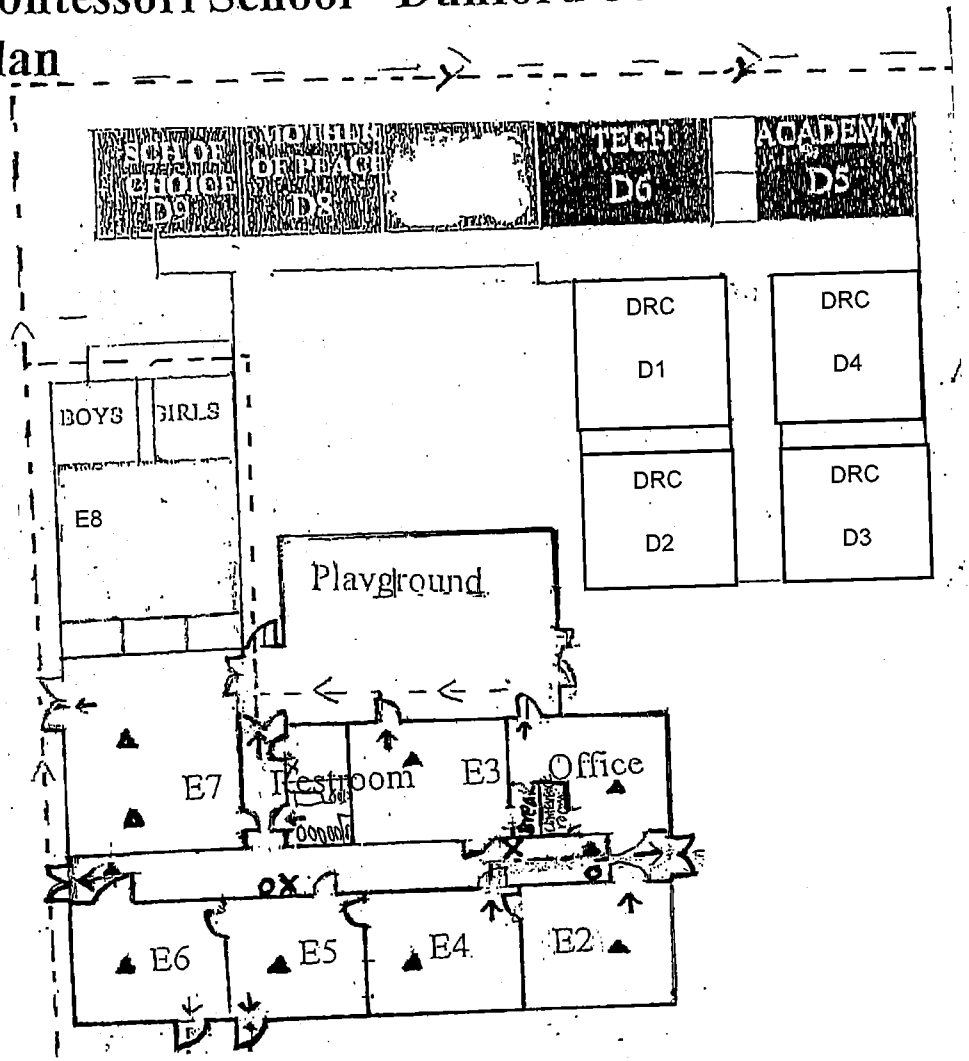
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

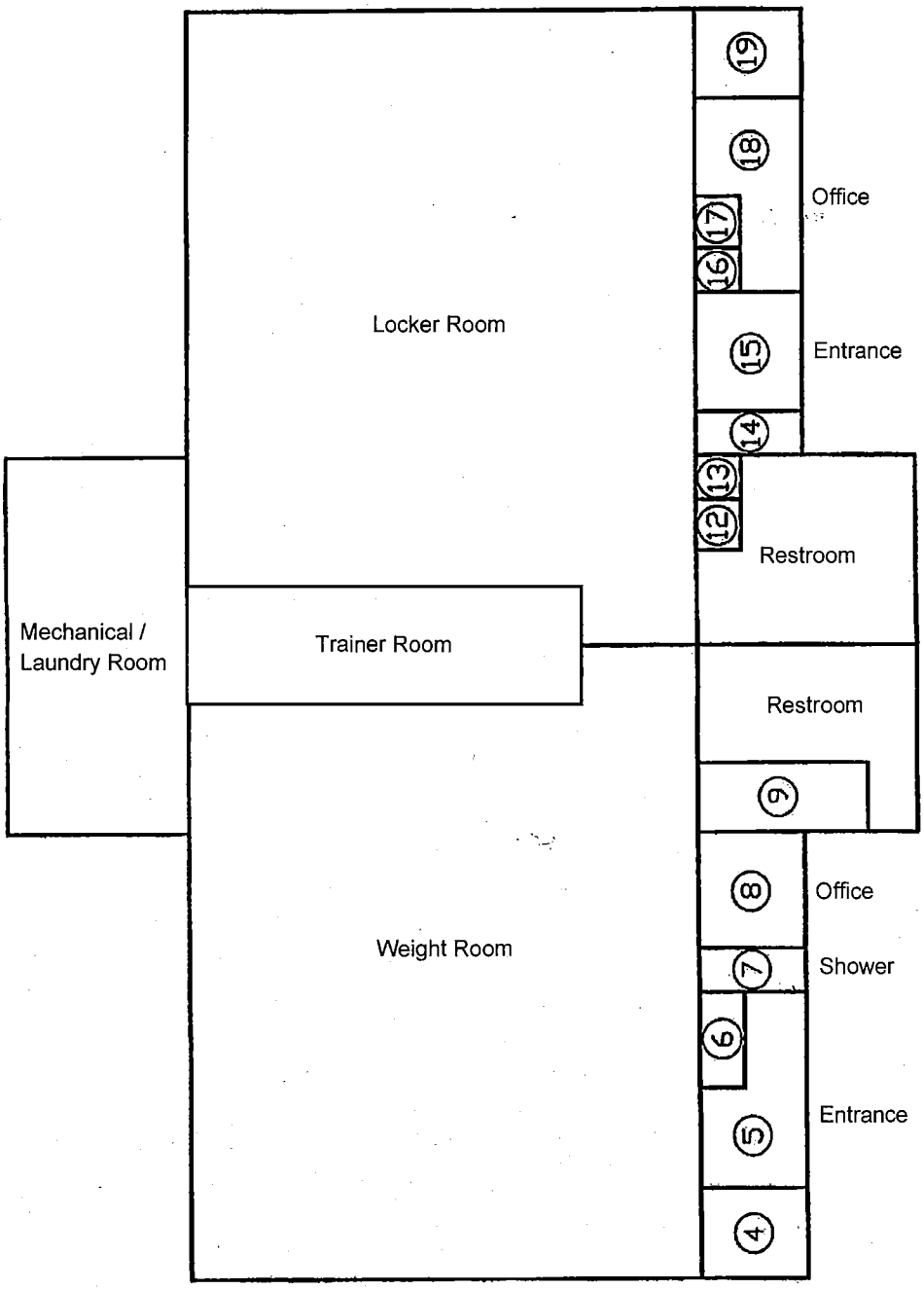
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100



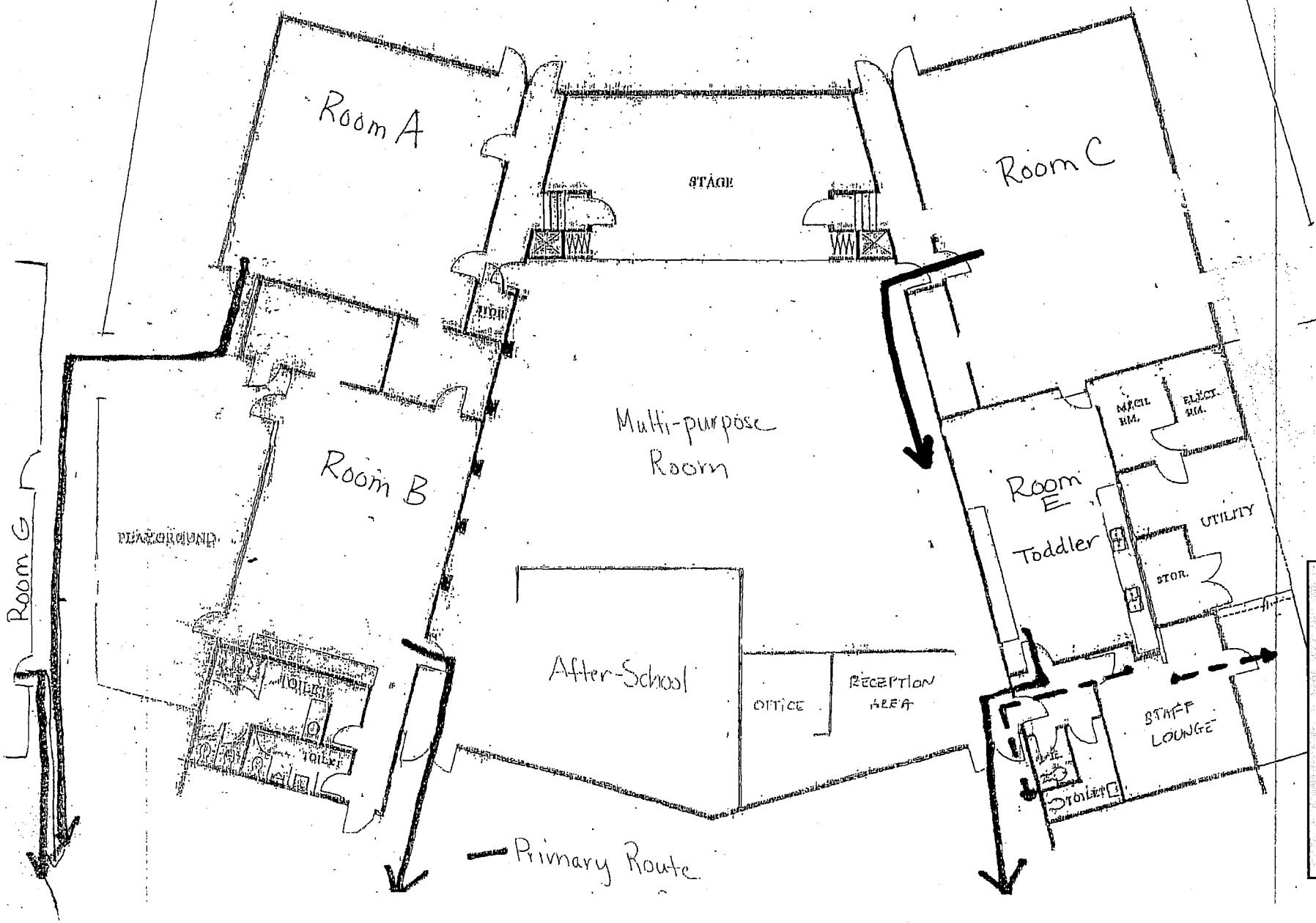
Storage Rooms
4, 6, 7, 9, 12, 13,
14, 16, 17, 19

AppleSeed International School
1095 Dunford Way, Ste. 300
Sunnyvale, CA 94087
Tel. No. (408) 260-9333
Fax. No. (408) 260-9933

N

AppleSeed

EVACUATION PLAN



PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

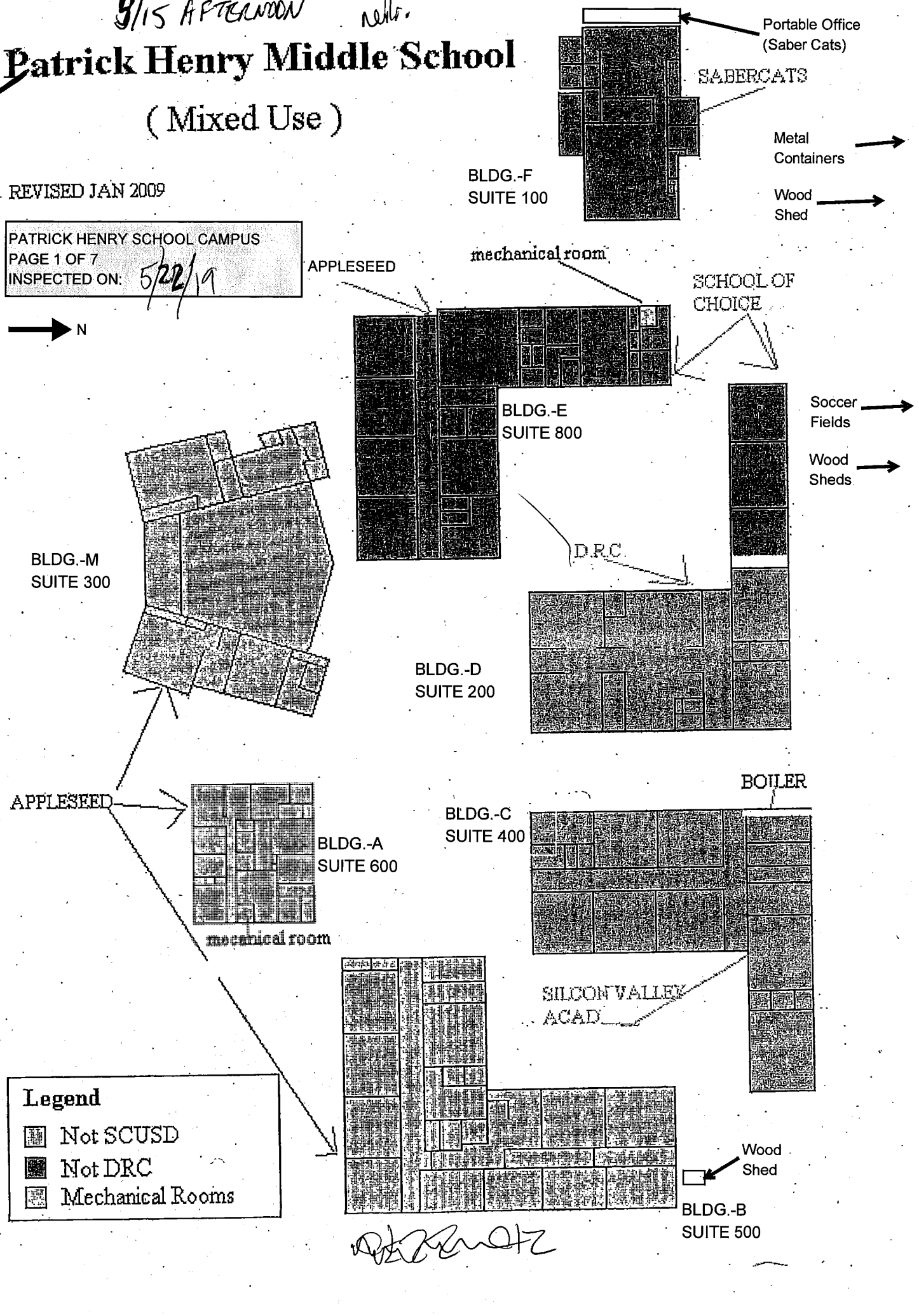
9/15 AFTERNOON

Patrick Henry Middle School

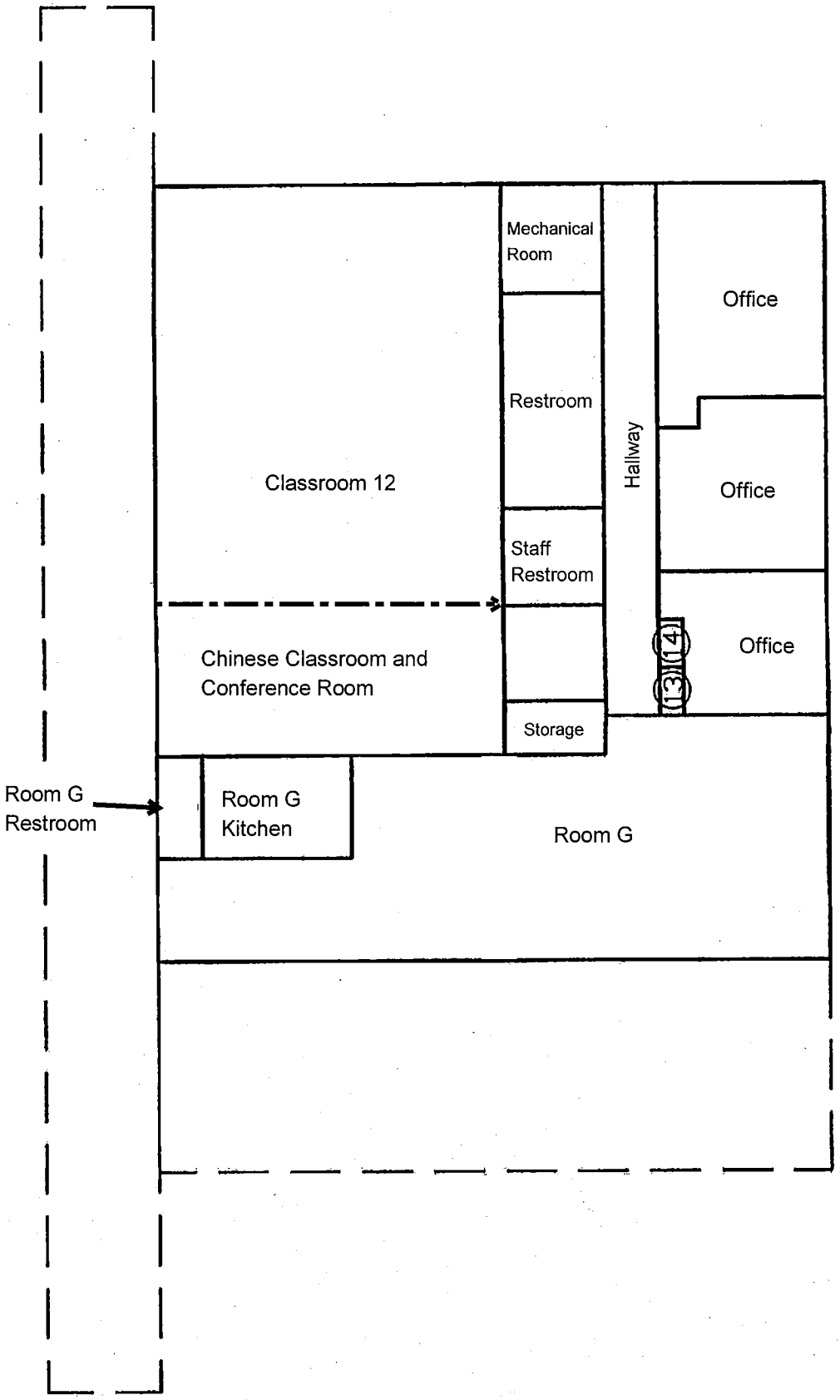
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: 5/22/19



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
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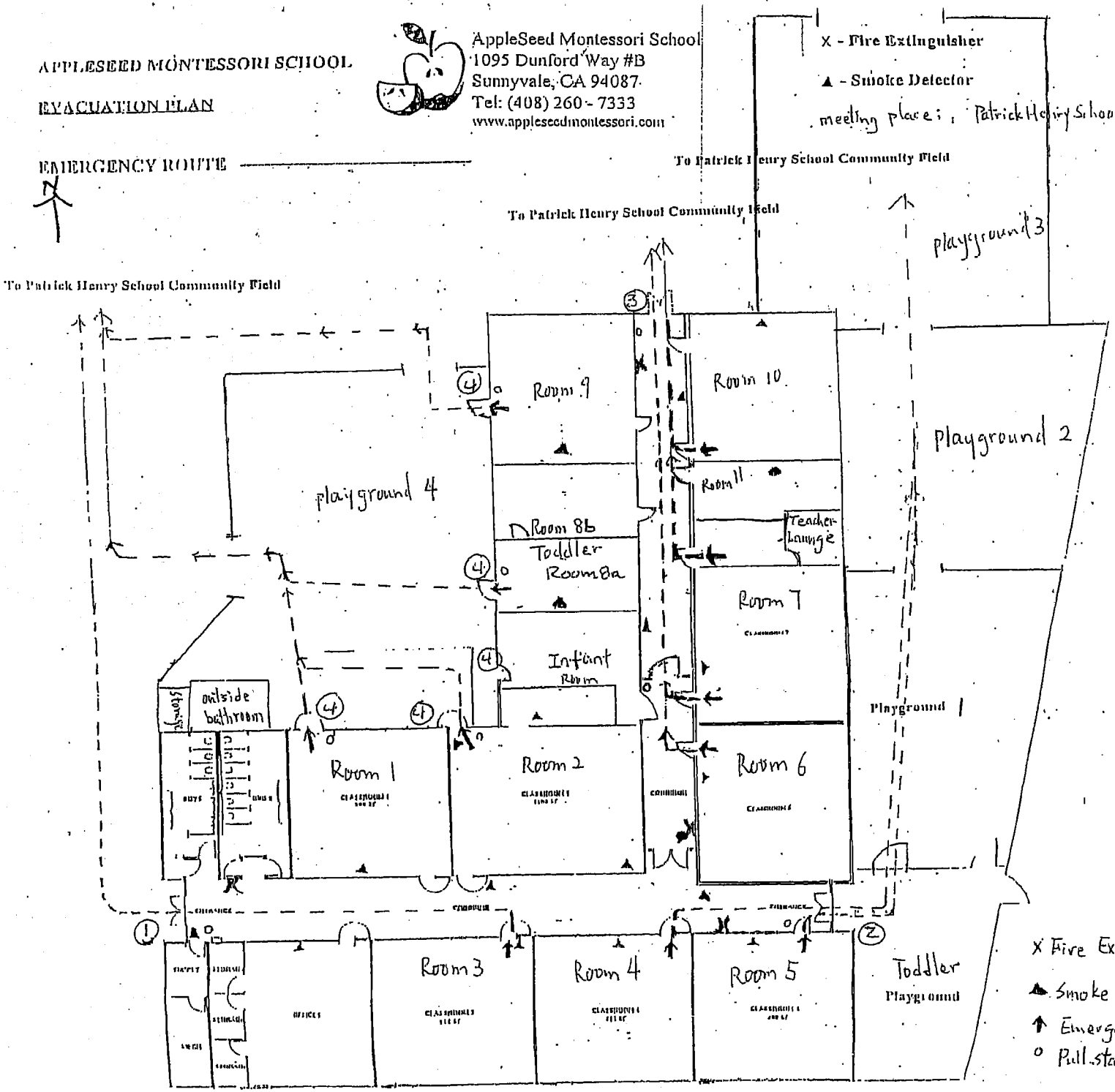
www.appleseedmontessori.com

EMERGENCY ROUTE ——————

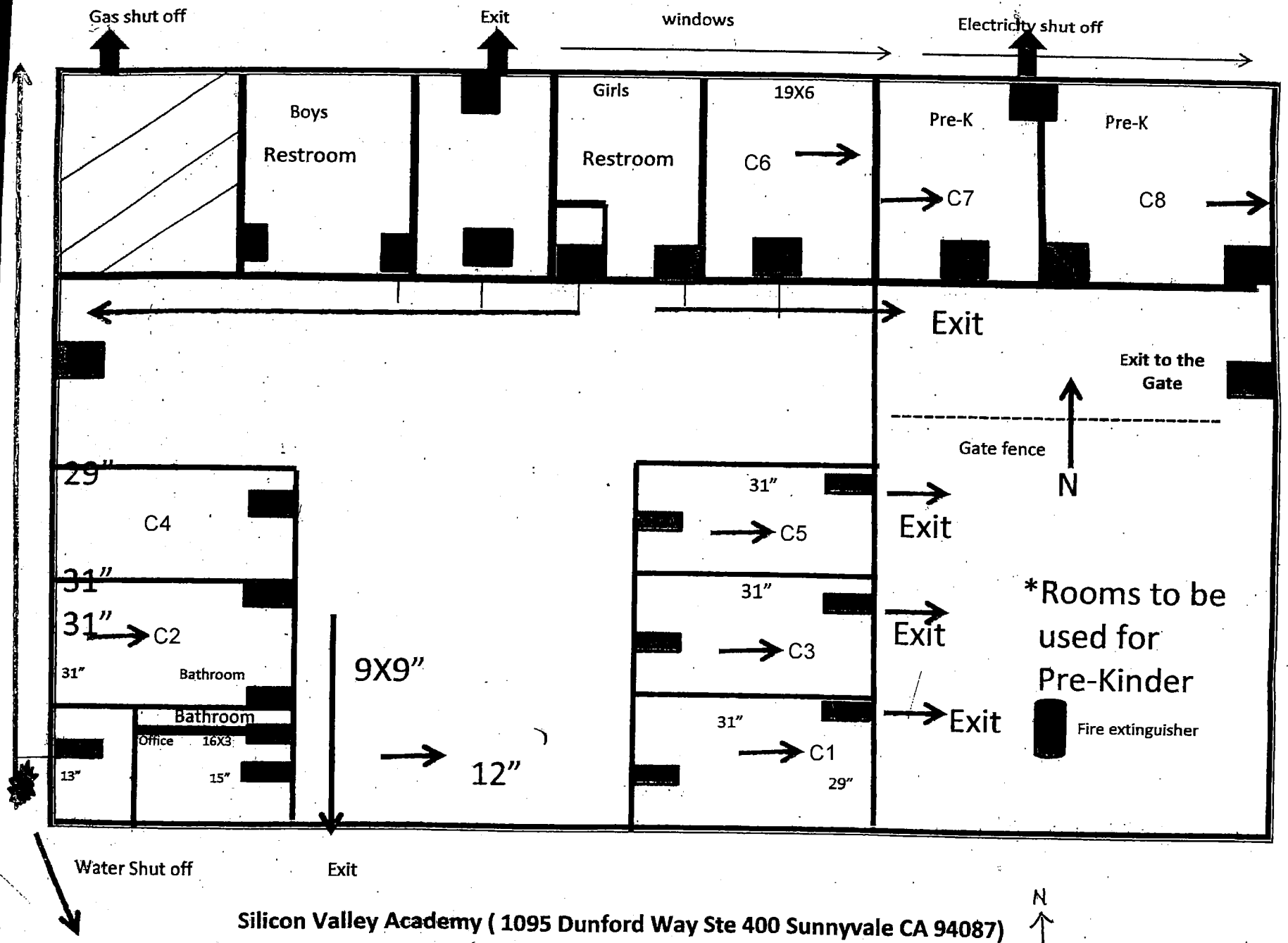
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School community field



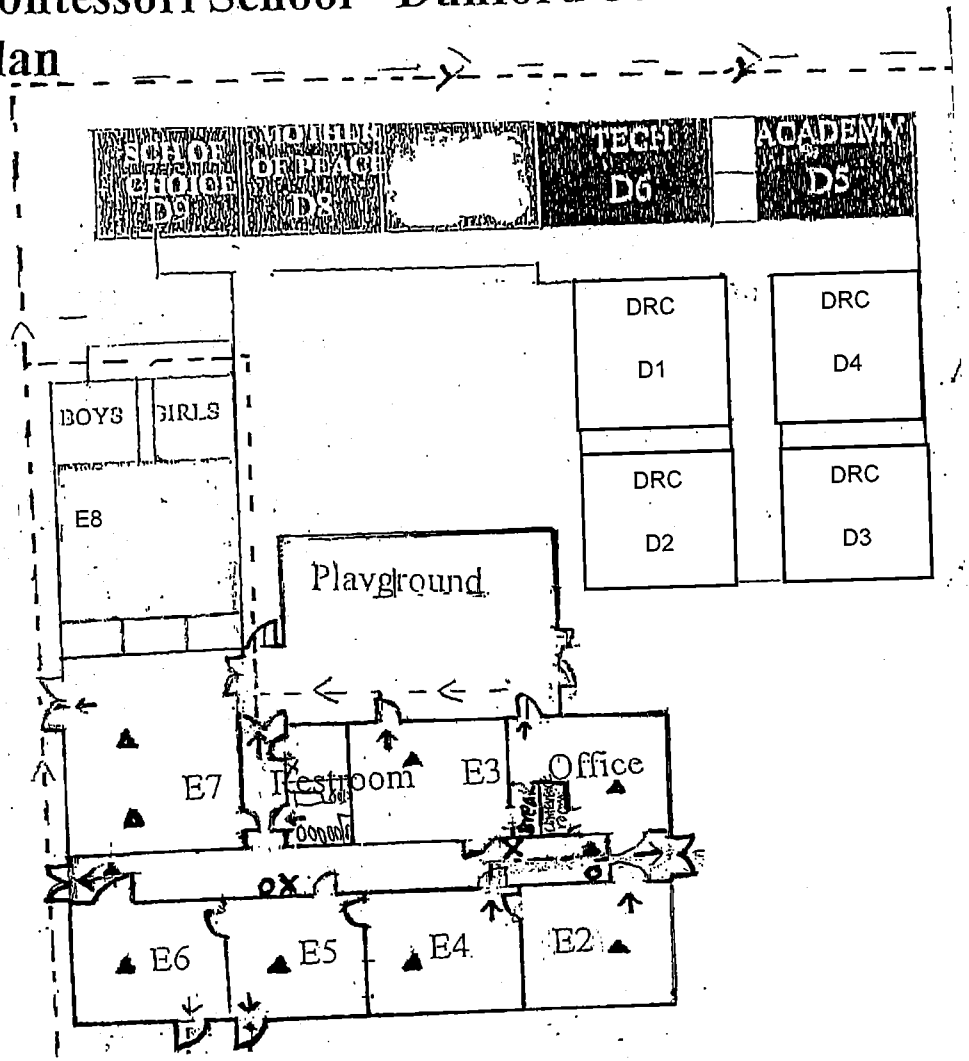
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

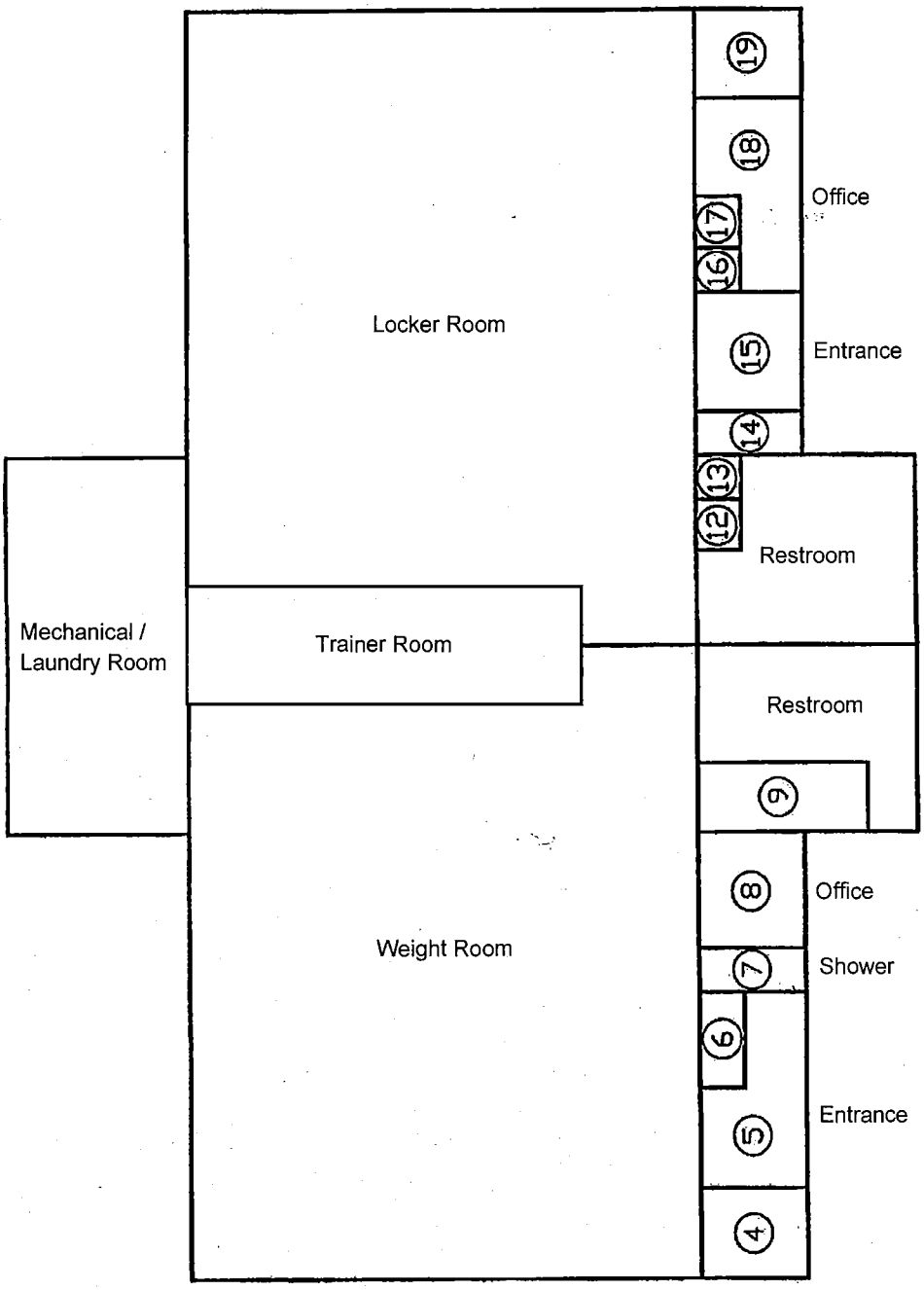
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100



Storage Rooms
4, 6, 7, 9, 12, 13,
14, 16, 17, 19

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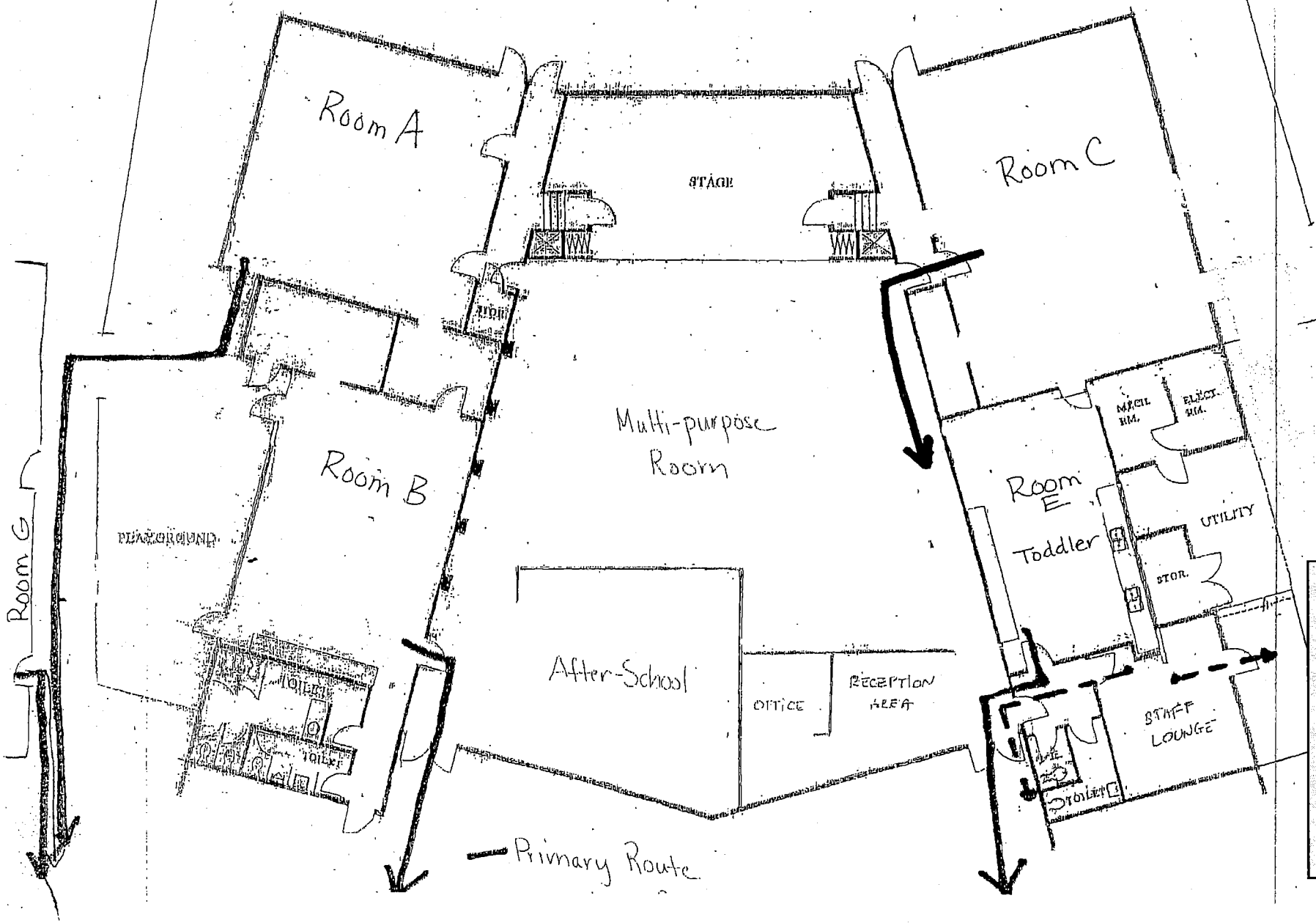
N

AppleSeed

EVACUATION PLAN



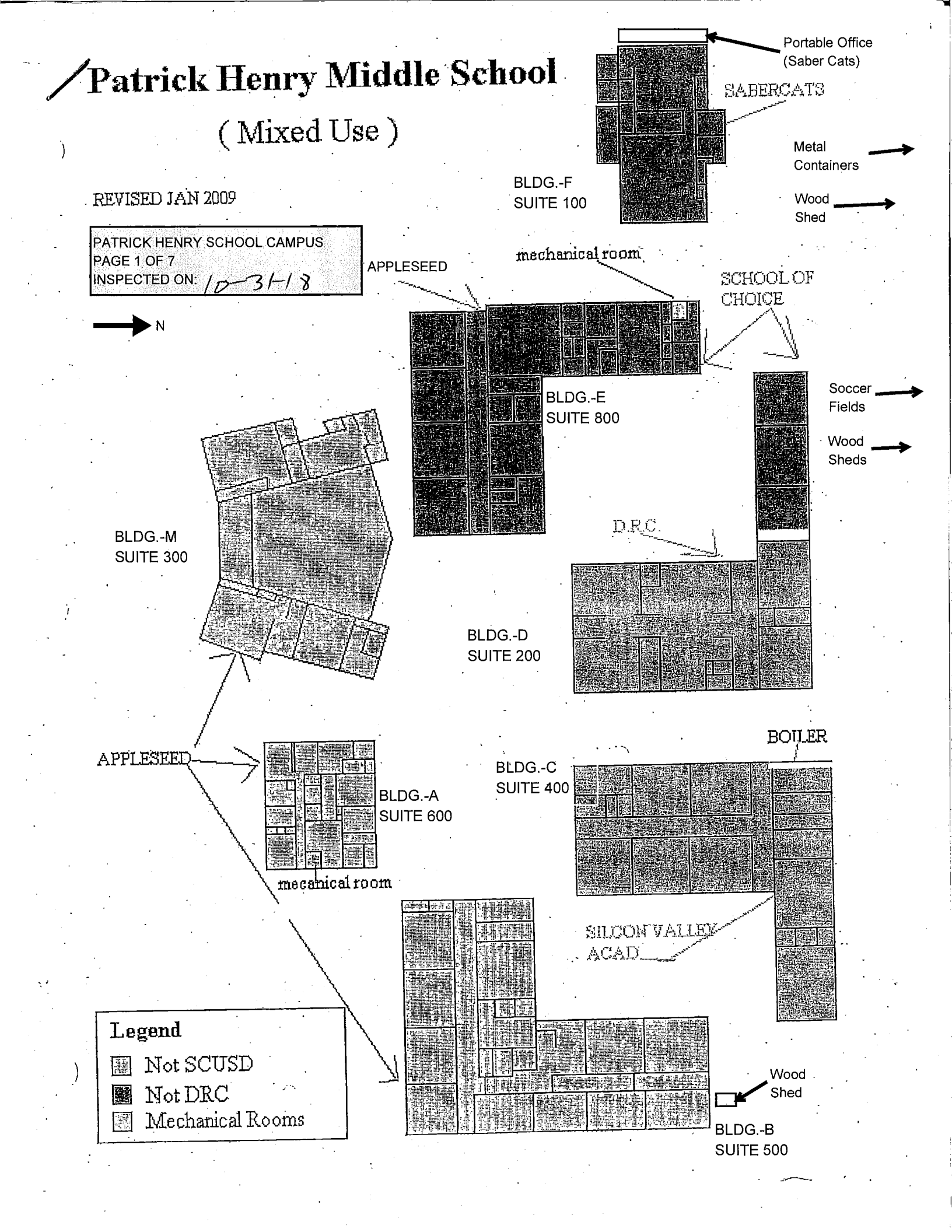
PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

Patrick Henry Middle School

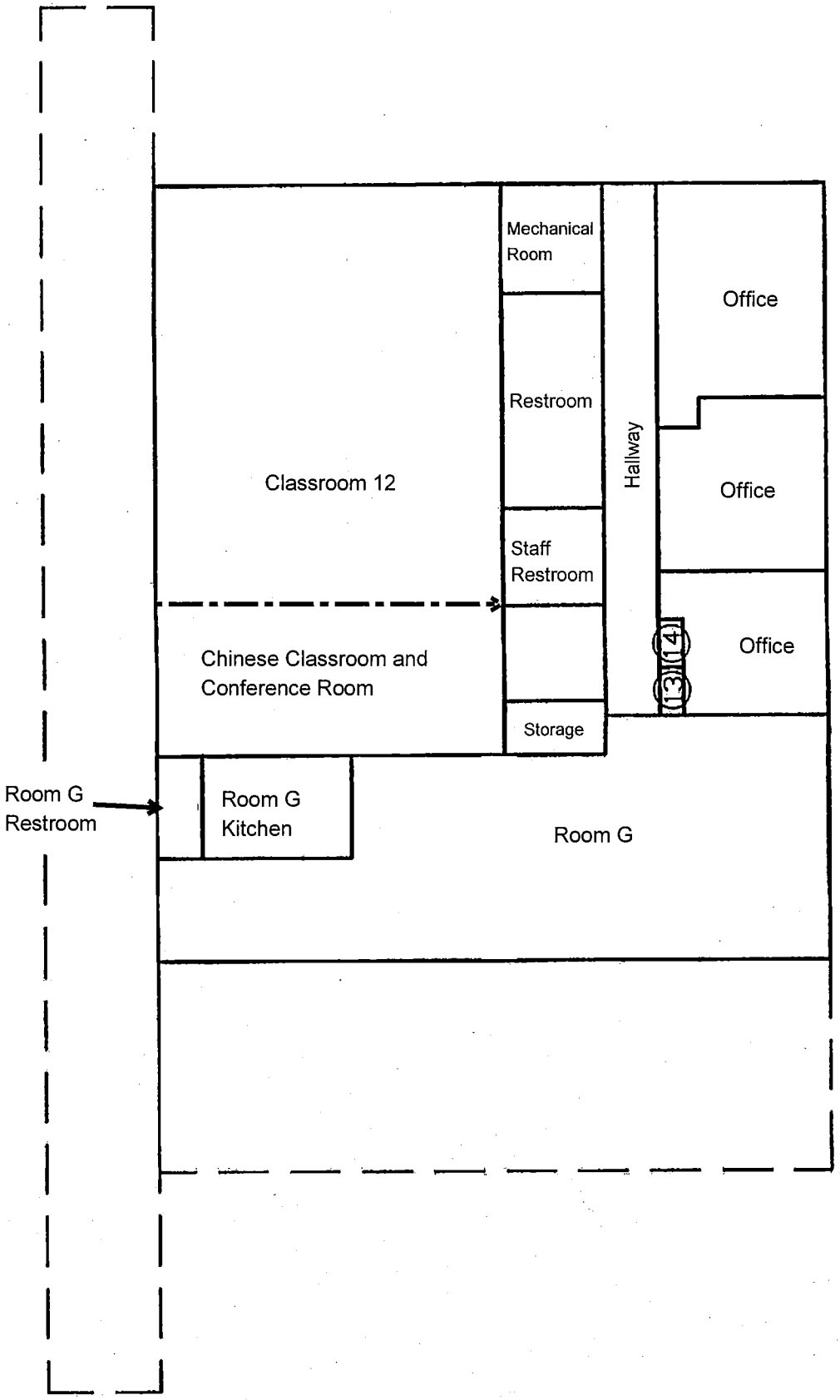
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: 10-31-18



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

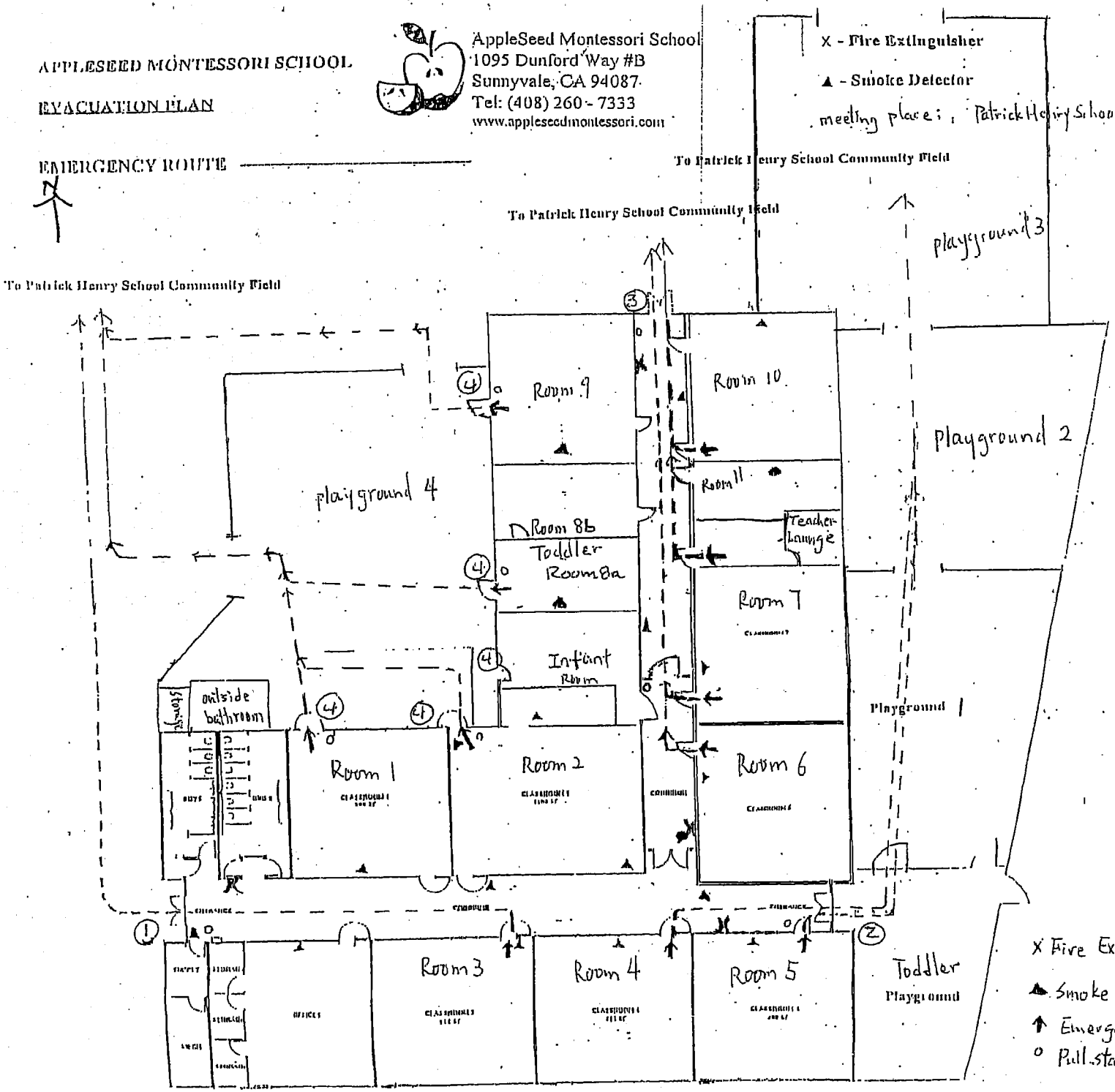
AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE ——————

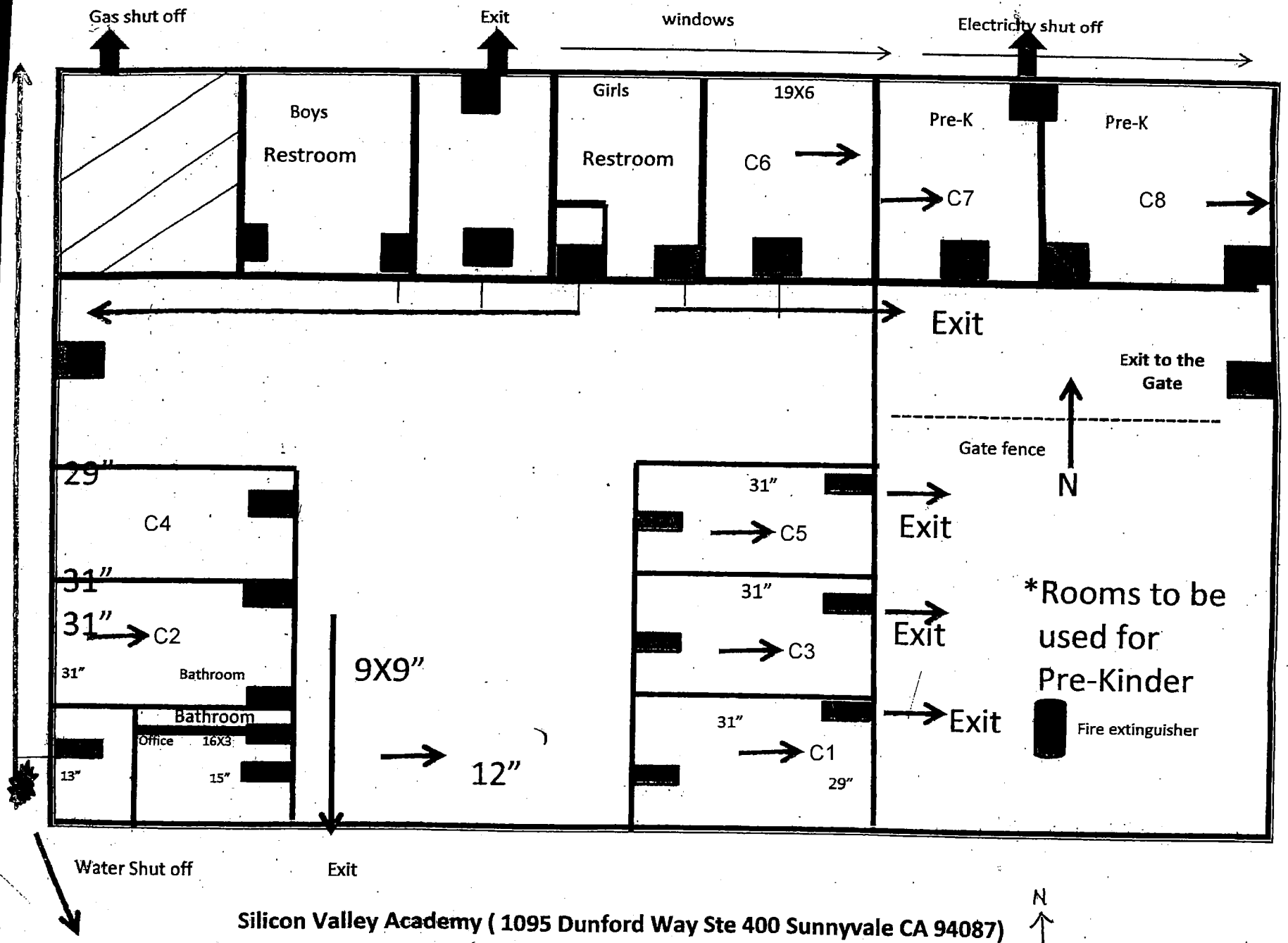
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School community field



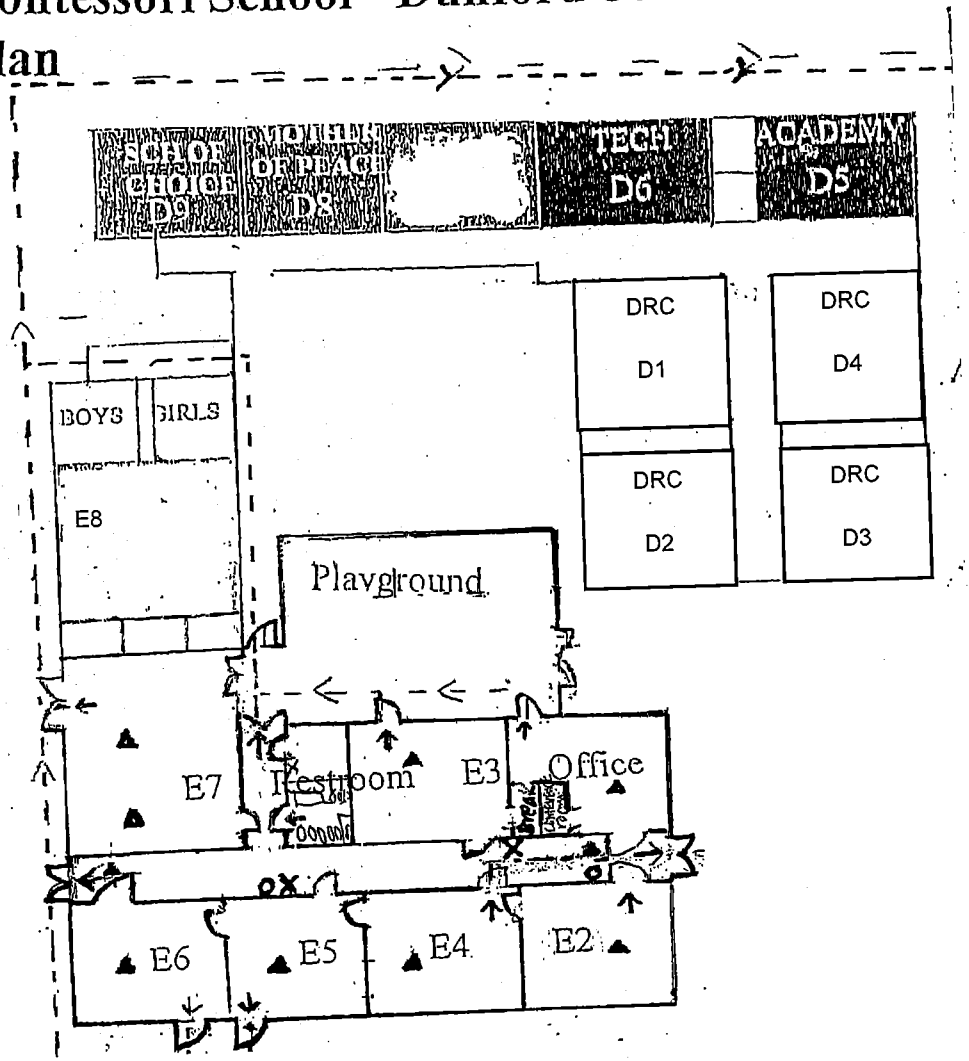
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

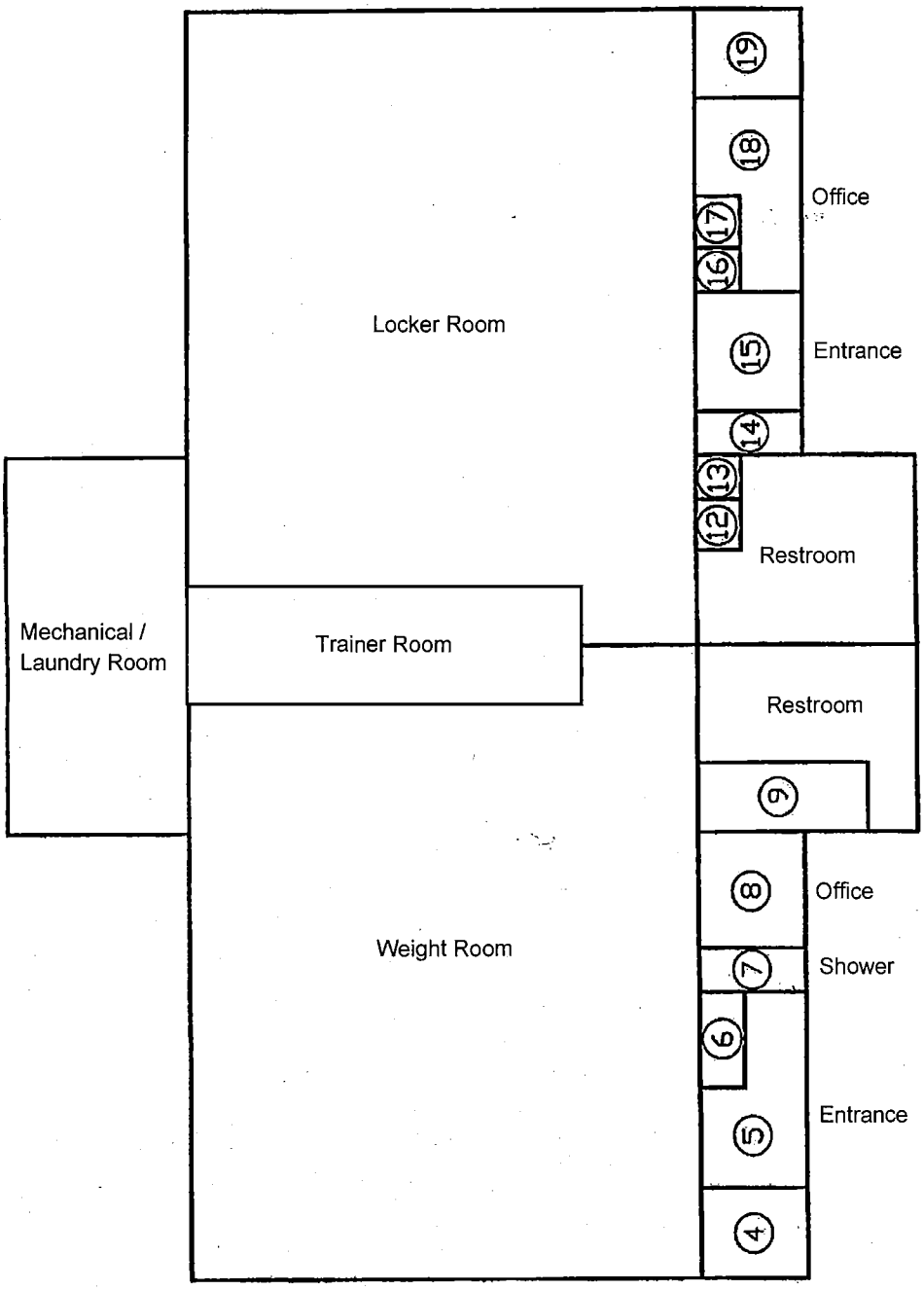
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100



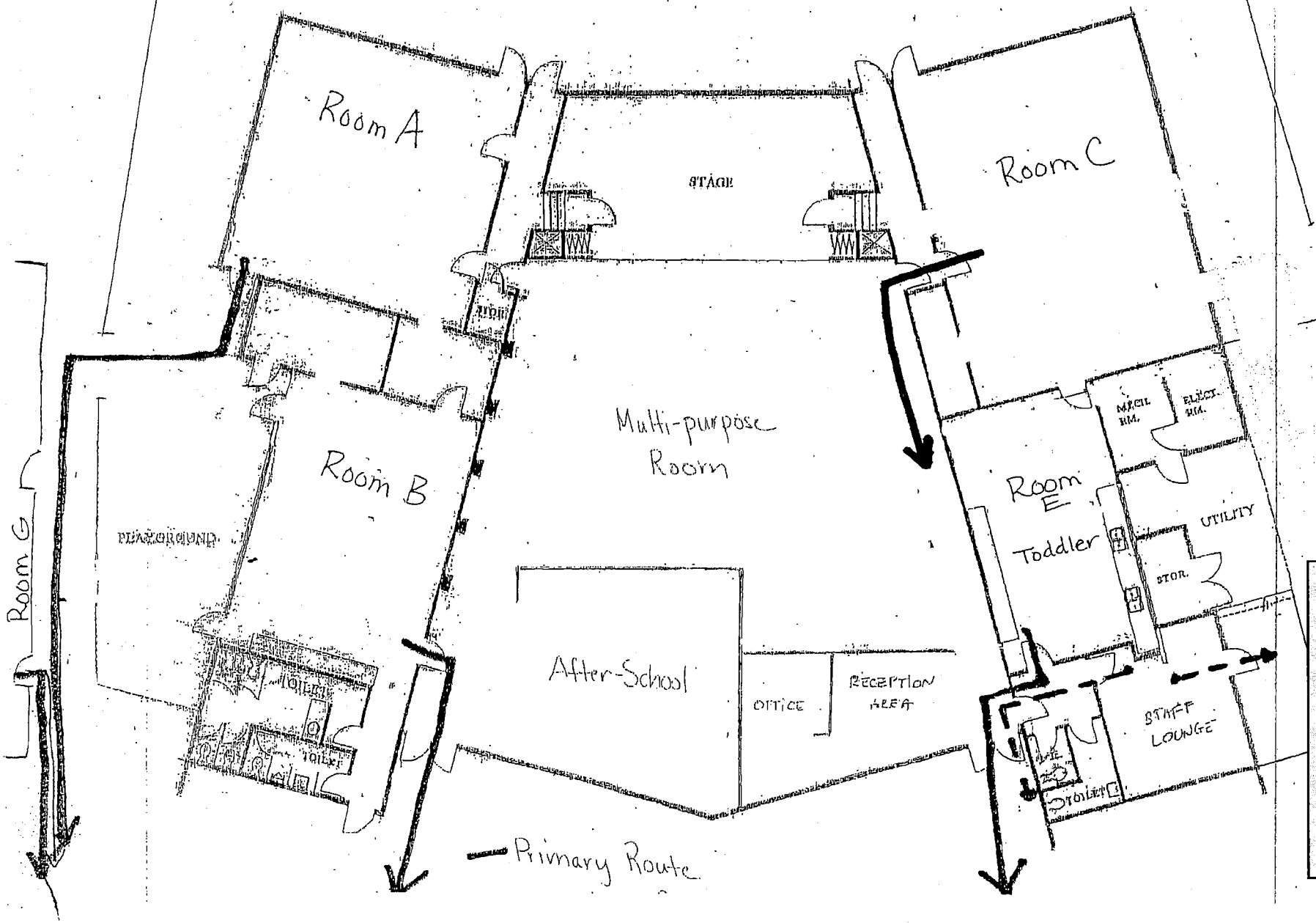
Storage Rooms
4, 6, 7, 9, 12, 13,
14, 16, 17, 19

AppleSeed International School
1095 Dunford Way, Ste. 300
Sunnyvale, CA 94087
Tel. No. (408) 260-9333
Fax. No. (408) 260-9933

N

AppleSeed

EVACUATION PLAN



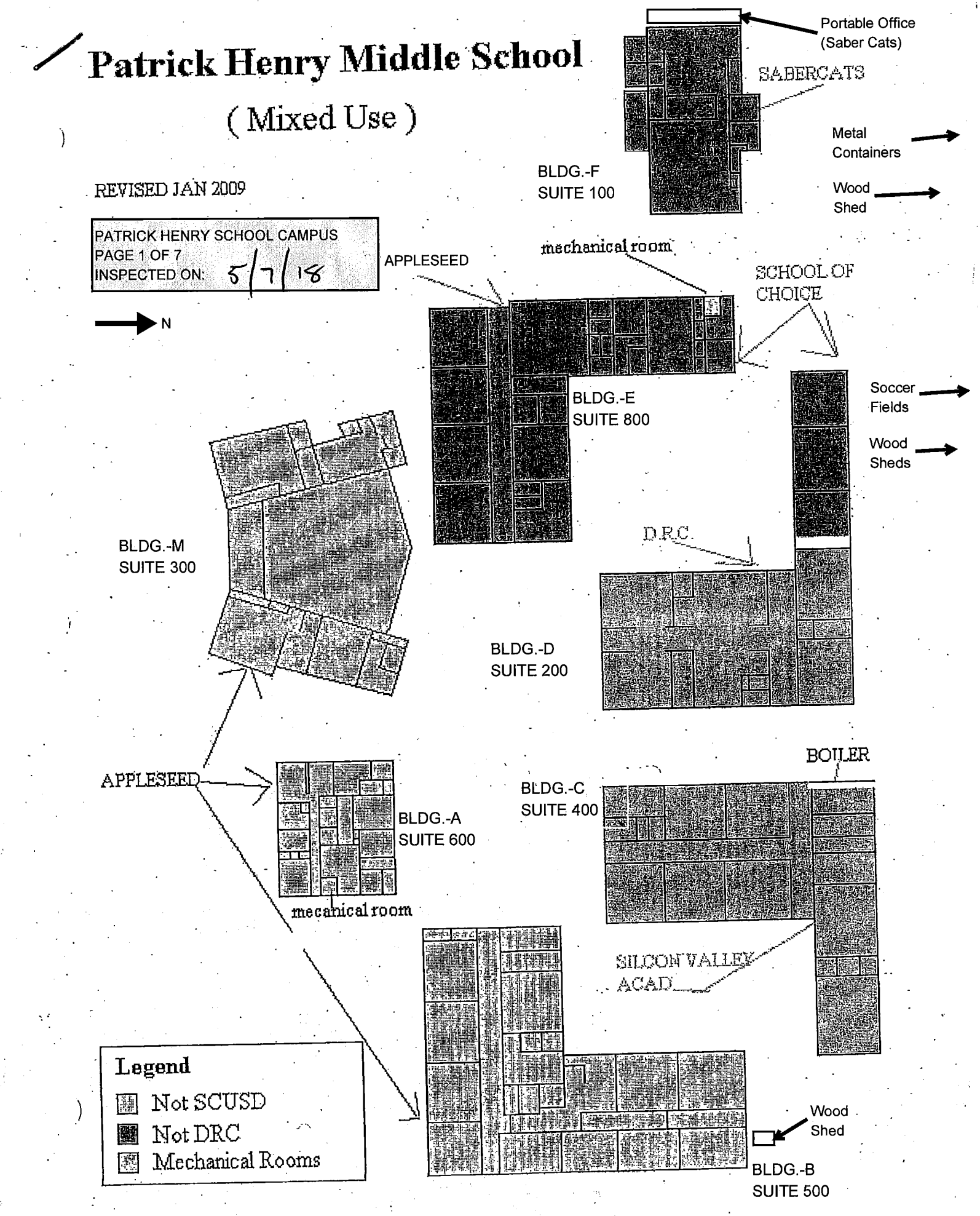
PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

Patrick Henry Middle School

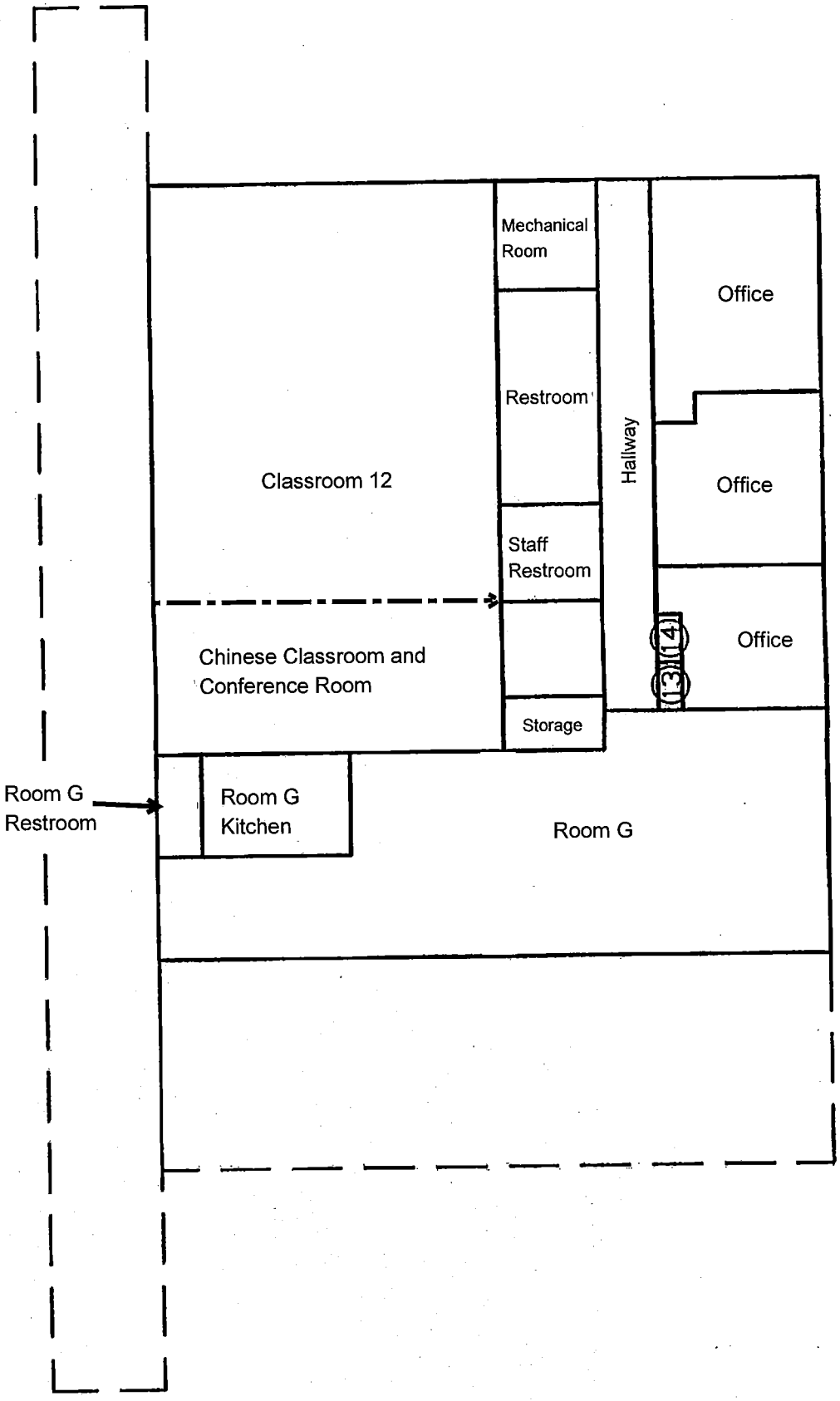
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: 5/7/18



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

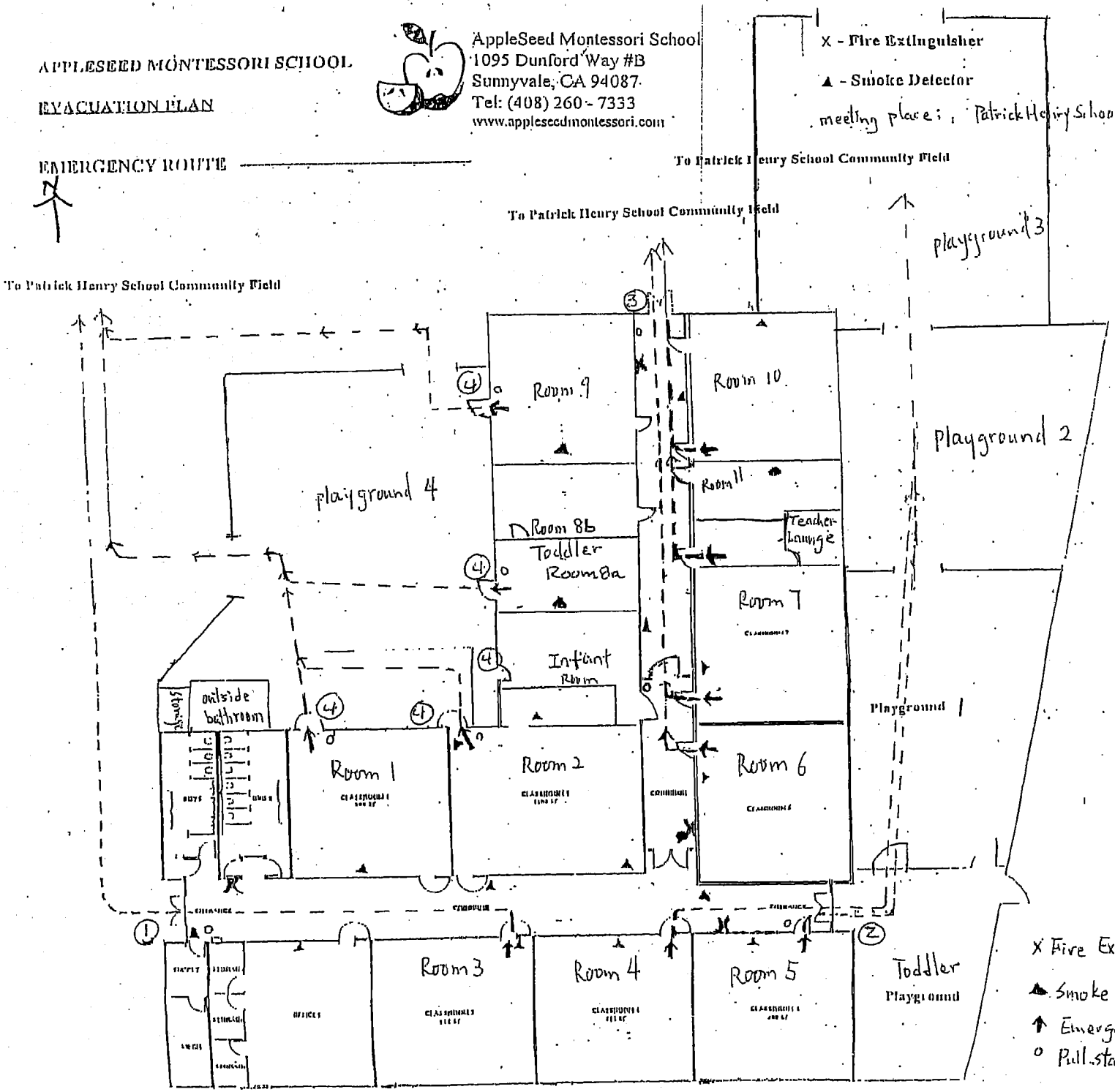
AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE ——————

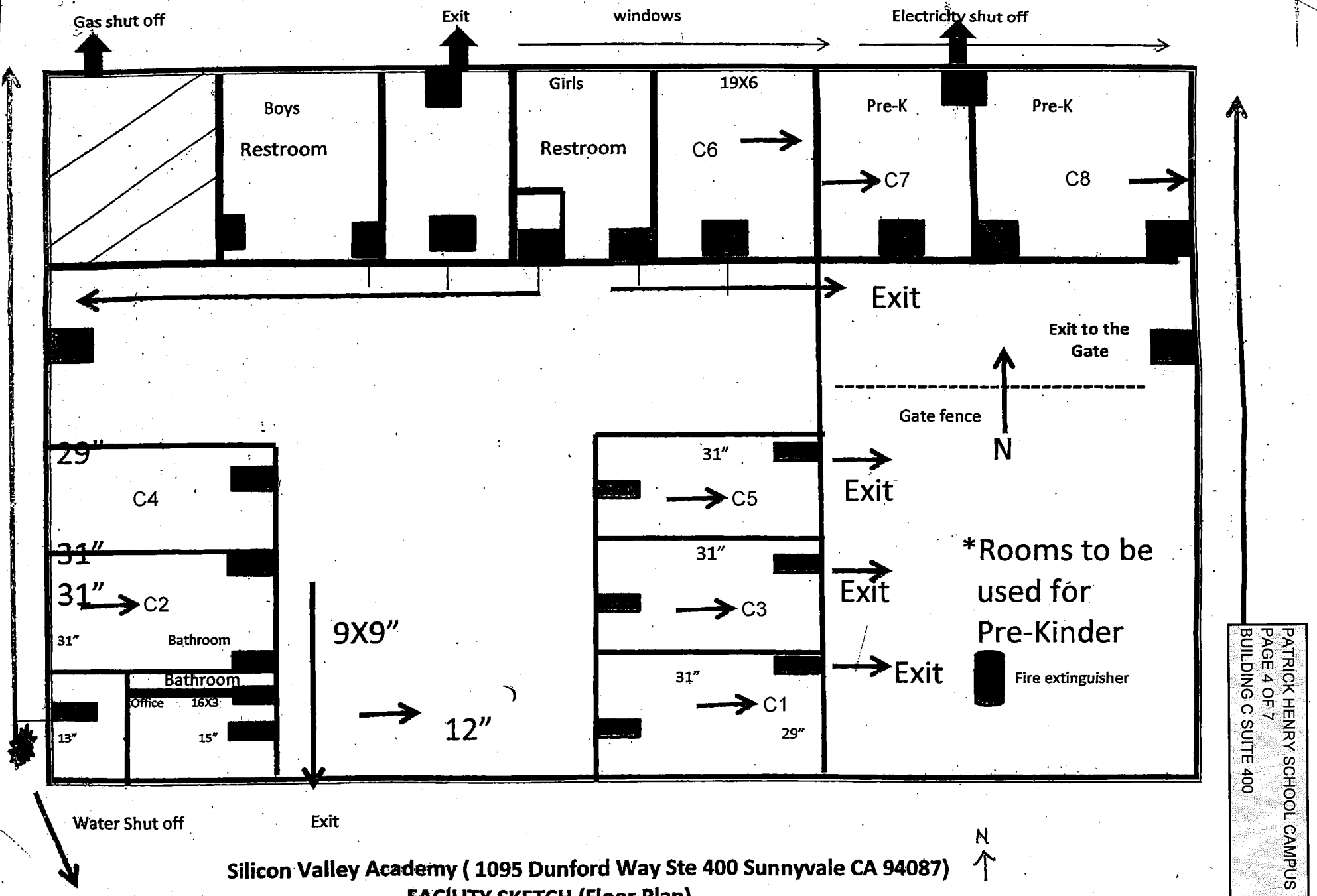
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School community field



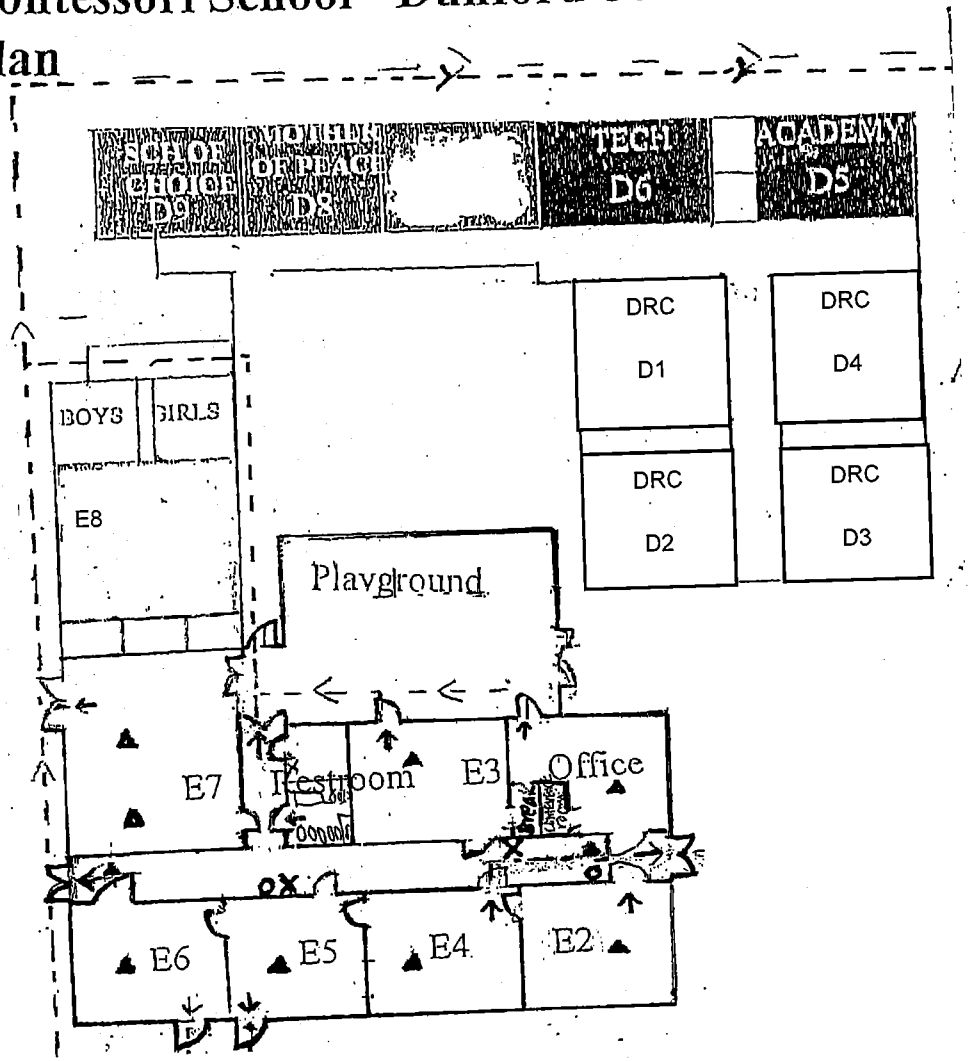
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

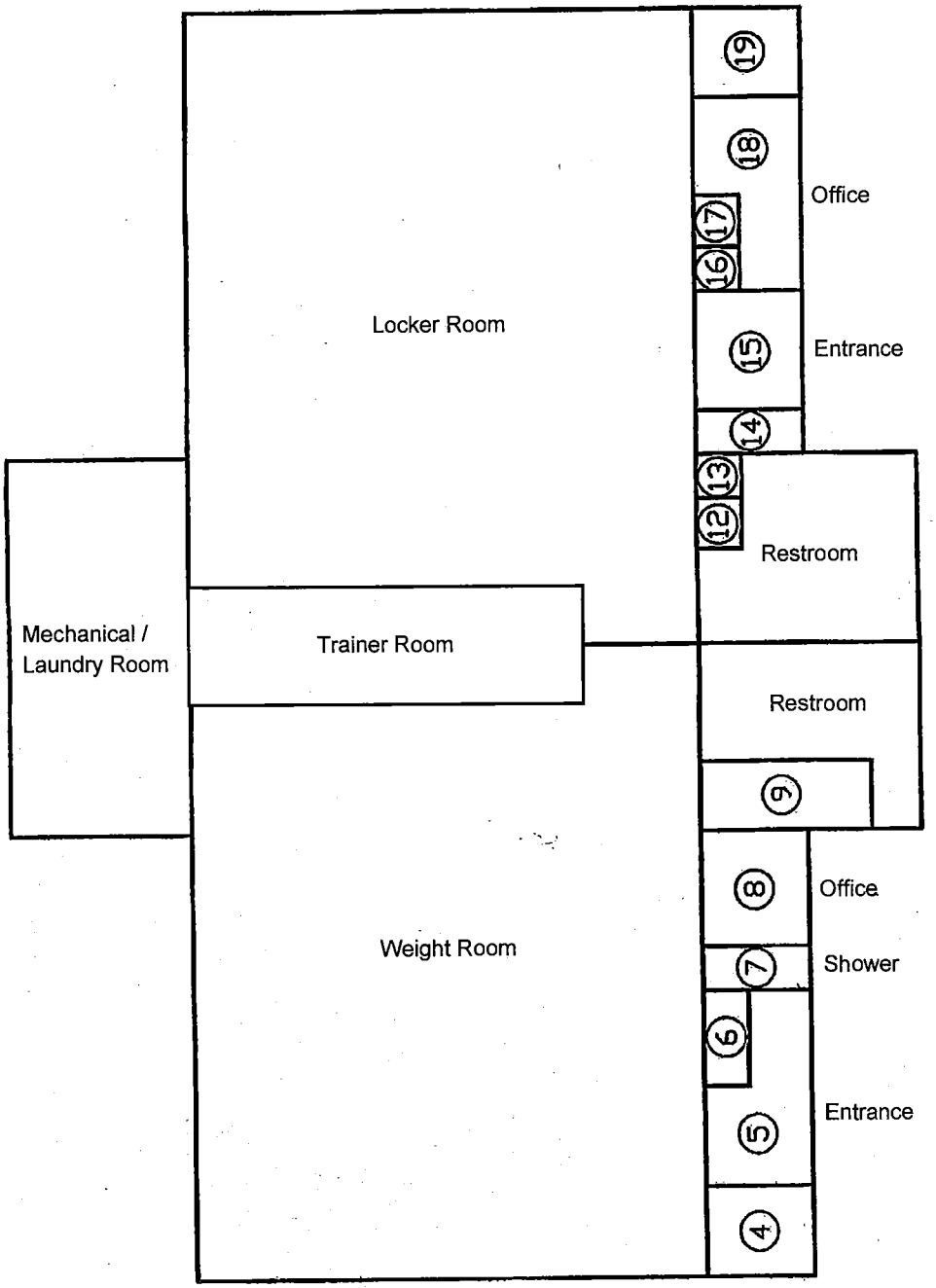
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100



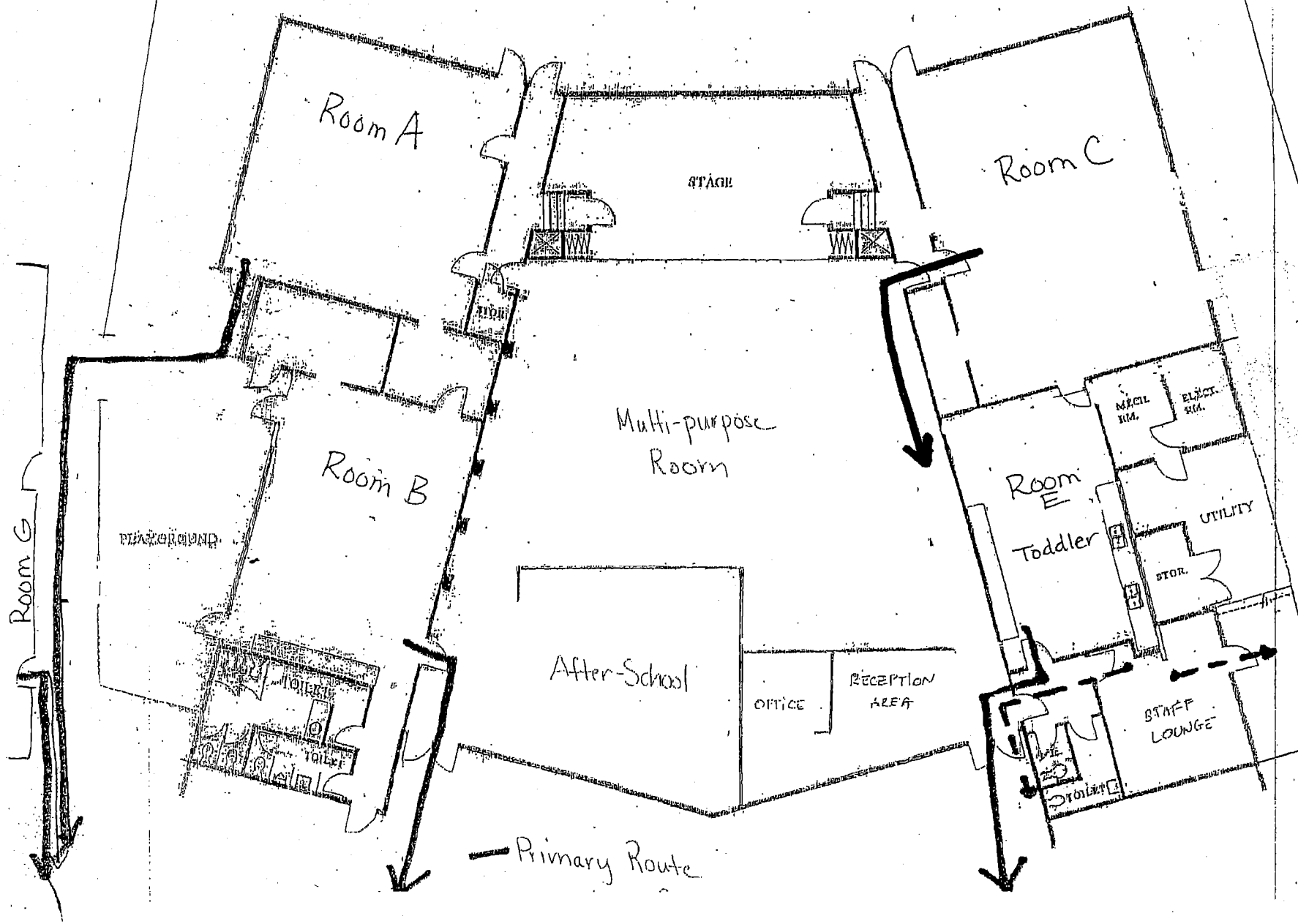
Storage Rooms
4, 6, 7, 9, 12, 13,
14, 16, 17, 19

AppleSeed International School
1095 Dunford Way, Ste. 300
Sunnyvale, CA 94087
Tel. No. (408) 260-9333
Fax. No. (408) 260-9933

N.

AppleSeed

EVACUATION PLAN



PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

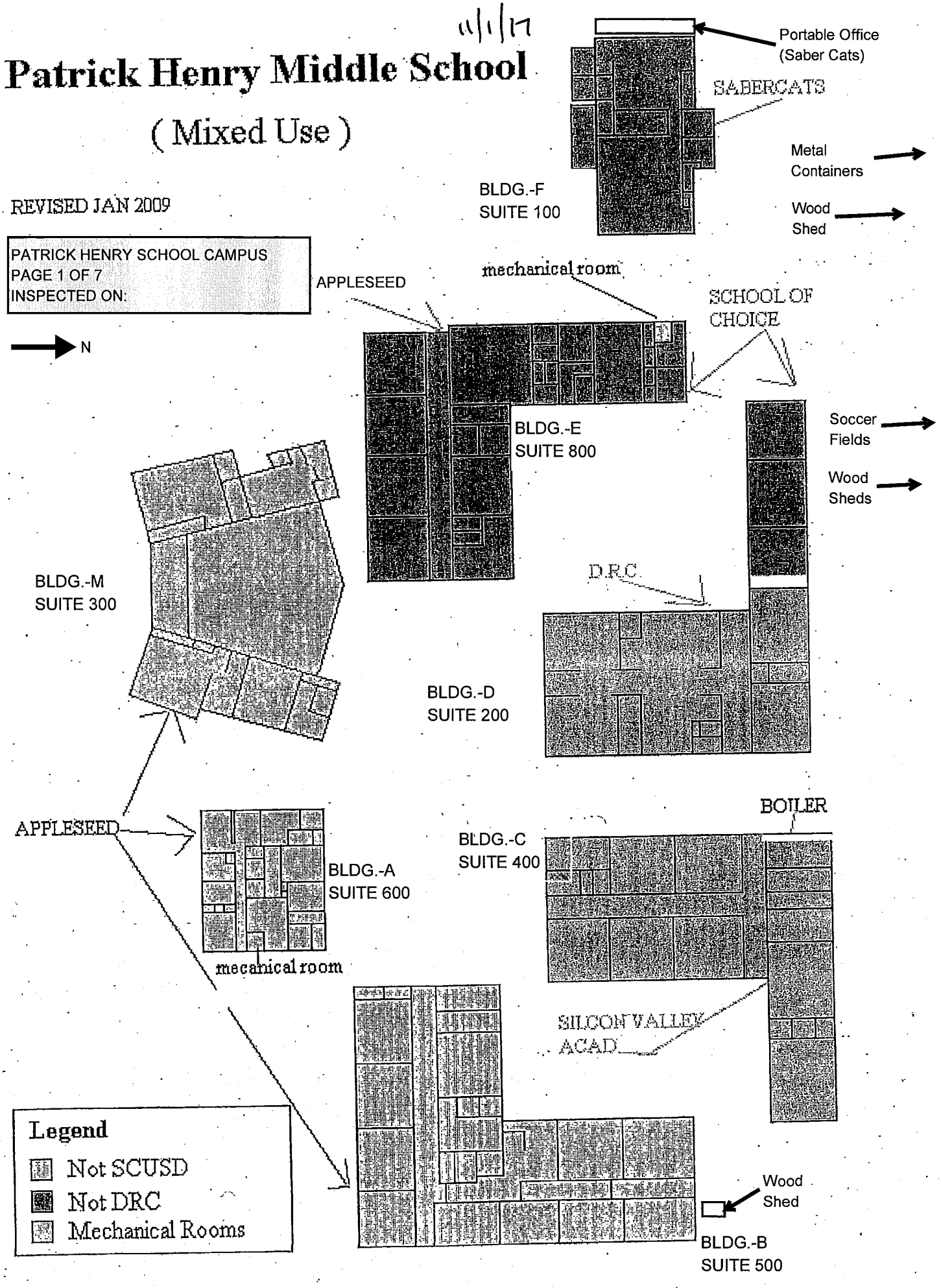
11/1/17

Patrick Henry Middle School

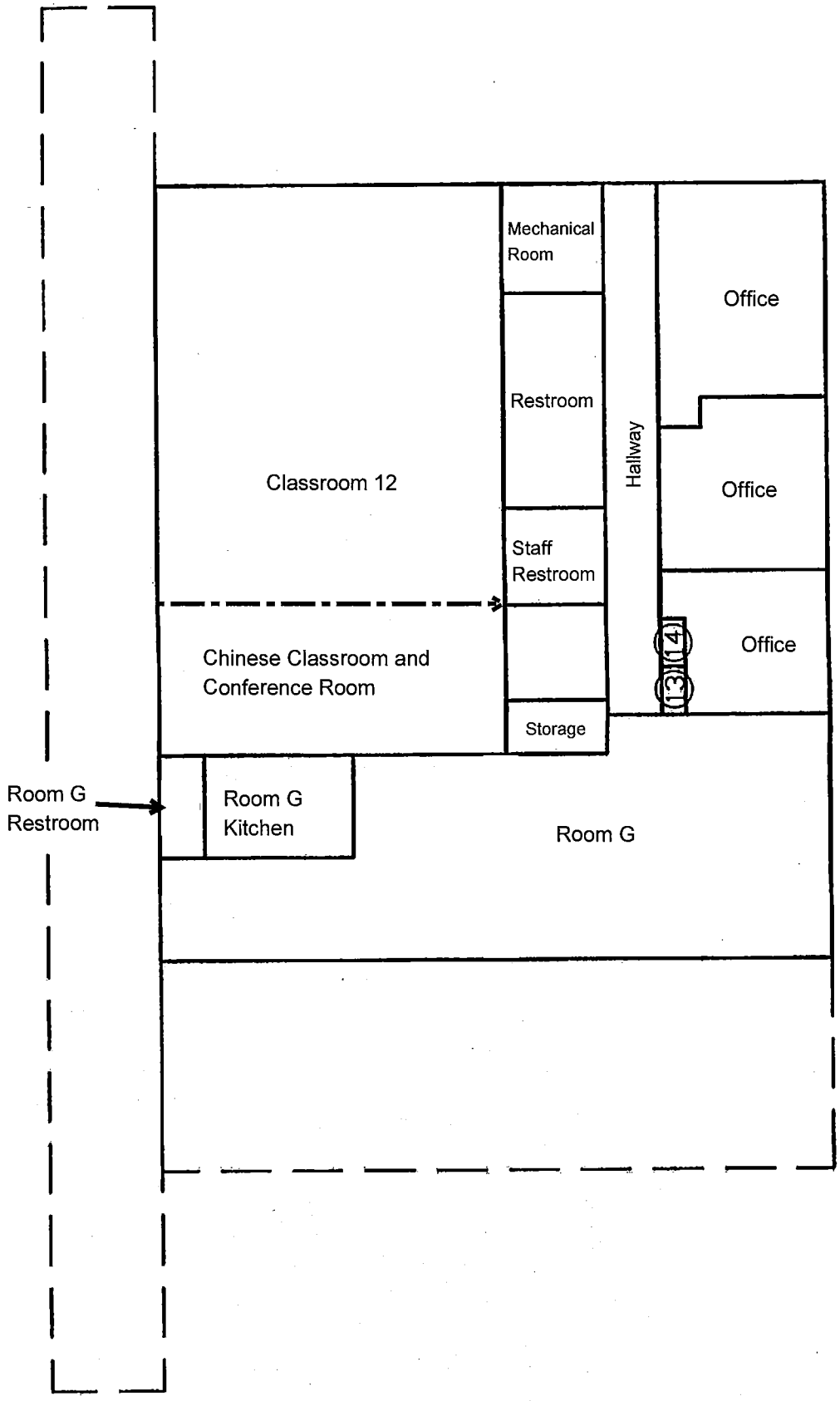
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON:



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

AppleSeed Montessori School
1095 Dunford Way #B
Sumyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE ——————

X - Fire Extinguisher

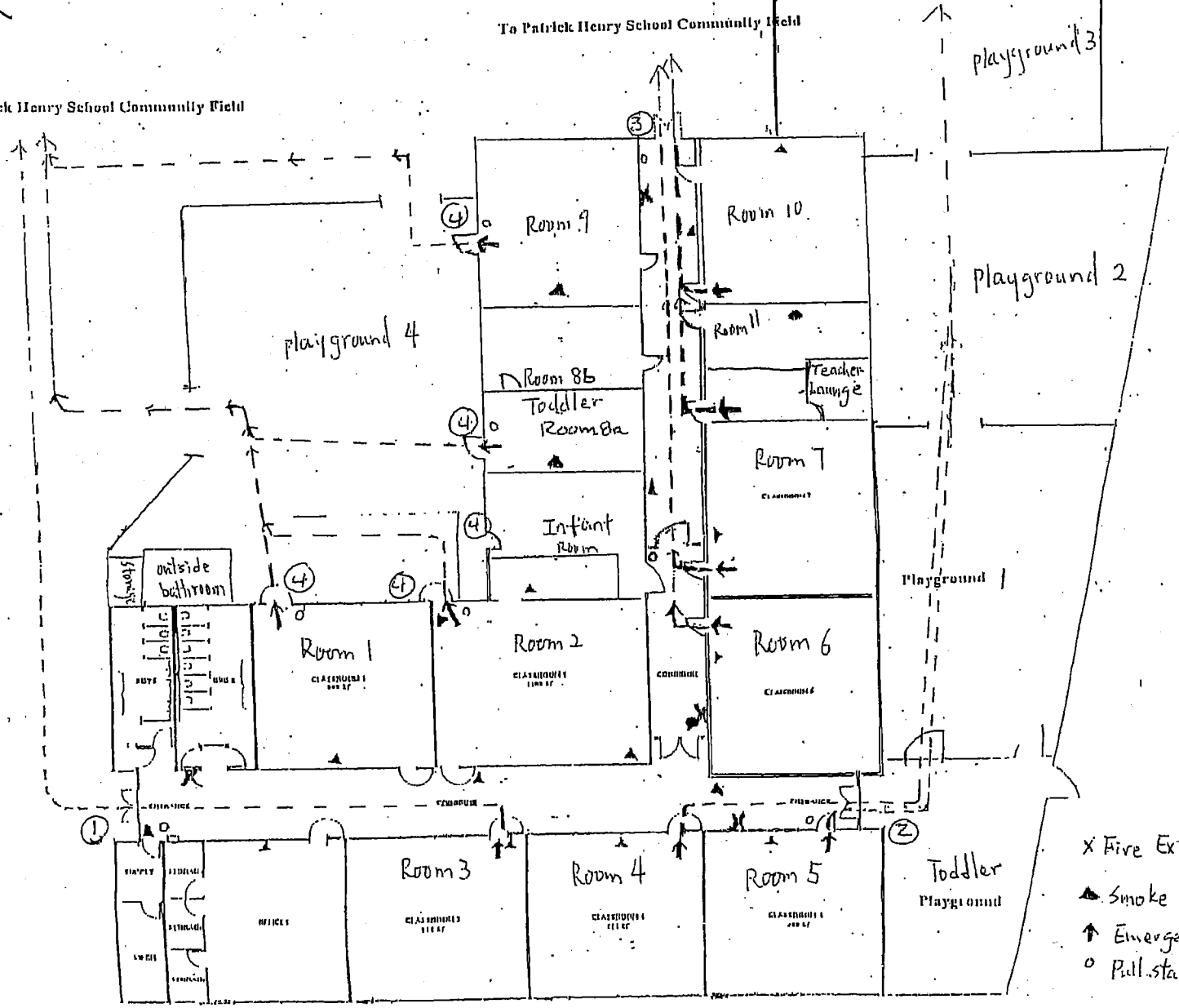
▲ - Smoke Detector

meeting place: Patrick Henry School Community Field

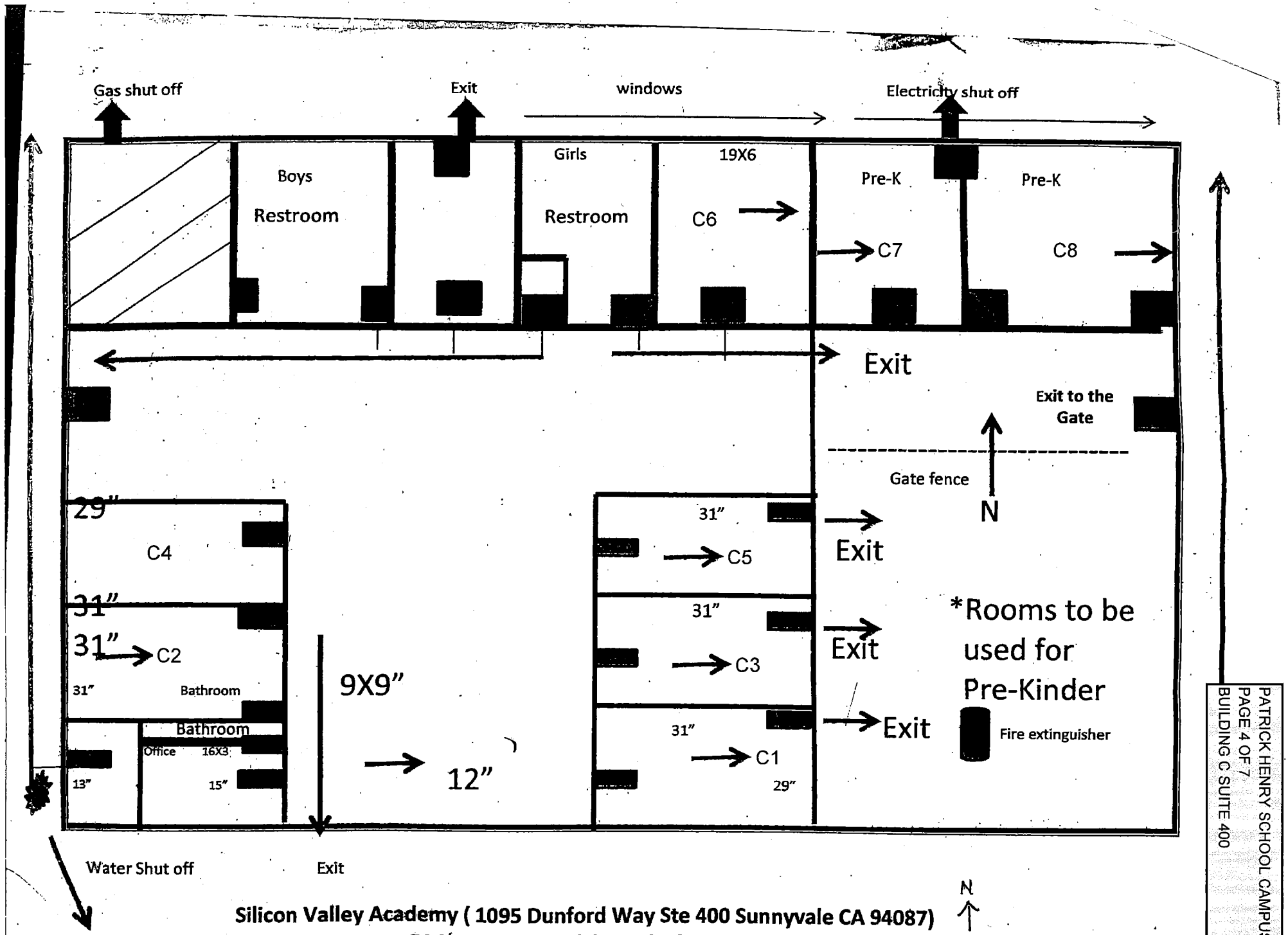
To Patrick Henry School Community Field

To Patrick Henry School Community Field

To Patrick Henry School Community Field



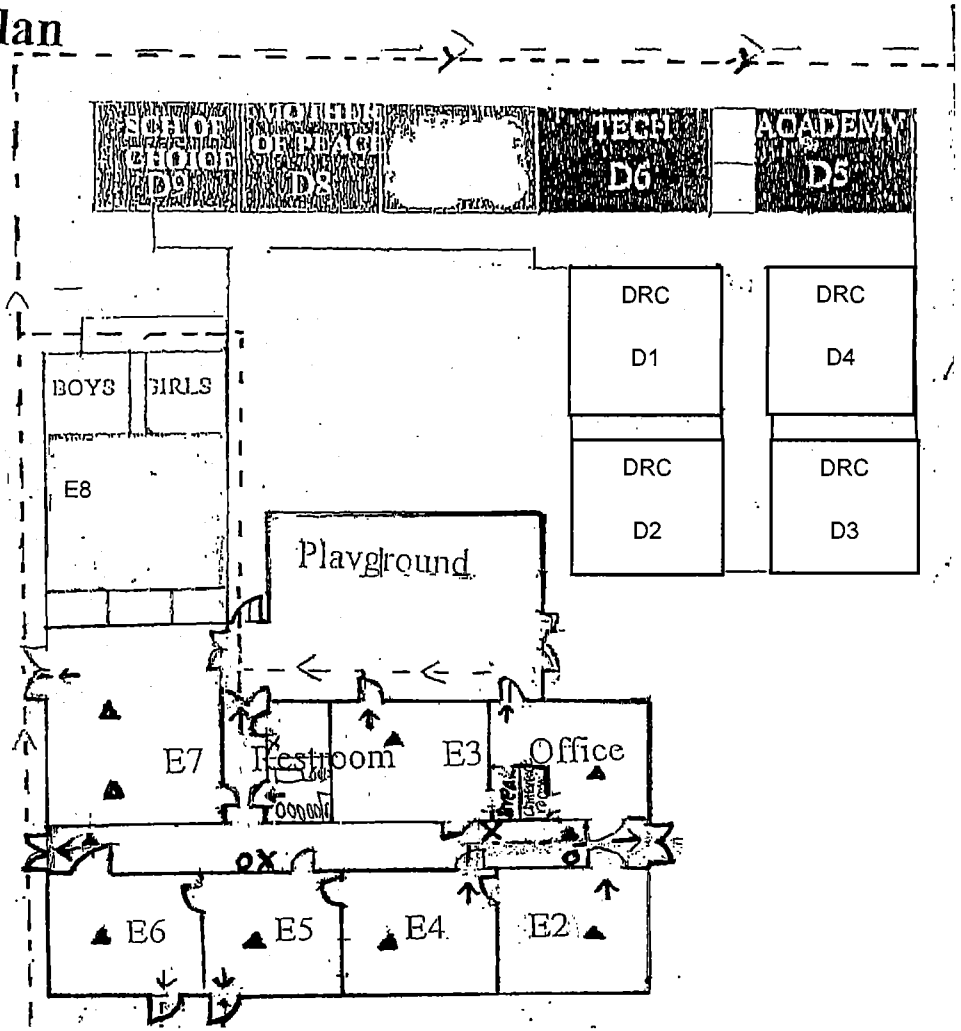
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

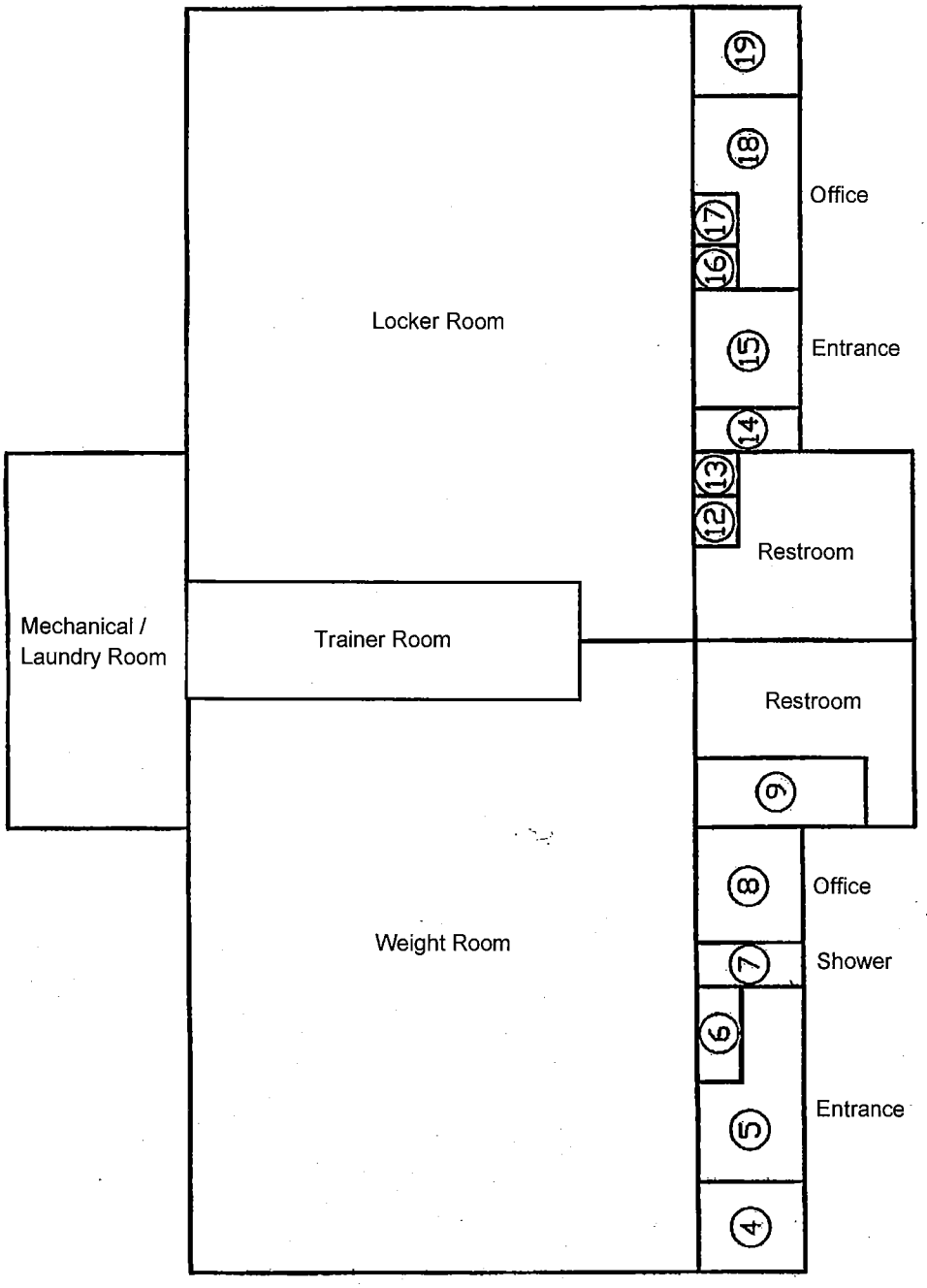
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100

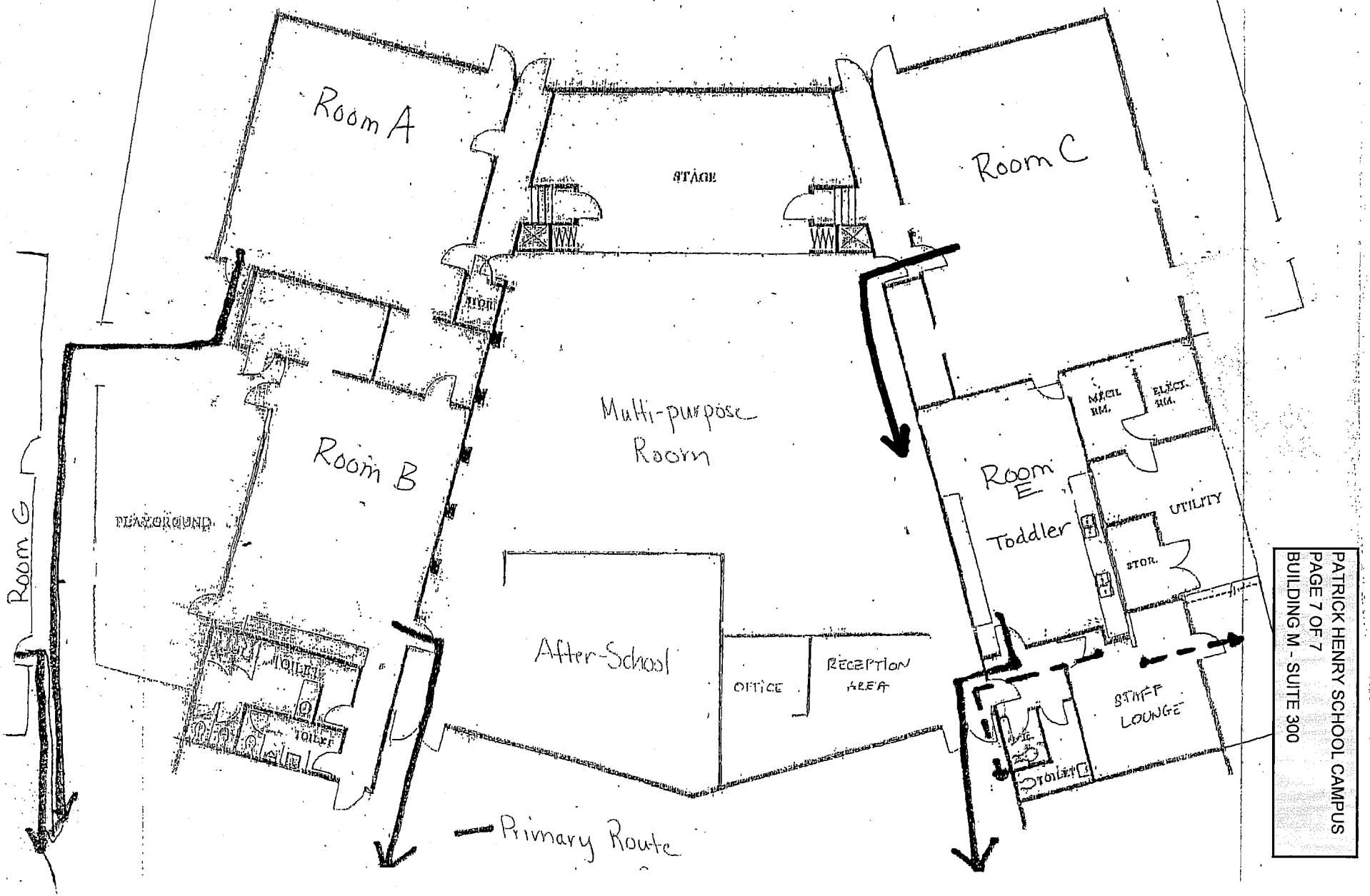


So wrong...

Storage Rooms
4, 6, 7, 9, 12, 13, 14, 16, 17, 19

AppleSeed International School
1095 Dunford Way, Ste. 300
Sunnyvale, CA 94087
Tel. No. (408) 260-9333
Fax. No. (408) 260-9933

EVACUATION PLAN



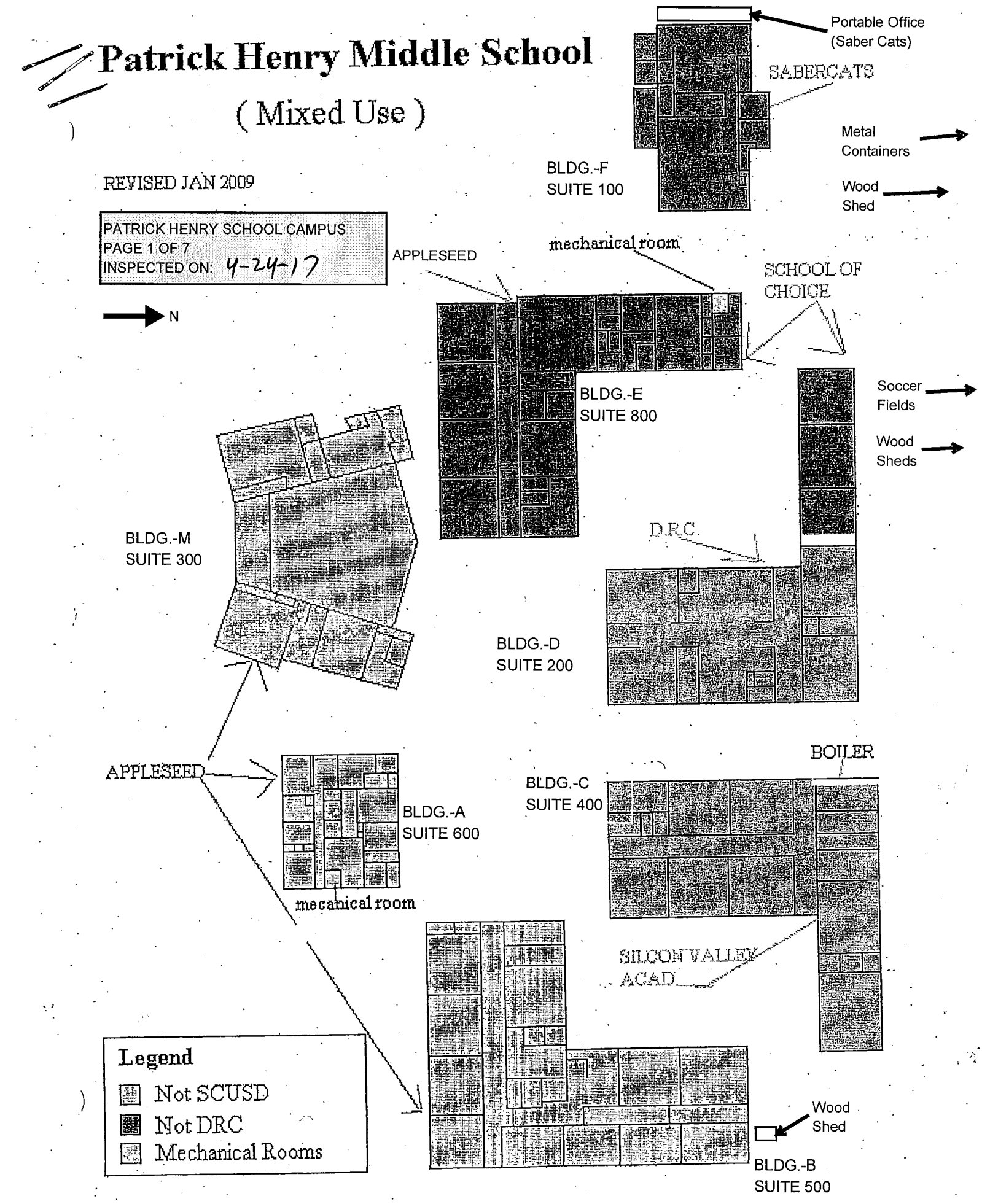
PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

Patrick Henry Middle School

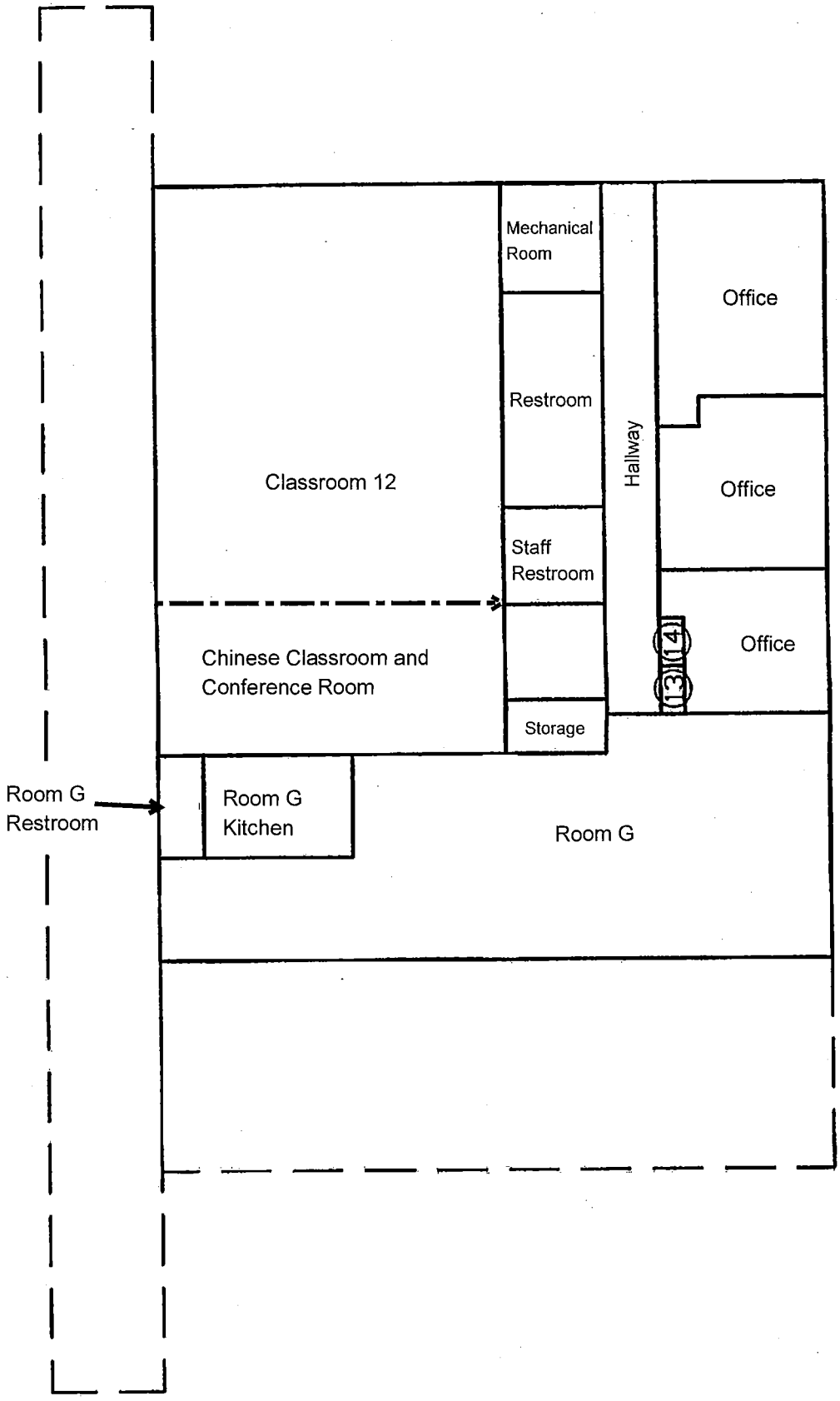
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: 4-24-17



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

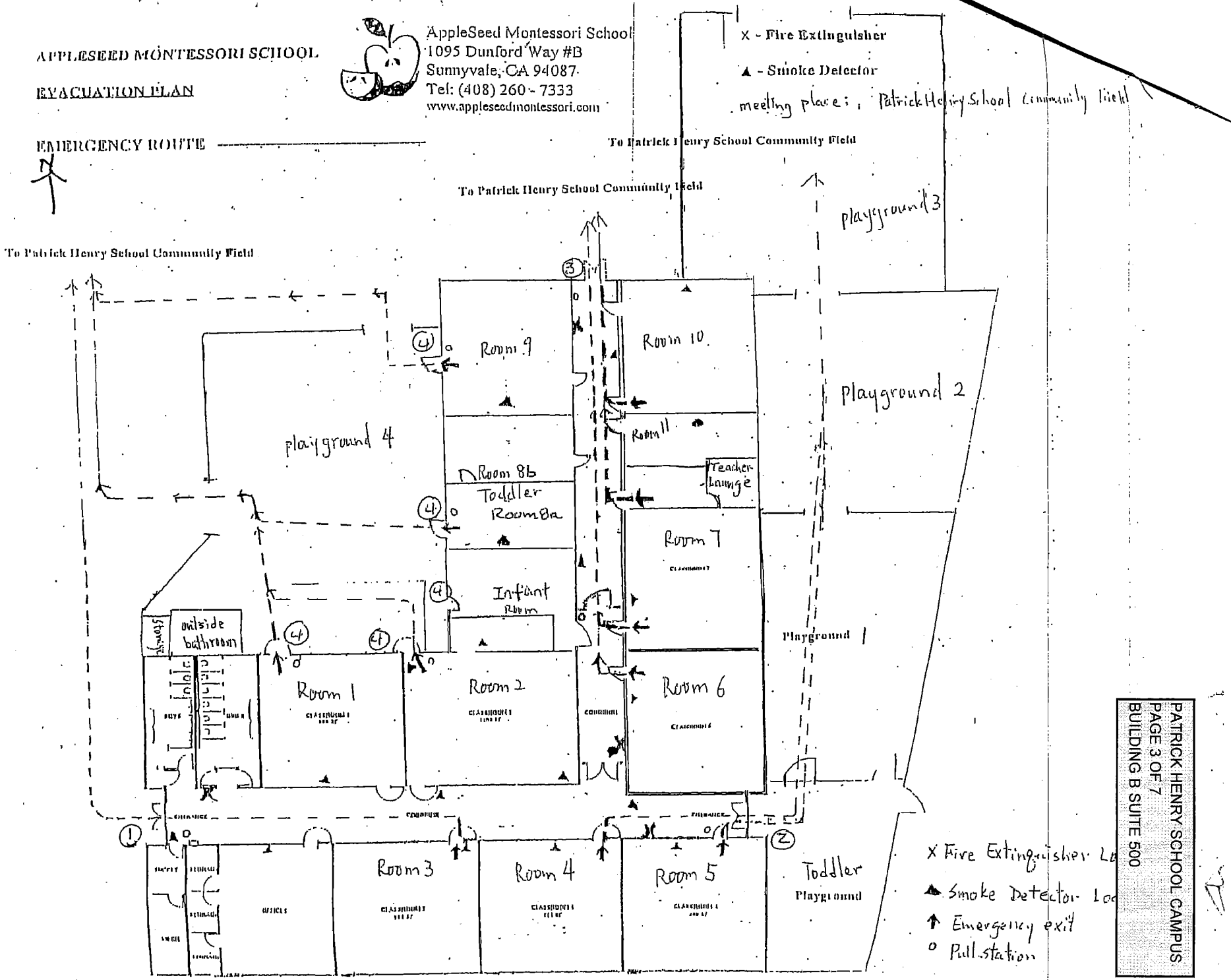
AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE

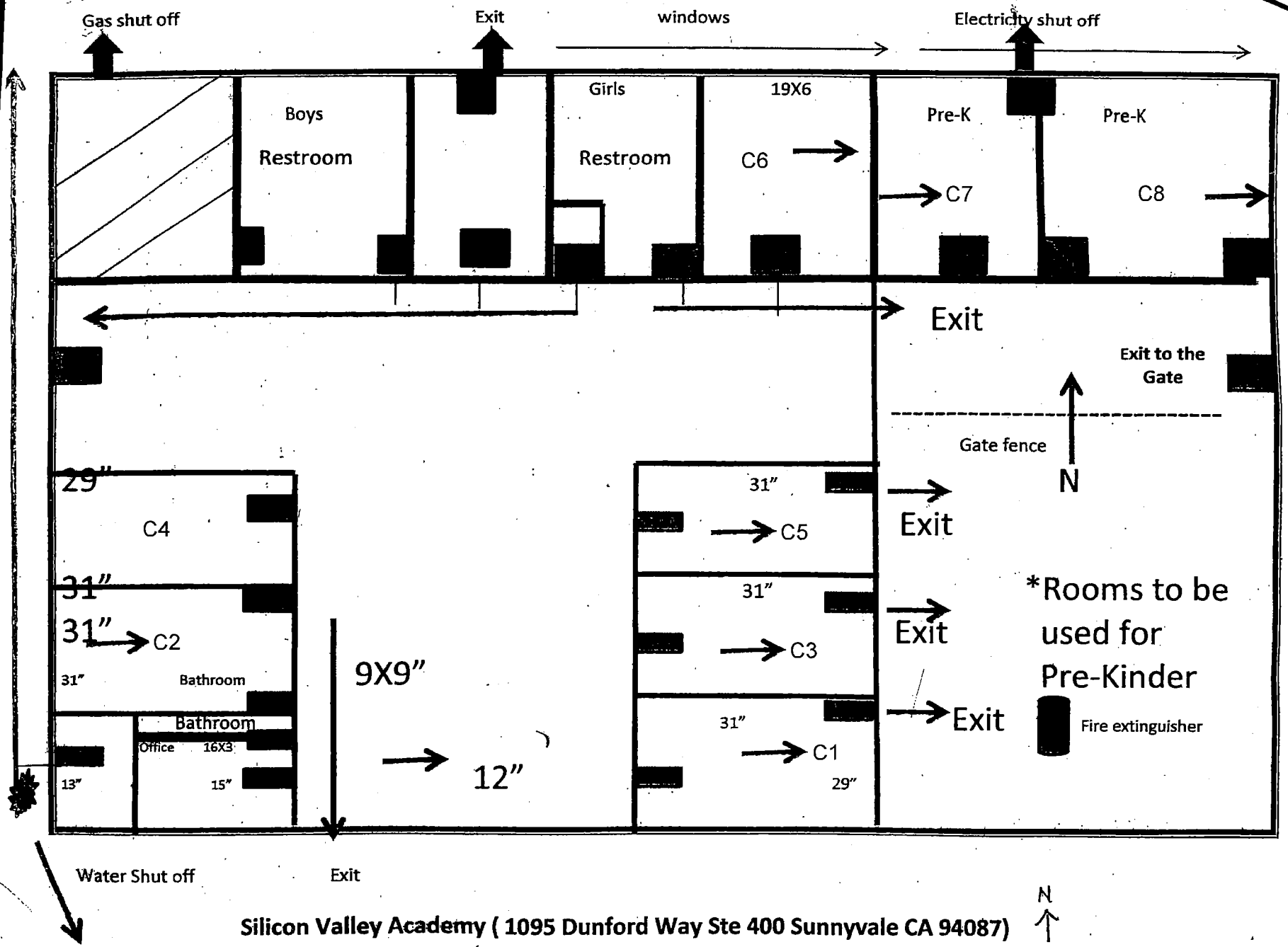
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School Community Field



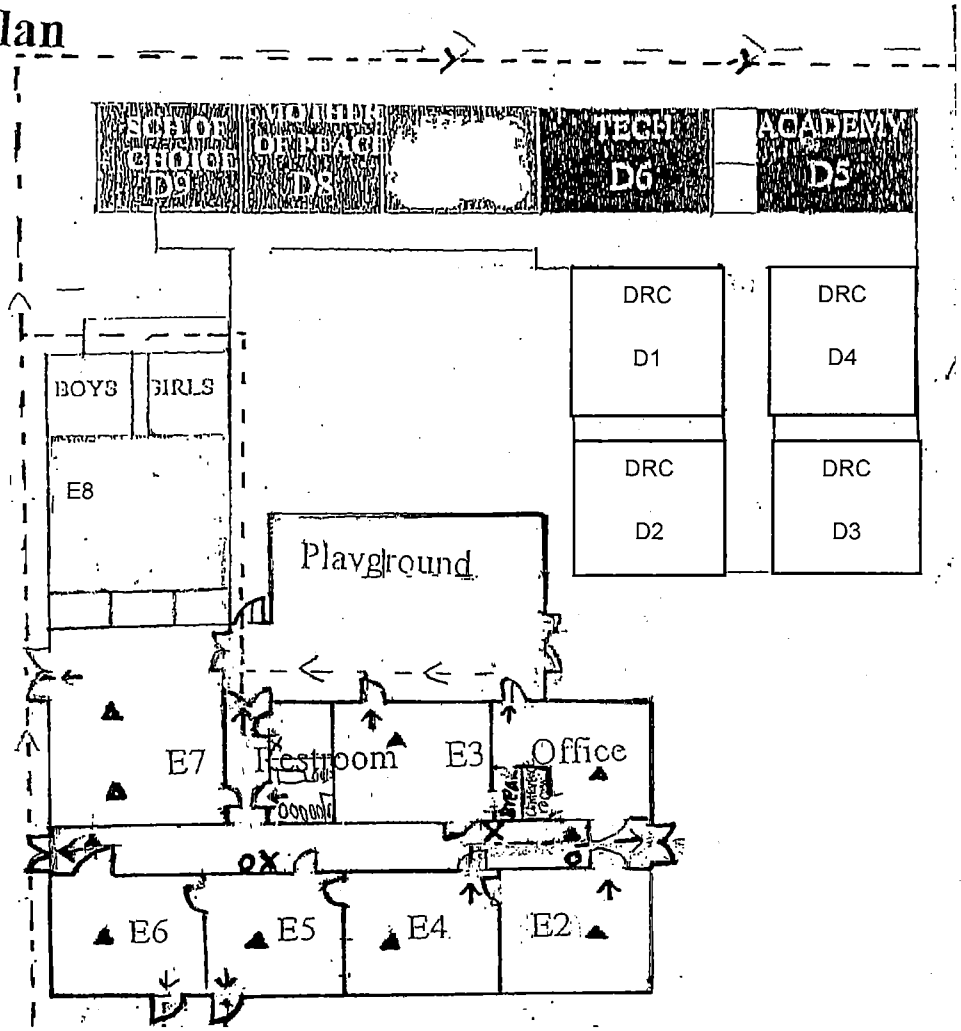
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

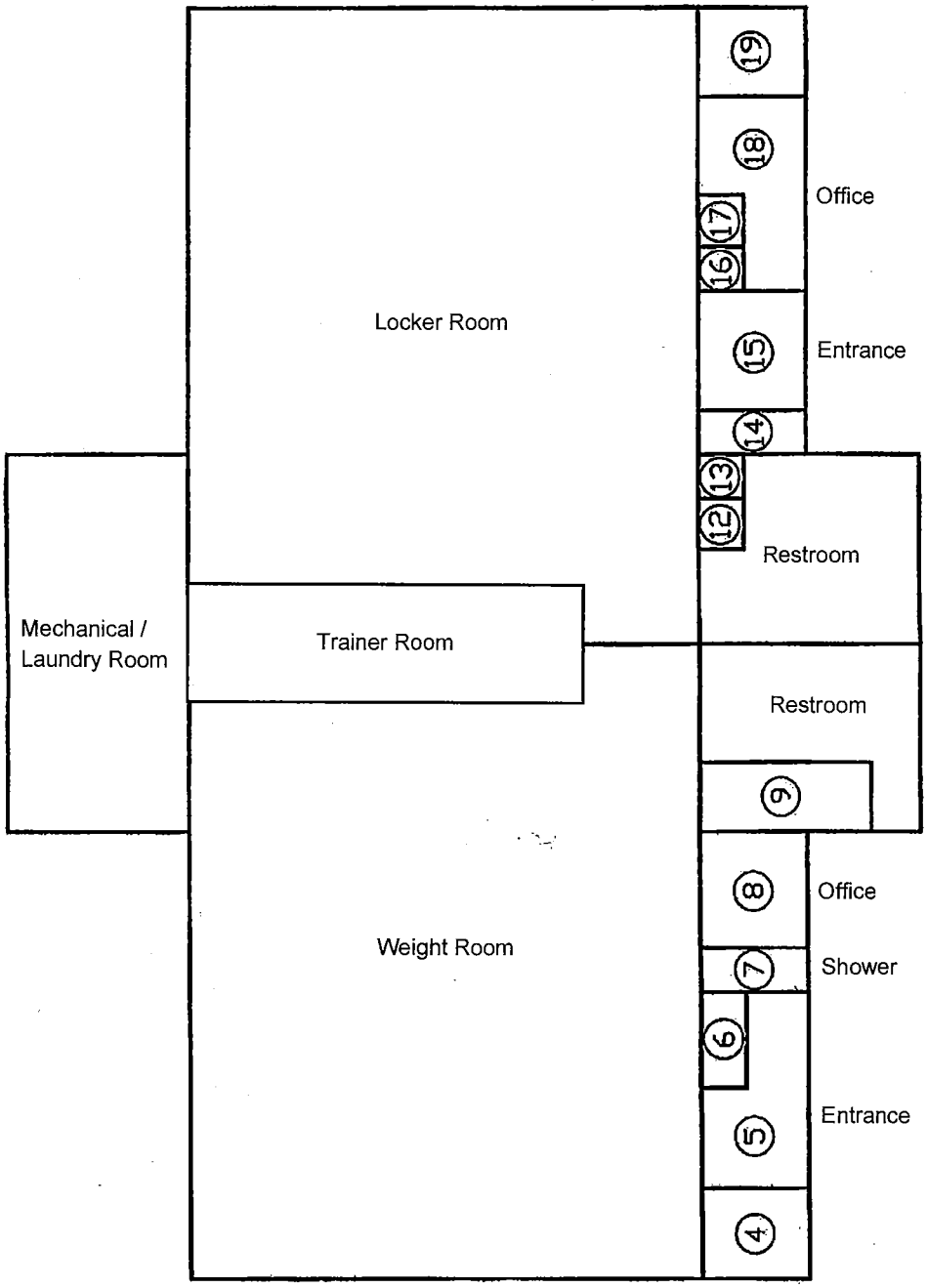
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100

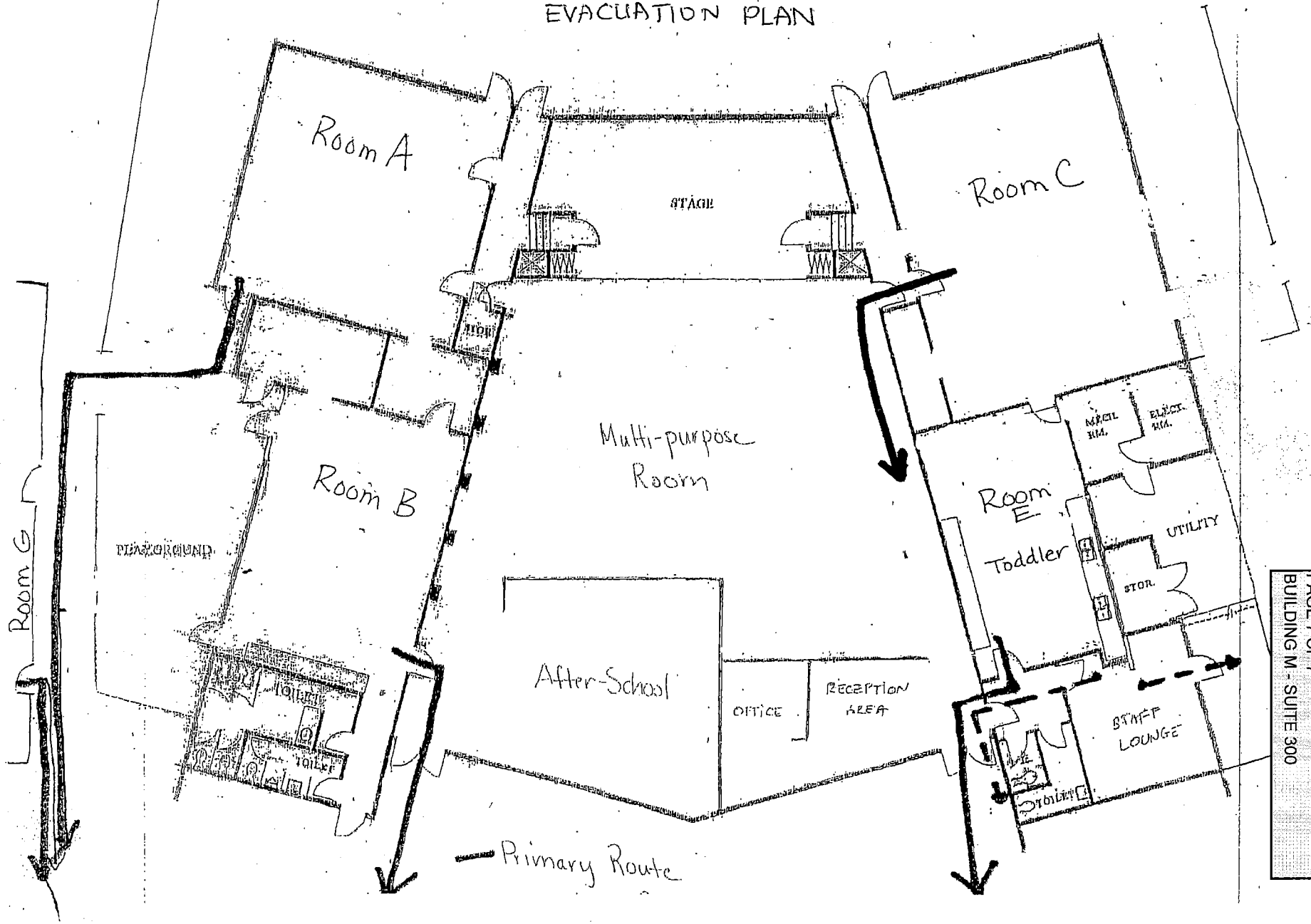


Storage Rooms
4, 6, 7, 9, 12, 13, 14, 16, 17, 19

AppleSeed International School
1095 Dunford Way, Ste. 300
Sunnyvale, CA 94087
Tel. No. (408) 260-9333
Fax. No. (408) 260-9933

N

EVACUATION PLAN



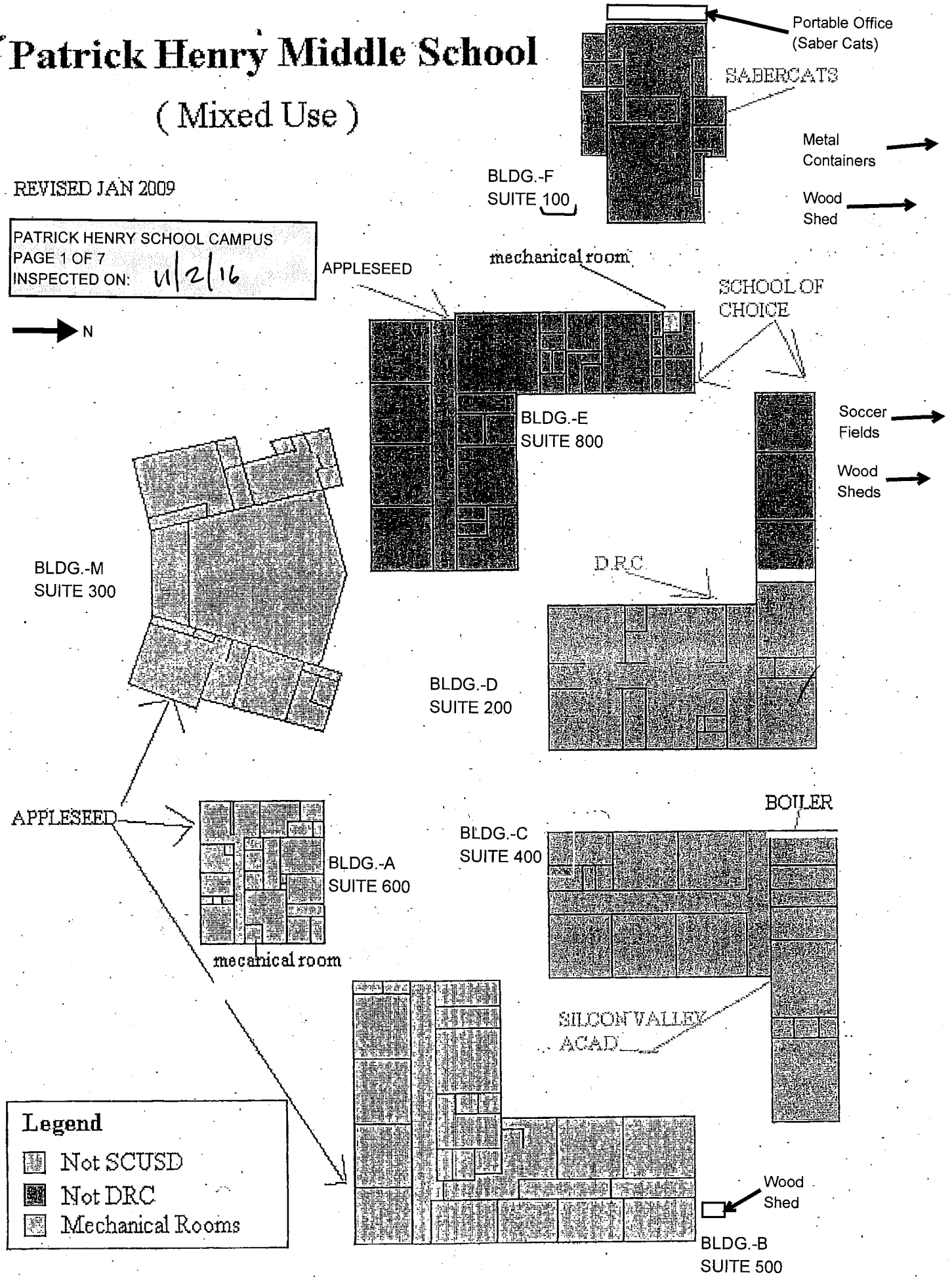
PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

Patrick Henry Middle School

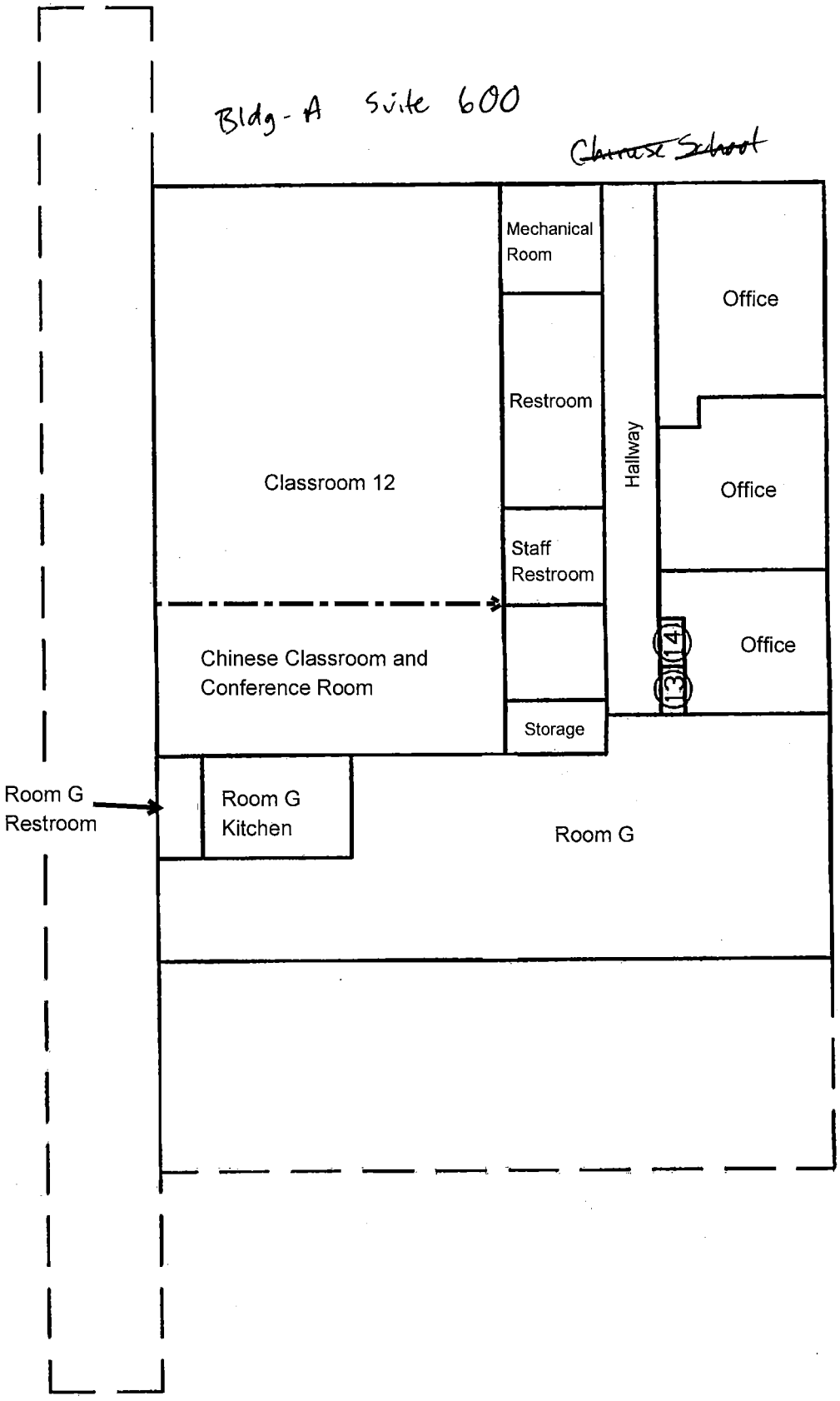
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: 11/2/16



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

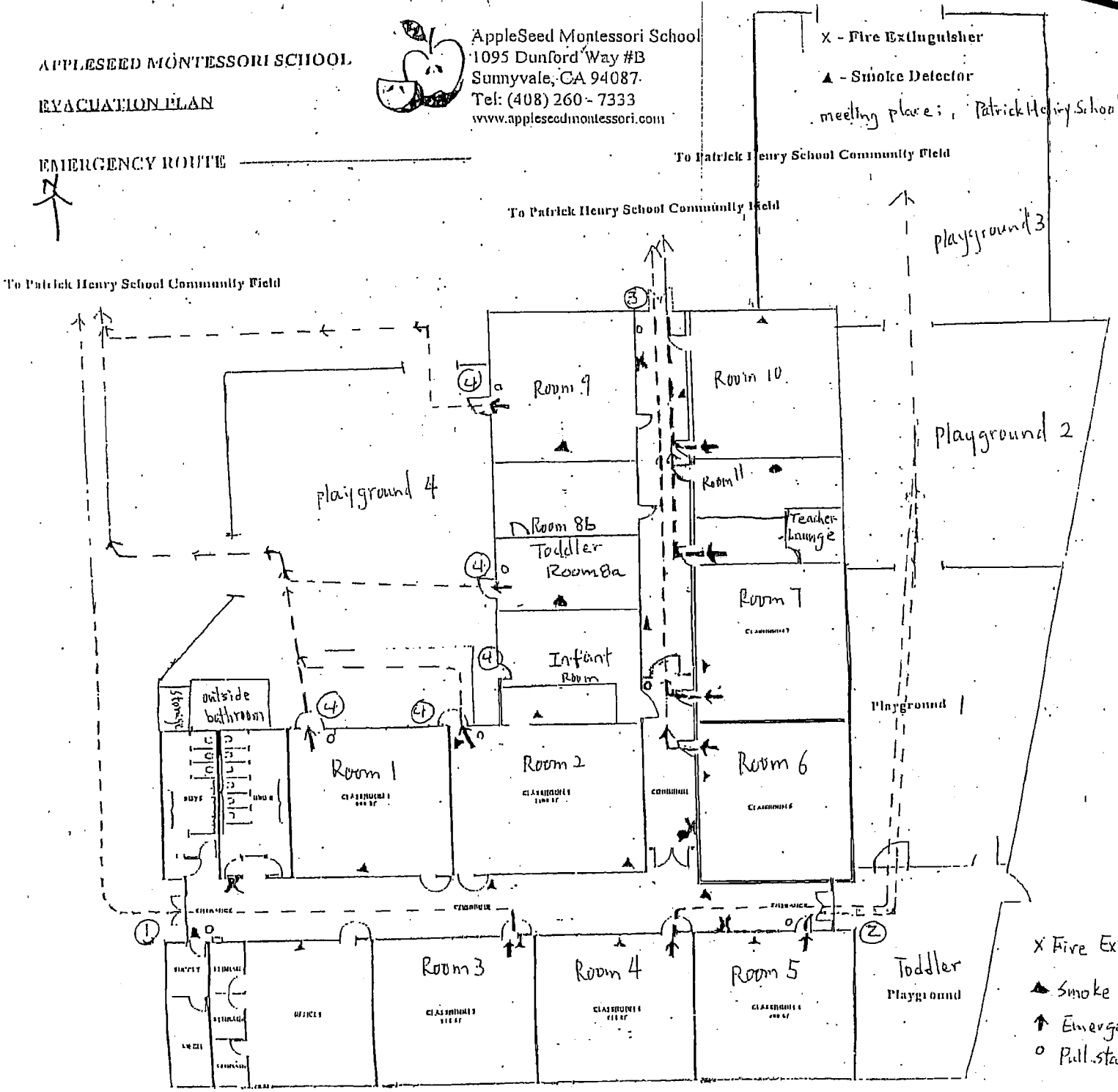
AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE

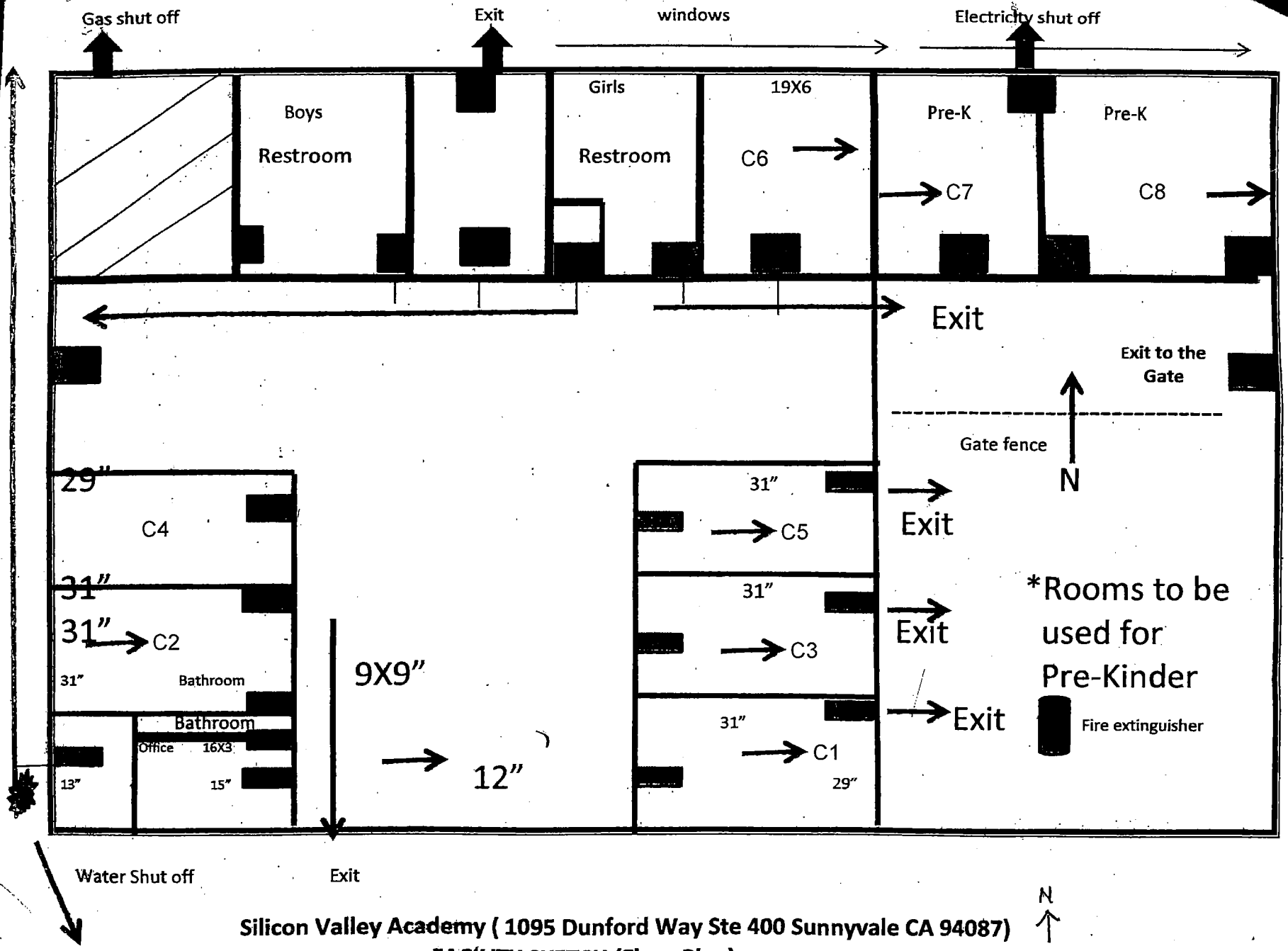
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School Community Field



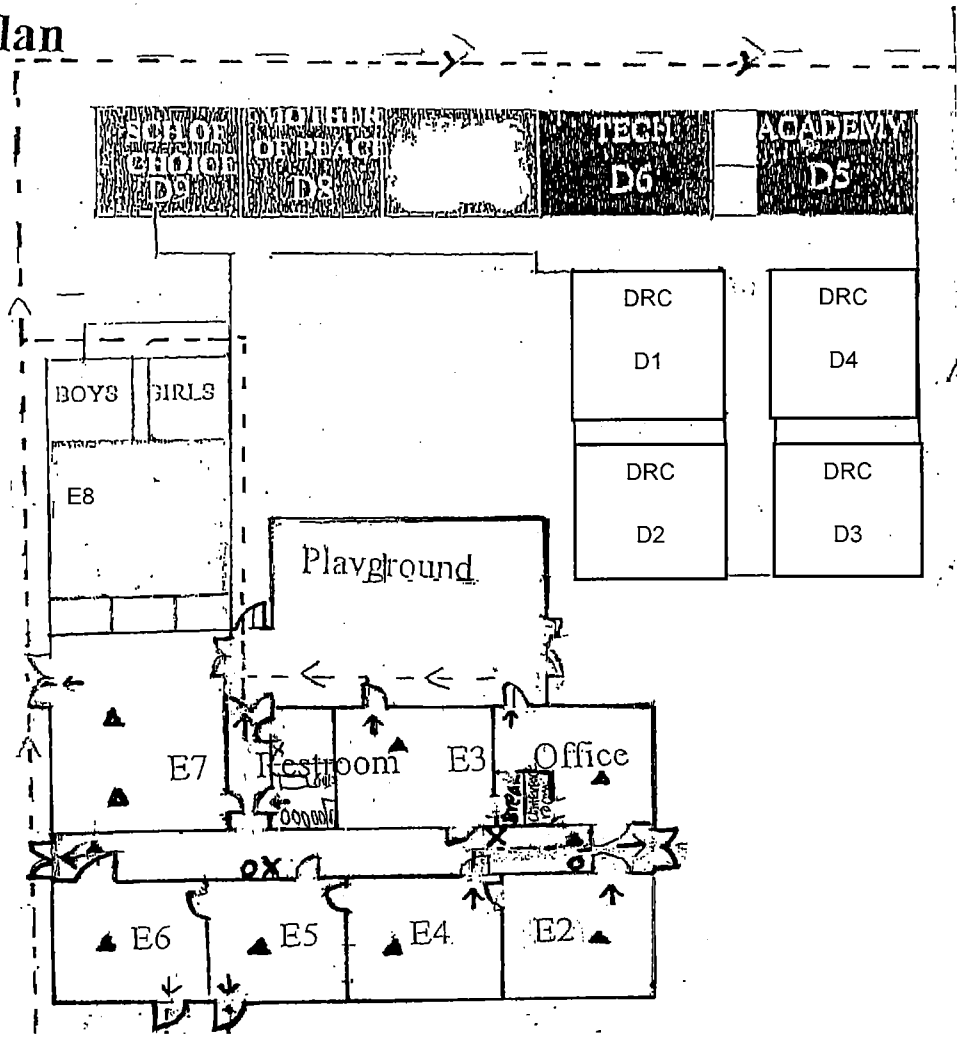
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

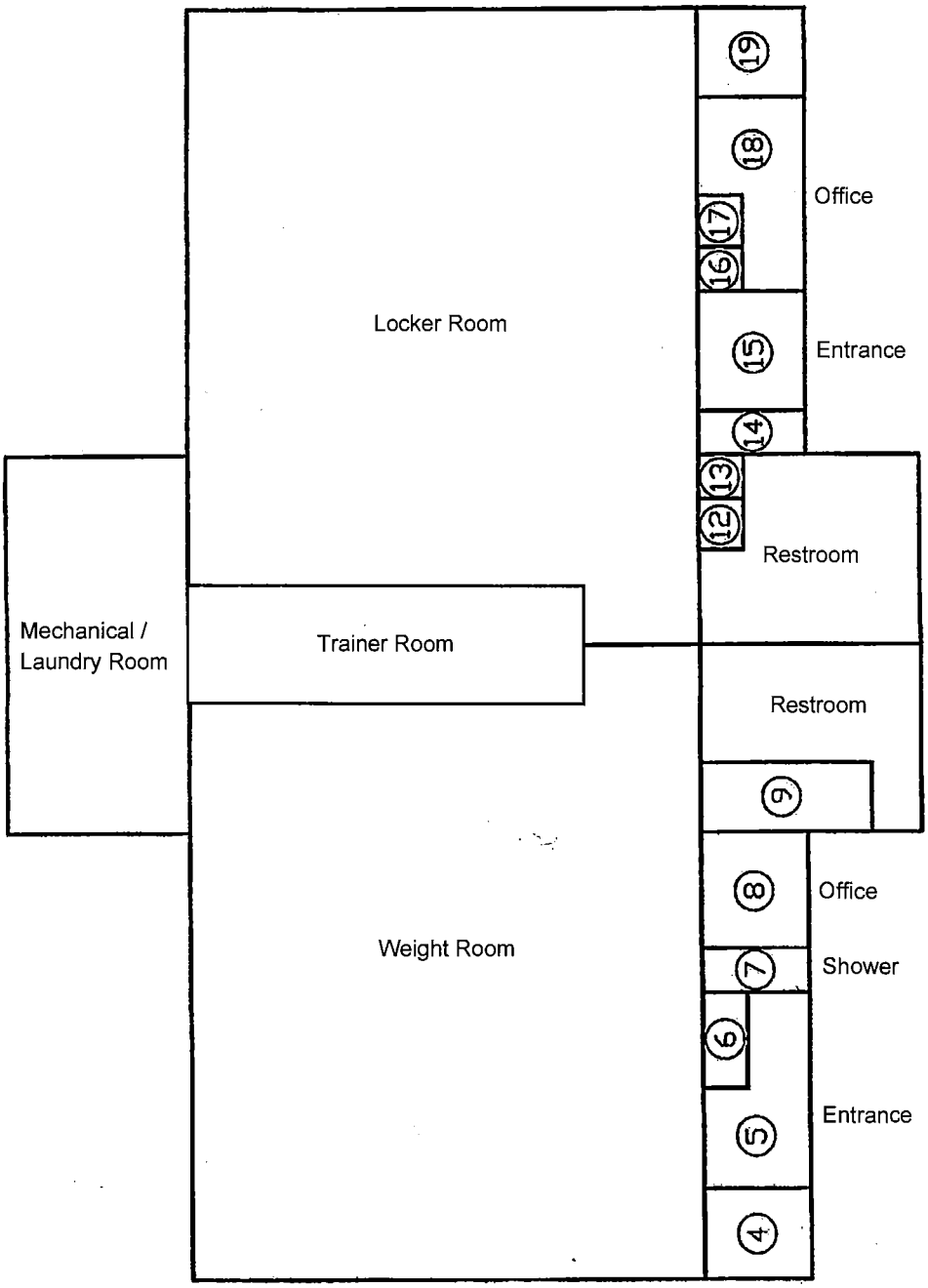
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100



Storage Rooms
4, 6, 7, 9, 12, 13,
14, 16, 17, 19

AppleSeed International School
1095 Dunford Way, Ste. 300
Sunnyvale, CA 94087
Tel. No. (408) 260-9333
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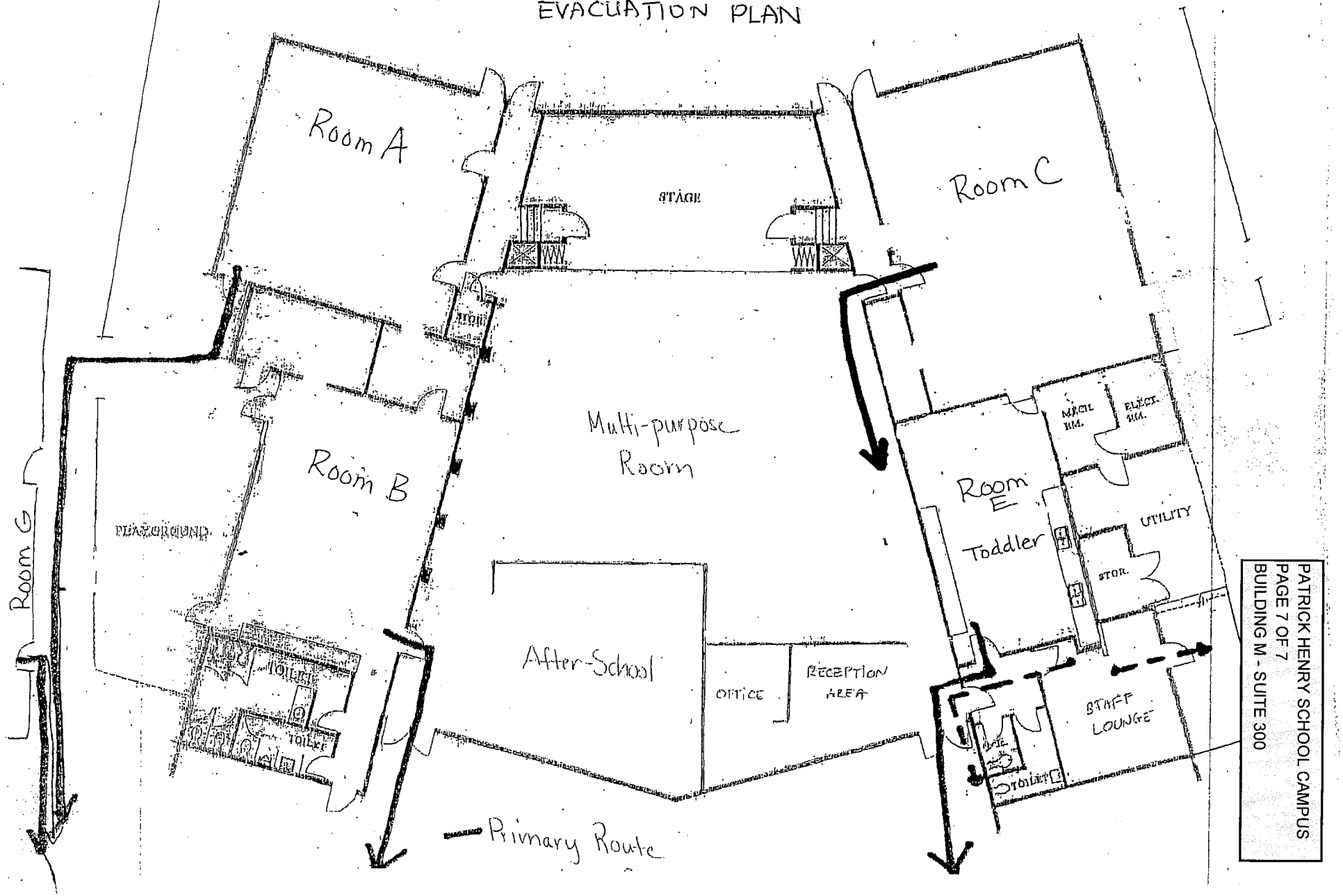
EVACUATION PLAN



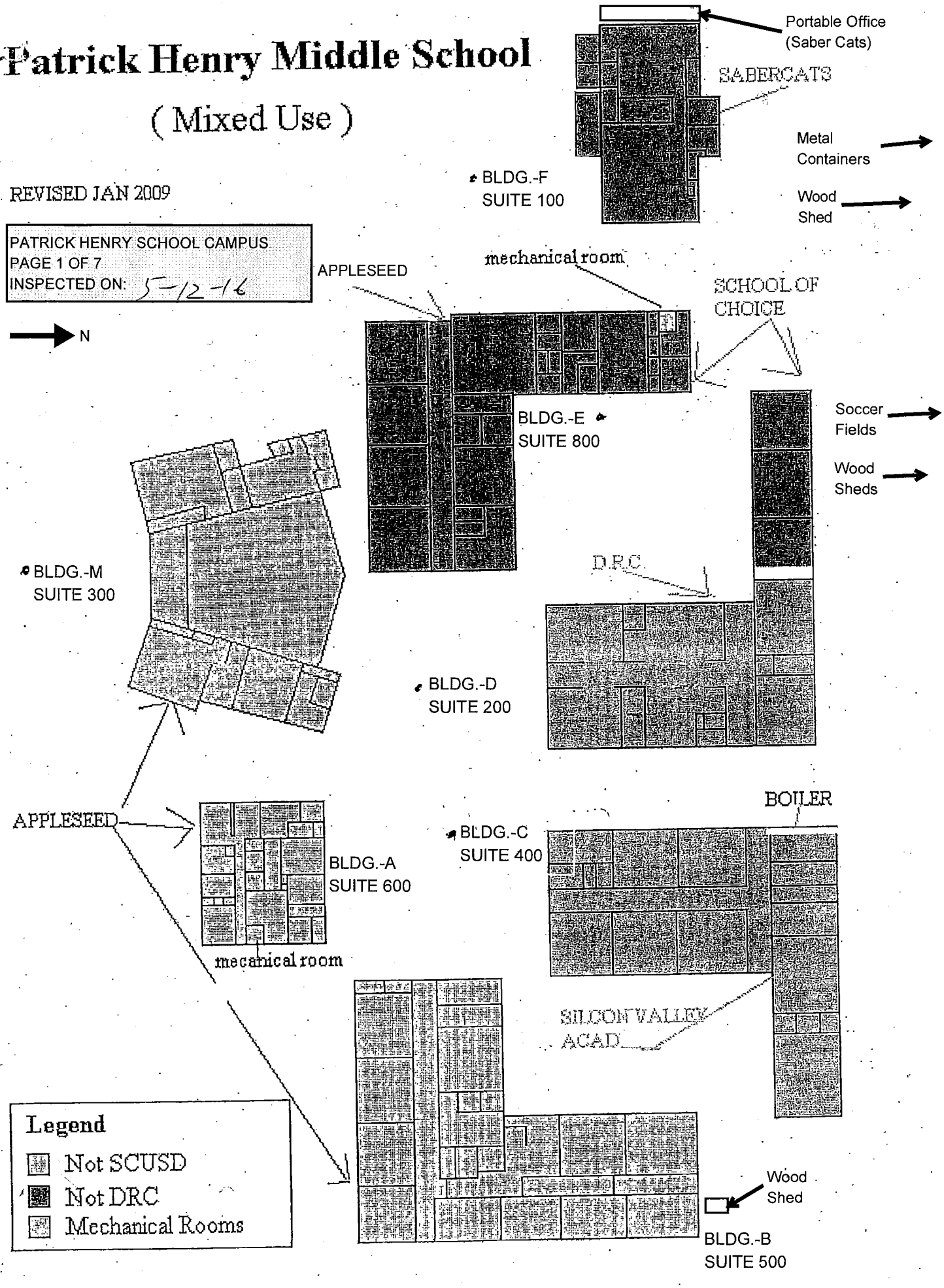
PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

Patrick Henry Middle School

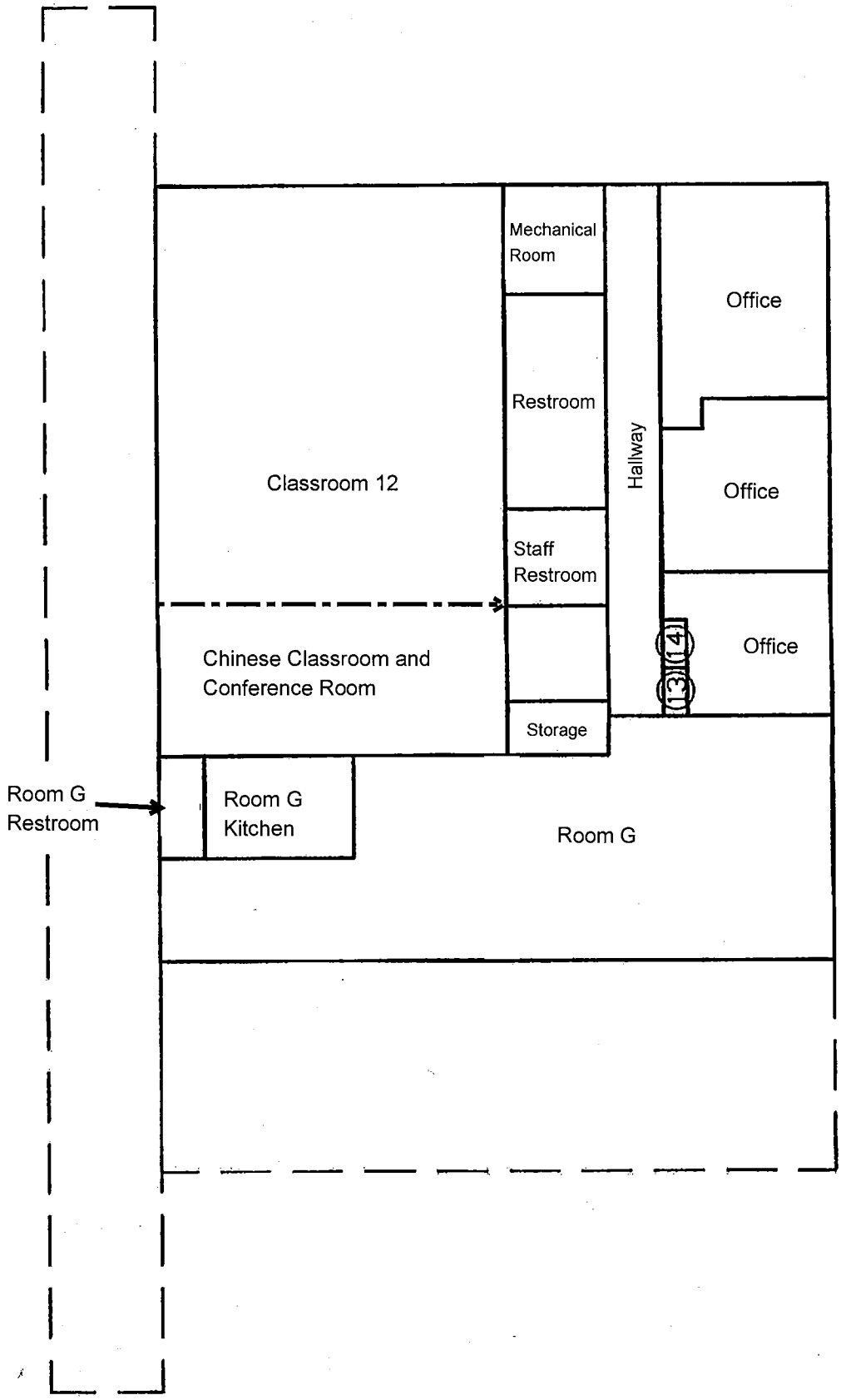
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: 5-12-16



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

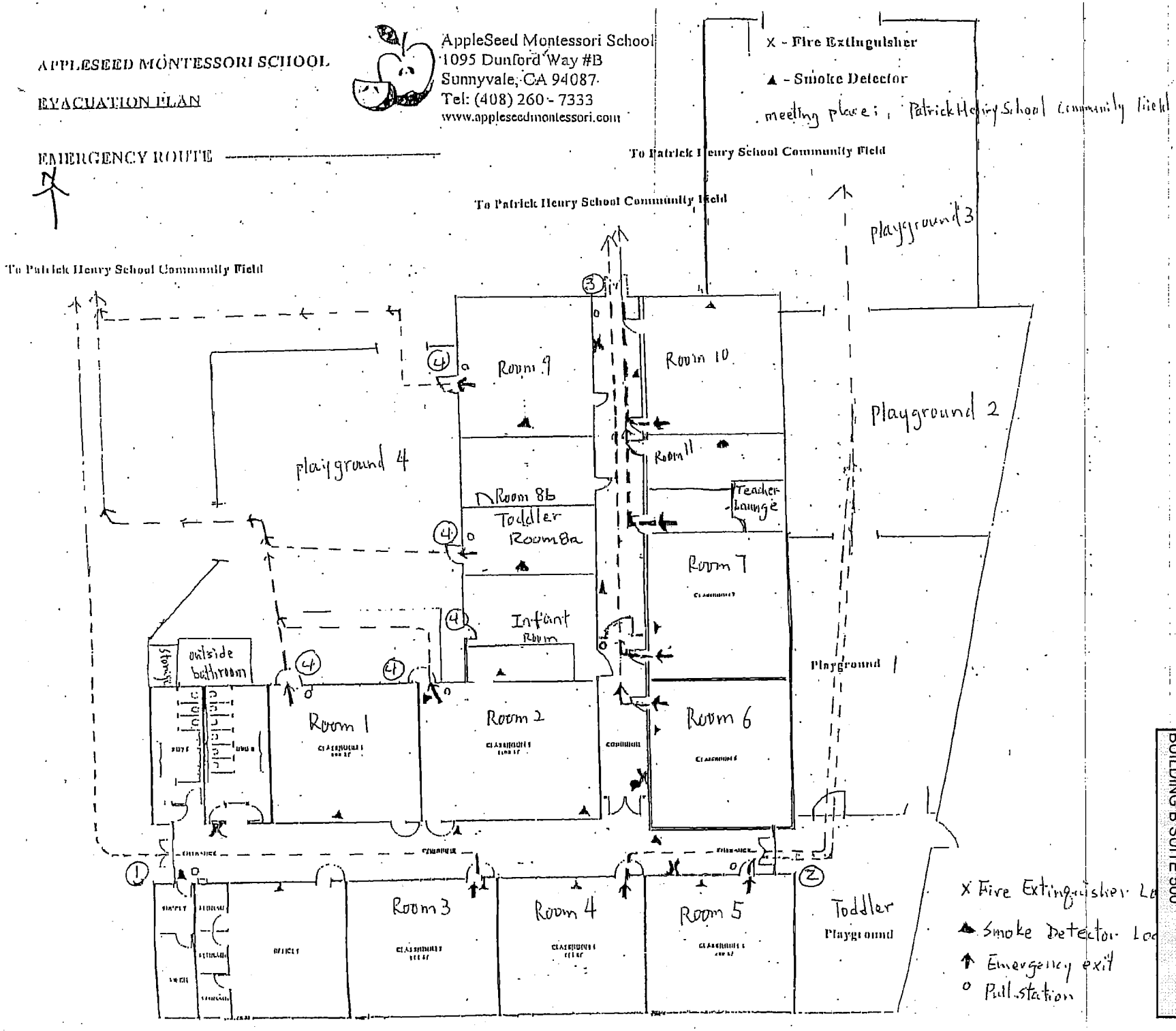
AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE ——————

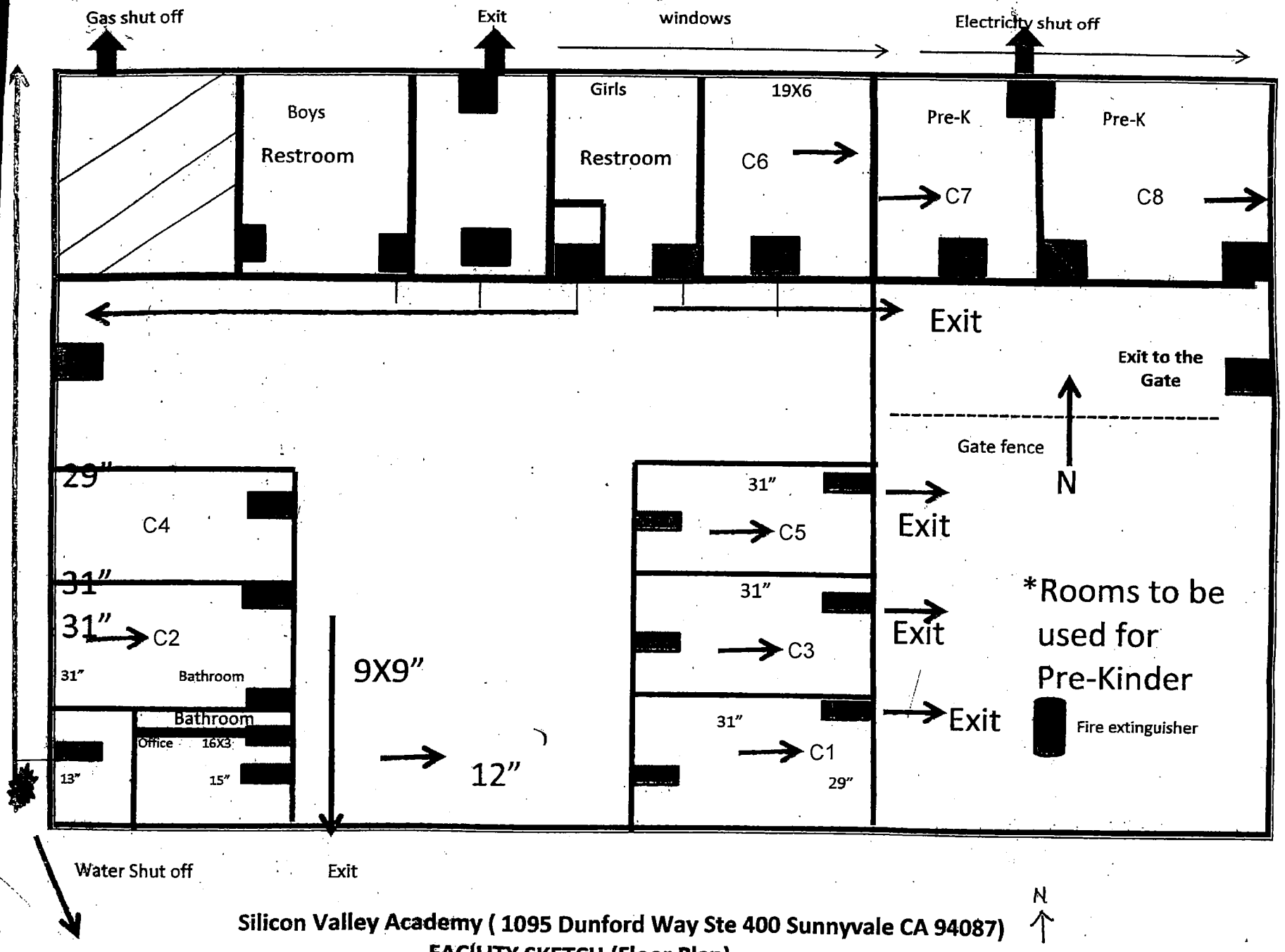
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School community field



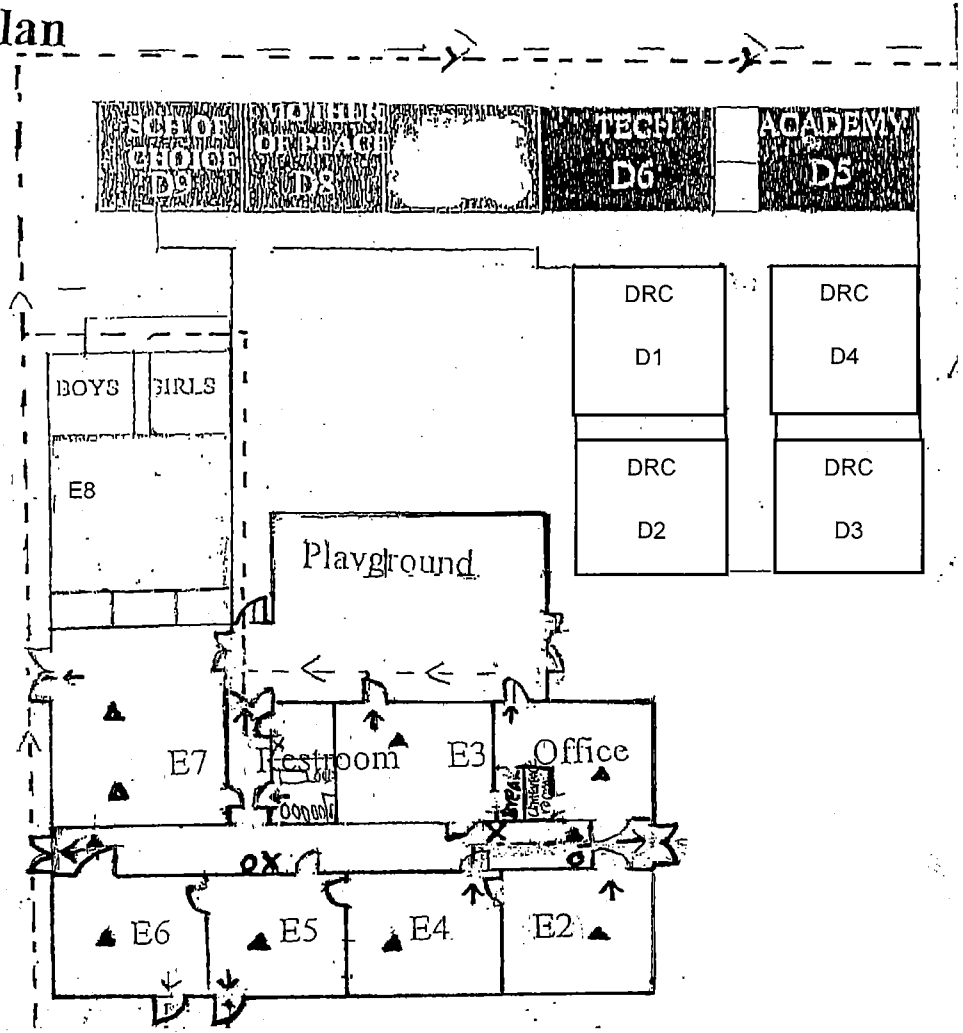
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

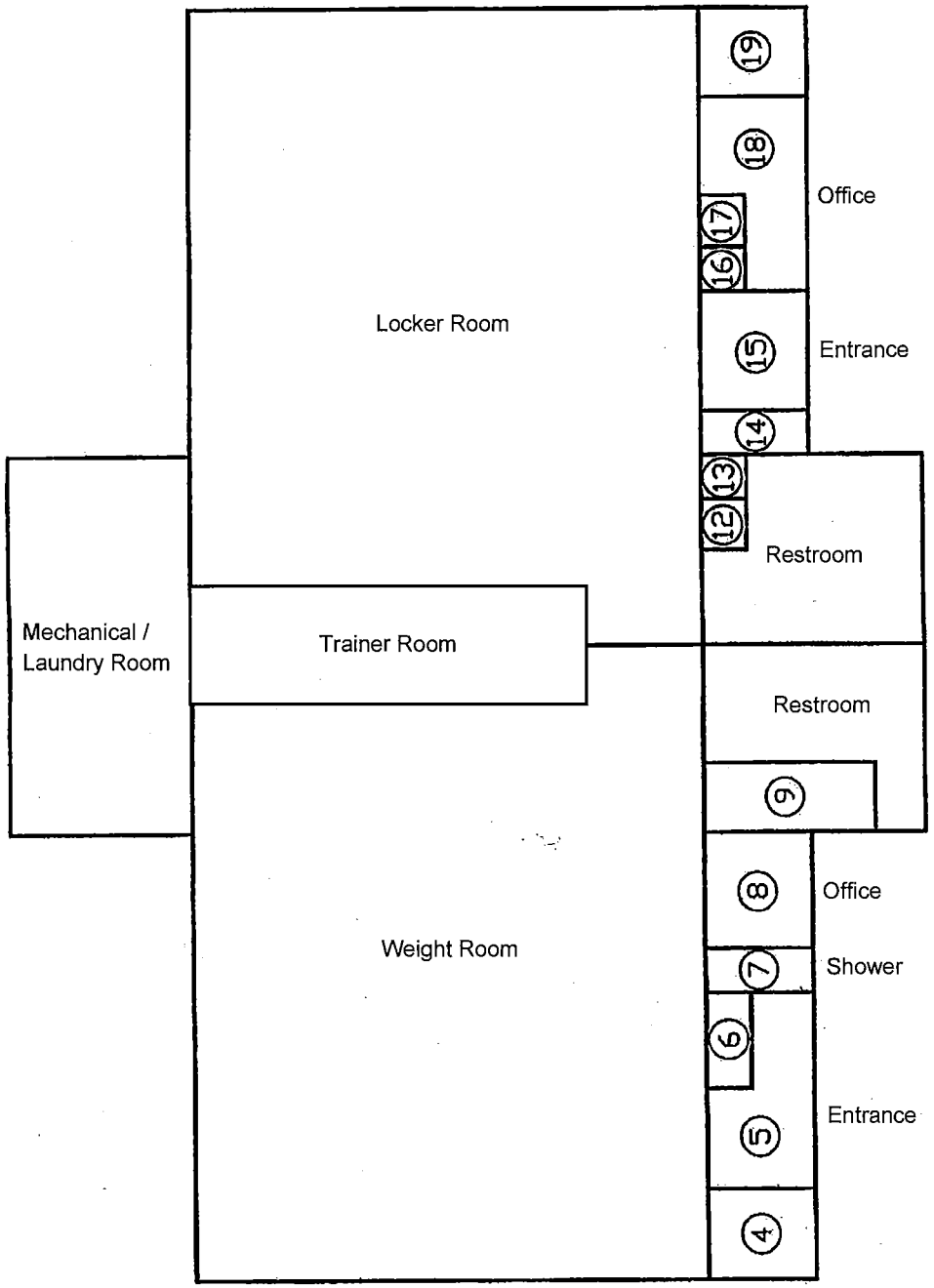
PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
PAGE 6 OF 7
BUILDING F SUITE 100



Storage Rooms
4, 6, 7, 9, 12, 13,
14, 16, 17, 19

AppleSeed International School
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Tel. No. (408) 260-9333
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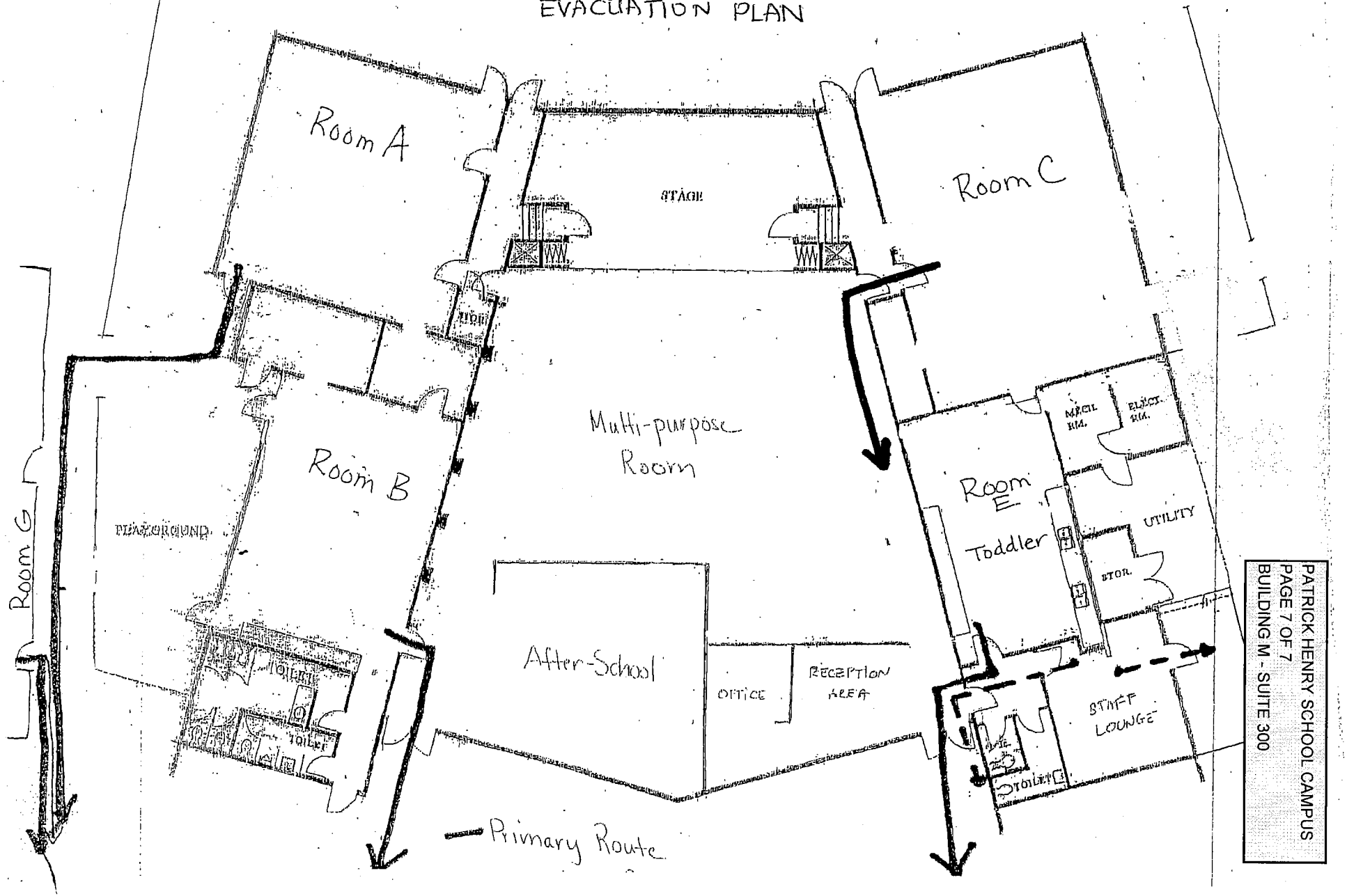
AppleSeed

N

EVACUATION PLAN



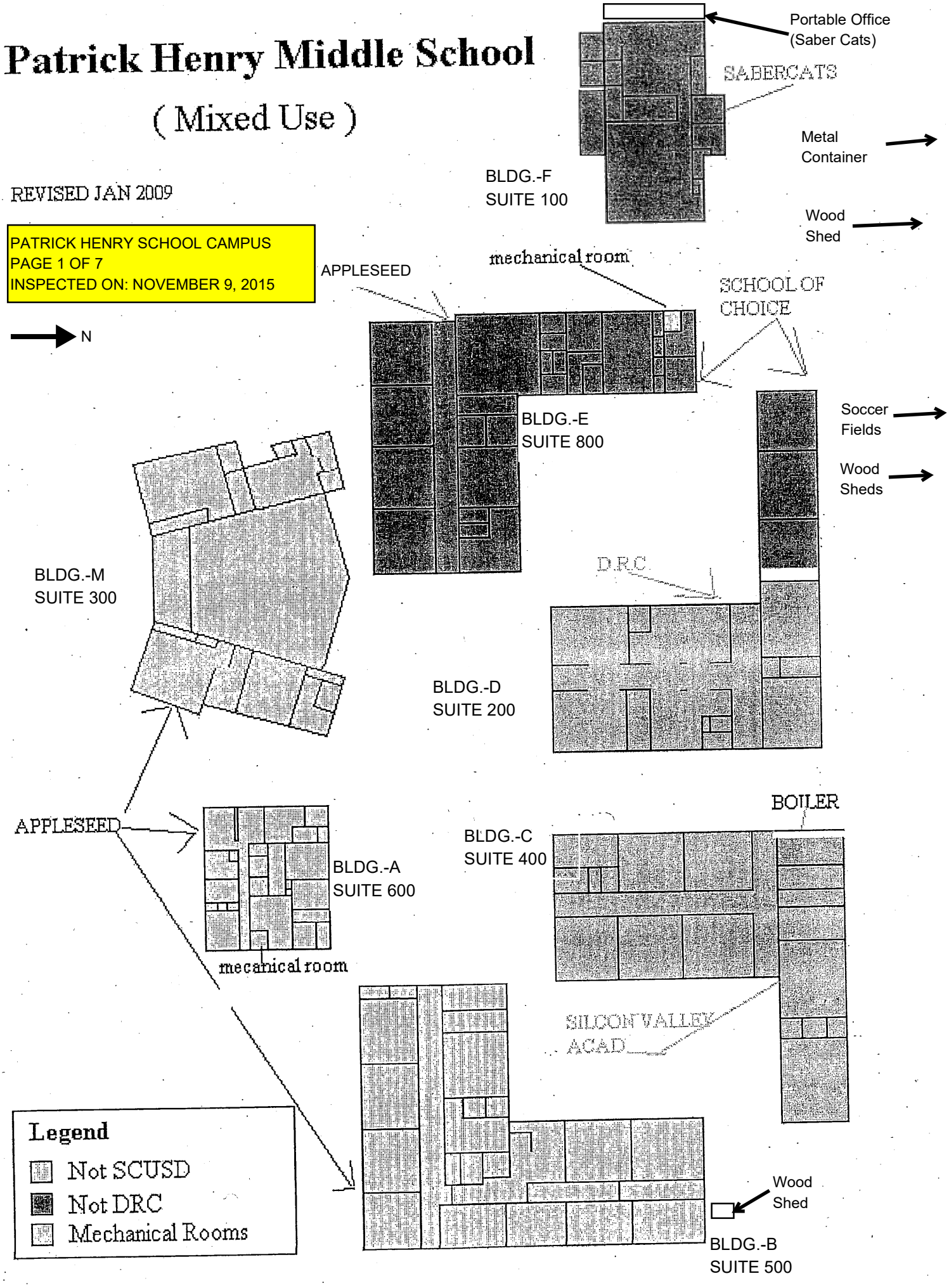
PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

Patrick Henry Middle School

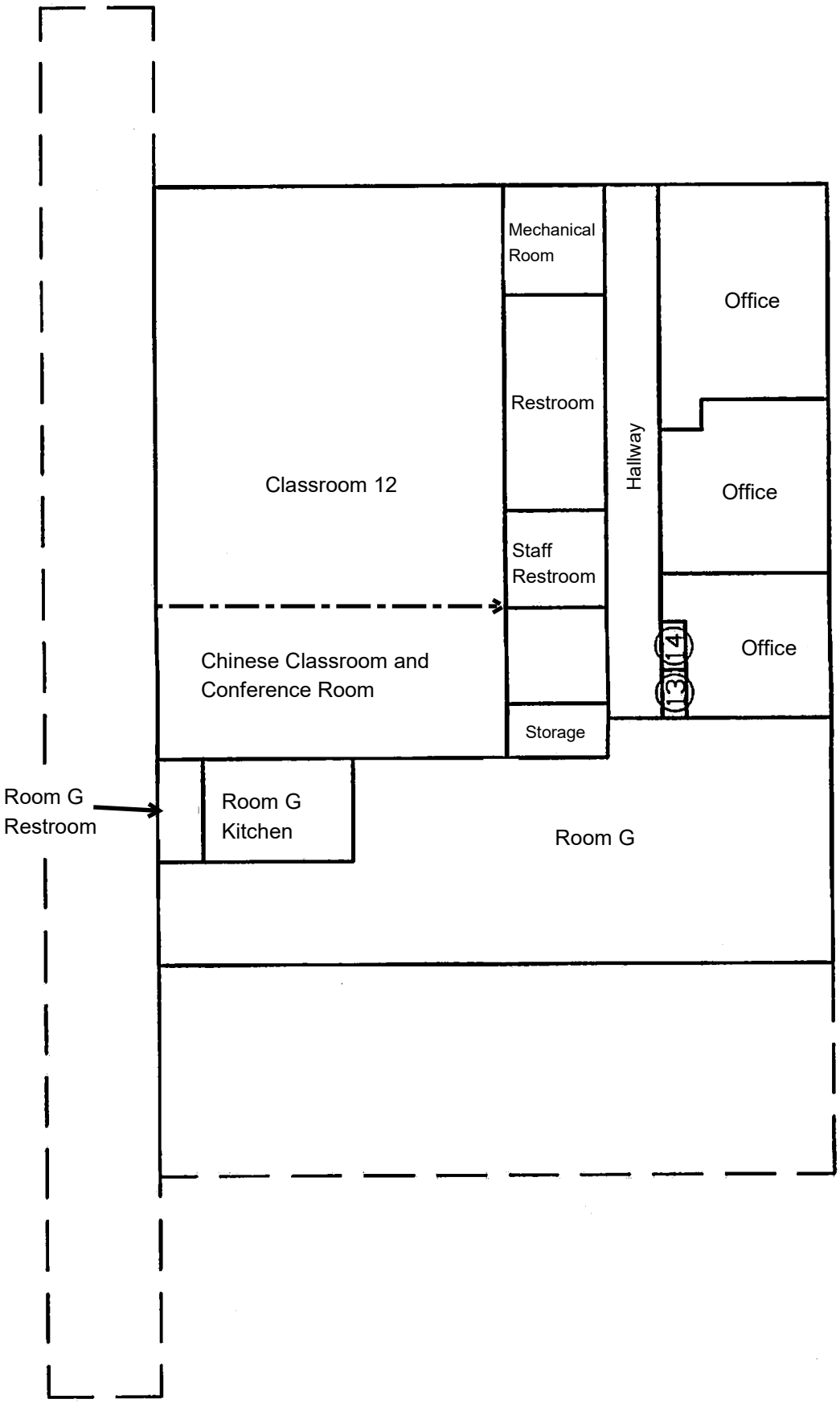
(Mixed Use)

REVISED JAN 2009

PATRICK HENRY SCHOOL CAMPUS
PAGE 1 OF 7
INSPECTED ON: NOVEMBER 9, 2015



PATRICK HENRY SCHOOL CAMPUS
PAGE 2 OF 7
BUILDING A SUITE 600



APPLESEED MONTESSORI SCHOOL

EVACUATION PLAN

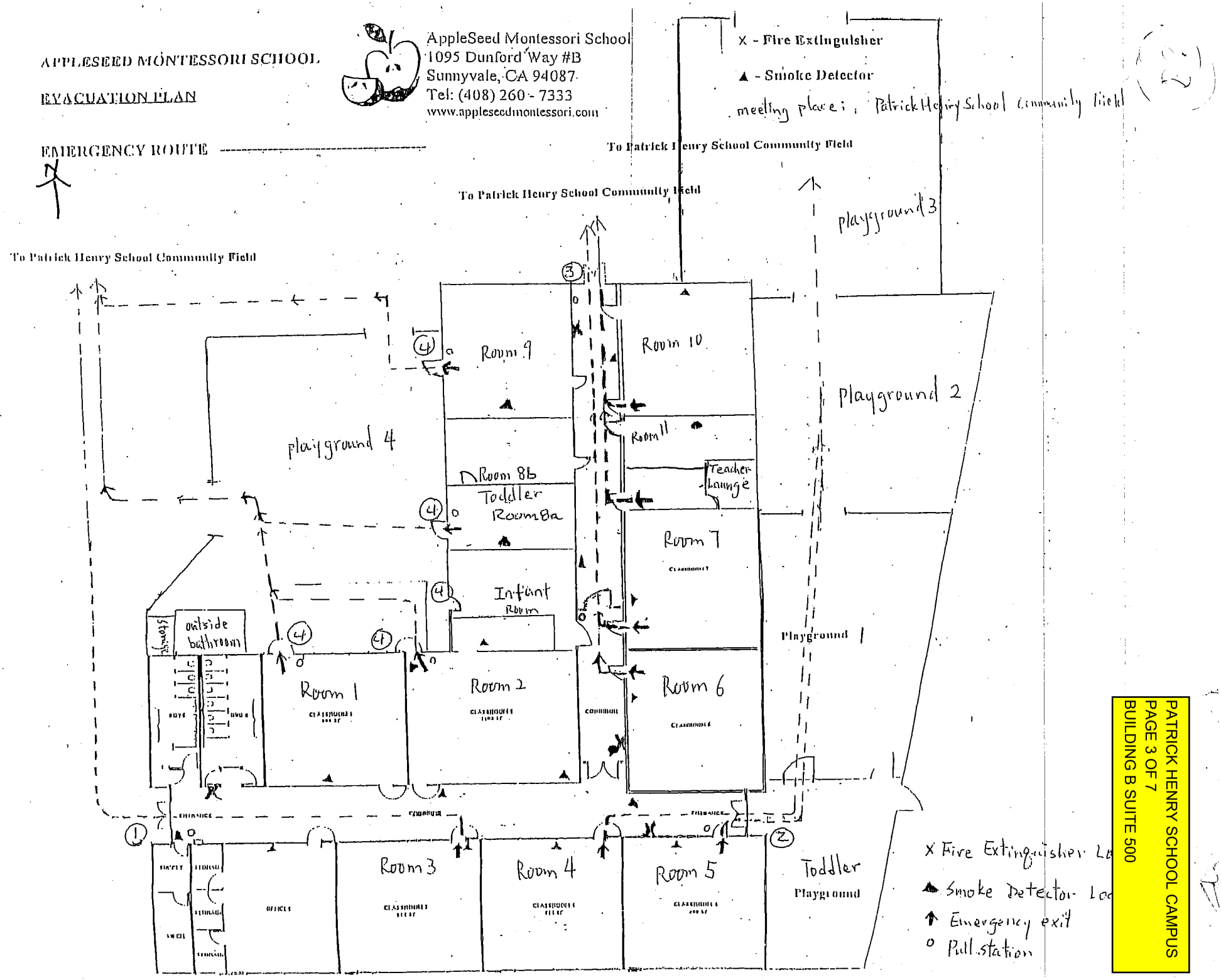
AppleSeed Montessori School
1095 Dunford Way #B
Sunnyvale, CA 94087
Tel: (408) 260 - 7333
www.appleseedmontessori.com

EMERGENCY ROUTE ----------

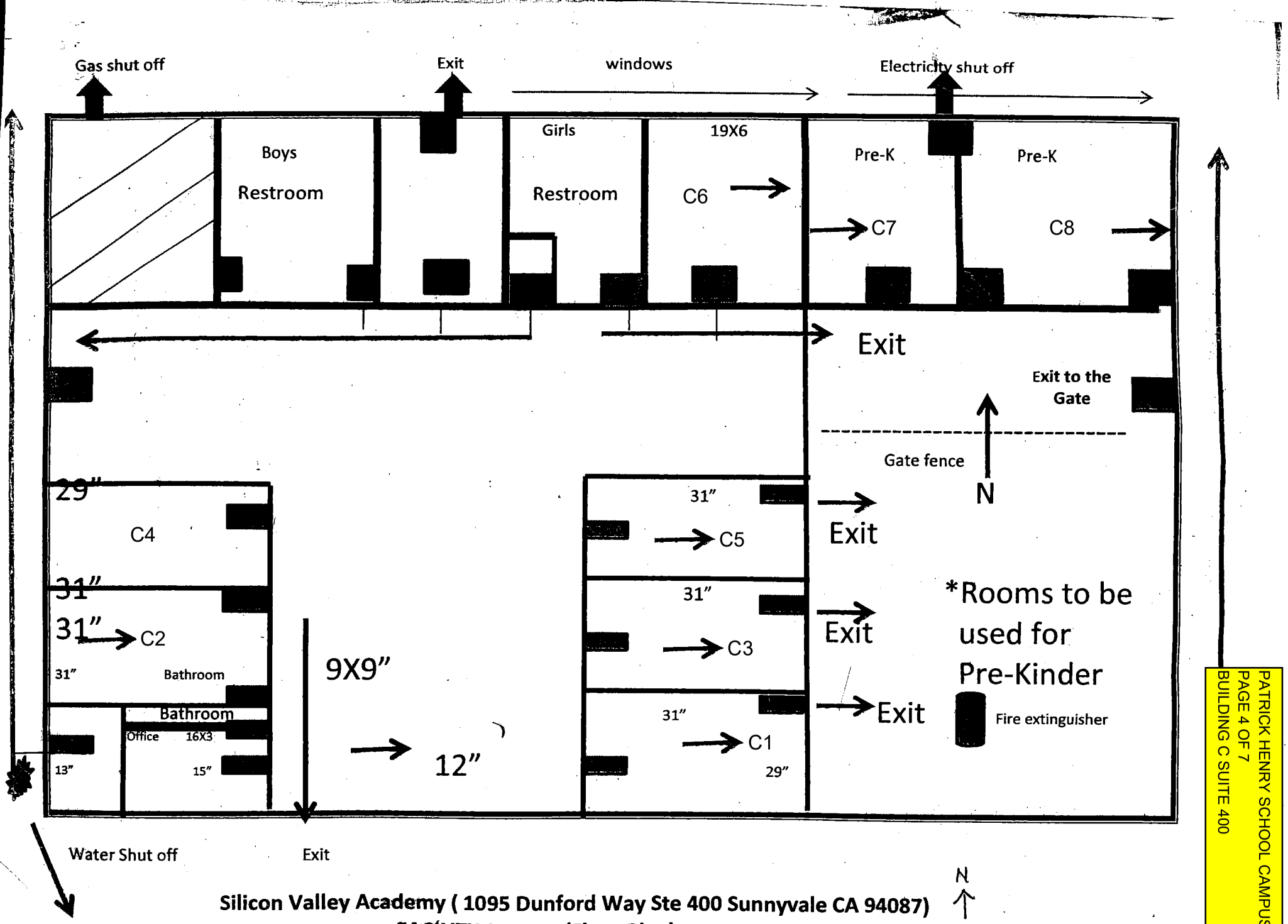
X - Fire Extinguisher

▲ - Smoke Detector

meeting place: Patrick Henry School Community field



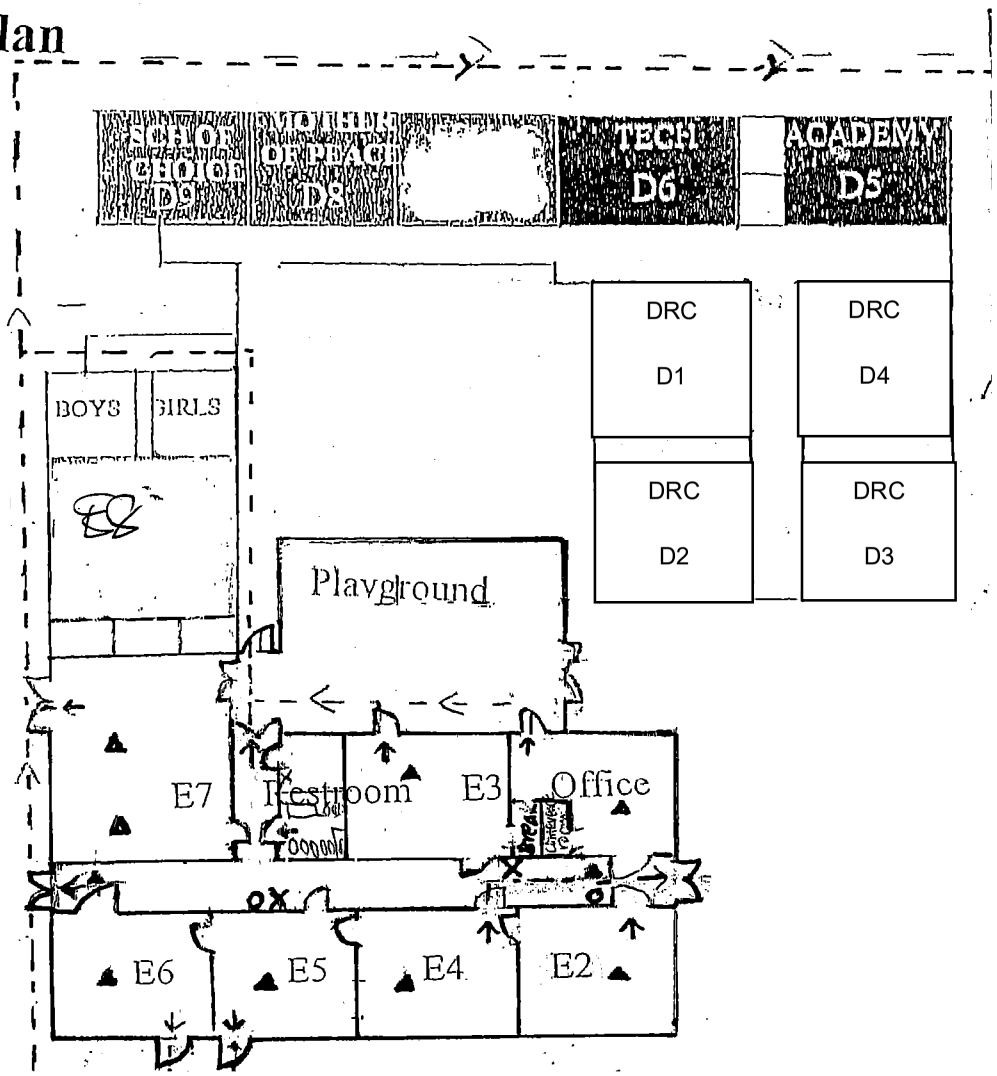
PATRICK HENRY SCHOOL CAMPUS
PAGE 3 OF 7
BUILDING B SUITE 500



Silicon Valley Academy (1095 Dunford Way Ste 400 Sunnyvale CA 94087)
FACILITY SKETCH (Floor Plan)

PATRICK HENRY SCHOOL CAMPUS
PAGE 4 OF 7
BUILDING C SUITE 400

AppleSeed Montessori School - Dunford 800
Evacuation Plan



PATRICK HENRY SCHOOL CAMPUS
PAGE 5 OF 7
BUILDING D SUITE 200
BUILDING E SUITE 800

PATRICK HENRY SCHOOL CAMPUS
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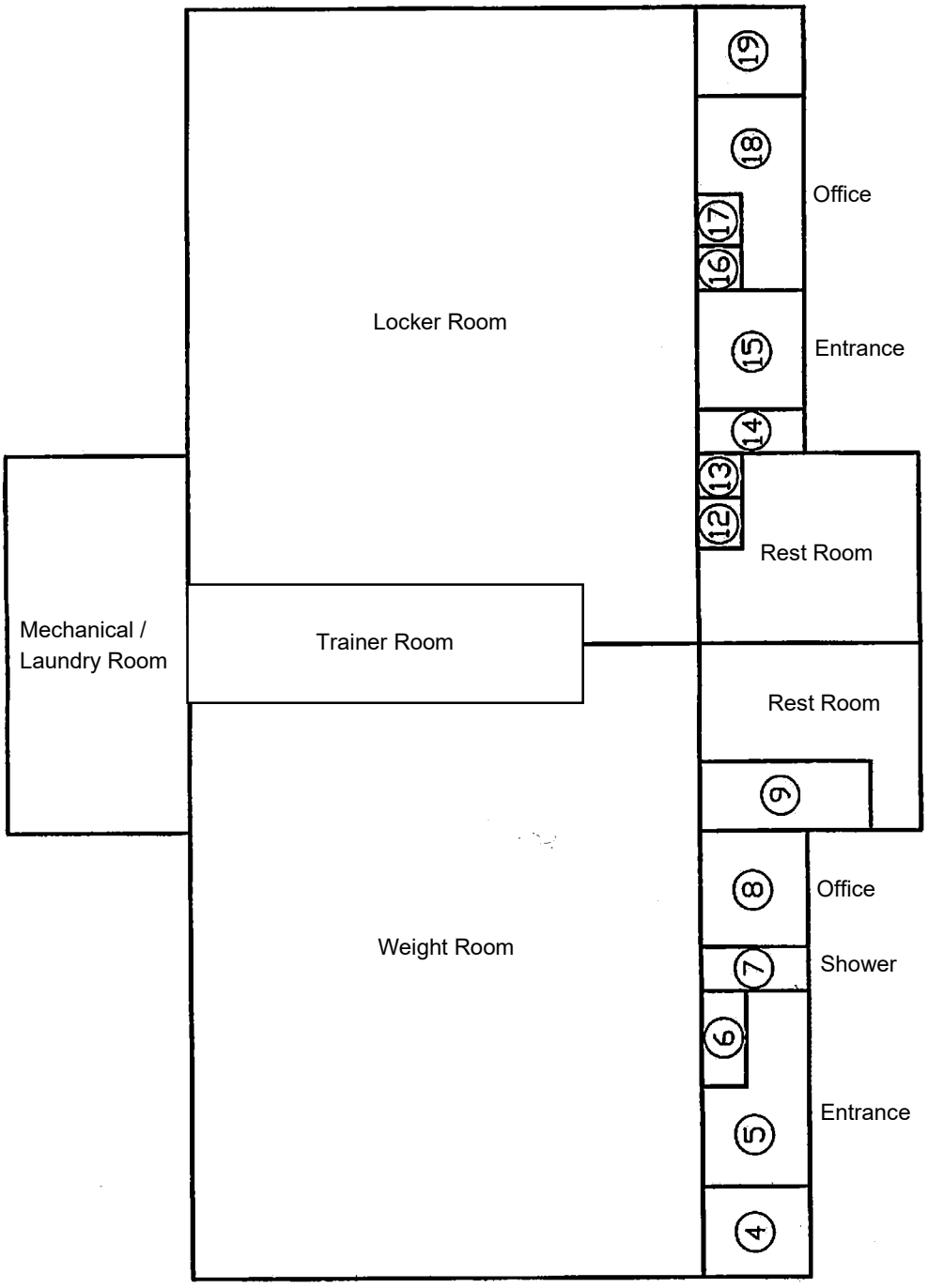
BUILDING F SUITE 100



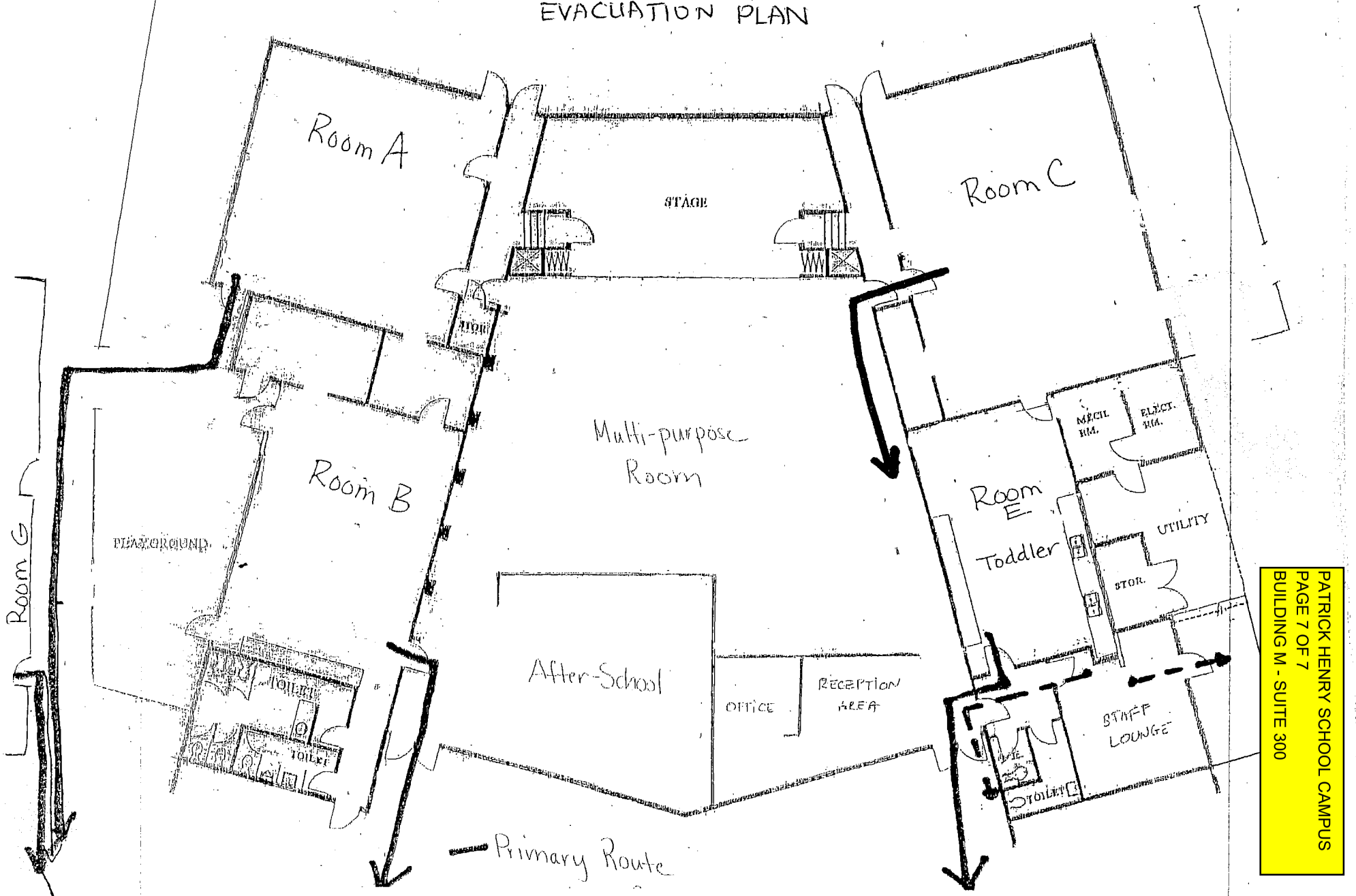
Storage Rooms
4, 6, 7, 9, 12, 13, 14, 16, 17, 19

AppleSeed International School
1095 Dunford Way, Ste. 300
Sunnyvale, CA 94087
Tel. No. (408) 260-9333
Fax. No. (408) 260-9933

AppleSeed

N

EVACUATION PLAN



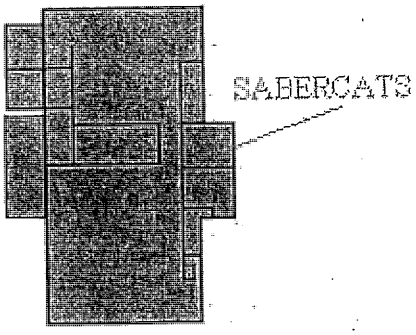
PATRICK HENRY SCHOOL CAMPUS
PAGE 7 OF 7
BUILDING M - SUITE 300

Patrick Henry Middle School

(Mixed Use)

REVISED JAN 2009

PATTRICK HENRY SCHOOL CAMPUS
INSPECTED ON: MAY 18, 2015



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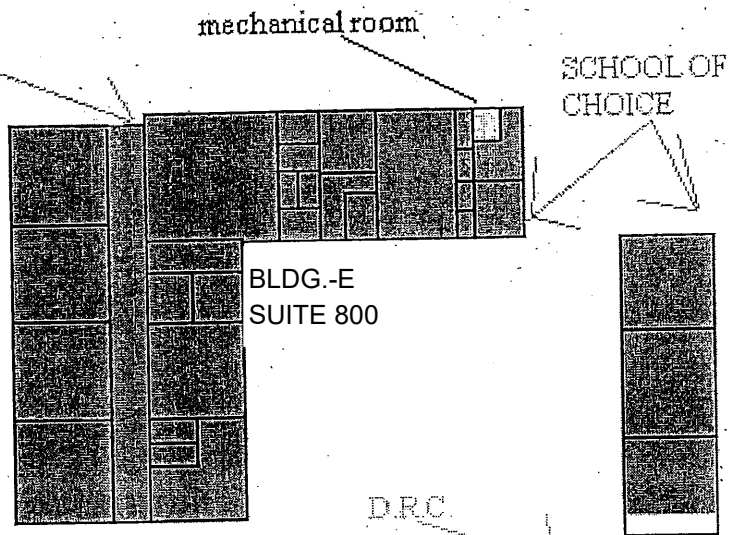

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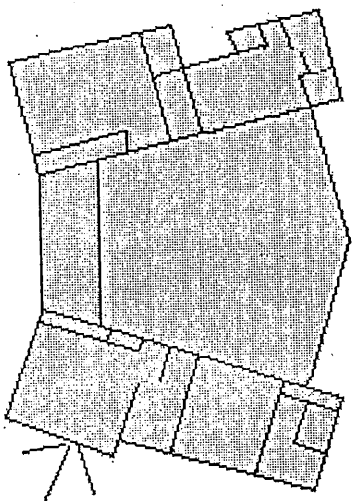

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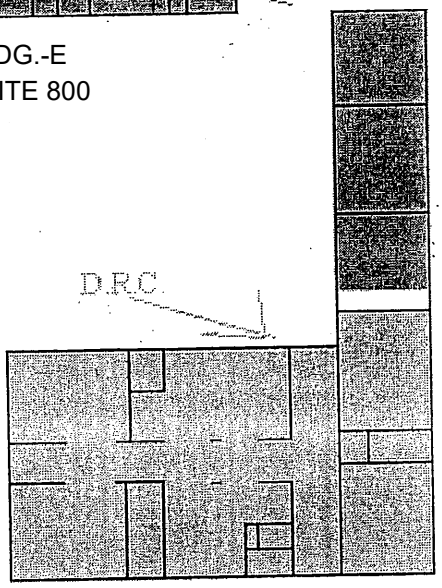

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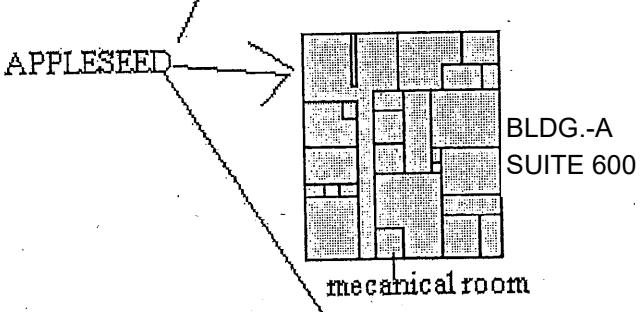

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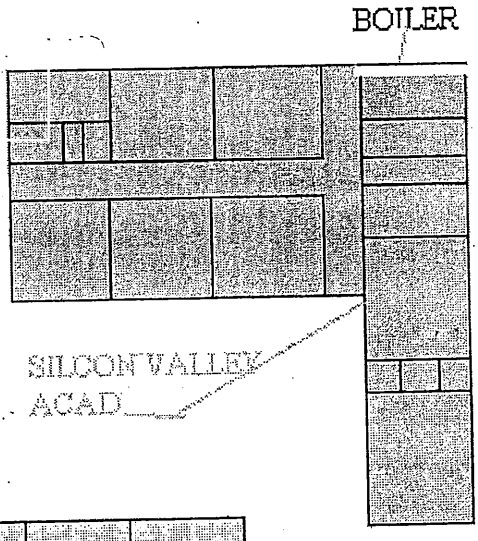
SUITE 600



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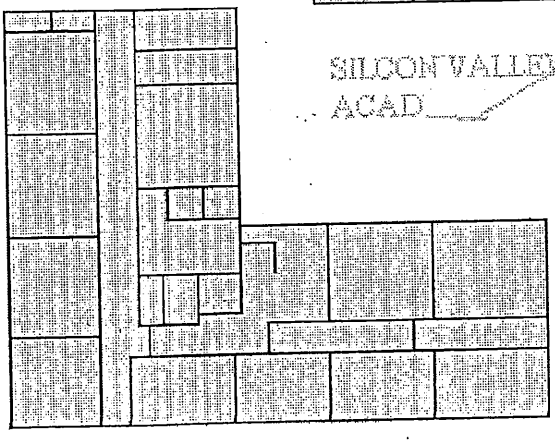
SUITE 400



BLDG.-B
SUITE 500

Legend

- Not SCUSD
- Not DRC
- Mechanical Rooms

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
Approved by State of California

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

TEL: 831-724-5422
FAX: 831-724-3188

Work Order #: 2030673
Account #: 10110
Date Received: Mar 29, 2022
Date Reported: Apr 16, 2022

Soil Report

Santa Clara Unified School District
1889 Larence Road
Santa Clara, CA 95052
Attn: David Tuttle

Lab Number: 2030673-1/1
Project #/Name: None / Soil Sample 5
Sample ID: Soil Sample

	Your Values (lbs/acre 6" deep)	Suggested Values	
Ammonia (NH_3-N)	12	10-50	OK
Nitrate (NO_3-N)	26	20-100	OK
Total Available N	38	75-150	Low
Phosphorous(P_2O_5)	220	100-300	OK
Potassium (K_2O)	490	553-922	Low
Calcium (Ca)	5600	4714-5892	OK
Magnesium (Mg)	1100	471-942	High
Sulfate (SO_4-S)	160	100-200	OK
Sodium (Na)	200	< 250	See SAR
Chloride (Cl)	97	1-100	OK
ECe (dS/m)	0.94	0.2-4	OK
Copper (Cu)	6.6	1 +	OK
Zinc (Zn)	7.1	3 +	OK
Iron (Fe)	120	8 +	OK
Manganese (Mn)	24	4 +	OK
Boron (B)	3.0	1-4	OK
SAR	1.5	0-6	OK
CEC (meq/100gms)	20	10-20	OK
ESP (%)	2.2	0-10	OK
pHs Value	6.9	6.5-7.5	OK
Organic Matter (%)	7.3		

RECOMMENDATIONS
ALL VALUES lbs/acre 6" deep

100	Nitrogen (N)
50	Phosphorous (P_2O_5)
300	Potassium (K_2O)
0	Gypsum ($CaSO_4$)
0	Lime ($CaCO_3$)
0	Dolomite ($CaCO_3$ & $MgCO_3$)
0	Sulfur

*Gypsum adds Ca and doesn't affect pH; Lime adds Ca and raises pH; Dolomite adds Ca & Mg & raises pH.

Lime Requirement:
Tons of 100% $CaCO_3$ Lime per Acre 6" deep needed to raise pH of soil to:

pH 6.0 needs	0.0
pH 6.5 needs	0.0
pH 7.0 needs	0.1

Gypsum Requirement (needed for clay treatment)
2.1 tons per acre 6" deep
Gypsum helps the soil structure by "loosening" the soil

Data:			Method
NO_3-N	13	mg/Kg	KCl
NH_3-N	6.1	mg/Kg	KCl
P	51	mg/Kg	Olsen
SP	74	%	Sat
pHs	6.9	unit	Sat
ECe	0.94	dS/m	Sat
Ca	5.7	meq/L	Sat
Mg	3.2	meq/L	Sat
Na	3.1	meq/L	Sat
K	0.38	meq/L	Sat
Cl	1.8	meq/L	Sat
SO_4-S	3.4	meq/L	Sat
SAR	1.5	ratio	Calc
B	1.5	mg/Kg	CaCl2
Cu	3.3	mg/Kg	DTPA
Zn	3.6	mg/Kg	DTPA
Fe	58	mg/Kg	DTPA
Mn	12	mg/Kg	DTPA

Data:			Method
OrgMat	7.3	%	LOI
Org-C	4.2	%	LOI
SMP Bufffer pH	7.12	unit	SMP
GypReq	2.4	meq/100g	GypSol
Ca	2800	mg/Kg	NH_4OAc
Mg	560	mg/Kg	NH_4OAc
Na	100	mg/Kg	NH_4OAc
K	200	mg/Kg	NH_4OAc

Cation Exchange Capacity (CEC) and Base Saturation Percentages

CEC	20	meq/100gm	Calc.
NH_3-N	0.2	% of CEC	Calc.
Ca	71.2	% of CEC	Calc.
Mg	23.7	% of CEC	Calc.
Na	2.2	% of CEC	Calc.
K	2.7	% of CEC	Calc.
H	0.0	% of CEC	Calc.

Lab Analyst:

Appendix E

Other Relevant Regulatory Records

beak

Remedial Investigation Report

Former Intersil Facility
10900 North Tantau Avenue
Cupertino, California

Prepared on behalf of
Intersil, Inc.
June 1990

Volume 1 of 2

IG 056

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REMEDIAL INVESTIGATION REPORT

FORMER INTERSIL, INC. FACILITY
CUPERTINO, CALIFORNIA

Prepared For:

Intersil, Inc.
San Francisco, California

Prepared by:

BEAK CONSULTANTS LIMITED
595 Woolwich Street
Guelph, Ontario
N1H 3Y5

June 1990
BEAK Ref.: 7009.1

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EXECUTIVE SUMMARY

1.0 INTRODUCTION

The Remedial Investigation (RI) report describes the results of past and current remedial investigations undertaken at the former Intersil facility and property located in Cupertino, California (the Property). Intersil conducted these investigations under the direction of the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), which manages the cleanup of the property as the lead agency under a formal agreement with the U.S. Environmental Protection Agency (EPA). The remedial investigations were performed in accordance with Site Cleanup Requirements Order No. 89-038 issued by the RWQCB on 15 March 1989, applicable sections of the California Health & Safety Code, and the U.S. EPA's guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA." The EPA proposed that the Property and the neighbouring Siemens Components, Inc., Optoelectronics Division (Siemens) facility (together identified ad the Intersil/Siemens Proposed Superfund Site) be listed on the National Priorities List (NPL) under the Federal Superfund Program in June 1988, although to date, no final action has been taken.

The information presented in the RI report -- for example, the nature and extent of chemical compounds in soil and groundwater beneath the Property; the existing and potential pathways of chemical migration; and the magnitude and probability of potential harm to human health and the environment posed by conditions at the Property -- has been used to prepare a Feasibility Study (FS) report. The FS report develops and evaluates various remedial alternatives for the Property.

In addition to the RI and FS reports, Intersil has also prepared a Proposed Plan, which summarizes the important features of the RI and FS, briefly analyzes the remedial alternatives under consideration, identifies the preferred alternative, and informs members of the public how to best participate in the remedy selection process.

2.0 PROPERTY BACKGROUND

Intersil formerly operated its facility as a silicon wafer fabrication plant and office building from 1967 until 1988. From 1967 to date, Intersil has leased the property from Vallco Park, Ltd.

In connection with its semiconductor wafer fabrication operations, Intersil used inorganic etching solutions (such as acids) and large amounts of water. Intersil's processes used more acid and water than volatile organic compounds (VOCs); fabrication operations therefore required the use of only one in-ground vaulted waste solvent tank. Acid and water-based process wastewater was directed through five in-ground wastewater neutralization systems and sumps before being discharged pursuant to a permit into the sanitary sewer.

3.0 HISTORY OF PREVIOUS INVESTIGATIONS

Intersil initiated its investigations of the Property in 1983. Initial investigations conducted between 1983 and 1986 involved drilling soil borings and installing groundwater monitoring wells, and resulted in the detection of low concentrations of trichloroethene (TCE) (up to 3.30 mg/kg) in soil beneath the northern and central portions of the Property, and low concentrations of TCE (up to 33.0 mg/L), tetrachlorethene (PCE) (up to 0.150 mg/L) and 1,1,1-trichloroethane (1,1,1-TCA) (up to 0.450 mg/L) in groundwater beneath the northern portion of the Property.

Subsequent phases of Intersil's investigations, both on the Property and adjacent to the Property, were undertaken to determine the lateral and vertical distribution of VOCs in the subsurface, and to design and implement interim remedial measures. With respect to the distribution of VOCs, Intersil's investigations conducted between November 1986 and October 1988 revealed that VOC-affected soils were restricted to the northern portion of the Property, and the central area of the Property near the former inactive east neutralization system. Interim remedial measures included the removal of the inactive east neutralization system and vaulted 250-gallon waste solvent tank (in 1986), the design and installation of groundwater and soil vapour extraction and treatment systems (in 1987), and

the removal of the remaining wastewater treatment facilities (the north and east neutralization systems, and the north and east scrubber sumps), and the former above-ground chemical and hazardous waste storage area (in 1988).

4.0 SCOPE OF REMEDIAL INVESTIGATION

In order to collect additional information necessary to thoroughly characterize the location of potential sources, and the respective identities and distributions of chemicals in the soil and groundwater at the Property, between June 1989 and January 1990 Intersil performed the following tasks:

- drilled 32 additional borings, collected and analyzed 283 soil samples, and performed further soil gas surveys;
- installed an additional piezometer to evaluate the effectiveness of the groundwater extraction and treatment system;
- collected groundwater samples from all Intersil monitoring wells, and analyzed each sample for VOCs, semi-VOCs and Priority Pollutant metals (results indicated that neither semi-VOCs nor metals require remediation); and
- further evaluated the effectiveness of the groundwater extraction and treatment system using water-level data from the new piezometer and existing wells, and the effectiveness of the vapour extraction system using the results of a soil gas pumping test.

5.0 RESULTS OF REMEDIAL INVESTIGATION

Analysis of all of the data collected and analyzed during investigations conducted at the Property has resulted in the complete characterization of chemical identities and distributions in soil and groundwater at the Property. Intersil's investigations have also resulted in the identification of two potential near-surface source areas of VOCs in soil.

Vadose Zone Investigation

The VOCs most commonly detected in soil samples were toluene, TCE, PCE, 1,1,1-TCA and Freon 113. Of these compounds, only TCE was detected in concentrations that exceeded 1.0 mg/kg. Representative concentrations of the other VOCs detected in soil samples were each less then 0.1 mg/kg. Shallow soil samples (to a depth of 55 feet) containing greater than 1.0 mg/kg of TCE were clustered in two areas: in the vicinity of the former inactive east neutralization system, and in the vicinity of well W18B. In deeper samples (taken from between 55 feet and 85 feet below the surface), the pattern of samples containing TCE was more disperse, but was for the most part confined to the northernmost 100 feet of the Property.

Based on the elevated concentrations of TCE observed in soil samples, the area around the former east neutralization system has been identified as a possible source of TCE. The relatively low (less than 3.5 mg/kg) concentrations of TCE detected in nearby soil samples support this conclusion, in that the concentrations are consistent with those that would result from leakage of water that contained relatively low concentrations of dissolved TCE. This conclusion is also consistent with the fact that the former inactive east neutralization system handled facility wastewater that contained dissolved, not pure TCE.

Elevated concentrations of TCE from soil samples collected from boring W18B suggest that a shallow source of TCE may exist in the vicinity of well W18B as well. Soil samples from this area also contained relatively low levels of TCE (not exceeding 6.70 mg/kg). These concentrations are similarly consistent with concentrations associated with the leakage of water that contained relatively low concentrations of dissolved TCE.

Thus, Intersil's investigations have identified two suspected source areas of chemicals at the Property: the former inactive east neutralization system and the area surrounding well W18B. In addition, concentrations of TCE detected in soil samples collected from these two suspected source areas indicate that TCE entered the soil as a dissolved constituent in water, not as a pure solvent. Data collected from adjacent soil borings have provided complete vertical and horizontal

characterization; therefore, no additional data concerning the distribution of the VOCs of concern at the Property are required.

Saturated Zone Investigation

Concentrations of VOCs detected in groundwater samples taken from on-site wells did not exceed 33 ppm. The highest concentrations were measured in groundwater samples from A-zone wells W1A, W9A, W10A, W12A and E17A. Each of these wells is located in the northern portion of the Property. Of all the samples of B-zone groundwater collected and analyzed, those samples collected from the B-zone groundwater in the northern portion of the Property were also found to contain the maximum concentrations of VOCs. These concentrations were generally found to be one to two orders of magnitude lower than the maximum VOC concentrations measured in the A-zone.

6.0 CHEMICAL FATE AND TRANSPORT

Chemical fate and transport refers to the processes affecting the physical movement of VOCs in the subsurface beneath the Property (transport), and the chemical interactions and transformations that occur during transport (fate). The RI report discusses the fate and transport of chemicals at the Property in two sections. The first section presents a model of local groundwater flow that outlines the major pathways followed by dissolved VOCs that have infiltrated and are migrating in the subsurface. The second section summarizes the directions and rates of VOC transport, and the chemical processes that have occurred along their path of migration.

In the conceptual model of local groundwater flow, groundwater recharge generally moves vertically downward in the vadose zone until encountering either perched conditions or the water table. In the perched zone, groundwater moves laterally until the clay lens ends and more permeable conditions are encountered, and then resumes flowing in a downward direction. The direction of movement within a given perched zone will depend on the slope of the free water surface in that zone.

Because of the variability of the topography of this surface, groundwater flow within each perched zone on the Property can be highly irregular.

Once groundwater containing dissolved VOCs encounters fully saturated conditions, groundwater flow becomes primarily lateral through the higher-hydraulic conductivity sediments that comprise the A-, B- and C-zones. Groundwater may also move vertically through the lower-hydraulic conductivity aquitards (A/B aquitard, B/C aquitard), but where movement occurs, it is at a significantly lower velocity. Between the C-zone and the Deeper Aquifers, relatively little groundwater movement occurs because of the thick, continuous nature of the Regional Aquitard.

In the vadose zone, processes such as sorption onto soil particles and volatilization into the soil gas phase effectively remove a portion of the VOCs from the infiltrating groundwater. As a result, VOC molecules dissolved in migrating groundwater will move at a slower rate than the groundwater.

The distribution of VOCs in the vadose zone suggests that vapour diffusion has been primarily responsible for lateral transport of VOCs in the vadose zone. However, the relatively high amount of organic carbon associated with the soils at the Property have caused the bulk of VOCs that were migrating through the vadose zone to be immobilized through sorption, and as a result, these VOCs have never reached the water table.

7.0 EVALUATION OF INTERIM REMEDIAL MEASURES

Four soil vapour extraction wells, installed as part of Intersil's interim remedial activities, are already treating vadose zone soil in the vicinity of the two suspected source areas outlined above. Testing of the soil gas extraction system has shown that the zone of capture created by the extraction wells extends at least 150 feet in all directions from the extraction wells. Further, the zone of capture in the deep vadose zone is even greater than in the shallow zone. Tests have demonstrated that this zone extends throughout the central and entire north end of the Property,

and beyond. The area of capture created by the operation of the vapour extraction system encompasses all areas of the vadose zone where Intersil has measured concentrations of TCE in soil greater than 1.0 mg/kg. Between May 1988 (initial start-up date) and December 1989 the soil gas extraction and treatment system has removed approximately 2300 pounds (1045 kg) of TCE from the unsaturated zone beneath the property. It is estimated that the total amount of VOCs remaining in the unsaturated zone and yet to be remediated by the VES is roughly 180 pounds (80 kg). The coarser-grained layers are able to conduct vapour more rapidly than the finer-grained layers and, therefore will be more quickly remediated by the vapour extraction system. Since VOC transport out of the more fine-grained units occurs in response to the concentration gradient which exists between relatively clean, coarse-grained materials which surround the clays, effective clean-up these more fine-grained units will only commence once the system has been in operation for some time and the more highly conductive materials have been remediated. The time required to fully remediate the vadose zone, including the finer-grained layers was estimated in the FS using a model of transport processes in the vadose zone. The model indicated that once the more permeable layers had been remediated, an additional 2 years would be required to fully remediate the less permeable clay layers.

Since 1987, perched and A-zone groundwater beneath the Property has been remediated by extracting and treating groundwater from wells W4A, W5A, W10A, W12A and E17A. An evaluation of the effectiveness of the groundwater extraction system using six months of operation data indicated that the capture zone of the groundwater extraction system has historically extended beyond the Property in all directions in the A-zone. More recent evaluations of the system indicate that due to an overall drop in the A-zone water-level, and a corresponding decrease in the groundwater extraction rate, it may be necessary to enhance the system and thereby increase the groundwater extraction rate in order to ensure that the capture zone continues to extend beyond the Property.

As of March 1990, the groundwater extraction system has removed a total of approximately 42 pounds (19.1 kg) of TCE. Concentrations of VOCs have decreased by several orders of magnitude since extraction began. Calculations

performed using very conservative estimates of the size and representative total VOC concentration of the zone of VOC-bearing groundwater indicate that approximately 44 pounds (20 kg) of VOCs are yet to be remediated by the groundwater extraction system.

8.0 SUMMARY OF THE BASELINE PUBLIC HEALTH EVALUATION

On behalf of the RWQCB, Clement Associates, Inc. (Clement), conducted a Baseline Public Health Evaluate (BPHE) to evaluate risks associated with the Intersil/Siemens Proposed Superfund Site (Intersil/Siemens site) (which includes the Property and the Siemens Components, Inc., Optoelectronics Division (Siemens) facility directly to the north of the Property). Risks were evaluated based on the assumption that no further remedial action would be undertaken at the Property.

Clement identified chemicals of concern (COCs) for the Intersil/Siemens site and off-site area. Based on Clement's findings and on investigations conducted at the Property, the following COCs have been identified for the Property:

- groundwater: chloroform, 1,1-DCE, Freon 113, PCE, toluene, 1,1,1-TCA and TCE;
- soil: none.

The BPHE identified currently existing and potential future routes of human exposure to chemicals from the Property. Levels of carcinogenic risks estimated to result from these exposures indicate that current exposures present no risks that exceed EPA target values. Among potential future routes of exposure, only the unlikely use of A-zone groundwater for private domestic consumption presents risks exceeding EPA target values. Thus, the BPHE did not identify any present risks to human health.

9.0 CONCLUSION

Through its remedial investigation, Intersil has identified the source areas of VOCs detected in soil and groundwater at the Property, and has thoroughly and completely characterized the distribution of VOCs at the Property as well. As a result, no further investigation is warranted.

The BPHE found no present risk to public health as a result of VOCs detected in soil and groundwater at the Property. With respect to potential future risks, the BPHE did associate certain risks with the potential, though unlikely, future use of shallow groundwater that might occur if no remedial action is undertaken. Based on this assessment, Intersil has designed its preferred remedial alternative to remove VOCs from soil, and to contain and remove VOCs from groundwater, through expansion of its existing remedial system. This alternative is consistent with remedial objectives and their focus on the removal of VOCs from soil and from groundwater in the A- and B-zones. Vacuum extraction of soil is particularly effective in attaining these objectives since the bulk (in terms of mass) of VOCs detected at the Property is present in soil, and treatment of that medium will serve to eliminate VOC-bearing soils as a source of VOCs to groundwater.

1.0 INTRODUCTION

This Remedial Investigation (RI) report has been prepared on behalf of Intersil, Inc. (Intersil) to comply with provisions in Site Cleanup Requirements (SCR) Order No. 89-038, issued to Intersil, Siemens Components, Inc. (Siemens), and Vallco Park, Ltd. (Vallco Park) on 15 March 1989 by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB). This report summarizes previous and recent remedial investigations undertaken to develop a Feasibility Study (FS) and Proposed Plan for the former Intersil facility at 10900 North Tantau Avenue in Cupertino, California (the Property). The RWQCB requested that an RI/FS be performed in part because the U.S. Environmental Protection Agency (EPA) has proposed placing both Intersil's former 10900 North Tantau Avenue facility and Siemens' adjacent 19000 Homestead Road facility on the National Priorities List (NPL). The RWQCB manages the cleanup of this proposed Superfund site as the lead agency under a formal agreement with the EPA.

This RI report describes the results of investigations conducted prior to, and in accordance with, the Second Revised RI/FS Workplan for the Property, prepared by Geomatrix Consultants, Inc. (Geomatrix) and submitted to the RWQCB on 7 April 1989 (Geomatrix, 1989e). The SCR, issued to Intersil, Siemens and Vallco Park on 15 March 1989, required that the scopes of work described in Intersil's and Siemens' RI/FS Workplans be implemented as proposed, and also outlined additional work to be conducted by Intersil and Siemens.

The SCR required that three RI/FS reports be prepared to address the following three areas: 1) "Siemens vadose zone and A-zone on-site areas;" 2) "Intersil vadose zone and A-zone on-site areas;" and 3) "Siemens B-zone and deeper zones on-site areas and B-zone and deeper zones off-site down gradient areas, Intersil B-zone and deeper zones on-site areas and B-zone and deeper zones off-site down gradient areas, and Intersil and Siemens off-site A-zone." Intersil and Siemens agreed to conduct separate investigations at their individual facilities, and jointly retained Levine-Fricke to conduct the off-site investigation on behalf of both companies. This report presents a description of the RI work conducted at the Property. Two

additional RI reports, one each for the Siemens property and the off-site area, will be submitted by Levine-Fricke under separate cover.

In addition to addressing the requirements set forth in the SCR, this document has also been prepared in accordance with Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300), Section 25356.1(c) of the California Health and Safety Code, and guidelines set forth in the EPA draft guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (EPA, 1988).

1.1 Purpose and Report Organization

The purposes of the Remedial Investigation are as follows:

a) to assess the nature and extent of chemical compounds in soil and groundwater underlying and adjacent to the Property;

b) to identify existing and potential migration pathways, including the direction, rate, and dispersion of chemical migration;

c) to assess the magnitude and probability of actual and potential harm to public health and welfare and to the environment by the threatened or actual release of chemicals at the property; and

d) to collect the information necessary to conduct a Feasibility Study and to prepare a Proposed Plan for remediation of the Property.

A Baseline Public Health Evaluation was performed by Clement Associates, Inc. (Clement) under contract with the RWQCB (Clement, 1990). This RI report contains a brief summary of the findings of the Baseline Public Health Evaluation.

This RI report describes the results of all investigations conducted at the Property and is organized in accordance with the format set forth in the EPA guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (U.S. EPA, 1988). The first volume of the RI report contains the text, figures and tables. The text is presented as follows:

- Section 1.0 describes the site and includes a history of operations;
- Section 2.0 includes a summary of previous soil and groundwater investigations conducted at the Property;
- Section 3.0 describes the most recent work conducted during the RI, as outlined in Intersil's Second Revised RI/FS Workplan and as required in Provision C.3 of the SCR;
- Section 4.0 describes the physical characteristics of the Property, the surface features, meteorology, surface hydrology, geology, and hydrogeology;
- Section 5.0 contains the geochemical results of the investigations in terms of potential source locations, and current soil and groundwater quality;
- Section 6.0 presents an evaluation of chemical fate and transport;
- Section 7.0 presents a description and evaluation of interim remedial measures underway at the Property;
- Section 8.0 presents a brief summary of the Baseline Public Health Evaluation;
- Section 9.0 contains a summary of the RI with conclusions and recommended remedial action objectives; and
- Section 10.0 contains references.

The second volume of the RI contains supporting appendices. In addition to other information compiled in support of the technical arguments presented in this report, the laboratory analytical data and QA/QC evaluation results for analyses performed in October and November 1989 in accordance with Intersil's Second Revised RI/FS Workplan are included in the appendices.

1.2 Property Background

1.2.1 Setting

The Property is situated in the Santa Clara Valley in Cupertino, California, approximately 7.5 miles south of San Francisco Bay (Figure 1.1). A number of electronics manufacturing facilities are located in the vicinity of the Property. These facilities include Siemens to the north, Hewlett-Packard to the west, the former AMI facility to the northeast, and the Tandem Computer facility to the east. A residential neighbourhood is located north of the Siemens facility, and orchards are located one block to the east (Marchese No. 1) and three blocks to the northeast (Marchese No. 2). Calabazas Creek is located approximately 1,500 feet east of the Property and flows north-northeast toward San Francisco Bay.

1.2.2 Property Description and History

The former Intersil facility is located at 10900 North Tantau Avenue between Homestead Road and Pruneridge Drive in Cupertino, California (Figure 1.1). Intersil leased the 4.5-acre property from Vallco Park (10050 North Wolfe Road, Cupertino) beginning in 1967. Intersil developed the northern portion of the property in 1967. In 1970, the building was expanded to the south and in approximately 1973, the parking lot was extended to the southern property line. Prior to the development of the property, the region was used primarily for agriculture.

The facility was operated continuously as a wafer fabrication plant and office building from 1967 until it was closed in February 1988. A site plan of the facility, as it existed in 1986, is presented as Figure 1.2. The single-story portion of the building, located at the northern end of building T2 depicted on Figure 1.2, comprises approximately 13,000 square feet and was originally constructed in 1967. It contained both a wafer fabrication operation and an office area. The two-story southern portion of the building, comprising approximately 43,000 square feet, was built as an expansion in 1970. In this part of the building, wafer fabrication, testing and assembly facilities were located on the first floor and office space was located on the second floor.

1.2.3 Chemical Use and Waste Management Practices at the Property

At the Property, Intersil fabricated the following: (1) integrated circuits, including watch chips, microprocessor memories and linear and analog devices; and (2) discrete devices, such as individual transistors, diodes, and other semiconductor devices. Because Intersil purchased polished silicon wafers from outside vendors, the processes of cutting and then polishing both sides of wafers, which require the use of large amounts of chlorinated solvents, were not conducted on the Property. Instead, Intersil's processes used inorganic etching solutions (such as acids) and large amounts (up to 100,000 gallons per day) of water. Because Intersil's processes were acid- and water-intensive, rather than solvent-intensive, the facility had five in-ground wastewater neutralization systems and sumps and only one in-ground vaulted waste solvent tank (Figure 1.3).

During the wafer fabrication process, sulphuric, hydrochloric, hydrofluoric, phosphoric, nitric, chromic and acetic acids were used to etch and clean wafers. Xylenes and n-butyl acetate were used as carrying agents for photoresist or as developers. More recently, Freon 113, isopropyl alcohol and acetone were used to clean wafers and equipment. Prior to approximately 1979, trichloroethene (TCE) was used on a limited basis as a cleaning agent. Very small quantities of 1,1,1-trichloroethane (TCA) were used until the closure of the facility in February 1988. Negative photoresist chemicals employed at the Property included n-butyl acetate, xylenes and limited amounts of ethylbenzene. Other chemicals used or produced during the fabricating process included phosphates, caustics, metals, fluorides, phenols, soaps and detergents. Quantities of chemicals used and waste chemicals generated are unknown.

The waste chemicals were handled in several different ways. Process wastewater, which contained acids and other etching and cleaning compounds, was discharged to the process wastewater system and was processed through in-ground acid neutralization systems to adjust pH. The neutralized wastewater was then discharged to the municipal sanitary sewer system according to applicable local regulations. Records from Intersil's self-monitoring program indicate that between 1984 and 1986, the following compounds were detected in the facility wastewater at the concentrations noted:

COMPOUNDS DETECTED IN FACILITY WASTEWATER
Concentrations in milligrams per litre (mg/L)

Constituent	10/84	2/85	8/85	11/85	2/86
Bromochloromethane	0.002	ND	ND	ND	ND
Chloroform	0.004	ND	ND	ND	0.012
Dichlorobenzene	0.003	0.012	ND	ND	ND
1,1-Dichloroethene	0.004	ND	ND	ND	ND
Tetrachlorobenzene	0.001	0.046	ND	ND	ND
1,1,1-Trichloroethane	0.16	ND	ND	ND	ND
Trichlorobenzene	ND	ND	ND	0.012	0.004
Methylene Chloride	ND	ND	14	ND	ND
Toluene	ND	ND	0.092	ND	ND
Ethylbenzene	ND	0.18	ND	ND	ND
Naphthalene	ND	ND	0.52	ND	0.036
Acetone	0.26	0.82	ND	ND	ND
bis (2-Ethylhexyl) Phthalate	0.05	0.031	ND	ND	ND
Diethyl Phthalate	0.001	ND	ND	ND	ND
Chromium, total	NA	0.11	0.06	NA	0.9
Fluoride	NA	250	8.3	NA	9
Phenolics	NA	0.02	NA	NA	0.02

ND = not detected
NA = not analyzed

From 1980 to 1986, certain waste solvents were stored in a 250-gallon, vaulted, in-ground waste solvent tank. This is the only in-ground unit at the Property that handled waste solvents that had not been mixed with very large quantities of water. This tank was located within the vault of the east neutralization system and was visible for inspection on the bottom and all sides. The tank reportedly received xylenes, ketones, alcohol, and n-butyl acetate. When in operation, wastes in the tank were pumped out monthly by California Solvent Recycling Corporation

for processing and disposal according to federal and state hazardous waste control laws. This tank was taken out of service and removed in July 1986. The tank appeared intact at the time of removal (Geomatrix, 1986a).

Other bulk wastes, including metals, fluorides, phenols and solvents, were collected in 55-gallon drums for storage and then transported by a certified hauler to licensed recycling or disposal facilities. The drums were stored in three separate, double-contained storage units that were secured, placarded, fire protected and segregated according to National Fire Protection Association (NFPA) classifications. The former above-ground waste storage area, located as shown on Figure 1.3, was fenced and placarded. The area could be observed from a security post that was staffed 24 hours per day.

A discussion of the development and operation of Intersil's in-ground acid neutralization systems and related wastewater handling units, based on available facility drawings, is presented below. The former locations of these systems and associated piping are shown on Figure 1.3.

- 1967 - Initial occupation of the Property by Intersil. Facility wastewater was treated in what is now referred to as the north scrubber sump, a 500-gallon, epoxy-lined, concrete sump.

- 1970 - Two-story southern addition constructed. Facility wastewater from the southern addition drained to what is now referred to as the east scrubber sump, also a 500-gallon, epoxy-lined, concrete sump, which was then a lift station that pumped wastewater to the north scrubber sump. Later, the east scrubber sump was converted to a neutralization system.

- 1972 - East neutralization system constructed, consisting of five 1,000-gallon concrete tanks with polypropylene liners and one 1,000-gallon, steel, gravity separator tank lined with epoxy.

- 1973 - Vaulted north neutralization system constructed, consisting of five 1,000-gallon, plastic tanks within two separated concrete vaults.

- 1975 - Plastic tanks within the north neutralization system replaced with two stainless steel, compartmented tanks with a total capacity of approximately 8,500 gallons.

- 1976 -Existing east neutralization system removed from service and new east neutralization system constructed to the east, consisting of an 8,500-gallon, stainless steel compartmented tank within a concrete vault.

- 1980 - A 250-gallon steel waste solvent storage tank was placed within the concrete vault of the new east neutralization system.

- 1986 - Inactive east neutralization system removed and 250-gallon waste solvent tank removed.

- 1988 - Facility closed, all remaining in-ground treatment systems (east and north neutralization systems and east and north scrubber sumps) removed.

2.0 HISTORY OF STUDY AREA INVESTIGATIONS

Hydrogeologic studies and soil investigations were initiated at the Property in 1983. Cooper Engineers (Cooper) conducted investigations for Intersil from 1983 until 1986. Geomatrix conducted investigations from 1986 through March 1989. In April 1990 Intersil retained Beak Consultants, Ltd. (BEAK) to manage the RI activities with Geomatrix and McCulley, Frick & Gilman, Inc. (MF&G) as subconsultants. A summary of the work conducted previously at the site, the consultants responsible for the studies and corresponding report references are presented in Table 2.1. The locations of all monitoring wells and soil borings resulting from these investigations are shown on Figure 2.1.

Three phases of investigation were conducted by Cooper between 1983 and 1986 (Table 2.1). These investigations included drilling nine soil borings and drilling and installing seven groundwater monitoring wells. The results of these investigations indicated the presence of TCE at low concentrations (up to 3.30 mg/kg) in soil beneath the northern and central portions of the site, and low concentrations of TCE (up to 33.0 mg/L), PCE (up to 0.150 mg/L), and 1,1,1-TCA (up to 0.450 mg/L) in groundwater beneath the northern portion of the site. Summaries of the results of analyses of soil samples and groundwater samples collected during these early phases are included in Tables 2.2 through 2.6, which present summaries of all geochemical analyses of soil and groundwater samples collected during investigations of the Property.

Based on the results of these investigations, the RWQCB issued Waste Discharge Requirements Order (WDR) No. 86-49 to Intersil in June 1986. This order provided, in part, that Intersil institute a comprehensive sampling and analysis program to determine the lateral and vertical distribution of VOCs in the subsurface, implement a quarterly groundwater monitoring program, and design and implement interim remedial measures.

Geomatrix conducted subsequent phases of investigation at the site and on adjacent properties, including drilling and installing eleven on-site groundwater monitoring wells and six off-site groundwater monitoring wells at the adjacent

Hewlett-Packard Company facility to the west (one well), the adjacent Siemens facility to the north (four wells), and the adjacent Tandem Computers, Inc. facility to the east (one well) (Figure 2.2). During drilling of these wells, soil samples were collected and analyzed for volatile organic compounds (VOCs). The results of these analyses, presented in Table 2.2a supported the findings of previous investigations and indicated that VOC-affected soils were restricted to the northern portion of the facility and the area near the former inactive east neutralization system (Figure 1.3). Geomatrix conducted monthly water-level measurements, quarterly groundwater quality monitoring, and quarterly reporting as required in the WDR. Results of the quarterly monitoring analyses are included in Tables 2.3 through 2.6 which summarize the results of all geochemical analyses performed on groundwater samples collected from the Property. These quarterly monitoring data are used to interpret the extent of the zone of VOC-bearing groundwater (Section 5.2.2) and evaluate the effectiveness of the interim remedial measures currently underway at the Property (Section 7.3).

An Interim Remedial Action Plan for the site was prepared and submitted to the RWQCB on 17 April 1987 (Geomatrix, 1987b). In July 1986, as an interim remedial measure, Intersil removed the inactive east neutralization system and the vaulted 250-gallon waste solvent tank (Geomatrix, 1986a). In September 1988, the north and east neutralization systems, the north and east scrubber sumps, and the above-ground chemical and hazardous waste storage area were removed (Figure 1.3). No visible signs of leakage were observed during removal of the waste storage and treatment units.

Groundwater and soil vapour extraction and treatment systems were designed and installed in 1987 (Geomatrix, 1988b). In the groundwater extraction and treatment system, groundwater is pumped from four A-zone wells through buried double-contained pipelines to a groundwater treatment plant, located near the centre of the Property (Figure 2.3). Groundwater is also extracted from one perched-zone well and stored in a 250-gallon above-ground holding tank which is periodically drained to the treatment plant. In the soil vapour extraction and treatment system, vapour is pumped from four extraction wells through buried pipelines to a carbon adsorption treatment system, located adjacent to the

groundwater treatment plant at the centre of the site (Figure 2.3). Six vent wells, located along the northern property boundary, serve as passive recharge wells to the soil vapour extraction system. The groundwater and soil vapour extraction and treatment systems, described in greater detail in Section 7.0, began full operation in December 1987 and May 1988, respectively, and have been operating on a nearly continuous basis since that time (Geomatrix, 1990).

In September 1987, the RWQCB issued Cleanup and Abatement Order (CAO) No. 87-133 to Intersil, Siemens and Vallco Park. This order required that Intersil and Siemens install two additional off-site monitoring wells and perform additional investigation of the quality of water in the region's deep aquifers. Siemens and Intersil installed the two additional wells, reviewed results of completed surveys of public and private wells in the area (completed by Intersil, Siemens, and others) (Geomatrix, 1987a; Geomatrix, 1988c; Woodward-Clyde Consultants (WCC), 1987d; Weiss Associates, 1986), and installed four deep aquifer monitoring wells (BK-1, BK-2, BK-3 and BK-4). Both Siemens and Intersil submitted reports to the RWQCB that documented well installation, contained sampling and chemical analysis results, and set forth the conclusion that no further evaluation of the deep aquifers was warranted.

In a letter dated 24 June 1988, the RWQCB requested that Siemens and Intersil submit an RI/FS Workplan for the two facilities (RWQCB, 1988). Intersil and Siemens submitted separate RI/FS Workplans to the RWQCB on 21 October 1988 (Geomatrix, 1988e; Levine-Fricke, 1988). After receiving comments by the RWQCB and EPA, Revised RI/FS Workplans were submitted to the RWQCB on 17 January 1989 (Geomatrix, 1989a; Levine-Fricke, 1989a). Additional RWQCB comments were incorporated in the Second Revised RI/FS Workplans, submitted to the RWQCB on 7 April 1989 by Intersil (Geomatrix, 1989e), and on 10 March 1989 by Siemens (Levine-Fricke, 1989b).

3.0 SCOPE OF REMEDIAL INVESTIGATION

The investigative tasks conducted at the Property were designed to provide the information necessary to satisfy the purposes of the RI listed in Section 1.1. The list of investigative tasks includes those tasks conducted prior to submittal of the RI/FS Workplan, tasks outlined in Intersil's Second Revised RI/FS Workplan (Geomatrix, 1989e) and those additional tasks required by SCR Order No. 89-038, issued by the RWQCB on 15 March 1989. The first group of investigations are termed "previous", or "historic" investigations and were discussed in the previous Section (Section 2.0). The second and third groups of tasks are termed the "recent" RI tasks. A summary of the recent RI tasks performed and reports recently-submitted as part of the RI is presented in Table 3.1. All of the information collected during the execution of all of the investigative tasks was collectively evaluated to satisfy the objectives of the RI listed in Section 1.1.

The tasks outlined in the Second Revised RI/FS Workplan and the work subsequently performed in connection with those tasks include the following:

- Task 1 - Project Operation Plans - This task included preparation of a Health and Safety Plan and a Sampling and Analysis Plan (SAP), which included a Field Sampling Plan (FSP) and a Quality Assurance Project Plan (QAPP). These reports were prepared by Geomatrix and submitted to the RWQCB on 17 January 1989 (Geomatrix, 1989b and c).

- Task 2 - Additional Study Area Characterization - This task included the following four subtasks:

  1 - Additional Source Characterization - Under this subtask, 32 additional borings were drilled, 283 soil samples were collected and analyzed, and soil gas surveys were performed.

  2 - Additional Piezometer Installation - One piezometer (23P) was installed to help evaluate the effectiveness of the interim groundwater extraction system.

  3 - Groundwater Sampling and Analysis - Groundwater samples were collected from all Intersil monitoring wells. Samples were analyzed

for VOCs, semi-volatile organic compounds (semi-VOCs), and Priority Pollutant metals (metals).

4 - Evaluation of Interim Remedial Measures - This task included further evaluation of the effectiveness of the groundwater extraction system using water-level data from the new piezometer and existing wells and performing a long-term recovery test of well W10A, and evaluation of the vapour extraction system by performing a soil gas pumping test.

- Task 3 - Baseline Risk Assessment - This task was performed by Clement under contract to the RWQCB.

- Task 4 - Remedial Investigation Report - This task included preparation of a draft RI report and includes preparation of this final RI report incorporating RWQCB and EPA comments.

- Task 5 - Progress Reports - Monthly progress reports have been submitted to the RWQCB by BEAK on behalf of Intersil. These reports contain documentation of progress on RI tasks and projections for additional work and scheduling.

- Task 6 - Meetings - On an as needed basis, Intersil and its consultants met with RWQCB staff to discuss Intersil's progress on the RI tasks.

Additional tasks required by the SCR include the following:

- Task 7 - Administrative Record - A technical report containing a proposal for developing the Administrative Record for the Intersil and Siemens sites was submitted to the RWQCB on 28 April 1989 and a revised index was submitted to the RWQCB on 12 April 1990. A copy of the revised index is attached as Appendix F.

- Task 8 - Additional Report Preparation - The RWQCB required the submittal of technical reports documenting additional remedial investigations prior to submittal of the RI report. Interim results of these additional investigations were reported to the RWQCB in a report by Geomatrix, dated 17 April 1989, and in reports by BEAK dated 26 June 1989 and 22 August 1989 (Geomatrix, 1989f; BEAK, 1989a and 1989b).

The following section contains a discussion of the scope of work conducted by Geomatrix and BEAK to complete the additional study area characterization outlined in Task 2 above.

3.1 Additional Source Characterization

Additional investigation of potential sources of the chemicals detected in soil and groundwater at the Property was divided into two parts. First, those locations previously identified as potential sources were further investigated. These areas included the north and east neutralization systems, the north and east scrubber sumps, the inactive east neutralization system, and the above-ground waste storage area. In these areas, additional soil borings were drilled and soil samples were collected and chemically analyzed. Second, a soil gas survey was performed to identify any additional potential source areas. These areas were further investigated by drilling borings and collecting soil samples for chemical analysis.

3.1.1 Soil Investigation at Potential Source Areas

The vertical and lateral distributions of VOCs in soil at previously identified potential source areas were established by collecting and analyzing soil samples from 16 borings drilled in April and May 1989. Eleven borings were drilled to a depth of about 100 feet, including five (borings RI-5, RI-8, RI-9, RI-10, and RI-11) to assess the vertical extent of chemicals at the locations of former in-ground sumps and neutralization systems, four (borings RI-1, RI-2, RI-3, and RI-4) to assess the lateral extent of chemicals at the northern and western property boundaries, and two (borings RI-6 and RI-7) to assess the lateral extent of chemicals associated with the area near well W18B. Five borings (RI-12, RI-13, RI-14, RI-15, and RI-16) were drilled to a depth of 30 feet to assess the quality of near-surface soils at the former above-ground waste storage area. The locations of all of these borings are shown on Figure 2.1.

Soil samples were collected at approximately 10-foot intervals from all 16 borings and analyzed for VOCs using EPA Method 8240. Additional samples were collected from depths of approximately 10, 20, and sometimes 30 feet from each of

these borings and analyzed for semi-VOCs (using EPA Method 8270), Priority Pollutant Metals (Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, Zn) using EPA Methods 6010, 7060, 7471, and 7740 and cyanide using EPA Method 9010. No semi-VOCs were detected in any of the recently-collected (since June 1989) soil samples. Results of the other soil sample analyses are presented in Tables 2.2a, and c, which summarize the results of all VOC, and Priority Pollutant Metal and cyanide analyses performed on soil samples collected from the Property, respectively. These geochemical data were used investigate the existence of any additional potential sources of VOCs and further delineate their extent in the vadose zone at the Property. Detailed discussions of the relevance of these soil chemistry data with respect to the investigative objectives outlined above are presented in the BEAK report entitled "Completion of Piezometer, Soil Borings and Additional Soil Gas Survey", dated 26 June 1989 (BEAK, 1989a). These discussions are summarized in Sections 5.1.3 (Investigation of Potential Sources) and 5.1.4 (Investigation of Extent of VOCs in the Vadose Zone) of this report.

To facilitate adequate lithologic description and hydrogeologic characterization, the borings were all continuously cored using the hollow-stem auger drilling method. Details of the soil boring program and lithologic logs of the borings are presented in the BEAK report entitled "Completion of Piezometer, Soil Borings, and Additional Soil Gas Survey," dated 26 June 1989 (BEAK, 1989a). The lithologic data obtained during this investigation and presented in the BEAK report of 26 June 1989 (BEAK, 1989a) was used to complete the interpretation of site geology presented in Section 4.2.2 (Site Geology) of this report.

3.1.2 Soil Gas Investigation

The presence of additional potential sources was investigated by collecting and analyzing soil gas samples from the 85 locations shown on Figure 3.1. The soil gas sample locations were positioned in a regular grid that covered the entire site except for the area beneath the buildings. The 85 soil gas locations yielded 109 soil gas samples which were analyzed for VOCs in the field, and in the laboratory using modified EPA Method 8010. Results of the soil gas sample analyses, conducted between March and May 1989, are presented in Table 3.2. The results of the soil gas investigation and discussions of their significance can be found in

the Geomatrix report entitled "Results of Soil Gas Investigation," dated 17 April 1989 (Geomatrix, 1989f) and the BEAK report titled "Completion of Piezometer, Soil Borings, and Additional Soil Gas Survey," dated 26 June 1989 (BEAK, 1989a). These discussions are summarized in Section 5.1.3.3 (Soil Gas Survey) of this report.

3.1.3 Additional Soil Investigation

Additional soil boring programs were conducted in July and November 1989 to further delineate the lateral extent of VOCs in soil at the Property. Fourteen additional soil borings were drilled in July 1989 at the locations shown on Figure 2.1. Thirteen of these borings (RI-18 through RI-30) were drilled to a maximum depth of 45 feet directly beneath the former Intersil building to investigate whether a wastewater pipeline beneath the building may have been a source of VOCs. One boring (RI-17) was drilled to a depth of 100 feet in the central portion of the Property to investigate the distribution of VOCs near an entrance to the former Intersil building where VOCs were detected in soil gas samples. Soil samples were collected for chemical analysis (EPA Method 8240) at approximate 5- to 10-foot intervals from these borings. Results of these analyses are included in Table 2.2a. A detailed discussion of the results of the investigation is presented in the BEAK report entitled "Completion of Additional Soil Borings," dated 22 August 1989 (BEAK, 1989b). This discussion is recapped in Sections 5.1.3.2 (Other Near-Surface Soils) and 5.1.4 (Investigation of Extent of VOCs in the Vadose Zone) of this report.

Two additional borings (RI-31 and RI-32) were drilled at the site in November 1989 (Figure 2.1) for the purpose of collecting soil samples for fraction of organic carbon (FOC) and moisture-density analyses and for additional VOC analyses (EPA Method 8240). These borings were drilled to an approximate depth of 100 feet to evaluate the lateral extent of VOCs east of the north scrubber sump and east of the area near well W18B. Results of the FOC and moisture-density analyses are presented in Table 3.3. Summaries of the results of the VOC analyses are included in Table 2.2a and discussed in Sections 5.1.3.2 (Other Near-Surface Soils) and 5.1.4 (Investigation of Extent of VOCs in the Vadose Zone) of this report. Copies of

lithologic logs of these two borings and copies of laboratory analytical reports are presented in Appendix A.

3.2 Additional Piezometer Installation

Piezometer 23P (Figure 2.1) was installed to provide additional water-level data northeast of Intersil's interim groundwater extraction system for further evaluation of the system's effectiveness (Section 7.3.1). The piezometer was installed in the A-zone sediments to a depth of approximately 117 feet. Details regarding drilling, installation and development of the piezometer are presented in the BEAK report entitled "Completion of Piezometer, Soil Borings, and Additional Soil Gas Survey," dated 26 June 1989 (BEAK, 1989a).

3.3 Groundwater Sampling and Analysis

In March 1989, groundwater samples were collected from all Intersil wells as part of the quarterly self-monitoring program. In addition to the normal analytical protocol, which includes VOC analysis using EPA Method 8240, selected groundwater samples were analyzed for semi-VOCs using EPA Method 8270, and metals using various EPA Methods (6010, 7060, 7471, and 7740). The results of these analyses were presented and discussed in Intersil's Quarterly Self-Monitoring Report, Calendar Quarter January - March 1989, dated 15 April 1989 (Geomatrix, 1989h). For completeness, these results and the results of all other quarterly groundwater analyses are presented in this report in Tables 2.3 through 2.6. The results of these and all other analyses of groundwater samples are used to delineate the extent of the zone of VOC-bearing groundwater beneath the Property and evaluate the effectiveness of the interim remedial measures currently underway. These discussions are contained in Sections 5.2.2 (Groundwater Chemistry) and 7.3.1 of this report, respectively.

3.4 Evaluation of Interim Remedial Measures

The effectiveness of interim remedial measures at the site was evaluated as outlined in Intersil's Second Revised RI/FS Workplan (Geomatrix, 1989e). The capture area of the groundwater extraction system was evaluated using groundwater flow modeling techniques and observed water-level data, and groundwater quality was monitored on a quarterly basis. Analysis of data collected during a long-term recovery test of Well 10A provided an additional estimate of the transmissivity of the A-zone (Appendix B). This aquifer parameter was necessary for the utilization of the groundwater flow model. For the vapour extraction system, the capture area was evaluated using data generated during a pumping test, and soil vapour quality was monitored on a monthly basis. Discussions of the methods and results of these evaluations are presented in Section 7.0 of this report.

4.0 PHYSICAL CHARACTERISTICS OF THE STUDY SITE

4.1 Site Description

4.1.1 Surface Features

The Property is predominantly flat and slopes gently toward the north. A maximum drop in elevation from south to north of 7 feet across the property results in a northward slope of about one percent. The majority of the 4.5-acre site is covered by buildings and asphalt. A 30-foot wide planting strip, primarily covered by grass and trees, bounds the Property on the west; a 30-foot wide planting strip, transected by driveways and covered by shrubs and trees, bounds the Property on the north. Numerous small planter boxes with mature trees are present in the parking lot (Figure 1.2).

4.1.2 Meteorology

Cupertino has a mediterranean climate with warm, dry summers and cool, wet winters. Climatological data compiled for six weather stations located in the San Francisco mid-peninsula and south bay areas are presented in Table 4.1.

The mean annual rainfall in the Cupertino area is approximately 14 inches, with most of the rainfall occurring between October and April. The mean annual temperature for the area is approximately 60 degrees Fahrenheit, and the average wind speed is approximately 5 miles per hour. Prevailing winds are generally from the northwest, although winds from the south and southwest are common in December and January.

4.1.3 Surface Water Hydrology

Surface runoff at the site is directed via swales in the pavement to numerous catch basins and storm drains located around the parking lot. Surface runoff in the region is directed via municipal storm drains to Calabazas Creek, located approximately 1000 feet east of the property boundary. The location of the storm drain outfall at Calabazas Creek is shown on Figure 1.1.

4.1.4 Ecology

Wetlands and Nature Reserves - Sensitive environments within the Santa Clara Valley and San Francisco Bay Regions include wetlands and nature reserves, neither of which were identified at the Property. Salt marshes located along Alviso and Guadalupe sloughs as they approach San Francisco Bay (6 to 7 miles to the north of the Property) are the vegetated wetlands nearest to the Property. Barren intertidal wetlands used as salt evaporators are found approximately 5.5 miles to the north of the Property, along the edge of San Francisco Bay.

The San Francisco Bay National Wildlife Refuge, located approximately 7 miles to the north, is the nearest nature reserve to the Property.

Critical Habitats and Endangered Species - Two endangered species, the California clapper rail (*Rallus longirostris*) and the salt marsh harvest mouse (*Reithrodontomys raviventris*), are known to inhabit the tidal marshes at South San Francisco Bay and the bayshore (WCC, 1987c). The endangered California brown pelican is occasionally observed in the South San Francisco Bay Area, but does not nest there (WCC, 1987c). The ranges of the American peregrine falcon and southern bald eagle, both of which are endangered species, are known to include the South San Francisco Bay area. These species do not, however, use bay and bayshore habitats (WCC, 1987c). None of the species discussed above use any portion of the Property for habitat.

4.2 Geology

4.2.1 Regional Geology

The Property is located in the southern part of the San Francisco Bay area in a physiographic region known as the West Side Alluvial Apron (California Department of Water Resources, 1967). This region consists of coalescing alluvial fans that fill part of the structural trough between the Santa Cruz Mountains to the west and southwest and the Diablo Range to the east and northeast. The axis of this structural trough probably underlies San Francisco Bay, a drowned river valley that stood above sea level during Pleistocene glacial stages. San Francisco

Bay lies approximately 7 miles northeast of the site. The alluvial sediments generated by erosion of the Santa Cruz Mountains highlands have gradually filled the portion of the structural trough underlying the site region.

The alluvial fan deposits can be separated into semiconsolidated and unconsolidated units. The semiconsolidated unit, known as the Santa Clara Formation, dips to the east-northeast. The unconsolidated alluvium unconformably overlies the Santa Clara Formation and may extend to a depth of approximately 1,000 feet below the Property. Interbedded and interlensing mixtures of gravel, sand, silt and clay comprise the Santa Clara Formation and unconsolidated alluvial deposits.

The interbedded and interlensing nature of the gravel, sand, silt and clay deposits results from the alternating depositional and erosional processes which occur in alluvial environments. Down-cutting of alluvial channels into previously deposited layers and subsequent filling of these channels by coarse-grained deposits typically occur in one part of the area, while continued deposition of fine-grained sediments occurs at another part. Because alluvial channels migrate laterally through time as a response to changes in sediment supply, uplift rate of the Santa Cruz Mountains, or base level change in the streams, many of the individual beds in the alluvial deposits underlying the study area are lenticular, and pinch out or interfinger with beds of differing lithologies. There are, however, relatively thick laterally continuous layers of fine-grained sediments interlayered with multilayered fine and coarse-grained material beneath the site region. These layers reflect major shifts in orientation of the main active channel systems through time.

4.2.2 Site Geology

Lithologic and geophysical logs of borings provided the basis to develop stratigraphic relationships beneath the Property. The information obtained from the continuous coring of the RI borings suggests that several strata may be laterally correlated across the site. Generalized Cross Sections A-A', B-B', C-C' and D-D' (Figures 4.1a and 4.1b) illustrate the stratigraphic conditions in the vicinity of the Property. Figure 4.1c shows the locations of these cross sections.

In most of the borings, samples from the upper 5 to 10 feet consisted of sandy or silty clay. Underlying these clayey soils and extending to a depth of approximately 40 feet, the samples consisted primarily of relatively thinly bedded mixtures of clay, silt, sand and gravel. Between depths of approximately 40 and 60 feet, samples consisted primarily of mixed sand and gravel. Below this level, samples from many of the boreholes indicated a 2- to 5-foot thick layer of fine-grained sediments consisting of clay, silt and sand mixtures. Between depths of approximately 65 and 80 feet, samples consisted primarily of sand and gravel. Samples from beneath this level consisted primarily of fine-grained sediments in layers up to 10 feet thick.

Deposits below a depth of approximately 90 feet and extending to a depth of approximately 115 feet are characterized by interlayered lenticular beds of coarse-grained sediments, consisting primarily of sand, and fine-grained sediments consisting primarily of silt. Beneath these interlayered beds, samples indicate a fine-grained unit consisting of clay, silt and sand mixtures. This unit is generally found in samples collected from depths extending to approximately 130 feet, although the thickness of the unit varies across the site and vicinity. Samples of deposits below a depth of approximately 130 feet and extending to a depth of approximately 150 feet are characterized primarily by sand and gravel, with minor fine-grained lenses. Below a depth of 150 feet and extending to a depth of approximately 180 feet, samples indicate another unit of fine-grained sediments consisting primarily of clay and silt. Below this fine-grained unit, samples indicate another coarse-grained unit consisting primarily of sand and gravel with minor fine-grained lenses and extending to a depth of approximately 210 feet.

4.3 Hydrogeology

4.3.1 Regional Hydrogeology

Groundwater occurs in the unconsolidated alluvial deposits in the region under both unconfined and confined conditions. Throughout the vicinity of the Property, these deposits are generally saturated below depths of 100 to 110 feet, which correspond to approximate elevations at the Property of 40 to 50 feet (National

Geodetic Vertical Datum of 1929 (NGVD)). Locally, perched groundwater zones occurring under unconfined conditions are found at higher elevations.

Within the upper approximately 210 feet of sediments, four relatively permeable, saturated, water-bearing zones have been identified. These zones, termed the "Shallow Water-Bearing Units," are illustrated on Figure 4.2 and are discussed in detail in Section 4.3.2. There are no confirmed present uses of groundwater from the Shallow Water-Bearing Units in the vicinity of the Property for either domestic, municipal, agricultural or industrial water supply. The Shallow Water-Bearing Units are underlain by a thick, low hydraulic conductivity unit termed the "Regional Aquitard", which separates them from the "Deeper Aquifers" (Figure 4.2). The deeper aquifers are found at depths of approximately 300 feet or more in the region. Groundwater in the Deeper Aquifers below the Regional Aquitard is pumped for municipal and agricultural supply.

4.3.2 Hydrogeology of the Property and Vicinity

Beneath the Property and vicinity, the four zones comprising the Shallow Water-Bearing Units, designated locally as "perched groundwater", "A-zone", "B-zone", and "C-zone", extend to a depth of approximately 210 feet. The configuration of these zones is illustrated schematically on Figure 4.3. The Regional Aquitard has been identified in the Property vicinity between approximate depths of 210 feet and 300 feet. Beneath the Regional Aquitard, the Deeper Aquifers have been investigated to an approximate depth of 500 feet in the Property vicinity. (It should be noted that correlations between depth and elevation values cited in this section apply to the Property only. Because the land surface slopes to the north, these correlations cannot be applied beyond the Property to the north.) A conceptual groundwater flow model for the Property and vicinity and the hydrogeologic properties of each of these zones are described in the following sections.

4.3.2.1 Conceptual Groundwater Flow Model

A conceptual flow model is described here to help illustrate the general movement of groundwater in the Property vicinity (Figure 4.3). Groundwater recharge in the Property vicinity is principally the result of irrigation and rainfall on pervious areas (lawns, fields, vacant land), and infiltration of surface runoff in Calabazas Creek. This groundwater recharge moves vertically downward in the vadose (unsaturated) zone until it is intercepted by either a perched groundwater zone or the A-zone. In a perched zone, groundwater spreads laterally until it reaches a boundary or until a balance between inflowing and outflowing water is achieved, and the groundwater then resumes its downward vertical transit. To maintain the continuity of groundwater recharge moving through the vadose zone, a saturated (perched) unit will form allowing groundwater to spread laterally over a larger area. The direction of groundwater movement in a particular perched unit is governed by the slope of the free surface of that perched unit, which can also be influenced by the slope of the underlying low hydraulic conductivity interface. Where the perched groundwater spreads laterally to the edge of a low hydraulic conductivity unit, it can drain vertically, and unsaturated conditions will resume. In this manner, a particular parcel of groundwater recharge may be offset laterally from the overlying area where it infiltrated the near-surface deposits. This stair-stepping process is independent of the local A-zone groundwater flow direction.

In the A-zone, most of the groundwater moves laterally in the general direction of the hydraulic gradient, while some groundwater moves vertically downward through the aquitard separating the A- and B-zones (Figure 4.3). The absence of this aquitard facilitates the downward vertical movement of groundwater between the A- and B-zones. Groundwater movement within and between the B- and C-zones is similar to that in the A-zone. Although the potential for groundwater movement between the C-zone and the Deeper Aquifers is downward, relatively little groundwater movement occurs because of the thick and continuous nature of the Regional Aquitard (Figure 4.10). In the deeper aquifers, the direction of groundwater movement is influenced by pumping from municipal and agricultural wells, which is the principal component of groundwater discharge from these units. Most groundwater movement in the deeper aquifers is expected to be lateral; however, groundwater also moves vertically downward between the sand and gravel layers that comprise the deeper aquifers.

4.3.2.2 Perched Groundwater

The uppermost water-bearing zone within the Shallow Water-Bearing Units, termed perched groundwater (Figure 4.3), occurs under unconfined conditions. Perched groundwater is defined as a saturated hydrogeologic unit that exists above the water table and is underlain by unsaturated deposits. It is a local zone of saturation within the vadose zone. Perched groundwater occurs where there is ample groundwater recharge and a bed of relatively low hydraulic conductivity that impedes the downward movement of groundwater in the vadose zone.

The lenticular geometry of the stratigraphic units beneath the Property and vicinity contributes to the formation and discontinuous nature of perched groundwater. Perched groundwater was encountered near the western boundary of the Property, at an approximate depth of 74 feet below ground surface (bgs) (elevation of 66 feet NGVD) and is monitored by well W4A. Lawn irrigation in this area is thought to contribute to this perched groundwater condition. As part of the interim remedial measures performed at the Property, groundwater has been extracted from well W4A since December 1987 (Section 7.0). The yield of this well is very low.

A water-level hydrograph for the perched well at the Property is illustrated in Figure 4.4. The hydrograph of a typical A-zone monitoring well, W2A, is presented in the same figure to exhibit how the characteristic pattern exhibited by the perched well hydrograph differs from that of an A-zone well. Water level elevations in the perched well W4A are approximately 20 feet higher than those measured in the A-zone well. Additionally, the hydrograph of the perched well is notably more flat when compared to that of the A-zone well whose water level oscillates by approximately three feet during the course of a year. The two hydrographs are similar in that the average water levels in both the perched- and A-zone well have gradually decreased since February 1986.

4.3.2.3 A-Zone

The A-zone is the uppermost, laterally continuous zone of saturation, and is historically encountered between depths of about 90 and 115 feet beneath the Property and vicinity. It consists of a heterogeneous assemblage of lenticular deposits with varying lithologies, but is comprised primarily of sand and silt. Beneath the Property, the A-zone presently extends from the top of the zone of saturation (water table), at an approximate depth of 100 feet bgs (elevations of 40 to 46 feet NGVD (National Geodetic Vertical Datum of 1929)), to the top of a sandy clay and silty clay layer at approximate depth of 115 feet bgs (elevations between 25 and 30 feet NGVD).

Groundwater in the A-zone occurs under unconfined conditions and is generally brackish. Nitrate concentrations generally exceed the primary drinking water standard (maximum measured = 27 milligrams per litre (mg/L) as N; standard = 10 mg/L as N), and the specific conductance generally exceeds the recommended secondary drinking water standard of 900 micromhos per centimetre at 25 degrees Celsius (Geomatrix Consultants, 1986b).

The saturated thickness of the A-zone varies seasonally as the water table fluctuates, as illustrated in the water-level hydrographs for selected A-zone wells (Figure 4.5). The thickness of the A-zone also apparently varies in response to yearly rainfall variations. A-zone water levels in non-pumping wells at the Property have declined approximately 4 feet between 1986 and 1989 (Figure 4.5). This decline was likely a consequence of below-average rainfall during the last two of these years and groundwater extraction from the A-zone at the Property since December 1987 (Section 7.0).

Water-level measurements collected in 1986 and 1987 indicate that, prior to starting groundwater extraction from A-zone wells on the Property, the elevation of the potentiometric surface in the A-zone at the Property has ranged from about 39 to 50 feet NGVD. Pumping water levels in groundwater extraction wells at the Property (W5A, W10A, W12A and E17A) have been as low as approximately 30 feet NGVD (Geomatrix, 1990). In any one monthly water-level measurement period, the difference in A-zone water levels between the upgradient and downgradient parts of the Property has ranged from approximately 6 to 8 feet.

The interlayered nature of the fine-grained and coarse-grained deposits which comprise the A-zone sediments result in large local variations in hydraulic conductivity. Laboratory permeameter tests conducted on selected A-zone soil samples provide hydraulic conductivity estimates at discrete sampling locations, while aquifer tests (pumping tests and recovery tests) conducted on A-zone extraction wells provide hydraulic conductivity estimates of a larger zone in the vicinity of the tested well.

The results of laboratory permeameter tests conducted on soil samples collected from A-zone depths in borings B8A and B9 beneath the Property are summarized in Table 4.2. These samples were classified in the field at the time of drilling as sandy clay to gravelly silty sand. The hydraulic conductivities of these samples ranged from approximately 2×10^{-8} centimetres per second (cm/s) (5.7×10^{-5} feet per day (ft/d)) to 2×10^{-6} cm/s (5.7×10^{-3} ft/d).

The hydraulic conductivity of the A-zone was also estimated from aquifer pumping and recovery tests performed on well W10A by Geomatrix (Geomatrix, 1987c and Appendix B). Using two methods of type-curve analysis of the pumping test, which was conducted prior to startup of the interim groundwater extraction system, hydraulic conductivity values of 1.9×10^{-2} to 2.6×10^{-2} cm/s (55 to 75 ft/d) were estimated for the coarse-grained deposits found between depths of 102 and 111 feet in the vicinity of well W10A. However, drawdown in the pumping well increased dramatically after 57 hours of pumping, indicating that the coarse-grained deposits have a limited lateral extent. Geomatrix recently conducted an aquifer recovery test in well W10A to assess the hydraulic conductivity of deeper, fine-grained A-zone sediments in the vicinity of this well. It is these finer grained sediments that will continue to transmit water during the continued operation of the A-zone groundwater extraction system at the Property. The methods and results of this test are presented in Appendix B. The results of this test suggest that the deeper sediments within the A-zone have a much lower hydraulic conductivity (2.2×10^{-3} to 2.8×10^{-3} cm/s (6.2 to 8.0 ft/d)) than that calculated from drawdown data collected during the initial, pumping and recovery tests conducted on well W10A.

The lateral direction of movement of groundwater in the A-zone has been inferred from the gradients exhibited by its potentiometric surface. Potentiometric surface maps compiled from monthly water-level data collected since 1986 are presented in Intersil's Second Revised Remedial Investigation/Feasibility Study Workplan (Geomatrix, 1989e) and in Intersil's Quarterly Self-Monitoring Program reports (Geomatrix, 1989g; 1989h; 1989i; 1989j; and 1990).

Representative features of the A-zone potentiometric surface at the Property are illustrated by the potentiometric surface maps for three of these monthly monitoring periods, which are provided in Figures 4.6a, b and c. Two of these maps (Figures 4.6a and 4.6b), for 07 November 1986 and 02 July 1987, illustrate the configuration of the A-zone potentiometric surface before groundwater extraction from A-zone wells on the Property began. The third map (Figure 4.6c), for 05 September 1989, is representative of recent times when A-zone groundwater extraction wells at the Property were pumping.

The potentiometric surface of the A-zone as interpreted is relatively complex, and a single direction of A-zone groundwater movement does not predominate at the Property. Because Intersil has been pumping groundwater from A-zone extraction wells, and because the geologic materials underlying the site are naturally heterogeneous, flow patterns in the A-zone appear to be irregular.

Prior to A-zone groundwater extraction on the Property, A-zone groundwater moved northeastward in the western part of the site; the magnitude of the lateral hydraulic gradient in this area was about 0.02 foot per foot (ft/ft) (Figures 4.6a and 4.6b). A-zone groundwater moved north-northeastward beneath the southern and central parts of the Property; the magnitude of the lateral hydraulic gradient in this area was approximately 0.01.

Since the commencement of extraction of A-zone groundwater from beneath the Property (December 1987), A-zone groundwater beneath most of the site south of the extraction wells (W5A, W10A, W12A and E17A) has been moving north and north-northeastward toward the extraction wells. The magnitude of the lateral hydraulic gradient under these pumping conditions ranges from about 0.02 to 0.04

under most of the site, although the hydraulic gradient probably is even greater near the extraction wells.

4.3.2.4 A/B Aquitard

The lower boundary of the A-zone is delineated beneath the site by sandy clay and occasionally silty clay deposits, termed the "A/B-aquitard." The A/B aquitard is found between approximate depth of 115 feet bgs (elevations of 25 to 30 feet NGVD) and 130 feet bgs (elevations of 10 to 15 feet NGVD). All borings on the Property that penetrated to these depths encountered this clayey hydrogeologic unit. The thickness of the A/B aquitard beneath the Property ranges between approximately 7 and 25 feet. The A/B aquitard appears to be continuous throughout the Property; in contrast, well E-8B in the eastern part of the AMI site reveals a possible conduit between the A- and B-zones (EMCON, 1989).

A downward vertical hydraulic gradient is measured between the A-zone and the B-zone in the Property vicinity. The magnitude of the vertical hydraulic gradient varies both laterally and with seasonal water-level fluctuations. Gradients calculated over a two-year period within the Property have ranged from 0.03 to 0.85 ft/ft (Geomatrix, 1989d). The average magnitude of the vertical hydraulic gradient between the A- and B-zones at the location of wells W11B and W12A, drilled adjacent to one another and completed in the B-zone and the A-zone, respectively, is approximately 0.21, for the 12-month period from September 1986 to September 1987, the month when groundwater extraction from well W12A at the Property began.

4.3.2.5 B-Zone

The B-zone is a saturated, laterally continuous zone of coarse-grained deposits, primarily sand and gravel, with minor fine-grained lenses (Figures 4.1a and 4.1b). Beneath the Property, the B-zone has been encountered between depths of approximately 130 and 150 feet (approximate elevations of 10 and -10 feet NGVD). Borings advanced to sufficient depths to encounter the B-zone indicate that the B-zone ranges in thickness from approximately 5 to 20 feet. The bottom of the B-zone ranges between approximate elevations of -5 and -10 feet NGVD; the top of the B-zone ranges between approximate elevations of 5 and 10 feet NGVD.

Groundwater in the B-zone occurs under confined conditions and generally meets the primary and secondary drinking water standards for nitrate and specific conductance (Geomatrix, 1986b).

The elevation of the potentiometric surface of the B-zone has varied seasonally by up to 10 feet, as illustrated by the water-level hydrographs for selected B-zone wells located at the Property (Figure 4.7). B-zone water levels in non-pumping wells at the Property have declined approximately three to six feet between 1987 and 1989. This decline is likely the consequence of below-average rainfall during the last two of these years and groundwater extraction from B-zone wells since March 1988.

Water-level measurements collected in 1986, 1987, 1988 and 1989 indicate that elevations of the potentiometric surface of the B-zone at the Property have ranged from 26 to 39 feet (NGVD). These elevations are noted to be approximately 15 to 30 feet above the top of the B-zone. The B-zone potentiometric surface beneath the Property has been relatively flat in all months of record, which results in a low lateral hydraulic gradient. In any one monthly water level measurement period, the difference in B-zone water levels between the upgradient and downgradient parts of the Property generally has been less than 0.6 foot and, in certain periods, has been as low as 0.2 foot.

The hydraulic conductivity of the B-zone deposits beneath the Property has not been measured directly. The B-zone hydraulic properties were estimated based on the results of several pumping tests of potential groundwater extraction wells performed by Siemens (Levine-Fricke, 1990). The B-zone wells that were tested (3-EB, H-3B, H-5B and LQ-2B) are located at the Siemens facility and in the off-site area to the north (Figure 2.2). The hydraulic conductivity of the B-zone deposits is estimated to range from approximately 2.8×10^{-3} to 1.0×10^{-2} cm/s (8 to 30 ft/d).

The lateral direction of groundwater movement in the B-zone has been inferred from the gradients of its potentiometric surface. Potentiometric surface maps

compiled from monthly water-level data collected since 1986 are presented in Intersil's Second Revised Remedial Investigation/Feasibility Study Workplan and in Intersil's Quarterly Self-Monitoring Program reports.

Representative features of the B-zone potentiometric surface at the Property are illustrated by the potentiometric surface maps for three of these monthly monitoring periods, which are provided in Figures 4.8a, b and c. Two of these maps (Figures 4.8a and 4.8b), for 02 September 1986 and 01 April 1987, illustrate the configuration of the B-zone potentiometric surface before groundwater extraction from off-site B-zone wells began. The third map (Figure 4.8c), for 05 September 1989, is representative of recent times when off-site B-zone groundwater extraction wells were pumping.

During some months when water-level monitoring was performed by Intersil, the lateral hydraulic gradient for the B-zone beneath the Property was generally northward and northwestward. The potentiometric surface map for 01 April 1987 (Figure 4.8b) illustrates these conditions. The magnitude of the lateral hydraulic gradient beneath the Property for this monitoring period ranged from about 0.0007 to 0.001 (ft/ft).

However, periodically the B-zone lateral hydraulic gradient beneath the northern part of the Property has indicated that groundwater in the B-zone moved from north to south (Figures 4.8a and 4.8c). These gradient reversals occurred during the summer and fall months, approximately June through October, in 1986 and 1987, and are thought to have been caused by responses to a seasonal decrease in water-levels. The magnitude of the lateral hydraulic gradient beneath the northern part of the Property for these monitoring periods ranged from about 0.0008 to 0.002. The effect of these gradient reversals on VOC migration between the Property and the Siemens facility is difficult to quantify; however, it is thought that VOC migration rates would be decreased.

Since March 1988, B-zone groundwater beneath most of the Property has been moving generally northward toward the extraction wells. Some southward groundwater movement at the northern portion of the Property may still be

occurring. The B-zone potentiometric surface at the Property under these conditions is, however, very flat indicating that the lateral hydraulic gradients are very low.

4.3.2.6 B/C Aquitard

A clayey unit termed the B/C-aquitard is found between approximate depths of 150 and 180 feet bgs (elevations of -10 and -40 feet NGVD) at the Property and vicinity. All borings at the Property that penetrated to these elevations encountered this clayey hydrogeologic unit.

A downward vertical hydraulic gradient is measured between the B-zone and the C-zone in the Property vicinity. The magnitude of this vertical hydraulic gradient for two recent months (July 1989 and September 1989) ranged from approximately 0.02 to 0.06 for five B-zone and C-zone well "pairs" located north of the Property. The mean vertical gradient was 0.04, with a standard deviation of 0.01. These data are presented in Table 4.3. The vertical hydraulic gradient appears to vary slightly among the various well pairs in the Property vicinity.

4.3.2.7 C-Zone

Based on the findings of boring B9 drilled on the Property, the B/C-aquitard is underlain by sand and gravel deposits that are interbedded with minor fine-grained deposits. This zone, designated the C-zone, is found beneath the Property at depths between approximately 180 and 210 feet bgs, which correspond to approximate elevations of -40 to -70 feet NGVD. Thicknesses of sand and gravel deposits in the C-zone range from approximately 10 to 30 feet.

Groundwater in the C-zone occurs under confined conditions and generally meets the recommended secondary drinking water standard for specific conductance (WCC, 1987a).

The elevation of the potentiometric surface in C-zone wells north of the Property has ranged from approximately 15 to 33 feet (NGVD) in measurements collected in 1986, 1987, 1988 and 1989. These elevations have generally been about 50 feet or more above the top of the C-zone. In any one monthly water-level measurement

period, the difference in C-zone water levels between the upgradient and downgradient wells has been approximately 4 feet.

The potentiometric surface of the C-zone has varied seasonally by up to about 12 feet, as illustrated by the water-level hydrographs of selected C-zone monitoring wells (Figure 4.9). C-zone water levels have declined approximately 2 to 3 feet between 1987 and 1989. This decline is probably the result of below-average rainfall during the last two of these years.

Measurements of the hydraulic conductivity of the C-zone deposits at the Property have not been performed.

Groundwater in the C-zone moves generally to the northeast, as inferred from the shape of its potentiometric surface. A representative potentiometric surface map for the C-zone, for 05 September 1989, is presented in Figure 4.10. The magnitude of the lateral hydraulic gradient for the C-zone was approximately 0.001 ft/ft for this monthly monitoring period.

4.3.2.8 Regional Aquitard

Drillers' logs for irrigation and municipal wells in the area (Geomatrix, 1987a; 1988a) and the lithologic logs of deep aquifer wells BK-1, BK-2, BK-3 and BK-4 (WCC, 1987d; Geomatrix, 1988c) show a laterally continuous, interbedded sequence of fine-grained deposits below the C-zone (Figure 4.2). These relatively low hydraulic conductivity deposits beneath the C-zone correspond to the Regional Aquitard and are at least approximately 75 feet thick. The thickness of this unit, and its laterally continuous nature and low hydraulic conductivity greatly impede the downward movement of groundwater from the Shallow Water-Bearing Units into the Deeper Aquifers used for water supply.

4.3.2.9 Deeper Aquifers

Four separate coarse-grained units, consisting primarily of sand and gravel mixtures and separated by fine-grained units of variable thickness, have been identified between depths of 300 and 500 feet bgs in the vicinity of off-site wells BK-1 through BK-4. The locations of these wells are shown on Figure 2.2. These

wells were installed to investigate the quality of groundwater in water-bearing zones screened by the former Marchese Well No. 2 (Figure 1.1). Santa Clara Municipal Well No. 24, located approximately 1 mile northeast of the Property (Figure 1.1), is reportedly screened between depths of 300 and 700 feet bgs, suggesting that the Deeper Aquifers extend to a depth of at least 700 feet (Geomatrix, 1987a).

5.0 GEOCHEMICAL RESULTS OF THE REMEDIAL INVESTIGATION

5.1 Vadose Zone

5.1.1 Introduction

VOCs formerly used at the Property are relatively immiscible in water, generally having solubilities less than 1,800 mg/L (Table 5.1). Because of the relatively low solubilities of these compounds, only a small quantity of the chemical will dissolve in water. If an excess of the compound is added to the VOC/water mixture, a separate phase consisting essentially of pure VOC will exist. The water in this "two phase" (VOC and water) mixture would be saturated with respect to the VOC. In other words, the concentration of the VOC in the water would be roughly equal to its solubility.

VOCs can be released to the subsurface in three liquid forms:

- as a pure VOC (pure meaning that it contains no separate water phase, although the liquid may contain small quantities of co-dissolved immiscible VOCs);
- as part of a two-phase liquid mixture that contains both pure VOC and water with dissolved VOCs; and/or
- as a dissolved constituent in a release of wastewater.

The difference between the environmental impacts of releases of the three liquid forms listed above is dramatic. Soils through which pure VOCs have migrated characteristically contain up to about 100,000 mg/kg of that VOC, whereas soils which have been in contact only with water that contains dissolved VOCs should contain less than about 100 mg/kg of the VOC (detailed calculations of theoretical phase partitioning of pure and dissolved VOCs in soils from the Property are presented in Appendix C).

The wastewater treatment units and piping that were used at the former Intersil facility transferred and treated process wastewater containing the third form of

VOCs (dissolved VOCs) (refer to Section 1.2.2). Any uncontrolled releases of dissolved phase VOCs from any of these units should therefore have resulted in 10's to 100's of mg/kg of VOCs in the soils directly beneath the point of postulated system failure . If higher concentrations of VOCs were observed, this would indicate that the chemical was likely released either as a pure VOC (or a mixture of VOCs which contained virtually no water) or as part of a two-phase mixture of VOC and water. For example, a release of pure phase VOC from the vaulted 250-gallon waste solvent storage tank located in the vicinity of the former east neutralization system would have resulted in 1,000's to 100,000's of mg/kg of VOCs in the soils directly beneath the unit. However, as the following discussion illustrates, none of the soil samples analyzed had concentrations of VOCs greater than 10 mg/kg. Therefore, the results of investigations at the Property suggest that the VOCs detected at the Property likely resulted from the third form of release, VOCs dissolved in facility wastewater.

5.1.2 Results of Investigation of Vadose Zone Chemistry

The chemistry of the vadose zone soils and groundwater at the Property was investigated using several techniques. Soil quality was evaluated using chemical data from approximately 529 soil samples (455 on site and 74 off site) collected from 64 borings drilled during previous and more recent investigations . Chemical analyses of these soil samples included: EPA Methods 8010, 8020 and 8240 for VOCs; EPA Method 8270 for semi-VOCs; EPA methods 6010, 7060, 7471 and 7740 for Priority Pollutant Metals, and EPA Method 9010 for cyanide (Section 3.0). Selected samples were additionally analyzed for fraction of organic carbon (FOC) and moisture content and density. The results of all chemical analyses performed on soil samples collected from the Property are summarized in Tables 2.2a, b, and c (results of VOC, semi-VOC, and metals and cyanide analyses, respectively) and 3.3 (results of moisture content, density and FOC analyses). The results of the soil chemistry data are discussed in Sections 5.1.3 (Investigation of Potential Sources) and 5.1.4 (Investigation of Extent of VOCs in the Vadose Zone) of this report.

Soil gas samples were collected during the RI to evaluate the quality of near-surface soils, specifically in the vicinities of suspected source areas. Soil gas samples were analyzed for selected VOCs most frequently detected in soil sample

analyses. The results of soil gas sample analyses are compiled in Table 3.2 and presented on Figures 5.1a through 5.1f. Because a soil gas survey is relatively inexpensive and easy to conduct, it is often used as a screening tool to give an indication of the locations of potential areas of shallow VOC-bearing soil (potential source areas) at a site. This information concerning the VOC content of the shallow soils is considered to be indirect; the actual VOC content of the soils must therefore be confirmed by analyses of samples collected within the soil gas anomaly. The soil gas data are discussed in Subsection 5.1.3.3 (Soil Gas Survey) of Section 5.1.3 (Investigation of Potential Sources) of this report.

The quality of perched groundwater in the vadose zone beneath the Property was evaluated by collecting and analyzing samples from perched well W4A. Samples from this well were collected on a quarterly basis and analyzed for VOCs using EPA Method 8240. The results of these chemical analyses of perched groundwater (collected from well W4A) from beneath the site are presented in Table 2.3. Selected samples from this well were also analyzed for semi-VOCs using EPA Method 8270, and for Priority Pollutant Metals using EPA methods 6010, 7060, 7471 and 7740. No semi-VOCs, Priority Pollutant Metals were detected in any of the samples collected from perched well W4A. The results of VOC analyses of perched groundwater at the Property are discussed in Section 5.1.5 (Perched Water Chemistry in the Vadose Zone) of this report.

5.1.3 Investigation of Potential Sources

Wastewater treatment tanks and transfer lines constitute the primary potential subsurface sources of chemicals at the Property. Any leakage of these systems or accidental spillage of chemicals onto the ground surface would have resulted in elevated concentrations of chemicals in soils near the ground surface. To assess whether these facilities acted as sources or whether any other sources of chemicals existed at the Property, data characterizing the concentrations of priority pollutant metals, cyanide, and semi-VOCs in soil samples from the upper 20 feet, and VOCs in soil samples collected from the upper 35 feet of borings drilled directly beneath the former wastewater treatment facilities and at other locations at the Property were evaluated. The results of this evaluation are discussed below in Sections

5.1.3.1 (Near Surface Soils at Former Wastewater Treatment Facilities) and 5.1.3.2 (Other Near-Surface Soils) of this report.

Soil gas chemistry data, which describe the VOC content of shallow (5 to 20 feet) soil gas at 85 points spaced in a grid-like fashion across the study site, were evaluated together with soil chemistry data to determine whether any additional sources of VOCs not identified during the soil boring program existed at the Property. The results of this evaluation are discussed below in Section 5.1.3.3 (Soil Gas Survey) of this report.

5.1.3.1 Near-Surface Soils at Former Wastewater Treatment Facilities

Soil borings B2A, B3A, B6A, B7A, W2A, RI-5, RI-8, RI-9 and RI-11 were drilled and sampled at each of the former wastewater treatment facilities to assess whether any of these treatment units acted as sources of chemicals at the Property. Results of these investigations were presented and discussed in reports describing previous investigations (Geomatrix, 1989e) and interim reports of the RI (BEAK, 1989a; 1989b). The conclusions of these reports are summarized below.

Semi-Volatile Organic Compounds - With one minor exception, none of the samples collected from any of the borings drilled and sampled at the Property to investigate the former wastewater treatment units contained detectable concentrations of semi-VOCs. The exception consists of two detections of semi-VOCs in the 81-foot sample collected from boring B7A by Cooper in 1986. In this sample, 0.5 mg/kg of benzo(a)pyrene and approximately 20 mg/kg (semi-quantified) of an unidentified hydrocarbon were detected.

Priority Pollutant Metals and Cyanide - Neither cadmium nor selenium was detected in soil samples collected from the upper 20 feet of these borings. Concentrations of arsenic, beryllium, chromium, copper, mercury, nickel, lead, antimony, and zinc measured in these soil samples are within the range of background concentrations for soils in the San Francisco Bay Area as reported by Shacklette and Boergen (1984) (BEAK, 1989a). Local background concentrations of silver, thallium, and cyanide are not available.

Volatile Organic Compounds - TCE, toluene, 1,1,1-TCA, PCE, benzene and xylenes were each detected in one of the soil samples from the upper 35 feet of at least one of the borings drilled to investigate the former waste treatment facilities. Only TCE and xylenes were detected in concentrations exceeding 1.0 mg/kg.

A concentration of 1.80 mg/kg of xylenes was measured in the soil sample collected from 9.5 feet bgs in boring W2A. Since both of the samples collected directly above this sample and both of the samples collected directly below this sample contained no detectable xylenes, this data point is not considered to indicate the presence of a source of xylenes at this location.

The concentrations of TCE measured in all of the soil samples collected from depths less than 35 feet bgs are presented in Figures 5.2a, 5.2b and 5.2c. Figures 5.2a and 5.2b indicate that none of the soil samples collected from the upper 25 feet from borings in the vicinities of the former waste treatment facilities contained greater than 1.0 mg/kg TCE. The 26-foot and 31-foot depth soil samples from boring B7A contained 3.30 mg/kg and 2.00 mg/kg of TCE while the 31.5 foot sample from boring W2A contained 2.30 mg/kg of TCE. These three data points indicate that a source of TCE may have existed in the shallow subsurface in the vicinity of the former inactive east neutralization system. It is, however, important to note that the concentrations of TCE exhibited by these samples are relatively low (much less than 10 mg/kg) and consistent with concentrations that would be expected to result from leakage of water that contained relatively low concentrations of dissolved TCE (Appendix C). Since the former inactive east neutralization system handled wastewater which may have contained dissolved concentrations of TCE, not pure TCE, the interpretation of the data is consistent with the nature of this potential source that was known to exist in the vicinity of soil borings B7A and W2A.

5.1.3.2 Other Near-Surface Soils

All of the soil chemistry data collected from the upper 35 feet of soil borings other than those drilled expressly to investigate the former waste treatment facilities were evaluated to determine whether any additional sources of chemicals exist at the Property. Results of these investigations are presented and discussed in

reports describing previous investigations (Geomatrix, 1989e) and interim reports of the RI (BEAK, 1989a; 1989b). The conclusions of these reports are summarized below.

Semi-Volatile Organic Compounds - In addition to the single sample collected from the borings drilled and sampled expressly to investigate the former wastewater treatment facilities which contained measurable concentrations of two semi-VOCs, only one of the samples collected from any of the other borings drilled at the property contained any semi-VOCs. Specifically, in 1986, 0.5 mg/kg of benzo(a)pyrene was detected in the sample from a depth of 13.5 feet in boring B8A.

Priority Pollutant Metals and Cyanide - Concentrations of arsenic, beryllium, chromium, copper, mercury, nickel, lead, antimony, and zinc measured in samples collected from the upper 20 feet of borings drilled to investigate unidentified source areas are within the range of background concentrations for soils in the San Francisco Bay Area as reported by Shacklette and Boergen (1984) (BEAK, 1989a). Local background concentrations of silver, thallium, and cyanide are not available. Neither cadmium nor selenium was detected in any of the soil samples analyzed.

Volatile Organic Compounds - TCE, toluene, 1,1,1-TCA, PCE, Freon 113, benzene, xylenes and dichlorobenzenes were each detected in at least one of the 177 soil samples collected from the upper 35 feet of borings other than those drilled to investigate the former waste treatment facilities. Only one sample contained any VOCs in concentrations exceeding 1.0 mg/kg (the 10.9-foot sample from boring W18B contained 1.5 mg/kg of TCE). This data point, which is illustrated on Figure 5.2a (the level plan which shows ranges of the concentrations of TCE in all samples collected at depths less than 15 feet bgs) indicates that a source of TCE may have existed in the shallow subsurface in the vicinity of boring W18B. It is once again important to note, however, that the concentration of TCE exhibited by this sample is relatively low (much less than 10 mg/kg) and consistent with concentrations that would be expected to result from leakage of water which contained relatively low concentrations of dissolved TCE.

5.1.3.3 Soil Gas Survey

A soil gas survey was conducted in two phases in the shallow soils at the Property. These data were evaluated in conjunction with the shallow soil chemistry data to assess whether previously unidentified sources of VOCs existed. The results of the investigations, illustrated on Figures 5.1a through 5.1f, were presented to the RWQCB and interpreted in two interim RI reports (Geomatrix, 1989f; BEAK, 1989a). The conclusions presented in these reports are summarized below.

Several areas of the study site yielded soil gas samples which contained measurable concentrations of VOCs. The locations of these areas and the compounds detected are summarized as follows:

- Low concentrations (up to 9.0 ug/L) of Freon 113 and 1,1,1-TCA, and higher concentrations (up to 160 ug/L) of PCE and TCE were detected at soil gas locations A030 and SG17 located near the northwest corner of building T2. Concentrations of TCE measured in soil gas samples collected from this area ranged from 25 ug/L to 90 ug/L.

- Concentrations of TCE in soil gas samples collected from an elongate area centred on soil gas sample locations E020 and SG3, near well W18B, and extending southwest toward the former north scrubber sump, ranged from 25 ug/L to 180 ug/L.

- Concentrations of TCE measured in soil gas samples collected from a fairly circular area approximately 80 feet in diameter and centred at sample locations SG6 and D050, located along the east side of building T2 near the centre of the Property, ranged from 25 ug/L to 110 ug/L.

- Concentrations of TCE in the soil gas samples collected in the vicinity of the former north neutralization system ranged up to 20 ug/L.

Soil VOC data from borings situated within or immediately adjacent to these areas were evaluated to assess whether the elevated concentrations of VOCs observed in soil gas accurately reflect the geochemistry of the subsurface and, if so, the extent of the area of elevated VOCs in the soils.

None of the shallow soil samples collected from borings RI-1, RI-2, RI-24 and RI-25, all located near the northwest corner of the Property, contained greater than 1.0 mg/kg of TCE. The apparent near-surface source of VOCs at this location is therefore not substantiated by soil chemistry data. It is possible, however, that a very small release of VOCs to the subsurface may have occurred in the vicinity of the northwest corner of the site. This would explain the presence of a small amount of VOCs in the soil gas while the soil chemistry data in adjacent soil borings shows low or non-detectable concentrations of VOCs.

The second area of TCE in soil gas listed above is in the vicinity of well W18B. This area had previously been recognized as a potential source of TCE at the Property (Section 5.1.3.2). The extent of its effects in the subsurface will be discussed in Section 5.1.4.

Boring RI-17 was drilled and sampled to investigate the soil chemistry in the vicinity of the third area of TCE in soil gas listed above. Concentrations of TCE in soil samples collected from less than 30 feet bgs in this boring were all significantly less than 1.0 mg/kg, with a maximum of 0.096 mg/kg. For this reason this area is not considered to represent a source of VOCs at the Property.

Shallow soil samples from boring RI-5, located in the vicinity of the former north neutralization system, just southwest of the last area of TCE in soil gas listed above, did not contain detectable concentrations of TCE. Because the concentrations of TCE in soil gas are relatively low and because the shallow soil samples from adjacent boring RI-5 contained no detectable TCE, this area, in the vicinity of the former north neutralization system, is not considered to represent a source of VOCs at the Property.

In conclusion, the only area in which soil gas samples indicated a potential surface source of VOCs, and soil chemistry data also indicated a surface source, was at the area at the Property located near well W18B.

5.1.4 Investigation of Extent of VOCs in the Vadose Zone

The purpose of investigating the vadose zone chemistry was to define the vertical and lateral extent of VOCs in the vadose zone soils at the former Intersil facility. This information allows estimation of VOC distribution and total mass, which are necessary to evaluate remedial alternatives and design an effective remedial system.

All soil VOC data have been evaluated to determine whether the vertical and lateral extent of VOCs of concern beneath the Property have been adequately characterized. The results of the investigations and the detailed interpretation of the data (with the exception of those data collected from borings RI-31 and RI-32 drilled in August 1989) are presented in reports describing previous investigations (Geomatrix, 1989e) and interim RI reports (BEAK, 1989a; 1989b). The conclusions presented in these reports are summarized briefly below.

Toluene (detected in 261/455 samples), TCE (detected in 241/455 samples), PCE (detected in 38/455 samples), 1,1,1-TCA (detected in 14/455 samples) and Freon 113 (detected in 9/455 samples) are the VOCs that were most commonly detected in soil samples collected from the Property. Greater than about 90 percent of the VOC content of soils in the vadose zone at the Property is represented by these compounds. Of the compounds listed above, only TCE and total xylenes have been detected in concentrations that exceed 1.0 mg/kg in any soil sample from the Property. Concentrations of xylenes greater than 0.001 mg/kg were measured in 9 of the 455 on-site soil samples that have been collected from the Property. With the exception of samples from 9.5 foot depth and 26.5 foot depth from boring W2A, which contained 1.80 and 1.10 mg/kg of total xylenes respectively, none of the concentrations measured were greater than 0.370 mg/kg.

The distributions and concentrations of each of the commonly detected VOCs in all soil samples collected from the Property are presented in three-dimensional isometric projections in Figures 5.3a through 5.8b. The distributions of toluene, Freon 113, 1,1,1-TCA and PCE may be summarized as follows:

- The source of toluene appears to be widespread because the concentrations of toluene observed throughout the site are uniformly low (all less than 0.68 mg/kg) and the extent of toluene includes areas unaffected by other compounds. These data indicate that activities at the Property probably are not the source of toluene to the subsurface beneath the site.

- The maximum concentration of Freon 113 measured in soils from the site was 0.052 mg/kg. Freon 113 was detected in 9 of 455 on-site soil samples collected. Most of the soil samples in which Freon 113 was detected were collected from the northeast corner of the Property. The vertical and lateral extent of Freon 113 in this portion of the Property has been fully delineated (BEAK, 1989b). The other soil samples in which Freon 113 was detected are completely enveloped by an area of the vadose zone containing elevated concentrations of TCE and will therefore be considered with TCE.

- The maximum concentration of 1,1,1-TCA measured in soils from the site was 0.25 mg/kg. 1,1,1-TCA was detected in 14 of 455 on-site soil samples collected. As with Freon 113, most of the samples in which 1,1,1-TCA was detected were collected from the northeast corner of the site. The vertical and lateral extent of this VOC has been fully delineated in this area (BEAK, 1989b). Other samples containing 1,1,1-TCA are fully enveloped by an area of the vadose zone containing elevated concentrations of TCE.

- The maximum concentration of PCE measured in soils from the site was 0.28 mg/kg. PCE was detected in 38 of 455 on-site soil samples collected. The samples containing PCE can be grouped into three areas: (1) an area near the east scrubber sump; (2) an area northeast of building T2; and (3) the northeast corner of the site. The vertical and lateral extent of PCE near the east scrubber sump has been fully delineated (BEAK, 1989b). The area of detectable PCE in soil in the second area which is situated to the northeast of building T2 is enveloped by an area of elevated TCE and for which remedial operations are currently underway (Section 7.0). Like Freon 113 and 1,1,1-TCA, elevated concentrations of PCE were also detected in soil samples from an area in the northeast corner of the site. The vertical and lateral extent of PCE in this area is fully delineated (BEAK, 1989b).

Next to toluene, which was detected in low concentrations over most of the Property and is therefore not considered to be the result of activities at the former Intersil facility, TCE was the VOC most commonly detected. With the exception of two early detections of xylenes, TCE was the only VOC to be measured in concentrations exceeding 1.0 mg/kg; the maximum concentration measured was 10.0 mg/kg. With the exception of the area near the northeast corner of the Property, which contains measurable concentrations of Freon 113, 1,1,1-TCA and PCE and no significant levels of TCE, areas of the vadose zone containing elevated concentrations of TCE envelope all areas of the vadose zone containing measurable concentrations of all other VOCs detected at the site. Consequently, if remedial measures are established based on the extent of TCE, all other VOCs of concern at the site will also be treated coincidentally. For this reason the distribution of TCE will be considered in more detail than those of the other VOCs mentioned above.

Figures illustrating the distribution of TCE in the vadose zone beneath the Property are presented to demonstrate that the distribution of TCE beneath the Property has been fully characterized. Level plans showing the concentrations of TCE in all of the soil samples collected at the Property are presented in Figures 5.2a through 5.2i. Each figure shows the boring locations and concentrations of TCE measured in discrete samples collected from within the depth interval specified in the figure title. The position of each boring is shown by a cross on the figure. The concentration of TCE measured in each sample is depicted using circles of different sizes around the boring locations. To simplify the process of evaluating the data, all concentrations of TCE are divided into two classes; greater than or equal to 1.0 mg/kg, and less than 1.0 mg/kg. These figures can be used to establish the three-dimensional extent of areas of the subsurface containing greater than 1.0 mg/kg of TCE and are useful for designing remedial activities.

As discussed previously, the first three figures in the series (Figures 5.2a, 5.2b and 5.2c) show the concentration of TCE in all soil samples collected from depths of less than 35 feet bgs in all of the borings drilled. These figures clearly indicate that only two potential near-surface sources of VOCs existed at the Property; one in the vicinity of the former inactive east neutralization system and one in the

vicinity of the boring for well W18B. The level plans illustrating the distribution of TCE in the deeper soils are used to delimit the effects of primarily downward VOC migration from these two shallow source areas.

In the vicinity of the former inactive east neutralization system, TCE was consistently detected at concentrations greater than 1.0 mg/kg at depths between 25 and 65 feet bgs. Down to a depth of 55 feet bgs the lateral extent of this zone of elevated TCE concentrations is well-defined in all directions by data collected from the adjacent borings. From depths of 55 feet to 65 feet bgs, the lateral extent of this zone is well defined to the west, south, east, and north by data collected from borings RI-9, RI-10, RI-11 and RI-17, respectively. Therefore, no additional data are required to characterize the distribution of TCE in the subsurface in the vicinity of the former inactive east neutralization system.

In the vicinity of well W18B, TCE was consistently detected at concentrations greater than 1.0 mg/kg but less than 7.0 mg/kg at depths between 35 and 95 feet bgs, as illustrated in Figures 5.2c through 5.2i. Down to a depth of 55 feet bgs, the lateral extent of this zone of elevated TCE concentration is very small and well-defined in all directions by data collected from adjacent borings RI-6 (north), RI-7 (south), RI-32 (east), and W10A (west). From depths of 55 feet to 95 feet bgs, the zone of TCE-bearing soils is enlarged to the west. The lateral extent of this zone is well-defined to the south, east and west on the Property using data collected from borings W13A, RI-32, and RI-2 respectively. This area of elevated TCE is confined to a band which parallels and extends approximately 100 feet to the south of Forge Drive. While it is possible that the elevated TCE concentrations in these soils to the west of W18B have resulted from failure of the north neutralization system, the relative absence of TCE in shallow soil samples collected from borings directly beneath (boring RI-5) and within 20 feet of the system (borings 2A and RI-18) (concentrations in samples from depths less than 30 feet are all less than 0.5 mg/kg), and the relatively low concentrations of TCE (up to 26 ug/L) measured in the soil gas samples collected in this area suggest that this is likely not the case. Because the zone of TCE-bearing soils is close to the northern property boundary, the property line is taken to define the northern extent of VOCs in the subsurface

beneath the Property. Additional data concerning the distribution of TCE in the subsurface around existing well W18B are therefore not required.

In summary, only a small percentage of soil samples collected from the Property exhibited concentrations of any VOC other than TCE that exceeded 1.0 mg/kg. In fact, with the exception of two concentrations of xylenes measured in previous samples (1.80 and 1.10 mg/kg in two samples collected and analyses by Cooper in 1986), no concentration of any other VOC detected in vadose zone soil samples exceeded 1.0 mg/kg . Representative concentrations for each of the other VOCs detected at the Property are all less than 0.1 mg/kg. With one exception, these VOCs were detected in areas where elevated concentrations of TCE have also been defined and where interim remedial measures are either currently underway or likely to be instituted in the future. The exception concerns the detection of small concentrations of Freon 113, 1,1-DCE, 1,1,1-TCA, and PCE (all less than 0.100 mg/kg) in the subsurface below the northeast corner of the site. The mixture of VOCs detected at this corner is unique, having not been observed at other areas on the Property. The remote location of these compounds and the unique mixture of compounds detected disassociate this area from other known areas of elevated VOC concentrations in soils beneath the Property. Additional data concerning the distribution of these compounds in the subsurface are not required, because their extent in on-site soils has been delineated.

All areas of the vadose zone that contain elevated concentrations of VOCs have been delineated using the results of VOC analyses of soil samples collected during the RI and previous investigations.

5.1.5 Perched Water Chemistry in the Vadose Zone

Perched groundwater was sampled at the Property from well W4A, the only location where perched groundwater was identified. The concentration of TCE measured in groundwater from this well has decreased from 3.8 mg/L in March 1986 to 0.5 mg/L in September 1989 (Geomatrix, 1990). Historically, PCE (max. = 0.006 mg/L), Freon 113 (max. = 0.05 mg/L), chloroform (max. = 0.009 mg/L), and toluene (max. = 0.002 mg/L) have each been detected in more than one sample from this well (Table 2.3). No 1,1,1-TCA, 1,1-DCE or semi-VOCs were detected

in perched groundwater from this well. During September 1989, Freon 113 (0.002 mg/L) and TCE (0.5 mg/L) were the only compounds detected in the groundwater sample from this well (Table 2.3). Remedial activities are currently underway at this well.

5.2 Saturated Zone

5.2.1 Results of Investigation of Saturated Zone Chemistry

The quality of groundwater in the saturated zones has been evaluated using data collected on a quarterly basis from on-site and off-site monitoring wells. For the A-zone and B-zone, water quality data are available from the on-site and off-site wells shown on Figure 2.2. The results of VOC analyses of groundwater samples from all A-zone and B-zone wells installed by Intersil are presented in Tables 2.4a and 2.5, respectively. For the C-zone and deeper aquifers, water quality data are available from wells located downgradient (north and northeast) of the Property. The locations of these wells are shown on Figure 2.2, and results of VOC analyses of groundwater samples from these wells are presented in Table 2.6. The results of all semi-VOC and inorganic chemical analyses performed on samples from selected perched- and A-zone wells installed by Intersil are summarized in Tables 2.4b and 2.4c, respectively.

5.2.2 Groundwater Chemistry

VOCs were detected in groundwater samples from the on-site wells at concentrations ranging up to 33 mg/L. The highest concentrations of VOCs were detected in groundwater samples collected from A-zone wells W1A, W9A, W10A, W12A and E17A which are all located in the northern portion of the site. Maximum VOC concentrations detected in B-zone groundwater beneath the site are generally one to two orders of magnitude lower than those in the A-zone. In the off-site area, VOCs have been detected at low levels in C-zone wells and at trace levels in deeper aquifer monitoring wells. The following sections present more detailed discussion of the distribution of VOCs in each hydrogeologic zone.

A-Zone Chemistry - The compound detected most frequently in on-site A-zone groundwater samples was TCE. Other compounds detected more than once include 1,1,1-TCA, PCE, Freon 113, 1,1-DCE, 1,2-DCE, 1,1-DCA, chloroform and toluene. Table 2.4a presents a complete list of VOCs detected in groundwater samples from Intersil's A-zone wells since sampling began in 1985. The historical maximum concentrations of these compounds in A-zone groundwater are:

Compound	Concentration (mg/L)	Well	Date Collected
TCE	33	W1A	8/85
1,1,1-TCA	0.61	W12A	9/86
PCE	1.2	W10A	8/87
Freon 113	0.065	W1A	8/87
1,1-DCE	0.049	W12A	6/87
1,2-DCE	0.008	E17A	9/88
1,1-DCA	0.019	W1A	9/85
chloroform	0.014	W1A	9/85
toluene	0.003	W10A	6/89

Intersil's A-zone groundwater extraction and treatment system has operated continuously since December 1987. During this time, the concentration of each of the compounds in samples from A-zone wells has greatly decreased. To demonstrate the decrease in VOC concentrations, the following table presents the maximum concentrations of the same compounds listed above for the samples collected in September 1989:

Compound	Concentration (mg/L)	Well
TCE	1.1	W10A
1,1,1-TCA	0.009	W10A
PCE	0.002	W10A
Freon 113	0.005	W10A
1,1-DCE	0.002	W10A
1,2-DCE	<0.001	-
1,1-DCA	<0.001	-
chloroform	<0.001	-
toluene	<0.001	-

An illustration of the distribution of historical maximum and recent VOC concentrations in A-zone groundwater is presented in Figure 5.9. The distribution of TCE in the A-zone has been contoured in Figure 5.10. As these figures illustrate, the distribution of VOCs in the A-zone beneath the Property has been delineated on-site, and off-site to the west, south and east.

Historically, the highest concentrations of VOCs in A-zone groundwater beneath the Property have been detected in groundwater samples from wells at the northern portion of the site. Non-detectable to very low levels of VOCs were measured in samples from A-zone wells in the southern and central portions of the site, and in samples from off-site wells W15A to the west and W16A to the east. In samples from well W7A, located at the southwestern corner of the site, Freon 113 was the only VOC detected with concentrations ranging up to 0.006 mg/L. In samples from well W14A, located at the southeastern corner of the site, Freon 113, 1,1,1-TCA, chloroform and TCE have been detected at concentrations of 0.005 mg/L or less. In the central area of the site (wells W2A and W13A), TCE, Freon 113 and chloroform were detected at maximum concentrations of 0.17, 0.05 and 0.003 mg/L, respectively.

In summary, the distribution of VOCs in A-zone groundwater beneath the Property has been delineated. VOCs are generally restricted to the north-central and northeastern portions of the site. VOC concentrations have decreased by up to two

orders of magnitude in on-site A-zone well samples since the implementation of on-site groundwater extraction and treatment.

B-Zone Chemistry - The concentrations of volatile organic compounds detected in groundwater samples from the on-site B-zone wells are considerably less than those detected in groundwater samples from the A-zone wells. The compound detected most frequently in on-site B-zone groundwater samples was TCE. Other compounds detected more than once include 1,1,1-TCA, Freon 113, 1,1-DCE, 2-butanone, chloroform and toluene. Table 2.5 presents a complete list of VOCs detected in groundwater samples from Intersil's B-zone wells since sampling began in 1986. The historical maximum concentrations of these compounds in on-site B-zone groundwater are:

Compound	Concentration (mg/L)	Well	Date Collected
TCE	0.95	W11B	12/86
1,1,1-TCA	0.10	W11B	12/86
Freon 113	0.11	W6B	8/87
1,1-DCE	0.003	W11B	12/86
2-butanone	0.031	W11B	9/88
chloroform	0.003	W14B	9/86
toluene	0.450	W11B	9/88

The concentration of each of the VOCs in samples from B-zone wells has decreased since monitoring began, most likely as a result of natural attenuation. To demonstrate the decrease in VOC concentrations, the following table presents the maximum concentrations of the same compounds listed above for the samples collected in September 1989:

Compound	Concentration (mg/L)	Well
TCE	0.25	W18B
1,1,1-TCA	0.003	W18B
Freon 113	0.057	W18B
1,1-DCE	<0.001	-
2-butanone	<0.001	-
chloroform	<0.001	-
toluene	0.007	W11B

An illustration of the distribution of historical maximum and recent VOC concentrations in B-zone groundwater is presented in Figure 5.11. The distribution of TCE in the B-zone has been contoured in Figure 5.12. As the figures illustrate, the distribution of VOCs in the B-zone beneath the Property has been delineated on site, and off site to the west, south and east with respect to the distribution of VOCs.

The distribution of chemicals in on-site B-zone groundwater is similar to that in the A-zone, with highest concentrations of VOCs at the north portion of the Property and low or non-detectable concentrations at the central and southern portions of the Property. In samples from well W6B, located in the central portion of the Property, the only VOCs detected at concentrations greater than 0.002 mg/L were toluene (detected in three samples with concentrations ranging from 0.003 to 0.024 mg/L) and Freon 113 (detected in 19 samples with concentrations ranging from 0.020 to 0.110 mg/L). In samples from well W14B in the southern portion of the site, except for an initial sample in which chloroform was detected at 0.003 mg/L, the only VOC detected was Freon 113 (detected in 11 samples with concentrations ranging from 0.003 to 0.011 mg/L).

In summary, the distribution of VOCs in B-zone groundwater beneath the Property has been delineated. VOCs are generally restricted to the north-central and northeastern portions of the site and VOC concentrations have decreased considerably in on-site B-zone well samples.

C-zone Chemistry - The predominant compounds detected in groundwater samples from off-site C-zone monitoring wells are TCE, 1,1,1-TCA, Freon 113, and toluene. Table 2.6 presents a complete list of VOCs detected in groundwater samples from all C-zone wells since sampling began in 1986. The historical maximum concentrations of these compounds in C-zone groundwater are:

Compound	Concentration (mg/L)	Well	Date Collected
TCE	0.059	RK-2C	12/88
1,1,1-TCA	0.062	RK-2C	12/87
Freon 113	0.026	LR-3C	9/88
toluene	0.032	PL-2C	3/88

The maximum concentrations of the compounds listed above detected in samples collected in September 1989 are:

Compound	Concentration (mg/L)	Well
TCE	0.050	RK-2C
1,1,1-TCA	0.025	RK-2C
Freon 113	0.004	RK-2C
toluene	0.007	LH-1C

An illustration of the distribution of historical maximum and recent VOC concentrations in off-site C-zone groundwater is presented in Figure 5.13. The distribution of TCE in the C-zone groundwater is contoured in Figure 5.14. As the figures illustrate , the distribution of VOCs in the C-zone has been delineated to the north, south, east and west. The extent of VOCs in the C-zone does not appear to encompass the Intersil site.

Deeper Aquifer Chemistry - The chemistry of deeper aquifer groundwater is monitored by Intersil using off-site monitoring wells BK-1, BK-2, BK-3, and BK-4. The results of analyses of groundwater samples from these wells are summarized in Table 2.6. Since installation, only trace levels of VOCs have been sporadically detected in samples from these wells. The only VOCs detected more than once at concentrations exceeding detection limits are TCE, 1,1,1-TCA, Freon 113 and toluene. The historical maximum concentrations of these compounds in groundwater samples from the deeper aquifer wells are:

Compound	Concentration (mg/L)	Well	Date Collected
TCE	0.001	BK-1	6/88
1,1,1-TCA	0.005	BK-3	6/89
Freon 113	0.010	BK-4	9/88
toluene	0.042	BK-2	3/89

Intersil continues to monitor these wells to assess trends in VOC concentrations. The extent of VOCs in the deeper aquifers does not appear to encompass the Intersil site.

6.0 CHEMICAL FATE AND TRANSPORT

The transport and fate of VOCs in the vadose and saturated zones beneath the Property are discussed in this section with respect to the processes contributing to their physical movement (transport) and the chemical interactions and transformations that may occur during transport (fate). The discussion of chemical fate and transport is divided into two sections: (1) the vadose zone, which includes the unsaturated soils and perched water from the ground surface to about 100 feet below ground surface; and (2) the saturated zone, which includes all of the hydrogeologic units of interest below the water table.

The discussion is presented in this manner because the processes affecting the liquid transport of chemicals in the vadose zone are considerably different from those that operate in the saturated zone. For example, the principal direction of chemical transport in the vadose zone is vertically downward under the influence of gravity, whereas the directions of liquid chemical transport in the saturated zones vary considerably depending on the direction of the hydraulic gradient, which is known to change considerably at the site over space and time. Also, the division between the two zones is appropriate, given that the vadose zone is composed of three phases (solid, liquid and gas), whereas the saturated zone is composed of only two phases (solid and liquid). Because of the tendency for VOCs to vaporize, the gas phase must be considered in the discussion of chemical fate and transport both in the unsaturated zone and at its interface with the saturated zone.

To design an effective and efficient remedial system, it is important to understand both the distribution of chemicals of concern in the subsurface and the processes responsible for the observed distribution. The importance of a working knowledge of the processes involved in transport of the chemicals in the subsurface must not be undervalued, as these processes will be employed to remove the chemicals from the subsurface during site remediation. The discussion of chemical fate and transport, therefore, is intended to: (1) identify the potential processes responsible for the observed distribution of chemicals in the subsurface; and (2) compare the relative rates of migration between these various processes.

It is especially important that an effective remedial system be designed and implemented in the vadose zone for three reasons:

(1) Chemicals in the vadose zone act as a continuing source to the groundwater;

(2) The performance of the interim remedial systems has shown that the mass of TCE removed to date via the vapour extraction system is about 50 times greater than the mass removed by the groundwater extraction system (Geomatrix, 1990). Because the vapour extraction system is comparatively effective, it is advantageous to remove the VOCs from the subsurface before they reach the saturated zone; and

(3) The concentrations of chemicals in the vadose zone are generally much greater than those observed in the saturated zone. This indicates that the majority of the mass of VOCs in the subsurface at the study site is in the vadose zone.

6.1 Transport in the Vadose Zone

The transport processes occurring in the vadose zone at the Property govern the migration of VOCs from an area of near-surface release to the water table. As indicated in Section 5.1.1, VOCs can be released to the subsurface in one of three forms: (1) as pure VOC; (2) as part of an immiscible mixture of VOC and water; or (3) dissolved in water. The soil chemistry data collected during the site investigation have been used to identify two areas where releases of the third type, VOCs dissolved in water, are suspected to have occurred (Section 5.1.3). These two areas are located in the vicinity of the former inactive east neutralization system and well W18B. The detection of these relatively low concentrations of VOCs, indicating a release of dissolved VOCs, is consistent with the type of waste handled by the wastewater treatment system. That is, a release from the wastewater treatment system would result in concentrations of VOCs in soils which are similar to those observed in the vicinity of the former inactive east neutralization system.

Dissolved VOCs migrating at the Property would move primarily downwards in the vadose zone under the force of gravity. The rate of downward flow would depend

primarily on the hydraulic conductivity of the soils, which is generally higher for the coarse-grained geologic deposits. At the interface between an overlying coarse-grained deposit and an underlying fine-grained deposit, the rate of downward flow in the underlying fine-grained unit might be too small to allow the water to pass through the lower unit as quickly as it is supplied. Under these conditions, a zone of perched water would develop. The perched groundwater forms into the shape of a mound which causes the perched water to spread laterally along the interface between the geologic layers in addition to the vertical flow through the underlying fine-grained unit. The direction of groundwater movement in a particular perched unit depends on the thickness of the perched water layer and the slope of the underlying fine-grained unit. Where the perched groundwater spreads laterally to the edge of a fine-grained unit, it can drain vertically, and unsaturated conditions will resume. In this manner, VOCs dissolved in water may migrate laterally from the original source area.

VOC molecules dissolved in water would move at a slower rate than the water molecules because the VOCs tend to adhere (sorb) to the natural organic matter in the soils and also tend to vaporize into the surrounding soil gas. Transport of VOCs can occur in the gas phase either by advection or diffusion. In the absence of any engineered systems (such as the vapour extraction system), diffusion is expected to be the dominant vapour transport mechanism. Vapour diffusion causes spreading of vapours in all directions away from the location of highest concentrations. The rate of vapour migration depends strongly on the porosity, moisture content and fraction of organic carbon (FOC) of the soils. If the porosity is high and the moisture content and organic carbon contents are low, the rate of vapour diffusion will be highest.

Calculations of the effect of vapour diffusion have been performed for the conditions at the site and are presented in Appendix D. The results indicate that in coarse-grained deposits, vapour diffusion is likely to have affected soils within an approximate radius of about 100 to 125 feet from dissolved VOC source areas. This is consistent with the distribution of the highest VOC concentrations observed in coarse-grained deposits, which, at a depth of approximately 60 feet, extends to distances of up to 200 feet laterally from the two identified source areas.

6.2 Transport in the Saturated Zone

Advection is the dominant process whereby VOCs migrate in the saturated zone. Groundwater carrying dissolved VOCs will tend to follow the paths of least resistance in the geologic deposits. Within relatively permeable units, such as the lenticular beds of sand and gravel found discontinuously in the A-zone and as a more continuous stratum in the B-zone (Section 4.3), groundwater will move laterally in the general direction of the lateral hydraulic gradient. Within units of relatively low permeability, such as the silty clay and sandy clay deposits that comprise the A/B aquitard (Section 4.3), groundwater will tend to move vertically at a slow rate in response to the vertical hydraulic gradient between the A- and B-zones.

The solubilities of the various VOCs identified in soil and groundwater beneath the Property are listed in Table 5.1. Because the measured concentrations of VOCs in groundwater beneath the Property are significantly less than their solubilities, these chemicals are assumed to have been transported in the saturated zone as dissolved constituents.

Sorption and chemical or biological transformation tend to retard the movement of groundwater. Chemical reactions and transformations can result in degradation of VOCs into other compounds (Section 6.3). For practical purposes, the term transformation is also used to account for loss of VOCs by volatilization from groundwater into a gaseous phase in the unsaturated zone.

6.2.1 A-Zone

VOCs likely enter the A-zone dissolved in groundwater recharging from areas of the vadose zone that contain VOCs (Section 5.1). Once in the A-zone, VOCs move laterally in the direction of the lateral hydraulic gradient. In the vicinity of the Property, this direction varies, as illustrated by the lateral hydraulic gradient on potentiometric surface maps (Figures 4.6a, b, and c). The direction of groundwater flow in the A-zone generally has been north to northeast.

The rates of groundwater movement in the A-zone were calculated using Darcy's Law and estimated values of hydraulic conductivity, hydraulic gradient and effective porosity. Calculations are shown in Appendix E. In the deposits of relatively high hydraulic conductivity, such as those evaluated during the 1987 pumping test of well W10A (Section 4.3), the calculated rate of A-zone groundwater movement ranges from about 2 to 5 feet/day (ft/d). The flow rate calculated from recent recovery test data from well W10A ranges from approximately 0.3 to 1 ft/d. Because the hydraulic conductivity of the lenticular and interbedded deposits comprising the A-zone ranges from relatively low (sandy clay) to relatively high (gravelly sand), the average rate of groundwater movement in the A-zone is probably one or more orders of magnitude less than in the relatively high hydraulic conductivity deposits.

Calculated rates of movement of VOCs in the variable hydraulic conductivity deposits of the A-zone range from approximately 0.1 to 3 ft/d, which accounts for retardation of VOCs due to sorption (Appendix E).

6.2.2 A/B Aquitard

The distributions of VOCs in the A- and B-zones beneath the Property indicate that some of the A-zone groundwater which contains dissolved VOCs may have moved downward from the A-zone to the B-zone through the A/B aquitard. The rate at which groundwater moves downward is controlled by the thickness of the aquitard, the vertical hydraulic conductivity of the deposits comprising the aquitard, and the vertical hydraulic gradient (Section 4.3).

The calculated rate of groundwater movement through the A/B aquitard in the vicinity of monitoring wells W11B and W12A, in the northeastern part of the Property, ranges from 0.006 to 0.01 ft/d (2 to 4 feet per year (ft/y)). The aquitard is estimated to be 13 feet thick at this location and composed mainly of silty clay. Calculated rates of movement of VOCs through these deposits range from approximately 0.002 to 0.007 ft/d, which accounts for retardation of VOCs due to sorption (Appendix E). Downward movement of VOCs is facilitated in locations where the A/B aquitard is very thin or not present.

6.2.3 B-Zone

VOCs dissolved in groundwater that has entered the B-zone have moved laterally in several directions, as illustrated by the lateral hydraulic gradient on potentiometric surface maps (Figures 4.8a, b, and c). Groundwater movement in the B-zone has been generally northward from the southern part to the central part of the Property. Groundwater movement in the central to northern parts of the Property has been northward in some months (Figure 4.8b) and southward in other months (Figure 4.8a).

Potentiometric surface maps, from the time period before off-site B-zone groundwater extraction began, illustrate that groundwater has moved southward at the northern part of the Property (Figure 4.8a). The months of record that illustrate this southward groundwater movement are September 1986 (Figure 4.8a) and June 1987 through October 1987 (Geomatrix, 1989e). The months of record that illustrate this southward apparent gradient are February 1988, May 1988, August 1988, October through December 1988, June 1989 and September 1989 (Geomatrix, 1989e; 1989g; 1989i; and 1989j).

The rates of groundwater movement in the B-zone were calculated using Darcy's Law and estimated values of hydraulic conductivity, hydraulic gradient and effective porosity. Calculations are shown in Appendix E. The hydraulic conductivity values used to estimate these rates were calculated using the results of the pumping tests of B-zone wells in the off-site area (WCC, 1987b; WCC, 1988; Levine-Fricke, 1990). The calculated rates of groundwater movement in the B-zone range from about 0.03 to 0.2 ft/d (10 to 70 ft/y).

Calculated rates of movement of VOCs in the B-zone range from approximately 0.01 to 0.1 ft/d, which accounts for retardation of VOCs due to sorption (Appendix E).

6.2.4 B/C Aquitard

The downward hydraulic gradient measured between the B-zone and the C-zone (Table 4.3) in the off-site area and vicinity indicates that VOCs dissolved in groundwater in the B-zone would be transported downward through the B/C

aquitard. The very low hydraulic conductivities exhibited by the sediments that comprise the aquitard cause this rate of vertical migration to be very slow.

A representative magnitude of the vertical hydraulic gradient across the B/C aquitard is approximately 0.06, based on water-level data from five B-zone and C-zone monitoring well pairs north of the Property (Table 4.3). Based on data gathered from boring B9 in the southern part of the Property, the B/C aquitard is approximately 25 feet thick and composed mainly of silty clay and sandy clay (Section 4.3.2).

The calculated rate of vertical groundwater movement through the B/C aquitard ranges from 0.002 to 0.003 ft/d (0.06 to 1 ft/y). Calculated rates of movement of VOCs through these deposits range from approximately 0.0001 to 0.002 feet per day, which accounts for retardation of VOCs due to sorption (Appendix E).

6.2.5 C-Zone

Groundwater in the C-zone is generally moving to the north-northeast, as illustrated by the potentiometric surface map of the C-zone (Figure 4.10). Although this potentiometric surface map is for the off-site area north of the Property, movement of groundwater in the C-zone beneath the Property is assumed to be in a similar direction.

The lateral hydraulic gradient in the C-zone is approximately 0.001, which is similar to that observed in the B-zone.

Rates of groundwater movement in the C-zone ranging from 0.06 to 0.1 ft/d (20 to 40 ft/y) were calculated using the values of hydraulic conductivity and effective porosity estimated for the B-zone (Appendix E). Calculated rates of movement of VOCs in these deposits range from approximately 0.02 to 0.08 ft/d, which accounts for retardation of VOCs due to sorption (Appendix E).

6.2.6 Deeper Aquifers

The investigations of possible transport mechanisms performed to date have identified no transport pathways between the shallow A-, B- and C-zones to the

deeper aquifers found at depths of approximately 300 feet or more below the ground surface in the study area. The Regional Aquitard in the vicinity of the Property appears to be at least approximately 75 feet thick (Section 4.3). Conduit studies performed by Intersil and others have not located conduits at the Property (Geomatrix, 1988e).

6.3 Chemical Fate

Chemical reactions and transformations can result in degradation of VOCs into other compounds. Microorganisms can degrade VOCs under anaerobic and denitrifying conditions, a process referred to as biotransformation.

There are two major mechanisms by which biodegradation of TCE can occur in the subsurface; 1) sequential reductive dehalogenation (i.e. sequential elimination of the chlorine atoms and their replacement with hydrogen atoms); 2) oxidation via epoxidation. Microorganisms responsible for the aerobic biodegradation of TCE do not gain either carbon or energy from the reaction, thus they require a cometabolite (which serves as the primary energy and carbon source for the microorganism, and induces enzymes that can degrade other carbon compounds). Methane-oxidizing bacteria have been documented to be responsible for the biodegradation of TCE while they grow on propane and/or methane.

Dehalogenation typically occurs under strongly reducing (anaerobic) conditions which favour the growth of the methanogenic bacteria. Under methanogenic conditions TCE is dechlorinated as shown below.

TCE $\rightarrow$ DCE $\rightarrow$ vinyl chloride (VC)

The *cis*-1,2-DCE isomer is favoured over the *trans*-1,2-DCE isomer, whereas 1,1-DCE is not the result of biological activity. VC is dehalogenated only slowly under anaerobic conditions and thus usually accumulates. Neither 1,2-DCE nor VC were detected at the site, therefore it is concluded that anaerobic transformation of TCE is not occurring. However, there is laboratory evidence that VC can be further

dechlorinated, forming ethylene, or ethane or be completely converted to CO_2. The analysis for these and other breakdown products are not routinely performed on samples, thus, there is no conclusive evidence that TCE biodegradation is not occurring.

Some VOCs can also be transformed by abiotic, chemical processes, such as hydrolysis and elimination. Published evidence for abiotic transformation of TCE is not conclusive. The limited laboratory experiments that have been conducted indicate that abiotic transformation of TCE, if it does occur, will be considerably slower than biotransformation (Dilling et al., 1975; Pearson and McConnell, 1975). Results of laboratory experiments indicate that 1,1,1-TCA does degrade abiotically to 1,1-DCE and probably to acetic acid (Vogel and McCarty, 1987).

The experimental data outlined above are supported by the observed chemical distributions at the Property. In general, degradation products of TCE have not been detected in groundwater beneath the Property; however, 1,1-DCE has been detected in groundwater beneath the property, indicating that abiotic transformation is occurring at the Property.

7.0 EVALUATION OF INTERIM REMEDIAL MEASURES

7.1 Summary of Operating Interim Remedial Measures

Three interim remedial measures have been implemented at the Property. These include:

- removal of all wastewater treatment and storage units;
- installation and operation of a groundwater extraction and treatment system for perched and A-zone groundwater; and
- installation and operation of a soil gas extraction and treatment system for the vadose zone.

The removal operations for the in-ground units are documented in reports submitted to the RWQCB in September 1986 (Geomatrix 1986b) and November 1988. The design and construction of the groundwater and soil gas extraction and treatment systems are documented in reports submitted to the RWQCB in April 1987 (Geomatrix, 1987b), April 1988 (Geomatrix, 1988a) and November 1987 (Geomatrix, 1987c).

Intersil's groundwater extraction and treatment system consists of five groundwater extraction wells, pipelines and an air stripping tower treatment system (Figure 2.3). Groundwater is pumped from four A-zone wells (Wells W5A, W10A, W12A and E17A) located along the northern and eastern portions of the Property, and from one perched zone well (Well W4A) located along the western side of the Property. Groundwater extracted from the four A-zone wells is pumped through buried, double-contained pipelines to the groundwater treatment plant (Geomatrix, 1988b). Groundwater extracted from Well W4A is stored in an above-ground, double-contained holding tank of approximately 250 gallons located near that well. The tank is drained on a regular basis to the groundwater treatment system.

The groundwater treatment system is located within an existing enclosure located near the centre of the Property. Volatile organic compounds are removed from the extracted groundwater in the air stripping tower and the treated groundwater is discharged to the storm drain system under an NPDES permit (CA002962, RWQCB Order No. 87-139). No emission controls are required on the air stripping tower by the Bay Area Air Quality Management District (BAAQMD) permit because the total organic compound emissions are less than 1 pound per day and the estimated carcinogenic risk attributable to the emissions is less than one in one million.

The groundwater extraction and treatment system began operation on 07 November 1987 (Geomatrix, 1988b). During the first month of operation, the system was occasionally shut down for modifications and adjustments. Long-term operation of the extraction and treatment system began during the first week in December 1987. The system has been operating on a nearly continuous basis since that time.

Intersil's soil gas extraction and treatment system consists of four vapour extraction wells, six vent wells, pipelines and a carbon adsorption treatment system (Figure 2.3). Three extraction wells (VE-1, VE-3 and VE-4), installed in July 1987, and one existing well (VE-2, formerly W1A) are used to remove soil gas containing volatile organic compound vapours from the vadose zone. The vapour extraction wells were placed in the northern and central portions of the former Intersil facility where concentrations of VOCs in the vadose zone were expected to be highest (Geomatrix, 1987b). The vent wells (V-1S, V-1D, V-2S, V-2D, V-3S and V-3D) were designed to allow the influx of atmospheric air into the subsurface at six locations along the northern boundary of the Property and thereby facilitate the circulation of soil gas to the gas extraction wells. Operation of the VES commenced in May 1988 (Geomatrix, 1990).

The vapour extraction and vent wells were drilled in clusters of two - one deep and one shallow (Geomatrix, 1988b). The deep wells are screened between depths of approximately 70 and 100 feet bgs. The shallow wells are screened from depths

of about 10 feet bgs to depths between about 60 and 70 feet bgs. The deep and shallow wells were installed in separate boreholes to preclude downward migration of contaminants through the well casing or borehole annulus.

7.2 Methods of Evaluation

The interim groundwater and soil gas extraction and treatment systems have been evaluated using the following criteria:

- the effectiveness with which they collect fluids containing VOCs from the subsurface; and

- the effectiveness with which the VOCs are removed from the collected fluids.

The absolute effectiveness of the groundwater extraction system in removing VOCs from the aquifer was assessed by evaluating the change in VOC content of the A-zone groundwater since pumping was initiated. Groundwater quality data collected from each of the Intersil wells on a quarterly basis (as part of the quarterly monitoring program) was particularly well suited to this evaluation.

7.2.1 Groundwater Extraction and Treatment System

The effectiveness of the groundwater extraction system has been evaluated using five main sources of information:

- aquifer testing programs conducted to measure the hydraulic properties of the A-zone;

- monthly monitoring of the water levels to record the response of the groundwater to pumping;

- interpretation of the flow directions based on the available water-level data and technical judgement;

- comparison between the interpreted flow directions and the results of an analytical groundwater flow model used to simulate the areal zone of capture of the extraction wells; and

- results of quarterly groundwater quality monitoring.

The aquifer testing programs consisted of step-drawdown tests on Wells W5A, W10A, W12A and E17A, a 57-hr constant-discharge test on well W10A, and a long-term recovery test on well W10A. The data from the step-drawdown test were analyzed to estimate the sustainable discharge for the extraction wells. The data from the constant discharge test were analyzed to estimate the transmissivity and storage coefficient. Two different methods were used to analyze the constant discharge test data, one that assumes an isotropic confined aquifer (Theis method) and one that assumes an anisotropic unconfined aquifer with vertical drainage (Stallman method) (Lohman, 1972). Both analyses gave very similar results, although the analyses illustrated heterogeneity of the deposits in the A-zone. The step-drawdown and constant discharge aquifer test results are described in the November 1987 "Technical Memorandum, A-Zone Aquifer Testing Program" (Geomatrix, 1987c). The methods and results of the recent long-term recovery test of well W10A are presented in Appendix B.

After six months of operation, the effectiveness of the interim groundwater extraction system was evaluated. The monthly monitoring of water levels in the A-zone wells was used to prepare potentiometric surface maps from which the lateral groundwater flow directions were interpreted. The potentiometric surface maps were presented in Intersil's quarterly self-monitoring reports (see also Figures 4.6.a, b, and c). The groundwater extraction system was deemed to be effective if the interpreted flow directions for the A-zone groundwater beneath the Property are towards the extraction wells.

The overall effectiveness of the groundwater remediation system was also evaluated using water quality data which was collected on a quarterly basis from each of the wells installed by Intersil. The system was deemed to be effective if the concentrations of VOCs in wells within the radius of influence of the extraction

system decreased, indicating that the total mass of VOCs in the groundwater was decreasing as a result of the operation of the system.

Finally, the effectiveness of the groundwater treatment system was evaluated by monitoring the concentrations of VOCs in the effluent from the groundwater treatment system. The influent, effluent and receiving water concentrations are monitored monthly and reported quarterly in accordance with the NPDES permit (Permit No. CA00029262, RWQCB Order No. 87-139). The concentrations are measured by a laboratory certified to perform wastewater analysis by the California Department of Health Services using EPA test methods 601, 602 and 624, subject to the quality control and quality assurance procedures outlined in the Quality Assurance Project Plan (Geomatrix, 1989b). The groundwater treatment system is deemed to be effective if the effluent concentrations are less than or equal to the criteria specified in the NPDES permit.

7.2.2 Soil Gas Extraction and Treatment System

The effectiveness of the soil gas extraction system was evaluated by testing the performance of the gas extraction system in the field. Since the response of pressure in the soil gas to pumping is very rapid compared to groundwater, it was possible to investigate the effect of the vapour extraction system using four pumping or recovery tests of relatively short duration. The tests consisted of measuring the vapour pressure change in selected vent wells during shut-down or start-up of the gas extraction system, using procedures analogous to groundwater pumping and recovery tests. The soil gas extraction system is deemed to be effective if the pressure influences extend to the portions of the Property where elevated concentrations of VOCs have been measured in the vadose zone.

The field testing program to test the effectiveness of the soil gas extraction system consisted of four tests:

- a recovery test consisting of pressure measurements in the shallow vent wells V-1S, V-2S, and V-3S, and monitoring well W9A immediately following the shut-down of the gas extraction system for a period of 120 minutes;

- a pumping test consisting of pressure measurements in the shallow vent wells V-1S, V-2S, and V-3S, and monitoring well W9A immediately following the start-up of the gas extraction system for a period of 75 minutes;

- a recovery test consisting of pressure measurements in the deep vent wells V-1D, V-2D, and V-3D, and monitoring well W9A immediately following the shut-down of the gas extraction system for a period of 60 minutes; and

- a pumping test consisting of pressure measurements in both shallow and deep vent wells V-1S, V-1D, V-2S and V-2D immediately following the start-up of gas extraction from only the deep gas extraction well VE-2 for a period of 50 minutes.

The pressure of the gas phase in the monitoring wells was measured relative to atmospheric pressure using progressively inclined manometers with a minimum sensitivity of about 0.001 inch of water head (in. H_2O). Wind gusts appeared to affect the readings in both directions at times on the order of about 0.01 in. H_2O. Because numerous manometer readings were taken, the effects of these fluctuations were minimized. The manometers were levelled and zeroed before each test, and the zero was read at the end of each test to determine whether there had been any significant instrument drift.

The pressure changes measured in the gas monitoring wells from the beginning to the end of each test are presented in Table 7.1. Each of the recorded pressure changes is significantly larger than the fluctuations caused by wind gusts. The direction of the change in each case was consistent with the test method used, increasing for the recovery tests and decreasing for the pumping tests. The change in pressure as a function of time behaved in much the same fashion as would be expected from the tests conducted, changing most rapidly at the beginning of each test, then gradually approaching a steady-state condition. The measured pressure changes can therefore be attributed to the operation of the gas extraction system.

The effectiveness of the soil gas treatment system has been evaluated by monitoring the concentrations of VOCs in the influent and effluent of the carbon adsorption unit. The concentrations are measured weekly in the field using a portable photoionization detector and monthly by submitting a sample to an independent laboratory for analysis by gas chromatography. The soil gas treatment system is deemed to be effective if the removal of VOCs is 90% or more according to criteria established by the BAAQMD.

7.3 Results of Evaluation

7.3.1 Groundwater Extraction System

An analysis of the estimated extent of hydraulic containment of Intersil's A-zone groundwater extraction system was performed prior to operation of the system. Aquifer parameters measured during the 1987 aquifer test program were utilized in the modeling exercise. A groundwater flow model was used to simulate the water levels in the A-zone that would result from groundwater extraction given the hydraulic properties determined from the aquifer testing. The flow model was verified by demonstrating that it could reasonably predict the drawdown values observed during the aquifer test. Simulations were then performed to estimate the long-term drawdown values that would result from pumping of the four A-zone groundwater extraction wells. These drawdown values were then superimposed onto a representative potentiometric surface map of the A-zone under non-pumping conditions to predict the corresponding zone of capture of the extraction system. The results of the simulations are described in a Geomatrix report entitled "Report on Evaluation of Hydraulic Containment-Groundwater Extraction Systems" (Geomatrix, 1988d). Briefly, the simulated zone of capture encompassed the entire Property and beyond, including the southwestern portion of the AMI facility as shown in Figure 7.1. The zone of capture actually observed during the operation of the wells was developed by interpreting flow directions from a map of the potentiometric surface under pumping conditions. The boundary of the estimated zone of capture observed on 01 March 1988, shown on Figure 7.2, runs in a roughly west-southwest/east-northeast direction from the corner of North Tantau Avenue

and Forge Drive. This interpreted zone of capture is very similar to that simulated using the groundwater flow model, encompassing the entire former Intersil facility and extending onto the southern portion of the Siemens facility and the southwestern portion of the AMI facility.

The monthly A-zone potentiometric surface maps show some variation over time but the general trend shows a depression in the potentiometric surface around the north portion of the Property which is attributable to the extraction of groundwater from wells W5A, W10A, W12A and E17A (Geomatrix, 1989e; 1989g; 1989h; 1989i; 1989j; and 1990). The current capture zone for the groundwater extraction system is interpreted from the potentiometric surface measured on 05 September 1989 in Figure 7.3. This capture zone is determined to extend beyond the Intersil property in all directions in the A-zone. The temporal variations are thought to be at least partially attributable to the fact that the pumps in the extraction wells operate on a cyclic basis, which leads to fluctuating water levels in the extraction wells and therefore some degree of difficulty in obtaining reproducible water-level measurements in those wells.

The groundwater extraction system has been operating on an essentially continuous basis since November 1987 (Geomatrix, 1988b). The measured influent concentration of TCE was initially 8.4 mg/L and has decreased to 0.55 mg/L as of September 1989 (Geomatrix, 1990). The average flow rate began at 1.8 gallons per minute (gpm), increased to a maximum of 4.2 gpm in March and April of 1988 and has since decreased to about 1.5 gpm. The cumulative mass of TCE removed as of March 1990 was about 42 pounds. Figure 7.4 illustrates the rate of TCE removal over time.

Further demonstrating the effectiveness of the interim remedial measures, the concentrations of VOCs in wells at the Property have decreased quite dramatically since the initiation of pumping of the perched- and A-zone groundwater. Historical maximum and recent VOC concentrations in perched-, A-, and B-zone groundwater are illustrated on Figures 5.9 (perched- and A-zone) and 5.10 (B-zone). As the figures illustrate, TCE concentrations in all site wells have decreased at least one

order of magnitude. For example, the TCE concentration measured in extraction well W10A has decreased from 25 mg/L in July 1987 to 1.3 mg/L in September 1989.

The decrease in the average flow rate of the extraction system is the result of a lack of available water in the A-zone. The extraction of water from the A-zone, combined with the reduction in the amount of rainfall over the past few years, has led to a gradual lowering of the water table to the point where the available drawdown in the extraction wells has been significantly reduced. The pumps have been designed to cycle automatically, shutting off when the water level drops to near the pump intake and turning on again after the water level has risen a few feet. The recent dewatering of the A-zone appears to have had an adverse effect on the zone of capture of the groundwater extraction system, as evidenced by recent rising water levels in well F1A, the closest downgradient monitoring well. Future water-level monitoring and interpretations of flow directions will confirm whether the zone of capture continues to encompass the Intersil facility. The Feasibility Study discusses the options considered for modifying the groundwater extraction system to make remediation of the A-zone groundwater more efficient.

7.3.2 Groundwater Treatment System

The concentrations of VOCs in samples of the effluent water from the groundwater treatment system have consistently been less than the detection limit of 0.1 ug/L. The groundwater treatment system is therefore considered to be effective at removing VOCs from the extracted groundwater. It should be noted that all discharges from the groundwater treatment plant have been in full compliance with the parameters set forth in the NPDES permit.

7.3.3 Soil Gas Extraction System

The results of the first test of the VES (recovery for 120 min) showed that small, but significant, pressure changes occurred at distances exceeding 200 feet from the extraction well (Table 7.1). Well W9A had a pressure change about one order of magnitude greater than the shallow vent wells. The results of the second test (pumping for 75 min) showed pressure changes similar to the first test except that

the pressures in the wells decreased instead of increased, as would be expected for pumping conditions. This provides additional evidence that the measured effects were the result of the gas extraction system. The magnitude of the pressure changes for the second test were somewhat less than the first test. This is reasonable since the duration of the second test was shorter. The results of the third test (recovery for 60 minutes) showed pressure increases in all three deep vent wells that were considerably greater than the corresponding changes in the shallow vent wells during the first test. This indicates that the VES has a stronger effect on the soil gas in the deeper half of the vadose zone. The results of the fourth test (pumping from only the deep extraction well VE-2 for 50 min) showed that the deep gas extraction well affects the gas pressure in the shallow vent wells to some extent. The magnitude of this influence is difficult to predict for normal pumping conditions because the pumping rate for the fourth test was higher than the normal operating conditions of the vapour extraction system.

The pressure changes measured during the four gas extraction tests demonstrate that the gas extraction system influences the flow of soil gas in the vadose zone at distances of at least 200 feet from extraction wells at the Property, although the effect is likely to extend to much greater distances in the highly permeable geologic units and may be restricted to shorter distances in the lower permeability units. For geologic units that are less affected by gas advection, VOCs would still be expected to be removed by gas diffusion. There may also be some tendency for the pressure changes to propagate at different rates in different directions, though anisotropy is expected to be essentially negligible. Pumping the gas extraction system induces large pressure changes in the deep vent wells and smaller but measurable changes in the shallow vent wells. As expected, the induced pressure drop under pumping conditions generally decreases with increasing distance away from the gas extraction wells. The pressure gradient towards the extraction wells causes the soil gas to flow toward the wells.

The induced pressure change in the deep zone was very large in all of the wells monitored. Since the induced pressure change is relatively large at the farthest monitoring well from the extraction well (located approximately 200 feet away), the

effect of the gas extraction system is expected to extend for considerable distances beyond the Property. Because the induced pressure change propagated over considerable distances in a relatively short time, it appears that the soil gas is able to flow with relatively little resistance through some or all of the deep portion (60 to 100 feet bgs) of the vadose zone. The induced pressure gradients in the deep vadose zone are considerably larger than would be expected under natural conditions. The gas extraction system is therefore deemed to be effective at removing soil gas containing VOCs from the deep portion of the vadose zone beneath the northern and central portions of the Property.

The induced pressure change in the shallow part of the vadose zone is much smaller than in the deeper vadose zone. This may be attributable to the influx of air from the atmosphere which would reduce the imposed pressure gradients. The pressure change imposed by the gas extraction system is nonetheless measurable at each of the three vent wells and therefore the pressure change is expected to cause flow towards the gas extraction system over distances of at least 200 feet in the shallow vadose zone. The shallow gas extraction wells are located much closer than 200 feet to the two areas where elevated concentrations of VOCs have been measured in the shallow vadose zone, well W18B and near the former inactive east neutralization system (Figures 1.3, 2.1, and 2.3). The gas extraction system is therefore deemed to be effective at removing soil gas containing VOCs from the shallow portions of the vadose zone that have been shown to contain elevated concentrations of VOCs.

The gas extraction system tests provide information on the effects of the system at the northern portion of the Property. From the current understanding of the geologic conditions at the site, it is reasonable to assume that gas extraction from wells VE-3 and VE-4 has comparable effects, except that the flow rate in well VE-4 is considerably lower than in well VE-2. The reduced effectiveness of well VE-4 for removing soil gas from the deep vadose zone is not considered problematic because the extent of VOCs in the vadose zone near well VE-4 appears to be confined to soil above a depth of approximately 60 feet bgs (Section 5.1.4 and

Figure 5.2a through 5.2i) and, thus, can be remediated via well VE-3 (the shallow well).

The soil gas extraction system has been operating on a nearly continuous basis since May 1988 (Geomatrix, 1990). The initial influent concentrations of TCE ranged between 161 and 590 parts per million dry volume (ppmv) and have decreased to between 17 and 110 ppmv as of December 1989. The average flow rates for wells VE-1, VE-2, and VE-3 have varied between 17 and 30 standard cubic feet per minute (scfm). The flow rate for VE-4 has been less than the minimum rate which can be measured with the available instrumentation and therefore, the TCE concentration from VE-4 has not been measured. The cumulative mass of TCE removed as of March 1990 was just over 2300 pounds. A graph showing the mass of VOCs removed from the soil gas in the vadose zone vs. time is presented in Figure 7.5. This figure clearly indicates that, while the vapour extraction system has been very effective in removing VOCs from the vadose zone, the rate of mass removal has also been steadily decreasing with time. As discussed in Appendix B of the FS report, the more permeable layers of the subsurface can conduct vapour more quickly and will therefore be more readily cleaned up than the lower hydraulic conductivity clays. The rapid rate of mass removal that occurred during the first year of operation of the vapour extraction system likely resulted from the relatively rapid flux of VOCs out of the sandy and gravelly layers beneath the Property. The lower rate of flux more recently observed probably represents the removal of VOCs from the more clayey materials. Transport of VOCs out of a clay lens occurs primarily by vapour diffusion in response to the concentration difference between the VOC-bearing clay and the adjacent (relatively-cleaner) sand and gravel which has already been remediated by the VES. The time required to fully remediate the vadose zone, including the finer-grained layers was estimated in the FS using a model of transport processes in the vadose zone. The rate-limiting step in the overall remediation process was represented by the time necessary to remediate a 10-foot thick clay layer (the thickest impermeable layer encountered at the Property) which contained 10 mg/kg of TCE (a concentration which is greater than the maximum concentration of TCE measured in any sample from the Property). The model indicated that once the

more permeable layers had been remediated (a process that would take on the order of five years), an additional two years would be required to fully remediate the less permeable lenses.

7.3.4 Soil Gas Treatment System

The carbon adsorption system consists of two adsorber units in series. When the effluent concentrations from the first scrubber reach one-half the influent concentration, the first unit is replaced with the second unit and the second unit is replaced with a new unit. This procedure has consistently resulted in effluent gas that contains no detectable concentrations of VOCs (Geomatrix, 1990). The soil gas treatment system is therefore deemed to be effective. In addition, the system has consistently operated in compliance with conditions of the Property's BAAQMD Permit to Operate.

8.0 SUMMARY OF BASELINE PUBLIC HEALTH EVALUATION

A Baseline Public Health Evaluation (BPHE) was prepared for the RWQCB by Clement (Clement, 1990). The BPHE evaluated and selected chemicals of concern (COCs) for the entire Intersil/Siemens Proposed Superfund Site (Intersil/Siemens site), evaluated current and future exposure pathways and conducted a screening-level evaluation of risks due to those exposure pathways judged to be complete (Clement, 1990).

To select COCs for the Intersil/Siemens site, Clement reviewed the results of chemical analyses for soil and soil gas samples collected in 1989 and for groundwater samples collected between March 1987 and May 1989. Clement also reviewed a limited number of inorganic analytical results from soil samples collected and analyzed in 1982 and 1983. Clement selected COCs according to the following criteria:

- the chemical was detected at a frequency greater than 5%;
- the chemical was detected at concentrations significantly exceeding background concentrations;
- the chemical was detected in samples at concentrations exceeding the concentrations detected in corresponding field blanks by a factor of five (except chemicals which are common laboratory artifacts for which a factor of ten was used);
- the chemical is a known or potential human carcinogen; and
- the chemical is or was used at the site.

Using these criteria, Clement selected the following COCs for the Intersil/Siemens site for the media indicated:

- groundwater:

  zinc, acetone, benzene, 2-butanone, chloroform, 1,1-DCE, 1,2-DCE, Freon 113, methylene chloride, PCE, toluene, 1,1,1-TCA, TCE, xylenes,

benzo(b)fluoranthene, bis-2-ethylhexyl phthalate, butyl benzyl phthalate and 1,4-dichlorobenzene;

- soil:

  arsenic, beryllium, copper, cyanide, gallium, silver, thallium, acetone, benzene, 2-butanone, 1,1-DCE, 1,2-DCE, ethyl benzene, Freon 113, methylene chloride, PCE, toluene, 1,1,1-TCA, TCE, xylenes, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and isopropyl alcohol;

- soil gas:

  carbon tetrachloride, chloroform, 1,2-DCE, PCE, toluene, 1,1,1-TCA, and TCE.

Clement presumed that VOCs present in the other media listed would also be present in air and, therefore, selected all of the VOCs selected for the other media as COCs for air.

8.1 Screening of Potential Chemicals of Concern

Because the BPHE was performed for both the Intersil and Siemens facilities, and potential COCs were identified by Clement using data from both facilities, a further screening of the potential COCs identified by Clement was conducted to determine the COCs specific to the Property. This screening was necessary to focus on the Property and to develop the appropriate remedial action objectives and alternatives for the Property. Geomatrix screened the potential COCs in a similar manner to Clement. Potential COCs were screened out if:

- the chemical is part of a pathway that for an average exposure scenario has a carcinogenic risk less than 10^{-6} and a hazard index less than one;

- the concentrations detected are demonstrated to be within background ranges;

- the chemical was detected once or twice and repeated nondetections have occurred subsequently; or

- the detection is demonstrated to be a laboratory or sampling artifact.

In accordance with the BPHE, only recent data were considered in the screening. Data used by Clement in the BPHE and by Geomatrix in the screening included soil data for organic chemicals obtained in 1989 with some inorganic data collected in 1982 and 1983, and groundwater data collected from March 1987 to May 1989. The following sections discuss the screening in detail, and Tables 8.1a and 8.1b summarize the results of the screening.

8.1.1 Groundwater

Clement identified 18 potential COCs in groundwater beneath the Siemens/Intersil site. In the following paragraphs, these chemicals are further screened according to the above criteria to determine the COCs specific to the Property. A summary of the screening is presented in Table 8.1a.

Acetone - This compound was only detected once (December 1988) out of 186 groundwater samples collected from the Property and analyzed for VOCs. Because acetone was only detected once and not detected in subsequent sampling, it is not considered a COC for the Property.

Benzene - This compound was not detected in any of the 186 groundwater samples collected from the Property and analyzed for aromatic compounds. Because benzene was not detected, it is not considered a COC for the Property.

Benzo(b)fluoranthene - This compound was not detected in any of the 21 groundwater samples collected from the Property and analyzed for semivolatile organic compounds. Therefore, benzo(b)fluoranthene is not considered a COC for the Property.

Bis-2-ethylhexylphthalate - This compound was not detected in any of the 21 groundwater samples collected from the Property and analyzed for semivolatile organic compounds. Therefore, bis-2-ethylhexylphthalate is not considered a COC for the Property.

2-Butanone - This compound was detected in seven out of 186 groundwater samples collected at the Property and analyzed for VOCs. All seven detections were in samples collected from B-zone wells during two consecutive sampling periods (September 1988 and March 1989). The method used to collect B-zone samples was subsequently changed, and 2-butanone was not detected in subsequent sampling from these wells. Since 2-butanone was not detected in any A-zone groundwater samples and was not detected after the B-zone sampling methodology was changed, it is believed that the presence of this compound in September 1988 and March 1989 was an artifact of the sampling method. Therefore, 2-butanone is not considered a COC for the Property.

Butylbenzylphthalate - This compound was not detected in any of the 21 groundwater samples collected from the Property and analyzed for semivolatile organic compounds. Since butylbenzylphthalate was not detected, it is not considered a COC for the Property.

1,4-Dichlorobenzene - This compound was not detected in any of the 21 groundwater samples collected from the Property and analyzed for semivolatile organic compounds. Therefore, 1,4-dichlorobenzene is not considered a COC for the Property.

1,2-Dichloroethene (cis/trans) - This compound was only detected twice out of 186 groundwater samples collected from the Property and analyzed for VOCs. These detections occurred in September and December 1988. Since 1,2-DCE was only detected twice and was not detected in subsequent sampling, it is not considered a COC for the Property.

Methylene chloride - This compound was not detected in any of the 186 groundwater samples collected from the Property and analyzed for VOCs. Therefore, methylene chloride is not considered a COC for the Property.

Xylenes - Xylenes were not detected in any of the 186 groundwater samples collected from the Property and analyzed for this chemical. Therefore, xylenes are not considered a COC for the Property.

Zinc - Zinc was detected in all of the four groundwater samples collected from the Property and analyzed for this element. The maximum concentration detected was 0.8 mg/L. This concentration is within background concentrations in the South San Francisco Bay (0.0057 - 3 mg/L; DWR, 1975). Since the maximum concentration detected at the Property is within background concentrations, zinc is not considered a COC for the Property.

Seven chemicals remain after the screening. These chemicals are chloroform, 1,1-DCE, Freon 113, PCE, toluene, 1,1,1-TCA, and TCE. These chemicals are considered the Property-specific COCs for groundwater.

8.1.2 Soil

Clement identified 26 potential chemicals of concern in soil for the Siemens/Intersil site. In the following paragraphs, these chemicals are further screened according to the above criteria to determine the COCs specific to the Property. A summary of the screening is presented in Table 8.1b.

Acetone - This compound was not detected in any of the 268 samples soil collected at the Property and analyzed for VOCs. Therefore, acetone is not considered a COC at the Property.

Arsenic - Arsenic was detected in 76 of the 80 soil samples collected at the Property and analyzed for this element. The soil samples at the Property had a maximum concentration of 40 mg/kg. This maximum concentration is within background concentrations of arsenic in the western United States (6 to 65 mg/kg; Shacklette and Boerngen, 1984). Since the maximum concentration of arsenic detected at the

Property is within background concentrations, it is not considered a COC for the Property.

Beryllium - Beryllium was detected in only 1 of the 41 soil samples collected at the Property and analyzed for this element at a concentration of 0.65 mg/kg. The background concentration of beryllium ranges from less than 1 to 12 mg/kg in the western United States (Connor and Shacklette, 1975). Since beryllium was only detected once and the detected concentration is within background concentrations, it is not considered a COC for the Property.

Copper - Copper was detected in all of the 41 soil samples collected at the Property and analyzed for this element at a maximum concentration of 70.3 mg/kg. The background concentration of copper in soil ranges from 30 to 500 mg/kg in the western United States (Shacklette and Boerngen, 1984). Since the maximum concentration detected is within background concentrations, copper is not considered a COC for the Property.

1,2-Dichlorobenzene - This compound was only detected twice in 268 soil samples collected from the Property and analyzed for VOCs including dichlorobenzenes. Because of the low frequency of detection, and the repeated non-detections that followed, 1,2-dichlorobenzene is not considered a COC at the Property.

1,3-Dichlorobenzene - This compound was not detected in any of the 268 soil samples collected at the Property and analyzed for VOCs including dichlorobenzenes. Therefore, 1,3-dichlorobenzene is not considered a COC at the Property.

1,4-Dichlorobenzene - This compound was only detected once in 268 soil samples collected from the Property and analyzed for VOCs including dichlorobenzenes. Because of the low frequency of detection, 1,4-dichlorobenzene is not considered a COC at the Property.

1,1-Dichloroethene - This compound was not detected in any of the 268 soil samples collected at the Property and analyzed for VOCs. Therefore, 1,1-DCE is not considered a COC at the Property.

1,2-Dichloroethene (cis/trans) - This compound was only detected twice in 268 soil samples collected from the Property and analyzed for VOCs. Because of the low frequency of detection, 1,2-DCE is not considered a COC at the Property.

Ethylbenzene - This compound was only detected once in 268 soil samples collected from the Property and analyzed for VOCs. Because of the low frequency of detection, ethylbenzene is not considered a COC at the Property.

Freon 113 - This compound was not detected in any of the 268 soil samples collected from the Property and analyzed for VOCs. Therefore, Freon 113 is not considered a COC at the Property.

Gallium - Gallium was not detected in any of the 41 soil samples collected at the Property and analyzed for this element. Therefore, gallium is not considered a COC at the Property.

Isopropanol - This compound was not detected in any of the 268 soil samples collected at the Property and analyzed for VOCs. Therefore, isopropanol is not considered a COC at the Property.

Methylene Chloride - This compound was not detected in any of the 268 soil samples collected at the Property and analyzed for VOCs. Therefore, methylene chloride is not considered a COC at the Property.

Thallium - Thallium was detected in 33 of the 41 soil samples analyzed for this element at a maximum concentration of 9.7 mg/kg. The background concentration of thallium in soil ranges from 3.8 to 30.8 mg/kg in the western United States (Boerngen and Shacklette, 1981). Since the maximum concentration detected at the Property is well within background concentrations, thallium is not considered a COC for the Property.

1,2,4-Trichlorobenzene - This compound was not detected in any of the 43 soil samples collected at the Property and analyzed for semivolatile organic compounds. Therefore, 1,2,4-trichlorobenzene is not considered a COC at the Property.

1,1,1-Trichloroethane - This compound was not detected in any of the 268 soil samples collected at the Property and analyzed for VOCs. Therefore, 1,1,1-TCA is not considered a COC at the Property.

Xylenes - Xylenes have only been detected once out of 268 soil samples collected at the Property and analyzed for aromatic organic compounds. Because of the low frequency of detection, xylenes are not considered a COC for the Property.

Zinc - Zinc was detected in all of the 80 samples analyzed for this element at a maximum concentration of 207 mg/kg. The background concentration of zinc in soil ranges from 120 to 400 mg/kg in the western United States (Shacklette and Boerngen, 1984). Since the maximum concentration detected at the Property is within background concentrations, zinc is not considered a COC for the Property.

Seven chemicals remain after the screening. These chemicals are benzene, 2-butanone, cyanide, silver, PCE, toluene, and TCE. These chemicals were considered potential Property-specific COCs for soil. However, results of the BPHE indicate that average exposures to soil for a child result in a hazard index less than one and a carcinogenic risk of 3×10^{-6}. The calculations in the BPHE indicate that the majority of the carcinogenic risk is due to arsenic. As discussed in the above section, the maximum concentration of arsenic is within background concentrations. Therefore, the majority of the carcinogenic risk is actually background risk due to exposure to background concentrations at the Property and not risk due to past activities at the Property (PCE, toluene, and TCE). If the calculations are changed to reflect only the incremental risk due to past activities at the Property, the carcinogenic risks are less than 1×10^{-9}. Therefore, the potential chemicals of concern for soil as identified by Clement are not considered COCs for the Property because exposure to soil results in incremental carcinogenic risks less than 10^{-6} and hazard indices less than one. It should be noted that PCE, toluene, and TCE remain as COCs for groundwater and that remediation of these

chemicals in soil will be considered for protection of groundwater in the Feasibility Study Report.

8.1.3 Air

Because air samples have not been collected at the Siemens/Intersil site, Clement identified all volatile organic chemicals detected at the Siemens/Intersil site as potential COCs for air. Risks due to exposure to these chemicals in air were calculated by Clement (Clement, 1990). Carcinogenic risks were much lower than 10^{-6} and hazard indices were much less than one for both the average and plausible maximum exposure scenarios. Because of the low risks associated with exposure to these chemicals in air, the potential COCs for air as identified by Clement are not considered COCs for the Property.

8.2 Evaluation of Exposure Pathways

Clement evaluated pathways by which the various environmental media might carry the COCs to a point at which humans might be exposed. From this evaluation they identified three pathways that are currently complete, i.e., exposures that are presently occurring. The pathways identified are: (1) contact with chemicals in the groundwater from Municipal Well No. 24; (2) inhalation of vapours in the soil gases emanating from the sites; and (3) off-site inhalation of vapours emanating from the off-site groundwater. The latter pathway was dismissed as insignificant by Clement and was not evaluated for risk. Clement also identified five pathways which could be complete in the future if the Intersil/Siemens site was converted to residential use and domestic water supply wells were installed in the shallow aquifers to serve these residents. The possible future pathways identified were: (1) ingestion and inhalation of chemicals from the groundwater in the shallow aquifers; (2) inhalation and ingestion of chemicals in the Deeper Aquifers at the location of the BK wells; (4) direct contact with the on-site soils; and (5) on-site inhalation of vapours in the soil gases.

For those pathways judged complete or possible in the future, Clement conducted screening-level evaluations of both carcinogenic and non-carcinogenic risks. In

conformance with the custom for a screening-level evaluation, where necessary, Clement used conservative estimates and assumptions which actually overestimate risk. Clement also prepared a semi-quantitative evaluation of the magnitude of under- or overestimation of risk, which suggests that risks may be overestimated by a factor of 10^4.

For each exposure, two exposure concentrations were evaluated. One concentration, termed the "average" exposure concentration, was derived from the spatial and temporal geometric mean of all detections reported for each chemical. The highest concentration reported for each chemical was used as the other exposure concentration, termed the "plausible maximum." However, the highest reported concentrations do not represent appropriate plausible maximums. The hazards evaluated are all for chronic exposures. Because chronic exposures are inherently averages over time, more appropriate plausible maximum concentrations for groundwater would be obtained from temporal average concentrations in the well with the highest concentration. For soil, the appropriate plausible maximum would be derived from the highest spatial average over any 5000-square-foot area (a typical residential lot size) at the site.

For those pathways judged to be currently complete, Clement evaluated four exposure scenarios. For exposure to carcinogens, two scenarios, off-site inhalation of vapours in the soil gases from the Siemens site and from the Property, have estimated risks less than the EPA target value range, 10^{-4} to 10^{-6}. The remaining two exposure scenarios involved contact with water from Municipal Well No. 24. Because no carcinogens were reported in water from Municipal Well No. 24, no risks were assigned to these two scenarios. For non-carcinogenic risks, all scenarios have hazard index values less than one. In summary, no present risks to public health were identified.

For those pathways which might be complete in the future, Clement evaluated twelve possible exposure scenarios. Carcinogenic risks less than 10^{-6} were estimated for inhalation of vapours in the soil gases from the Property and vicinity; and for direct contact with soil by adults gardening. Carcinogenic risks greater than 10^{-6} and less than 10^{-4} were estimated for direct contact with soil by children,

ingestion of Deeper Aquifer groundwater, inhalation of vapours from Deeper Aquifer groundwater, ingestion of A-zone groundwater, ingestion of B-zone groundwater, ingestion of C-zone groundwater and inhalation of vapours from B-zone groundwater. Carcinogenic risks exceeding 10^{-4} were estimated for inhalation of vapours from A-zone groundwater. Inhalation of vapours from C-zone groundwater was assigned a risk of 3 X 10^{-4} by Clement; however this value was based on a 1,1-DCE maximum concentration of 41 ug/l detected in a matrix spike, which Clement mistook for a C-zone groundwater sample. When the actual maximum 1,1-DCE concentration in C-zone groundwater is used (5.5 ug/l), the calculated risk is well below 10^{-4}. For non-carcinogenic risks, a hazard index value of one was exceeded for ingestion of A-zone groundwater. Estimated non-carcinogenic risks were equal to one for ingestion of B-zone groundwater. For all other scenarios and exposures, the estimated non-carcinogenic hazard index was less than one.

The results of Clement's screening-level evaluation divide the exposure scenarios into three categories: (1) those which are below 10^{-6} or a hazard index value less than one and thus require no further consideration or action; (2) those within the range of 10^{-4} and 10^{-6} or with a hazard index value equal to one for which a more detailed evaluation may be performed to confirm that the risks are within this range; and (3) those which exceed 10^{-4} or a hazard index value greater than one for which a more detailed evaluation should be performed to establish cleanup goals.

Based on the evaluations described above, Clement concluded that no present risk to human health exists at the Intersil/Siemens site. Only ingestion of A-zone groundwater, a possible future risk scenario, had estimated risks higher than 10^{-4}. The water in the A-zone contains dissolved salts and nitrates at levels which exceed the federal Primary Drinking Water Standards (40 CFR 141.11). It is, therefore, highly improbable that the A-zone groundwater would be used for potable water. If it were used, it would require prior treatment.

9.0 CONCLUSIONS OF THE REMEDIAL INVESTIGATION AND RECOMMENDATIONS

9.1 Summary and Conclusions

9.1.1 Location of Potential Source Areas and Nature and Extent of Chemicals

The locations of potential sources, and the identities and distributions of chemicals in the subsurface at the Property have been thoroughly characterized using data collected during investigations conducted from 1983 to September 1989. A total of 64 soil borings (from which 529 samples were collected and analyzed (455 on site and 74 off site)) and 25 groundwater monitoring wells and piezometers were drilled and/or installed during the investigations. Additionally, 109 shallow soil gas samples were collected from 85 locations and analyzed during recent investigations.

The results of analyses of soil samples collected from directly beneath the former wastewater transfer lines and treatment facilities, and the above- and in-ground chemical storage areas were assessed to determine whether chemicals were released to the subsurface at any of these previously-identified potential source areas. Geochemical data collected from borings drilled at the north and east scrubber sumps, the north and east neutralization systems, the inactive east neutralization system (which together comprise the wastewater treatment system and the in-ground waste chemical storage area), and the above-ground waste chemical storage area (Figure 1.3) were used specifically for this purpose. Results of analyses of soil gas samples were used to identify any potential source areas that were not encountered in the soil boring program. Soil chemistry data from adjacent borings were used to determine whether an actual source of VOCs existed in the vicinity of any soil gas chemistry anomaly. Additional soil borings were drilled and sampled as necessary to complete this evaluation of the soil gas chemistry data. Other soil borings were drilled to help delineate the three dimensional extent of chemicals in the subsurface.

Conclusions concerning the location and nature of the sources and the distribution of chemicals of concern identified in the subsurface at the Property have been discussed in detail in Sections 5.1.3 and 5.1.4 of this report. The primary conclusions pertaining to the vadose zone and the saturated zone are summarized in the following two sections.

9.1.1.1 Locations of Suspected Source Areas and the Nature and Extent of Chemicals in the Vadose Zone

Soil samples collected from borings drilled at the Property have been analyzed for Priority Pollutant Metals, cyanide, semi-VOCs, and VOCs. None of the samples collected from borings drilled during recent investigations contained detectable concentrations of semi-VOCs.

Many of the soil and soil gas samples that were collected and analyzed contained measurable concentrations of several VOCs. Toluene, TCE, PCE, 1,1,1-TCA and Freon 113 are the VOCs that were most commonly detected in soil samples from the Property. Of the compounds listed, only TCE has been detected in concentrations that exceed 1.0 mg/kg in any sample collected during the investigations. Representative concentrations of each of the other VOCs are all less than 0.1 mg/kg. A total of 28 of the 455 on-site soil samples analyzed from the Property contained TCE at concentrations greater than or equal to 1.0 mg/kg. The shallow (ground surface to 55-foot depth) soil samples that contained greater than 1.0 mg/kg of TCE are clustered in two areas: around the former inactive east neutralization system, and in the vicinity of well W18B. The locations of the deeper (55 to 85 feet bgs) samples containing TCE at concentrations greater than 1.0 mg/kg were more disperse, but were usually confined to the northernmost 100 feet of the Property.

Elevated concentrations of TCE observed in soil samples collected from shallow depths in borings drilled to investigate the former inactive east neutralization system indicate that a source of TCE may have existed at this location. The relatively low (less than 3.5 mg/kg) concentrations of TCE measured in the affected soil samples are consistent with concentrations that would be expected to result

from leakage of water that contained relatively low concentrations of dissolved TCE. Since the former inactive east neutralization system handled facility wastewater that contained dissolved concentrations of TCE, not pure solvent, the interpretation of the data is consistent with the nature of the potential source that was known to exist in this area.

In the vicinity of the former inactive east neutralization system, TCE was consistently detected at concentrations greater than 1.0 mg/kg at depths between 25 and 65 feet bgs. This zone of elevated TCE was fully delineated in three dimensions using soil chemistry data collected from the adjacent borings. It is estimated that the area of the subsurface that is affected by TCE has the rough shape of an upright cylinder, centred between borings W2A and B7, that is approximately 40 feet in height (extending from 25 to 65 feet below ground surface) with a radius of less than 100 feet.

One of the shallow soil samples (less than 35 feet bgs) and several of the deeper soil samples collected from the boring for well W18B also contained greater than 1.0 mg/kg of TCE. These data suggest that a source of TCE may have existed in the shallow subsurface in the vicinity of well W18B. It is once again important to note that the concentrations of TCE exhibited by soil samples collected from this area of elevated TCE in soils are relatively low and are consistent with concentrations that would be expected to result from leakage of water which contained relatively low concentrations of dissolved TCE.

The areal extent of the zone of elevated TCE in soils from 35 to 55 feet bgs in the vicinity of well W18B has been fully delineated using data from the adjacent borings, located less than 50 feet to the north, south, east, and west. The area of elevated TCE which extends from depths of 55 to 95 feet bgs is confined to a band which parallels and extends approximately 100 feet to the south of Forge Drive.

The former inactive east neutralization system and the area surrounding well W18B constitute the only two suspected sources of chemicals identified at the Property. The concentrations of TCE measured in the soil samples collected from these suspected source areas indicate that TCE likely entered the subsurface at

each of these two zones as a dissolved constituent in water, not as a pure solvent. The three-dimensional extents of the two zones of elevated TCE in soil have been fully delineated using the data collected from adjacent soil borings. Therefore, no additional data concerning the distribution of VOCs at the Property are required.

As part of the interim remedial measures underway at the Property, soil gas is extracted from four gas extraction wells. Two wells, one shallow and one deep, are situated in very close proximity to each of the two suspected source areas outlined above. Testing of the soil gas extraction system has demonstrated that the radius of the zone of capture in the shallow zone created by soil vapour removal from the four extraction wells extends approximately 150 feet in all directions from the two wells. The zone of capture observed in the deep zone is much larger than its shallow counterpart, extending throughout the central and entire northern end of the Property (and beyond). These zones of capture encompass all of the areas of the vadose zone where greater than 1.0 mg/kg of TCE has been detected in soils. The effectiveness of the soil gas extraction and treatment system is further evidenced by the fact that approximately 2200 lbs of TCE has been removed from the vadose zone over the 20 months (May 1988 through December 1989) during which the system has been in operation.

9.1.1.2 Nature and Extent of Chemicals in the Saturated Zone

The concentrations of inorganic chemicals measured in groundwater samples from the on-site A-and B-zone wells were within the range expected under natural conditions. No semi-volatile chemicals were detected in samples from the on-site wells. VOCs, including primarily TCE, 1,1,1-TCA, and 1,1-DCE, were detected in groundwater samples from the on-site wells at concentrations ranging up to 33 ppm. The highest concentrations of VOCs were detected in groundwater samples collected from A-zone wells W1A, W9A, W10A, W12A and E17A which are all located in the northern portion of the Property. Maximum VOC concentrations detected in B-zone groundwater beneath the Property are generally one to two orders of magnitude lower than those in the A-zone, and are also found beneath the northern portion of the Property. In the off-site area, VOCs have been detected at low levels in C-zone wells and at trace levels in Deeper Aquifer monitoring wells.

The on-site extent of VOCs in the perched, A-, and B-zones has been adequately delineated. In addition, due to interim remedial activities and natural chemical degradation, the concentrations of VOCs in these zones have decreased considerably. Approximately 42 pounds of VOCs have been removed by the existing A-zone groundwater extraction and treatment system.

The extent of VOCs in the C-zone and Deeper Aquifers have been adequately defined by data from off-site wells. These zones do not require on-site remedial efforts.

9.1.2 Fate and Transport of Chemicals

The discussion of the fate and transport of chemicals at the Property is subdivided into two major sections. The conceptual model of local groundwater flow (originally presented in Section 4.3.2.7), which outlines the dominant pathways followed by dissolved VOCs that have infiltrated and migrated in the subsurface, is recapped in the first section. The second section summarizes the rates and directions of VOC transport, and the chemical processes which are likely to be causing the transformation of VOCs along their path of migration in the subsurface at the Property.

9.1.2.1 Conceptual Model of Groundwater Flow

Infiltrating groundwater recharge generally moves in a downward direction in the vadose zone until either perched conditions or the water table (A-zone) is encountered. In a perched zone the groundwater moves laterally until the conditions responsible for the perched saturated conditions end. At that point the groundwater resumes its downward vertical transit until another perched zone or the watertable is encountered. The direction of groundwater movement within a perched zone is governed by the slope of the free surface of the water in that zone. Because the topography of this surface can be highly variable over short distances, the resulting direction of groundwater flow within each perched zone can be highly irregular and consequently unpredictable.

Once fully saturated conditions are encountered (at the watertable), groundwater moves in a primarily lateral direction through the more permeable zones (A-zone,

B-zone, C-zone), and, at a significantly lower velocity, vertically through the lower-hydraulic conductivity aquitards (A/B-aquitard, B/C-aquitard). Although the potential for groundwater movement between the C-zone and the Deeper Aquifers is downward, relatively little groundwater movement occurs because of the thick and continuous nature of the Regional Aquitard.

9.1.2.2 Summary of the Fate and Transport of Chemicals Identified at the Property

The physical, chemical and biological processes which govern the physical movement (transport), or result in the transformation of chemicals as they migrate in the subsurface (fate) are summarized in this section. The summary is divided into two sections that deal separately with fate and transport processes of importance in: (1) the vadose zone, and (2) the saturated zone. This division is necessary because the processes that govern the fate and transport of chemicals are considerably different in each of the two zones.

Fate and Transport in the Vadose Zone - As discussed above, VOCs which have been identified at the Property are likely to have been released to the subsurface as constituents dissolved in water. Consequently, the primary pathway of VOC migration in the vadose zone is parallel to that followed by the infiltrating groundwater recharge. This pathway is outlined in the conceptual model of groundwater flow at the Property summarized above. Briefly, groundwater in the vadose zone moves in a primarily vertically downward direction toward the watertable. Local lateral flow in many directions may occur when perched conditions are encountered. Processes such as sorption onto soil particles and volatilization into the soil gas phase will effectively remove a portion of the VOCs from the infiltrating groundwater. For this reason VOCs molecules dissolved in migrating groundwater will move at a slower rate than the groundwater.

While the VOCs that are sorbed onto the soil are immobilized for a period of time, those VOCs that volatilize may continue to migrate by either advection or diffusion through the soil gas phase. The lack of significant perched zones at the Property, combined with the distribution of VOCs in the vadose zone suggests that vapour diffusion, not vapour advection or lateral groundwater flow in perched zones, has been the primary mechanism of lateral VOC transport in the vadose zone.

Processes such as sorption and dissolution into the soil moisture effectively remove VOCs from the gas phase in the vadose zone.

The quantity of VOCs that are removed from the groundwater or the soil gas through sorption is dependent on the porosity, moisture content and the amount of organic carbon that is associated with the soils (FOC). The relatively high FOC values measured in soil samples collected from the site cause a significant portion of the VOCs that are either migrating in groundwater or diffusing through the soil gas to be sorbed onto the stationary soil mass. Significant quantities of VOCs are removed from the groundwater as it migrates vertically to the water table via this process. For this reason, it is believed that the bulk of the VOCs originally migrating in the vadose zone at the Property were immobilized through sorption onto the soil phase, and consequently never reached the watertable.

Fate and Transport in the Saturated Zone - Those VOCs that reach the water table are transported through the saturated zone primarily by advection. Groundwater carrying dissolved VOCs will tend to follow the paths of least resistance in the geologic deposits. Within relatively permeable units, such as the lenticular beds of sand and gravel found discontinuously in the A-zone and as a more continuous stratum in the B-zone, groundwater will move laterally in the general direction of the lateral hydraulic gradient. At the Property and vicinity, the directions of the lateral hydraulic gradients in the A- and B-zones are highly variable; therefore, it is difficult to accurately define the exact locations of sources of chemicals detected in the saturated zones.

Within units of relatively low permeability, such as the silty clay and sandy clay deposits that comprise the A/B aquitard, groundwater will tend to move vertically at a slow rate in response to the vertical hydraulic gradient between the A- and B-zones.

Rates of VOC movement through the various hydrogeologic units identified at the Property were calculated based on estimated hydraulic properties of these units, FOC data from soil sample analyses, and octanol-water partitioning coefficient

values for TCE from the literature. These calculated rates are summarized as follows:

Hydrogeologic Unit	Calculated Groundwater Flow Rate (ft/d)	Calculated VOC Flow Rate (ft/d)
A-zone	0.3 to 5	0.1 to 0.5
A/B aquitard	0.006 to 0.01	0.002 to 0.006
B-zone	0.03 to 0.2	0.01 to 0.1
B/C aquitard	0.002 to 0.003	0.001 to 0.002
C-zone	0.06 to 0.1	0.02 to 0.06

9.2 Recommendations

9.2.1 Recommendations for Future Investigation

Investigation of the sources and distribution of VOCs, and characterization of the physical properties of the affected media at the Property are judged to be complete: therefore, no further remedial investigation is warranted.

9.2.2 Recommended Remedial Action Objectives

The results of the Baseline Public Health Evaluation indicate no present risk to public health as a result of VOCs in soil and groundwater at the Property. However, potential future risks associated with the potential though unlikely future use of shallow groundwater were identified, assuming that no remedial action is performed. Therefore, remedial action designed to remove VOCs from soil, and to contain and remove groundwater containing VOCs, is recommended. Because the bulk of the mass of VOCs is present in soil rather than in groundwater, and because these VOC-containing soils continue to act as a source of VOCs to groundwater, remedial efforts that focus on removing VOCs from soil will be most effective, especially when those efforts are combined with extraction and treatment of groundwater.

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TABLE 2.1

SUMMARY OF PREVIOUS INVESTIGATIONS
10900 North Tantau Avenue
Cupertino, California
February 1983 - April 1989

Report References	Wells Installed	No. Soil Borings	No. Groundwater Samples Analyzed	No. Soil Samples Analyzed	Predominant Organic Compounds Detected	Comments
Cooper Engineers 28 February 1983	-	2	-	2	none, see Comments	Preliminary investigation. Analysis for chlorinated compounds was not performed.
Cooper Engineers 22 October 1985	W1A	5	3	49	TCE, PCE, TCA	Phase II investigation
Cooper Engineers 11 November 1985	-	-	3	-	TCE	Letter report
Cooper Engineers 23 April 1986	W2A, W3A, W4A, W5A, W6B, W7A,	2	24	31	TCE, TCA	Phase III investigation
Geomatrix Consultants 9 June 1986	-	-	-	-	-	Initial remedial action plan for removal of inactive neutralization system
Cooper Engineers 10 June 1986	-	-	6	-	TCE, PCE, Freon 113	Letter report
Geomatrix Consultants 30 June 1986	-	-	-	-	-	Phase IV work plan
Geomatrix Consultants 25 July 1986	-	-	-	-	-	Work plan for Public and Private Well Survey
Geomatrix Consultants 28 July 1986	-	-	-	-	-	Health and Safety Plan
Geomatrix Consultants 15 August 1986	-	-	5	-	TCE, TCA	Quarterly monitoring report for the calendar quarter of April-June 1986
Geomatrix Consultants 18 September 1986	-	-	-	3	TCE, xylenes	Report on the removal of the inactive neutralization system
Geomatrix Consultants 7 November 1986	W8B, W9A, W10A, W11B, W12A, W13A, W14A, W14B, W15A, W16A	-	15	58	TCE, Toluene PCE	Phase IV investigation
Geomatrix Consultants 15 November 1986	-	-	15	-	TCE, TCA	Quarterly monitoring report for the calendar quarter of July-Sept. 1986
Geomatrix Consultants 9 January 1987	-	-	-	-	-	Public and private well survey
Geomatrix Consultants 15 February 1987	-	-	15	-	TCE, TCA	Quarterly monitoring report for the calendar quarter of Oct.-Dec. 1986

TABLE 2.1 (continued)

SUMMARY OF PREVIOUS INVESTIGATIONS
10900 North Tantau Avenue
Cupertino, California
February 1983 - April 1989

Report References	Wells Installed	No. Soil Borings	No. Groundwater Samples Analyzed	No. Soil Samples Analyzed	Predominant Organic Compounds Detected	Comments
Geomatrix Consultants 17 April 1987	-	-	-	-	-	Interim Remedial Action Plan
Geomatrix Consultants 8 May 1988	-	-	-	-	-	Comments on Siemens/Woodward-Clyde reports of 11, 13 and 20 March 1987
Geomatrix Consultants 15 May 1987	-	-	15	-	TCE, TCA	Quarterly monitoring report for the calendar quarter of Jan.-Mar. 1987
Geomatrix Consultants 18 May 1987	-	-	-	-	-	Site Inspection Technical Report
Geomatrix Consultants 15 August 1987	-	-	15	-	TCE, TCA	Quarterly monitoring report for the calendar quarter April-June 1987
Geomatrix Consultants 21 August 1987	-	-	-	-	-	Work Plan for further plume definition B- and C-aquifers
Geomatrix Consultants 25 September 1987	-	-	-	-	-	Revised Work Plan for further plume definition B- and C-aquifers
Geomatrix Consultants 16 November 1987	-	-	15	-	TCE, TCA	Quarterly monitoring report for the calendar quarter July-Sept. 1987
Geomatrix Consultants 16 November 1987	E17A	-	-	10	TCE	Technical report on installation of extraction well E17A.
Geomatrix Consultants 16 November 1987	VE2, VE3, VE4, V1S, V1D, V2S, V2D, V3S, V3D	-	-	-	-	Technical report on installation of vapor extraction and vent wells.
Geomatrix Consultants 16 November 1987	-	-	10	-	TCE, TCA	Technical report on A-zone aquifer testing program
Geomatrix Consultants 18 December 1987	PG-1B	-	2	-	-	Report on installation of wells PG-1B and IP-1B
Geomatrix Consultants 20 November 1987	-	-	-	-	-	Quality Assurance Project Plan Revision 0

TABLE 2.1 (continued)

SUMMARY OF PREVIOUS INVESTIGATIONS
10900 North Tantau Avenue
Cupertino, California
February 1983 - April 1989

Report References	Wells Installed	No. Soil Borings	No. Groundwater Samples Analyzed	No. Soil Samples Analyzed	Predominant Organic Compounds Detected	Comments
Geomatrix Consultants 8 January 1988	-	-	-	-	-	Technical report for further deep aquifer investigations
Geomatrix Consultants 15 January 1988	-	-	6	-	TCE	NPDES self-monitoring report for Dec. 1987
Geomatrix Consultants 16 February 1988	W18B	-	20	-	TCE, TCA	Quarterly monitoring report for the calendar quarter Oct.-Dec. 1987
Geomatrix Consultants 1 March 1988	W19B, W20B, W21A, W22A	6	74	-	TCE, TCA	Unpublished report
Geomatrix Consultants 1 April 1988	-	-	42[a]	-	TCE	Report on implementation of the interim remedial action plan
Geomatrix Consultants 15 April 1988	-	-	-	16	TCE	NPDES self-monitoring report for the calendar quarter Jan.-March 1988
Geomatrix Consultants 6 May 1988	BK-4	-	2	-	-	Technical report on installation of deep well BK-4
Geomatrix Consultants 16 May 1988	5	-	23	-	TCE, TCA	Quarterly monitoring report for the calendar quarter Jan.-March 1988
Geomatrix Consultants 15 July 1988	-	-	10	-	TCE	NPDES self-monitoring report for the calendar quarter April-June 1988
Geomatrix Consultants 15 August 1988	-	-	23	-	TCE, TCA	Quarterly monitoring report for the calendar quarter of April-June 1988
Geomatrix Consultants 30 September 1988	-	-	-	-	-	Report on evaluation of hydraulic containment of groundwater extraction system
Geomatrix Consultants 17 October 1988	-	-	10	-	TCE	NPDES self-monitoring report for the calendar quarter of July-Sept. 1988
Geomatrix Consultants 26 October 1988	-	-	-	8	TCE, Toluene	Letter report for additional soil chemistry data (beneath in-ground units) and review of additional background information

TABLE 2.1 (continued)

SUMMARY OF PREVIOUS INVESTIGATIONS
10900 North Tantau Avenue
Cupertino, California
February 1983 - April 1989

Report References	Wells Installed	No. Soil Borings	No. Groundwater Samples Analyzed	No. Soil Samples Analyzed	Predominant Organic Compounds Detected	Comments
Geomatrix Consultants 21 October 1988	-	-	-	-	-	Remedial Investigation/Feasibility Study (RI/FS) Work Plan
Geomatrix Consultants 15 November 1988	-	-	23	-	TCE, TCA	Quarterly monitoring report for the calendar quarter of July-Sept. 1988
Geomatrix Consultants 17 January 1989	-	-	-	-	-	Revised RI/FS Work Plan
Geomatrix Consultants 17 January 1989	-	-	-	-	-	Quality Assurance Project Plan (QAAP)
Geomatrix Consultants 17 January 1989	-	-	-	-	-	Health and Safety Plan
Geomatrix Consultants 30 January 1989	-	-	10	-	TCE	NPDES self-monitoring report for the calendar quarter of Oct.-Dec. and annual summary
Geomatrix Consultants 15 February 1989	-	-	9	-	TCE	Quarterly monitoring report for the calendar quarter of Oct.-Dec.
Geomatrix Consultants 7 April 1989	-	-	-	-	-	Second revised RI/FS Work Plan

Notes:

a. Samples consisted of influent and effluent from extraction and treatment system.

TABLE 2.2.a
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO BENZENES
Phase II, Cooper, Oct. 1985	W1A[2]	4.5	<0.001	0.083	0.069	0.052	<0.001	0.20	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	10.0	<0.001	0.12	0.023	<0.001	<0.001	0.19	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	15.0	0.001	0.17	0.063	0.003	<0.001	0.048	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	20.0	<0.001	0.061	0.018	<0.001	<0.001	0.016	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	30.0	<0.001	0.21	0.045	<0.001	<0.001	0.098	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	40.0	<0.001	0.16	0.010	<0.001	<0.001	0.022	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	49.5	<0.001	0.35	0.037	<0.001	<0.001	0.048	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	60.0	<0.001	0.46	0.006	0.003	<0.001	0.049	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	64.5	<0.001	0.36	0.009	<0.001	<0.001	0.14	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	69.5	<0.001	0.33	0.007	<0.001	<0.001	0.26	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	79.5	<0.001	0.45	0.018	<0.001	<0.001	0.38	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	84.5	<0.001	1.20	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phase II, Cooper, Oct. 1985	W1A	94.5	<0.001	0.14	<0.001	<0.001	<0.001	0.017	<0.001	<0.001
Phase II, Cooper, Oct. 1985	B2A	5.0	0.004	0.026	0.008	<0.001	<0.001	0.13	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B2A	10.0	0.014	0.095	0.03	<0.001	<0.001	0.021	0.24	<0.001
Phase II, Cooper, Oct. 1985	B2A	15.0	0.031	0.028	0.075	<0.001	<0.001	0.68	0.37	<0.001
Phase II, Cooper, Oct. 1985	B2A	20.0	<0.001	<0.001	0.014	<0.001	<0.001	0.16	<0.002	<0 001
Phase II, Cooper, Oct. 1985	B2A	29.5	0.016	0.016	0.10	<0.001	<0.001	0.016	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B2A	40.0	0.001	0.32	0.062	<0.001	<0.001	0.004	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B2A	50.0	<0.001	0.31	0.042	<0.001	<0.001	0.20	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	5.0	<0.001	0.38	0.28	<0.001	<0.001	0.68	0.10	<0.001
Phase II, Cooper, Oct. 1985	B3A	10.0	<0.001	0.40	0.055	<0.001	<0.001	0.006	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	15.0	<0.001	0.46	0.029	<0.001	<0.001	0.014	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	20.0	<0.001	0.82	0.041	<0.001	<0.001	0.005	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	25.0	<0.001	0.21	0:013	<0.001	<0.001	0.11	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	30.0	<0.001	0.38	0.004	<0.001	<0.001	0.32	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	35.0	<0.001	0.78	0.006	<0.001	<0.001	0.10	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	40.0	<0.001	0.78	0.006	<0.001	<0.001	0.26	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	44.5	<0.001	0.58	0.066	<0.001	<0.001	0.16	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B3A	49.5	<0.001	0.29	0.047	<0.001	<0.001	0.053	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	3.5	<0.001	0.018	0.013	<0.001	<0.001	0.58	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	8.5	<0.001	0.083	<0.001	<0.001	<0.001	0.21	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	13.5	<0.001	0.11	<0.001	<0.001	<0.001	0.32	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	18.5	<0.001	0.072	<0.001	<0.001	<0.001	0.25	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	23.5	<0.001	0.11	<0.001	<0.001	<0.001	0.19	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	28.5	<0.001	0.19	<0.001	<0.001	<0.001	0.22	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	33.5	<0.001	0.45	<0.001	<0.001	<0.001	0.26	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	38.5	<0.001	0.28	<0.001	<0.001	<0.001	0.21	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	43.5	<0.001	0.36	<0.001	<0.001	<0.001	0.19	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B4A	48.0	<0.001	0.43	<0.001	<0.001	<0.001	0.027	<0.002	<0.001

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO-BENZENES
Phase II, Cooper, Oct. 1985	B5A	2.5	<0.001	0.16	0.26	<0.001	<0.001	0.26	<0.002	<0.001
Phase II, Cooper, Oct 1985	B5A	5.0	<0.001	0.19	0.22	<0.001	<0.001	0.35	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B5A	10.0	<0.001	0.26	0.11	<0.001	<0.001	0.17	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B5A	15.0	<0.001	0.15	0.061	<0.001	<0.001	0.12	<0.002	<0 001
Phase II, Cooper, Oct. 1985	B5A	19.0	<0.001	0.095	<0.001	<0.001	<0.001	0.033	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B6A	2.5	<0.001	0.16	0.001	<0.001	<0.001	0.066	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B6A	5.0	<0.001	0.14	0.26	<0.001	<0.001	0.28	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B6A	10.0	<0.001	0.10	0.004	<0.001	<0.001	0.064	<0.002	<0.001
Phase II, Cooper, Oct. 1985	B6A	12.5	<0.001	0.14	0.009	<0.001	<0.001	0.078	<0.002	<0.001
Phase III, Cooper, Apnl 1986	B7A	3.5	<0.5	0.60	<0.5	<0.5	0.50	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	B7A	7.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	10.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0 5	<0.5
Phase III, Cooper, Apnl 1986	B7A	15.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	B7A	19.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	26.0	<0.5	3.30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	31.0	<0.5	2.00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	41.0	<0.5	0.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0 5
Phase III, Cooper, April 1986	B7A	50.5	<0.5	1.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	61.0	<0.5	0.90	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	71.0	<0.5	<0.5	<0.5	<0.5	0.60	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	75.5	<0.5	<0.5	<0.5	<0.5	0.80	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	81.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	B7A	86.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	B7A	91.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	W2A	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	W2A	6.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	W2A	9.5	<0.5	<0.5	<0.5	<0.5	0.70	<0.5	1.80	<0.5
Phase III, Cooper, Apnl 1986	W2A	15.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	W2A	16.5	<0.5	<0.5	<0.5	<0.5	0.60	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	W2A	20.5	<0.5	<0.5	<0.5	<0.5	0.90	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	W2A	26.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.10	<0.5
Phase III, Cooper, Apnl 1986	W2A	31.5	<0.5	2.30	<0.5	<0.5	<0.5	<0.5	<0.5	<0 5
Phase III, Cooper, April 1986	W2A	41.0	<0.5	3.30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	W2A	51.0	<0.5	0.80	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	W2A	61.0	<0.5	2.70	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, Apnl 1986	W2A	71.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	W2A	79.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0 5
Phase III, Cooper, Apnl 1986	W2A	91.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phase III, Cooper, April 1986	W2A	101.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0 5
Phase III, Cooper, Apnl 1986	W2A	111.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Geomatrix, 18 September 1986	INSa-N	12.0	<0.5	0.06	<0.5	<0.05	<0.05	<0.05	0.7	<0.05
Geomatrix, 18 September 1986	INS-M	12.0	<0.5	0.08	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05
Geomatrix, 18 September 1986	INS-S	12.0	<0.5	1.0	<0.5	<0.05	<0.05	<0.05	0.1	<0.05

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO BENZENE
Phase IV, Geomatrix, Nov. 1986	W8B	21.0	0.003	0.033	0.019	<0.0002	<0.0002	<0.0002	<0.0002	0.001
Phase IV, Geomatrix, Nov. 1986	W8B	40.5	<0.004	0.33	0.028	<0.004	<0.004	0.009	<0.004	0.075
Phase IV, Geomatrix, Nov. 1986	W8B	60.5	<0.01	1.60	0.03	<0.01	<0.01	<0.01	<0.01	0 07
Phase IV, Geomatrix, Nov. 1986	W8B	80.5	<0.05	7.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phase IV, Geomatrix, Nov. 1986	W8B	100.5	<0.008	0.22	<0.008	<0.008	<0.008	0.017	<0.008	<0.008
Phase IV, Geomatrix, Nov. 1986	W8B	120.5	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W8B	140.5	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W9A	18.5	0.004	0.025	0.007	<0.0002	<0.0002	0.001	0.002	0.006
Phase IV, Geomatrix, Nov 1986	W9A	38.5	<0.004	0.41	0.05	<0.004	<0.004	0.009	<0.004	0.138
Phase IV, Geomatrix, Nov. 1986	W9A	58.5	<0.008	0.93	0.023	<0.008	<0.008	<0.008	<0.008	0.03
Phase IV, Geomatrix, Nov. 1986	W9A	78.5	<0.004	0.82	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W9A	98.5	0.013	0 70	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W9A	125.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.001	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W10A	20.5	<0.004	0.35	0.044	<0.004	<0.004	<0.004	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W10A	40.5	<0.004	0.60	0.078	<0.004	<0.004	<0.004	<0.004	0.06
Phase IV, Geomatrix, Nov. 1986	W10A	59.5	<0.004	0.83	0.022	<0.004	<0.004	<0.004	<0.004	0.029
Phase IV, Geomatrix, Nov. 1986	W10A	79.5	<0.004	0.73	0.033	<0.004	<0.004	<0.004	<0.004	0.042
Phase IV, Geomatrix, Nov. 1986	W10A	99.5	<0.004	1.30	0.020	<0.004	<0.004	<0.004	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W10A	119.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W11B	20.5	<0.0002	<0.0002	<0.0002	0.001	<0.0002	0.027	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W11B	40.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.001	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W11B	60.5[3]	0.0056	0.045	0.0007	0.002	<0.0002	0.0037	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W11B	78.5	<0.0002	0.074	0.0003	0.001	<0.0002	<0.0002	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W11B	99.5[4]	0.023	0.11	0.0003	0.001	<0.0002	<0.0002	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W11B	119.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0033	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W11B	160.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0014	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W12A	18.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0093	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W12A	38.5	<0.0002	<0.0002	<0.0002	<0.0002	.0056	0.0056	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W12A	58.5	<0.004	0.26	<0.004	<0.004	<0.004	0.014	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W12A	78.5	<0.004	0.11	<0.004	<0.004	<0.004	0.006	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W12A	98.5	0.045	1.00	<0.004	<0.004	<0.004	0.005	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W12A	119.5	<0.0002	0.0031	<0.0002	<0.0002	<0.0002	0.0017	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W13A	17.0	<0.004	0.15	<0.004	<0.004	<0.004	0.022	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W13A	38.5	<0.004	0.30	<0.004	<0.004	<0.004	0.055	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W13A	59.5	<0.004	0.57	<0.004	<0.004	<0.004	0.062	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W13A	79.5	<0.004	0.51	<0.004	<0.004	<0.004	0.14	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W13A	99.5	<0.004	0.083	<0.004	<0.004	<0.004	0.054	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W13A	119.5	<0.004	<0.0002	<0.004	<0.004	<0.004	0.28	<0.004	<0.004

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES1
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO-BENZENES
Phase IV, Geomatrnx, Nov. 1986	14P	20.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0091	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	14P	38.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.042	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	14P	58.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.017	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	14P	79 5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.21	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	14P	99.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.024	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	14P	119.0	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.083	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	14P	139.0	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.02	<0.0002	<0.0002
Phase IV, Geomatrnx, Nov. 1986	14P	157.0	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0037	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W15A	18.0	<0.004	0.004	<0.004	<0.004	<0.004	0.069	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W15A	38.5	<0.004	0.100	0.008	<0.004	<0.004	0.059	<0.004	<0.004
Phase IV, Geomatrnx, Nov. 1986	W15A	58.0	<0.004	0.28	0.007	<0.004	<0.004	0.097	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W15A	78.0	0.0028	0.0028	<0.0002	<0.0002	<0.0002	0.19	<0.0002	<0.0002
Phase IV, Geomatnx, Nov. 1986	W15A	98.0	<0.004	0.016	<0.004	<0.004	<0.004	0.13	<0.004	<0.004
Phase IV, Geomatrix, Nov. 1986	W15A	118.0	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	0.15	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W16A	18.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.022	<0.0002	<0.0002
Phase IV, Geomatrnx, Nov. 1986	W16A	38.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.014	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W16A	58.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.25	<0.0002	<0.0002
Phase IV, Geomatrnx, Nov. 1986	W16A	78.0	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.12	<0.0002	<0.0002
Phase IV, Geomatnx, Nov. 1986	W16A	99.0	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.04	<0.0002	<0.0002
Phase IV, Geomatrix, Nov. 1986	W16A	119.0	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.11	<0.0002	<0.0002
Geomatrix, 16 November 1987	E17A	21.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, 16 November 1987	E17A	40.7	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, 16 November 1987	E17A	60.75	0.02	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	<0.01
Geomatrix, 16 November 1987	E17A	71.5	<0.01	0.03	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Geomatrix, 16 November 1987	E17A	81.0	<0.01	<0.01	<0.01	0.01	<0.01	0.12	<0.01	0.01
Geomatrix, 16 November 1987	E17A	91.0	<0.01	0.01	<0.01	0.01	<0.01	0.06	<0.01	0.01
Geomatrnx, 16 November 1987	E17AS	100.7	0.25	1 3	<0.01	<0.01	<0.01	<0.01	<0.01	<0 01
Geomatrix, 16 November 1987	E17AS	111 5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrnx, 16 November 1987	E17AS	121.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, 16 November 1987	E17AR	112.0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, March 1988	W18B	10.9	<0.01	1.5	0.05	<0.01	<0.01	0.09	<0.01	<0.01
Geomatrnx, March 1988	W18B	20.9	<0.01	0.19	0.01	<0.01	<0.01	0.09	<0.01	<0.01
Geomatrix, March 1988	W18B	30.9	<0.01	0.12	<0.01	<0.01	<0.01	0.08	<0.01	<0.01
Geomatrix, March 1988	W18B	41.5	<0.01	2.5	<0.01	<0.01	<0.01	0.15	<0.01	<0.01
Geomatrix, March 1988	W18B	51.0	<0.01	4.7	<0.01	<0.01	<0.01	0.04	<0.01	<0.01
Geomatrnx, March 1988	W18B	60.8	<0.01	2.5	<0.01	<0.01	<0.01	0.14	<0.01	<0.01
Geomatrnx, March 1988	W18B	80.5	<0.01	3.6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, March 1988	W18B	90.5	<1.0	6.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Geomatrix, March 1988	W18B	111.2	<0.01	0.32	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, March 1988	W18B	120 7	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLOR BENZEN
Geomatrix, March 1988	W18B	130.5	<0.5	0.70	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Geomatrix, March 1988	W18B	140.7	0.02	0.45	<0.01	0.02	<0.01	0.01	<0.01	<0.01
Geomatrix, March 1988	W18B	151.7	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01
Geomatrix, March 1988	W18B	156.2	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Geomatrix, March 1988	W19B[6]	10.9	<0.01	<0.01	<0.01	<0.01	<0.01	0.31	<0.01	<0.01
Geomatrix, March 1988	W19B	21.0	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	<0.01	<0.01
Geomatrix, March 1988	W19B	31.9	<0.01	0.02	<0.01	<0.01	<0.01	0.09	<0.01	<0.01
Geomatrix, March 1988	W19B	41.2	<0.01	0.22	<0.01	<0.01	<0.01	0.12	<0.01	<0.01
Geomatrix, March 1988	W19B	50.6	<0.01	1.1	<0.01	<0.01	<0.01	0.39	<0.01	<0.01
Geomatrix, March 1988	W19B	60.6[b]	<0.01	0.38	<0.01	<0.01	<0.01	0.069	<0.01	<0.01
Geomatrix, March 1988	W19B	69.9	<0.01	0.53	<0.01	<0.01	<0.01	0.08	<0.01	<0.01
Geomatrix, March 1988	W19B	81.0[7]	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	<0.01
Geomatrix, March 1988	W19B	90.5	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	<0.01
Geomatrix, March 1988	W19B	101.3	<0.01	6.2	<0.01	<0.01	<0.01	0.21	<0.01	<0.01
Geomatrix, March 1988	W19B	110.5	<0.01	0.01	<0.01	<0.01	<0.01	0.12	<0.01	<0.01
Geomatrix, March 1988	W19B	122.3	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01
Geomatrix, March 1988	W19B	131.1	<0.01	<0.01	0.04	<0.01	<0.01	0.06	<0.01	<0.01
Geomatrix, March 1988	W19B	141.0	0.03	0.22	<0.01	<0.01	<0.01	0.02	<0.01	<0.01
Geomatrix, March 1988	W19B	156.8[b]	<0.01	<0.01	0.01	<0.2	<0.01	0.06	<0.01	<0.01
Geomatrix, March 1988	W20B[6]	11.7	0.01	0.02	<0.1	0.01	<0.1	0.01	<0.1	<0.1
Geomatrix, March 1988	W20B	20.7	<0.1	0.04	<0.1	<0.1	<0.1	0.05	<0.1	<0.1
Geomatrix, March 1988	W20B	31.5	0.03	0.16	0.07	<0.1	<0.1	0.12	<0.1	<0.1
Geomatrix, March 1988	W20B	40.8	0.05	0.16	0.08	0.01	<0.1	0.57	<0.1	<0.1
Geomatrix, March 1988	W20B	50.0	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Geomatrix, March 1988	W20B	60.7	<0.1	<0.1	<0.1	<0.1	<0.1	0.05	<0.1	<0.1
Geomatrix, March 1988	W20B	69.5	<0.5	3.9	<0.5	<0.5	<0.5	0.50	<0.5	<0.5
Geomatrix, March 1988	W20B	79.5	<0.5	3.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Geomatrix, March 1988	W20B	90.5	<0.1	0.02	<0.1	<0.1	<0.1	0.10	<0.1	<0.1
Geomatrix, March 1988	W20B	100.8	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Geomatrix, March 1988	W20B	121.8	<0.1	<0.1	<0.1	<0.1	<0.1	0.15	<0.1	<0.1
Geomatrix, March 1988	W20B	131.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.09	<0.1	<0.1
Geomatrix, March 1988	W20B	141.8[8]	<0.1	<0.1	<0.1	<0.1	<0.1	0.08	<0.1	<0.1
Geomatrix, March 1988	W20B	156.0	<0.1	<0.1	<0.1	<0.1	<0.1	0.03	<0.1	<0.1
Geomatrix, March 1988	W21A[6]	7.5	<0.01	<0.01	<0.01	<0.01	<0.01	0.18	<0.01	<0.01
Geomatrix, March 1988	W21A	11.3	0.01	0.01	<0.01	<0.01	<0.01	0.32	<0.01	<0.01
Geomatrix, March 1988	W21A	14.9	<0.01	0.01	<0.01	<0.01	<0.01	0.19	<0.01	<0.01
Geomatrix, March 1988	W21A	22.0	0.01	0.04	0.01	<0.01	<0.01	0.16	<0.01	<0.01
Geomatrix, March 1988	W21A	25.3	0.03	0.12	0.02	0.01	0.01	0.27	<0.01	<0.01
Geomatrix, March 1988	W21A	31.4	0.03	0.29	0.05	<0.01	<0.01	0.31	<0.01	<0.01
Geomatrix, March 1988	W21A	35.8	0.03	0.23	0.04	<0.01	<0.01	0.50	<0.01	<0.01
Geomatrix, March 1988	W21A	45.3	0.03	0.60	0.03	0.01	<0.01	0.71	<0.01	<0.01
Geomatrix, March 1988	W21A	50.5	0.04	1.4	0.04	<0.01	<0.01	0.78	<0.01	<0.01
Geomatrix, March 1988	W21A	55.1[9]	0.43	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, March 1988	W21A	60.6	<0.01	<0.01	0.03	<0.01	<0.01	0.08	<0.01	<0.01
Geomatrix, March 1988	W21A	65.3	<0.01	1.1	0.01	<0.01	<0.01	0.08	<0.01	<0.01
Geomatrix, March 1988	W21A	67.7	<0.01	0.92	<0.01	<0.01	<0.01	0.13	<0.01	<0.01

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO BENZENES
Geomatrix, March 1988	W21A[6]	69.7	<0.01	3.4	<0.01	<0.01	<0.01	0.82	<0.01	<0.01
Geomatrix, March 1988	W21A	71.1	<0.01	2.4	<0.01	<0.01	<0.01	0.44	<0.01	<0.01
Geomatrix, March 1988	W21A	75.8[10]	<0.01	2.3	<0.01	<0.01	<0.01	0.20	<0.01	<0.01
Geomatrix, March 1988	W21A	78.0[10]	<0.01	1.7	<0.01	<0.01	<0.01	0.18	<0.01	<0.01
Geomatrix, March 1988	W21A	80.4[10]	<0.01	1.8	<0.01	<0.01	<0.01	0.15	<0.01	<0 01
Geomatrix, March 1988	W21A	83.1[10]	<0.01	0.79	<0.01	<0.01	<0.01	0.09	<0.01	<0.01
Geomatrix, March 1988	W21A	85.4[10]	<0.01	1.20	0.29	<0.01	<0.01	0.41	<0.01	<0.01
Geomatrix, March 1988	W21A	90.1[11]	<0.01	0.33	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, March 1988	W21A	96.8	<0.01	0.34	<0.01	<0.01	<0.01	0.06	<0.01	<0.01
Geomatrix, March 1988	W21A	99.9	<0.01	1 4	<0.01	<0.01	<0.01	0.04	<0.01	<0.01
Geomatrix, March 1988	W21A	131.5	<0.01	<0.01	<0.01	<0.01	<0.01	0.17	<0.01	<0.01
Geomatrix, March 1988	W22A[6]	2.7	<0.01	<0.01	<0.01	<0.01	<0.01	0.89	<0.01	<0.01
Geomatrix, March 1988	W22A	5.9	<0.01	<0.01	<0.01	<0.01	<0.01	0.24	<0.01	<0.01
Geomatrix, March 1988	W22A	11.1	<0.01	<0.01	<0.01	<0.01	<0.01	0.15	<0.01	<0.01
Geomatrix, March 1988	W22A	17.2	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01
Geomatrix, March 1988	W22A	24.3	<0.01	0.10	<0.01	<0.01	<0.01	0.30	<0.01	<0.01
Geomatrix, March 1988	W22A	29.1	<0.01	0.10	<0.01	<0.01	<0.01	0.10	<0.01	<0.01
Geomatrix, March 1988	W22A	33.8	<0.01	0.50	0.01	<0.01	<0.01	0.13	<0.01	<0.01
Geomatrix, March 1988	W22A	37.7	<0.01	0.45	<0.01	<0.01	<0.01	0.10	<0.01	<0.01
Geomatrix, March 1988	W22A	44.2	<0.01	0.83	<0.01	<0.01	<0.01	0.31	<0.01	<0.01
Geomatrix, March 1988	W22A	52.4	<0.01	0.63	<0.01	<0.01	<0.01	0.08	<0.01	<0.01
Geomatrix, March 1988	W22A	56.1[10]	<0.01	4.2	<0.01	<0.01	<0.01	0.39	<0.01	<0.01
Geomatrix, March 1988	W22A	65.8	<0.01	0.93	<0.01	<0.01	<0.01	0.16	<0.01	<0.01
Geomatrix, March 1988	W22A	72.7	<0.01	2.1	<0.01	<0.01	<0.01	0.10	<0.01	<0.01
Geomatrix, March 1988	W22A	76.5[10]	<0.01	2.1	<0.01	<0.01	<0.01	0.12	<0.01	<0.01
Geomatrix, March 1988	W22A	80.9[10]	<0.01	4.4	<0.01	<0.01	<0.01	0.28	<0.01	<0.01
Geomatrix, March 1988	W22A	88.3	<0.01	0.15	<0.01	<0.01	<0.01	0.08	<0.01	<0.01
Geomatrix, March 1988	W22A	94.0	<0.01	0.17	<0.01	<0.01	<0.01	0.10	<0.01	<0.01
Geomatrix, March 1988	W22A	95.5	<0.01	0.55	<0.01	<0.01	<0.01	0.12	<0.01	<0.01
Geomatrix, March 1988	W22A	101.1	<0.01	0.96	<0.01	<0.01	<0.01	0.21	<0.01	<0.01
Geomatrix, March 1988	W22A	112.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0 01
Geomatrix, March 1988	W22A	121.5[10]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Geomatrix, Oct. 1988	SE-1	7.6	<0.0005	0.0012	0.0011	<0.0005	<0.0005	0.011	<0.001	<0.001
Geomatrix, Oct. 1988	SE-2	7.5	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0037	<0.001	0.010
Geomatrix, Oct. 1988	ENS-1	15.2	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001
Geomatrix, Oct. 1988	ENS-2	15.2	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001
Geomatrix, Oct. 1988	SN-1	15.0	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	0.0006	<0.001	<0.001
Geomatrix, Oct. 1988	SN-2	15.0	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	0.0013	<0.001	<0.001
Geomatrix, Oct. 1988	NNS-1	20.0	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	0.0023	<0.001	<0.001
Geomatrix, Oct. 1988	NNS-2	20.0	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	0.011	<0.001	<0.001

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO BENZENE
Beak, June 1989	RI-1	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-1	20	<0.005	<0.005	<0.005	<0.005	<0.005	0.037	<0.005	<0.005
Beak, June 1989	RI-1 DUP	20	<0.005	<0.005	<0.005	<0.005	<0.005	0.037	<0.005	<0.005
Beak, June 1989	RI-1	30	<0.005	0.013	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Beak, June 1989	RI-1	40	<0.005	0.007	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, June 1989	RI-1	49.5	<0.005	0.006	<0.005	<0.005	<0.005	0.011	<0.005	<0.005
Beak, June 1989	RI-1	50	<0.005	0.006	<0.005	<0.005	<0.005	0.038	<0.005	<0.005
Beak, June 1989	RI-1	59	<0.005	0.044	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-1	69.5	<0.005	0.006	<0.005	<0.005	<0.005	0.015	<0.005	<0.005
Beak, June 1989	RI-1	79	<0.005	0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, June 1989	RI-1	90	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, June 1989	RI-1	99.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.039	<0.005	<0.005
Beak, June 1989	RI-1 DUP	99.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.029	<0.005	<0.005
Beak, June 1989	RI-2	10	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, June 1989	RI-2	20	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Beak, June 1989	RI-2	30	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-2	40	<0.005	0.006	<0.005	0.008	<0.005	0.016	<0.005	<0.005
Beak, June 1989	RI-2	49.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.017	<0.005	<0.005
Beak, June 1989	RI-2	50	<0.005	0.008	<0.005	<0.005	<0.005	0.040	<0.005	<0.005
Beak, June 1989	RI-2	60	<0.005	0.079	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-2	70	<0.005	0.065	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-2	79	<0.005	0.006	<0.005	<0.005	<0.005	0.042	<0.005	<0.005
Beak, June 1989	RI-2	89.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, June 1989	RI-2	99.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.041	<0.005	<0.005
Beak, June 1989	RI-3	10	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005
Beak, June 1989	RI-3	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-3	30	<0.005	0.017	<0.005	<0.005	<0.005	0.015	<0.005	<0.005
Beak, June 1989	RI-3	39.5[12]	<0.005	0.021	<0.005	<0.005	<0.005	0.038	<0.005	<0.005
Beak, June 1989	RI-3	49.5[13]	<0.005	0.007	<0.005	<0.005	<0.005	0.064	<0.005	<0.005
Beak, June 1989	RI-3	59.5[14]	<0.005	<0.005	<0.005	<0.005	<0.005	0.041	<0.005	<0.005
Beak, June 1989	RI-3	60[15]	<0.005	0.006	<0.005	<0.005	<0.005	0.087	<0.005	<0.005
Beak, June 1989	RI-3 DUP	60[16]	<0.005	0.010	<0.005	<0.005	<0.005	0.085	<0.005	<0.005
Beak, June 1989	RI-3	69	<0.005	0.010	<0.005	<0.005	<0.005	0.024	<0.005	<0.005
Beak, June 1989	RI-3	79.5	<0.005	0.024	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, June 1989	RI-3	89.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.091	<0 005	<0.005
Beak, June 1989	RI-3 DUP	89.5	<0.005	<0.005	<0.005	<0.005	<0.005	0 100	<0.005	<0.005
Beak, June 1989	RI-3	99[17]	<0.005	<0.005	<0.005	<0.005	<0.005	0.083	<0.005	<0.005
Beak, June 1989	RI-4	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0 005
Beak, June 1989	RI-4	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	30	<0.005	0.030	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	44.5	<0.005	0.064	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4 DUP	44.5	<0.005	0.064	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	49.0	<0.005	0.040	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	49.5	<0.005	0.019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	60	<0.005	2.600	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO-BENZENES
Beak, June 1989	RI-4	60	<0.005	2.200	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	69.5	<0.005	0.068	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	80	<0.005	0.029	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	90	<0.005	0.370	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-4	98.5	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	30	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	39.5	<0.005	0.085	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	50	<0.005	0.034	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Beak, June 1989	RI-5	59.5	<0.005	3.000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	60	<0.005	1.700	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	70	<0.005	0.300	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5 DUP	70	<0.005	0.390	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	80	<0.005	0.059	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	90	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-5	100	<0.005	0.014	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	29.5	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	39.5	<0.005	0.023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	49	<0.005	0.038	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	49.5	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	59.5	<0.005	1.500	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	59.5	<0.005	1.400	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	70	<0.005	1.200	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	80	<0.005	0.550	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	89.5	<0.005	1.000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-6	100	<0.005	1.600	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	30	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	40	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	49.5	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	50	<0.005	0.022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	60	<0.005	0.750	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	69.5	<0.005	0.110	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	78.5	<0.005	0.033	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	88.5	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-7	99	<0.005	0.037	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO-BENZENES
Beak, June 1989	RI-8	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
Beak, June 1989	RI-8	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, June 1989	RI-8	29.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005
Beak, June 1989	RI-8	39	<0.005	0.022	<0.005	<0.005	<0.005	0.020	<0.005	<0.005
Beak, June 1989	RI-8	49.5	<0.005	0.044	<0.005	<0.005	<0.005	0.071	<0.005	<0.005
Beak, June 1989	RI-8	59.5[18]	<0.05	10.000	<0.05	<0.05	<0.05	<0.05	0.180	0.050
Beak, June 1989	RI-8	69	<0.05	0.018	<0.05	<0.05	<0.005	0.023	<0.005	<0.005
Beak, June 1989	RI-8	69.5	<0.05	0.024	<0.05	<0.05	<0.005	0.017	<0.005	<0.005
Beak, June 1989	RI-8	79.5	<0.05	0.120	<0.05	<0.05	<0.005	0.016	<0.005	<0 005
Beak, June 1989	RI-8	89.5	<0.05	0.057	<0.05	<0.05	<0.005	0.049	<0.005	<0 005
Beak, June 1989	RI-8	99	<0.05	0.028	<0.05	<0.05	<0.005	0.026	<0.005	<0.005
Beak, June 1989	RI-8 DUP	99	<0.05	0.027	<0.05	<0.05	<0.005	0.027	<0.005	<0.005
Beak, June 1989	RI-9	10	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, June 1989	RI-9	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005
Beak, June 1989	RI-9	29.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.047	<0.005	<0.005
Beak, June 1989	RI-9	40	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-9	49.5	<0.005	0.006	<0.005	<0.005	<0.005	0.060	<0.005	<0.005
Beak, June 1989	RI-9	50	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Beak, June 1989	RI-9	60	<0.005	0.005	<0.005	<0.005	<0.005	0.010	<0.005	<0.005
Beak, June 1989	RI-9	69.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, June 1989	RI-9	79.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	<0.005
Beak, June 1989	RI-9	90	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-9	100	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-10	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-10	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Beak, June 1989	RI-10	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-10	30	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	<0.005
Beak, June 1989	RI-10 DUP	30	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Beak, June 1989	RI-10	39.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.017	<0.005	<0.005
Beak, June 1989	RI-10	49.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005
Beak, June 1989	RI-10	50	<0.005	<0.005	<0.005	<0.005	<0.005	0.020	<0.005	<0.005
Beak, June 1989	RI-10	60	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
Beak, June 1989	RI-10	69.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.035	<0.005	<0.005
Beak, June 1989	RI-10	80	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
Beak, June 1989	RI-10	90	<0.005	<0.005	<0.005	<0.005	<0.005	0.028	<0.005	<0.005
Beak, June 1989	RI-10	100	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
Beak, June 1989	RI-11	10	<0.005	<0.005	<0.005	<0.005	<0.005	0.022	<0.005	<0.005
Beak, June 1989	RI-11	20	<0.005	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	<0 005
Beak, June 1989	RI-11	29.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.064	<0.005	<0.005
Beak, June 1989	RI-11 DUP	29.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.070	<0.005	<0 005
Beak, June 1989	RI-11	40	<0.005	<0.005		<0.005	<0.005	0.030	<0.005	<0.005
Beak, June 1989	RI-11	48.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.065	<0.005	<0.005
Beak, June 1989	RI-11	49.5	<0.005	0.006	<0.005	<0.005	<0.005	0.057	<0.005	<0.005
Beak, June 1989	RI-11	60	<0.005	0.007	<0.005	<0.005	<0.005	0.079	<0.005	<0.005

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO-BENZENES
Beak, June 1989	RI-11	69.5[19]	<0.005	0.170	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, June 1989	RI-11	80	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, June 1989	RI-11	90	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, June 1989	RI-11	99.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-12	10	<0.005	<0.005	<0.005	<0.005	<0.005	0.035	<0.005	<0.005
Beak, June 1989	RI-12	19.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.033	<0.005	<0.005
Beak, June 1989	RI-12	30	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Beak, June 1989	RI-13	9	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Beak, June 1989	RI-13	19	<0.005	<0.005	<0.005	<0.005	<0.005	0.017	<0.005	<0.005
Beak, June 1989	RI-13	28	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-14	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-14	19	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Beak, June 1989	RI-14	29	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Beak, June 1989	RI-15	8	<0.005	<0.005	<0.005	<0.005	<0.005	0.010	<0.005	<0.005
Beak, June 1989	RI-15	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
Beak, June 1989	RI-15 DUP	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Beak, June 1989	RI-15	19	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Beak, June 1989	RI-15	29	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, June 1989	RI-16	9[20]	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, June 1989	RI-16	18.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	<0.005
Beak, June 1989	RI-16	29	<0.005	<0.005	<0.005	<0.005	<0.005	0.031	<0.005	<0.005
Beak, August 1989	RI-17	10	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-17	20	<0.005	0.028	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-17	30	<0.005	0.096	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, August 1989	RI-17	39.5	<0.005	0.077	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, August 1989	RI-17	49.5	<0.005	0.094	<0.005	<0.005	<0.005	0.011	<0.005	<0.005
Beak, August 1989	RI-17	59.5	<0.005	0.160	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-17	69.5	<0.005	0.076	<0.005	<0.005	<0.005	0.010	<0.005	<0.005
Beak, August 1989	RI-17	70[21]	<0.005	0.065	<0.005	<0.005	<0.005	0.010	<0.005	<0.005
Beak, August 1989	RI-17	79.5[22]	<0.005	0.023	<0.005	<0.005	<0.005	0.019	<0.005	<0.005
Beak, August 1989	RI-17	84.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, August 1989	RI-17	99.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005
Beak, August 1989	RI-18	6	<0.005	<0.005	<0.005	<0.005	<0.005	0.062	<0.005	<0.005
Beak, August 1989	RI-18	11	<0.005	<0.005	<0.005	<0.005	<0.005	0.110	<0.005	<0.005
Beak, August 1989	RI-18	11.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.094	<0.005	<0.005
Beak, August 1989	RI-18	16	<0.005	0.025	<0.005	<0.005	<0.005	0.083	<0.005	<0.005
Beak, August 1989	RI-18	21.5	<0.005	0.007	<0.005	<0.005	<0.005	0.053	<0.005	<0.005
Beak, August 1989	RI-18	26.5	<0.005	0.010	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Beak, August 1989	RI-18	36	<0.005	0.043	0.015	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-18	46	<0.005	0.026	<0.005	<0.005	<0.005	0.062	<0.005	0.555

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO-BENZENES
Beak, August 1989	RI-19	6	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, August 1989	RI-19	6.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.038	<0.005	<0.005
Beak, August 1989	RI-19	11.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.022	<0.005	<0.005
Beak, August 1989	RI-19	16.5	<0.005	0.011	<0.005	<0.005	<0.005	0.082	<0.005	<0.005
Beak, August 1989	RI-19	21	<0.005	0.009	<0.005	<0.005	<0.005	0.095	<0.005	<0.005
Beak, August 1989	RI-19	26.5	<0.005	0 012	<0.005	<0.005	<0.005	0.096	<0.005	<0.005
Beak, August 1989	RI-19	36.5	<0.005	0.126	0.015	<0.005	<0.005	0.007	<0.005	<0.005
Beak, August 1989	RI-19	46.5	<0.005	0.035	<0.005	<0.005	<0.005	0.082	<0.005	<0.005
Beak, August 1989	RI-20	6	<0.005	<0.005	<0.005	<0.005	<0.005	0.066	<0.005	<0.005
Beak, August 1989	RI-20	11.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.026	<0.005	<0.005
Beak, August 1989	RI-20	15.5	<0.005	0.017	<0.005	<0.005	<0.005	0.070	<0.005	<0.005
Beak, August 1989	RI-20	16	<0.005	0.009	<0.005	<0.005	<0.005	0.064	<0.005	<0.005
Beak, August 1989	RI-20	2123	<0.005	0.010	<0.005	<0.005	<0.005	0.028	<0.005	<0.005
Beak, August 1989	RI-20	2623	<0.005	<0 005	<0.005	<0.005	<0.005	0.035	<0.005	<0.005
Beak, August 1989	RI-20	36	<0.005	0.055	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-20	45	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-21	5.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.041	<0.005	<0.005
Beak, August 1989	RI-21	11.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.021	<0.005	<0 005
Beak, August 1989	RI-21	15.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.027	<0.005	<0.005
Beak, August 1989	RI-21	16	<0.005	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	<0.005
Beak, August 1989	RI-21	21	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-21	25.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.020	<0.005	<0.005
Beak, August 1989	RI-21	36	<0.005	0.035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-21	46	<0.005	0.078	<0.005	<0.005	<0.005	0.017	<0.005	<0.005
Beak, August 1989	RI-22	6	<0.005	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-22	11	<0.005	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-22	16	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-22	20.5	<0.005	0.014	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, August 1989	RI-22	25.5	<0.005	0.010	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, August 1989	RI-22	26.5	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-22	36.5	<0.005	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-22	45.5	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0 005
Beak, August 1989	RI-23	5.5	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-23	10.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0 005
Beak, August 1989	RI-23	15.5	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-23	20.5	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-23	26	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-23	35.5	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-23	36	<0.005	0.013	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-23	45.5	<0.005	0.021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES1
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO-BENZENES
Beak, August 1989	RI-24	8	<0.005	0.010	<0.005	<0.005	<0.005	0.034	<0.005	<0.005
Beak, August 1989	RI-24	12.5	<0.005	0.032	<0.005	<0.005	<0.005	0.058	<0.005	<0.005
Beak, August 1989	RI-24	17.5	<0.005	0.059	0.005	<0.005	<0.005	0.130	<0.005	<0.005
Beak, August 1989	RI-24	23	<0.005	0 044	<0.005	<0.005	<0.005	0.095	<0.005	<0.005
Beak, August 1989	RI-24	28.5	<0.005	0.028	<0.005	<0.005	<0.005	0.120	<0.005	<0.005
Beak, August 1989	RI-24	33.5	<0.005	0.125	0.022	<0.005	<0.005	0.051	<0.005	<0.005
Beak, August 1989	RI-24	38.5	<0.005	0.067	<0.005	<0.005	<0.005	0.140	<0.005	<0.005
Beak, August 1989	RI-24	42.5	<0.005	0.060	0.007	<0.005	<0.005	0.130	<0.005	<0.005
Beak, August 1989	RI-24	46	<0.005	0.049	<0.005	<0.005	<0.005	0.170	<0.005	<0.005
Beak, August 1989	RI-25	6.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-25	11	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-25	16	<0.005	0.034	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-25	16.5	<0.005	0.022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-25	21	<0.005	0.023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-25	26.5	<0.005	0.030	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-25	36.5	<0.005	0.021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-25	46.5	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-26	5.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-26	11	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0 005
Beak, August 1989	RI-26	16	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-26	21	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-26	26	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-26	36	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-26	46.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-27	6	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-27	11	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-27	16	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Beak, August 1989	RI-27	20.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-27	21	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, August 1989	RI-27	26.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-27	35	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-27	44.5	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-28	6	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-28	11	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-28	15.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-28	16	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-28	21	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005
Beak, August 1989	RI-28	26	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-28	35.5	<0.005	0.013	<0.005	<0.005	<0.005	0.015	<0.005	<0.005

TABLE 2.2.a (continued)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES1
Concentrations in milligrams per kilogram (mg/kg or ppm)

INVESTIGATION PHASE	BORING ID	DEPTH (FT)	1,1,1-TCA	TCE	PCE	FREON 113	BENZENE	TOLUENE	XYLENE	DICHLORO-BENZENES
Beak, August 1989	RI-29	11	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Beak, August 1989	RI-29	16	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Beak, August 1989	RI-29	21	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Beak, August 1989	RI-29	26	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Beak, August 1989	RI-29	35	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005
Beak, August 1989	RI-29	40.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-30	6.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-30	10.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Beak, August 1989	RI-30	11	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, August 1989	RI-30	16.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, August 1989	RI-30	20	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005
Beak, August 1989	RI-30	26.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Beak, August 1989	RI-30	36	<0.005	<0.005	<0.005	<0.005	<0.005	0.027	<0.005	<0.005
Beak, August 1989	RI-30	39.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Beak, January 1990	RI-31	9.5	<0.005	.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-31	20	<0.005	.019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-31	30	<0.005	.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-31	39.5	<0.005	.023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-31	50	<0.005	.044	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-31	59.5	<0.005	.200	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-31	70	<0.005	.063	<0.005	<0.005	<0.005	.010	<0.005	<0.005
Beak, January 1990	RI-31	80.5	<0.005	.051	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-31	90	<0.005	.06	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-32	10	<0.005	<0.005	<0.005	<0.005	<0.005	.055	<0.005	<0.005
Beak, January 1990	RI-32	20	<0.005	.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-32	29.5	<0.005	.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-32	39.5	<0.005	.028	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-32	50	<0.005	.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-32	59.5	<0.005	.081	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beak, January 1990	RI-32	69.5	<0.005	.045	<0.005	<0.005	<0.005	.022	<0.005	<0.005
Beak, January 1990	RI-32	80	<0.005	.550	<0.005	<0.005	<0.005	.095	<0.005	<0.005
Beak, January 1990	RI-32	89.5	<0.005	.047	<0.005	<0.005	<0.005	.061	<0.005	<0.005
Beak, January 1990	RI-32	97	<0.005	.067	<0.005	<0.005	<0.005	.140	<0.005	<0.005

TABLE 2.2.a (concluded)
SUMMARY OF SOIL CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

Notes:
1 All analyses performed by EPA Test Methods 8010, 8020 and/or 8240.
2 Well W1A has been converted to vapor extraction well VE-2.
3 1,1-dichloroethylene (1,1-DCE) detected at 0.0002 ppm, chloroform detected at 0.0002 ppm.
4 1,1-DCE detected at 0.0015 ppm, chloroform detected at 0.0008 ppm.
5 1,1-DCE detected at 0.01 ppm.
6 Wells installed at Siemens by Intersil
7 Methylene chloride detected at 0.02 ppm.
8 Ethyl benzene detected at 0.07 ppm.
9 1,1-DCE detected at 0.87 ppm.
10 Samples were analyzed 1 to 21 days over the prescribed holding time
11 Ethyl benzene detected at 0.10 ppm.
12 2-butanone detected a 0.052 ppm.
13 2-butanone detected a 0.05 ppm.
14 2-butanone detected a 0.036 ppm.
15 2-butanone detected a 0.035 ppm.
16 2-butanone detected a 0.042 ppm.
17 2-butanone detected a 0.065 ppm.
18 Ethyl benzene detected at 0.07 ppm
19 1,2-DCE detected at 0.01 ppm.
20 1,2-DCE detected at 0.006 ppm.
21 2-butanone detected at 0.047 ppm.
22 2-butanone detected at 0.030 ppm.
23 Unknown compound (scan #1062) detected at an estimated concentration of 10 ppb.

SE = east sump
ENS = east neutralization system
SN = north sump
NNS = north neutralization system
INS = inactive neutralization system (removed in July 1986)

TABLE 2.2.b
SUMMARY OF SOIL CHEMISTRY DATA - SEMI-VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

Investigation Phase	Boring ID	Sample Depth (ft.)	Dichloro-benzenes	Phenols (total)	Trichloro-benzenes	Other
Phase II, Cooper, October 1985	B1A	84.5	<0.1	<3	<0.1	
Phase III, Cooper, April 1986	B7A	81.0	<0.1	<3	<0.1	Hydrocarbon[2] - 20 Benzo(a)pyrene - 0.5
Phase III, Cooper, April 1986	B8A	13.5	<0.1	<3	<0.1	Benzo(a)pyrene - 0.5
Phase III, Cooper, April 1986	B8A	79.0	<0.1	<3	<0.1	
Beak, 1989a	RI-1	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-1	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-2	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-2	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-3	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-3	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-4	9.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-4	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-4	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-5	9.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-5	19.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-6	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-6	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-7	9.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-7	19.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-8	9.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-8	19.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-9	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-9	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-10	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-10	19.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-10	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-11	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-11	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-12	10.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-12	19.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-13	9.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-13	19.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-13	28.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-14	8.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-14	19.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-14	29.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-15	8.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-15	8.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-15	19.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-15	20.0	<0.33	<1.6	<0.33	
Beak, 1989a	RI-16	9.0	<0.33	<1.6	<0 33	
Beak, 1989a	RI-16	18.5	<0.33	<1.6	<0.33	
Beak, 1989a	RI-16	29.0	<0.33	<1.6	<0.33	

Notes:
[1] All analyses performed by EPA Test Method 625 or 8270.
[2] Semi-quantified.

TABLE 2.2.c
SUMMARY OF SOIL CHEMISTRY DATA - INORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

Investigation Phase	Boring I.D.	Depth (feet)	Ag	As	B	Be	Total Cr	Cu	Hg	Ni	Pb	Sb	Tl	Zn	CN
Phase I, Cooper, Feb. 1982	1	Composite[2]	NA	40	0.27	NA	29	NA	NA	NA	NA	ND	NA	74	NA
Phase I, Cooper, Feb. 1985	2	Composite[3]	NA	35	0.79	NA	36	NA	NA	NA	NA	ND	NA	85	NA
Phase II, Cooper, Oct. 1985	W1A	4.5	NA	15	ND	NA	32	NA	NA	NA	NA	ND	NA	60	NA
Phase II, Cooper, Oct. 1985	W1A	10	NA	3	ND	NA	20	NA	NA	NA	NA	ND	NA	42	NA
Phase II, Cooper, Oct. 1985	W1A	15	NA	14	ND	NA	28	NA	NA	NA	NA	ND	NA	47	NA
Phase II, Cooper, Oct. 1985	W1A	20	NA	8	ND	NA	30	NA	NA	NA	NA	ND	NA	52	NA
Phase II, Cooper, Oct. 1985	B2A	5	NA	13	ND	NA	33	NA	NA	NA	NA	ND	NA	130	NA
Phase II, Cooper, Oct. 1985	B2A	10	NA	10	ND	NA	56	NA	NA	NA	NA	ND	NA	35	NA
Phase II, Cooper, Oct. 1985	B2A	15	NA	3.8	ND	NA	31	NA	NA	NA	NA	ND	NA	28	NA
Phase II, Cooper, Oct. 1985	B2A	20	NA	8.8	ND	NA	23	NA	NA	NA	NA	ND	NA	57	NA
Phase II, Cooper, Oct. 1985	B3A	5	NA	13	ND	NA	44	NA	NA	NA	NA	ND	NA	63	NA
Phase II, Cooper, Oct. 1985	B3A	10	NA	15	ND	NA	38	NA	NA	NA	NA	ND	NA	75	NA
Phase II, Cooper, Oct. 1985	B3A	15	NA	10	ND	NA	28	NA	NA	NA	NA	ND	NA	55	NA
Phase II, Cooper, Oct. 1985	B3A	20	NA	8.9	ND	NA	24	NA	NA	NA	NA	ND	NA	54	NA
Phase II, Cooper, Oct. 1985	B4A	3.5	NA	15	ND	NA	69	NA	NA	NA	NA	ND	NA	65	NA
Phase II, Cooper, Oct. 1985	B4A	8.5	NA	ND	ND	NA	44	NA	NA	NA	NA	ND	NA	50	NA
Phase II, Cooper, Oct. 1985	B4A	13.5	NA	2.5	ND	NA	34	NA	NA	NA	NA	ND	NA	54	NA
Phase II, Cooper, Oct. 1985	B4A	18.5	NA	ND	ND	NA	53	NA	NA	NA	NA	ND	NA	51	NA
Phase II, Cooper, Oct. 1985	B4A	23.5	NA	3.6	ND	NA	36	NA	NA	NA	NA	ND	NA	53	NA
Phase II, Cooper, Oct. 1985	B5A	2.5	NA	1.6	ND	NA	54	NA	NA	NA	NA	ND	NA	67	NA
Phase II, Cooper, Oct. 1985	B5A	5	NA	18	ND	NA	60	NA	NA	NA	NA	ND	NA	62	NA
Phase II, Cooper, Oct. 1985	B5A	10	NA	7.4	ND	NA	37	NA	NA	NA	NA	ND	NA	49	NA
Phase II, Cooper, Oct. 1985	B5A	15	NA	2.9	ND	NA	35	NA	NA	NA	NA	ND	NA	74	NA
Phase II, Cooper, Oct. 1985	B5A	19	NA	1.7	ND	NA	44	NA	NA	NA	NA	ND	NA	39	NA
Phase II, Cooper, Oct. 1985	B6A	2.5	NA	1.9	ND	NA	51	NA	NA	NA	NA	ND	NA	55	NA
Phase II, Cooper, Oct. 1985	B6A	5	NA	6.5	ND	NA	43	NA	NA	NA	NA	ND	NA	110	NA
Phase II, Cooper, Oct. 1985	B6A	10	NA	15	ND	NA	37	NA	NA	NA	NA	ND	NA	88	NA
Phase II, Cooper, Oct. 1985	B6A	12.5	NA	ND	ND	NA	28	NA	NA	NA	NA	ND	NA	47	NA
Phase III, Cooper, April 1986	B7A	3.5	NA	20	NA	NA	60	NA	NA	NA	NA	ND	NA	71	NA
Phase III, Cooper, April 1986	B7A	7.5	NA	19	NA	NA	46	NA	NA	NA	NA	ND	NA	60	NA
Phase III, Cooper, April 1986	B7A	10.5	NA	20	NA	NA	34	NA	NA	NA	NA	ND	NA	60	NA
Phase III, Cooper, April 1986	B7A	15.5	NA	18	NA	NA	46	NA	NA	NA	NA	ND	NA	66	NA
Phase III, Cooper, April 1986	B7A	19.5	NA	13	NA	NA	48	NA	NA	NA	NA	ND	NA	62	NA
Phase III, Cooper, April 1986	B8A (W2A)	3.5	NA	28	NA	NA	58	NA	NA	NA	NA	ND	NA	68	NA
Phase III, Cooper, April 1986	B8A (W2A)	6.5	NA	20	NA	NA	52	NA	NA	NA	NA	ND	NA	60	NA
Phase III, Cooper, April 1986	B8A (W2A)	9.5	NA	16	NA	NA	38	NA	NA	NA	NA	ND	NA	56	NA
Phase III, Cooper, April 1986	B8A (W2A)	13.5	NA	13	NA	NA	41	NA	NA	NA	NA	ND	NA	62	NA
Phase III, Cooper, April 1986	B8A (W2A)	16.5	NA	12	NA	NA	52	NA	NA	NA	NA	ND	NA	52	NA
Phase III, Cooper, April 1986	B8A (W2A)	20.5	NA	9.6	NA	NA	52	NA	NA	NA	NA	ND	NA	70	NA
Beak, June 1989	RI-1	10	ND	11.6	NA	ND	27.6	30.2	0.059	42.4	5 82	ND	4.50	50 9	ND
Beak, June 1989	RI-1	20	ND	12.1	NA	ND	45.1	30.0	0.093	91.1	8.51	ND	4.32	61.3	ND
Beak, June 1989	RI-2	10	ND	7.95	NA	ND	38.1	24.9	0.057	54.2	5 84	ND	4.07	48.3	ND
Beak, June 1989	RI-2	20	ND	10.0	NA	ND	38.3	25.6	0.086	62.9	6.72	ND	3.07	51 0	ND
Beak, June 1989	RI-3	10	ND	10.5	NA	ND	36.7	125	0.062	50.3	5 08	ND	ND	92.2	ND
Beak, June 1989	RI-3	20	ND	9.25	NA	ND	36.7	25.1	0.074	45.7	5 55	ND	3 94	44.1	ND
Beak, June 1989	RI-4	9.5	ND	6.00	NA	ND	17.6	17.7	0.098	31.5	3.68	ND	ND	29.0	ND
Beak, June 1989	RI-4	10	ND	9.55	NA	ND	37.5	27.9	0.091	50.5	5 32	ND	ND	42.9	0 120
Beak, June 1989	RI-4	20	4.87	14.3	NA	ND	40.3	31.2	0.189	73.7	7.90	ND	3.11	65.9	ND

TABLE 2.2.c (continued)
SUMMARY OF INTERSIL SOIL CHEMISTRY DATA - INORGANIC ANALYSES[1]
Concentrations in milligrams per kilogram (mg/kg or ppm)

Investigation Phase	Boring I.D.	Depth (feet)	Ag	As	B	Be	Total Cr	Cu	Hg	Ni	Pb	Sb	Tl	Zn	CN
Beak, June 1989	RI-5	9.5	17.4	11.5	NA	ND	33.0	23.1	0.048	62.2	7.72	ND	3.68	50.6	9.0
Beak, June 1989	RI-5	9.5	ND	10.3	NA	ND	57.6	27.6	NA	115	12.1	ND	3.12	58.3	NA
Beak, June 1989	RI-5	19.5	ND	11.9	NA	ND	52.0	41.3	0.057	99.7	10.8	ND	9.66	79.9	6.0
Beak, June 1989	RI-5	19 5	NA	NA	NA	ND	NA	NA	0.056	NA	NA	NA	NA	NA	NA
Beak, June 1989	RI-6	10	20.0	8.27	NA	ND	31.9	24.7	0.057	47.0	6.18	ND	3.34	45.0	0.036
Beak, June 1989	RI-6	20	ND	12.7	NA	ND	54.1	32.6	0.081	97.7	8.61	ND	3.15	204	1.6
Beak, June 1989	RI-7	9.5	ND	12.2	NA	ND	43.5	45.8	0.059	58.2	7.70	ND	2.49	65.4	ND
Beak, June 1989	RI-7	19.5	ND	12.1	NA	ND	52.6	31.7	0.085	94.3	8.25	ND	3.29	48.1	4.0
Beak, June 1989	RI-8	9.5	ND	8.70	NA	ND	39.4	33.3	0.095	50.6	6.15	ND	8.21	199	0 14
Beak, June 1989	RI-8	19.5	ND	10.6	NA	ND	62.0	31.9	0.047	85.2	5.51	3.57	ND	47.9	0 95
Beak, June 1989	RI-9	10	ND	15.7	NA	ND	57.0	33.7	0.27	96.2	10.0	3.47	5.61	163	ND
Beak, June 1989	RI-9	19.5	ND	11.7	NA	ND	53.3	31.8	0.06	90.4	7.20	ND	4.78	51.7	ND
Beak, June 1989	RI-10	10	ND	15.0	NA	ND	58.5	32.8	0.068	76.3	8.19	0.643	3.23	56.8	ND
Beak, June 1989	RI-10	19.5	ND	13.0	NA	ND	58.5	29.0	0.091	80.7	6.59	0.498	1.36	45.9	ND
Beak, June 1989	RI-10	20	ND	18.9	NA	ND	51.2	39.3	0.092	99.6	6.78	0.563	0.882	59.8	ND
Beak, June 1989	RI-11	10	ND	14.3	NA	ND	46.6	34.3	0.044	93.6	10.9	2.81	2.70	59.8	0 96
Beak, June 1989	RI-11	20	ND	6.76	NA	ND	50.9	35.0	0.075	81.0	7.35	2.73	6.17	51.5	1.8
Beak, June 1989	RI-12	10	ND	11.4	NA	ND	46.9	27.9	0.06	84.1	7.10	5.38	3.42	54.1	0.16
Beak, June 1989	RI-12	19.5	ND	12.7	NA	ND	54.7	31.7	0.095	101	5.24	ND	6.04	53.9	0 12
Beak, June 1989	RI-13	9	ND	14.8	NA	ND	44.9	30.8	0.05	82.4	4.38	1.66	6.18	75.7	ND
Beak, June 1989	RI-13	19	ND	16.5	NA	ND	57.4	70.3	0.085	91.6	2.50	2.05	4.69	207	ND
Beak, June 1989	RI-13	28	ND	18.3	NA	ND	53.1	35.9	0.05	82.3	4.31	2.35	ND	52.7	0.10
Beak, June 1989	RI-14	8.5	ND	13.3	NA	ND	45.3	31.8	0.05	79.5	4.63	2.50	5.96	72.6	ND
Beak, June 1989	RI-14	19	ND	20.0	NA	ND	59.7	35.3	0.088	102	4.08	2.99	5.80	63.0	ND
Beak, June 1989	RI-14	29	ND	15.4	NA	ND	49.4	30.1	0.062	71.5	6.40	3.92	3.80	50.7	ND
Beak, June 1989	RI-15	8	ND	15.9	NA	ND	57.4	34.9	0.044	95.9	9.17	5.06	7.41	57.2	0.10
Beak, June 1989	RI-15	8.5	ND	18.1	NA	0.649	59.0	35.2	0.043	105	7.23	5.28	4.49	68.9	0.12
Beak, June 1989	RI-15	19	ND	17.2	NA	ND	87.2	43.8	0.07	154	ND	ND	ND	80.9	0.15
Beak, June 1989	RI-15	29	ND	15.2	NA	ND	53.1	26.8	0.058	77.1	1.48	3.93	ND	77.3	ND
Beak, June 1989	RI-16	9	ND	15.3	NA	ND	55.7	32.0	0.063	88.8	8.00	3.83	7.48	59.9	0.15
Beak, June 1989	RI-16	18.5	ND	14.0	NA	ND	59.1	33.3	0.094	109	7.65	6.27	8.33	52.5	ND
Beak, June 1989	RI-16	29	ND	12.6	NA	ND	74.0	28.3	0.048	71.4	2.44	3.90	3.67	110	ND

NA = Not analyzed
ND = Not detected.

Note Cadmium and selenium were not detected in any of the RI borings

1 Analyses performed by U.S. EPA Test Methods 6010, 7060, 7470, 7740 and 9010.
2 9.5 ppm ammonia detected, 1.4 ppm fluoride detected, 11 ppm nitrate detected, 28 ppm sulfate detected.
3 5.6 ppm ammonia detected, 1.4 ppm fluoride detected, no nitrate detected, 47 ppm sulfate detected.

TABLE 2.3
SUMMARY OF PERCHED GROUNDWATER CHEMISTRY DATA -
VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	TCE	PCE	FREON 113	CHLORO-FORM
Phase III, Cooper, April 1986	W4A	3/1/86[2]	0.240	<0.001	<0.001	0.009
Phase III, Cooper, April 1986	W4A	3/26/86	3.800	0.003	0.024	0.001
Phase III, Cooper, April 1986	W4A	3/26/86	3.800	0.010	0.029	<0.010
Phase III, Cooper, April 1986	W4A	3/26/86	3.800	0.006	<0.001	0.002
Geomatrix, 15 August 1986	W4A	6/17/86	1.500	0.002	0.050	0.001
Phase IV, Geomatrix, Nov. 1986	W4A	9/4/86	1.800	0.004	0.029	0.001
Geomatrix, 15 February 1987	W4A	12/3/86	2.400	0.004	0.013	0.001
Geomatrix, 15 May 1987	W4A	3/4/87	1.200	0.002	0.005	<0.001
Geomatrix, 15 August 1987	W4A	6/3/87	0.600	<0.001	0.001	<0.001
Geomatrix, 16 November 1987	W4A	9/2/87	1.000	0.001	0.004	<0.001
Geomatrix, 16 February 1988	W4A	12/2/87	0.750	<0.001	0.004	<0.001
Geomatrix, 16 May 1988	W4A	3/3/88	1.000	<0.001	0.002	<0.001
Geomatrix, 15 August 1988	W4A	6/8/88	0.550	<0.001	0.002	<0.001
Geomatrix, 15 November 1988	W4A	9/8/88	0.600	<0.001	0.003	<0.001
Geomatrix, 15 February 1989	W4A	12/5/88	0.560	<0.001	0.002	<0.001
Geomatrix, 17 April 1989	W4A	3/9/89[3]	0.430	<0.001	<0.001	<0.001
Geomatrix, 17 July 1989	W4A	6/5/89	0.570	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	W4A	9/7/89	0.500	<0.001	0.002	<0.001
Geomatrix, 15 January 1990	W4A	12/6/89	0.360	<0.001	<0.001	<0.001

Notes:
1 All analyses performed by EPA Test Methods 601, 602, 624, or 8240.
2 Total hydrocarbons (C10-28) detected at 1.0 ppm (semi-quantified), toluene detected at 0.002 ppm.
3 Toluene detected at 0.002 ppm.

TABLE 2.4.a
SUMMARY OF A-ZONE GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	PCE	FREON 113	CHLORO-FORM
Phase II, Cooper, Oct 1985	W1A	8/3/85[2]	0.039	0.012	33 0	0.150	<0.0005	0.0067
Phase II, Cooper, Oct. 1985	W1A	8/29/85[3]	<0.010	0.190	25 0	0.014	0.011	<0 010
Cooper, 11 November 1985	W1A	10/1/85	<0.050	0.220	12.0	0.140	<0.050	<0.050
Cooper, 11 November 1985	W1A	10/1/85[4]	0.018	0.172	17.821	<0.030	NA	0 0138
Cooper, 11 November 1985	W1A	10/1/85[5]	0.010	0.210	18.0	0.013	0.065	<0.0005
Phase III, Cooper, Apnl 1986	W2A	3/1/86	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cooper, 10 June 1986	W2A	5/8/86	<0.001	<0.001	0.018	<0.001	0.004	<0.001
Cooper, 10 June 1986	W2A	5/8/86[6]	<0.001	<0.001	0.012	<0.001	0.008	<0.002
Cooper, 10 June 1986	W2A	5/8/86[7]	<0.001	<0.001	0.018	<0.001	0.009	<0.001
Geomatrix, 15 August 1986	W2A	6/16/86	<0.001	<0.001	0.003	<0.001	0.002	<0.001
Phase IV, Geomatrix, Nov. 1986	W2A	9/3/86	0.001	<0.001	0.020	<0.001	0.002	<0.001
Geomatrix, 15 February 1987	W2A	12/2/86	<0.001	<0.001	0.006	<0.001	<0.001	<0.001
Geomatrix, 15 February 1987	W2A	12/2/86 DUP	<0.001	0.002	<0.001	<0.001	0.002	<0.001
Geomatrix, 15 May 1987	W2A	3/4/87	<0.001	<0.001	0.003	<0.001	<0.001	<0.001
Geomatrix, 15 August 1987	W2A	6/2/87	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 November 1987	W2A	9/1/87	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Geomatrix, 16 November 1987	W2A	9/1/87 DUP	<0.001	<0.001	0.002	<0.001	<0.001	<0.001
Geomatrix, 16 February 1988	W2A	12/2/87	<0.001	<0.001	0.005	<0.001	<0.001	<0.001
Geomatrix, 16 February 1988	W2A	12/2/87 DUP	<0.001	<0.001	0.003	<0.001	<0.001	<0.001
Geomatrix, 16 May 1988	W2A	3/1/88	<0.001	<0.001	0.009	<0.001	<0.001	<0.001
Geomatrix, 15 August 1988	W2A	6/8/88	<0.001	<0.001	0.003	<0.001	<0.001	<0.001
Geomatrix, 15 November 1988	W2A	9/7/88	<0.001	<0.001	0.002	<0.001	<0.001	<0.001
Geomatrix, 17 April 1989	W2A	3/9/89	<0.001	<0.001	0.003	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	W2A	9/7/89	<0.001	<0.001	0.003	<0.001	<0.001	<0.001
Phase III, Cooper, April 1986	W3A	-DRY-						
Phase III, Cooper, April 1986	W5A	3/1/86[8]	0.011	0.270	1 7	<0.001	0.008	0.004
Phase III, Cooper, April 1986	W5A	3/26/86	0.014	0.270	1.4	<0.001	<0.001	<0.001
Phase III, Cooper, April 1986	W5A	3/26/86	0.012	0.450	1.7	<0.001	0.014	<0.001
Phase III, Cooper, April 1986	W5A	3/26/86	0.018	0.280	1.4	<0.001	0.017	<0.001
Geomatrix, 15 August 1986	W5A	6/17/86	0.006	0.440	1.8	<0.005	0.007	<0.005
Phase IV, Geomatrix, Nov. 1986	W5A	9/4/86	0.004	0.064	0.760	<0.001	0.008	<0.001
Geomatrix, 15 February 1987	W5A	12/2/86	0.003	0.060	0.750	<0.001	0.007	<0.001
Geomatrix, 15 May 1987	W5A	3/3/87	0.002	0.025	0.410	<0.001	0.006	<0.001
Geomatrix, 16 November 1987	W5A	5/19/87	<0.010	0.051	0.910	<0.010	<0.010	<0.010
Geomatrix, 15 August 1987	W5A	6/3/87	0.001	0.040	1.0	<0.001	0.002	<0.001
Geomatrix, 16 November 1987	W5A	9/1/87	<0.001	0.016	0.220	<0 001	0.018	<0.001
Geomatrix, 16 February 1987	W5A	12/1/87	0.001	0.018	0.220	0.008	<0.001	<0.001
Geomatrix, 16 May 1988	W5A	3/3/88	0.002	0.022	0.190	<0.001	0.011	<0.001
Geomatrix, 15 August 1988	W5A	6/8/88	<0.001	0.013	0.150	<0.001	0.008	<0.001
Geomatrix, 15 November 1988	W5A	9/8/88	<0.001	0.009	0.110	<0.001	<0.001	<0.001
Geomatrix, 15 February 1989	W5A	12/5/88[9]	<0 001	0.007	0 100	<0.001	<0.001	<0.001
Geomatrix, 17 Apnl 1989	W5A	3/9/89	<0 001	0.004	0.074	<0.001	<0.001	<0.001
Geomatrix, 17 July 1989	W5A	6/5/89	<0 001	<0.001	0.120	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	W5A	9/7/89	<0.001	0.007	0.082	0.001	0.001	<0.001
Geomatrix, 15 January 1990	W5A	12/5/89	<0.001	0.005	0.073	<0.001	<0.001	<0.001

TABLE 2.4.a (continued)
SUMMARY OF A-ZONE GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	PCE	FREON 113	CHLORO-FORM
Phase III, Cooper, Apnl 1986	W7A	3/1/86	<0 001	<0.001	<0.001	<0.001	<0.001	<0.001
Phase III, Cooper, Apnl 1986	W7A	3/26/86[10]	<0 001	<0.001	<0.001	<0.001	0.005	0.001
Phase III, Cooper, Apnl 1986	W7A	3/26/86	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 August 1986	W7A	6/13/86	<0 001	<0 001	<0.001	<0 001	0.004	<0.001
Phase IV, Geomatrix, Nov. 1986	W7A	9/3/86	<0.001	<0.001	<0.001	<0.001	0.003	<0.001
Geomatrix, 15 February 1987	W7A	12/1/86	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 May 1987	W7A	3/2/87	<0.001	<0.001	<0.001	<0.001	0.004	<0.001
Geomatrix, 15 August 1987	W7A	6/1/87	<0.001	<0.001	<0.001	<0.001	0.003	<0.001
Geomatrix, 16 November 1987	W7A	8/31/87	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 February 1988	W7A	11/30/87	<0 001	<0.001	<0.001	<0.001	0.002	<0.001
Geomatrix, 16 May 1988	W7A	2/29/88	<0.001	<0.001	<0.001	<0.001	0.006	<0.001
Geomatrix, 15 August 1988	W7A	6/6/88	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Geomatrix, 15 November 1988	W7A	9/6/88	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Geomatrix, 17 April 1989	W7A	3/6/89	<0.001	<0.001	<0.001	<0.001	0.005	<0.001
Geomatrix, 16 October 1989	W7A	9/5/89	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phase IV, Geomatrix, Nov. 1986	W9A	9/5/86	<0.001	0.004	0.400	<0.001	0.011	<0.001
Geomatrix, 15 February 1987	W9A	12/2/86	<0.001	0.006	0.420	<0.001	0.010	<0.001
Geomatrix, 15 May 1987	W9A	3/3/87	<0.001	0.003	0.240	<0.001	0.008	<0.001
Geomatrix, 15 August 1987	W9A	6/2/87	<0.001	0.004	0.240	<0.001	0.005	<0.001
Geomatrix, 16 November 1987	W9A	9/1/87	<0.001	0.005	0.200	<0.001	0.016	<0.001
Geomatrix, 16 February 1988	W9A	12/1/87	<0.001	<0.001	0.200	<0.001	0.006	<0.001
Geomatrix, 16 May 1988	W9A	3/2/88	<0.001	0.002	0.160	<0.001	0.005	<0.001
Geomatrix, 15 August 1988	W9A	6/7/88	<0.001	0.001	0.095	<0.001	0.003	<0.001
Geomatrix, 15 November 1988	W9A	9/8/88	<0.001	<0.001	0.067	<0.001	<0.001	<0.001
Geomatrix, 17 April 1989	W9A	3/9/89	<0.001	<0.001	0.084	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	W9A	9/7/89	<0.001	<0.001	0.068	<0.001	<0.001	<0.001
Phase IV, Geomatrix, Nov. 1986	W10A	9/5/86	0.004	0.025	18.0	0.022	0.013	0.007
Geomatrix, 15 February 1987	W10A	12/3/86	0.003	0.035	18.0	0 014	0.011	0.006
Geomatrix, 15 May 1987	W10A	3/4/87	0.001	0.011	13.000	0.009	0.011	0.004
Geomatrix, 16 November 1987	W10A	5/21/87	<0.100	<0.100	15.000	<0.100	<0.100	<0.100
Geomatrix, 16 November 1987	W10A	7/13/87[11]	<0.250	<0.250	13.000	1.200	<0.250	<0.250
Geomatrix, 16 November 1987	W10A	7/15/87	<0.100	<0 100	17 0	<0.100	<0.100	<0.100
Geomatrix, 16 November 1987	W10A	7/16/87	<0.250	<0.250	25.0	<0.250	<0.250	<0.250
Geomatrix, 15 August 1987	W10A	6/3/87	0.001	0.014	15.0	0.011	0.007	0.006
Geomatrix, 16 November 1987	W10A	9/2/87	0.002	0.012	11.0	0.015	0.009	0.005
Geomatrix, 16 February 1988	W10A	12/1/87	0.002	0 010	7 0	0.008	0.005	0.003
Geomatrix, 16 May 1988	W10A	3/3/88	0 001	0.009	6.6	0.006	0.007	0.002
Geomatrix, 15 August 1988	W10A	6/9/88	<0.001	0 005	3 4	0.002	0.003	<0.001
Geomatrix, 15 August 1988	W10A	6/9/88 DUP	<0.001	0.005	3 2	0.002	0.003	0.001
Geomatrix, 15 November 1988	W10A	9/8/88	<0.001	0.005	1 5	0.001	0.002	<0.001
Geomatrix, 15 November 1988	W10A	9/8/88 DUP	<0.001	0.005	1 4	0.002	0.003	<0.001
Geomatrix, 15 February 1989	W10A	12/5/88	<0.001	<0.001	0 760	<0.001	0.002	<0.001
Geomatrix, 15 February 1989	W10A	12/5/88 DUP	<0 001	0.001	0 760	0 001	<0.001	<0.001
Geomatrix, 17 April 1989	W10A	3/9/89	<0 001	<0.001	0.560	<0.001	<0.001	<0.001
Geomatrix, 17 April 1989	W10A	3/9/89 DUP[12]	<0.001	<0.001	0.530	<0.001	<0.001	<0.001
Geomatrix, 17 July 1989	W10A	6/5/89	<0.001	0.005	1.300	<0.001	<0.001	<0.001
Geomatrix, 17 July 1989	W10A	6/5/89 DUP[13]	<0 001	0.003	1 100	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	W10A	9/7/89	0.002	0.009	1 100	0.002	0.008	<0.001
Geomatrix, 16 October 1989	W10A	9/7/89 DUP	0.002	0.007	1 300	0.002	0.005	<0.001
Geomatrix, 15 January 1990	W10A	12/5/89	<0 001	0 006	0.860	0.002	<0.001	<0.001
Geomatrix, 15 January 1990	W10A	12/5/89 DUP	<0 010	<0 010	0 970	<0 010	<0.010	<0.010

TABLE 2.4.a (continued)
SUMMARY OF A-ZONE GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	PCE	FREON 113	CHLORO-FORM
Phase IV, Geomatrix, Nov 1986	W12A	9/5/86	0 033	0 610	22.0	0.019	0.008	0.010
Geomatrix, 15 February 1987	W12A	12/3/86	0 033	0.370	9 400	0.004	0.009	0 003
Geomatrix, 15 May 1987	W12A	3/4/87	0 001	0 011	6 900	0.010	0.010	0 004
Geomatrix, 16 November 1987	W12A	5/22/87	<0 100	0 720	16 0	<0.100	<0.100	<0.100
Geomatrix, 15 August 1987	W12A	6/3/87	0.049	0 670	12.0	0.006	0.013	0.004
Geomatrix, 16 November 1987	W12A	9/2/87	0 028	0.370	5 800	0.005	0.006	0.003
Geomatrix, 16 February 1988	W12A	12/2/87	0.008	0.046	1.200	<0.001	0.004	<0.001
Geomatrix, 16 May 1988	W12A	3/2/88	<0 001	0.002	0.150	<0.001	0.005	<0.001
Geomatrix, 15 August 1988	W12A	6/8/88	<0.001	0.004	0.190	<0.001	<0.001	<0.001
Geomatrix, 15 November 1988	W12A	9/8/88	<0.001	0.009	0.290	<0.001	0.003	<0.001
Geomatrix, 15 February 1989	W12A	12/5/88	<0 001	0.003	0.130	<0.001	0.004	<0.001
Geomatrix, 17 April 1989	W12A	3/9/89	<0 001	0.002	0.100	<0.001	<0.001	<0.001
Geomatrix, 17 July 1989	W12A	6/5/89	<0.001	0.002	0.150	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	W12A	9/7/89	<0.001	0.004	0.130	<0.001	0.002	<0.001
Geomatrix, 15 January 1990	W12A	12/5/89	<0.001	<0.001	0.041	<0.001	0.001	<0.001
Phase IV, Geomatrix, Nov. 1986	W13A	9/4/86	<0.001	<0.001	0.026	<0.001	<0.001	0.003
Phase IV, Geomatrix, Nov. 1986	W13A	9/4/86	<0.001	<0.001	0.018	<0.001	<0.001	0.002
Geomatrix, 15 February 1987	W13A	12/2/86	<0.001	<0.001	0.004	<0.001	<0.001	<0.001
Geomatrix, 15 May 1987	W13A	3/4/87	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 August 1987	W13A	6/2/87	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 November 1987	W13A	9/1/87	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Geomatrix, 16 November 1987	W13A	9/1/87 DUP	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Geomatrix, 16 February 1988	W13A	12/2/87	<0 001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 May 1988	W13A	3/1/88	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 August 1988	W13A	6/8/88	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Geomatrix, 15 November 1988	W13A	9/7/88	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Geomatrix, 17 April, 1989	W13A	3/9/89	<0.001	<0.001	0.170	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	W13A	9/7/89	<0.001	<0.001	0.050	0.001	0.001	<0.001
Phase IV, Geomatrix, Nov. 1986	W14A	9/3/86	<0.001	0.002	<0.001	<0.001	0.001	0.004
Geomatrix, 15 February 1987	W14A	12/2/86	<0 001	0.002	<0.001	<0.001	0.002	<0.001
Geomatrix, 15 May 1987	W14A	3/2/87	<0.001	0.003	0.003	<0.001	0.003	0 002
Geomatrix, 15 August 1987	W14A	6/1/87	<0 001	0.003	<0.001	<0.001	0.003	0.001
Geomatrix, 16 November 1987	W14A	9/1/87	<0 001	0.004	<0.001	<0.001	0.009	<0.001
Geomatrix, 16 February 1988	W14A	11/30/87	<0.001	0.003	<0.001	<0.001	0.003	<0.001
Geomatrix, 16 May 1988	W14A	2/29/88	<0 001	0.004	<0.001	<0.001	0.004	<0.001
Geomatrix, 15 August 1988	W14A	6/6/88	<0 001	0.003	<0 001	<0.001	0.005	<0 001
Geomatrix, 15 November 1988	W14A	9/6/88	<0 001	0.004	<0.001	<0.001	0.003	<0 001
Geomatrix, 17 April 1989	W14A	3/6/89	<0.001	0.002	<0.001	<0.001	0.005	<0 001
Geomatrix, 16 October 1989	W14A	9/6/89	<0.001	0.002	0.004	<0.001	0.003	<0.001
Phase IV, Geomatrix, Nov 1986	W15A[a]	9/4/86	<0.001	<0.001	<0 001	<0.001	<0.001	0 006
Geomatrix, 15 February 1987	W15A	12/1/86	<0 001	<0.001	0.018	<0.001	0.007	<0.001
Geomatrix, 15 May 1987	W15A	3/3/87	<0.001	<0 001	0.014	<0.001	0.002	<0 001
Geomatrix, 15 August 1987	W15A	6/2/87	<0 001	<0 001	0.009	<0.001	<0.001	<0.001
Geomatrix, 16 November 1987	W15A	9/1/87	<0.001	<0.001	0.011	<0.001	0.002	<0 001
Geomatrix, 16 February 1988	W15A	12/1/87	<0 001	<0 001	0.011	<0.001	<0.001	<0 001
Geomatrix, 16 May 1988	W15A	3/2/88	<0 001	<0 001	0 011	<0.001	<0.001	<0 001
Geomatrix, 15 August 1988	W15A	6/7/88	<0 001	<0.001	0.007	<0.001	<0.001	<0 001
Geomatrix, 15 November 1988	W15A	9/8/88	<0.001	<0 001	0.006	<0.001	<0.001	<0 001
Geomatrix, 17 April 1989	W15A	3/7/89	<0.001	<0 001	0.005	<0.001	<0.001	<0 001
Geomatrix, 16 October 1989	W15A	9/6/89	<0.001	<0 001	0.004	<0.001	0.002	<0.001

TABLE 2.4.a (continued)
SUMMARY OF A-ZONE GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	PCE	FREON 113	CHLORO-FORM
Phase IV, Geomatnx, Nov 1986	W16A[b]	9/4/86	<0 001	<0.001	0 017	<0.001	0.004	<0 001
Geomatrix, 15 February 1987	W16A	12/2/86	<0.001	<0 001	<0 001	<0.001	<0.001	0.001
Geomatrix, 15 May 1987	W16A	3/3/87	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 August 1987	W16A	6/2/87	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001
Geomatrix, 16 November 1987	W16A	9/1/87	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 February 1988	W16A	12/1/87	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 February 1988	W16A	12/1/87 DUP	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 May 1988	W16A	3/1/88	<0 001	<0.001	<0.001	<0 001	<0.001	<0.001
Geomatrix, 15 August 1988	W16A	6/7/88	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Geomatrix, 15 November 1988	W16A	9/7/88	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatnx, 17 April 1989	W16A	3/9/89	<0.001	<0.001	0.002	<0.001	<0.001	<0 001
Geomatrix, 16 October 1989	W16A	9/7/89	<0.001	<0.001	0.002	<0.001	<0.001	<0.001
Geomatrix, 16 February 1988	E17A	12/2/87	0.005	0.064	1.500	<0.001	<0.001	<0.001
Geomatrix, 16 May 1988	E17A	3/3/88	0.004	<0.001	1.200	<0.001	<0.001	0.001
Geomatrix, 15 August 1988	E17A	6/8/88	0.001	0.019	1.200	<0.001	<0.001	<0.001
Geomatrix, 15 November 1988	E17A	9/8/88[14]	<0.001	0.010	0.370	<0.001	<0.001	<0.001
Geomatrix, 15 February 1989	E17A	12/5/88[15]	<0.001	<0.001	0.019	<0.001	<0.001	<0.001
Geomatrix, 17 April 1989	E17A	3/9/89	<0.001	<0.001	0.025	<0.001	<0.001	<0.001
Geomatrix, 17 July 1989	E17A	6/5/89	<0.001	<0.001	0.041	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	E17A	9/7/89	<0.001	0.005	0.150	<0.001	<0.001	<0.001
Geomatrix, 15 January 1990	E17A	12/5/89	<0.001	<0.001	0.026	<0.001	<0.001	<0.001
Geomatrix, unpublished	W21A[c]	1/26/88	<0.001	<0.001	11.0	<0.001	<0.001	<0.001
Geomatrix, 16 May 1988	W21A	3/3/88	0.006	0.053	5.9	0.005	0.004	0.002
Geomatrix, 15 August 1988	W21A	6/8/88	0.005	0.051	4.1	0.002	0.003	0.001
Geomatrix, 15 November 1988	W21A	9/8/88	0.013	0.116	5.1	0.007	0.011	0.002
Geomatrix, 15 February 1989	W21A	12/5/88[16]	0.008	0.045	5.8	0.009	0.010	0.002
Geomatrix, 17 April 1989	W21A	3/9/89	0.004	0.034	3.2	0.005	0.005	0.001
Geomatrix, 17 July 1989	W21A	6/5/89	0.007	0.049	2.8	0.004	0.005	<0.001
Geomatrix, 16 October 1989	W21A	9/7/89[17]	0.010	0.088	3.9	0.007	0.013	0.002
Geomatrix, 15 January 1990	W21A	12/5/89[18]	0.005	0.037	2.400	0.005	0.003	0.001
Geomatrix, 16 May 1988	W22A[c]	3/3/88	<0.001	<0.001	0.800	<0.001	<0.001	<0.001
Geomatrix, 15 August 1988	W22A	6/8/88	<0.001	0.004	0.750	<0.001	<0.001	<0.001
Geomatrix, 15 November 1988	W22A	9/8/88	<0.001	0.004	0.790	<0.001	<0.001	<0.001
Geomatrix, 15 February 1989	W22A	12/5/88	<0.001	<0.001	0.190	<0.001	<0.001	<0.001
Geomatrix, 17 April 1989	W22A	3/10/89	<0.001	0.012	0.360	<0.001	<0.001	<0.001
Geomatrix, 17 July 1989	W22A	6/5/89	<0.001	0.035	0.400	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	W22A	9/7/89	<0.001	0.018	0.150	<0.001	<0.001	<0 001
Geomatrix, 15 January 1990	W22A	12/6/89	0.004	0.056	0.680	<0.001	<0.001	<0 001

Notes

1 All analyses performed by EPA Test Methods 601, 602, 624, or 8240.
2 1,2-DCE detected at 0.004 ppm, 1,1-DCA detected at 0.019 ppm
3 Chlorohexanol detected at 0 070 ppm, dichlorocyclohexane detected at 0.1 ppm, trichloropropane detected at 0.040 ppm, unknown chlorinated compound detected at 0 02 ppm
4 Carbon tetrachloride detected at 0.0004 ppm, methylene chloride detected at 0 0016 ppm, 2-butanone detected at 0.007 ppm, 1,2-DCE detected at 0 0009 ppm, 1,1-DCA detected at 0 0063 ppm, acetone detected at 0.018 ppm.
5 1,2-DCE detected at 0.0005 ppm, acetone detected at 0 019 ppm
6 Tetrahydrofuran detected at 0 003 ppm (semi-quantified)
7 Tetrahydrofuran detected at 0.020 ppm

TABLE 2.4.a (concluded)
SUMMARY OF A-ZONE GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

Notes (cont'd):

8 Total hydrocarbons (C10-C28) detected at 3.0 ppm (semi-quantified).
9 Acetone detected at 0 018 ppm.
10 Total hydrocarbons (C10-C30) detected at 0.6 ppm (semi-quantified)
11 Chloromethane detected at 2.400 ppm, chloroethane detected at 0.8 ppm.
12 Toluene detected at 0.001 ppm.
13 Chloromethane detected at 0.028 ppm, 2-butanone detected at 0.026 ppm, cis-1,3-dichloropropene detected at 0.003 ppm, tetrahydrofuran tentatively detected at 1.100 ppm, toluene detected at 0.003 ppm.
14 1,2-DCE detected at 0.008 ppm.
15 1,2-DCE detected at 0.002 ppm
16 1,2-DCE detected at 0.001 ppm.
17 1,2-DCE detected at 0.001 ppm.
18 Toluene detected at 0.002 ppm

a = Well installed at Hewlett-Packard by Geomatrix
b = Well installed at Tandem by Geomatrix
c = Well installed at Siemens by Geomatrix.

TABLE 2.4.b
SUMMARY OF GROUNDWATER CHEMISTRY DATA - SEMI-VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

Investigation Phase	Well ID	Collect Date	Dichloro-benzenes	Phenols (total)	Trichloro-benzenes	Other
Perched and A-zone						
Phase II, Cooper, Oct. 1985	Well 1A	08/29/85	NA	NA	NA	Dichlorocyclohexane - 0.10[2] Chlorohexanol - 0.07[2] Trichloropropene - 0.04[2]
Phase III, Cooper, April 1986	Well 2A	03/01/86	<0.001	<0.025	<0.001	
Geomatrix, 15 August 1988	Well 2A	06/08/88	<0.001	<0.001	<0.001	
Geomatrix, 17 April 1989	Well 2A	03/10/89	<0.01	<0.05	<0.01	
Geomatrix, 17 April 1989	Well 2A	03/13/89	<0.01	<0.05	<0.01	
Phase III, Cooper April 1986	Well 4A	03/01/86	<0.001	<0.025	<0.001	Hydrocarbon matrix - 1.0
Geomatrix, 15 August 1988	Well 4A	06/09/88	<0.001	<0.001	<0.001	
Geomatrix, 17 April 1989	Well 4A	03/13/89	<0.01	<0.05	<0.01	
Phase III, Cooper, April 1986	Well 5A	03/01/86	<0.001	<0.025	<0.001	Hydrocarbon matrix - 3.0[2]
Geomatrix, 15 August 1988	Well 5A	06/08/88	<0.001	<0.001	<0.001	
Geomatrix, 17 April 1989	Well 5A	03/09/89	<0.01	<0.05	<0.01	
Phase III, Cooper, April 1986	Well 7A	03/27/86	<0.001	<0.050	<0.001	Hydrocarbon matrix - 0.60[2]
Phase III, Cooper, April 1986	Well 7A	03/27/86 (DUP)	<0.001	<0.001	<0.001	bis (2-ethylhexyl) phthalate - 0.004[3]
Phase III, Cooper, April 1986	Well 7A	03/27/86 (DUP)	<0.002	<0.002	<0.002	butyl benzyl phthalate - 0.001[3] di-n-butyl phthalate - 0.001[3]
Geomatrix, 15 August 1988	Well 7A	06/06/88	<0.001	<0.001	<0.001	Hydrocarbons - 0.02[2]
Geomatrix, 15 August 1988	Well 7A	06/06/88	<0.001	<0.001	<0.001	Ether alcohol - 0 01[2]
Geomatrix, 17 April 1989	Well 7A	03/06/89	<0.01	<0 05	<0.01	
Geomatrix, 15 August 1988	Well 9A	06/07/88	<0.001	<0 001	<0.001	
Geomatrix, 17 April 1989	Well 9A	03/09/89	<0.01	<0.05	<0 01	
Geomatrix, 15 August 1988	Well 10A	06/09/88	<0.001	<0.001	<0.001	
Geomatrix, 15 August 1988	Well 10A (DUP)	06/09/88	<0 002	<0.002	<0.002	
Geomatrix, 15 August 1988	Well 10A (DUP)	06/09/88	<0.001	<0.001	<0.001	
Geomatrix, 17 April 1989	Well 10A	03/09/89	<0 01	<0.05	<0 01	
Geomatrix, 17 April 1989	Well 10A (DUP)	03/09/89	<0.01	<0.05	<0 01	
Geomatrix, 15 August 1988	Well 12A	06/08/88	<0.001	<0 001	<0 001	
Geomatrix, 17 April 1989	Well 12A	03/09/89	<0.01	<0.05	<0.01	
Geomatrix, 15 August 1988	Well 13A	06/08/88	<0.001	<0 001	<0.001	
Geomatrix, 17 April 1989	Well 13A	03/09/89	<0.01	<0.05	<0 01	
Geomatrix, 15 August 1988	Well 14A	06/06/88	<0 001	<0 001	<0 001	
Geomatrix, 17 April 1989	Well 14A	03/06/89	<0.01	<0.05	<0 01	
Geomatrix, 15 August 1988	Well 15A	06/07/88	<0 002	<0 002	<0 002	
Geomatrix, 17 April 1989	Well 15A	03/07/89	<0 01	<0 05	<0 01	
Geomatrix, 15 August 1988	Well 16A	06/07/88	<0 001	<0 001	<0 001	
Geomatrix, 17 April 1989	Well 16A	03/09/89	<0.01	<0 05	<0 01	
Geomatrix, 15 August 1988	Well E17A	06/08/88	<0.001	<0 001	<0 001	
Geomatrix, 17 April 1989	Well E17A	03/13/89	<0.01	<0 05	<0 01	
Geomatrix, 15 August 1988	Well 21A	06/08/88	<0 001	<0 001	<0 001	
Geomatrix, 17 April 1989	Well 21A	03/09/89	<0.01	<0 05	<0 01	
Geomatrix, 15 August 1988	Well 22A	06/08/88	<0 002	<0 002	<0 002	
Geomatrix, 17 April 1989	Well 22A	03/10/89	<0.01	<0 05	<0 01	

NA = NOT ANALYZED

TABLE 2.4.b (continued)
SUMMARY OF GROUNDWATER CHEMISTRY DATA - SEMI-VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

Investigation Phase	Well ID	Collect Date	Dichloro-benzenes	Phenols (total)	Trichloro-benzenes	Other
B-zone and Deeper Aquifer						
Phase III, Cooper, April 1986	Well 6B	03/01/86	<0.001	<0.025	<0.001	
Geomatrix, 15 August 1988	Well 6B	06/08/88	<0.001	<0.001	<0.001	
Geomatrix, 17 April 1989	Well 6B	03/06/89	<0.01	<0.05	<0.01	Molecular Sulfur - 0.02[2]
Geomatrix, 15 August 1988	Well 8B	06/07/88	<0.001	<0.001	<0.001	Benzyl Alcohol - 0.008[2] Pyrene - 0.001 Benzo(b)fluoranthene - 0 001 Fluoranthene - 0 001
Geomatrix, 15 August 1988	Well 8B (DUP)	06/07/88	<0.001	<0.001	<0.001	Benzyl Alcohol - 0.003[2] Benzo(b)fluoranthene - 0.001
Geomatrix, 17 April 1989	Well 8B	03/07/89	<0.01	<0.05	<0.01	Nonanoic acid - 0 03[2] Decanoic acid - 0.01[2] Dedecanoic acid - 0.05[2] Tetradecanoic acid - 0.02[2]
Geomatrix, 15 August 1988	Well 11B	06/06/88	<0.001	<0.001	<0.001	Pyrene - 0.001 Fluoranthene - 0.002
Geomatrix, 17 April 1989	Well 11B	03/07/89	<0.01	<0.05	<0.01	Nonanoic acid - 0 3[2]
Geomatrix, 15 August 1988	Well 14B	06/06/88	<0.001	<0.001	<0.001	Hydrocarbons - 0 14[2]
Geomatrix, 17 April 1989	Well 14B	03/06/89	<0.01	<0.05	<0.01	
Geomatrix, 15 August 1988	Well 18B	06/07/88	<0.001	<0.001	<0.001	
Geomatrix, 17 April 1989	Well 18B	03/08/89	<0.01	<0.05	<0.01	
Geomatrix, 17 April 1989	Well 18B (DUP)	03/08/89	<0.01	<0.05	<0.01	
Geomatrix, 15 August 1988	Well 19B	06/08/88	<0.001	<0.001	<0.001	
Geomatrix, 17 April 1989	Well 19B	03/08/89	<0.01	<0.05	<0.01	
Geomatrix, 15 August 1988	Well 20B	06/08/88	<0.001	<0.001	<0.001	Fatty acids, unidentified - 0.16[2]
Geomatrix, 15 August 1988	Well 20B (DUP)	06/08/88	<0.001	<0.001	<0.001	Fatty acids, unidentified - 0.16[2]
Geomatrix, 17 April 1989	Well 20B	03/09/89	<0.01	<0.05	<0 01	
Geomatrix, 15 August 1988	Well PG-1B	06/06/88	<0.001	<0.001	<0.001	
Geomatrix, 17 April 1989	Well PG-1B	03/08/89	<0.01	<0.05	<0.01	Nonanoic acid - 0 02[2] Dedecanoic acid - 0 02[2]
Geomatrix, 17 April 1989	Well BK-4	03/10/89	<0.01	<0.05	<0.01	

Notes

1 Analyzed by EPA Test Method 625 or 8270.
2 Compounds not 625 specific, compounds semi-quantified
3 Common laboratory contaminants

TABLE 2.4.c

SUMMARY OF GROUNDWATER CHEMISTRY DATA - INORGANIC ANALYSES
through December 1989

Concentrations in milligrams per litre (mg/L or ppm)

Investigation Phase	Well ID	Collect Date	Antimony	Arsenic	Barium	Boron	Chromium (total)	Chloride	Copper	Fluoride	Lead	Mercury	Nitrate	Vanadium	Zinc
Perched and A-zone															
Phase II, Cooper, October 1985	W1A	08/03/85	< 0.1	< 0.001	NA	1.13	< 0.02	NA	NA	NA	NA	NA	NA	NA	0.02
Cooper, 11 November 1985	W1A	10/04/85	< 0.1	0.77	NA	0.3	1.1	NA	NA	NA	NA	NA	NA	NA	1.2
Cooper, 11 November 1985	W1A DUP	10/04/85	< 0.01	< 0.01	NA	< 0.3	0.05	NA	NA	NA	NA	NA	NA	NA	0.06
Cooper, 11 November 1985	W1A DUP	10/04/85	< 0.05	< 0.01	NA	0.35	< 0.1	NA	NA	NA	NA	NA	NA	NA	0.02
Phase IV, Geomatrix, Nov. 1986	W2A	09/03/86	NA	NA	NA	NA	NA	88	NA	0.13	NA	NA	4.1	NA	NA
Geomatrix, April 17, 1989	W2A	03/09/89	< 0.08	0.006	0.24	NA	< 0.02	NA	0.16	NA	< 0.04	< 0.002	NA	0.03	0.02
Phase IV, Geomatrix, Nov. 1986	W4A	09/04/86	NA	NA	NA	NA	NA	79	NA	0.15	NA	NA	11	NA	NA
Phase IV, Geomatrix, Nov. 1986	W5A	09/04/86	NA	NA	NA	NA	NA	67	NA	0.17	NA	NA	8.9	NA	NA
Phase IV, Geomatrix, Nov. 1986	W7A	09/03/86	NA	NA	NA	NA	NA	71	NA	0.15	NA	NA	11	NA	NA
Geomatrix, April 7, 1989	W7A	03/06/89	< 0.08	< 0.002	0.189	NA	< 0.02	NA	< 0.02	NA	< 0.04	< 0.002	NA	< 0.02	0.055
Phase IV, Geomatrix, Nov. 1986	W9A	09/05/86	NA	NA	NA	NA	NA	110	NA	0.15	NA	NA	27	NA	NA
Geomatrix, April 7, 1989	W9A	03/09/98	< 0.08	0.006	0.20	NA	< 0.02	NA	0.12	NA	< 0.04	0.005	NA	< 0.02	0.03
Phase IV, Geomatrix, Nov. 1986	W10A	09/05/86	NA	NA	NA	NA	NA	88	NA	0.59	NA	NA	18	NA	NA
Geomatrix, April 7, 1989	W10A	03/09/89	< 0.08	0.005	0.20	NA	< 0.02	NA	0.14	NA	0.04	< 0.002	NA	< 0.02	0.08
Geomatrix, April 7, 1989	W10A DUP	03/09/89	< 0.08	0.005	0.20	NA	< 0.02	NA	0.13	NA	< 0.04	< 0.002	NA	< 0.02	0.08
Phase IV, Geomatrix, Nov. 1986	W12A	09/05/86	NA	NA	NA	NA	NA	48	NA	0.21	NA	NA	16	NA	NA
Phase IV, Geomatrix, Nov. 1986	W13A	09/04/86	NA	NA	NA	NA	NA	55	NA	0.45	NA	NA	0.58	NA	NA
Phase IV, Geomatrix, Nov. 1986	W14A	09/03/86	NA	NA	NA	NA	NA	76	NA	0.26	NA	NA	9.9	NA	NA
Phase IV, Geomatrix, Nov. 1986	W15A	09/04/86	NA	NA	NA	NA	NA	100	NA	0.52	NA	NA	0.53	NA	NA
Phase IV, Geomatrix, Nov. 1986	W16A	09/04/86	NA	NA	NA	NA	NA	110	NA	0.52	NA	NA	25	NA	NA
B-zone and Deeper Aquifers															
Phase IV, Geomatrix, Nov. 1986	W6B	09/02/86	NA	NA	NA	NA	NA	52	NA	0.18	NA	NA	4.4	NA	NA
Phase IV, Geomatrix, Nov. 1986	W8B	09/03/86	NA	NA	NA	NA	NA	23	NA	0.13	NA	NA	0.38	NA	NA
Phase IV, Geomatrix, Nov. 1986	W11B	09/03/86	NA	NA	NA	NA	NA	56	NA	0.14	NA	NA	6.1	NA	NA
Phase IV, Geomatrix, Nov. 1986	W14B	09/02/86	NA	NA	NA	NA	NA	46	NA	0.21	NA	NA	2.8	NA	NA

TABLE 2.5
SUMMARY OF B-ZONE GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	FREON 113	TOLUENE
Phase III, Cooper, April 1986	W6B	3/1/86[2]	<0.001	<0.001	<0.001	0.020	0.003
Cooper, 10 June 1986	W6B	5/8/86	<0.001	<0.001	<0.001	0.084	<0.001
Cooper, 10 June 1986	W6B	5/8/86[3]	<0.001	<0.001	<0.001	0.040	<0.001
Cooper, 10 June 1986	W6B	5/8/86[4]	<0.001	<0.001	<0.001	0.094	<0.001
Geomatrix, 15 August 1986	W6B	6/16/86[5]	<0.001	<0.001	<0.001	0.062	<0.001
Phase IV, Geomatrix, Nov. 1986	W6B	9/2/86	<0.001	0.001	<0.001	0.092	<0.001
Phase IV, Geomatrix, Nov. 1986	W6B	9/2/86 DUP	<0.001	<0.001	<0.001	0.090	<0.001
Geomatrix, 15 February 1987	W6B	12/1/86	<0.001	<0.001	<0.001	0.073	<0.001
Geomatrix, 15 May 1987	W6B	3/2/87	<0.001	<0.001	<0.001	0.068	<0.001
Geomatrix, 15 May 1987	W6B	3/2/87 DUP	<0.001	<0.001	<0.001	0.067	<0.001
Geomatrix, 15 August 1987	W6B	6/1/87	<0.001	<0.001	<0.001	0.062	<0.001
Geomatrix, 16 November 1987	W6B	8/31/87	<0.001	<0.001	<0.001	0.110	<0.001
Geomatrix, 16 February 1988	W6B	12/2/87	<0.001	<0.001	<0.001	0.055	<0.001
Geomatrix, 16 May 1988	W6B	2/29/88	<0.001	<0.001	<0.001	0.085	<0.001
Geomatrix, 15 August 1988	W6B	6/8/88	<0.001	<0.001	<0.001	0.080	<0.001
Geomatrix, 15 November 1988	W6B	9/7/88	<0.001	<0.001	<0.001	0.095	0.024
Geomatrix, 17 April 1989	W6B	3/6/89[6]	<0.001	<0.001	<0.001	0.097	0.009
Geomatrix, 16 October 1989	W6B	9/6/89	<0.001	<0.001	0.002	0.043	<0.001
Geomatrix, 16 October 1989	W6B	9/6/89 DUP	<0.001	<0.001	0.002	0.045	<0.001
Phase IV, Geomatrix, Nov. 1986	W8B	9/3/86	<0.001	<0.001	0.003	<0.001	<0.001
Geomatrix, 15 February 1987	W8B	12/1/86	<0.001	<0.001	0.002	<0.001	<0.001
Geomatrix, 15 May 1987	W8B	3/2/87	<0.001	<0.001	0.002	<0.001	<0.001
Geomatrix, 15 August 1987	W8B	6/1/87	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 August 1987	W8B	6/1/87 DUP	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 November 1987	W8B	8/31/87	<0.010	<0.010	<0.010	<0.010	<0.001
Geomatrix, 16 February 1988	W8B	11/30/87	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 May 1988	W8B	3/2/88	<0.001	<0.001	0.005	<0.001	<0.001
Geomatrix, 15 August 1988	W8B	6/7/88	<0.001	<0.001	0.002	<0.001	<0.001
Geomatrix, 15 August 1988	W8B	6/7/88 DUP	<0.001	<0.001	0.002	<0.001	<0.001
Geomatrix, 15 November 1988	W8B	9/7/88[7]	<0.001	<0.001	<0.001	<0.001	0.083
Geomatrix, 17 April 1989	W8B	3/7/89[8]	<0.001	<0.001	0.001	<0.001	0.004
Geomatrix, 16 October 1989	W8B	9/6/89	<0.001	<0.001	0.003	<0.001	<0.001
Phase IV, Geomatrix, Nov. 1986	W11B	9/3/86	0.001	0.052	0.540	0.008	<0.001
Geomatrix, 15 February 1987	W11B	12/3/86	0.003	0.100	0.950	0.004	<0.001
Geomatrix, 15 May 1987	W11B	3/4/87	<0.001	0.008	0.048	0.008	<0.001
Geomatrix, 15 May 1987	W11B	3/4/87 DUP	<0.001	0.010	0.051	0.007	<0.001
Geomatrix, 15 August 1987	W11B	6/3/87	<0.001	<0.001	0.170	0.008	<0.001
Geomatrix, 16 November 1987	W11B	9/2/87	<0.001	0.010	0.280	0.010	<0.001
Geomatrix, 16 February 1988	W11B	12/2/87	<0.001	0.009	0.130	0.011	<0.001
Geomatrix, 16 May 1988	W11B	3/1/88	<0.001	0.003	0.069	0.004	<0.001
Geomatrix, 16 May 1988	W11B	3/1/88 DUP	<0.001	0.003	0.072	0.005	<0.001
Geomatrix, 15 August 1988	W11B	6/6/88	<0 001	0.005	0.066	0.022	<0.001
Geomatrix, 15 November 1988	W11B	9/6/88[9]	<0.001	0.003	0.060	0.006	0.450
Geomatrix, 17 April 1989	W11B	3/7/89[10]	<0.001	0.001	0.034	0.004	0.009
Geomatrix, 16 October 1989	W11B	9/6/89	<0.001	0.002	0.037	0.006	0.007

TABLE 2.5 (continued)
SUMMARY OF B-ZONE GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	FREON 113	TOLUENE
Phase IV, Geomatrix, Nov. 1986	W14B	9/2/86[11]	<0.001	<0.001	<0.001	0.008	<0.001
Geomatrix, 15 February 1987	W14B	12/1/86	<0.001	<0.001	<0.001	0.005	<0.001
Geomatrix, 15 May 1987	W14B	3/2/87	<0.001	<0.001	<0.001	0.005	<0.001
Geomatrix, 15 August 1987	W14B	6/1/87	<0.001	<0.001	<0.001	0.003	<0.001
Geomatrix, 16 November 1987	W14B	8/31/87	<0.001	<0.001	<0.001	0.008	<0.001
Geomatrix, 16 February 1988	W14B	11/30/87	<0.001	<0.001	<0.001	0.005	<0.001
Geomatrix, 16 May 1988	W14B	2/29/88	<0.001	<0.001	<0.001	0.009	<0.001
Geomatrix, 15 August 1988	W14B	6/6/88	<0.001	<0.001	<0.001	0.009	<0.001
Geomatrix, 15 November 1988	W14B	9/6/88	<0.001	<0.001	<0.001	0.004	<0.001
Geomatrix, 17 April 1989	W14B	3/6/89	<0.001	<0.001	<0.001	0.011	<0.001
Geomatrix, 16 October 1989	W14B	9/5/89	<0.001	<0.001	<0.001	0.006	<0.001
Geomatrix, 18 December 1987	PG-1B	11/3/87	<0.001	<0.001	<0.001	<0.001	0.150
Geomatrix, 18 December 1987	PG-1B	11/3/87 DUP	<0.001	<0.001	<0.001	<0.001	0.150
Geomatrix, 18 December 1987	PG-1B	11/9/87	<0.002	<0.002	<0.002	<0.002	0.040
Geomatrix, 18 December 1987	PG-1B	11/9/87 DUP	<0.002	<0.002	<0.002	<0.002	0.024
Geomatrix, 16 February 1988	PG-1B	11/30/87	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 May 1988	PG-1B	3/1/88	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 August 1988	PG-1B	6/6/88	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 November 1988	PG-1B	9/6/88	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 17 April 1989	PG-1B	3/8/89[12]	<0.001	<0.001	<0.001	<0.001	0.004
Geomatrix, 16 October 1989	PG-1B	9/5/89	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 February 1988	W18B	11/20/87	<0.001	0.010	0.300	0.009	0.057
Geomatrix, 16 May 1988	W18B	3/3/88	<0.001	<0.001	0.430	0.014	<0.001
Geomatrix, 15 August 1988	W18B	6/7/88	<0.001	0.005	0.440	0.030	<0.001
Geomatrix, 15 November 1988	W18B	9/7/88	<0.001	0.004	0.270	0.047	0.200
Geomatrix, 15 November 1988	W18B	9/7/88 DUP	<0.001	0.003	0.240	0.033	0.200
Geomatrix, 17 April 1989	W18B	3/8/89[13]	<0.001	0.003	0.260	0.055	0.003
Geomatrix, 17 April 1989	W18B	3/8/89 DUP[14]	<0.001	0.003	0.230	0.058	0.003
Geomatrix, 16 October 1989	W18B	9/6/89	<0.001	0.003	0.250	0.057	<0.001
Geomatrix, 16 February 1988	W19B[a]	12/7/87	0.004	0.120	0.300	0.007	<0.001
Geomatrix, 16 May 1988	W19B	3/3/88	0.003	0.076	0.560	0.007	<0.001
Geomatrix, 15 August 1988	W19B	6/8/88	0.001	0.055	0.540	0.014	<0.001
Geomatrix, 15 November 1988	W19B	9/8/88	0.002	0.042	0.550	0.039	0.028
Geomatrix, 17 April 1989	W19B	3/8/89	0.002	0.022	0.360	0.045	0.002
Geomatrix, 16 October 1989	W19B	9/7/89	0.003	0.022	0.460	0.073	<0.001
Geomatrix, 16 February 1988	W20B[a]	12/2/87	<0.001	<0.001	0.008	0.026	<0.001
Geomatrix, 16 February 1988	W20B	12/2/87 DUP	<0.001	<0.001	0.008	0.025	<0.001
Geomatrix, unpublished	W20B	12/9/87	<0.001	<0.001	0.003	0.013	<0.001
Geomatrix, 16 May 1988	W20B	3/2/88	<0.001	0.003	0.170	0.017	<0.001
Geomatrix, 15 August 1988	W20B	6/8/88	<0.001	0.007	0.250	0.039	<0.001
Geomatrix, 15 August 1988	W20B	6/8/88 DUP	<0.001	0.005	0.250	0.031	<0.001
Geomatrix, 15 November 1988	W20B	9/8/88	<0.001	0.019	0.048	0.038	0.089
Geomatrix, 17 April 1989	W20B	3/9/89	<0.001	0.006	0.069	0.048	0.001
Geomatrix, 16 October 1989	W20B	9/7/89	0.001	0.013	0.160	0.032	<0.001

TABLE 2.5 (concluded)
SUMMARY OF B-ZONE GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

Notes:

1 All analyses performed by US EPA Test Methods 601, 602, 624, or 8240.
2 Benzene detected at 0.001 ppm, xylene detected at 0.004 ppm.
3 Tetrahydrofuran detected at 0.040 ppm (semi-quantified)
4 Tetrahydrofuran detected at 0.260 ppm (semi-quantified)
5 Tetrahydrofuran detected at 0.030 ppm (semi-quantified).
6 2-butanone detected at 0.027 ppm, 4-methyl-2-pentanone detected at 0.002 ppm.
7 2-butanone detected at 0.012 ppm.
8 2-butanone detected at 0.008 ppm.
9 2-butanone detected at 0.031 ppm, 2-methyl-2-propenoic acid tentatively detected at 0.003 ppm.
10 2-butanone detected at 0.006 ppm.
11 Chloroform detected at 0.003 ppm.
12 2-butanone detected at 0.007 ppm.
13 2-butanone detected at 0.005 ppm.
14 2-butanone detected at 0.010 ppm.
15 Chloroform detected at 0.001 ppm.

a Well installed at Siemens by Geomatrix.

TABLE 2.6
SUMMARY OF C-ZONE AND DEEP AQUIFER GROUNDWATER CHEMISTRY DATA -
VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	FREON 113	CHLORO-FORM	TOLUENE
WCC, May 1987	H-4C	3/25/86	<0.005	<0.005	0.004	NA	<0.005	0.016
WCC, May 1986	H-4C	3/25/86 DUP	<0.0005	0.0009	0.0038	0.0035	<0.0005	NA
WCC, 22 July 1986	H-4C	6/4/86	<0.0005	0.0031	0.011	0.014	<0.0005	NA
WCC, 15 November 1986	H-4C	9/4/86	<0.0005	0.0013	0.0072	0.013	<0.0005	NA
WCC, 15 February 1987	H-4C	12/3/86	<0.0005	<0.0005	0.0023	0.023	<0.0005	NA
WCC, 15 May 1987	H-4C	3/5/87	<0.0005	<0.0005	0.0025	0.009	0.0077	NA
WCC, 15 May 1987	H-4C	3/5/87[2]	<0.005	<0.005	<0.005	NA	0.003	0.020
WCC, 14 August 1987	H-4C	6/4/87	<0.0005	0.0005	0.0020	0.0105	0.0010	NA
WCC, 13 November 1987	H-4C	9/11/87	<0.0005	<0.0005	0.0023	0.0057	0.0012	NA
WCC, 12 February 1988	H-4C	12/22/87	<0.0005	<0.0005	0.0015	0.014	<0.0005	NA
WCC, 13 May 1988	H-4C	3/8/88	<0.005	<0.005	<0.005	0.022	<0.005	<0.005
WCC, 12 August 1988	H-4C	5/26/88	<0.0005	<0.0005	0.0064	0.0171	<0.0005	NA
L-F, 14 November 1988	H-4C	9/30/88	<0.0005	<0.0005	0.0036	0.032	<0.0005	NA
L-F, 14 February 1989	H-4C	12/21/88	<0.0005	<0.0005	0.001	0.0063	<0.0005	NA
L-F, 15 July 1989	H-4C	6/12/89	<0.001	<0.001	<0.001	0.013	<0.001	0.005
L-F, 30 January 1990	H-4C	11/13/89	<0.0005	<0.0005	<0.0005	0.0038	<0.0005	<0.027
L-F, 15 July 1989	LH-1C	5/17/89	<0.001	0.004	<0.001	<0.001	<0.001	0.001
L-F, 15 July 1989	LH-1C	5/24/89[3]	<0.0005	0.0072	0.0005	<0.0005	<0.0005	NA
L-F, 15 October 1989	LH-1C	9/19/89	ND	0.0076	ND	ND	ND	ND
L-F, 15 October 1989	LH-1C	9/19/89 DUP	ND	0.0083	ND	ND	ND	0.007
L-F, 30 January 1990	LH-1C	11/28/89	<0.0005	0.0070	<0.0005	<0.0005	<0.0005	0.019
WCC, 9 July 1987	LR-3C	5/19/87	<0.0005	<0.0005	0.0026	0.0183	<0.0005	NA
WCC, 9 July 1987	LR-3C	5/19/87 DUP	<0.0005	<0.0005	0.0027	0.0174	<0.0005	NA
WCC, 9 July 1987	LR-3C	5/19/87	<0.005	<0.005	<0.005	NA	<0.005	0.009
WCC, 9 July 1987	LR-3C	6/2/87	<0.0005	<0.0005	0.0022	0.0125	<0.0005	NA
WCC, 9 July 1987	LR-3C	6/2/87 DUP	<0.0005	<0.0005	0.0022	0.0129	<0.0005	NA
WCC, 13 November 1987	LR-3C	9/14/87	<0.0005	<0.0005	0.0041	0.0169	<0.0005	NA
WCC, 13 November 1987	LR-3C	9/14/87 DUP	<0.0005	<0.0005	0.0037	0.0154	<0.0005	NA
WCC, 12 February 1988	LR-3C	12/21/87	<0.0005	<0.0005	0.003	0.019	<0.0005	NA
WCC, 12 February 1988	LR-3C	12/21/87	<0.0005	<0.0005	0.003	0.020	<0.0005	NA
WCC, 13 May 1988	LR-3C	3/8/88	<0.005	<0.005	<0.005	0.017	<0.005	0.0059
WCC, 13 May 1988	LR-3C	3/8/88 DUP	<0.005	<0.005	<0.005	0.015	<0.005	0.013
WCC, 12 August 1988	LR-3C	5/25/88	<0.0005	<0.0005	0.0025	0.0091	<0.0005	NA
L-F, 14 November 1988	LR-3C	9/26/88	<0.0005	0.0005	0.0066	0.026	<0.0005	NA
L-F, 14 February 1989	LR-3C	12/15/88[4]	<0.0005	<0.0005	0.0055	0.0087	<0.0005	NA
L-F, 14 February 1989	LR-3C	12/15/88 DUP[5]	<0.0005	<0.0005	0.002	0.0026	<0.0005	NA
L-F, 2 May 1989	LR-3C	3/27/89	<0.0005	<0.0005	0.0049	0.0067	<0.0005	0.018
L-F, 2 May 1989	LR-3C	3/27/89 DUP[6]	<0.0005	<0.0005	0.0055	0.010	<0.0005	0.021
L-F, 15 July 1989	LR-3C	6/8/89	<0.001	<0.001	0.004	0.016	<0.001	0.008
L-F, 15 July 1989	LR-3C	6/8/89 DUP	<0.001	<0.001	0.004	0.013	<0.001	0.003
L-F, 15 October 1989	LR-3C	9/7/89	<0.0005	<0.0005	0.012	0.016	<0.0005	0.014
L-F, 30 January 1990	LR-3C	11/9/89	<0.0005	<0.0005	0.0038	0.0083	<0.0005	0.0036

ND = NOT DETECTED
NA = NOT ANALYZED

TABLE 2.6 (continued)
SUMMARY OF C-ZONE AND DEEP AQUIFER GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	FREON 113	CHLORO-FORM	TOLUENE
WCC, 9 July 1987	PL-2C	5/22/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 9 July 1987	PL-2C	5/27/87	<0.0005	ND	<0.0005	<0.0005	<0.0005	NA
WCC, 9 July 1987	PL-2C	5/27/87	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 9 July 1987	PL-2C	6/2/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 13 November 1987	PL-2C	9/9/87	<0.0005	<0.0005	<0.0005	0.0010	<0.0005	NA
WCC, 12 February 1988	PL-2C	12/21/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 13 May 1988	PL-2C	3/8/88[7]	<0.005	<0.005	<0.005	<0.005	<0.005	0.032
WCC, 12 August 1988	PL-2C	5/25/88	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	NA
L-F, 14 November 1988	PL-2C	9/27/88	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
L-F, 14 February 1989	PL-2C	12/16/88	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
L-F, 15 July 1989	PL-2C	6/4/89[8]	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.004
L-F, 30 January 1990	PL-2C	11/10/89	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	0.012
WCC, 13 March 1987	RK-2C	12/23/86	<0.005	<0.005	<0.005	NA	<0.005	<0.005
WCC, 13 March 1987	RK-2C	2/10/87	<0.0005	0.0013	<0.0005	NA	<0.0005	NA
WCC, 15 May 1987	RK-2C	3/11/87	<0.0005	0.0055	<0.0005	0.0017	<0.0005	NA
WCC, 15 May 1987	RK-2C	3/11/87	<0.005	<0.005	<0.005	NA	<0.005	<0.005
WCC, 14 August 1987	RK-2C	6/4/87	<0.0005	0.0030	<0.0005	<0.0005	<0.0005	NA
WCC, 13 November 1987	RK-2C	9/9/87	<0.0005	0.0082	<0.0005	0.0016	<0.0005	NA
WCC, 12 February 1988	RK-2C	12/21/87	0.002	0.062	0.0115	0.0045	<0.0005	NA
WCC, 13 May 1988	RK-2C	3/1/88	<0.005	0.017	<0.005	<0.005	<0.005	0.0099
WCC, 13 May 1988	RK-2C	3/1/88	0.0015	0.0465	0.0105	<0.0005	<0.0005	NA
WCC, 13 May 1988	RK-2C	3/1/88 DUP	0.0015	0.0425	0.009	<0.0005	<0.0005	NA
WCC, 12 August 1988	RK-2C	5/26/88	0.0009	0.0183	0.0077	<0.005	<0.0005	NA
WCC, 12 August 1988	RK-2C	5/26/88 DUP	0.0008	0.0218	0.009	<0.005	<0.0005	NA
L-F, 14 November 1988	RK-2C	9/26/88	0.0036	0.041	0.032	0.0051	<0.0005	NA
L-F, 14 February 1989	RK-2C	12/20/88	0.0055	0 0061	0.059	0.0048	<0.0005	NA
L-F, 2 May 1989	RK-2C	3/27/89	0.0048	0.044	0.038	0.004	<0.0005	0.007
L-F, 15 July 1989	RK-2C	6/9/89	0.003	0.036	0.037	0.004	<0.0005	0.003
L-F, 15 October 1989	RK-2C	9/11/89	0.0053	0.025	0.050	0.004	<0.0005	0.0011
L-F, 30 January 1990	RK-2C	11/8/89	0.0012	0.022	0.048	0.0015	<0.0005	0.010
WCC, 3 November 1986	S-4C	9/22/86	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 11 March 1987	S-4C[a]	10/16/86	ND	ND	ND	0.0006	ND	NA
WCC, 11 March 1987	S-4C[a]	11/3/86	ND	ND	ND	ND	ND	NA
WCC, 15 February 1987	S-4C	12/16/86	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 15 May 1987	S-4C	3/5/87	<0.0005	<0.0005	<0.0005	<0.0005	0.0023	NA
WCC, 15 May 1987	S-4C	3/5/87[9]	<0.005	<0.005	<0.005	NA	0.005	0.022
WCC, 14 August 1987	S-4C	6/3/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 13 November 1987	S-4C	9/8/87	<0.0005	<0.0005	<0.0005	0.001	<0.0005	NA
WCC, 12 February 1988	S-4C	12/18/87	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	NA
WCC, 13 May 1988	S-4C	3/2/88	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 12 August 1988	S-4C	5/24/88	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	NA
L-F, 14 November 1988	S-4C	9/23/88	<0.0005	0.0076	<0.0005	<0.0005	<0.0005	NA
L-F, 14 February 1989	S-4C	12/15/88	<0.0005	<0.0005	0.001	<0.0005	<0.0005	NA
L-F, 15 July 1989	S-4C	6/5/89	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
L-F, 30 January 1990	S-4C	11/7/89	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	0.0031

ND = NOT DETECTED
NA = NOT ANALYZED

TABLE 2.6 (continued)
SUMMARY OF C-ZONE AND DEEP AQUIFER GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	FREON 113	CHLORO-FORM	TOLUENE
WCC, 11 March 1987	S-6C[a]	10/28/86	ND	ND	ND	ND	ND	NA
WCC, 15 February 1987	S-6C	12/3/86	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
WCC, 15 May 1987	S-6C	3/6/87	<0.0005	<0.0005	<0.0005	ND	0.0018	NA
WCC, 15 May 1987	S-6C	3/6/87[10]	<0.005	<0.005	0.007	NA	0.002	0.019
WCC, 14 August 1987	S-6C	6/4/87	<0.0005	ND	<0.0005	<0.0005	<0.0005	NA
WCC, 13 November 1987	S-6C	9/10/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 12 February 1988	S-6C	12/18/87	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	NA
WCC, 13 May 1988	S-6C	3/4/88	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 12 August 1988	S-6C	5/25/88	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	NA
WCC, 12 August 1988	S-6C	5/25/88 DUP	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	NA
L-F, 14 November 1988	S-6C	9/27/88	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	NA
L-F, 14 February 1989	S-6C	12/16/88	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	NA
L-F, 15 July 1989	S-6C	6/9/89	<0.001	<0.001	0.007	<0.001	<0.001	<0.001
WCC, 20 November 1987	BK-1	10/1/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 20 November 1987	BK-1	10/1/87 DUP	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 20 November 1987	BK-1	10/20/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 20 November 1987	BK-1	10/20/87 DUP	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 20 November 1987	BK-1	10/20/87 DUP	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 20 November 1987	BK-1	10/20/87 DUP	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 12 February 1988	BK-1[a]	11/10/87	ND	ND	ND	ND	ND	0.012
WCC, 12 February 1988	BK-1	12/17/87	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 12 February 1988	BK-1	12/17/87	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 13 May 1988	BK-1	3/4/88	<0.0005	<0.005	<0.005	<0.005	<0.005	0.0094
WCC, 12 August 1988	BK-1	6/7/88	<0.0005	0.0005	0.001	<0.005	<0.0005	NA
L-F, 14 November 1988	BK-1	9/30/88	<0.0005	<0.0005	<0.0005	<0.0005	0.025	NA
L-F, 14 Feburary 1989	BK-1	12/14/88[11]	<0.0005	<0.0005	0.0007	<0.0005	0.001	NA
L-F, 2 May 1989	BK-1	3/8/89[12]	0.0006	0.0006	0.0005	<0.0005	<0.0005	<0.0005
L-F, 15 July 1989	BK-1	6/4/89	<0.001	<0.001	<0.001	<0.001	<0.001	0.039
L-F, 15 July 1989	BK-1	6/4/89 DUP	<0.001	<0.001	<0.001	<0.001	<0.001	0.040
L-F, 15 October 1989	BK-1	9/6/89	<0.500	<0.500	<0.500	<0.500	<0.500	0.0098
L-F, 30 January 1990	BK-1	11/3/89	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0061
WCC, 20 November 1987	BK-2	10/15/87	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 20 November 1987	BK-2	10/15/87 DUP	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	NA
WCC, 20 November 1987	BK-2	10/20/87	<0.0005	0.0007	<0.0005	<0.001	<0.0005	NA
WCC, 20 November 1987	BK-2	10/20/87 DUP	<0.005	<0.005	<0.005	<0.005	<0.005	0.010
WCC, 12 February 1988	BK-2[a]	11/10/87	ND	ND	ND	ND	ND	0.0068
WCC, 12 February 1988	BK-2	12/17/87	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	NA
WCC, 12 February 1988	BK-2	12/17/87	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 13 May 1988	BK-2	3/3/88	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 12 August 1988	BK-2	6/7/88	<0.0005	0.0006	<0.0005	<0.005	<0.0005	NA
L-F, 14 November 1988	BK-2	9/23/88	<0.0005	<0.0005	<0.0005	<0.0005	0.008	NA
L-F, 14 February 1989	BK-2	12/13/88	<0.0005	0.001	<0.0005	<0.0005	<0.0005	NA
L-F, 14 February 1989	BK-2	12/13/88 DUP	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	NA
L-F, 2 May 1989	BK-2	3/8/89	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.042
L-F, 15 July 1989	BK-2	6/16/89	<0.001	<0.001	<0.001	<0.001	<0.001	0.014
L-F, 15 October 1989	BK-2	9/7/89	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.015
L-F, 30 January 1990	BK-2	11/3/89	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0039
L-F, 30 January 1990	BK-2	11/3/89 DUP	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0030

ND = NOT DETECTED
NA = NOT ANALYZED

TABLE 2.6 (concluded)
SUMMARY OF C-ZONE AND DEEP AQUIFER GROUNDWATER CHEMISTRY DATA - VOLATILE ORGANIC ANALYSES[1]
Concentrations in milligrams per litre (mg/L or ppm)

INVESTIGATION PHASE	WELL ID	COLLECT DATE	1,1-DCE	1,1,1-TCA	TCE	FREON 113	CHLORO-FORM	TOLUENE
WCC, 20 November 1987	BK-3	10/2/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 20 November 1987	BK-3	10/2/87 DUP	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 20 November 1987	BK-3	10/16/87	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	NA
WCC, 20 November 1987	BK-3	10/19/87	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	NA
WCC, 20 November 1987	BK-3	10/20/87	<0.005	<0.005	<0.005	<0.005	<0.005	0.007
WCC, 12 February 1988	BK-3a	11/10/87	ND	ND	ND	ND	ND	ND
WCC, 12 February 1988	BK-3	12/16/87	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
WCC, 12 February 1988	BK-3	12/16/87[13]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 13 May 1988	BK-3	3/3/88	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WCC, 12 August 1988	BK-3	6/7/88	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	NA
L-F, 14 November 1988	BK-3	9/23/88[14]	<0.0005	0.0019	<0.0005	<0.0005	0.005	NA
-F, 14 February 1989	BK-3	12/13/88	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
-F, 2 May 1989	BK-3	3/7/89	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0016
L-F, 2 May 1989	BK-3	3/7/89 DUP	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002
L-F, 15 July 1989	BK-3	6/7/89	<0.001	0.005	<0.001	<0.001	<0.001	0.002
-F, 15 October 1989	BK-3	9/6/89	<0.0005	0.0043	<0.0005	<0.0005	<0.0005	0.0045
-F, 15 October 1989	BK-3	9/6/89 DUP	<0.0005	0.0031	<0.0005	<0.0005	<0.0005	0.0040
-F, 30 January 1990	BK-3	11/6/89	<0.0005	<0.005	<0.0005	<0.0005	<0.0005	0.0012
Geomatrix, 6 May 1988	BK-4	3/25/88	<0.001	<0.001	<0.001	<0.001	<0.001	NA
Geomatrix, 6 May 1988	BK-4	3/25/88	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 6 May 1988	BK-4	3/31/88	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 August 1988	BK-4	6/28/88	<0.001	<0.001	<0.001	0.001	0.001	<0.001
Geomatrix, 15 November 1988	BK-4	9/28/88	<0.001	0.001	<0.001	0.010	<0.001	<0.001
Geomatrix, 15 February 1989	BK-4	12/5/88	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 17 April 1989	BK-4	3/10/89	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Geomatrix, 17 July 1989	BK-4	6/6/89	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 16 October 1989	BK-4	9/6/89	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Geomatrix, 15 January 1990	BK-4	12/6/89	<0.001	<0.001	<0.001	0.001	<0.001	0.001

ND = NOT DETECTED
NA = NOT ANALYZED

Notes:
1 All analyses performed by US EPA Test Methods 601, 602, 624, 8010, 8020, 8240.
2 Acetone detected at 0.032 ppm.
3 1,2-DCA detected at 0.0005 ppm.
4 1,2-DCA detected at 0.0038 ppm.
5 1,2-DCA detected at 0.0025 ppm, 1,2-DCE detected at 0.001 ppm
6 Xylenes detected at 0.0007 ppm.
7 Xylenes detected at 0.010 ppm.
8 Benzene detected at 0.001 ppm.
9 Ethyl benzene detected at 0.001 ppm.
10 Acetone detected at 0.050 ppm.
11 1,2-DCA detected at 0.012 ppm.
12 Benzene detected at 0.012 ppm
13 PCE detected at 0.0064 ppm.
14 1,2-DCE detected at 0.006 ppm.

a No laboratory reports provided.

TABLE 3.1

SUMMARY OF WORK PERFORMED UNDER THE REMEDIAL INVESTIGATION
10900 North Tantau Avenue
Cupertino, California
April 1989 - January 1990

Report References	Wells Installed	No. Soil Borings	No. Groundwater Samples Analyzed	No. Soil Samples Analyzed	No. Soil Gas Samples Analyzed	Predominant Organic Compounds Detected	Comments
Geomatrix Consultants 17 April 1989	-	-	25	-	-	-	Quarterly monitoring report for the calendar of quarter Jan.-March
Geomatrix Consultants 17 April 1989	-	-	16	-	-	-	NPDES self-monitoring report for the calendar quarter of Jan.-March
Geomatrix Consultants 17 April 1989	-	-	-	-	86	TCE, Toluene	Report on soil gas investigation
Beak Consultants June 1989	-	16	-	151	20	TCE, Toluene	Report on completion of piezometers, soil borings and additional soil gas survey
Geomatrix Consultants 17 July 1989	-	-	9	-	-	TCE	Quarterly monitoring report for the calendar quarter of April-June
Geomatrix Consultants 17 July 1989	-	-	9	-	-	TCE	NPDES self-monitoring report for the calendar quarter of April-June
Beak Consultants August 1989	-	14	-	112	-	TCE	Report on completion of additional soil borings
Geomatrix Consultants 16 October 1989	-	-	9	-	-	TCE	Quarterly monitoring report for the calendar quarter of July-Sept.
Geomatrix Consultants 16 October 1989	-	-	9	-	-	TCE	NPDES self-monitoring report for the calendar quarter of July-Sept.
Geomatrix Consultants 15 January 1990	-	-	9	-	-	TCE	Quarterly monitoring report for the calendar quarter of Oct-Dec.
Geomatrix Consultants 15 January 1990	-	-	9	-	-	TCE	NPDES self-monitoring report for the calendar quarter of Oct-Dec.
This report	-	2	-	19	-	TCE	Additional RI borings

TABLE 3.2
SUMMARY OF SOIL GAS CHEMISTRY DATA
Concentrations in micrograms per litre (µg/L or ppb)

LOCATION	SAMPLE NO.	DEPTH (FEET)	FREON 113	1,1-DCE	PCE	1,1,1-TCA	TCE	TOLUENE
A020		15.5	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
A025	A	15	<0.80	<0.40	2.4	<0.50	8.7	1.7
A025	B	20	<0.80	<0.40	1.3	<0.50	<0.50	7.0
A030		15	<0.80	<0.40	70	7.7	60	<0.10
A030	A	15	<0.80	<0.40	91	9.0	73	<0.10
A030	A (Rep)	15	<0.80	<0.40	88	8.8	71	<0.10
A030	B	20.5	<0.80	<0.40	26	0.90	83	<0.10
A040	A	15	<0.80	<0.40	2.0	<0.50	90	<0.10
A040	B	20	<0.80	<0.40	<0.50	<0.50	0.80	<0.10
A040	B (Rep)	20	<0.80	<0.40	<0.50	<0.50	0.70	<0.10
A045		20	<0.80	<0.40	1.0	<0.50	7.7	0.71
A050	A	15	<0.80	<0.40	<0.50	<0.50	<0.50	1.7
A050	B	20	<0.80	<0.40	<0.50	<0.50	1.3	0.70
A055		20	<0.80	<0.40	<0.50	<0.50	<0.50	0.92
A060		20	<0.80	<0.40	<0.50	<0.50	<0.50	2.3
A070		20	<0.80	<0.40	<0.50	<0.50	<0.50	2.7
A080		20.5	<0.80	<0.40	0.83	<0.50	<0.50	<0.10
A095		20	<0.80	<0.40	0.83	<0.50	<0.50	0.47
A105		20	<0.80	<0.40	<0.50	<0.50	<0.50	0.38
B010	A	10	<0.80	<0.40	0.90	<0.50	3.1	<0.10
B010	A (Rep)	10	<0.80	<0.40	1.2	<0.50	3.2	<0.10
B010	B	15	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
B010	C	19	<0.80	1.0	1.2	<0.50	5.8	1.2
B015	A	11.5	<0.80	<0.40	1.7	<0.50	13	<0.10
B015	A (Rep)	11.5	<0.80	<0.40	1.6	<0.50	14	<0.10
B015	B	16	<0.80	<0.40	4.8	<0.50	26	<0.10
B015	C	20	<0.80	<0.40	<0.50	<0.50	1.8	<0.10
B020		21	<0.80	<0.40	<0.50	<0.50	<0.50	0.51
B080		19	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
C010	A	15	<0.80	<0.40	<0.50	<0.50	3.0	<0.10
C010	B	16	<0.80	<0.40	2.0	<0.50	9.9	0.31
C020		15	<0.80	<0.40	3.0	<0.50	20	<0.10
C080		20.5	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
C095		14	<0.80	<0.40	<0.50	<0.50	<0.50	0.99
C100		20	<0.80	<0.40	0.93	<0.50	<0.50	0.86
D010	A	15	<0.80	<0.40	3.0	<0.50	6.7	<0.10
D010	B	20	<0.80	<0.40	1.6	<0.50	4.6	<0.10
D020		20	<0.80	<0.40	<0.50	<0.50	1.8	<0.10
D021		18.5	<0.80	0.74	3.2	<0.50	56	<0.10
D030		20	<0.80	<0.40	<0.50	<0.50	4.1	0.11
D040	A	18	<0.80	<0.40	<0.50	<0.50	<0.50	0.68
D050	A	16	<0.80	<0.40	<0.50	<0.50	110	<0.10
D050	A (Rep)	16	<0.80	<0.40	<0.50	<0.50	110	<0.10
D051		20	<0.80	<0.40	<0.50	<0.50	48	<0.10

TABLE 3.2 (continued)
SUMMARY OF SOIL GAS CHEMISTRY DATA
Concentrations in micrograms per litre (µg/L or ppb)

LOCATION	SAMPLE NO.	DEPTH (FEET)	FREON 113	1,1-DCE	PCE	1,1,1-TCA	TCE	TOLUENE
D052	A	18	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
D053	A	20	<0.80	<0.40	0.70	<0.50	0.43	4.8
D054	A	20	<0.80	<0.40	<0.50	<0.50	1.9	0.23
D055	A	25	<0.80	<0.40	<0.50	<0.50	<0.50	0.21
D056		20	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
D070		20	<0.80	<0.40	0.89	<0.50	<0.50	5.6
D080		20.5	<0.80	<0.59	<0.50	<0.50	<0.50	<0.10
D095		20	6.3	<0.40	2.3	<0.50	<0.50	3.5
D100		20	<0.80	<0.40	<0.50	<0.50	<0.50	0.68
E010	A	14	<0.80	<0.40	<0.50	<0.50	<0.50	1.5
E010	B	18	<0.80	<0.40	2.2	<0.50	0.65	0.91
E015	A	14	<0.80	<0.40	<0.50	<0.50	26	1.8
E015	A (Rep)	14	<0.80	<0.40	<0.50	<0.50	26	0.34
E015	B	19	<0.80	<0.40	<0.50	<0.50	<0.50	0.74
E020		20.5	<0.80	<0.40	<0.50	<0.50	180	<0.10
E020	A (Rep)	20.5	<0.80	<0.40	<0.50	<0.50	170	<0.10
E030		20.5	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
E040		16.5	<0.80	<0.40	<0.50	<0.50	8.5	<0.10
E050		20.5	<0.80	<0.40	0.99	<0.50	26	<0.10
E055	A	18	<0.80	<0.40	3.7	<0.50	17	<0.10
E060	A	18	<0.80	<0.40	0.71	<0.50	<0.50	0.31
E070		20.5	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
E080		20.5	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
E100		20	<0.80	<0.40	0.81	<0.50	2.5	<0.10
F010	A	14	<0.80	<0.40	<0.50	<0.50	<0.50	0.85
F010	B	20	<0.80	<0.40	1.4	<0.50	<0.50	1.2
F020		20	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
F030		20	<0.80	<0.40	0.86	<0.50	<0.50	0.53
F040		20	<0.80	<0.40	<0.50	<0.50	0.55	0.55
F050		20	<0.80	<0.40	0.93	<0.50	<0.50	0.58
F060		20	<0.80	<0.40	2.4	<0.50	<0.50	0.78
F070		20	<0.80	<0.40	0.60	<0.50	<0.50	<0.10
F080		10	<0.80	<0.40	0.68	<0.50	<0.50	<0.10
F100		20	<0.80	<0.40	0.95	<0.50	<0.50	0.61
G015		11	<0.80	<0.40	<0.50	<0.50	<0.50	0.24
G030		20	<0.80	<0.40	<0.50	<0.50	<0.50	0.28
G040		16	<0.80	<0.40	<0.50	<0.50	<0.50	0.29
G050		20	<0.80	<0.40	1.7	<0.50	<0.50	<0.10
G060		20	<0.80	<0.40	2.7	<0.50	<0.50	1.3
G070		20	5.4	<0.40	0.70	<0.50	<0.50	0.84
G080		20	<0.80	<0.40	<0.50	<0.50	<0.50	0.39
G100		20	<0.80	<0.40	<0.50	<0.50	<0.50	0.41

TABLE 3.2 (concluded)
SUMMARY OF SOIL GAS CHEMISTRY DATA
Concentrations in micrograms per litre (µg/L or ppb)

LOCATION	SAMPLE NO.	DEPTH (FEET)	FREON 113	1,1-DCE	PCE	1,1,1-TCA	TCE	TOLUENE
SG-1		15	<0.80	<0.40	<0.50	<0.50	0.6	<0.10
SG-2		13	<0.80	<0.40	<0.50	<0.50	9.7	<0.10
SG-3		15	<0.80	<0.40	<0.50	<0.50	120	<0.10
SG-4		15	<0.80	<0.40	<0.50	<0.50	23	<0.10
SG-5		15	<0.80	<0.40	1.2	<0.50	40	<0.10
SG-6		15	<0.80	<0.40	<0.50	<0.50	100	<0.10
SG-7		15	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
SG-8		15	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
SG-9		15	<0.80	<0.40	<0.50	<0.50	1.8	<0.10
SG-10		15	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
SG-11		15	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
SG-12		15	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
SG-13		15	<0.80	<0.40	9	<0.50	52	<0.10
SG-14		15	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
SG-15		15	<0.80	<0.40	<0.50	<0.50	55	<0.10
SG-16		15	<0.80	<0.40	<0.50	<0.50	74	<0.10
SG-17		15	3.4	<0.40	160	6.4	70	<0.10
SG-18*	B	15	<0.80	<0.40	<0.50	<0.50	<0.50	<0.10
SG-18	D	20	<0.80	<0.40	<0.50	<0.50	40	<0.10
SG-19*	B	15	<0.80	<0.40	<0.50	<0.50	17	<0.10
SG-19	D	20	<0.80	<0.40	<0.50	<0.50	8.6	<0.10
SG-20*	B	10	<0.80	<0.40	45	<0.50	14	<0.10
SG-20	D	13	<0.80	<0.40	5.8	<0.50	12	<0.10

Rep - Laboratory replicate.

Trans-1,2-dichloroethene was not detected in any of the soil gas samples.

TABLE 3.3

DRY DENSITY, MOISTURE CONTENT AND FRACTION ORGANIC CARBON CONTENT OF SELECTED SOIL SAMPLES

Boring I.D.	Depth (feet)	Dry Density (PCF)[a]	Moisture Content (%)	Fraction Organic Carbon (%)
RI-31	10	NA[b]	7.7	0.11
RI-31	20.5	NA	19.2	0.13
RI-31	29.5	NA	13.4	0.09
RI-31	40.5	NA	10.9	0.11
RI-31	50.5	122.3	4.5	0.11
RI-31	60.0	111.4	4.7	0.09
RI-31	69.5	106.7	6.5	0.10
RI-31	81.0	109.8	7.7	0.11
RI-31	89.5	109.1	8.6	0.11
RI-32	9.5	107.5	7.2	0.12
RI-32	19.5	95.9	10.1	0.10
RI-32	30.0	100.2	21.9	0.11
RI-32	40.0	109.6	14.5	0.06
RI-32	49.5	112.8	4.4	0.12
RI-32	60.0	112.5	16.5	0.09
RI-32	70.0	116.2	13.1	0.07
RI-32	79.5	118.9	14.5	0.08
RI-32	89.0	113.7	6.7	0.10
RI-32	96.5	106.1	10.3	0.12

Notes:

[a] PCF = Pounds per cubic foot

[b] NA = Not analyzed

TABLE 4.1

CLIMATOLOGICAL DATA

WEATHER STATION	PRECIPITATION Total (inches)	TEMPERATURE Annual Mean (°F)	WIND SPEED Annual Mean (mph)	WIND DIRECTION Prevailing
San Jose Weather Station[1]	13.85	59	6.4	NW
San Francisco Int'l Airport[2]	19.71	56.6	10.5	WNW
San Jose (NOAA)[3]	13.86	59.7	--	--
Palo Alto[4]	14.77	57.8	--	--
San Jose (BAAQMD)[5]	--	--	7.2	NW
Moffett Naval Air Station[5]	--	--	5.1	NNW
Montague[5]	--	--	6.2	N

(a) Data Sources:

1 - Office of Emergency Services, City of San Jose
2 - National Oceanic and Atmospheric Administration, National Climatic Data Center, 1985
3 - National Oceanic and Atmospheric Administration, National Climatic Data Center, September 1982
4 - Climates of the States, 3rd edition, 1985
5 - Bay Area Air Quality Management District

-- Data Not Available

TABLE 4.2

LABORATORY PERMEABILITY VALUES FOR UNDISTURBED SAMPLES[1] OF A-ZONE SEDIMENTS FORMER INTERSIL FACILITY, CUPERTINO, CALIFORNIA

Boring[2]	Sample Depth (feet)	Lithologic Classification[3]	Permeability[4] at 20°C (cm/sec)
B8A (W2A)	90.5	Very sandy clay (CL)	5.5×10^{-8}
B8A (W2A)	110.5	Sandy Clay (CL)	2.3×10^{-8}
B9	95.5	Very sandy clay/ clayey sand (CL/SC)	4.1×10^{-7}
B9	100.5	Gravelly silty sand (SM)	1.9×10^{-6}
B9	105	Clayey sand (SC)	2.2×10^{-7}
B9	110.5	Clayey sand (SC)	1.1×10^{-7}

Notes:

1 Data from Cooper Engineers, 1986, Report Phase III Groundwater Quality Investigation, Manufacturing Facility, 10900 North Tantau Avenue, Cupertino, California: Prepared for Intersil, Inc., Plates 8A and 8B.

2 Locations of borings are shown in Figure 2.1.

3 Unified soil classification in parentheses.

4 Laboratory permeability tests were performed in accordance with ASTM Test Method D-2434. The values are a measure of the vertical permeability of the samples.

TABLE 4.3

VERTICAL HYDRAULIC GRADIENTS ACROSS THE B/C AQUITARD

Well Pair	17 July 1989			5 September 1989		
	Δh[1]	l_m[2]	i_{vm}[3]	Δh	l_m	i_m
LR-3C, S-2B	1.67	42.0	0.04	1.44	42.0	0.03
H-4C, H-3B	(-)3.53	54.0	(-)0.07	N/A	54.0	N/A
S-4C, S-3B	2.57	65.0	0.04	2.40	65.0	0.04
S-6C, S-5B	3.73	60.0	0.06	3.35	60.0	0.06
PL-2C, PL-1B	1.26	61.0	0.02	2.08	61.0	0.03
RK-2C, RK-1B	2.40	55.0	0.04	N/A	55.0	N/A

Notes:

[1] Δh = difference in water levels in feet between wells indicated.

[2] l_m = distance in feet between mid-points of screened intervals of wells indicated.

[3] i_{vm} = vertical hydraulic gradient in foot/foot ($i_{vm} = \frac{\Delta h}{\Delta l_m}$)

TABLE 5.1

AQUEOUS SOLUBILITIES AND OCTANOL:
WATER PARTITION COEFFICIENTS FOR SELECTED ORGANIC
COMPOUNDS DETECTED BENEATH THE FORMER INTERSIL FACILITY

Compound	Solubility[a] (mg/L)	Octanol: Water Partition Coefficient (K_{ow})[b]
Acetone	miscible	0.83[a]
Benzene	1,780 at 20°C	130[c]
Ethylbenzene	150 at 20°C	1,400[d]
Freon 113	170 at 25°C	--[e]
Tetrachloroethene	150 at 20°C	400[c]
Toluene	500 at 20°C	490[c]
1,1,1-Trichloroethane	700 at 20°C	300[f]
Trichloroethene	1,000 at 20°C	220[d]

Notes:

[a] Roy, W.R. and Griffin, R.A., 1985, Mobility of organic solvents in water-saturated soil materials: Environmental Geology and Water Science, Vol. 7, No. 4, pp. 241-247.

[b] Octanol:Water Partition Coefficient is defined as the equilibrium concentration ratio of an organic chemical distributed between an organic liquid (i.e., octanol) and water. The octanol:Water Partition Coefficient can be used as a means to predict soil adsorption.

[c] Chiou, C.T., Freed, V.H., Schmedding, D.W., and Kohnert, R.L., 1977, Partition coefficient and bioaccumulation of selected organic chemicals: Environmental Science and Technology, Vol. 11, No. 5, pp. 475-478.

[d] Valvani, S.C., Yalkowsky, S.H., and Roseman, T.J., 1981, Solubility and partitioning IV: aqueous solubility and octanol-water partition coefficients of liquid nonelectrolytes: Journal of Pharmaceutical Science, Vol. 70, No. 5, pp. 502-507, May.

[e] Data not available.

[f] Karickhoff, S.W., 1981, Semi-empirical estimation of sorption of hydrophobic pollutants on natural sediments and soils: Chemosphere, Vol. 10, No. 8, pp. 833-846.

TABLE 7.1

PRESSURE CHANGE IN GAS MONITORING WELLS
FROM START TO END OF GAS EXTRACTION TESTS

Test	Pressure Change (inches of water head)						
	V1S	V1D	V2S	V2D	V3S	V3D	W9A
Recovery for 120 minutes	+0.091	NR	+0.090	NR	+0.064	NR	+0.80
Pumping for 75 minutes at approx. 20 ft^3/min.	-0.084	NR	-0.082	NR	-0.031	NR	-0.54
Recovery for 60 minutes	NR	+0.62	NR	+0.32	NR	+0.24	+0.53
Pumping VE2 only for 50 minutes at approx. 36 ft^3/min.	-.024	-0.95	-0.083	-0.41	NR	NR	NR

NR = not recorded

Notes: A positive pressure change is defined as an increase in the gas phase pressure in the well over the duration of the test.

The pressure readings in the vent wells approached steady values at the end of each test with some fluctuation resulting from wind gusts. Average pressure values were used to calculate the pressure change before compiling this table. The pressure in W9A did not stabilize by the end of each test, however, the magnitude of the change for each test clearly indicate that the gas extraction system has a strong influence at W9A.

TABLE 8.1a
SCREENING OF POTENTIAL CHEMICALS OF CONCERN IN GROUNDWATER

Potential Chemical of Concern[1]	Frequency of Detection[2]	Maximum Conc.[3]	Background Conc.[3]	COC	Comments
Acetone	1/186	0.019			Low frequency
Benzene	0/186				Not detected
Benzo(b)fluoranthene	0/21				Not detected
Bis-2-ethylhexylphthalate	0/21				Not detected
2-Butanone	7/186	0.027			Sampling artifact
Butylbenzylphthalate	0/21				Not detected
Chloroform	11/186	0.0138		X	
1,4-Dichlorobenzene	0/21				Not detected
1,1-Dichloroethene	17/186	0.049		X	
1,2-Dichloroethene (cis/trans)	2/186	0.008			Low frequency
Freon 113	84/186	0.11		X	
Methylene Chloride	0/186				Not detected
Tetrachloroethene	19/186	1.2		X	
Toluene	20/186	0.45		X	
1,1,1-Trichloroethane	17/186	0.72		X	
Trichloroethene	121/186	33		X	
Xylenes (total)	1/186	0.004			Low frequency
Zinc	4/4	0.8	0.0057-3[4]		Background

[1]As determined in BPHE (Clement, 1990).

[2]Frequency of detection determined from data collected between March 1987 and May 1989.

[3]Concentration in milligrams per litre (mg/L).

[4]Department of Water Resources, 1975, Evaluation of Groundwater Resources, South San Francisco Bay, Volume III: Northern Santa Clara County Area, December.

TABLE 8.1b
SCREENING OF POTENTIAL CHEMICALS OF CONCERN IN SOIL

Potential Chemical of Concern[1]	Frequency of Detection[2]	Maximum Conc.[3]	Background Conc.[3]	COC	Comments
Acetone	0/268				Not detected
Arsenic	76/80	40	6 - 65[4]		Background
Benzene	7/268	0.9			Pathway has acceptable risks
Beryllium	1/41	0.649	<1 - 12[5]		Background
2-Butanone	8/268	0.065			Pathway has acceptable risks
Copper	41/41	125	30 - 500[4]		Background
Cyanide	18/41	4	<0.5[4]		Pathway has acceptable risks
1,2-Dichlorobenzene	2/268	0.52			Low freqency
1,3-Dichlorobenzene	0/268				Not detected
1,4-Dichlorobenzene	1/268	0.035			Low frequency
1,1-Dichloroethene	0/268				Not detected
1,2-Dichloroethene (cis/trans)	2/268	0.01			Low freqency
Ethylbenzene	1/268	0.07			Low frequency
Freon 113	0/268				Not detected
Gallium	0/41		30 - 704[1]		Not detected
Isopropanol	0/268				Not detected
Methylene Chloride	0/268				Not detected
Silver	3/41	20	<0.5 - 5[5]		Pathway has acceptable risks
Tetrachloroethene	5/268	0.022			Pathway has acceptable risks
Thallium	33/41	9.66	3.78 - 30.77[6]		Background
Toluene	148/268	0.17			Pathway has acceptable risks
1,2,4-Trichlorobenzene	0/43				Not detected
1,1,1-Trichloroethane	0/268				Not detected
Trichloroethene	127/268	10			Pathway has acceptable risks
Xylenes (total)	1/268	0.18			Low frequency
Zinc	80/80	207	120 - 400[4]		Background

[1]As determined in BPHE (Clement, 1990).

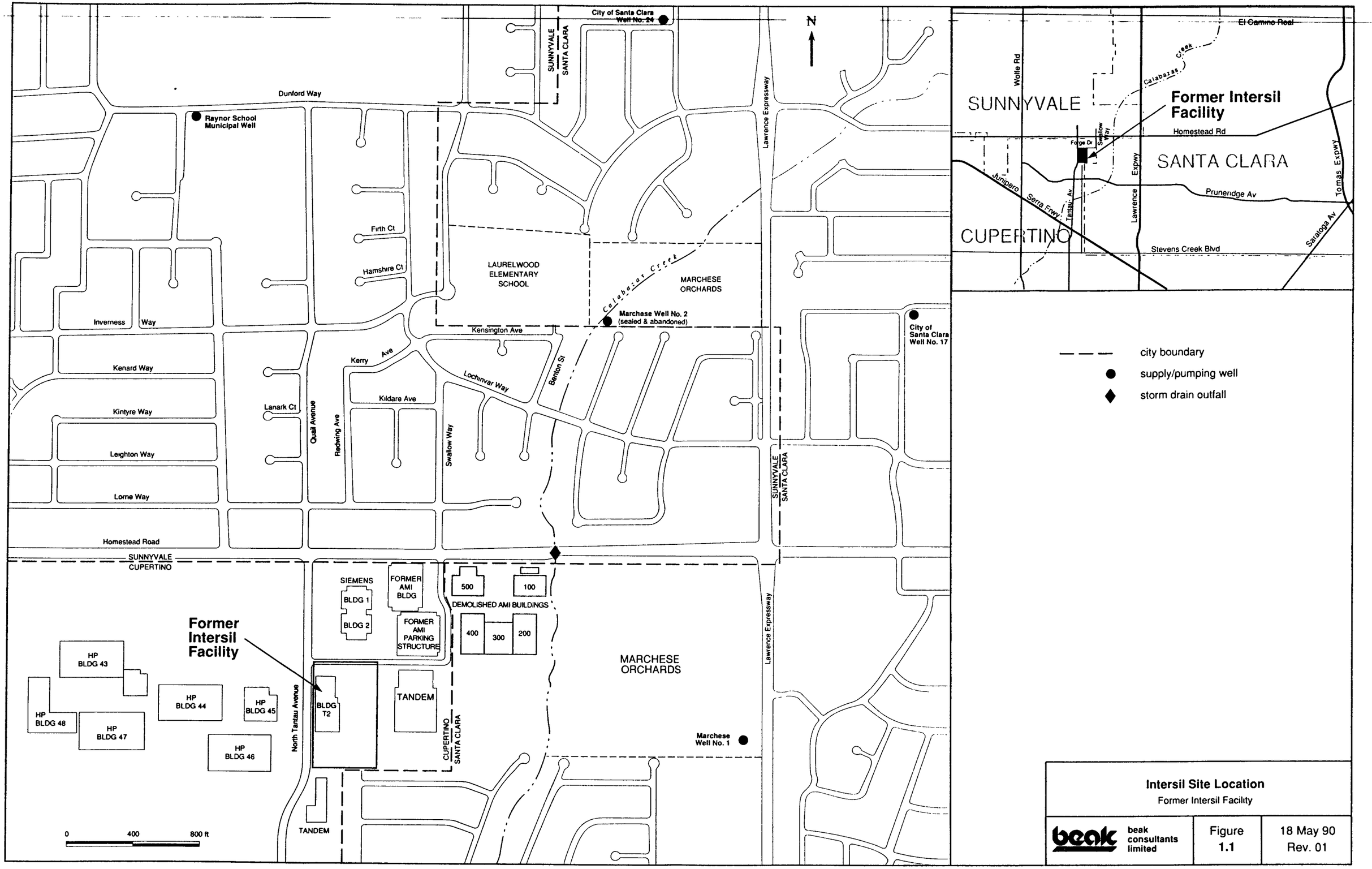
[2]Frequency of detection for organic compounds determined from data collected during 1989. Frequency of detection for inorganic compounds determined from data collected from 1982, 1983, and 1989.

[3]Concentration in milligrams per kilogram (mg/kg).

[4]Shacklette and Boergnen, 1984.

[5]Connor and Shacklette, 1975.

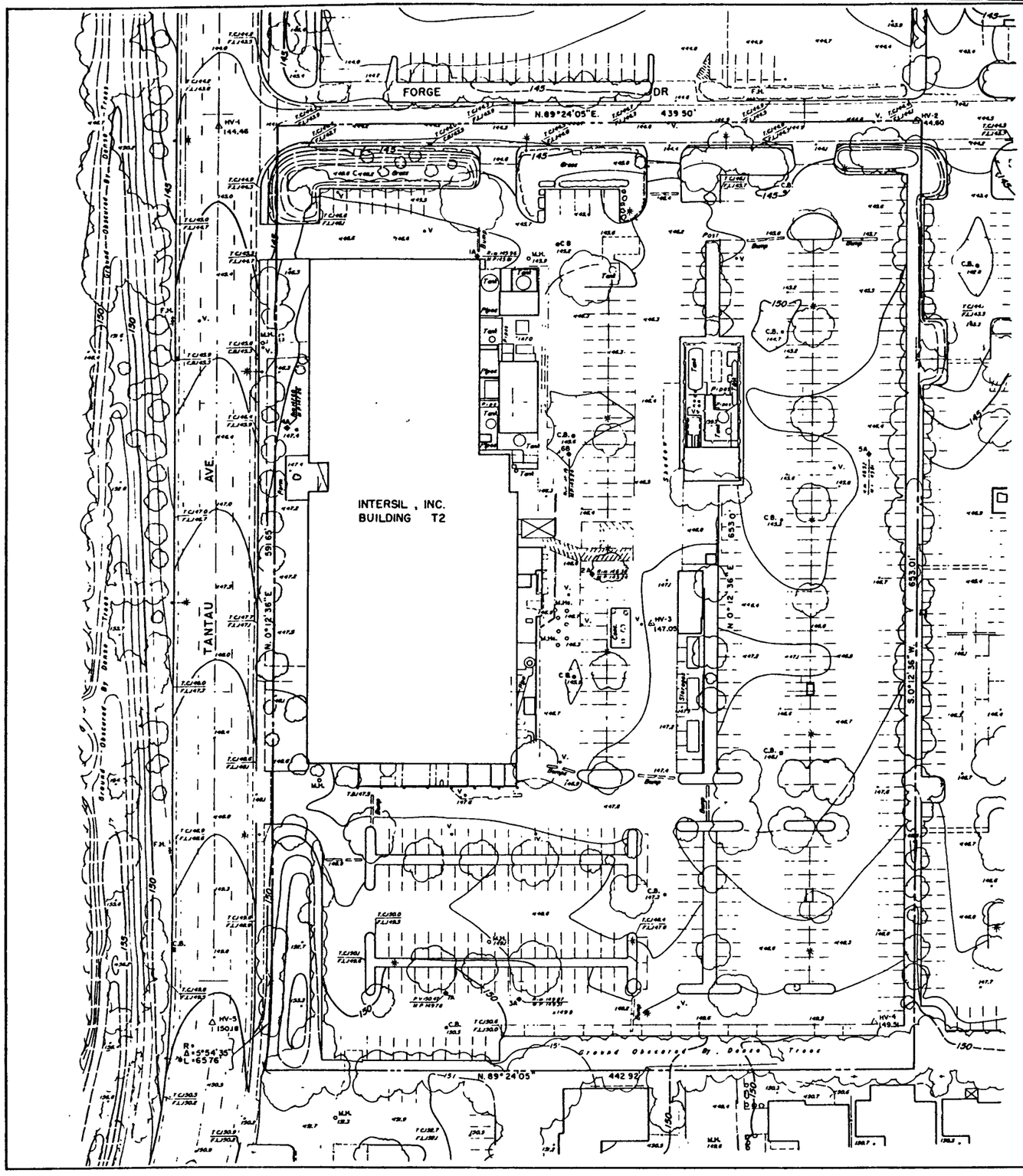
[6]Boergnen and Shacklette, 1981.



Intersil Site Location

Former Intersil Facility

beak consultants limited	Figure 1.1	18 May 90 Rev. 01



EXPLANATION

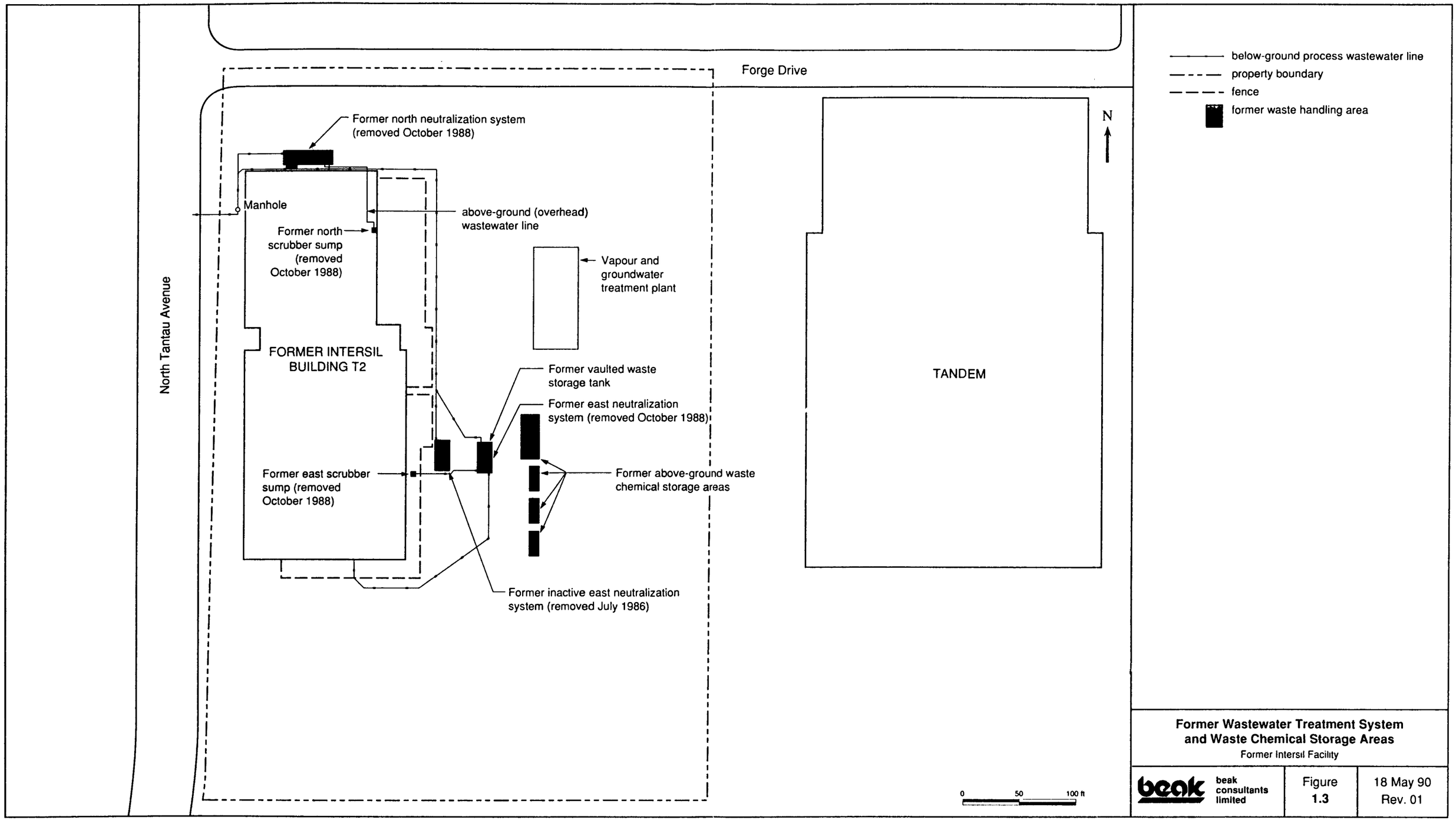
- C.B. Catch basin
- —— Centerline
- —☼— Electrolier
- F.H. Fire hydrant
- F.L. Flow line
- x145 Ground shot
- M.H. Man hole
- ◆ Monitoring well
- P.V. Pavement
- ——— Property line
- T.C. Top of curb
- M.P. Monitoring point

Notes

1. Bench mark: north rim of most easterly monument box at intersection of Tantau Avenue and Homestead Road. (From George Nolte & Associates datum) Elev. = 140.58
2. Base map: Plot Plan, Location of Monitoring Wells at Intersil Facilities, prepared by Ruth and Going, Inc. 25 September 1986. Job No. 17040-122.

Site Topographic Map (1986)
Former Intersil Facility

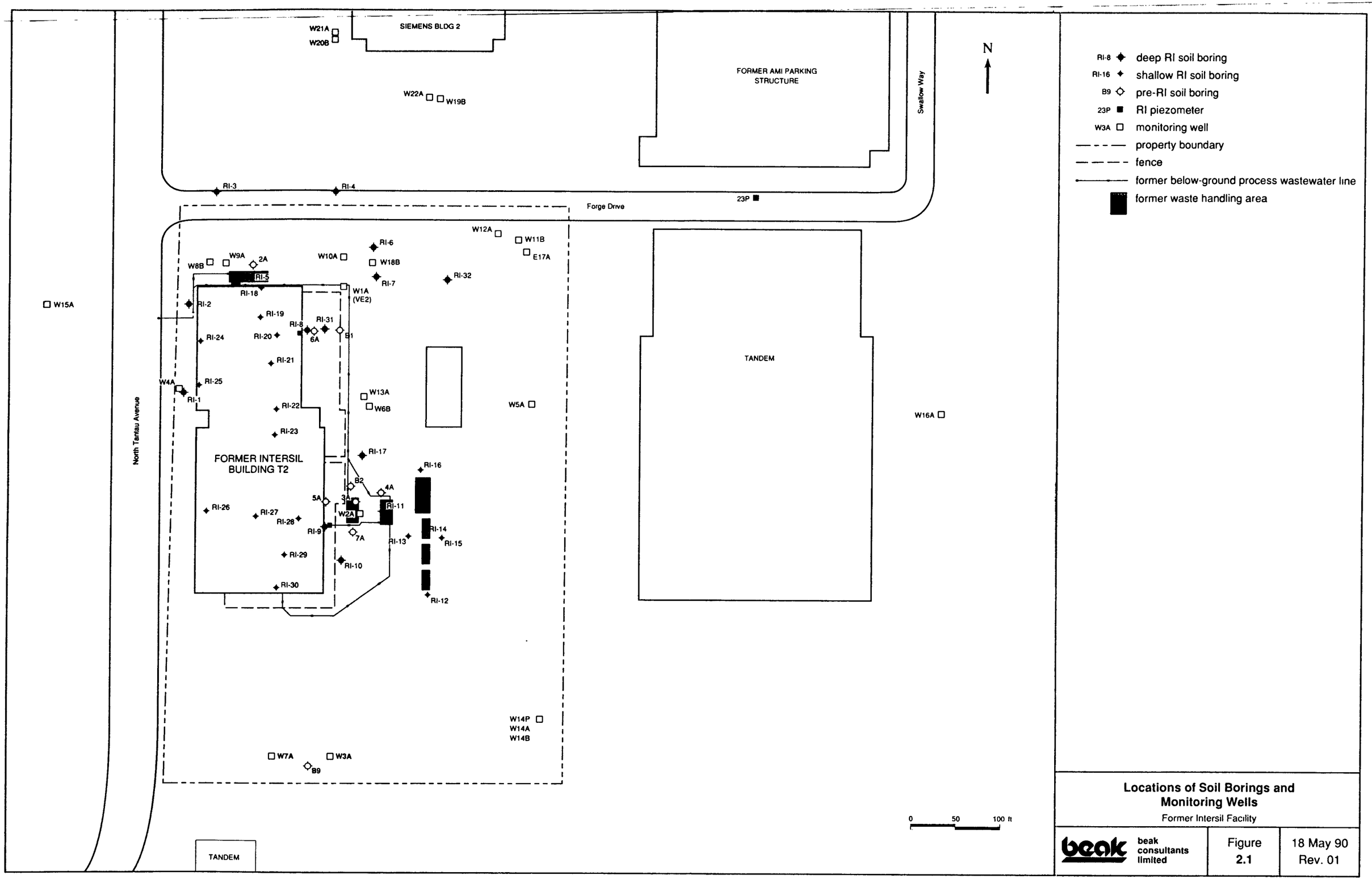
beak consultants limited	Figure 1.2	23 Feb 90 Rev. 00



Former Wastewater Treatment System and Waste Chemical Storage Areas

Former Intersil Facility

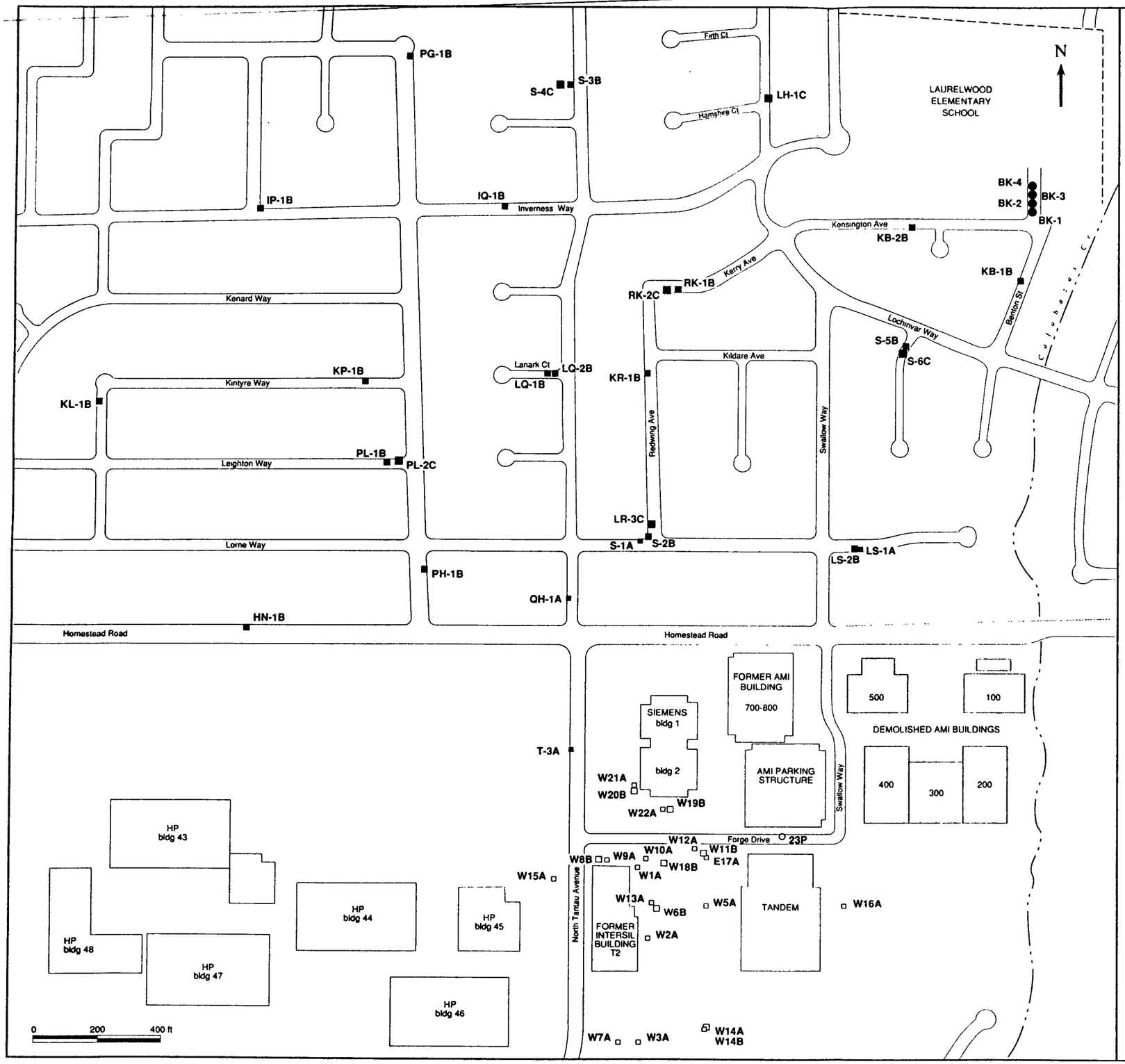
beak consultants limited	Figure 1.3	18 May 90 Rev. 01



Locations of Soil Borings and Monitoring Wells

Former Intersil Facility

beak consultants limited	Figure 2.1	18 May 90 Rev. 01



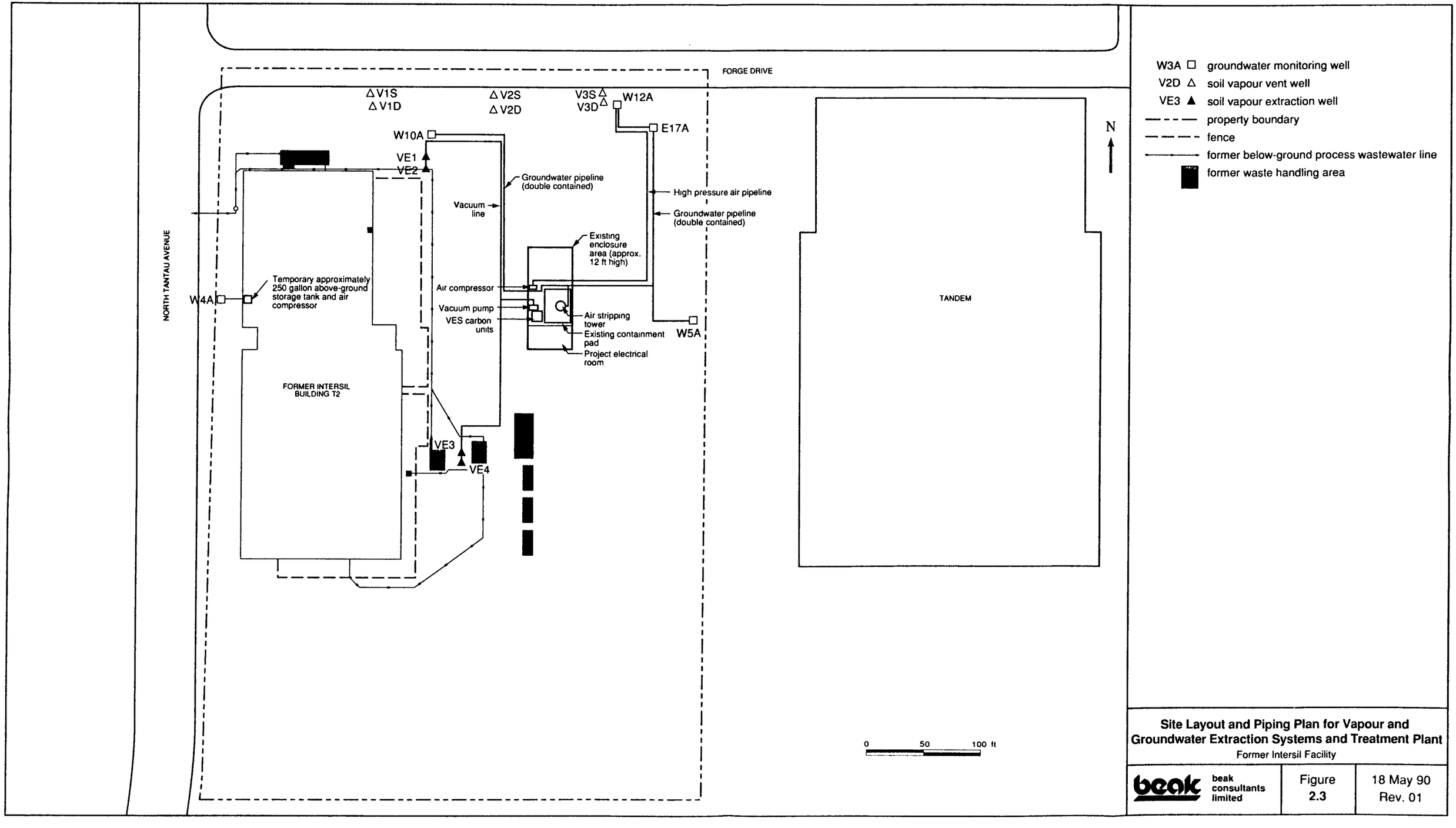
W13A □ Intersil A-zone monitoring well
W6B □ Intersil B-zone monitoring well
23P ○ Intersil A-zone piezometer

QH-1A ■ off-site A-zone monitoring well
LQ-1B ■ off-site B-zone monitoring well
LR-3C ■ off-site C-zone monitoring well

BK-4 ● off-site deep aquifer monitoring well

Locations of Intersil and Off-Site Wells
Former Intersil Facility

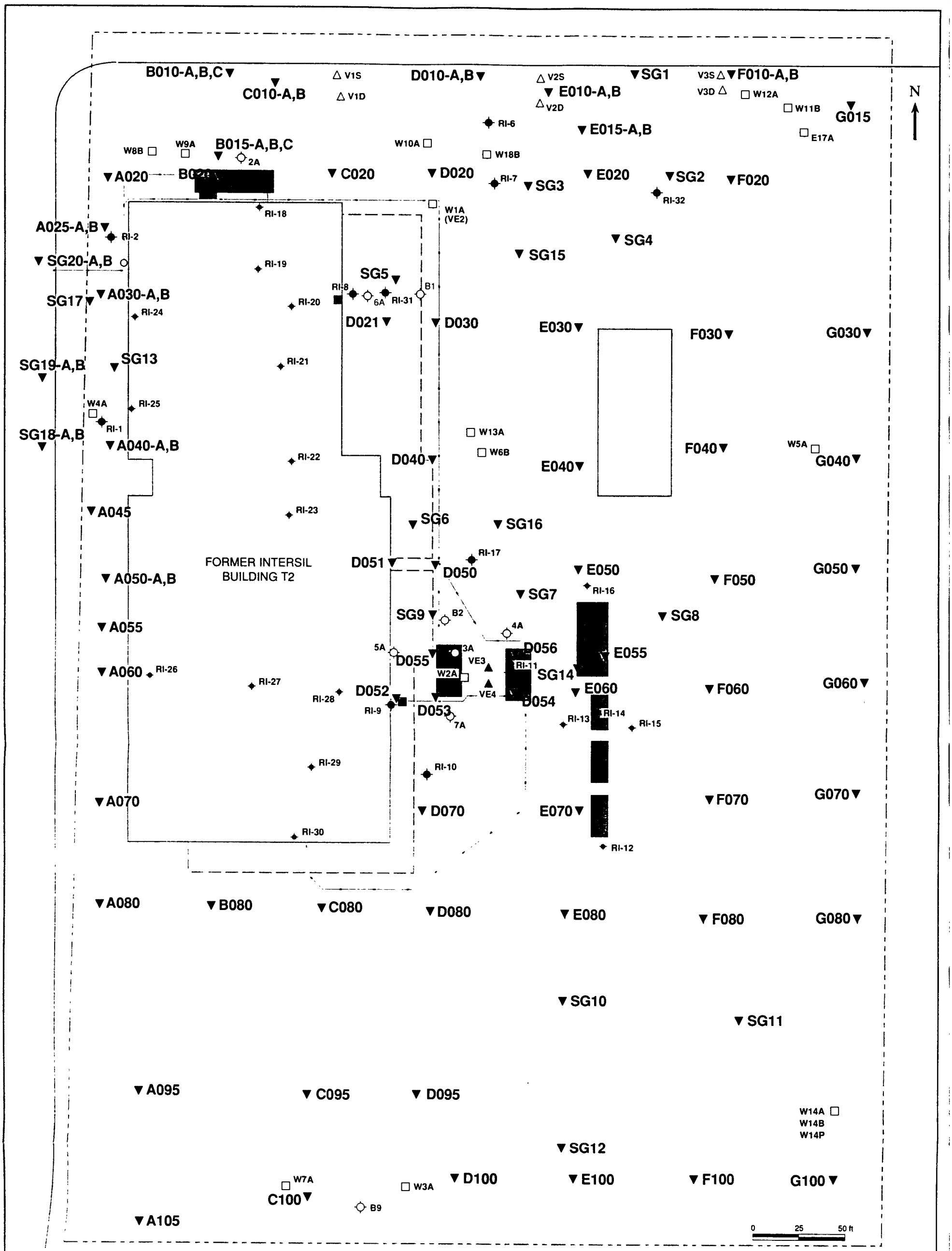
beak consultants limited	Figure 2.2	18 May 90 Rev. 01



Site Layout and Piping Plan for Vapour and Groundwater Extraction Systems and Treatment Plant

Former Intersil Facility

beak consultants limited	Figure 2.3	18 May 90 Rev. 01

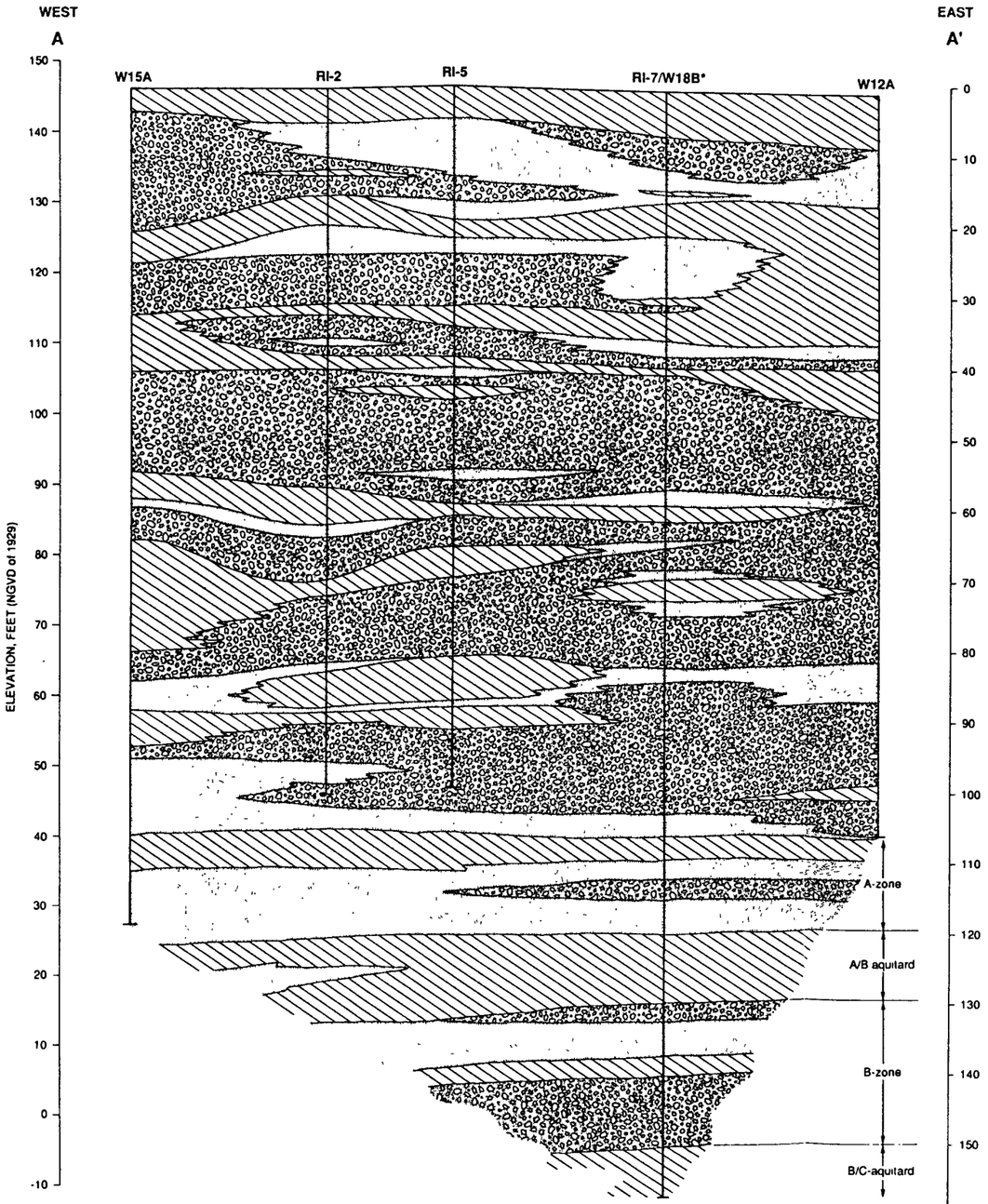


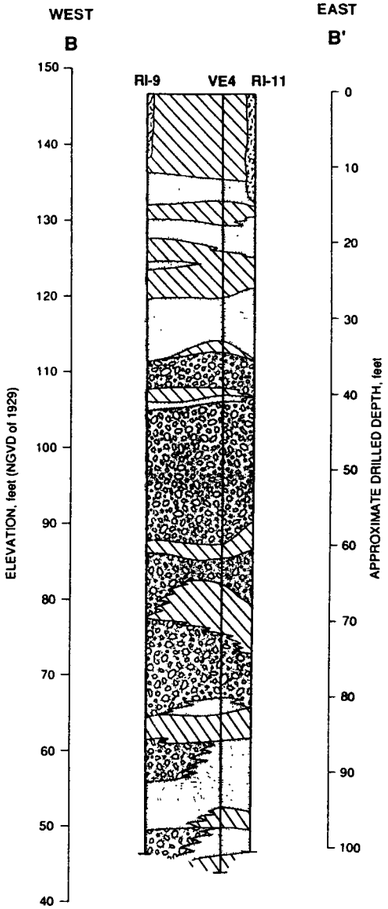
- RI-8 ● deep RI soil boring
- RI-16 ◆ shallow RI soil boring
- W3A □ groundwater monitoring well
- V2D △ soil vapour vent well
- VE3 ▲ soil vapour extraction well
- B9 ☼ pre-RI soil boring
- E100 ▼ soil gas sample location
- property boundary
- fence
- former below-ground process wastewater line
- former waste handling area

Soil Gas Sampling Locations

Former Intersil Facility

beak consultants limited	Figure 3.1	18 May 90 Rev. 01

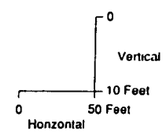




EXPLANATION

GENERALIZED GEOLOGIC UNITS

- Clay, silty clay, sandy clay, clayey silt
- Sandy silt, silty sand, clayey sand
- Sand, gravelly sand, sandy gravel
- Fill



Notes

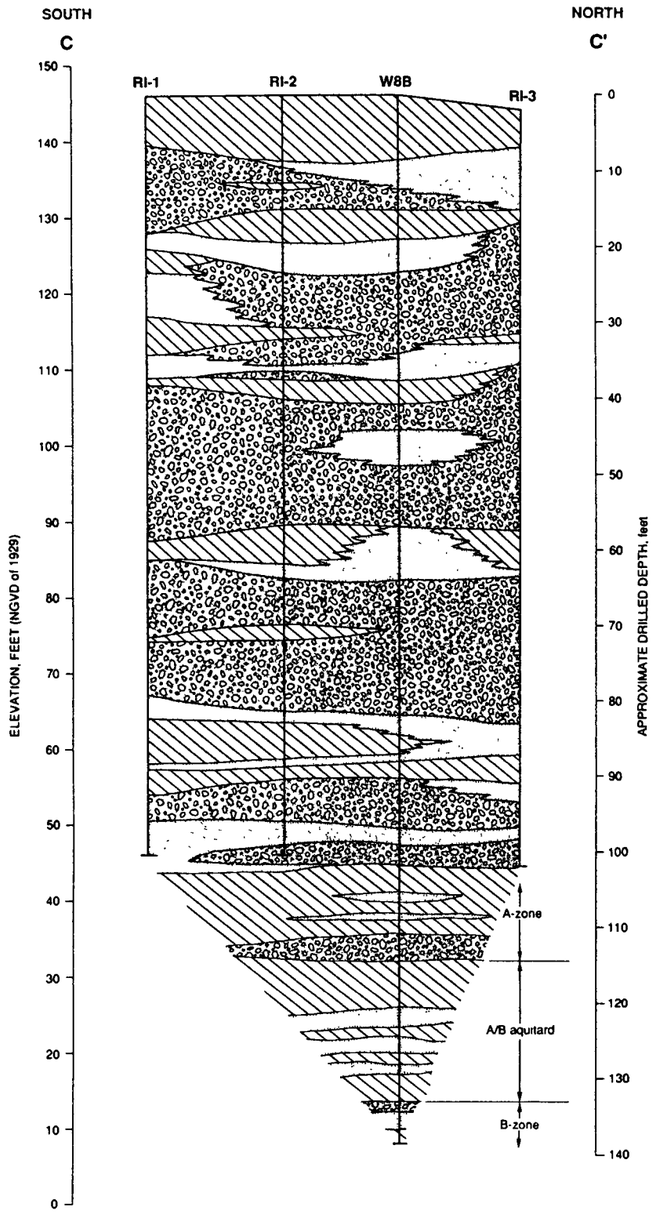
* Lithology from 100' to 157' from W18B

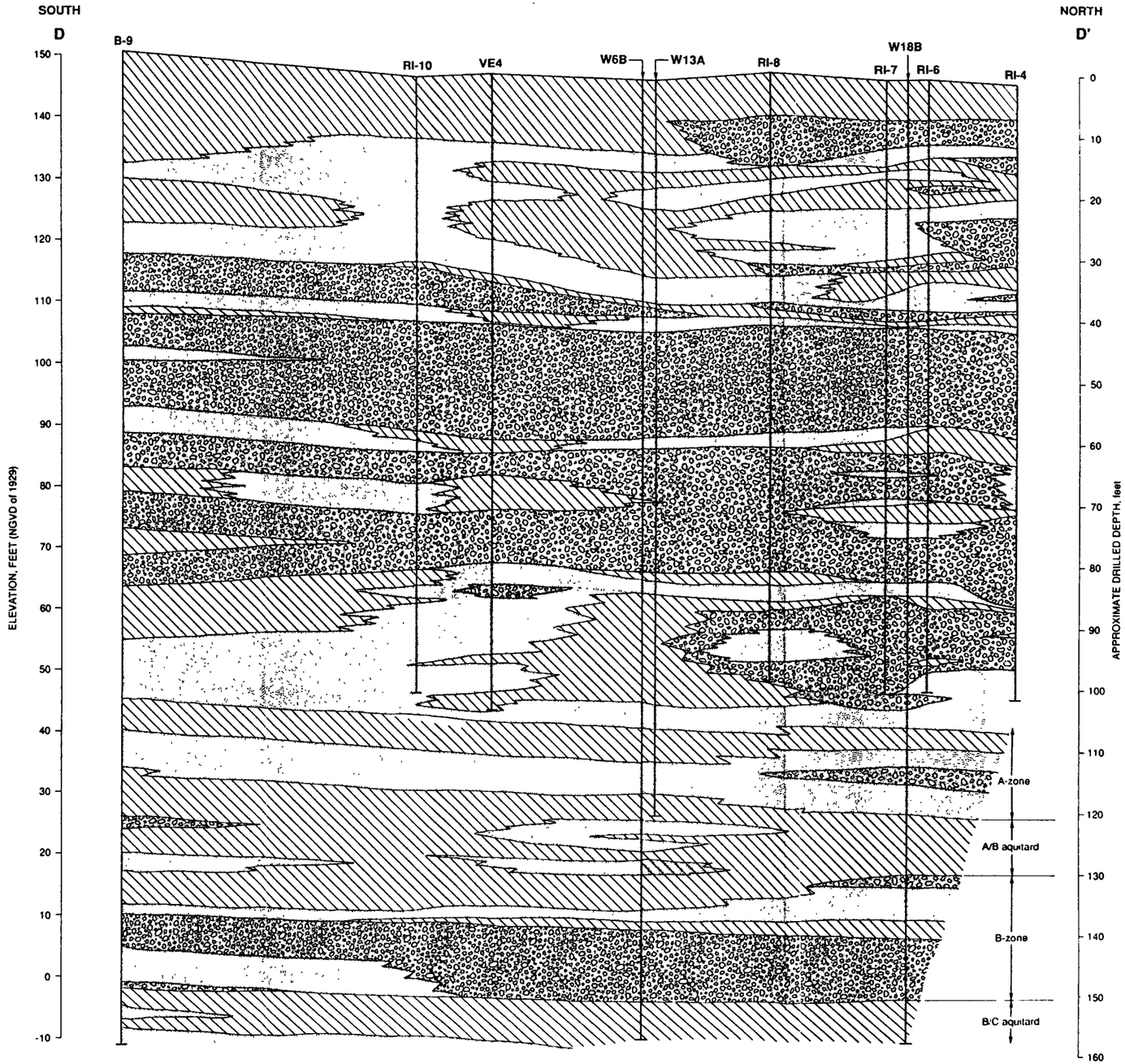
1 The geologic units connected between borings have been inferred and are based on interpolation between widely spaced points, and in part, on work performed by others The contacts between these units are shown as solid lines solely for clarity and are not meant to imply certainty Refer to lithologic logs for details of subsurface conditions

2. Section locations shown on Figure 4 1 c

GENERALIZED CROSS SECTIONS
A-A' AND B-B'
Former Intersil Facility
Cupertino, California

GEOMATRIX | Figure 4.1a | 23 Feb 90 Rev. 00





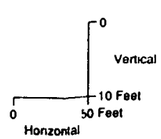
EXPLANATION

GENERALIZED GEOLOGIC UNITS

- Clay, silty clay, sandy clay, clayey silt
- Sandy silt, silty sand, clayey sand
- Sand, gravelly sand, sandy gravel
- Fill-

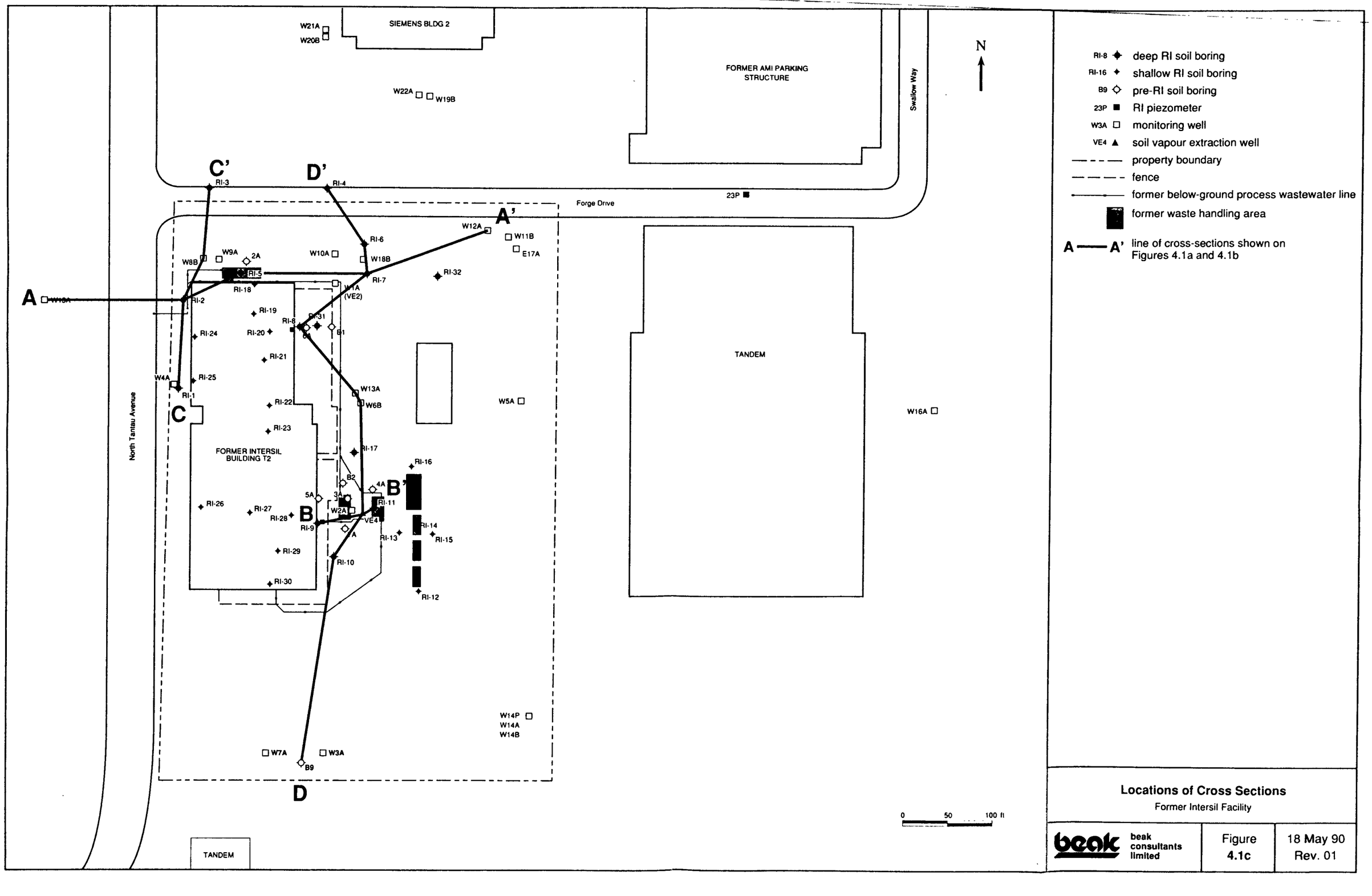
Notes

1. The geologic units connected between borings have been inferred and are based on interpolation between widely spaced points, and in part, on work performed by others The contacts between these units are shown as solid lines solely for clarity and are not meant to imply certainty Refer to lithologic logs for details of subsurface conditions
2. Section locations shown on Figure 4 1 c



GENERALIZED CROSS SECTIONS
C-C' AND D-D'
Former Intersil Facility
Cupertino, California

GEOMATRIX | Figure 4.1b | 23 Feb 90 Rev. 00



Locations of Cross Sections

Former Intersil Facility

beak consultants limited	Figure 4.1c	18 May 90 Rev. 01

SOUTH

NORTH

City of Santa Clara Municipal Well No. 15 (7S1W08M01)

BK-3

City of Santa Clara Municipal Well No. 17 (7S1W05P02)

ELEVATION, feet

200
100
0
-100
-200
-300
-400
-500
-600

TD 604'

TD 500'

TD 800'

Shallow Water Bearing Units

Regional Aquitard

Deeper Aquifers

EXPLANATION

Clay, shale, silty clay, sandy clay, sandy silty clay, and gravelly clay

Sand, gravel, gravelly sand, sandy gravel, and clayey sand

BK-3 — Well identification

Drilled interval

TD 500' — Total depth of well

NOTE

1. The geologic units connected between borings have been inferred and are based on interpolation between widely spaced points and, in part, on work performed by others. The contacts between these units are shown as solid lines soley for clarity and are not meant to imply certainty.

0 500 Feet

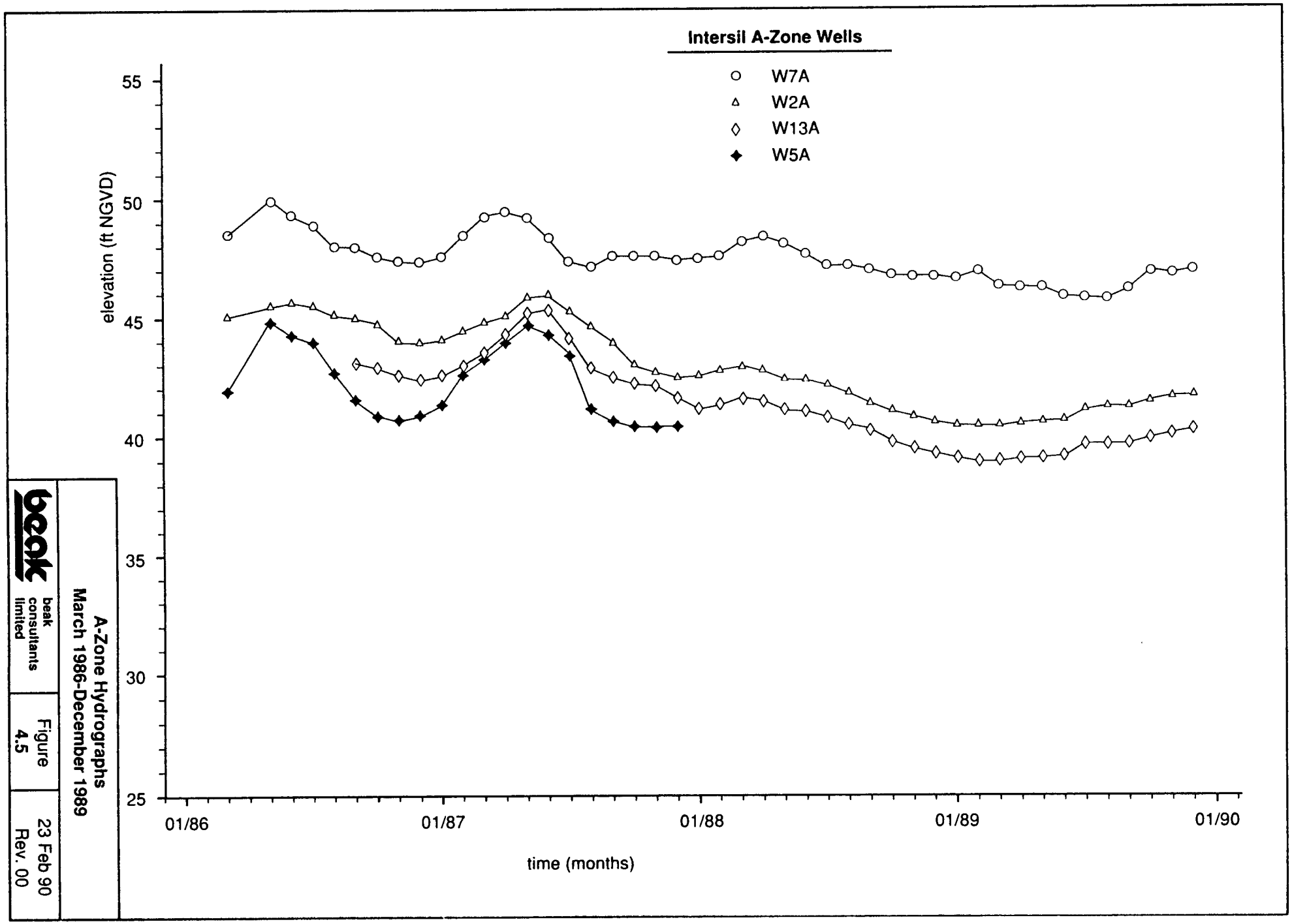
Horizontal scale
5X vertical exaggeration

REGIONAL GEOLOGIC SECTION
Santa Clara County, California

GEOMATRIX

Project No. 1159C-0900

Figure 4.2

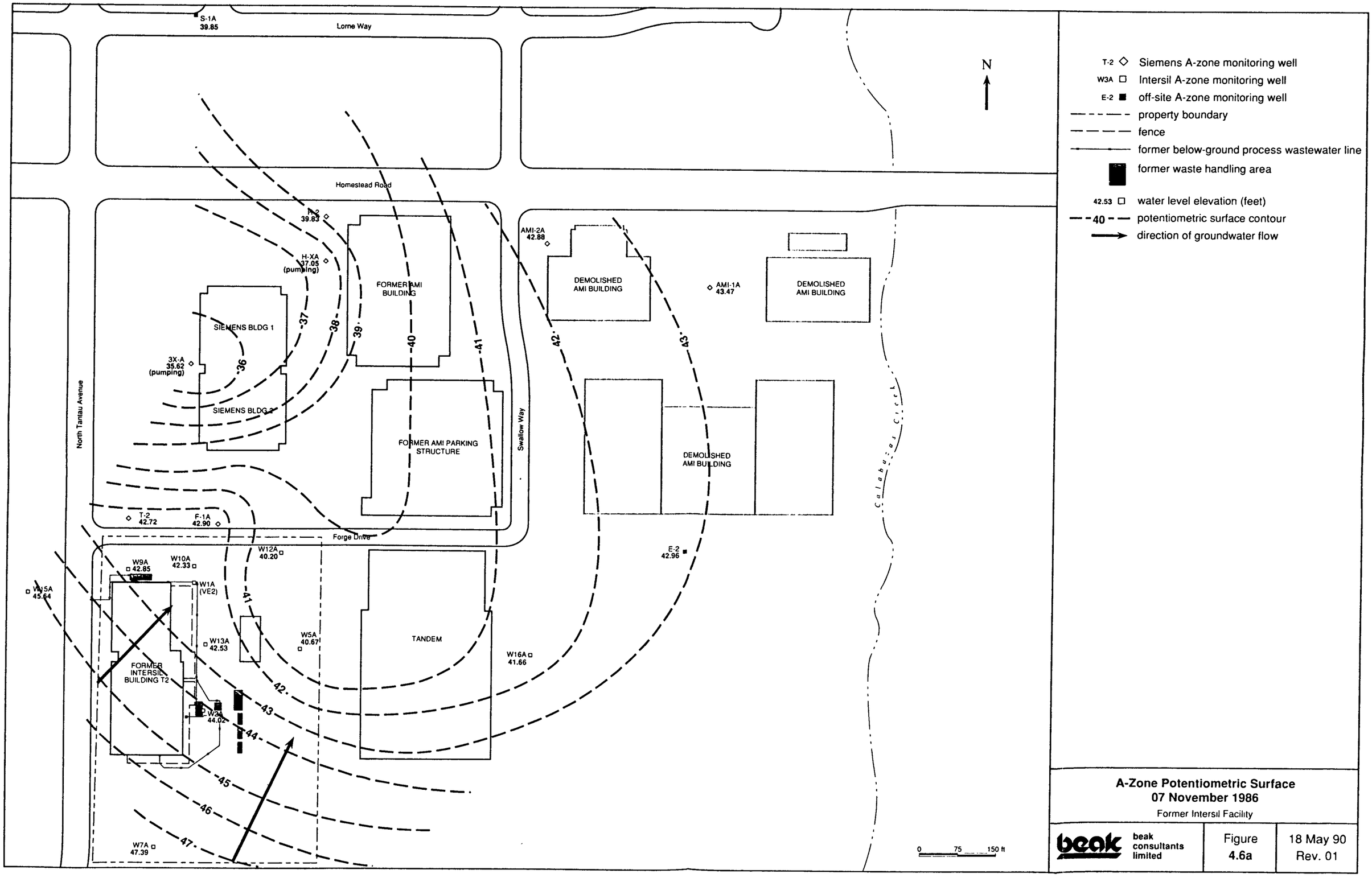


beak consultants limited

A-Zone Hydrographs
March 1986-December 1989

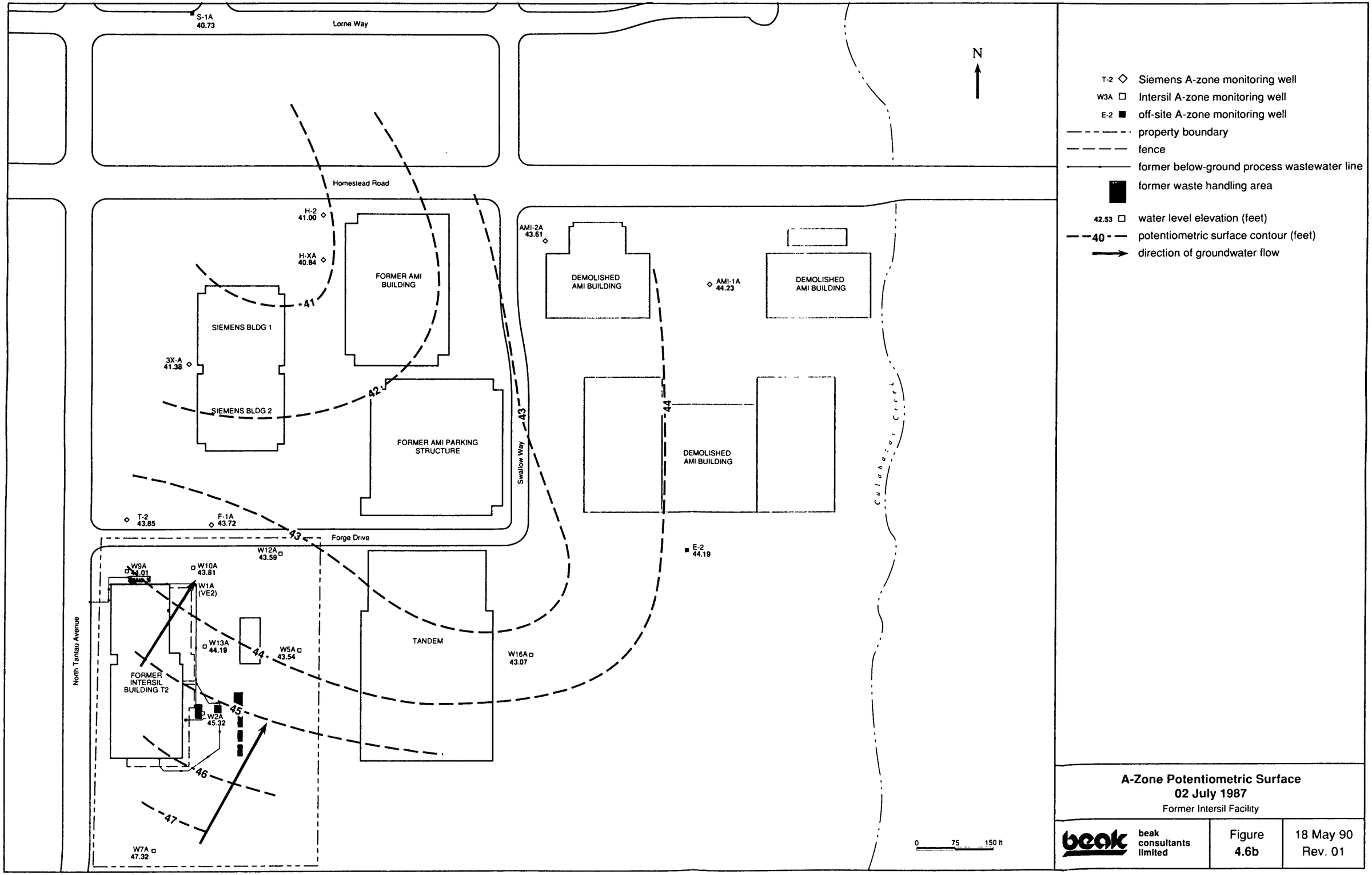
Figure 4.5

23 Feb 90
Rev. 00



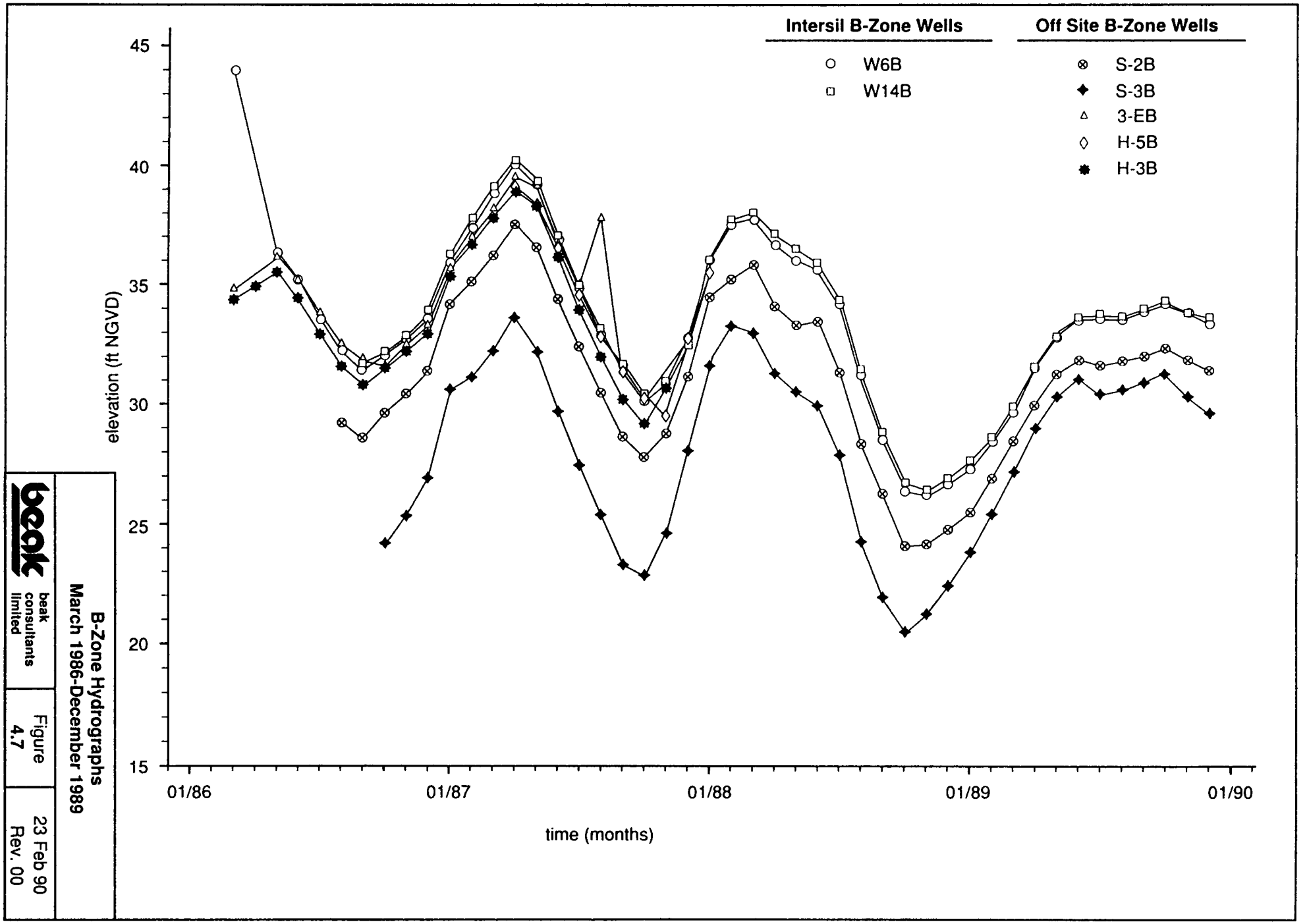
A-Zone Potentiometric Surface
07 November 1986
Former Intersil Facility

beak consultants limited	Figure 4.6a	18 May 90 Rev. 01



A-Zone Potentiometric Surface
02 July 1987
Former Intersil Facility

beak consultants limited	Figure 4.6b	18 May 90 Rev. 01

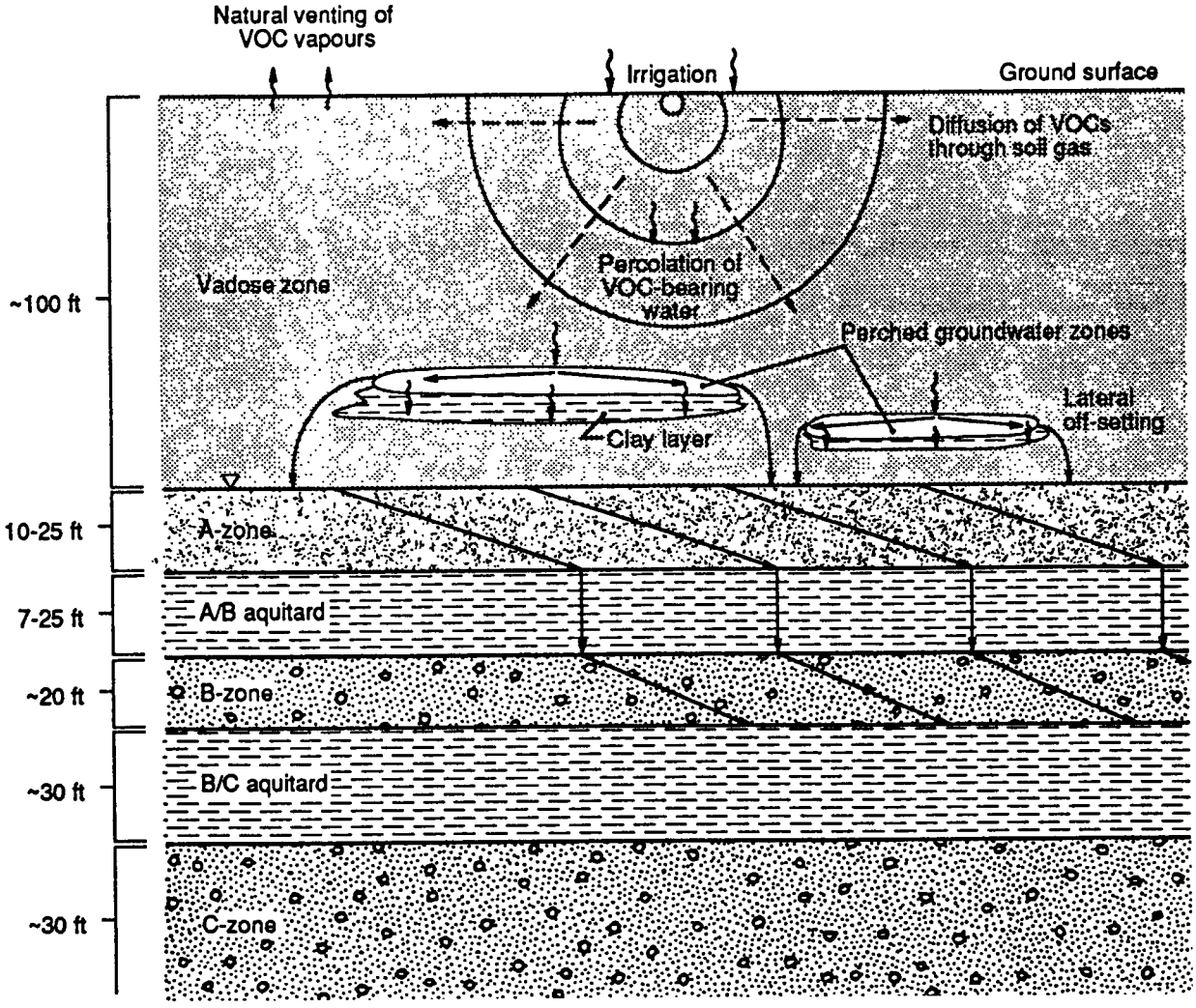


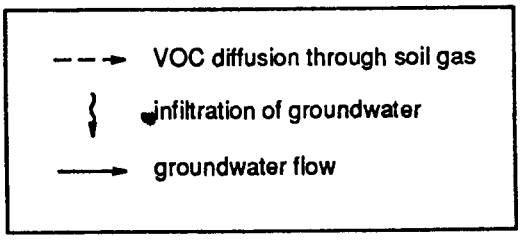
B-Zone Hydrographs
March 1986-December 1989

beak consultants limited

Figure 4.7

23 Feb 90
Rev. 00

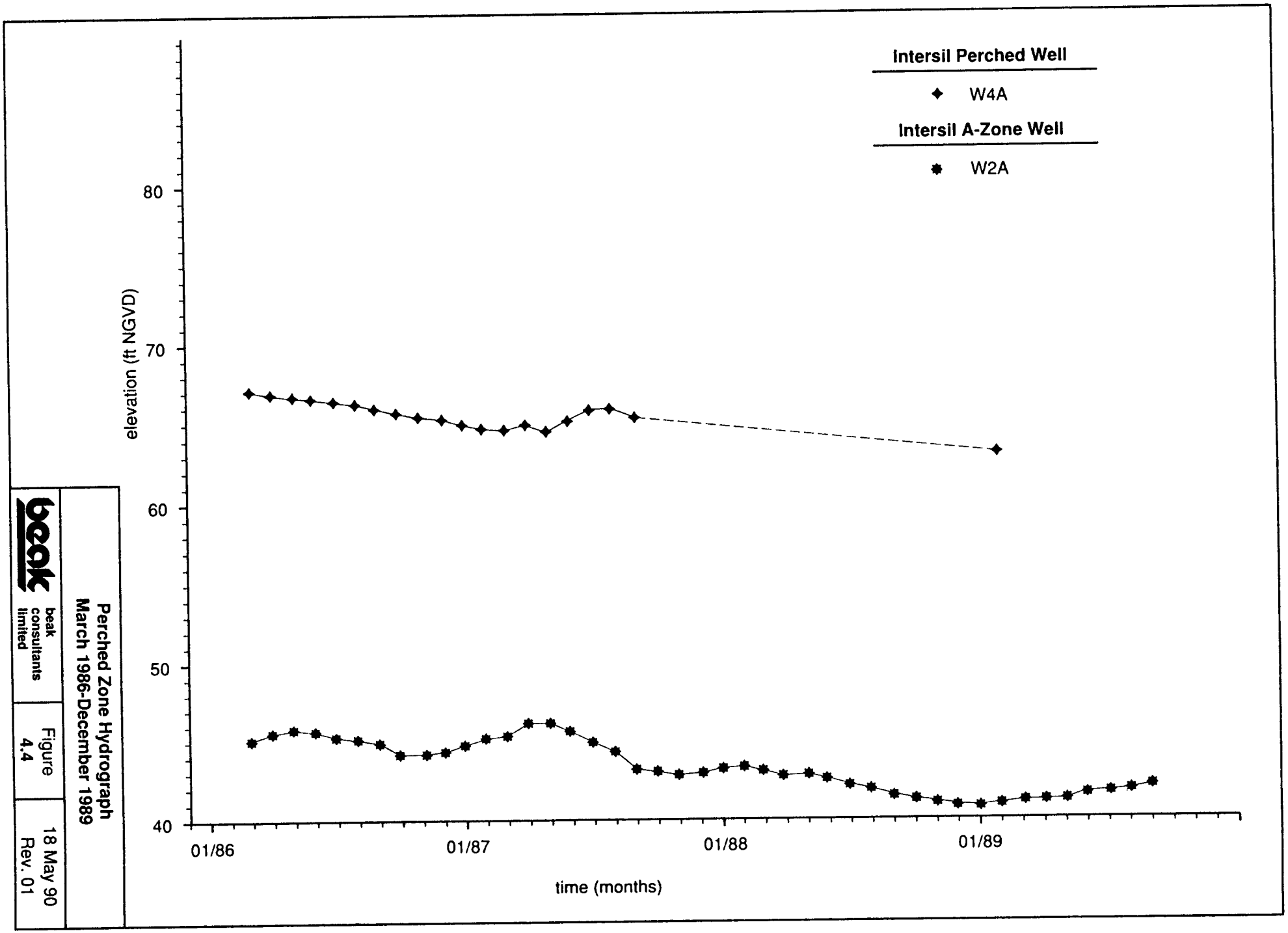




Schematic Diagram of Chemical Transport Processes at the Study Site

Former Intersil Facility

beak consultants limited	Figure 4.3	18 May 90 Rev. 00

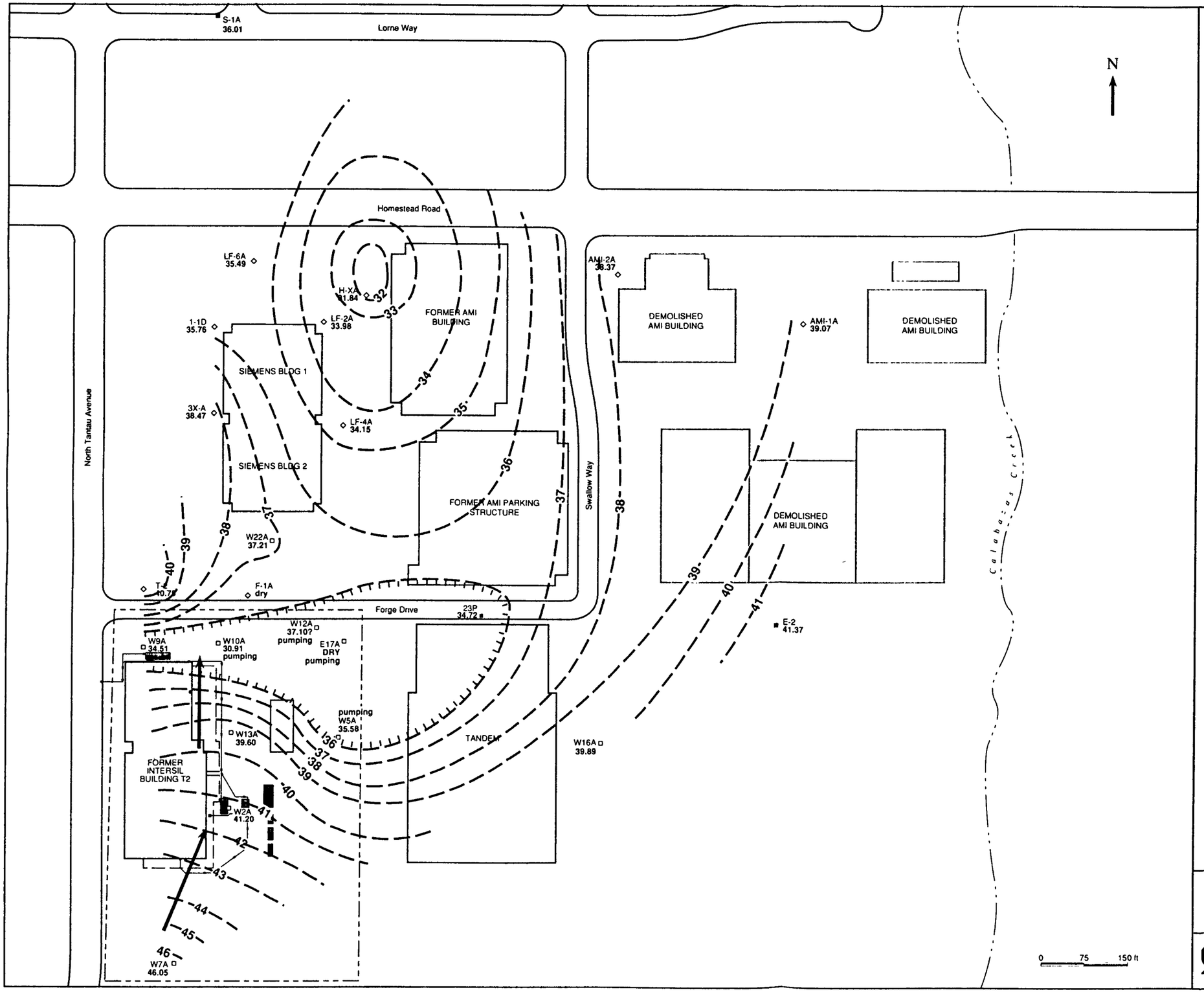


Perched Zone Hydrograph
March 1986-December 1989

beak consultants limited

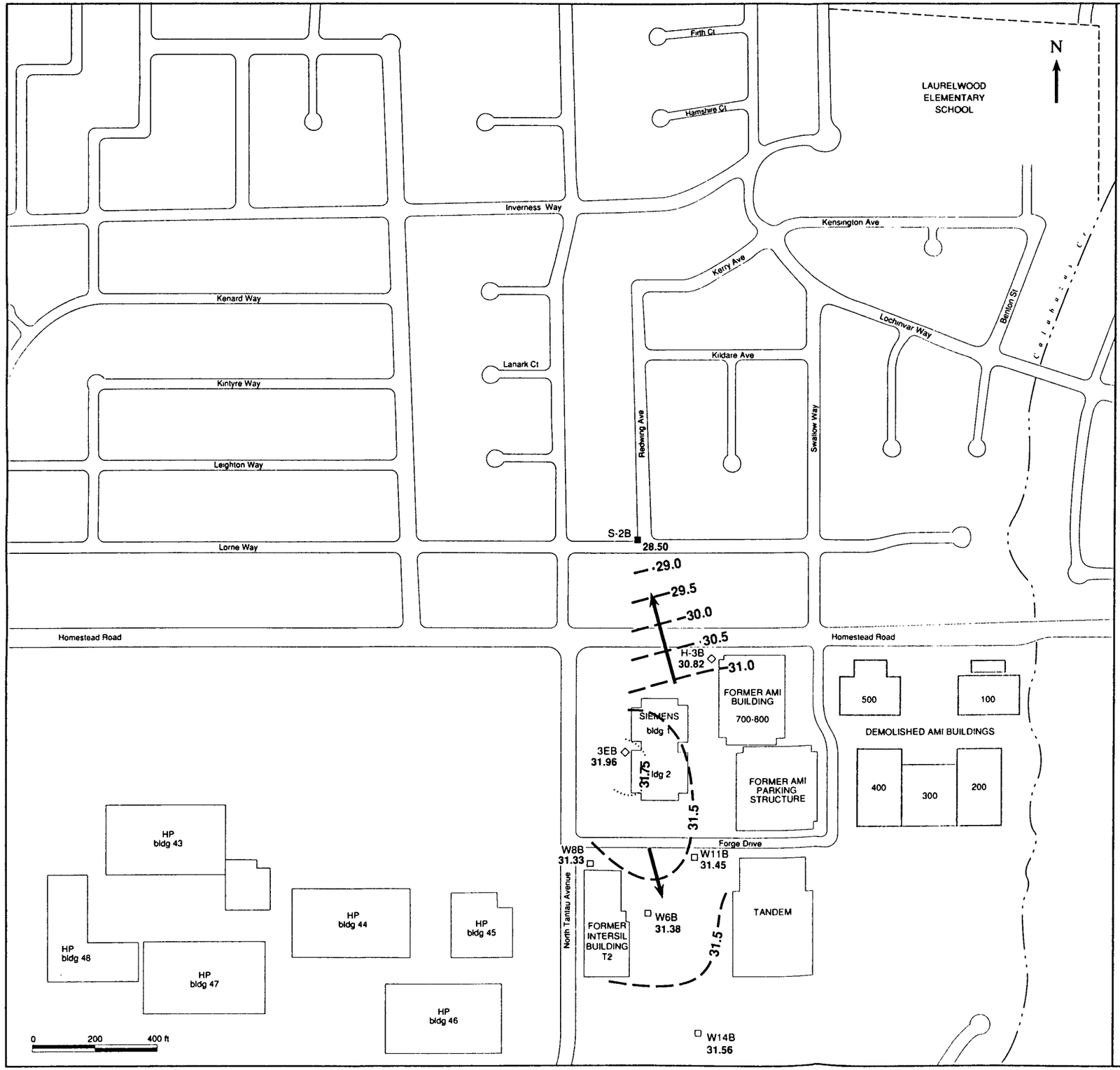
Figure 4.4

18 May 90
Rev. 01



A-Zone Potentiometric Surface
05 September 1989
Former Intersil Facility

beak consultants limited	Figure 4.6c	18 May 90 Rev. 01



W6B □ Intersil B-zone monitoring well

H-3B ◇ Siemens B-zone monitoring well

LQ-1B ■ off-site B-zone monitoring well

31.56 □ water level elevation (feet)

— -31.0- — potentiometric surface contour

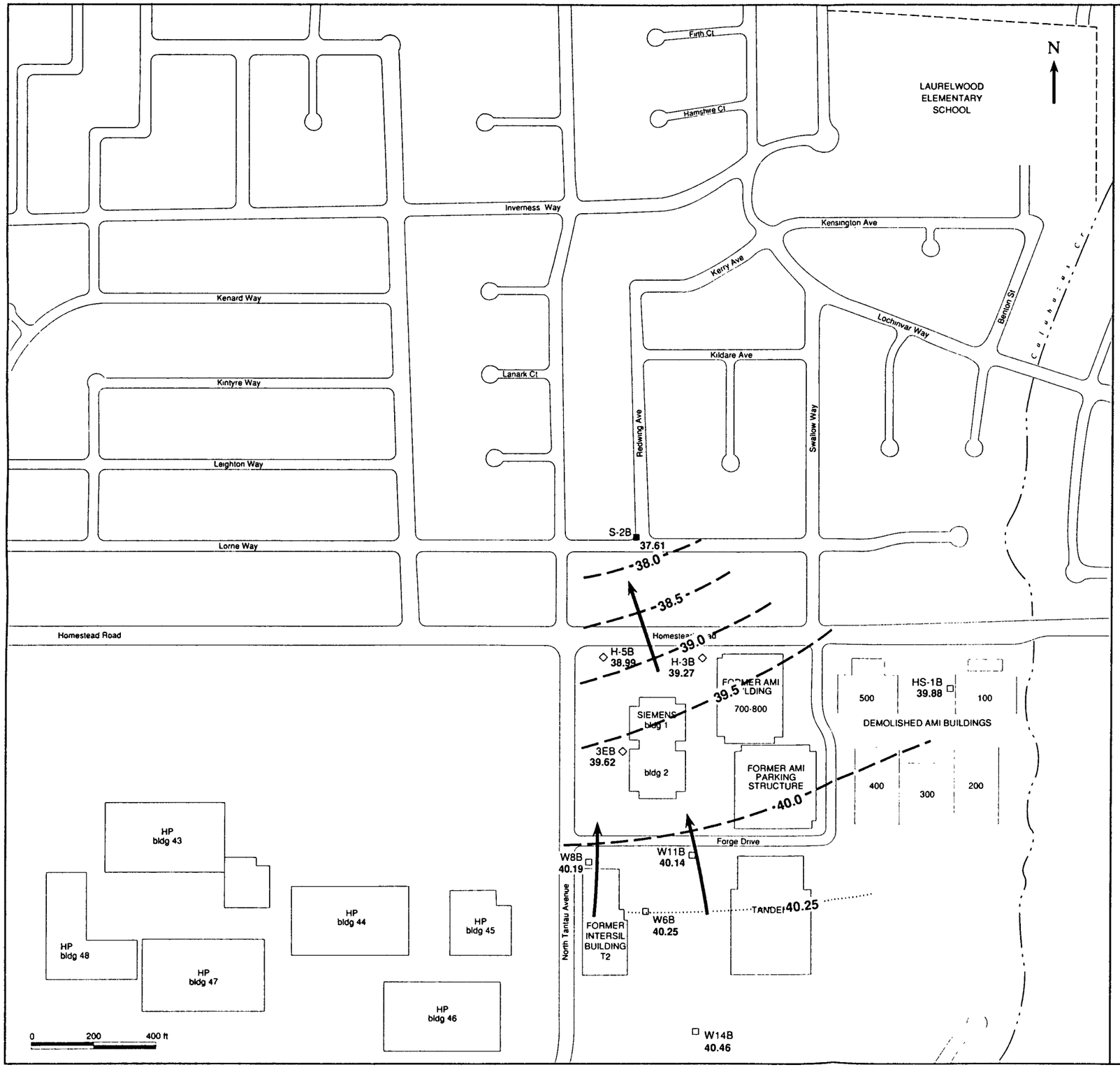
→ direction of groundwater flow

B-Zone Potentiometric Surface
02 September 1986
Former Intersil Facility

beak consultants limited

Figure 4.8a

18 May 90
Rev. 01



W6B □ Intersil B-zone monitoring well

H-5B ◇ Siemens B-zone monitoring well

LQ-1B ■ off-site B-zone monitoring well

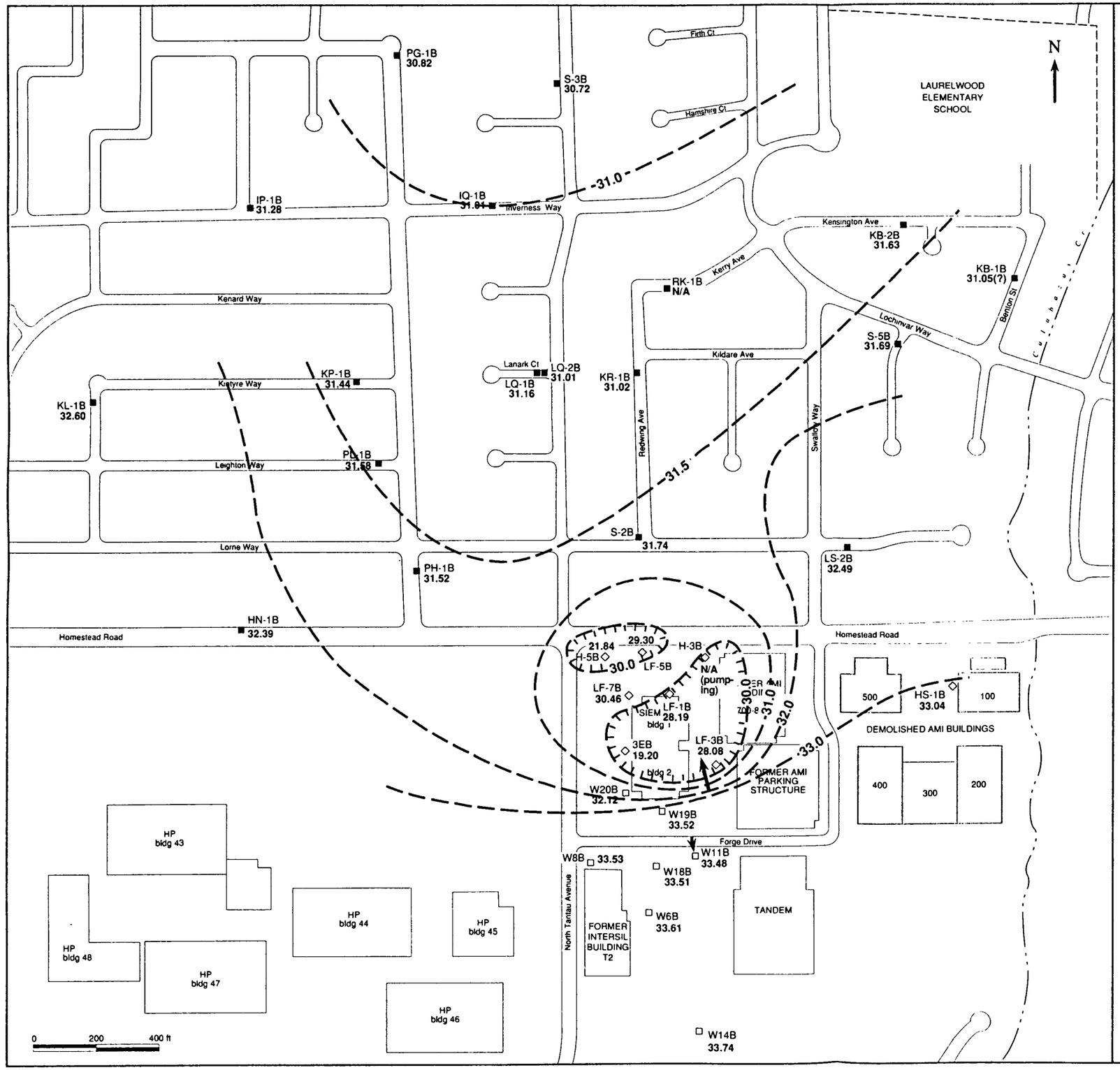
31.56 □ water level elevation (feet)

— —39.0— — potentiometric surface contour

→ direction of groundwater flow

B-Zone Potentiometric Surface
01 April 1987
Former Intersil Facility

beak consultants limited | Figure 4.8b | 18 May 90 Rev. 01



W6B □ Intersil B-zone monitoring well

H-3B ◇ Siemens B-zone monitoring well

LQ-1B ■ off-site B-zone monitoring well

31.56 □ water level elevation (feet)

33.0 potentiometric surface contour

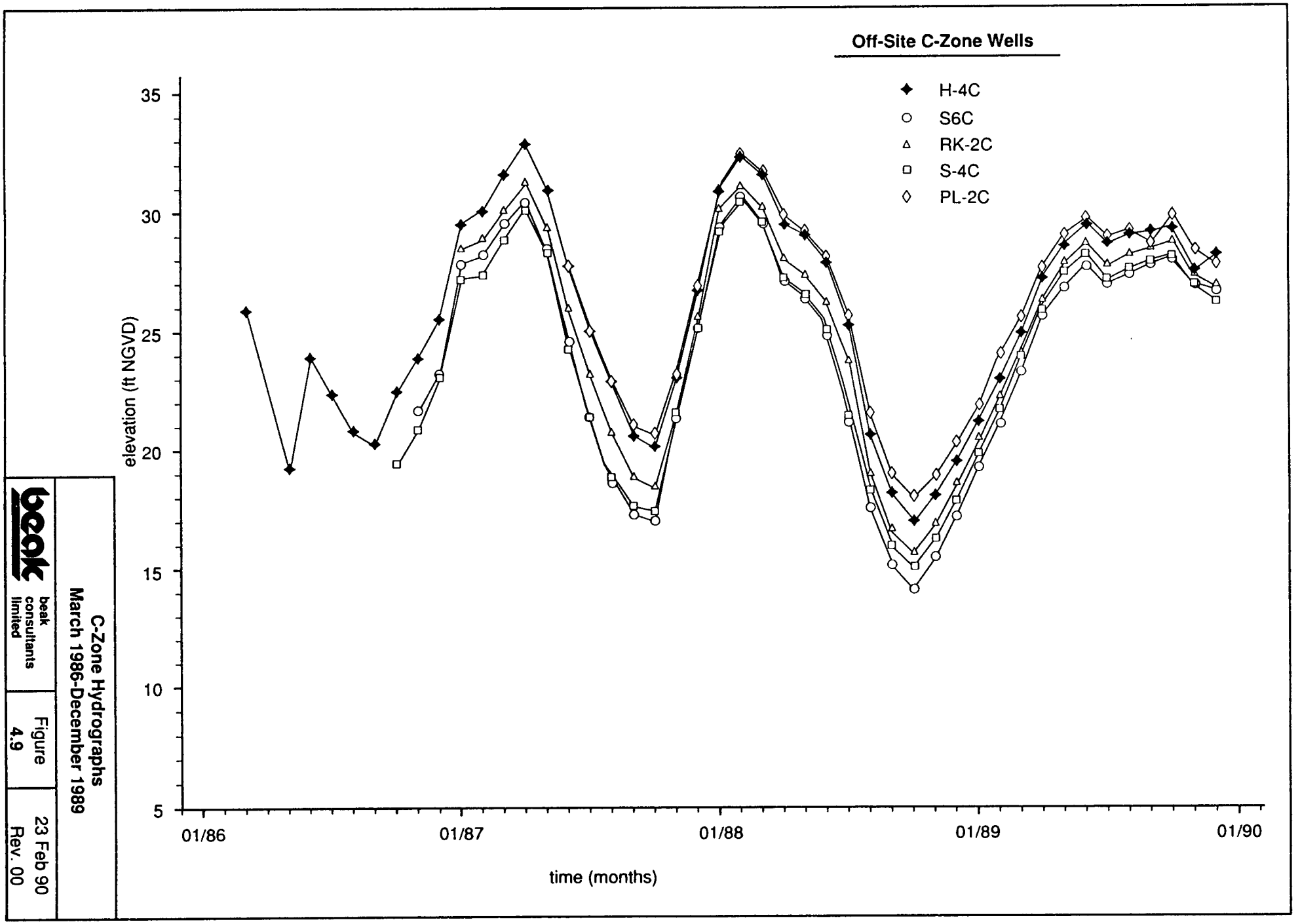
direction of groundwater flow

B-Zone Potentiometric Surface
05 September 1989
Former Intersil Facility

beak consultants limited

Figure 4.8c

18 May 90
Rev. 01

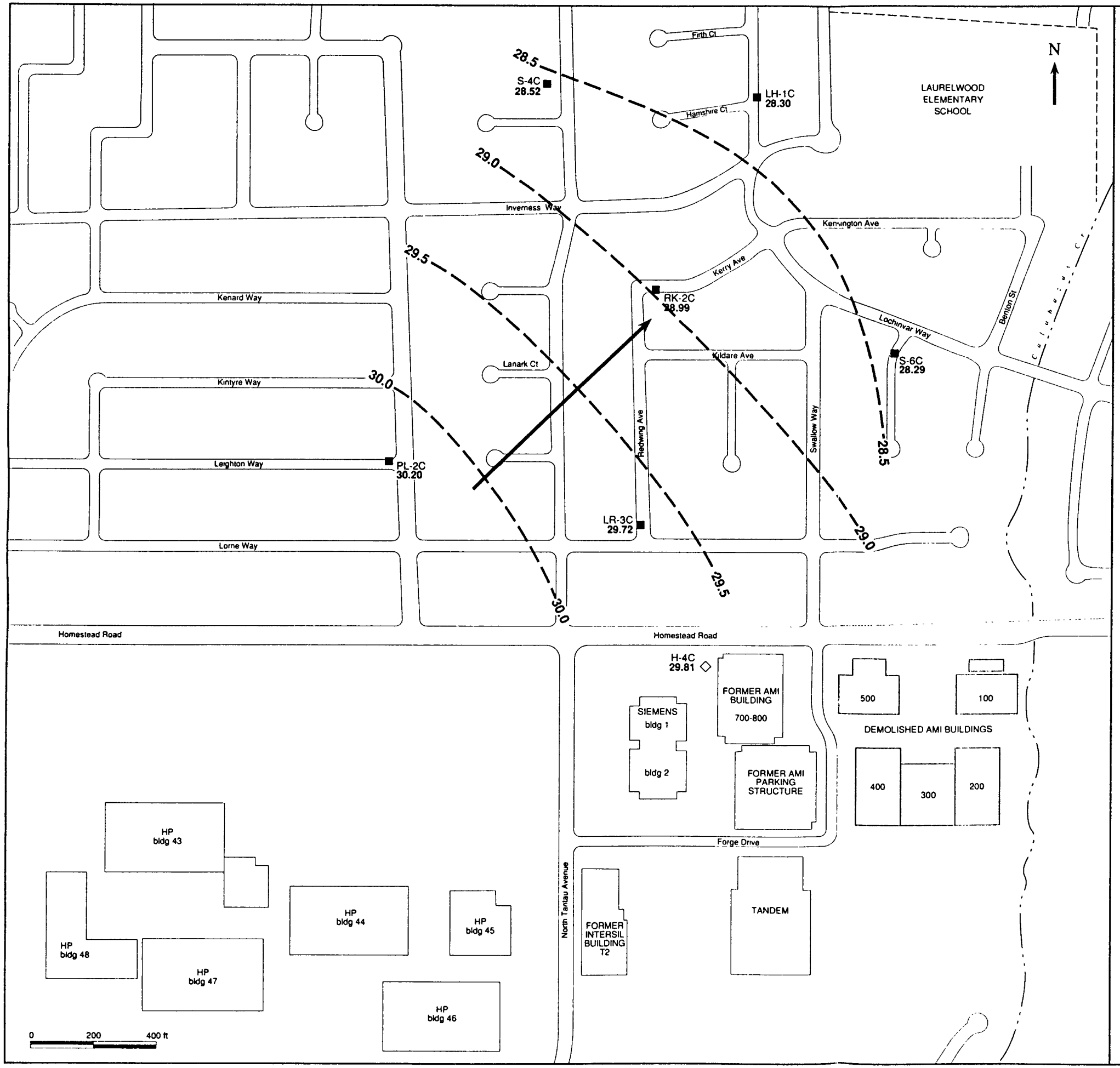


C-Zone Hydrographs
March 1986-December 1989

beak consultants limited

Figure 4.9

23 Feb 90
Rev. 00



H-4C ◇ Siemens C-zone monitoring well

LR-3C ■ off-site C-zone monitoring well

29.81 ◇ water level elevation (feet)

—29.0— potentiometric surface contour

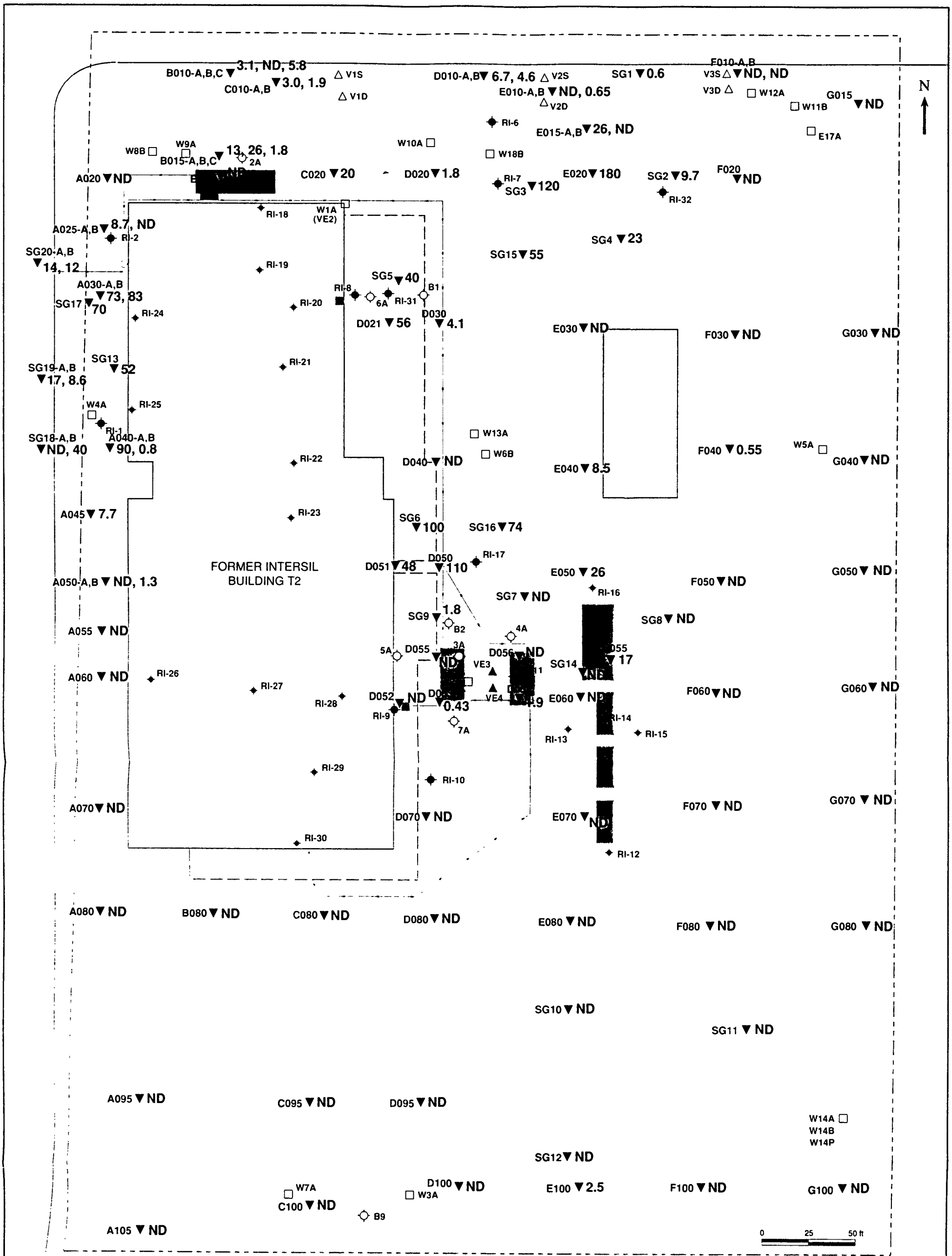
→ direction of groundwater flow

C-Zone Potentiometric Surface
05 September 1989
Former Intersil Facility

beak consultants limited

Figure **4.10**

18 May 90
Rev. 01

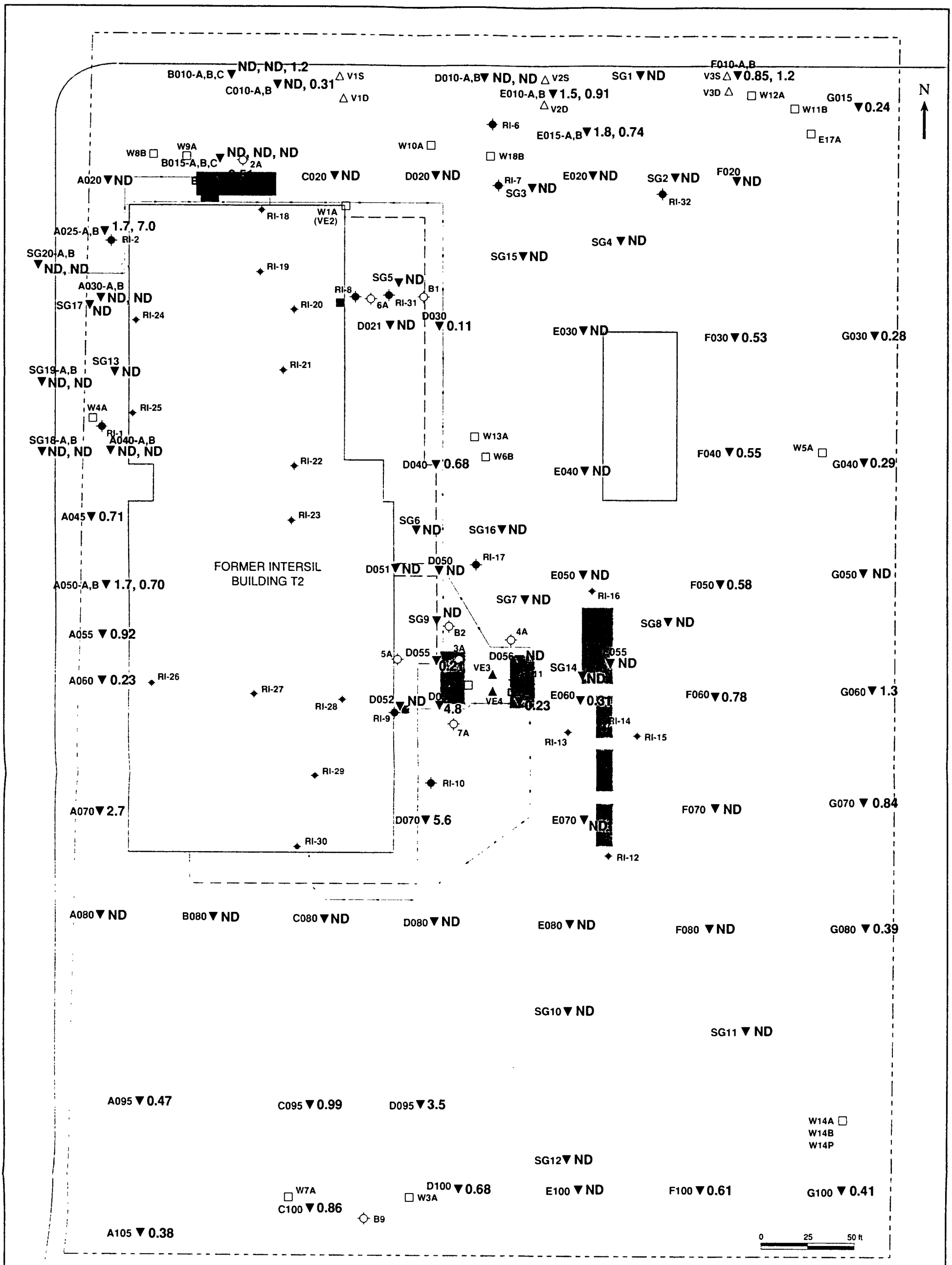


RI-8 ● deep RI soil boring
RI-16 ◆ shallow RI soil boring
W3A □ groundwater monitoring well
V2D △ soil vapour vent well
VE3 ▲ soil vapour extraction well
B9 ⊙ pre-RI soil boring
E100 ▼ soil gas sample location
1.7 ▼ concentration (µg/L)
property boundary
fence
former below-ground process wastewater line
former waste handling area

Note: Where more than one sample result is reported at a sample location, multiple depth samples were collected.

Concentrations of TCE in Soil Gas
Former Intersil Facility

beak consultants limited | Figure 5.1a | 18 May 90 Rev. 01



RI-8 ● deep RI soil boring
RI-16 ◆ shallow RI soil boring
W3A □ groundwater monitoring well
V2D △ soil vapour vent well
VE3 ▲ soil vapour extraction well
B9 ○ pre-RI soil boring
E100 ▼ soil gas sample location
1.7 ▼ concentration (µg/L)
property boundary
fence
former below-ground process wastewater line
former waste handling area

Note: Where more than one sample result is reported at a sample location, multiple depth samples were collected.

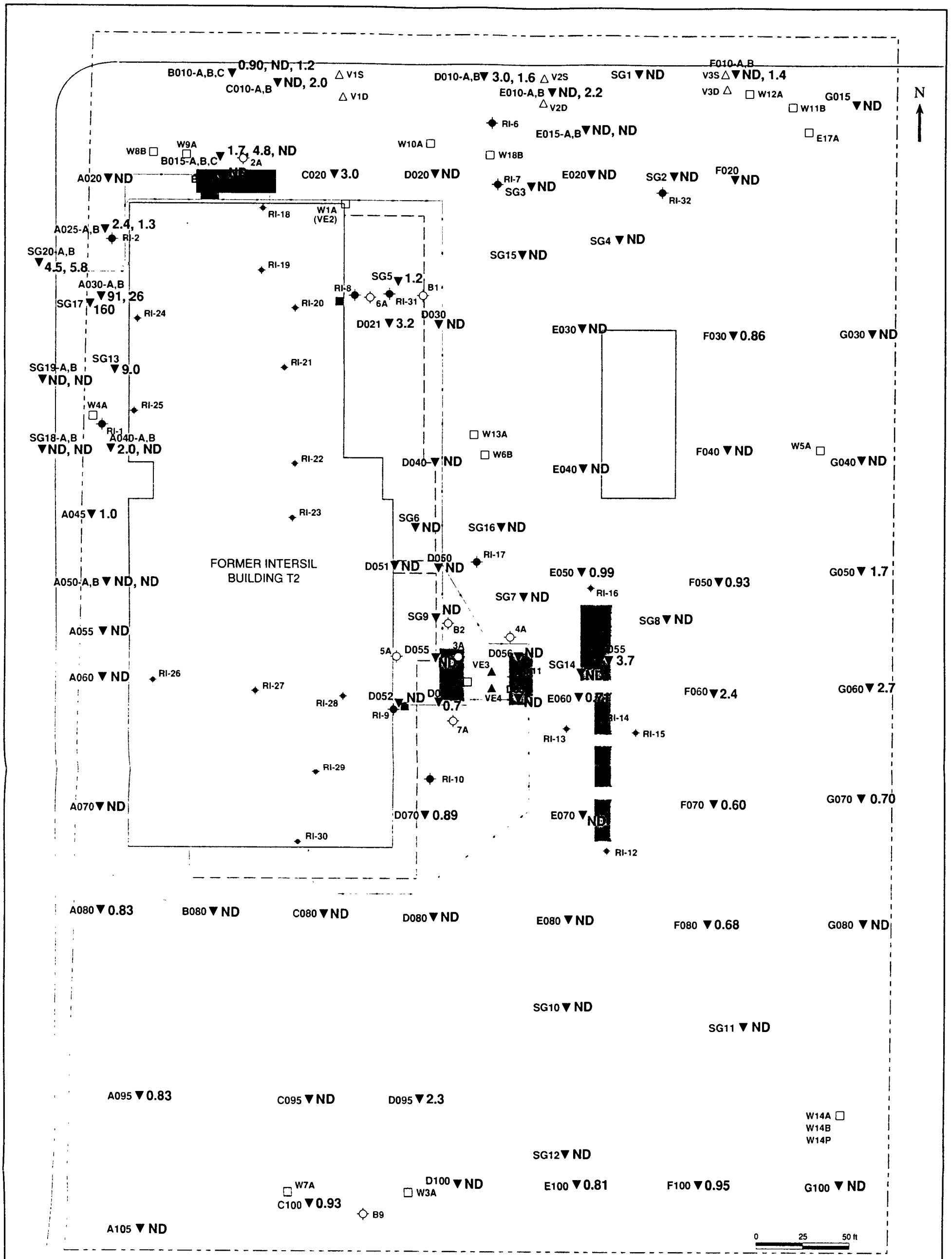
Concentrations of Toluene in Soil Gas

Former Intersil Facility

beak consultants limited

Figure **5.1b**

18 May 90
Rev. 01

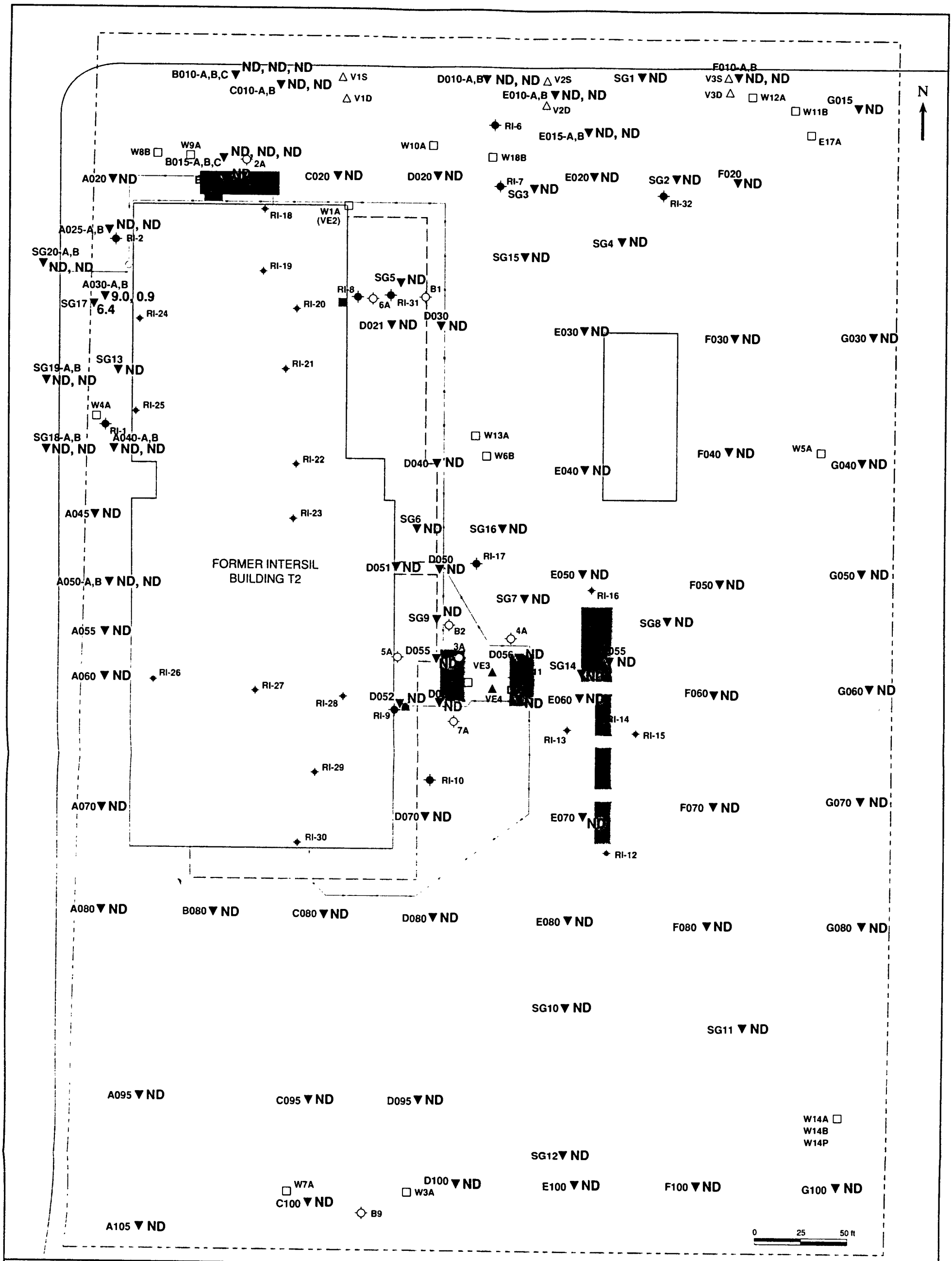


RI-8 ● deep RI soil boring
RI-16 ◆ shallow RI soil boring
W3A □ groundwater monitoring well
V2D △ soil vapour vent well
VE3 ▲ soil vapour extraction well
B9 ◌ pre-RI soil boring
E100 ▼ soil gas sample location
1.7 ▼ concentration (µg/L)
property boundary
fence
former below-ground process wastewater line
former waste handling area

Note: Where more than one sample result is reported at a sample location, multiple depth samples were collected.

Concentrations of PCE in Soil Gas
Former Intersil Facility

beak consultants limited	Figure 5.1c	18 May 90 Rev. 01



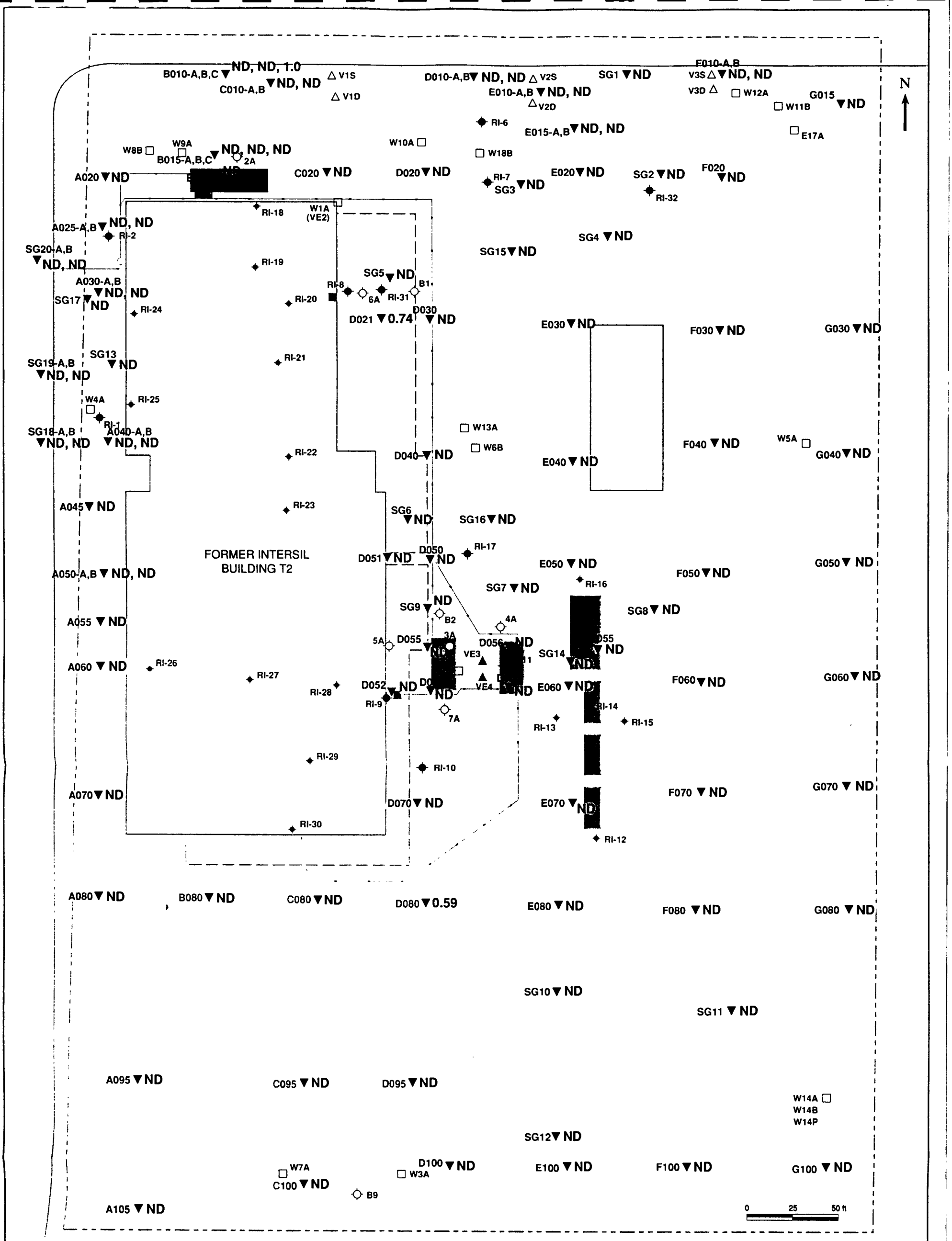
RI-8 ◆ deep RI soil boring
RI-16 ◆ shallow RI soil boring
W3A □ groundwater monitoring well
V2D △ soil vapour vent well
VE3 ▲ soil vapour extraction well
B9 ○ pre-RI soil boring
E100 ▼ soil gas sample location
1.7 ▼ concentration (µg/L)
— — — property boundary
— — — — fence
· - · - · former below-ground process wastewater line
■ former waste handling area

Note: Where more than one sample result is reported at a sample location, multiple depth samples were collected.

Concentrations of 1,1,1-TCA in Soil Gas

Former Intersil Facility

beak consultants limited	Figure 5.1d	18 May 90 Rev. 01



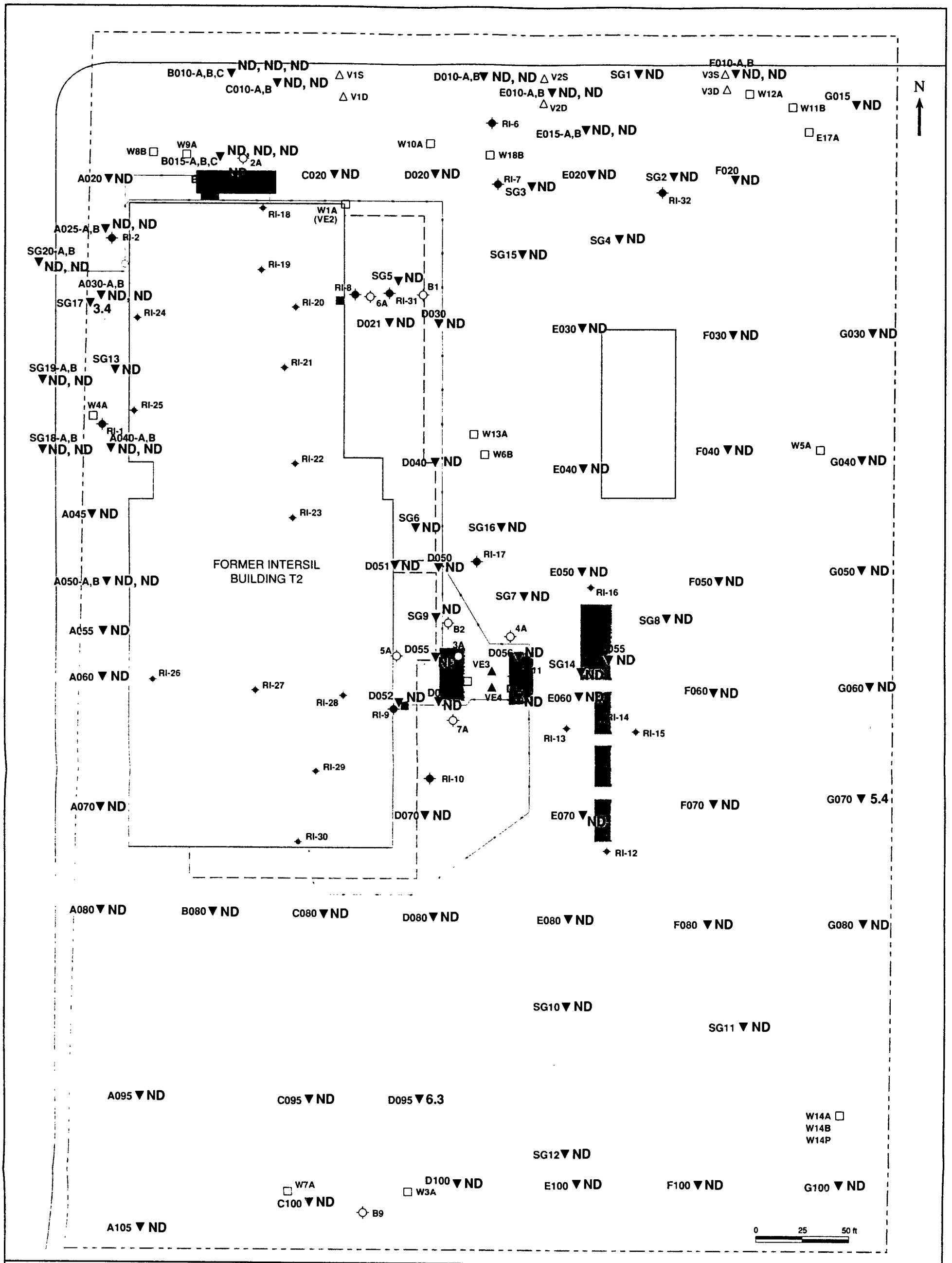
RI-8 ◆ deep RI soil boring
RI-16 ◆ shallow RI soil boring
W3A □ groundwater monitoring well
V2D △ soil vapour vent well
VE3 ▲ soil vapour extraction well
B9 ○ pre-RI soil boring
E100 ▼ soil gas sample location
1.7 ▼ concentration (µg/L)
property boundary
fence
former below-ground process wastewater line
former waste handling area

Note: Where more than one sample result is reported at a sample location, multiple depth samples were collected.

Concentrations of 1,1-DCE in Soil Gas

Former Intersil Facility

beak consultants limited | Figure 5.1e | 18 May 90 Rev. 01



RI-8 ◆ deep RI soil boring
RI-16 ◆ shallow RI soil boring
W3A □ groundwater monitoring well
V2D △ soil vapour vent well
VE3 ▲ soil vapour extraction well
B9 ○ pre-RI soil boring
E100 ▼ soil gas sample location
1.7 ▼ concentration (µg/L)
property boundary
fence
former below-ground process wastewater line
former waste handling area

Note: Where more than one sample result is reported at a sample location, multiple depth samples were collected.

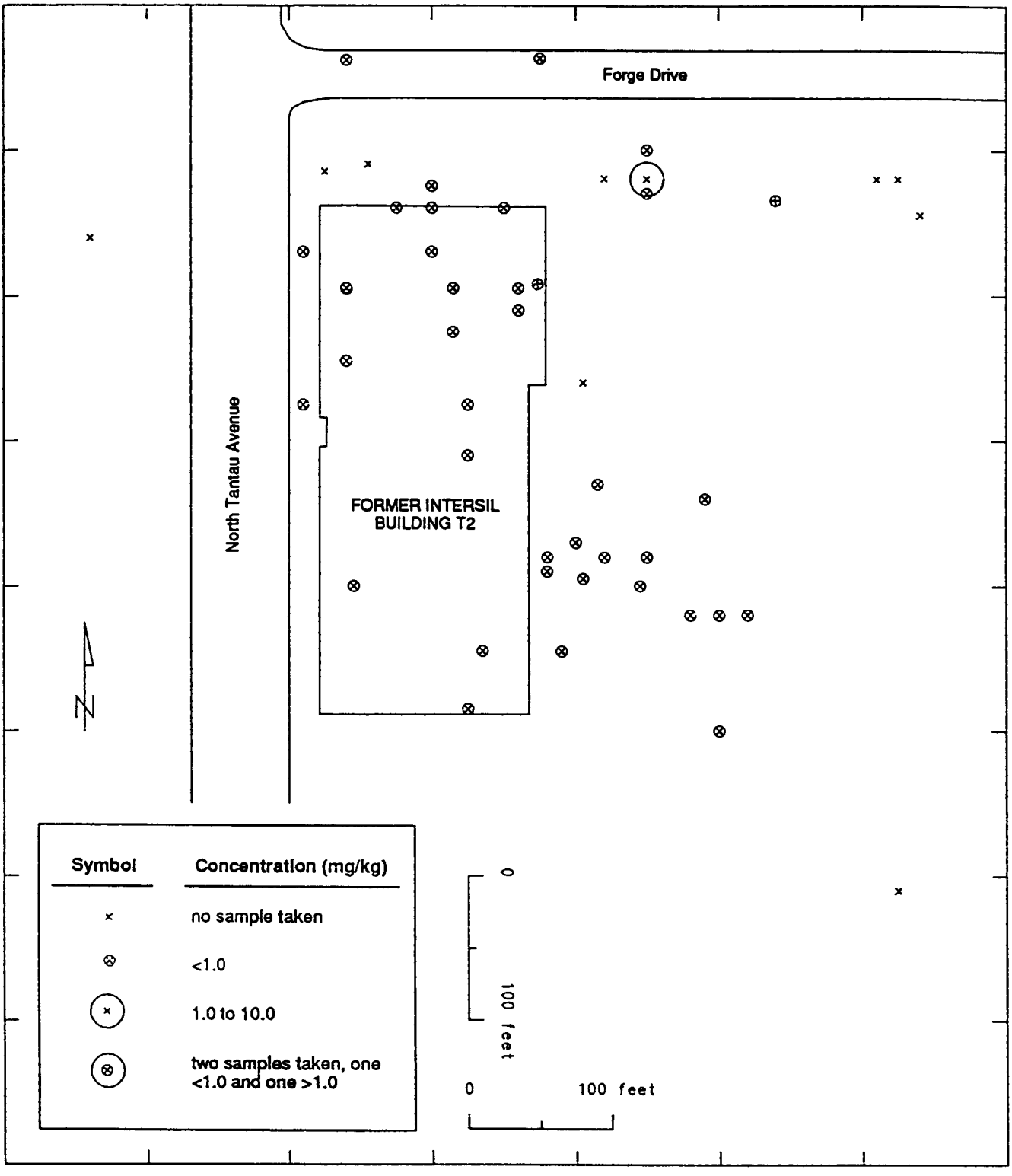
Concentrations of Freon 113 in Soil Gas

Former Intersil Facility

beak consultants limited

Figure 5.1f

18 May 90
Rev. 01

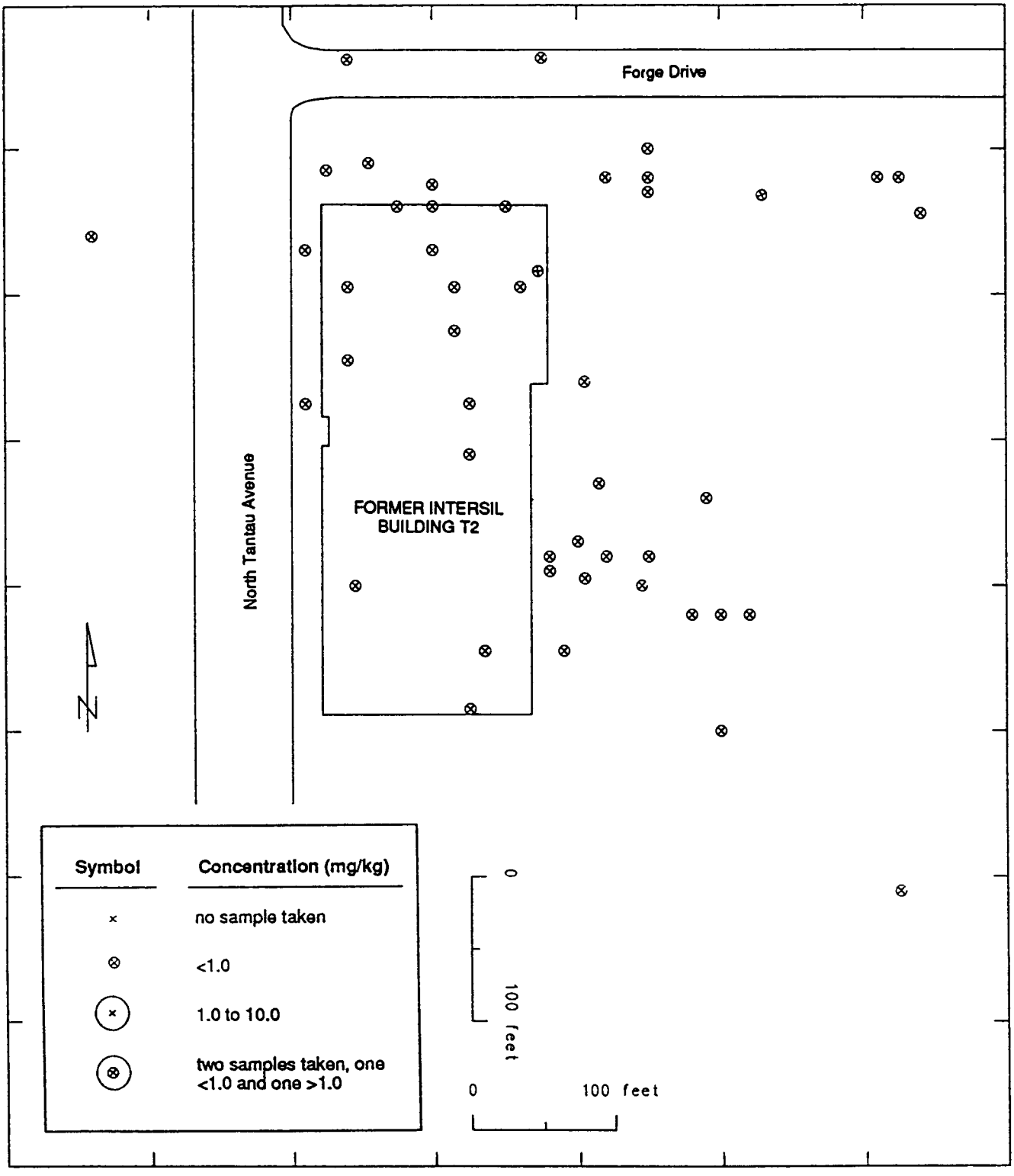


Level Plan Showing Concentrations of TCE in Soil Samples (0-15' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2a	Rev. 01

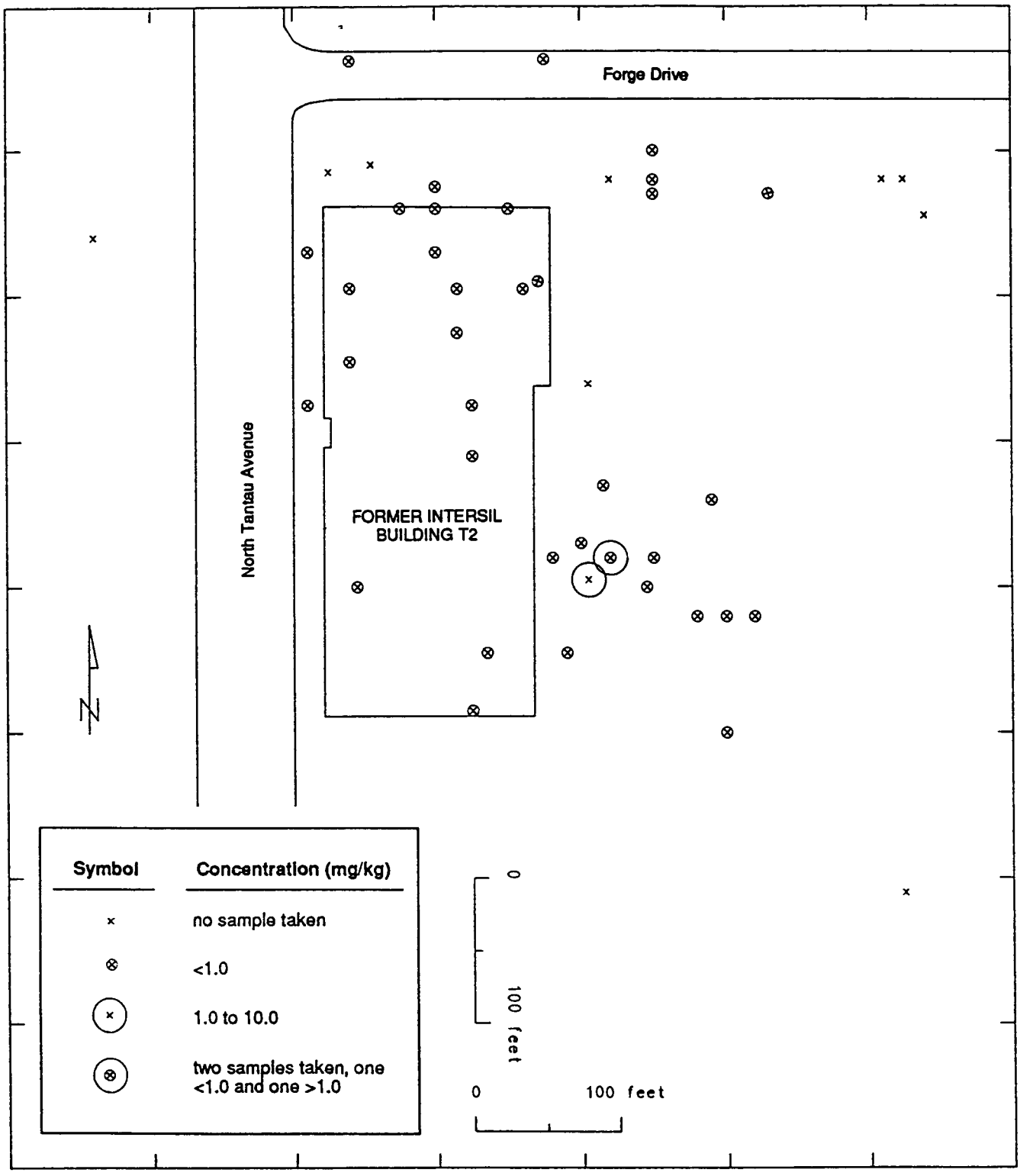


Level Plan Showing Concentrations of TCE in Soil Samples (15-25' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2b	Rev. 01

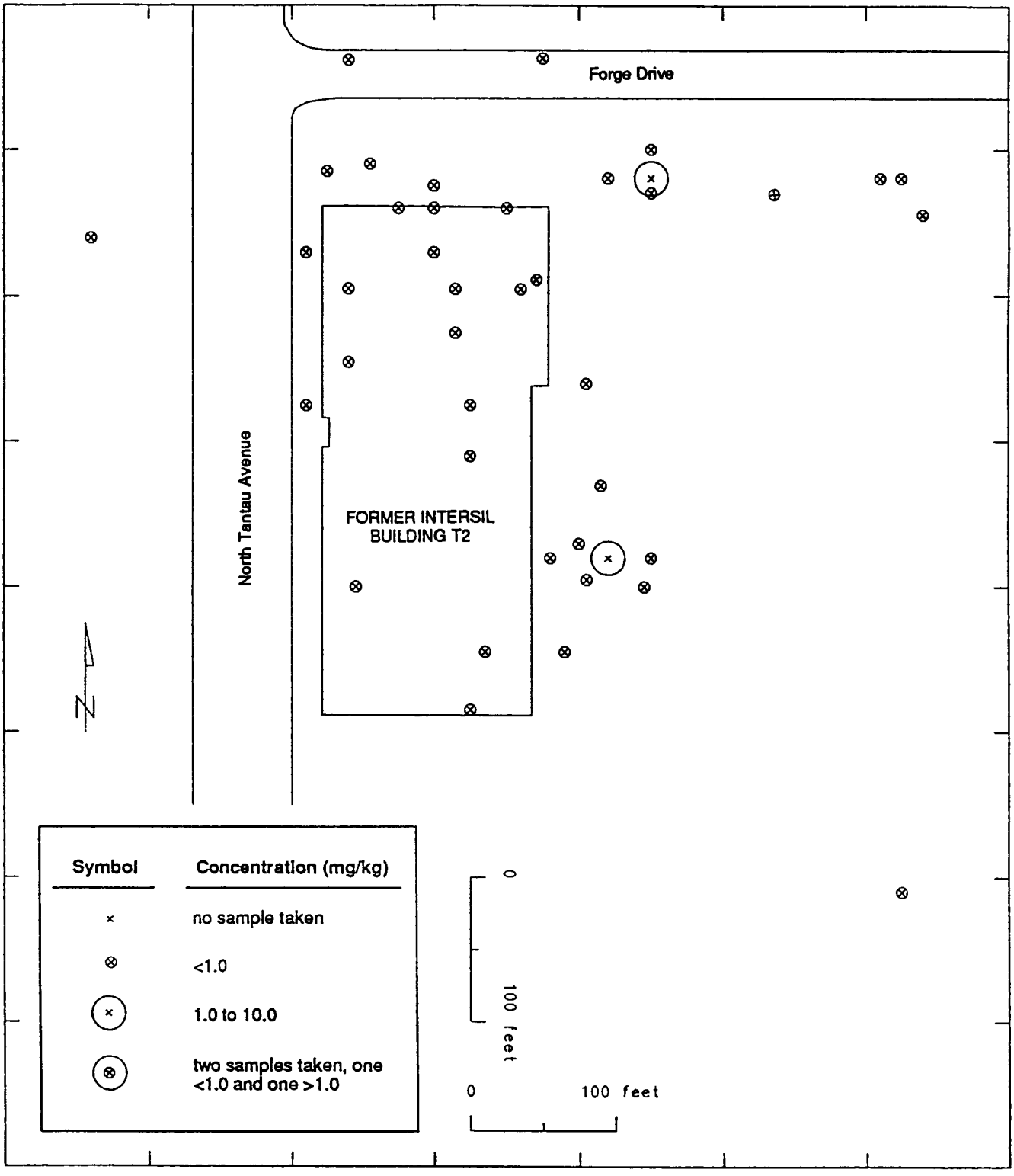


Level Plan Showing Concentrations of TCE in Soil Samples (25-35' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2c	Rev. 01

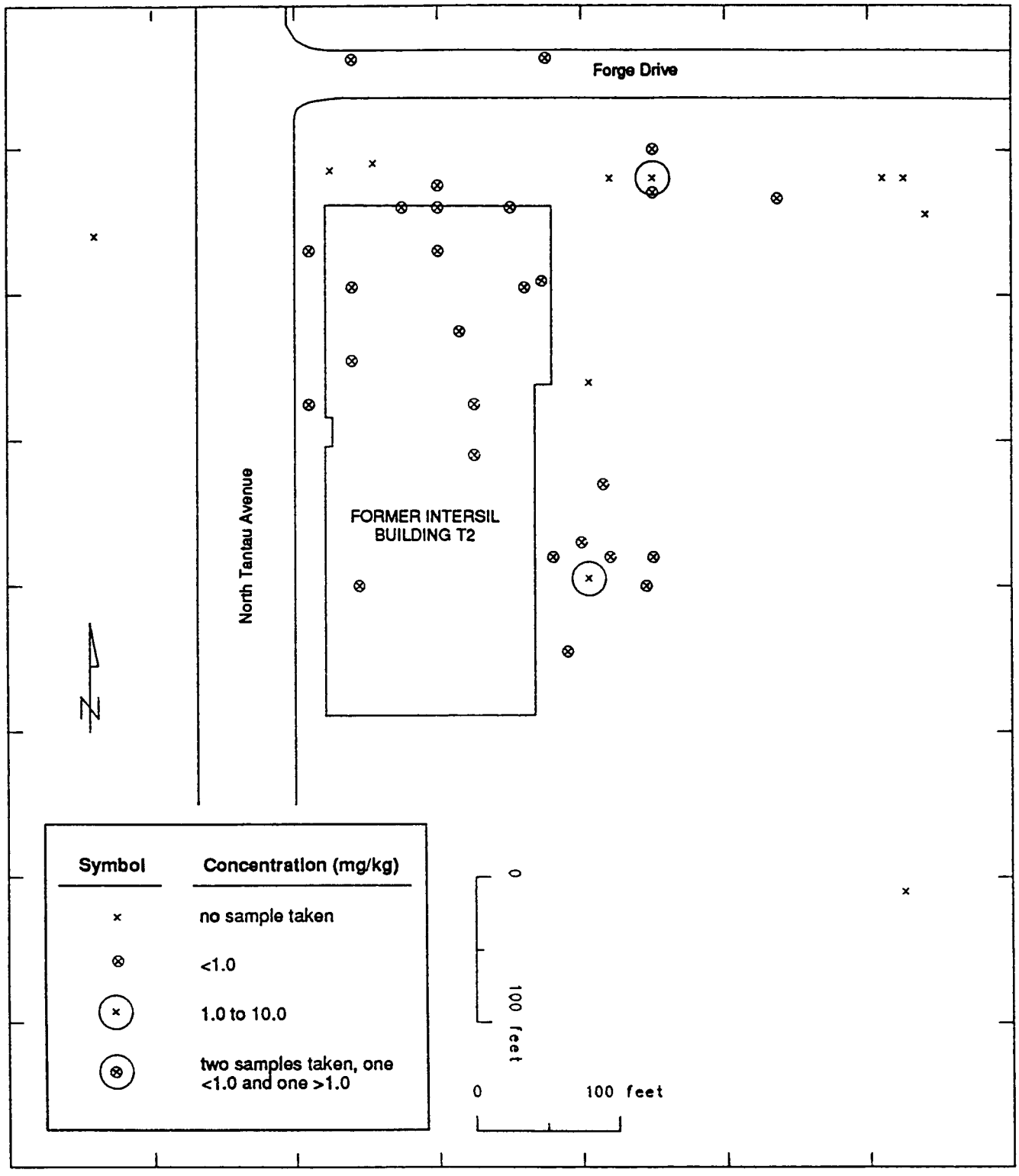


Level Plan Showing Concentrations of TCE in Soil Samples (35-45' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2d	Rev. 01

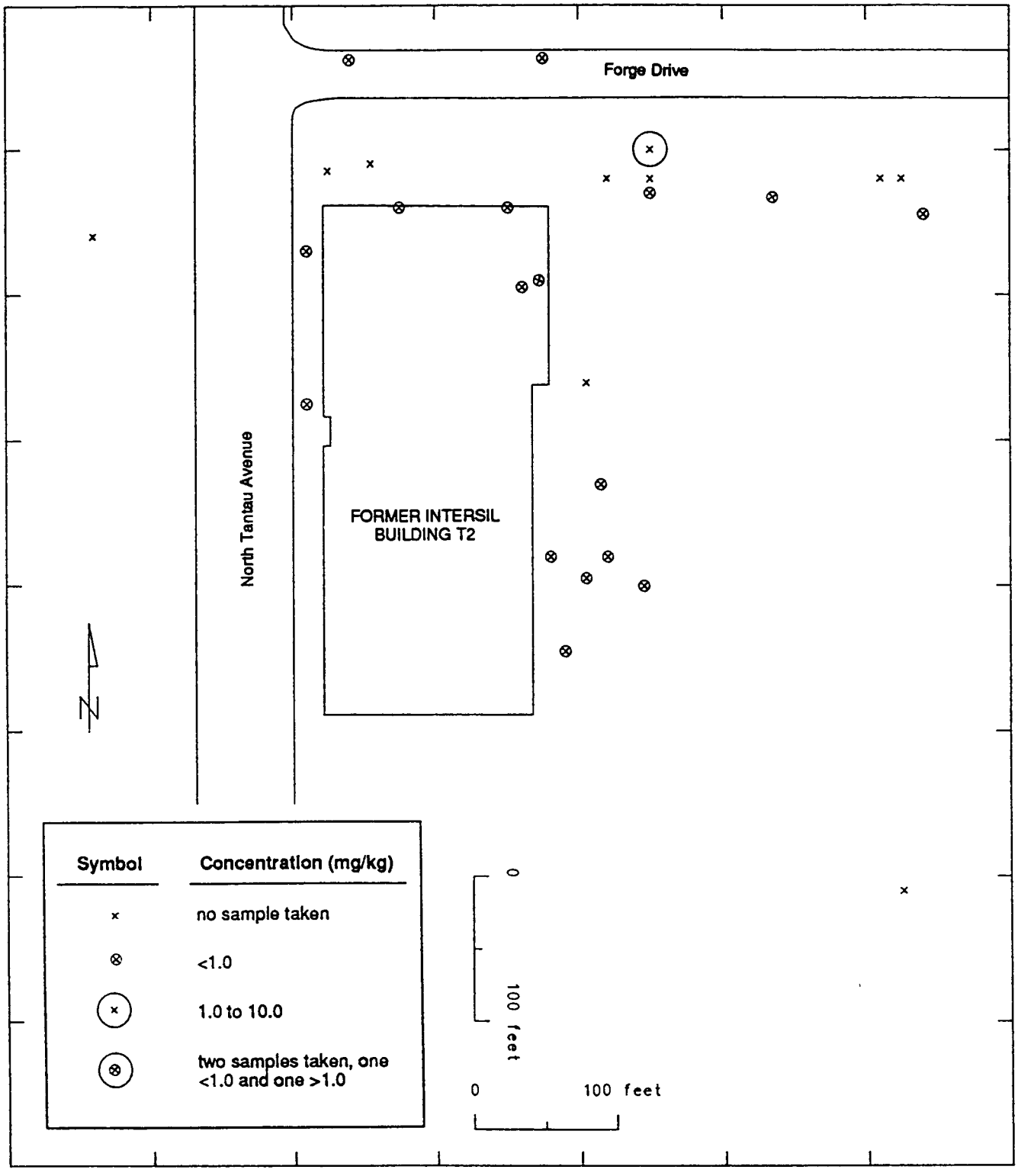


Level Plan Showing Concentrations of TCE in Soil Samples (45-55' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2e	Rev. 01

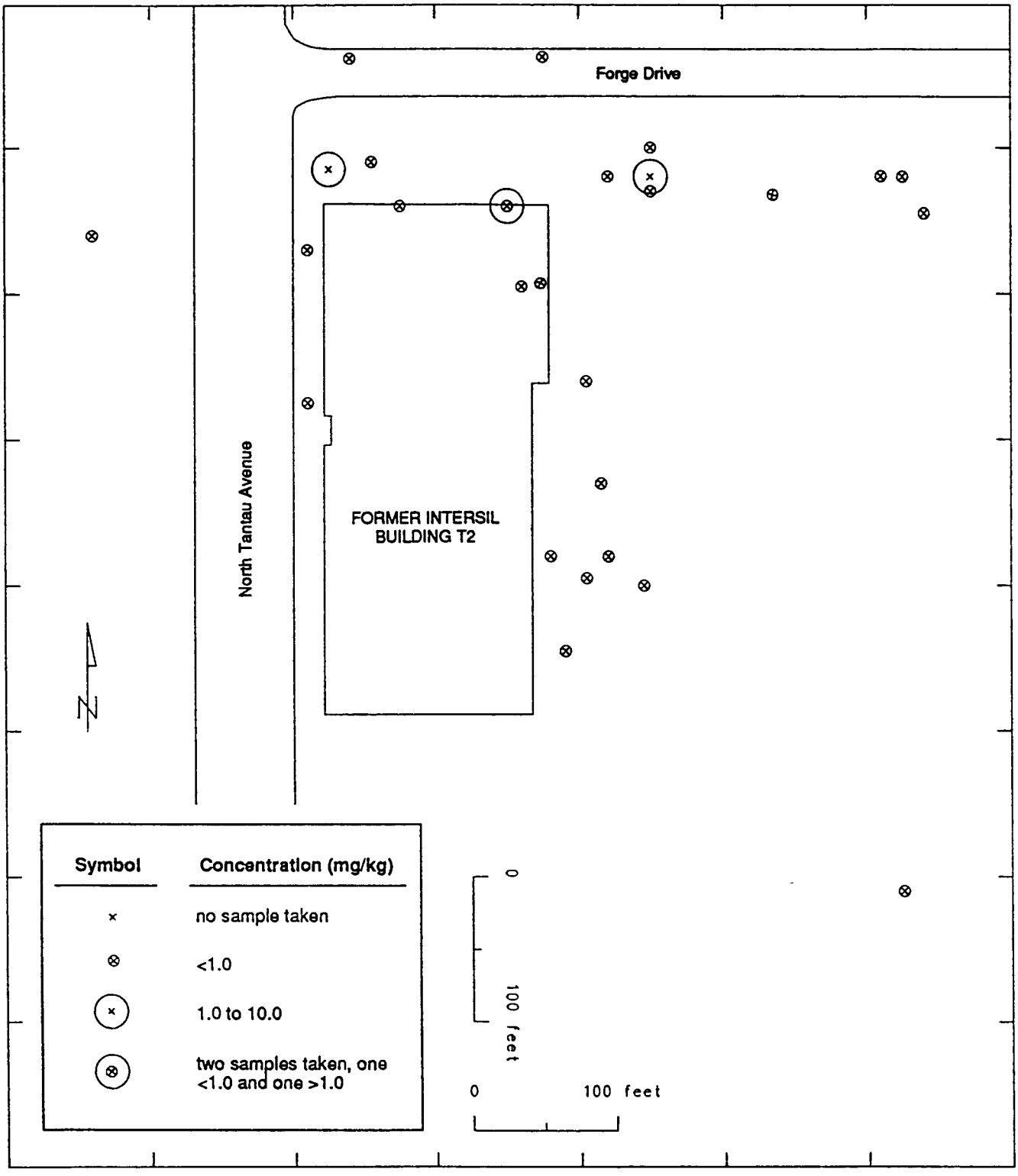


Level Plan Showing Concentrations of TCE in Soil Samples (65-75' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2g	Rev. 01

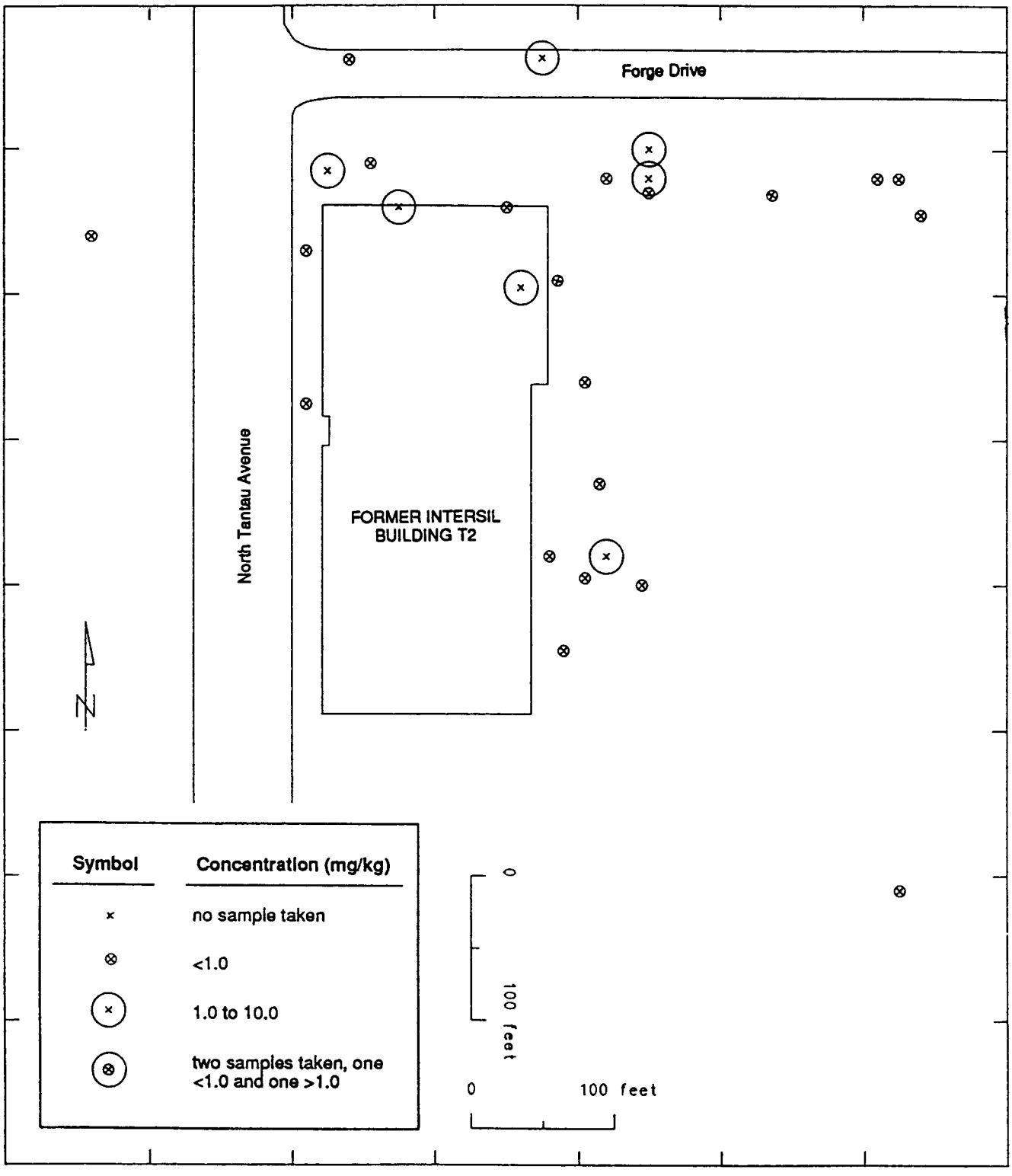


Level Plan Showing Concentrations of TCE in Soil Samples (75-85' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2h	Rev. 01

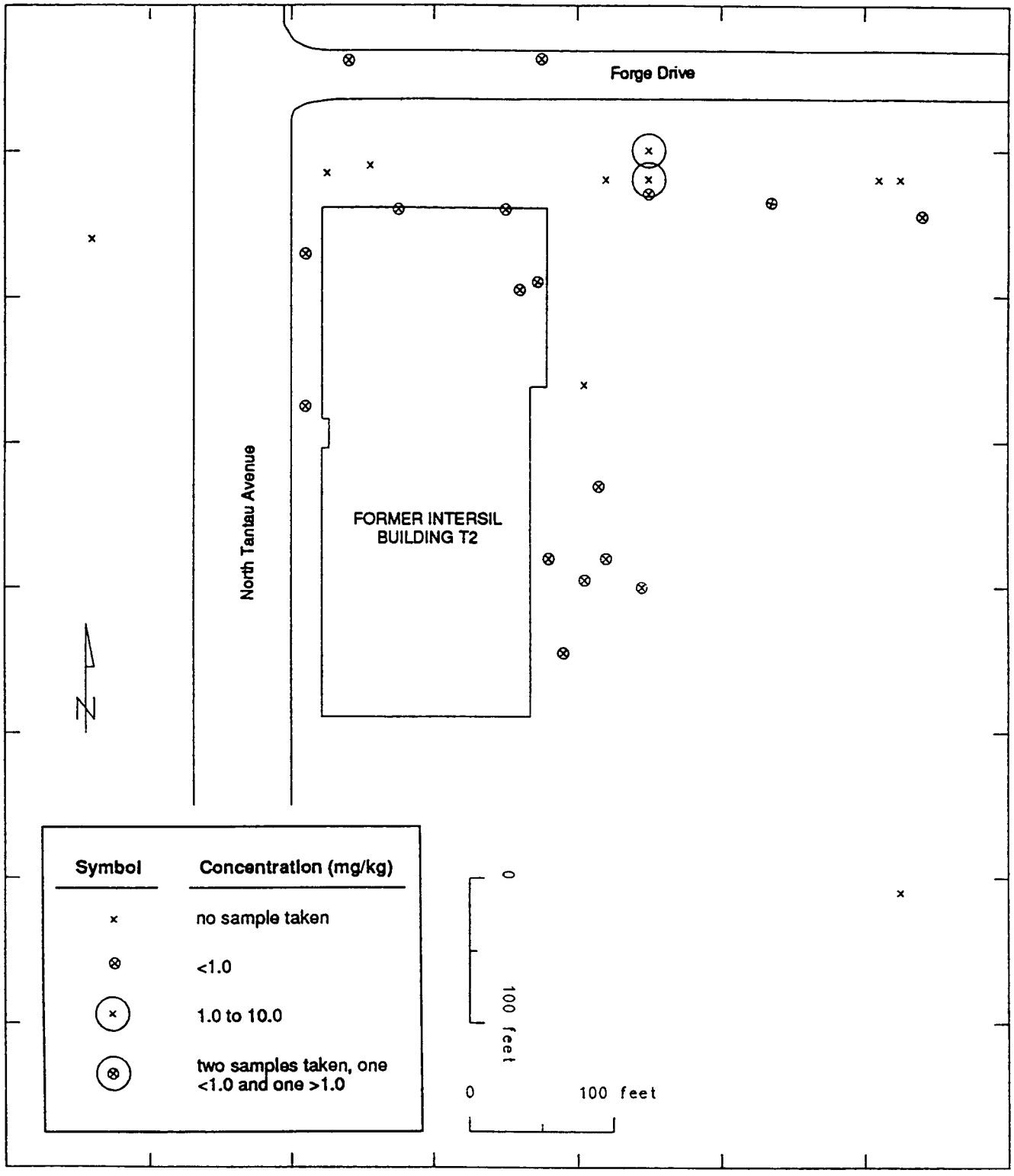


Level Plan Showing Concentrations of TCE in Soil Samples (55-65' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2f	Rev. 01

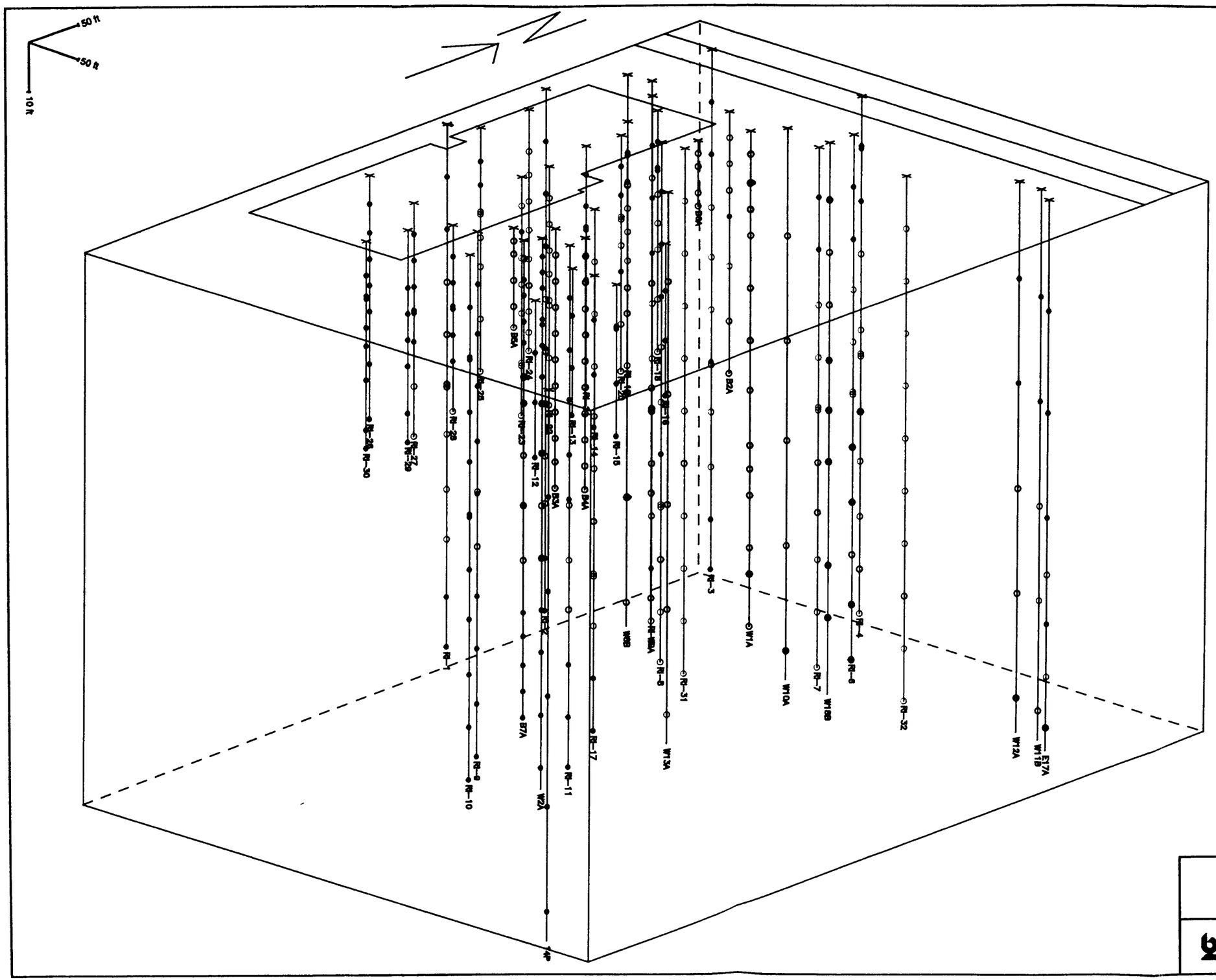


Level Plan Showing Concentrations of TCE in Soil Samples (85-95' depth)

Former Intersil Facility

beak consultants limited

Figure	18 May 90
5.2I	Rev. 01



LEGEND

Range of Concentration (mg/kg)

- 0–.1
- .1–1.
- 1.–5.
- 5.–10.
- 10.–100.

- Not Detected

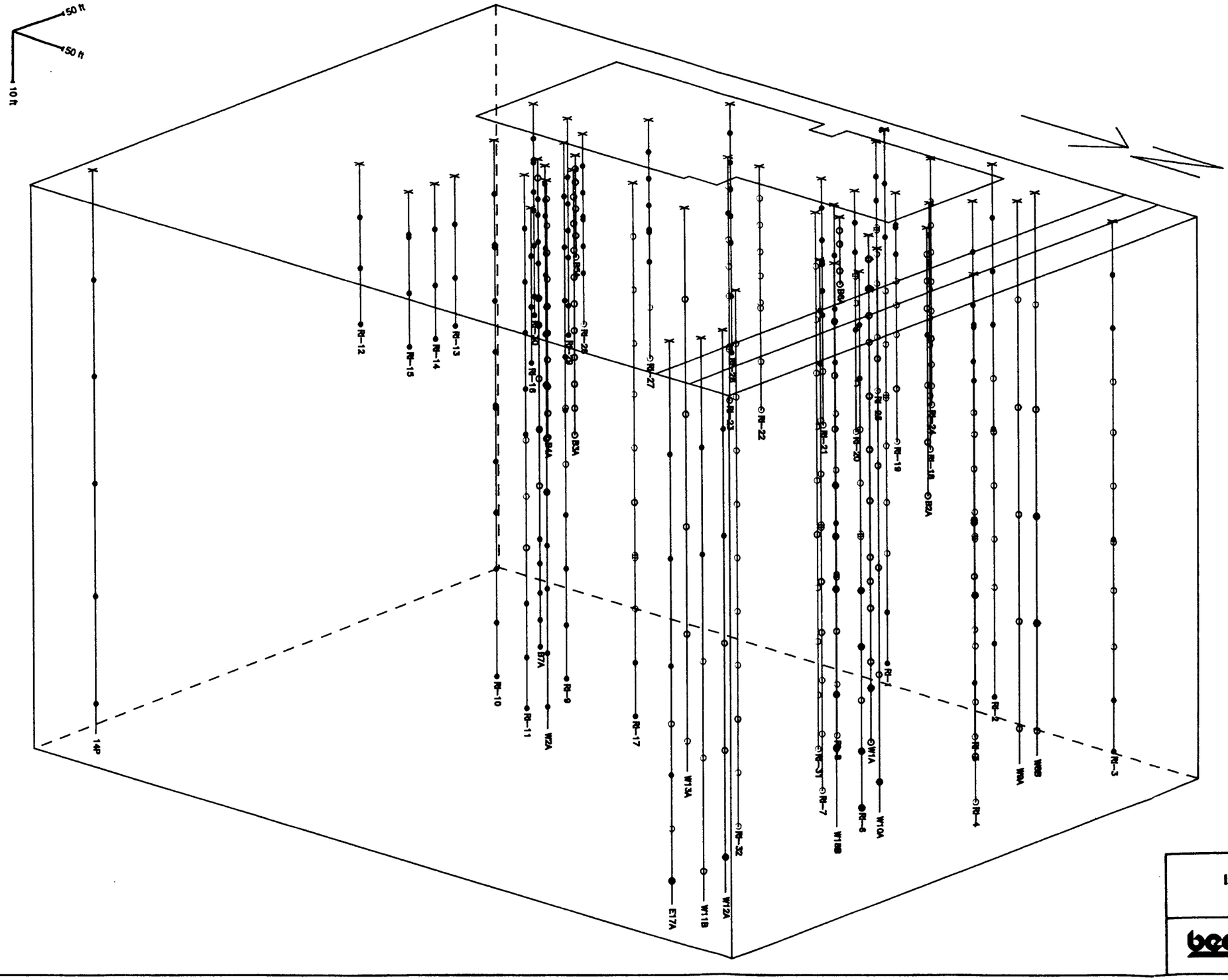
Previous Borings

Recent Borings

Isometric View of TCE in Soil Samples

Former Intersil Facility

beak consultants limited	Figure 5.3a	18 May 90 Rev. 01



LEGEND

Range of Concentration (mg/kg)

- o 0–.1
- o .1–1.
- ● 1.–5.
- ● 5.–10.
- ● 10.–100.

- • Not Detected

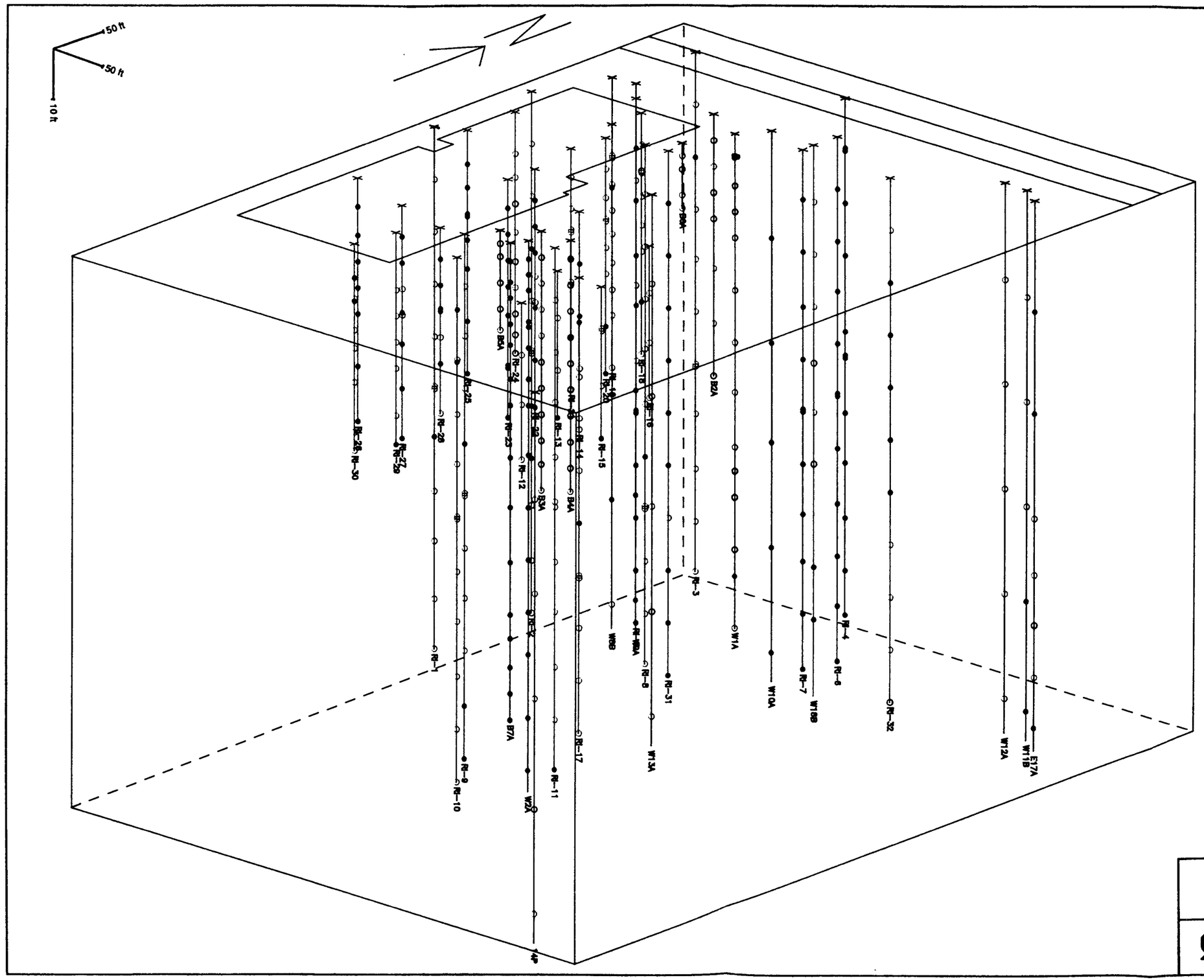
Previous Borings

Recent Borings

Isometric View of TCE in Soil Samples

Former Intersil Facility

beak consultants limited	Figure 5.3b	18 May 90 Rev. 01



LEGEND

Range of Concentration (mg/kg)

- 0–.1
- .1–1.
- 1.–5.
- 5.–10.
- 10.–100.

- Not Detected

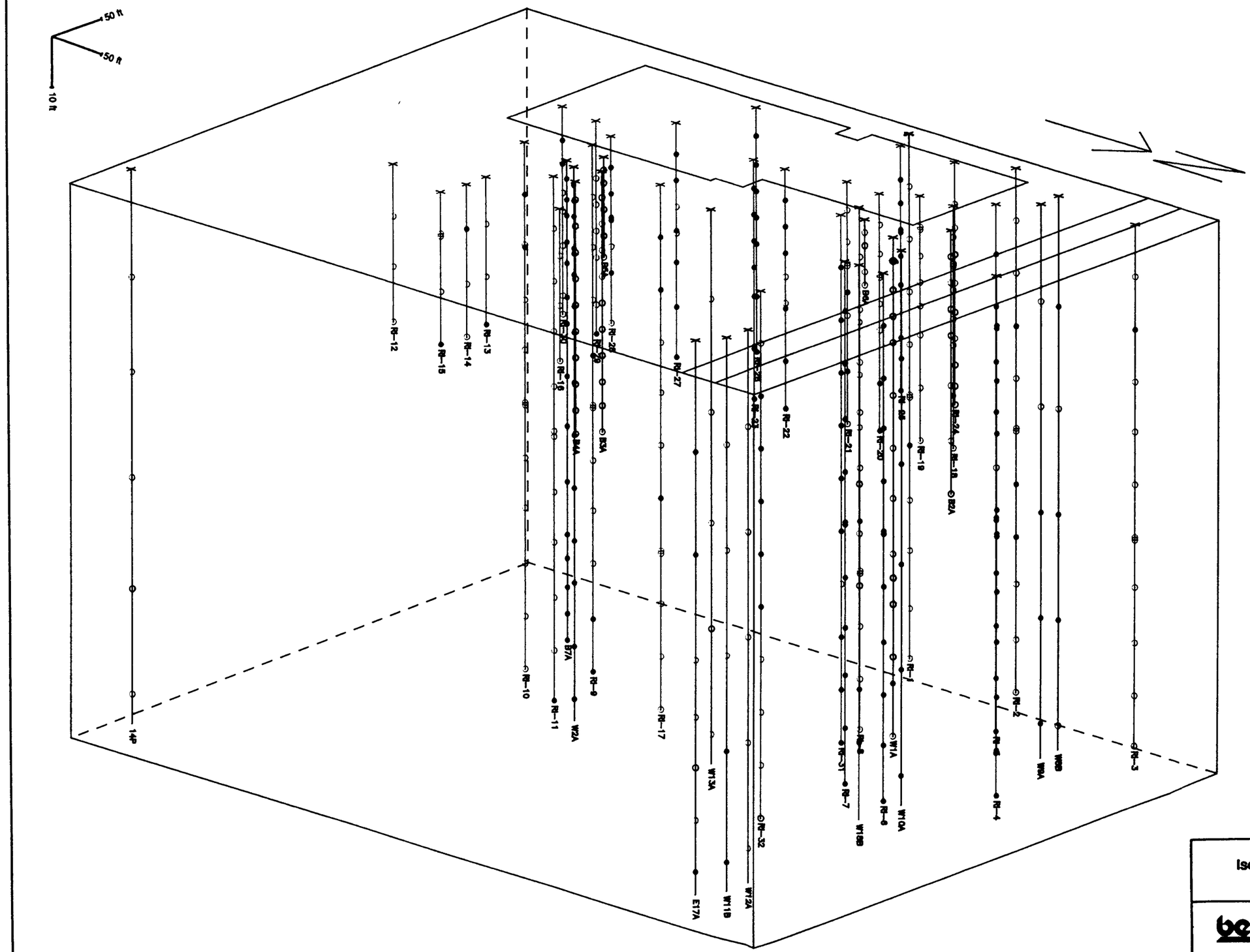
Previous Borings

Recent Borings

Isometric View of Toluene in Soil Samples

Former Intersil Facility

beak consultants limited	Figure 5.4a	18 May 90 Rev. 01



LEGEND

Range of Concentration (mg/kg)

- 0–.1
- .1–1.
- 1.–5.
- 5.–10.
- 10.–100.

- Not Detected

Previous Borings

Recent Borings

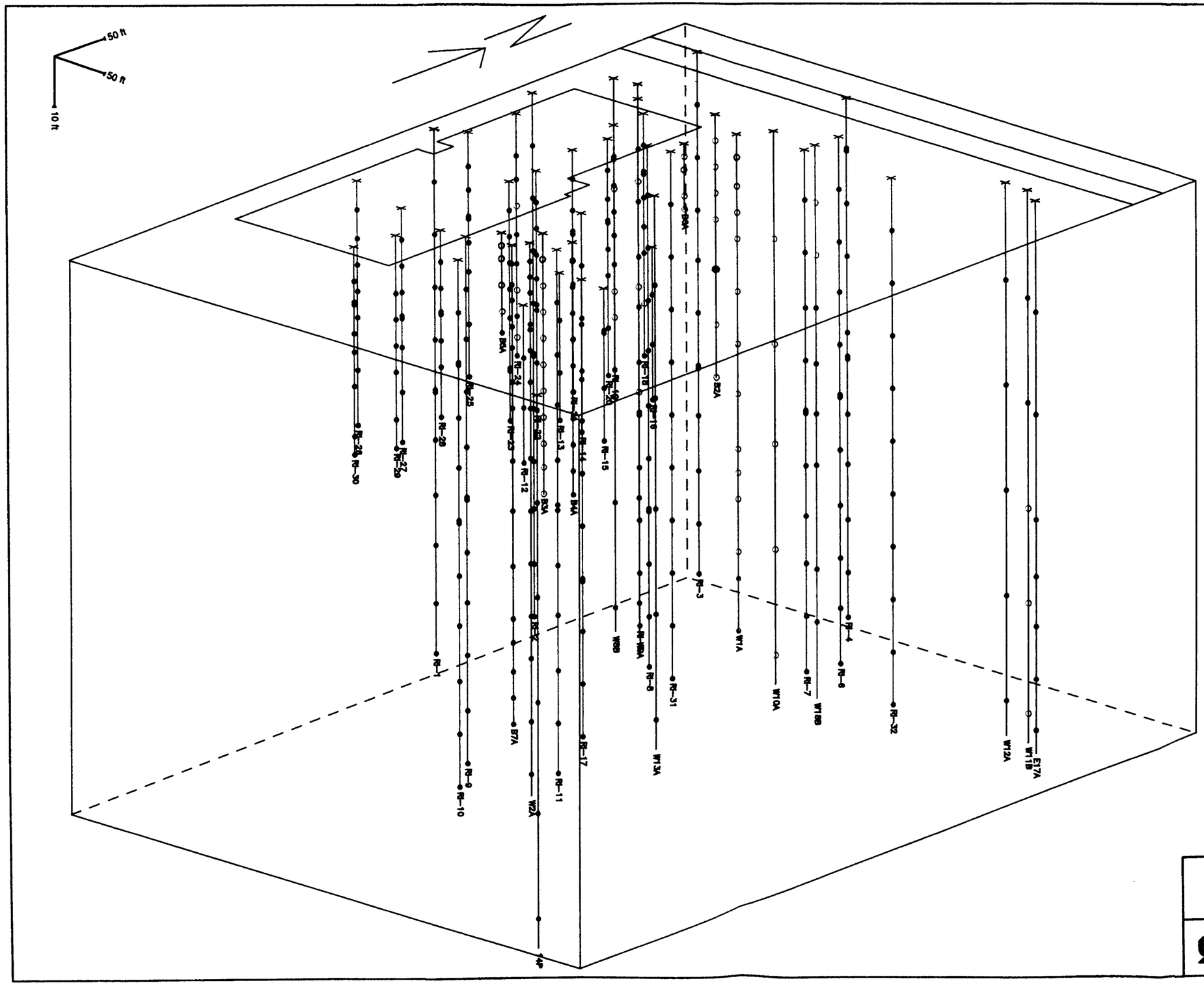
Isometric View of Toluene in Soil Samples

Former Intersil Facility

beak consultants limited

Figure 5.4b

18 May 90
Rev. 01



LEGEND

Range of Concentration (mg/kg)

- ○ 0–.1
- ○ .1–1.
- ● 1.–5.
- ● 5.–10.
- ● 10.–100.

- • Not Detected

Previous Borings

Recent Borings

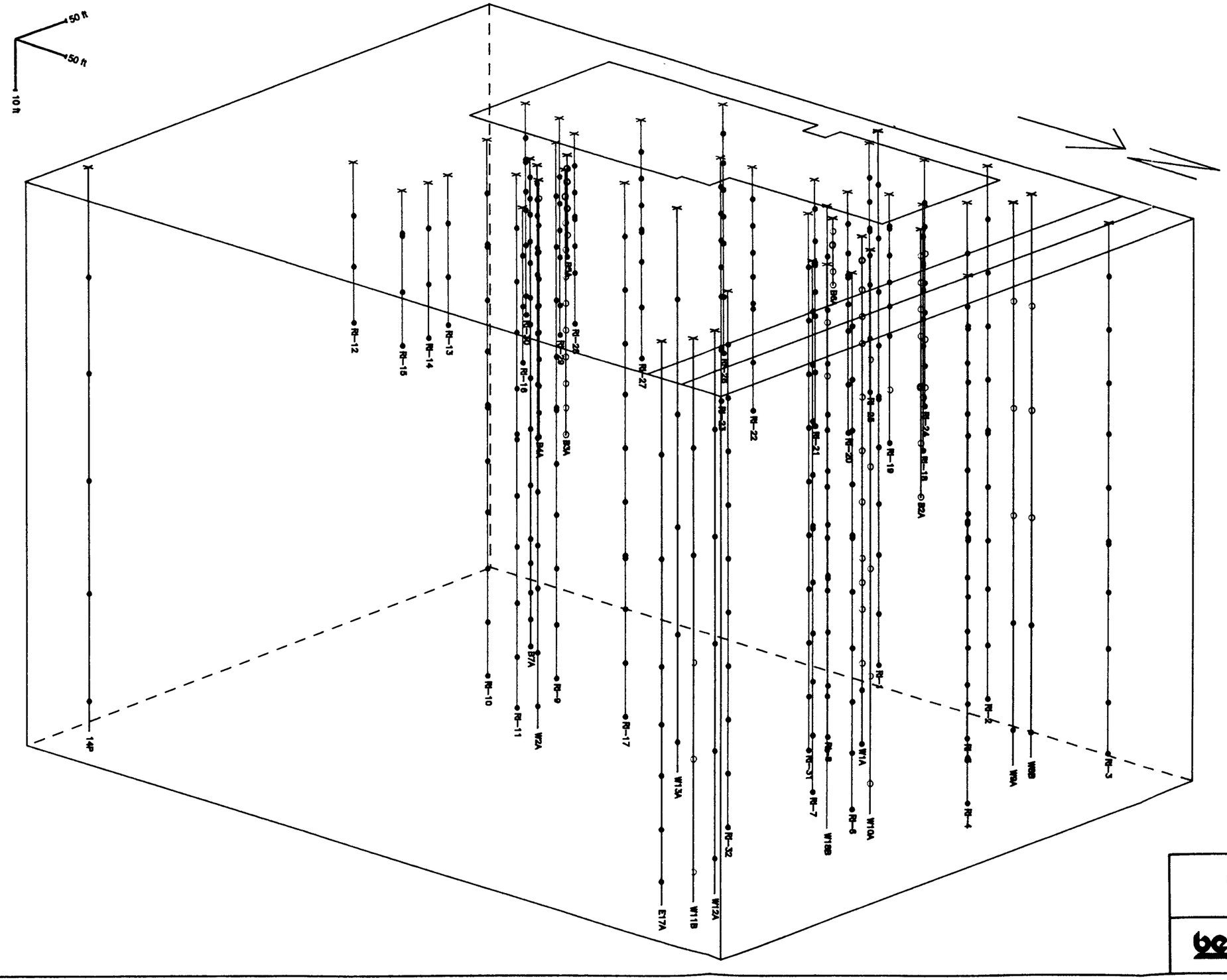
Isometric View of PCE in Soil Samples

Former Intersil Facility

beak consultants limited

Figure 5.5a

18 May 90
Rev. 01



LEGEND

Range of Concentration (mg/kg)

- ○ 0–.1
- ○ .1–1.
- ● 1.–5.
- ● 5.–10.
- ● 10.–100.

- • Not Detected

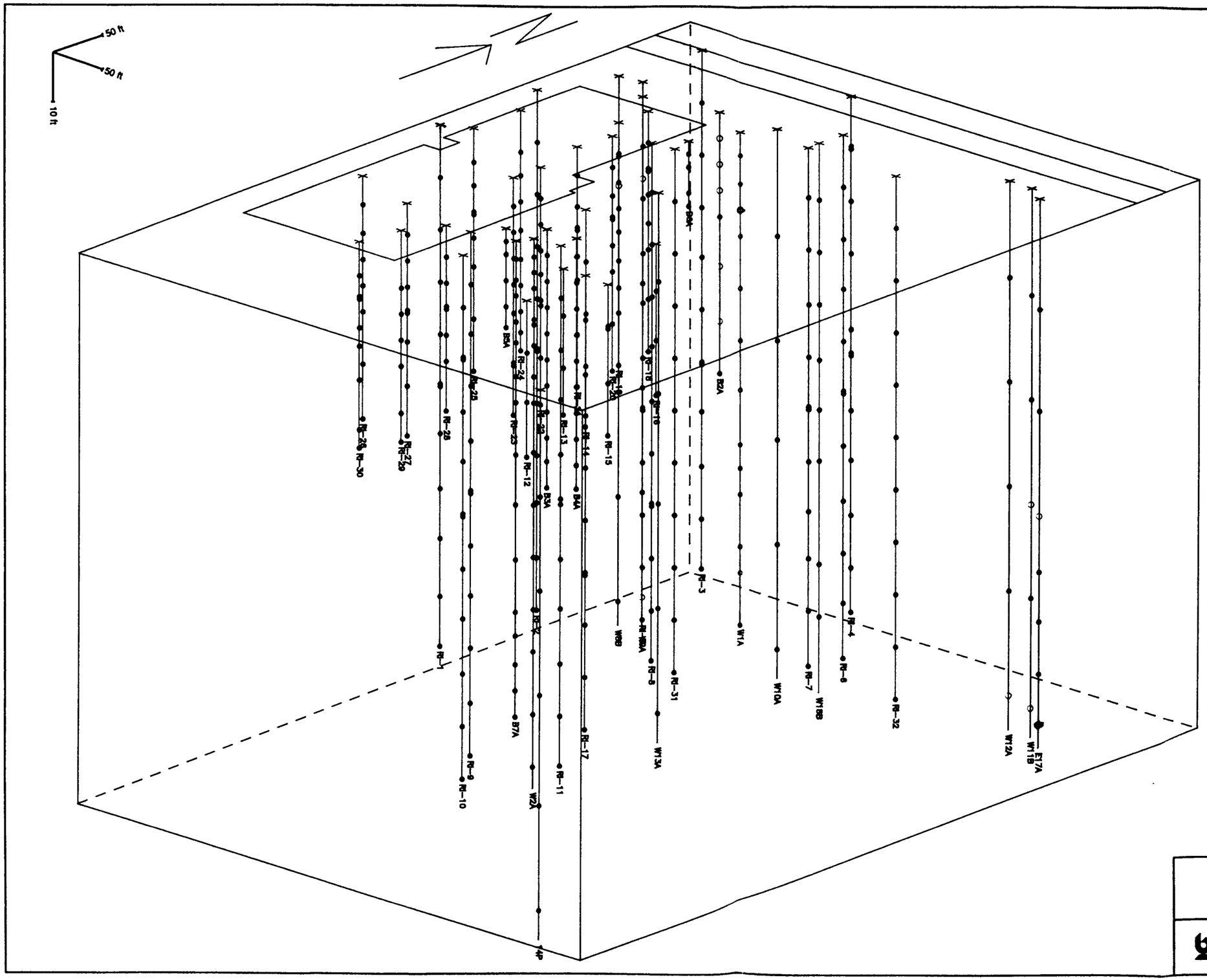
Previous Borings

Recent Borings

Isometric View of PCE in Soil Samples

Former Intersil Facility

beak consultants limited	Figure 5.5b	18 May 90 Rev. 01



LEGEND

Range of Concentration (mg/kg)

- 0–.1
- .1–1.
- 1.–5.
- 5.–10.
- 10.–100.

- Not Detected

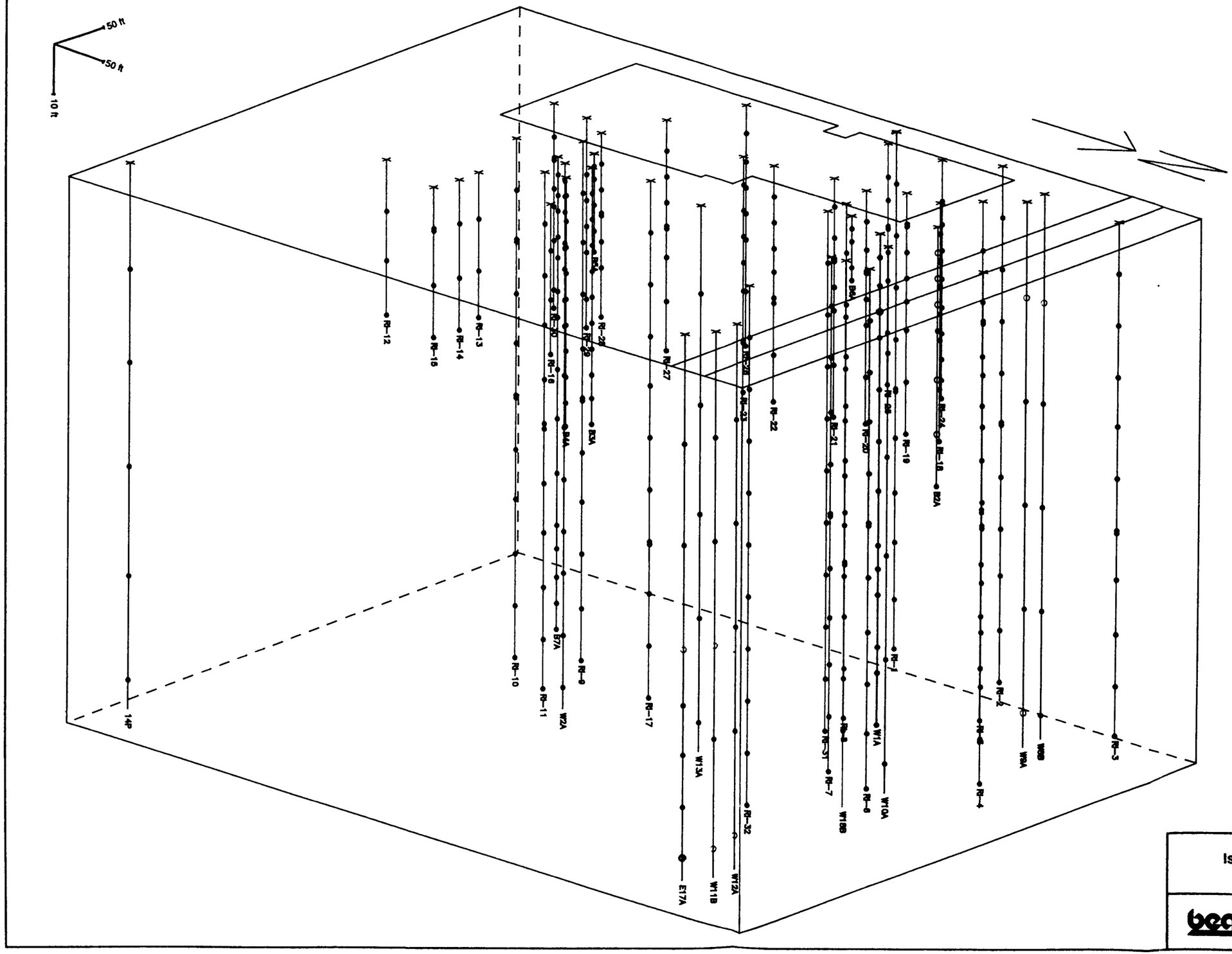
Previous Borings

Recent Borings

Isometric View of TCA in Soil Samples

Former Intersil Facility

beak consultants limited	Figure 5.6a	18 May 90 Rev. 01



LEGEND

Range of Concentration (mg/kg)

- ○ 0–.1
- ○ .1–1.
- ● 1.–5.
- ● 5.–10.
- ● 10.–100.

• Not Detected

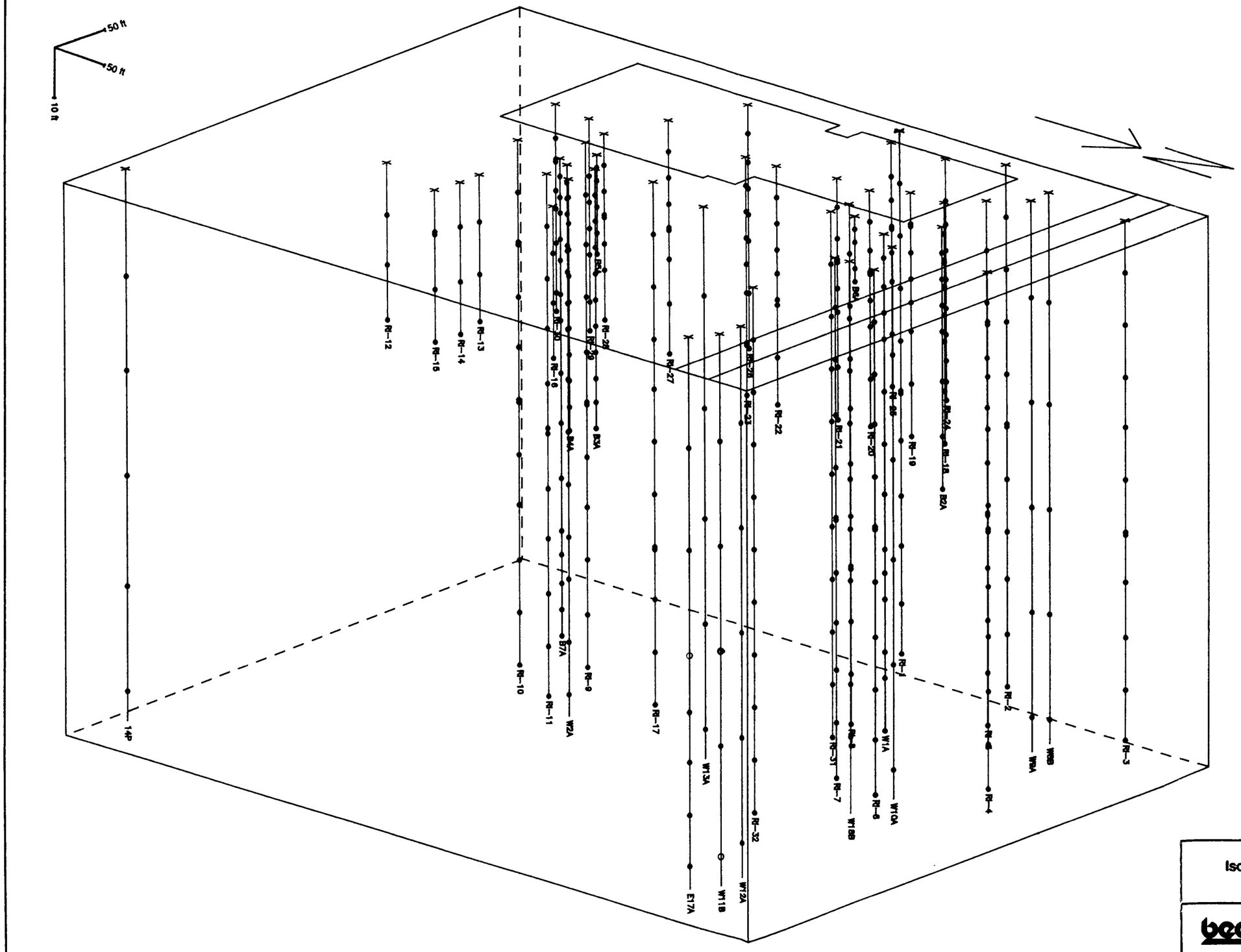
Previous Borings

Recent Borings

Isometric View of TCA in Soil Samples

Former Intersil Facility

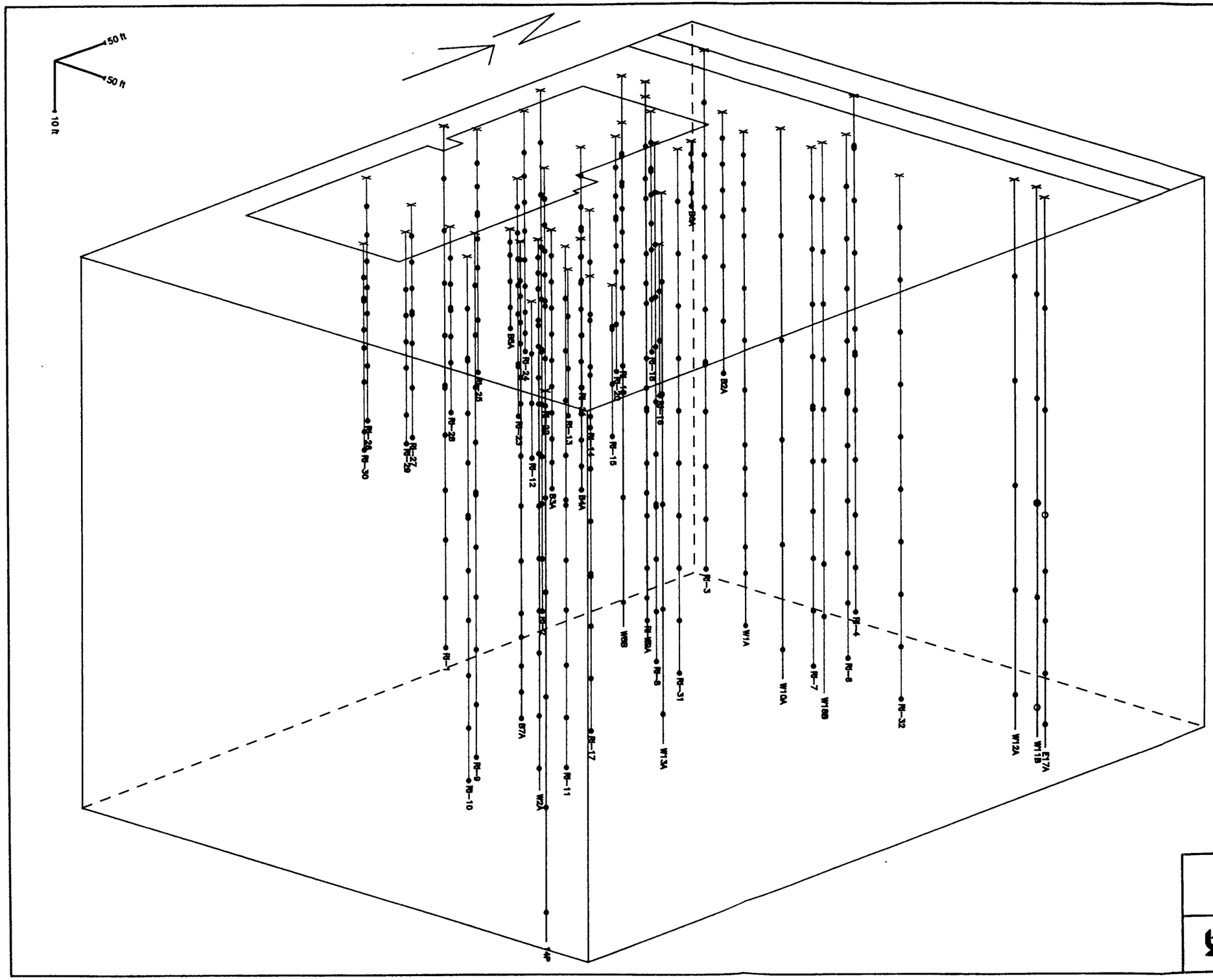
beak consultants limited	Figure 5.6b	18 May 90 Rev. 01



Isometric View of 1,2-DCE in Soil Samples

Former Intersil Facility

beak consultants limited	Figure 5.7a	18 May 90 Rev. 01



LEGEND

Range of Concentration (mg/kg)

- ○ 0–.1
- ○ .1–1.
- ● 1.–5.
- ● 5.–10.
- ● 10.–100.

- • Not Detected

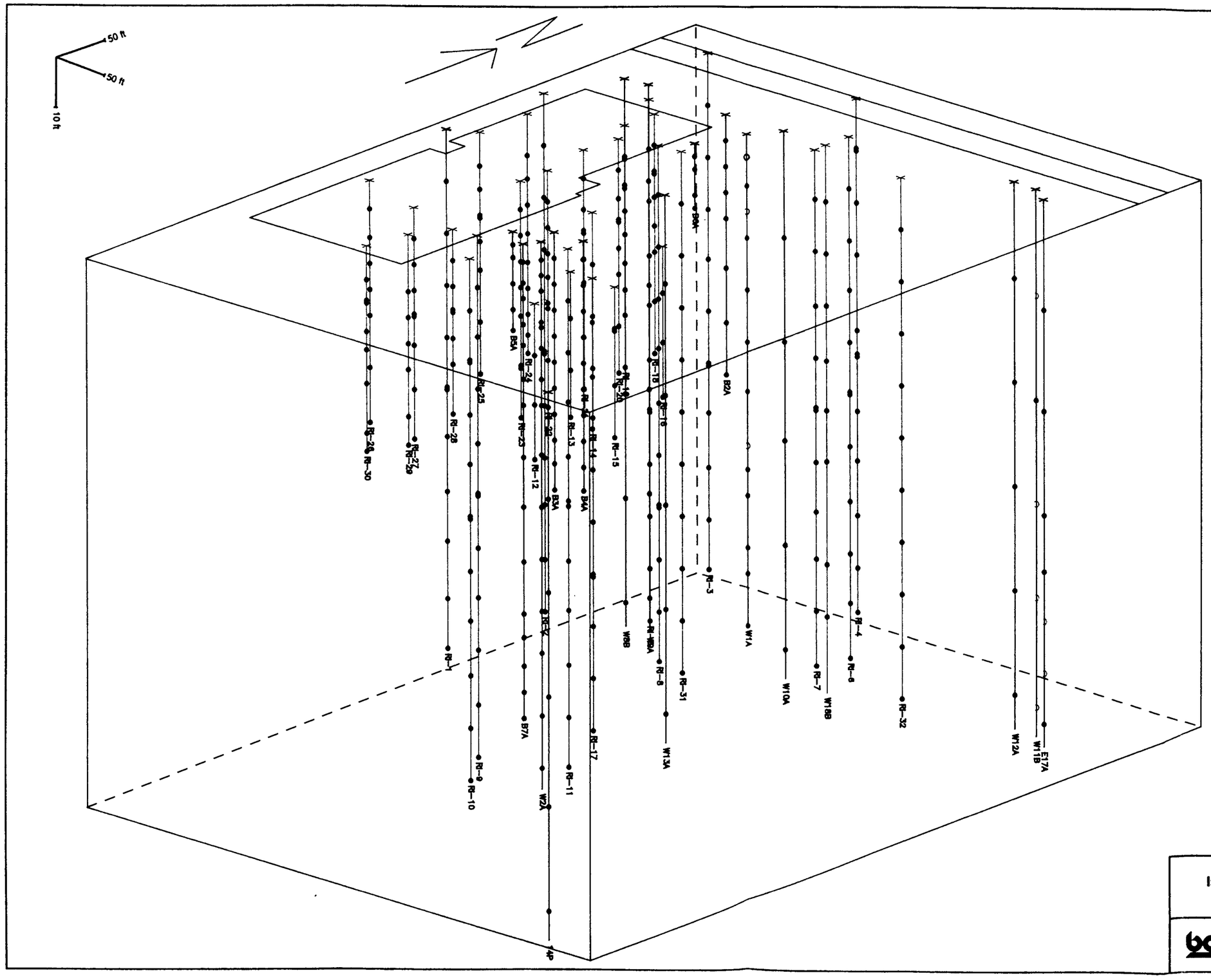
Previous Borings

Recent Borings

Isometric View of 1,2-DCE in Soil Samples

Former Intersil Facility

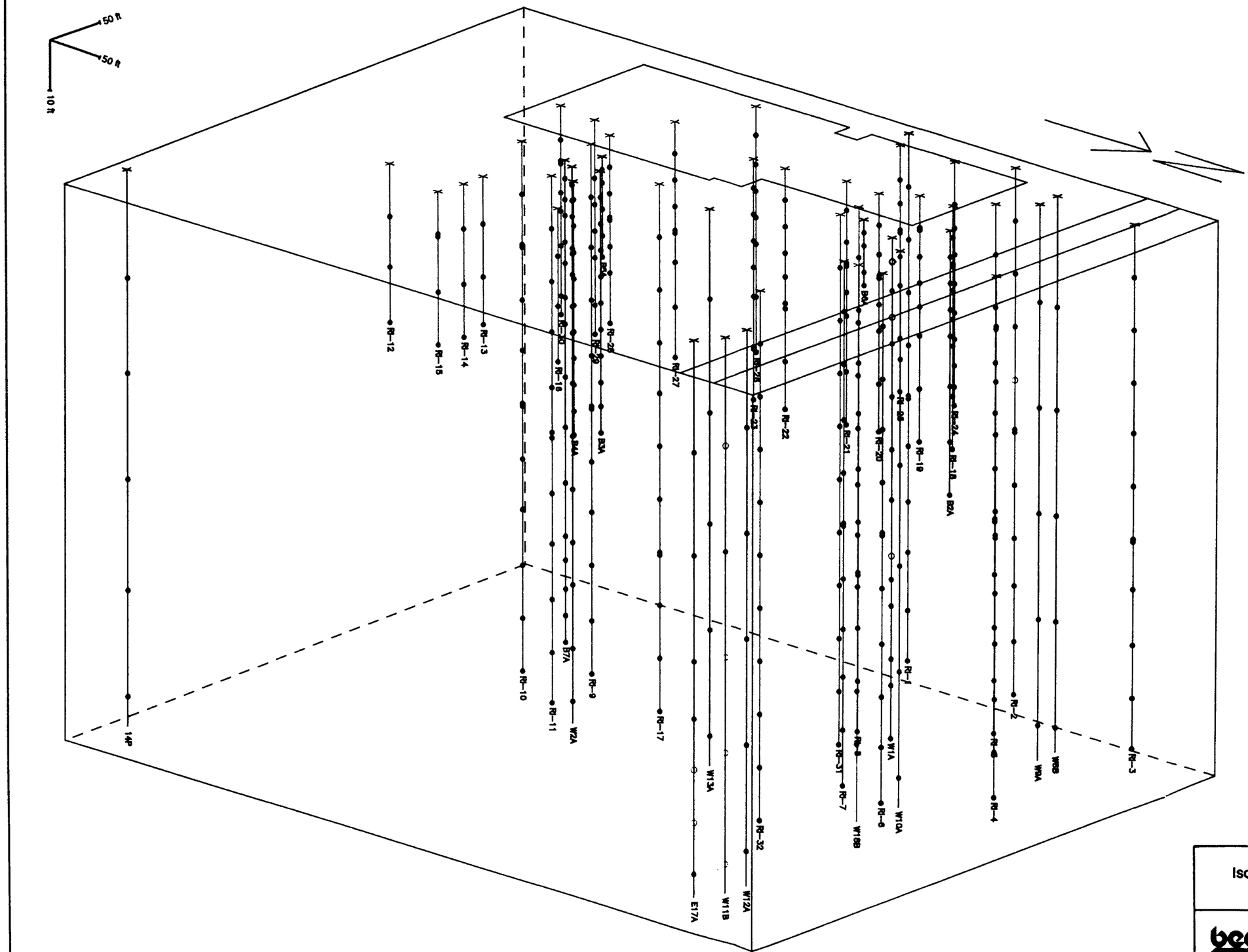
beak consultants limited	Figure 5.7b	18 May 90 Rev. 01



Isometric View of Freon 113 in Soil Samples

Former Intersil Facility

beak consultants limited	Figure 5.8a	18 May 90 Rev. 01



LEGEND

Range of Concentration (mg/kg)

- ○ 0–.1
- ○ .1–1.
- ● 1.–5.
- ● 5.–10.
- ● 10.–100.

- • Not Detected

Previous Borings

Recent Borings

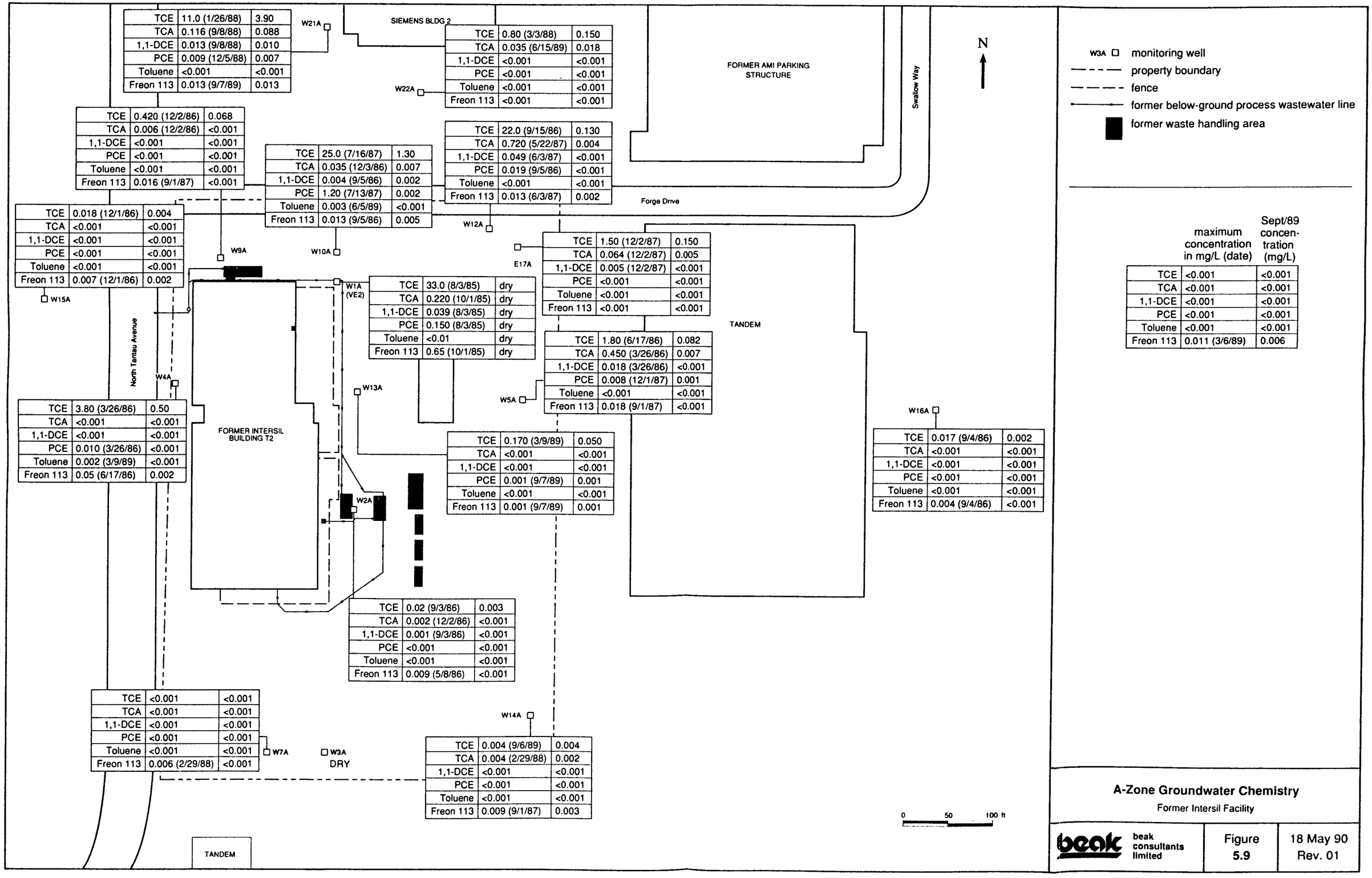
Isometric View of Freon 113 in Soil Samples

Former Intersil Facility

beak consultants limited

Figure 5.8b

18 May 90
Rev. 01



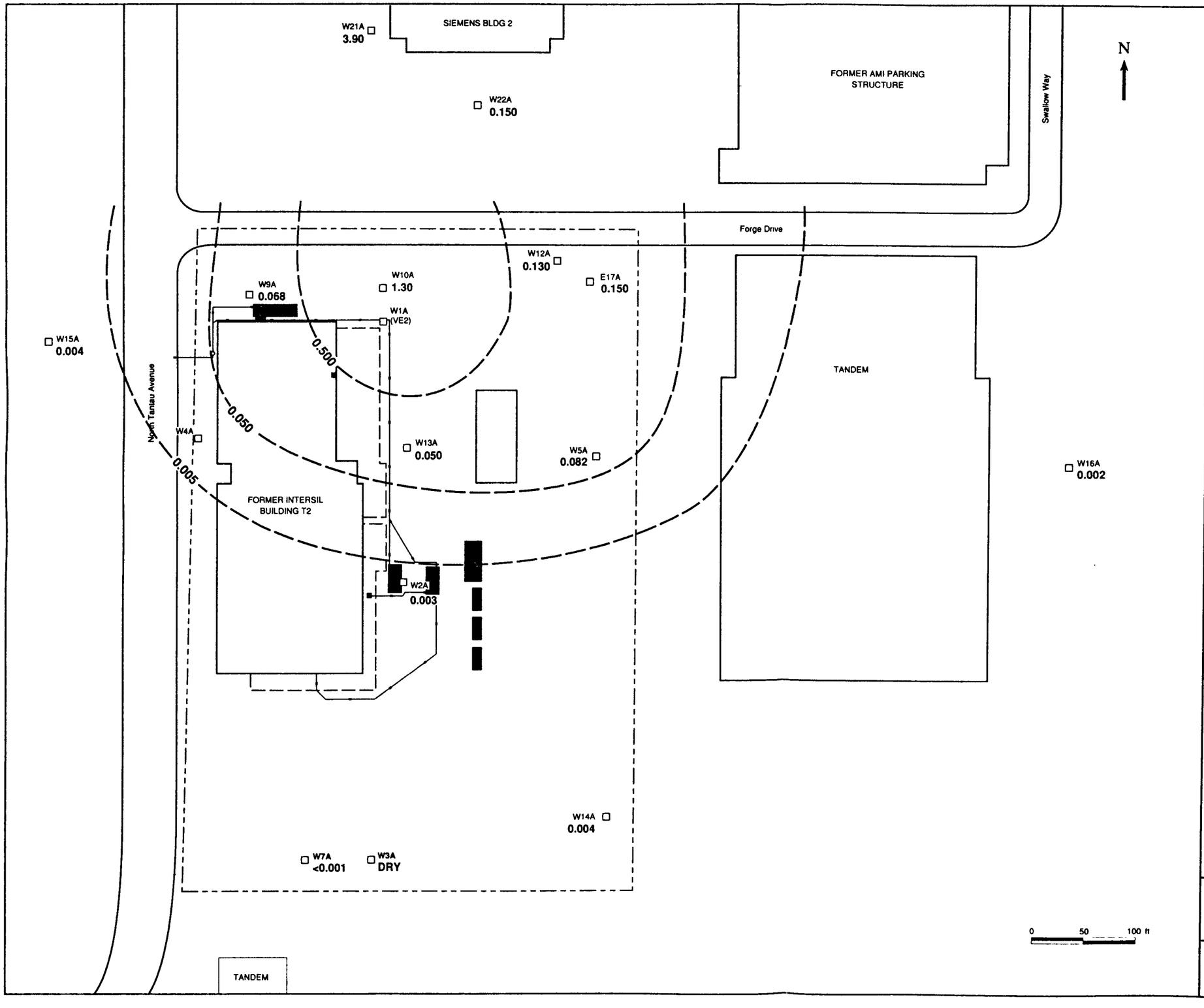
A-Zone Groundwater Chemistry

Former Intersil Facility

beak consultants limited

Figure 5.9

18 May 90
Rev. 01



TCE Concentrations in A-Zone Groundwater

Former Intersil Facility

beak consultants limited	Figure **5.10**	18 May 90 Rev. 00

TCE	0.250 (6/8/88)	0.160
TCA	0.019 (9/8/88)	0.013
1,1-DCE	0.001 (9/7/89)	0.001
PCE	<0.001	<0.001
Toluene	0.089 (9/8/88)	<0.001
Freon 113	0.048 (3/9/89)	0.032

W20B

SIEMENS BLDG 2

TCE	0.560 (3/3/88)	0.460
TCA	0.120 (12/7/87)	0.022
1,1-DCE	0.004 (12/7/87)	0.003
PCE	<0.001	<0.001
Toluene	0.028 (9/8/88)	<0.001
Freon 113	0.073 (9/7/89)	0.073

W19B

FORMER AMI PARKING STRUCTURE

Swallow Way

N

W6B monitoring well

property boundary

fence

former below-ground process wastewater line

former waste handling area

TCE	0.005 (3/2/88)	0.003
TCA	<0.001	<0.001
1,1-DCE	<0.001	<0.001
PCE	<0.001	<0.001
Toluene	0.083 (9/7/88)	<0.001
Freon 113	<0.001	<0.001

W8B

TCE	0.440 (6/7/88)	0.250
TCA	0.010 (11/20/87)	0.003
1,1-DCE	<0.001	<0.001
PCE	<0.001	<0.001
Toluene	0.200 (9/7/88)	<0.001
Freon 113	0.058 (3/8/89)	0.057

W18B

Forge Drive

TCE	0.950 (12/3/86)	0.037
TCA	0.10 (12/3/86)	0.002
1,1-DCE	0.003 (12/3/86)	<0.001
PCE	<0.001	<0.001
Toluene	0.450 (9/6/88)	0.007
Freon 113	0.022 (6/6/88)	0.006

W11B

TANDEM

North Tantau Avenue

FORMER INTERSIL BUILDING T2

TCE	0.002 (9/6/89)	0.002
TCA	0.001 (9/2/86)	<0.001
1,1-DCE	<0.001	<0.001
PCE	<0.001	<0.001
Toluene	0.024 (9/7/88)	<0.001
Freon 113	0.110 (8/31/87)	0.045

W6B

TCE	<0.001	<0.001
TCA	<0.001	<0.001
1,1-DCE	<0.001	<0.001
PCE	<0.001	<0.001
Toluene	<0.001	<0.001
Freon 113	0.011 (3/6/89)	0.006

W14B

TANDEM

0 50 100 ft

	maximum concentration in mg/L (date)	Sept/89 concentration (mg/L)
TCE	<0.001	<0.001
TCA	<0.001	<0.001
1,1-DCE	<0.001	<0.001
PCE	<0.001	<0.001
Toluene	<0.001	<0.001
Freon 113	0.011 (3/6/89)	0.006

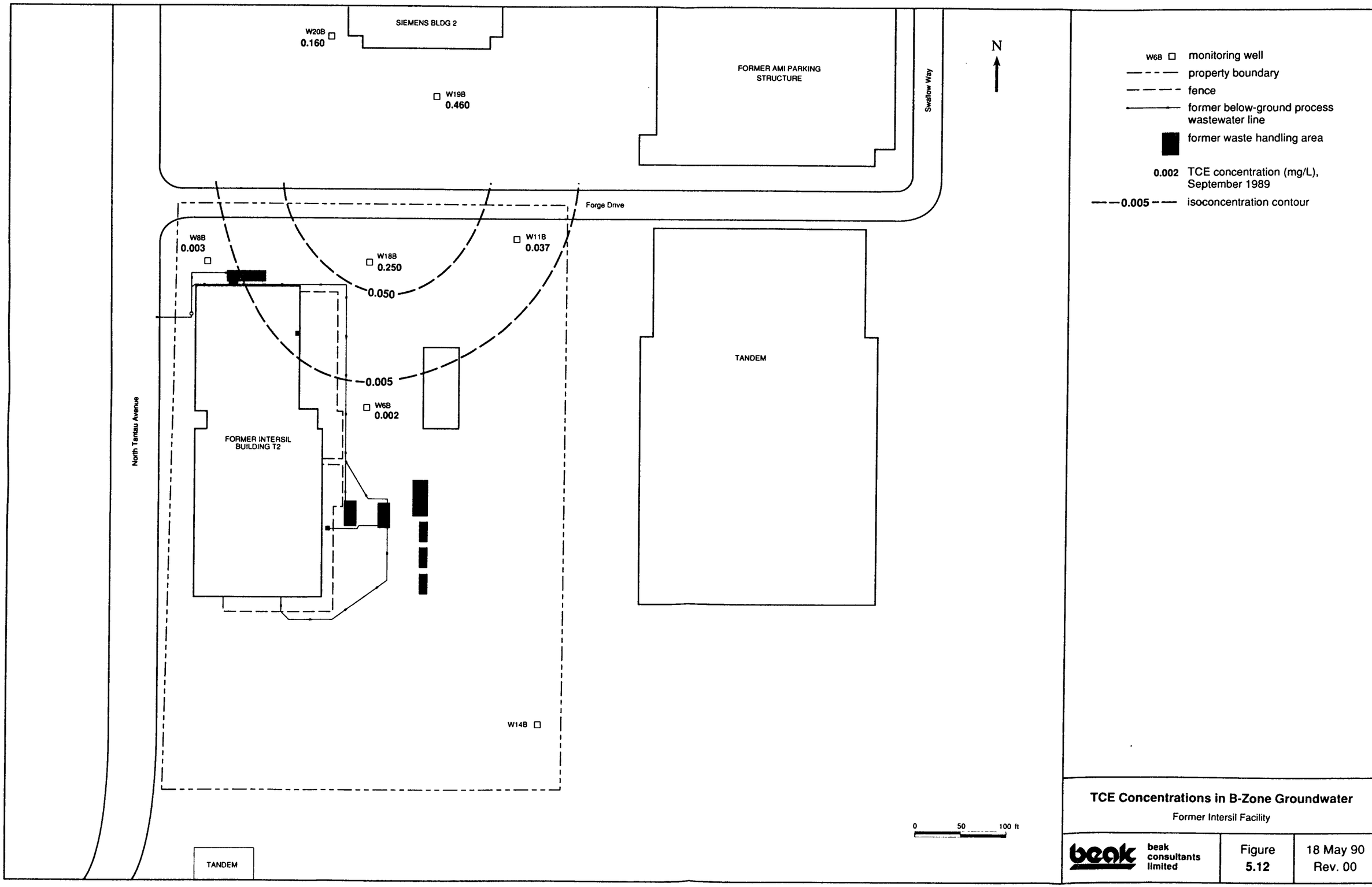
B-Zone Groundwater Chemistry

Former Intersil Facility

beak consultants limited

Figure 5.11

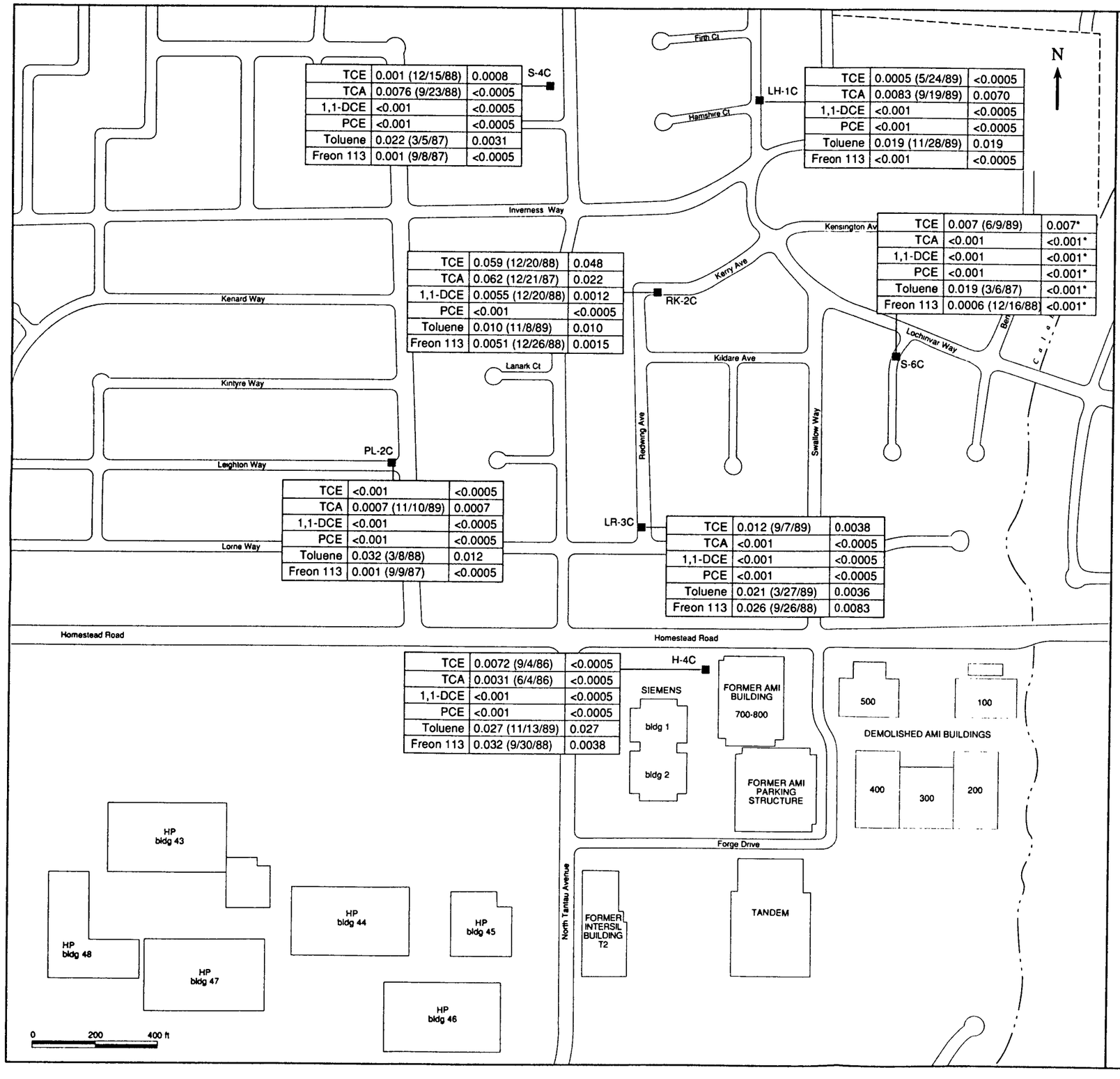
18 May 90 Rev. 01



TCE Concentrations in B-Zone Groundwater

Former Intersil Facility

beak consultants limited	Figure 5.12	18 May 90 Rev. 00



TCE	0.001 (12/15/88)	0.0008
TCA	0.0076 (9/23/88)	<0.0005
1,1-DCE	<0.001	<0.0005
PCE	<0.001	<0.0005
Toluene	0.022 (3/5/87)	0.0031
Freon 113	0.001 (9/8/87)	<0.0005

TCE	0.0005 (5/24/89)	<0.0005
TCA	0.0083 (9/19/89)	0.0070
1,1-DCE	<0.001	<0.0005
PCE	<0.001	<0.0005
Toluene	0.019 (11/28/89)	0.019
Freon 113	<0.001	<0.0005

TCE	0.007 (6/9/89)	0.007*
TCA	<0.001	<0.001*
1,1-DCE	<0.001	<0.001*
PCE	<0.001	<0.001*
Toluene	0.019 (3/6/87)	<0.001*
Freon 113	0.0006 (12/16/88)	<0.001*

TCE	0.059 (12/20/88)	0.048
TCA	0.062 (12/21/87)	0.022
1,1-DCE	0.0055 (12/20/88)	0.0012
PCE	<0.001	<0.0005
Toluene	0.010 (11/8/89)	0.010
Freon 113	0.0051 (12/26/88)	0.0015

TCE	<0.001	<0.0005
TCA	0.0007 (11/10/89)	0.0007
1,1-DCE	<0.001	<0.0005
PCE	<0.001	<0.0005
Toluene	0.032 (3/8/88)	0.012
Freon 113	0.001 (9/9/87)	<0.0005

TCE	0.012 (9/7/89)	0.0038
TCA	<0.001	<0.0005
1,1-DCE	<0.001	<0.0005
PCE	<0.001	<0.0005
Toluene	0.021 (3/27/89)	0.0036
Freon 113	0.026 (9/26/88)	0.0083

TCE	0.0072 (9/4/86)	<0.0005
TCA	0.0031 (6/4/86)	<0.0005
1,1-DCE	<0.001	<0.0005
PCE	<0.001	<0.0005
Toluene	0.027 (11/13/89)	0.027
Freon 113	0.032 (9/30/88)	0.0038

LR-3C ■ off-site C-zone monitoring well

	maximum concentration in mg/L (date)	Nov/89 concentration (mg/L)
TCE	<0.001	<0.001
TCA	<0.001	<0.001
1,1-DCE	<0.001	<0.001
PCE	<0.001	<0.001
Toluene	<0.001	<0.001
Freon 113	0.011 (3/6/89)	0.006

* last sampled 6/9/89

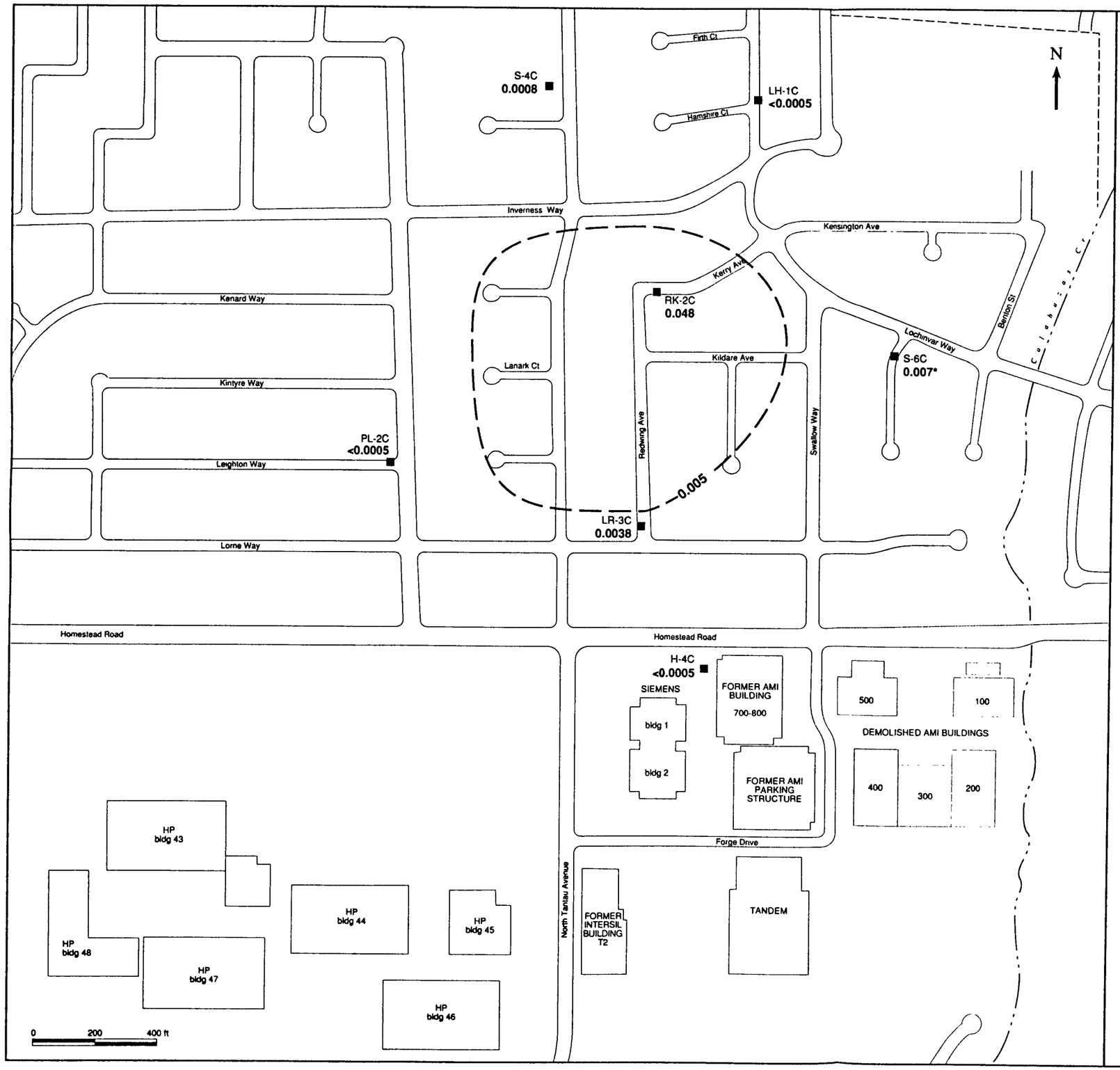
C-Zone Groundwater Chemistry

Former Intersil Facility

beak consultants limited

Figure 5.13

18 May 90
Rev. 01



LR-3C ■ off-site C-zone monitoring well

0.0008 TCE concentration (mg/L), September 1989

* last sampled 6/9/89

——0.005 - - - isoconcentration contour

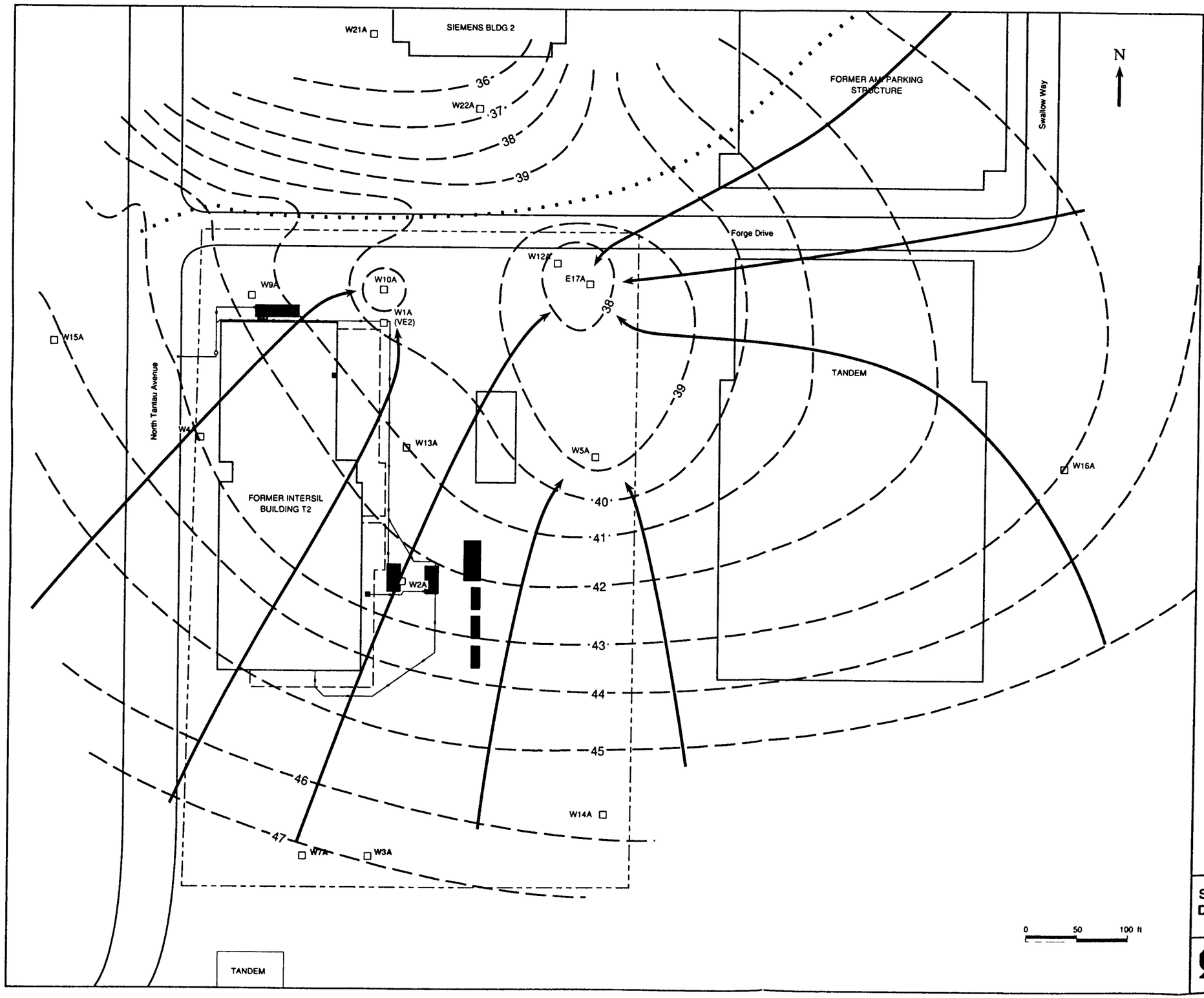
TCE Concentrations in C-Zone Groundwater

Former Intersil Facility

beak consultants limited

Figure 5.14

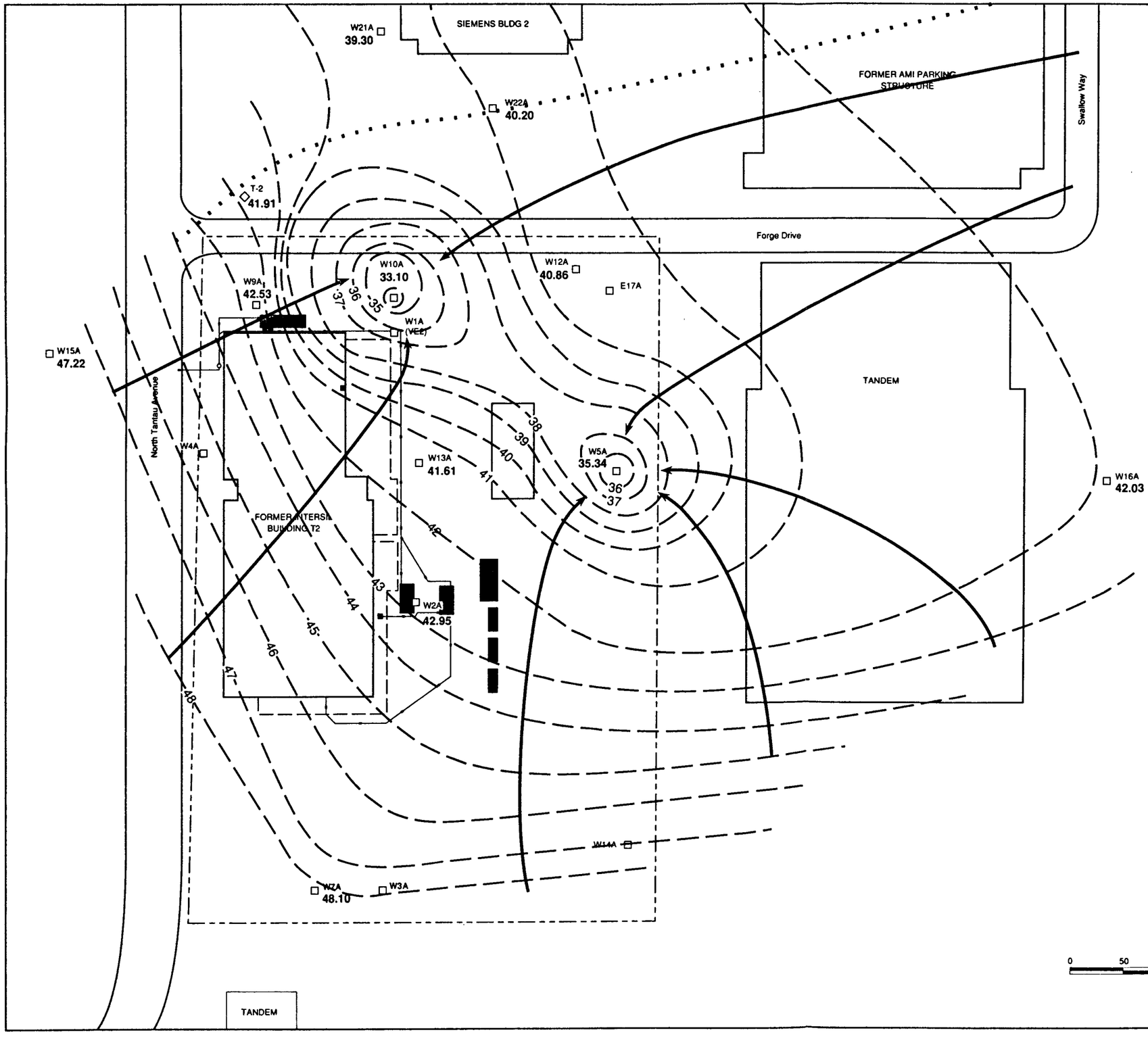
06 June 90
Rev. 01



Simulated Zone of Hydraulic Containment in A-Zone During Operation of Groundwater Extraction System

Former Intersil Facility

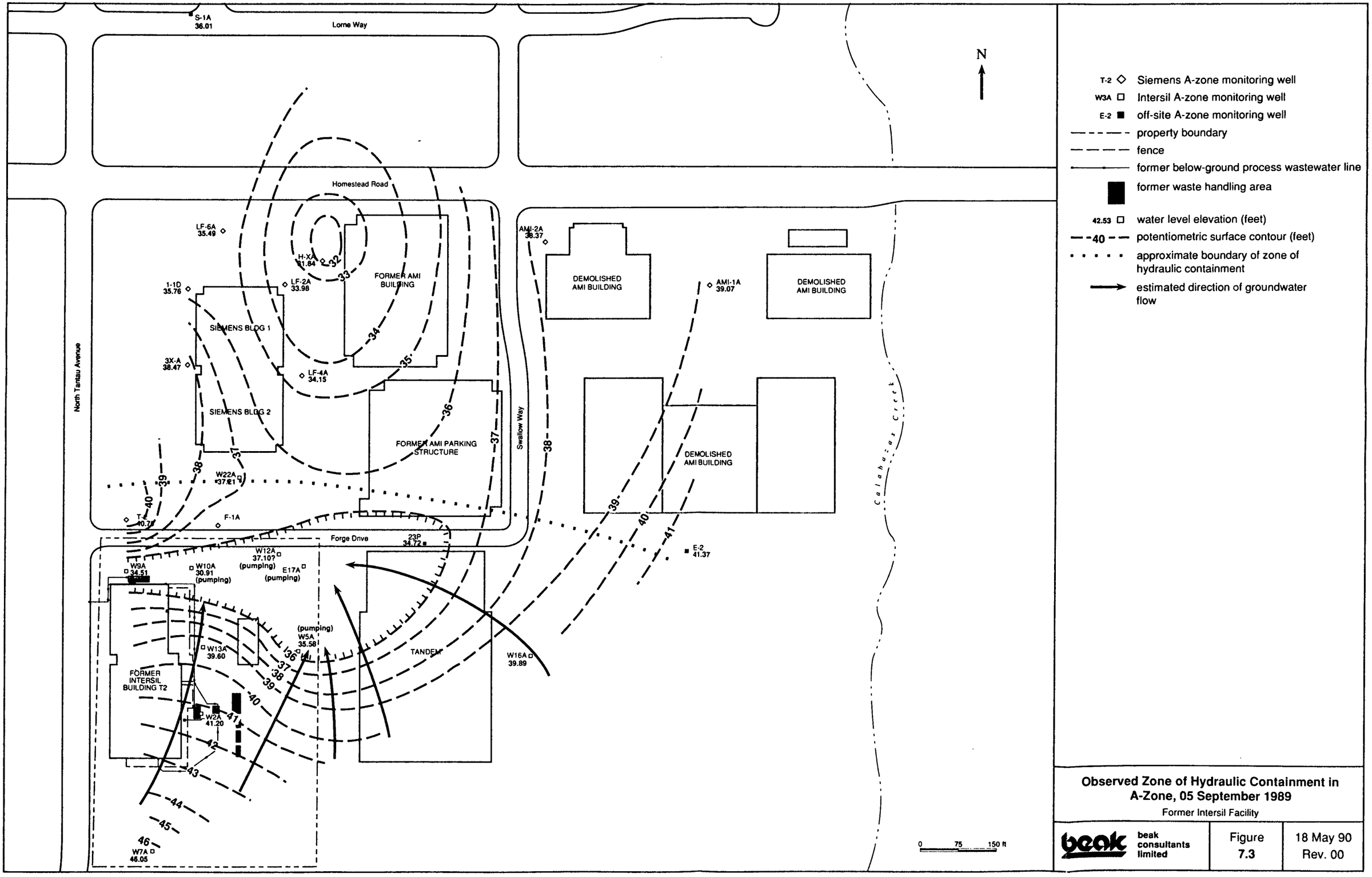
beak consultants limited	Figure 7.1	18 May 90 Rev. 00



Observed Zone of Hydraulic Containment In A-zone, 01 March 1988

Former Intersil Facility

beak consultants limited	Figure 7.2	18 May 90 Rev. 00



Observed Zone of Hydraulic Containment in A-Zone, 05 September 1989

Former Intersil Facility

beak consultants limited	Figure 7.3	18 May 90 Rev. 00

SIXTH FIVE-YEAR REVIEW REPORT FOR

INTERSIL INC./SIEMENS COMPONENTS SUPERFUND SITE

SANTA CLARA COUNTY, CALIFORNIA

PREPARED BY

United States Corps of Engineers, Seattle District

FOR

U.S. Environmental Protection Agency, Region IX

Approved by: DANA BARTON Digitally signed by DANA BARTON Date: 2020.09.28 10:45:17 -07'00' **Date:**

Dana Barton, Assistant Director
California Site Cleanup & Enforcement Branch
Superfund and Emergency Management Division
US. Environmental Protection Agency, Region 9

John D Wolfenden FOR Digitally signed by John Wolfenden Date: 2020.09.25 14:12:12 -07'00'

Water Boards

Alec Naugle, Division Chief
Toxics Cleanup Division
San Francisco Bay Regional Water Quality Control Board

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Executive Summary

This is the sixth Five-Year Review of the Intersil Inc./Siemens Components Superfund Site (Site) located in Cupertino, Santa Clara County, California. The purpose of this Five-Year Review is to review information to determine if the remedy is and will continue to be protective of human health and the environment.

The California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) and the U.S. Environmental Protection Agency (EPA) worked together to select the final remedy for the Site, which was presented in the Final Site Cleanup Requirements Board Order No. 90-119, on August 15, 1990. The September 27, 1990 Record of Decision (ROD) incorporated the Final Site Cleanup Requirements Board Order No. 90-119 and provided a summary of the selected final remedy, documented comments and questions received during remedial planning, and required further investigation in the Study Area located downgradient from the two source properties described below. The selected final cleanup remedy consisted of modifications to two existing groundwater extraction and treatment (GWET) systems and two soil vapor extraction and treatment (SVET) systems. The following three areas that include the two source properties are associated with the Site:

- Former Intersil, Inc. (Intersil) facility, located at 10900 North Tantau Avenue, Cupertino, California.
- Former Siemens Components, Inc. (Siemens) facility, located at former 10950 North Tantau Avenue (currently 19000 Homestead Road), Cupertino, California.
- Off-Property Study Area, located north of, and hydraulically downgradient from, the former Intersil and Siemens facilities, which extends into Sunnyvale, California.

The goal of the selected final cleanup remedy is to restore groundwater to beneficial use. The selected remedy addressed the principal threats posed by the Site. Contaminants removed from both soil and groundwater were captured and permanently destroyed, significantly reducing the toxicity, mobility, and volume of the hazardous substances in both media. Both SVET systems were shut down following a rise in groundwater levels and following subsequent shutdown approval by the RWQCB. Further soil vapor extraction would have resulted in relatively insignificant reductions in contaminants due to asymptotic mass removal. Both GWET systems continue to operate, containing the groundwater contaminant plumes and removing contaminants in groundwater from the Site.

Land use and exposure pathways have not changed since the last Five-Year Review. Land use covenants as deed restrictions are in place for the former Intersil and former Siemens properties, effectively preventing land use changes that would result in contaminant exposure to Site contaminants. Multiple vapor intrusion assessments have been completed for buildings within the Site and vapor intrusion was shown to not pose an unacceptable current human health risk.

The remedy, including the past soil excavation, past soil vapor extraction, and ongoing groundwater extraction and treatment are functioning as designed. TCE concentrations above ROD cleanup standards are present in the furthest downgradient wells to the north for the Upper Aquifer water-bearing A and B zones, TCE concentrations are decreasing in the majority of monitoring wells and the plume is decreasing overall. Decreasing TCE concentration trends are due, in part, to additional methods of alternative

remediation that Siemens has implemented in recent years as part of pilot study activities. The Site contaminants are not above the California drinking water Maximum Contaminant Level (MCL) standards in the C Zone.

Some of the highest TCE concentrations in groundwater at the Site have been detected within the A Zone Resaturated Interval along Forge Drive between the former Intersil and former Siemens properties. This may indicate relatively shallow contamination in this location and may be a continuing source of contamination downgradient. Without an understanding of the magnitude of contamination within the Resaturated Interval south of Forge Drive on the former Intersil property site, analysis for understanding of when cleanup timeframes will be met under the current methods of remediation may be incomplete.

The remedy at the Intersil Inc./Siemens Components Superfund Site currently protects human health and the environment by maintaining capture of the contaminant plume and eliminating on- and off-property exposure pathways. Institutional controls eliminate exposure pathways on the former Intersil and Siemens properties. In order for the remedy to be protective in the long-term, additional delineation of the Resaturated Interval of the A Zone should be completed.

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List of Abbreviations

1,1,1-TCA	1,1,1-trichloroethane
AMI	American Microsystems, Inc.
bgs	below ground surface
EPA	The U.S. Environmental Protection Agency
ERD	enhanced reductive dechlorination
gpm	gallons per minute
GWET	groundwater extraction and treatment
Intersil	Intersil, Inc.
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
mg/kg	milligrams per kilogram
MIP	membrane interface probe
NPDES	National Pollutant Discharge Elimination System
PCE	tetrachloroethene (also called tetrachloroethylene and perchloroethylene)
ROD	Record of Decision
RWQCB	The California Regional Water Quality Control Board
Siemens	Siemens Components, Inc.
SVE	soil vapor extraction
SVET	soil vapor extraction and treatment
TCE	trichloroethene
µg/L	micrograms per liter
VOC	volatile organic compound

1. Introduction

The purpose of a five-year review is to evaluate the implementation and performance of a remedy in order to determine if the remedy will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in five-year review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this Five-Year Review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act Section 121, 40 Code of Federal Regulations Section 300.430(f)(4)(ii) of the National Contingency Plan and EPA policy.

This is the sixth Five-Year Review for the Intersil Inc./Siemens Components Superfund Site (Site). The triggering action for this policy review is the completion date of the previous Five-Year Review. This Five-Year Review has been prepared due to the fact that hazardous substances, pollutants, or contaminants currently remain at the site above levels that allow for unlimited use and unrestricted exposure, and cleanup levels have not yet been achieved.

The California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) is the lead agency for implementing the Site's remedy. The EPA has reviewed all supporting documentation and provided input during the Five-Year Review process. The Site consists of three distinct areas in the city of Cupertino, California. The first area is the former Intersil Inc. (Intersil) property, located at 10900 North Tantau Avenue. The second area, the former Siemens Components, Inc. (Siemens) property, lies immediately north at 19000 Homestead Road (former 10950 North Tantau Ave). Those two areas have comingled plumes of volatile organic compounds (VOCs) in both groundwater and vadose zone soils. This plume extends north from the source properties to an adjacent residential area of Sunnyvale, California which is the third area within the Site, referred to as the Off-Property Study Area.

The Intersil Inc./Siemens Components Superfund Site Five-Year Review was led by Roger Papler of the RWQCB and Michael Schulman of the EPA. Participants included Cynthia Wetmore, EPA Region 9 Superfund Five-Year Review Coordinator, and from the U.S. Army Corps of Engineers, Seattle District, Daniel J. Carlson, physical scientist; Lisa Scott, hydrogeologist; and Benino McKenna, geologist. The review began on October 2, 2019.

Table 1. Five-Year Review Summary Form

SITE IDENTIFICATION		
Site Name: Intersil Inc./Siemens Components Superfund Site		
EPA ID: CAD041472341		
Region: 9	**State:** CA	**City/County:** Cupertino / Santa Clara
SITE STATUS		
National Priorities List Status: Final		
Multiple Operable Units? No	**Has the site achieved construction completion?** Yes	
REVIEW STATUS		
Lead agency: State ***[If "Other Federal Agency", enter Agency name]*:**		
Author names (State and Federal Project Managers): Roger Papler and Michael Schulman		
Author affiliations: San Francisco Bay Regional Water Quality Control Board (RWQCB) and United States Environmental Protection Agency		
Review period: 10/2/2019 – 9/30/2020		
Date of site inspection: 2/6/2020		
Type of review: Policy		
Review number: 6		
Triggering action date: 9/30/2015		
Due date *(five years after triggering action date)*: 9/30/2020		

1.1. Background

Former Intersil Facility

From 1967 to 1988, Intersil operated as a silicon wafer fabrication plant and office building. In connection with these activities, Intersil used inorganic etching solutions (i.e., acids) and large amounts of water (up to 100,000 gallons per day). Trichloroethylene (TCE), an industrial solvent, was used as a cleaning agent prior to 1979. This was replaced with 1,1,1-trichloroethane (1,1,1-TCA), which was used until closure of the facility in 1988. Because Intersil's processes were acid- and water-intensive, rather than solvent-intensive, the facility had multiple in-groundwater wastewater neutralization systems and sumps, with the acids processed in the North and East Neutralization Systems.

The East and North Neutralization Systems consisted of five 1,000-gallon subsurface vaulted concrete tanks with polypropylene liners, five in-ground vaulted 1,000-gallon plastic tanks (later replaced by two stainless steel compartment tanks), and one 1,000-gallon steel gravity separator tank. The neutralized wastewater was then discharged to the municipal sanitary sewer system. In 1976, the East Neutralization System was moved further to the east and installed as a 8,500-gallon, stainless steel compartment tank within subsurface concrete vaults. In 1980, a 250-gallon, steel waste solvent storage task was added to the East Neutralization System concrete vault. Wastes from the 250-gallon waste tank were pumped out monthly by a recycling company. Other wastewater treatment handling areas included the North and East scrubber sumps that consisted of 500-gallon, epoxy-lined concrete sumps.

Intersil conducted investigations of the property between 1983 and 1988, which involved drilling soil borings and installing groundwater monitoring wells. The investigations revealed the presence of TCE in soil and groundwater beneath the central and northern portions of the property. The impact of groundwater contaminants was limited to the upper aquifer. Groundwater samples collected from the deeper aquifer indicated that it had not been significantly impacted.

Initial response actions included the removal of inactive industrial systems components in 1986 and 1988. Furthermore, a groundwater extraction and treatment system (GWET) was installed in 1987 and a soil vapor extraction and treatment system (SVET) was installed in 1988.

General Electric is the successor to Intersil, Inc. and retains responsibility for the operation and maintenance of the GWET system. The former Intersil property is now occupied by Panasonic Corporation and Apple, Inc.

Former Siemens Facility

From approximately 1970 to 1982, Litronix used the facility for semiconductor manufacturing operations. In 1978 Litronix was purchased by Siemens, and from 1982 to 1995 Siemens used the facility for semiconductor manufacturing operations to produce light emitting diode products using a variety of organic and inorganic solutions and compressed gasses. The solvents TCE and 1,1,1-TCA were used for cleaning of the bulk and wafer fabrication processes to remove a wax coating that were used to hold the wafer in place for polishing. The bulk use of TCE and 1,1,1-TCA were phased out through 1980 to 1983

with the elimination of wax from the polishing process. To store liquid wastes, five underground storage tanks were installed between 1971 and 1974, which were removed by 1982. From 1982 until closure of facility operations in 1986, liquid wastes were temporarily stored on site in 55-gallon drums for later off-site disposal or recycling.

Investigations began in 1982 after the discovery of contaminants during the removal of the underground storage tanks. Investigations performed between 1982 and 1989 indicated that releases of mostly chlorinated VOCs and semi-volatile organic compounds had occurred and impacted soil and groundwater at levels requiring remediation. The groundwater contamination from Siemens comingled with the contamination from the former Intersil property.

Initial response actions included the installation of a SVET system in 1983 and a GWET system in 1986. The purpose of the GWET system was to provide hydraulic control and remediation of the affected groundwater.

The building on the former Siemens property is now occupied by Kaiser Permanente.

Off-Property Study Area

Intersil and Siemens initiated the investigation of the Off-Property Study Area in 1986. The Off-Property Study Area has no known history of manufacturing activities and is almost entirely developed for residential use. During the 1980s investigations, groundwater in the uppermost zone of the Upper Aquifer (A Zone; see Hydrology in Section 1.3) in this area was not found to be impacted and remediation was not required under RWQCB Order 90-119 (Order). The off-property investigation indicated that the B Zone of the Upper Aquifer was the most contaminated. The C Zone of the Upper Aquifer had much lower levels of contamination than the B Zone, and concentrations are below California drinking water Maximum Contaminant Level (MCL) standards.

Initial response actions included the installation of three groundwater extraction wells and incorporating them into the GWET system on the former Siemens property.

1.2. Physical Characteristics

The former Intersil facility is located at 10900 North Tantau Avenue and the former Siemens facility is located at 19000 Homestead Road, formerly 10950 North Tantau Avenue, in Cupertino, California (Figure 1). The Off-Property Study Area is located north of and hydraulically downgradient from, the former Intersil and Siemens facilities and extends into the City of Sunnyvale. Cupertino has a population of approximately 60,000, is located on the west side of Santa Clara Valley in Santa Clara County, and is part of the San Francisco Bay Metropolitan Region.

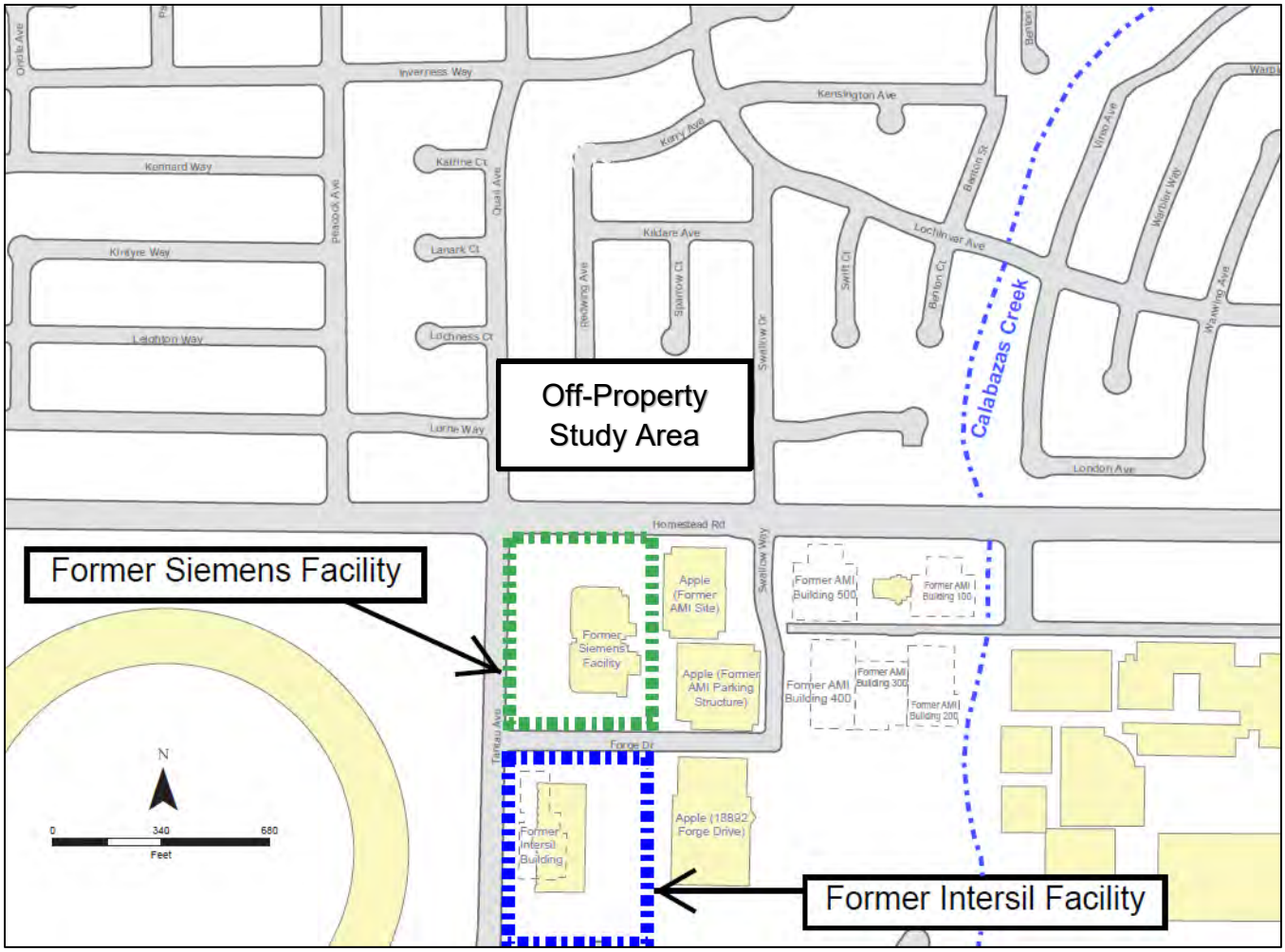


Figure 1. Detailed Site Map

The buildings at the former Intersil facility were demolished in the 1990s and the property was sold several times. In 2007, Tantau Investments, LLC., purchased the property and constructed a two-story, 51,750 square foot commercial office building with a vapor barrier beneath the building foundation. The building on the former Siemens property is used for commercial purposes and land use in the Off-Property Study Area is residential.

The former American Microsystems, Inc. (AMI) site is located northeast of the former Intersil facility and adjacent to and east of the former Siemens facility. The AMI site contains VOCs in groundwater and is managed under a separate Board Order than the Site. The Board Order and initial remedial investigations of the AMI site do not cite the immediately adjacent AMI property to the west of the AMI site as a source of VOC contamination.

The Site overlies the Santa Clara Valley Basin, groundwater from which provides up to 50 percent of the municipal drinking water for over 1.9 million residents of the Santa Clara County, as of 2018. Within the Santa Clara Subbasin, the Site overlies the Santa Clara Plain Confined Area. Approximately 99 percent of groundwater pumped from the Santa Clara Plain is used for municipal and industrial purposes. Drinking

water for Cupertino residents and businesses is supplied by either San Jose Water Company or California Water Service. Some of the Off-Property Study Area falls within the City of Sunnyvale; the City of Sunnyvale Department of Public Works supplies drinking water to city residents and businesses. No private wells exist on properties located within the Off-Property Study Area. There are five active municipal wells within a 1-mile radius of the Site. The nearest downgradient municipal supply wells are City of Santa Clara Wells No. 24 and No. 17-02, respectively located approximately 3,700 feet north-northeast and 3,900 feet east-northeast from the northern border of the former Siemens property. Both wells are active municipal groundwater supply wells for domestic supply as of April 2020, producing approximately 1,500 gallons per minute (gpm) from Well # 24 and 2,000 gpm from Well #17-02.

Calabazas Creek is approximately 1,100 feet east of the Site and flows north-northeast approximately 7 miles into San Francisco Bay.

1.3. Hydrology

The Site is located in Northern California, along the southern edge of the San Francisco Bay within the Santa Clara Valley. The Santa Clara Valley is a gently northward sloping alluvial plain, flanked by the Diablo Range to the northeast, and the Santa Cruz Mountains to the southwest. The geologic setting at the Site consists of coarse-grained sand and gravel interbedded with fine grained silt and clay, representing alluvial stream channel and associated overbank deposits. The Remedial Investigation Reports for Intersil (Beak Consultants, 1990) and for Siemens (Levine-Fricke, 1990) present an overview of the geology, hydrogeology, groundwater quality for the Site. The hydrology of the Site is composed of two primary water-bearing units, the Upper Aquifer (A, B and C Zones) and the Deep Aquifer.

Historically and in current analyses, the Upper Aquifer is divided into three water-bearing zones which are generally separated by fine-grained sediments that act as semi-confining aquitards, as follows:

Upper Aquifer Water-Yielding Zones:

- A Zone (top of the groundwater table to 115 to 125 feet below ground surface [bgs])
- B Zone (approximately 130 to 150 feet bgs)
- C Zone (approximately 180 to 210 feet bgs)

The Deep Aquifer (the regional aquifer) is a confined aquifer that exists at depths of approximately 300 to 500 feet bgs and is separated from the C Zone by an approximately 80- to 150–foot-thick aquitard of fine-grained sediments (Levin-Fricke, 1990; AMEC Geomatrix and ARCADIS, 2011). The groundwater flow direction in the A, B, and C Zones and the regional aquifer is generally northward to northeast beneath the former Intersil and Siemens facilities, generally towards the Off-Property Study Area and San Francisco Bay (Beak Consultants, 1990).

The groundwater elevations rose approximately 50 to 55 feet between 1993 and 1998 due to reductions in agricultural pumping. The rise in groundwater from historical groundwater levels at approximately 100 feet bgs created the originally designated Upper Aquifer Resaturated Interval in the A Zone that extended from 45 to 90 bgs. At the former Siemens property, the Resaturated Interval was divided into two intervals: the Upper Resaturated Interval that extends from approximately 45 to 60 feet bgs, and the

Lower Resaturated Interval that extends from approximately 60 to 90 feet bgs. The Resaturated Interval was later divided into four depth intervals, A1 through A4 (see below).

The Hydrogeologic Framework Report (AMEC Geomatrix and ARCADIS, 2011) discussed and reclassified the A Zone into the four depth zones: A1, A2, A3, and A4 to clarify the hydrogeologic relationship between the two source properties. Former vadose zone wells in the Resaturated Interval are now designated as A1, A2, or A3 Zone wells based on the depths of their screened intervals. The former saturated A Zone is now referred to as the A4 Zone (see Table 2). The A1 through A4 Zones are interconnected and not separate groundwater bearing zones; however, the finer-grained A2 Zone tends to function like an aquitard between the A1 and A3 Zones and is not evaluated as a water bearing zone. In some locations, the A1 Zone does not produce enough water to collect groundwater samples or extract groundwater. The depth ranges for the A1, A2, A3, and A4 Zones at the former Intersil and Siemens facilities are shown below in Table 2.

Table 2. A Zone Subdivided Depth Intervals

Water-Bearing Zone	Former Intersil Facility Approximate Depth (feet bgs)	Former Siemens Facility Approximate Depth (feet bgs)
A1	38 to 58-60	40 to 58-60
A2	58-60 to 69-74	58-60 to 70-74
A3	69-74 to 80-90	70-74 to 90
A4	80-90 to 125	90 to 125

The groundwater plume originating from the former Siemens and former Intersil properties is managed as one commingled plume by SMI Holding, LLC (Siemens) and General Electric, the successor to Intersil. The groundwater plume in the A Zone extends approximately 800 feet downgradient to the north of the former Siemens property and east of Swallow Way. The groundwater plume in the B Zone extends approximately 1,400 feet downgradient to the north into the Off-Property Study Area.

2. Remedial Actions Summary

2.1. Basis for Taking Action

In the 1980s, the municipal water supply well City of Santa Clara Well No. 24 (located approximately 3,700 feet downgradient of the former Siemens property) showed signs of minor impact from chemical releases of Freon-113 and 1,1,1-TCA into soil and groundwater from the Site. The primary threats to human health were future risks posed by ingestion of groundwater and inhalation of volatilized chemicals, should residential development occur on the Site or if untreated shallow zone groundwater was used for human consumption.

2.2. Remedy Selection

The RWQCB and the EPA worked together to select the final remedy for the Site, which was presented in the Final Site Cleanup Requirements Board Order No. 90-119, on August 15, 1990. The September 27, 1990 Record of Decision (ROD) incorporated the Final Site Cleanup Requirements Board Order No. 90-119, provided a summary of the selected final remedy, and required further off-property investigation. The selected final cleanup remedy consists of the following elements:

- Former Intersil property: Expanding pre-existing groundwater and soil vapor extraction and treatment systems by adding three groundwater extraction wells, with two converted from groundwater monitoring wells, and four soil vapor extraction wells.
- Former Siemens property: Expanding the pre-existing groundwater and soil vapor extraction and treatment systems by adding one groundwater extraction well and 12 soil vapor extraction wells, and the excavation of approximately 40 cubic yards of contaminated soil.
- Off-Property Study Area: Installing groundwater extraction wells and connecting them to the Siemens property groundwater extraction and treatment systems.

The ROD stated that the goal of the remedy is to restore groundwater to its beneficial use based on California drinking water MCL standards. The ROD also stated that continued monitoring of groundwater and soil would be conducted to verify containment of the contaminated groundwater and attainment of cleanup levels.

Table 3. ROD Soil Cleanup Standards

Chemical	Former Intersil Facility Cleanup Standards (mg/kg)	Former Siemens Facility Cleanup Standards (mg/kg)	Basis of Cleanup
Total VOCs	1	1	Not specified*
Semivolatile Organic Compounds	None	10	Not specified*

Notes: mg/kg = milligrams per kilogram; ***** The Final Site Cleanup Requirements Board Order No. 90-119 states within the remedy selection rationale that soil is remediated to a level that will protect groundwater from future solvent contamination.

Table 4. ROD Groundwater Cleanup Standards

Chemical*	Former Intersil and Former Siemens Facilities Cleanup Standards (µg/L)	Basis of Cleanup
TCE	5	CA MCL
Tetrachloroethylene (PCE)	5	CA MCL
1,1-Dichloroethylene	6	CA MCL
cis-1,2-Dichloroethylene (cis-DCE)	6	CA MCL
trans-1,2-Dichloroethylene (trans-DCE)	10	CA MCL
1,1,1-TCA	200	CA MCL
Freon-113	1,200	CA MCL
Toluene	100	CA RDWAL

Notes: µg/L = micrograms per liter; CA MCL = California Department of Health Services Maximum Contaminant Level
CA RDWAL = California Department of Health Services Recommended Drinking Water Action Levels; The ROD states that "the goal of this remedial action is to restore groundwater to its beneficial use"; therefore, cleanup standards apply to all contaminants resulting from the Site with applicable standards, including TCE breakdown products such as vinyl chloride.

2.3. Remedy Implementation

Former Intersil Facility

The ROD, issued in 1990, mandated that the two major systems operating at the Site continue to operate, and in some cases, be expanded. The SVET system was subsequently expanded to twelve wells, and the GWET was expanded to seven wells. The SVET system operated from 1988 to 1993, when system approached asymptotic conditions (conditions in which diminished decreases of contaminants may be expected). The GWET system continues to operate today. Extracted soil vapor was treated using carbon adsorption in granular activated carbon vessels. Groundwater was treated using air strippers, although these were replaced by granular activated carbon vessels in 2007.

Former Siemens Facility

Siemens expanded the pre-ROD remediation systems at the former Siemens property to twelve SVET wells and seven GWET wells. The remedy also included excavating approximately 40 cubic yards of contaminated soil on the property. The SVET system operated from 1983 to 2005 when the system approached asymptotic conditions. Groundwater was treated using air strippers that were replaced by granular activated carbon vessels in 2007.

Off-Property Study Area

The remedy implemented at the Off-Property Study Area included extracting groundwater from the three existing extraction wells and regular groundwater monitoring, similar to the monitoring required for the former Siemens property.

2.4. Operation and Maintenance

The remedy for the former Intersil property, former Siemens property, and Off-Property Study Area requires operating and modifying the existing GWET systems at each property. Regular groundwater and soil vapor monitoring is also required for each system. Monitoring requirements include groundwater monitoring of the Upper Aquifer A, B, and C Zones, and additional delineation of the contaminant plume if monitoring results show evidence of plume migration.

Upgrades and modifications have been made to each GWET system for adapting to changes in site conditions, including the 50-foot rise in groundwater that occurred between 1993 and 1998, and for performance optimizations. Upgrades and modifications continue to be made to each GWET system to optimize remedy performance.

Treated effluent from both the GWET systems are discharged to Calabazas Creek under a National Pollutant Discharge Elimination System (NPDES) general permit. General Electric and Siemens continue monitoring groundwater conditions, operating the GWET systems, and reporting to the RWQCB in accordance with the August 15, 1990 Board Order No. 90-119 and the January 2013 amended Board Order R2-2013-0002.

3. Progress Since the Last Five-Year Review

3.1. Previous Five-Year Review Protectiveness Statement and Issues

The protectiveness statement from the 2015 Five-Year Review for the Intersil Inc./Siemens Components Superfund Site stated the following:

> *The remedy at the Intersil Inc,/Siemens Components Superfund Site, including the former Intersil property, former Siemens Property, and Off-Property Study Area, currently protects human health and the environment because all exposure pathways and scenarios are being controlled, including the vapor intrusion pathway. In order for the remedy to be protective in the long-term, additional evaluations of the A Zone in the Off-Property Study Area must be conducted, the groundwater remedy needs to be optimized so as to be more effective, or an alternative remedy selected, and 1,4-dioxane should be analyzed in future site sampling to determine its distribution and whether it should be considered a Site contaminant of concern.*

The 2015 Five-Year Review included three issues and recommendations.

Table 5. Status of Recommendations from the 2015 Five-Year Review

Issue	Recommendation	Current Status	Current Implementation Status Description	Completion Date (if applicable)
The boundary of the TCE plume in the Off-Property Study Area has not been sufficiently defined.	Install more monitoring wells in the Off-Property Study Area and further evaluate and define TCE concentrations across the A Zone.	Ongoing	Groundwater investigations were completed in the Off-Property Study Area in 2015 and 2016 (ERM, 2016c). Detected VOCs were below MCLs within the A1 and A4 Zones downgradient of the former Siemens property; however, TCE was detected above MCLs and not defined in the A3 Zone to the northeast of the Siemens Site, to the east of the roads Swallow Drive and Swift Court.	N/A

Issue	Recommendation	Current Status	Current Implementation Status Description	Completion Date (if applicable)
In the former Siemens property, a minor increasing trend was observed in three B Zone wells [PL-1B, H-3B, W18B] and a stable trend above cleanup standards was observed in two A Zone wells [S-1A, F-1A] and one B Zone well [KR-1B]. Increasing trends may preliminarily indicate a lack of full control of the TCE plume by the selected remedy (extraction wells) and stable trends may preliminarily indicate ineffectiveness of the current remedy in achieving cleanup standards.	Improve the efficiency of the current groundwater remediation and/or develop alternative methods of remediation.	Ongoing	In the former Siemens property, three phases of enhanced reductive dechlorination (ERD) pilot studies have been completed to explore additional remediation options. ERD pilot study mitigation measures included targeted Soil Vapor Extraction (SVE) and chemical oxidant injections completed in April 2019 to address vinyl chloride in groundwater and support ongoing remediation enhancement efforts. Performance monitoring for the 2017 Phase III ERD pilot study and mitigation measures are ongoing. For the former Intersil property, no wells are screened in the A1 Zone and only a paired groundwater extraction well and monitoring well are located within the A3 Zone and therefore the statistical evaluation of TCE concentration trends for the Intersil property could not be conducted. The delineation of TCE impacts in the A1 and A3 Zones as a source area is currently not defined. Since the 2015 Five-Year Review no improvements to the current groundwater remediation have been made nor development of alternative methods of remediation.	N/A
Research has shown that 1,4-dioxane is an emerging contaminant that can be found at sites where 1,1,1-TCA is a contaminant of concern. However, there is no information regarding the presence and distribution of 1,4-dioxane in the subsurface.	Add 1,4-dioxane to the list of contaminants to be monitored for in regular groundwater sampling and assess whether it should be considered a Site contaminant of concern.	Completed	Thirteen wells from the former Intersil, former Siemens, and Off-Property Study Area were sampled for 1,4-dioxane in October 2018. Only one well (4BP) on the former Siemens property was slightly above the California drinking water notification level[1] indicating that there was not a significant source or release from the former Intersil/Siemens properties.	October 2018

[1] Notification levels are health-based advisory levels established by the California Division of Drinking Water for chemicals in drinking water that lack MCLs. The notification level is not an enforceable regulatory cleanup standard.

3.2. Work Completed at the Site During this Five-Year Review Period

Former Intersil Property

The GWET system at the former Intersil property extracted from four extraction wells during this Five-Year Review period; one within the A3 Zone of the Resaturated Zone and three within the A4 Zone. The wells pumped a total volume of approximately 58 million gallons of groundwater and removed approximately 34 pounds of VOCs between 2015 and 2019. The system was occasionally shut down to facilitate maintenance activities but was operating approximately 99 percent of the time.

At the RWQCB's request, General Electric collected samples for sulfate analysis in 2018 to evaluate discharge of sulfate to Calabazas Creek by the GWET system. Samples were collected from on-property groundwater wells, from GWET system effluent, and from outfall piping downgradient of the system that discharges to Calabazas Creek. The sulfate concentrations were within the allowable sulfate ranges under the NPDES general permit (Wood, 2018).

Former Siemens Property

GWET system: The GWET system at the former Siemens property extracted from five on-property Upper Aquifer extraction wells; three within the A3 Zone, one within the A4 Zone, and one within the B Zone. The wells pumped a total volume of approximately 134 million gallons of groundwater and removed approximately 110 pounds of VOCs between 2015 and 2019. Off-property wells pumped as part of the GWET system are discussed in the Off-Property Study Area subsection. Two on-property extraction wells were not operated during this Five-Year Review period due to ongoing ERD pilot study activities. The GWET system was occasionally shut down to facilitate maintenance activities but operated approximately 99 percent of the time. Upgrades to the GWET system included installing a new remote accessible totalizer that provided real-time system flow data. Additional upgrade and maintenance activities included installing a human-machine interface, replacement of failing equipment (e.g., extraction pumps, transfer pump), and redevelopment of several extraction wells. This has reportedly increased the system runtime in recent years (Appendix G).

Phase III ERD: In February and March 2017, Phase III ERD pilot study activities included injecting a carbon/zero valent iron product and emulsified vegetable oil into groundwater. in February, June, July, and August 2018, the pilot study also included injecting KB-1 ® Primer and/or emulsified vegetable oil (ERM, 2018a). In April 2019, subsequent mitigation measures included targeted SVE and injecting potassium permanganate to address the increased vinyl chloride in groundwater on the north side of the former Siemens property and to support ongoing remediation enhancement efforts (ERM, 2019d). Groundwater, soil vapor, and extraction well performance monitoring associated with the 2017 Phase III ERD pilot study and mitigation measures are ongoing.

Vapor Extraction Investigation: In April 2018, a soil vapor investigation evaluated potential residual VOC sources in deep vadose soil under the building and the potential impact of those VOCs on the pace of groundwater restoration. Existing soil vapor extraction wells on one side of the building were

pressurized with tracer gas (helium) and subsequently vented to allow atmospheric airflow underneath the building to corresponding extraction wells on the opposite side. A trailer-mounted SVET system was used to implement and measure induced flow of soil vapor under the building. Air samples were collected for VOCs upon detection of the tracer gas and confirmation that lateral transport underneath the building had occurred. This study concluded that an insignificant residual VOC source likely exists beneath the building (ERM, 2018b).

Well Evaluation: In April and July 2018, a well evaluation survey in April 2018 verified screen depth and total well depth on select wells and updated well construction datasets. In February and June 2018, a water level logging study involved single-well pumping tests at extraction wells on the former Siemens property. Changes in groundwater elevation were monitored in the A, B, and C Zones of the upper aquifer using water level data loggers on the former Siemens property and in the Off-Property Study Area. The results of those data extraction wells performance and guided future remedy enhancements.

TOC Evaluation: In 2018, a total organic carbon (TOC) data study from A1 Zone wells within the former Siemens property and from B Zone Off-Property Study Area wells gathered additional data to support potential remedial activities. The A1 Zone was found to have higher total organic carbon than the B Zone aquifer (Wood and ERM, 2019).

Residual Source Evaluation: In May and June 2018, a sub-building investigation evaluated residual VOCs beneath the building on the former Siemens property. Direct-push borings equipped with a membrane interface probe and hydraulic profiling tool were advanced at 11 locations and standard direct-push borings were advanced at four locations. After reviewing the data, this study concluded that significant residual VOCs are not present beneath the on-property building (ERM, 2019b).

Monitoring Well Installation: In January and February 2019, 14 additional monitoring wells were installed, mostly along Forge Drive between the former Intersil and Siemens properties, as well as within the Off-Property Study Area (see below) within Swallow Way and Tantau Avenue south and east of the former Siemens facility (six wells in each of the A1 and A3 depth intervals, one well in the A4 depth interval, and one well in the B Zone) (ERM, 2018c). Soil and groundwater samples were collected during the well installation process. TCE was detected in groundwater above MCLs in the A1 and A3 Zones (ERM, 2019a).

Shallow Soil and Groundwater Investigation: A well evaluation survey was conducted in April 2018 with a down-well camera used to verify screen depth and total well depth on select wells. Another camera survey was completed in July 2018 to update well construction datasets. A water level logging study was conducted between February and June 2018, which involved single-well pumping tests at extraction wells on the former Siemens property. Changes in groundwater elevation were monitored in the A, B, and C Zones of the upper aquifer using water level data loggers on the former Siemens property and in the Off-Property Study Area. The results of those data were used to optimize extraction wells performance and guide future remedy enhancements.

A shallow soil and groundwater investigation was completed at the southern portion of the former Siemens property in June and July 2019 to determine the extent of chlorinated VOCs within the

unsaturated zone and shallow A1 Zone of the Upper Aquifer (ERM, 2019c). Direct-push borings using a membrane interface probe and hydraulic profiling tool were advanced at three locations. Standard direct-push borings were advanced at nine locations and soil and grab groundwater samples were collected from those borings. Chlorinated VOCs were not detected in the upper soils, only in soils in periodic contact with groundwater at depths 30 feet bgs or greater. All groundwater samples contained chlorinated VOCs, with TCE as the predominant contaminant.

Off-Property Study Area

GWET System: In addition to the on-property wells, the GWET system at the former Siemens property extracted from two B-Zone extraction wells in the Off-Property Study Area. The wells pumped a total volume of approximately 124 million gallons of groundwater and removed approximately 67 pounds of VOCs from those two wells.

Groundwater Investigation: In November 2015, a groundwater investigation further characterized the extent of Site contaminants in groundwater in the Resaturated Interval (ERM, 2016b) by advancing Membrane interface probe/cone penetration test borings at seven locations within the A3 Zone. Samples were not collected within the A1 Zone due to absence of a water-bearing zone. Groundwater levels decreased significantly across all areas of the Site since 2011, with some wells screened in the Resaturated Interval going dry (see also Section 4.2.1). Elevated VOCs were encountered in borings near the intersections of Swallow Way and Homestead Road, and Swallow Way and Lorne Way. The RWQCB requested that General Electric and Siemens attempt to collect groundwater samples from the A1 Zone following the rainy season and to further investigate the A3 Zone northeast of borings that contained elevated VOCs.

Additional Groundwater Investigation: In 2016, an additional groundwater investigation further defined VOC contamination in the Resaturated Interval northeast of the 2015 investigation area by advancing membrane interface probe/cone penetration test borings within the A1, A3, and A4 Zones (ERM, 2016c). Groundwater samples were also collected from three AMI monitoring wells adjacent to the Off-Property Study Area. Elevated concentrations of VOCs were found in the A3 Zone north of the western side of the former AMI properties located east of and adjacent to the former Siemens property (see also Appendix C for additional data review). A groundwater sample could not be collected from the 55 to 60 feet bgs interval from MIP-OS-16 in 2015 and 2016. However, a grab groundwater sample was collected from the A1 Zone in 2016 from MIP-OS-28 at 55 to 60 feet bgs located approximately 500 feet northeast of MIP-OS-16. A boring log was not available to review soil type at the bottom of the borehole. The A1 Zone is as between 38 to 60 feet bgs between the former Intersil and Siemens properties; however, it was not defined in the Off-Property Study Area.

Sitewide Work

GWET System: Due to the shutdown of three extraction wells on the former Siemens property in 2014 to facilitate the ERD pilot studies, there was a significant reduction in total VOC mass removed from the two GWET systems between the 2015 and 2020 Five-Year Review periods (422 pounds VOCs removed over 2010-2015 versus 211 pounds VOCs removed over 2015-2020) relative to the smaller reduction in

VOC mass between the 2010 and 2015 Five-Year Review periods (471 pounds VOCs removed over 2005-2010 versus 422 pounds VOCs removed over 2010-2015).

Nuclear Magnetic Resonance and Passive Flux Meter Study: In February and April 2019, nuclear magnetic resonance and passive flux meter study evaluated potential preferential pathways of groundwater flow within the Upper Aquifer A though C zones. The study also evaluated contaminant transport and contaminant storage zones. The investigation results assessed groundwater flow direction, where TCE mass is the most mobile, and evaluated optimization of the groundwater extraction remedy (ERM, 2020).

1,4-Dioxane Study: A1,4-dioxane study evaluated 1,4-dioxane in groundwater from wells within the former Intersil and Siemens properties, the Off-Property Study Area, and for effluent and influent samples collected from the two GWET systems. All results were below the California drinking water notification level for 1,4-dioxane of 1 µg/L (see also Table 5, above) with the exception of one groundwater sample from the former Siemens property (well 4BP), within which 1,4-dioxane was detected at 1.8 µg/L (Wood and ERM, 2019).

4. Five-Year Review Process

4.1. Community Notification, Involvement and Site Interviews

The *Cupertino Courier* published a public notice on March 13, 2020. It stated the RWQCB and the EPA were conducting a five-year review and invited the public to submit any comments to the EPA. The results of the review and the report will be available at the Sunnyvale Public Library, located at 665 West Olive Avenue, Sunnyvale, California 94086, and at the RWQCB, located at 1515 Clay Street, Suite 1400, Oakland, California 94612.

During the Five-Year Review process, the U.S. Army Corp of Engineers (USACE) conducted interviews with Wood PLC and ERM, consultants for General Electric and Siemens, respectively. General Electric is responsible for the former Intersil property and Siemens is responsible for the former Siemens property. The purpose of the interviews was to document the Site's perceived status and any perceived problems or successes with the phases of the remedy that have been implemented to date. Wood PLC and ERM submitted written responses to interview questions via email on March 10, 2020.

The overall impression of the interviewees at both properties was that the remedy is functioning as designed and continues to provide hydraulic containment and some mass removal of VOC-impacted groundwater. Due to significant reductions in mass removal rates since the GWET's startup, the interviewees recommended determining whether GWET cessation and changing the remedy to monitored natural attenuation would also be protective of human health and the environment.

4.2. Data Review

4.2.1. Ground Water

Groundwater levels decreased significantly over the last several years since 2011 and probably impacted the GWET effectiveness, affected Site contaminant concentrations, and influenced vertical contaminant migration. The decreased groundwater levels are probably related to the severe drought in California from December 2011 to March 2019. Between 2011 and 2016, water levels decreased by approximately 17 feet in the A4 Zone, 10 feet in the B Zone, and 12 feet in the C Zone. Additionally, several wells became dry within the Resaturated Interval (A1 and A3 Zone wells). Groundwater levels decreased significantly across all areas of the Site since approximately 2011, with certain permanent wells screened in the Resaturated Interval going dry. During increased rainfall during the winter of 2018-2019, decreasing groundwater levels reversed and groundwater levels increased approximately 5 feet in the Resaturated Interval, 6 feet in the A4 Zone, 7 feet in the B Zone, and 10 feet in the C Zone. Groundwater gradients are still generally to the north.

For this Five-Year Review, USACE conducted a groundwater-TCE trend analysis to evaluate increasing, decreasing, stable, or no trend using the nonparametric (i.e., data does not Mann-Kendall statistical analysis). In total, 19 monitoring locations where selected as good lateral and vertical representatives of Site TCE concentrations. Groundwater data for TCE over the previous 5-year period (2015 through 2019) were used. The Mann-Kendall analysis can demonstrate the statistical existence of an increasing, decreasing, stable, or no trend for each monitoring location. The trends combined with the locations of monitoring wells within a plume can be used for interpreting plume stability (expanding, stable, or decreasing). For example, decreasing trends at the downgradient extent of a plume generally indicate a decreasing plume. Plume stability can then be used as part of evaluating the effectiveness of remedial action. Mann-Kendall, while a powerful statistical tool, may not account for long time-periods initial increasing trends followed by a long-period of declining trends, or vice versa (e.g., the test may determine an increasing trend, despite a recent long-period of declining concentration trends).

The trend analyses indicate that the TCE plume is decreasing overall at the Site. The Mann-Kendall analysis results are summarized on Table 6 and calculations are presented in Appendix C. Eight wells show decreasing trends, one well shows a probably decreasing trend, three wells show stable trends, six wells show no trends, and one well shows an increasing trend. The comparison of trend analyses for those 12 wells shows that most wells that previously had either stable or increasing trends now have decreasing trends. Median concentrations are displayed for reference in relation to the trends. In general, monitoring wells with very low constituent concentrations may exhibit a trend through Mann-Kendall analysis that is not necessarily indicative of true plume behavior, but instead a product of the natural variability of the sampling and testing procedures.

Table 6. Summary of Mann-Kendall Trend Analysis

TCE Mann-Kendall Analysis			2015-2019			2004-2014 (previous Five-Year Review)	
Well	Zone	Location in Plume	Median TCE Conc. (µg/L)	Trend	Confidence	Trend	Confidence
VM-3S	A1	Mid-Plume Well (On-Property)	0.65	No Trend	75.8%	Mann-Kendall not completed	
LF-13A	A1	Mid-Plume Well (On-Property)	5.3	Decreasing	99.5%	Mann-Kendall not completed	
MW-OS-3A1	A1	Furthest Downgradient Toe Well (Off-Property)	13	No Trend	87.5%	Mann-Kendall not completed (Well installed in 2014)	
MW-05A3	A3	Mid-Plume Well (On-Property)	67	Stable	76.5%	Mann-Kendall not completed (Well installed in 2016)	
VM-3D	A3	Mid-Plume Well (On-Property)	14	**Increasing**	99.6%	Mann-Kendall not completed	
MW-OS-5A3	A3	Furthest Downgradient Toe Well (Off-Property)	8	Decreasing	99.5%	Mann-Kendall not completed (Well installed in 2014)	
F-1A	A4	Plume Source Area Well (On-Property)	670	No Trend	76.5%	Stable	58.0%
H-XA-S	A4	Mid-Plume Well (On-Property)	150	Decreasing	97.2%	Decreasing	99.8%
S-1A	A4	Downgradient Toe Well (Off-Property)	1.6	Decreasing	99.2%	Stable	68.4%
MW-OS-4A4	A4	Furthest Downgradient Toe Well (Off-Property)	9.7	No Trend	80.1%	Mann-Kendall not completed (Well installed in 2014)	
W18B	B	Upgradient Toe Well (On-Property)	17	Stable	71.9%	**Increasing**	97.0%
H-3B	B	Mid-Plume Well (On-Property)	29	Decreasing	99.5%	**Increasing**	98.7%
KR-1B	B	Mid-Plume Well (Off-Property)	32	Decreasing	96.5%	Stable	89.1%
LQ-2B*	B	Mid-Plume Well (Off-Property)	56	Probably Decreasing	93.3%	Decreasing	99.7%
PL-1B	B	Side gradient / Downgradient Toe Well (Off-Property)	16	No Trend	80.9%	**Probably Increasing**	94.9%
IQ-1B	B	Furthest Downgradient Toe Well (Off-Property)	0.775	No Trend	58.0%	Decreasing	99.9%
LR-3C	C	Mid-Plume Well (Off-Property)	4	Stable	59.2%	No Trend	77.7%
RK-2C	C	Downgradient Toe Well (Off-Property)	0.64	Decreasing	95.8%	Stable	56.0%
S-4C	C	Furthest Downgradient Toe Well (Off-Property)	0.86	Decreasing	99.2%	Decreasing	97.5%

Upgradient or downgradient well within the outer extent of the plume for the aquifer Zone; *Extraction well

TCE Plume Evaluation: TCE concentrations for wells within the Resaturated Interval 1990s (A1 and A3 Zones) have generally decreased within the last five years and downgradient wells to the north show decreasing or no trends, especially within the former Siemens site along Homestead Rd where ERD pilot studies have been conducted.

However, on the northern side of the former Intersil property, the TCE plume is not fully delineated within the Resaturated Interval A zones. In January 2019, five new A1 Zone wells (MW-OS-08A1 through MW-OS-12A1) were installed on the former Siemens property along Forge Drive at the boundary of the former Intersil property. Currently, there are no wells screened within the A1 or A2 zones on the former Intersil property. Elevated TCE concentrations detected in the five newly installed wells, suggests the plume is not fully delineated upgradient in the A1 Zone for the former Intersil property. The five new wells had the some of highest TCE concentrations of all former Intersil/Siemens property wells (excluding the Off-Property Study Area) in the A1 zone, ranging up to 370 µg/L. Additional evidence of a shallow localized contaminant mass on the former Intersil property was documented in the 2011 Hydrogeologic Framework Report, which identified a single, high concentration of TCE (9,000 µg/L) in a grab groundwater sample from the A3 Zone on the former Intersil property close to Forge Drive. These TCE concentrations within the Resaturated Interval along Forge Drive suggests that there may be a shallow contaminant mass present on the former Intersil property; however, it is unclear if this TCE mass is a previously undefined source, or is a result of historic groundwater extraction pulling groundwater contamination from the former Siemens property south to the current location along Forge Drive.

During the ERD Phase III Pilot Study in the north portion of the Siemens property, TCE concentrations decreased in the Resaturated Interval (A1 and A3 Zones), while TCE degradation daughter products increased, particularly vinyl chloride. The daughter products were addressed with additional remedy during the mitigation measures with targeted SVE and injections of potassium permanganate that took place subsequent to the ERD Phase III Pilot Study, but their effectiveness in reducing the concentrations of daughter products is inconclusive.

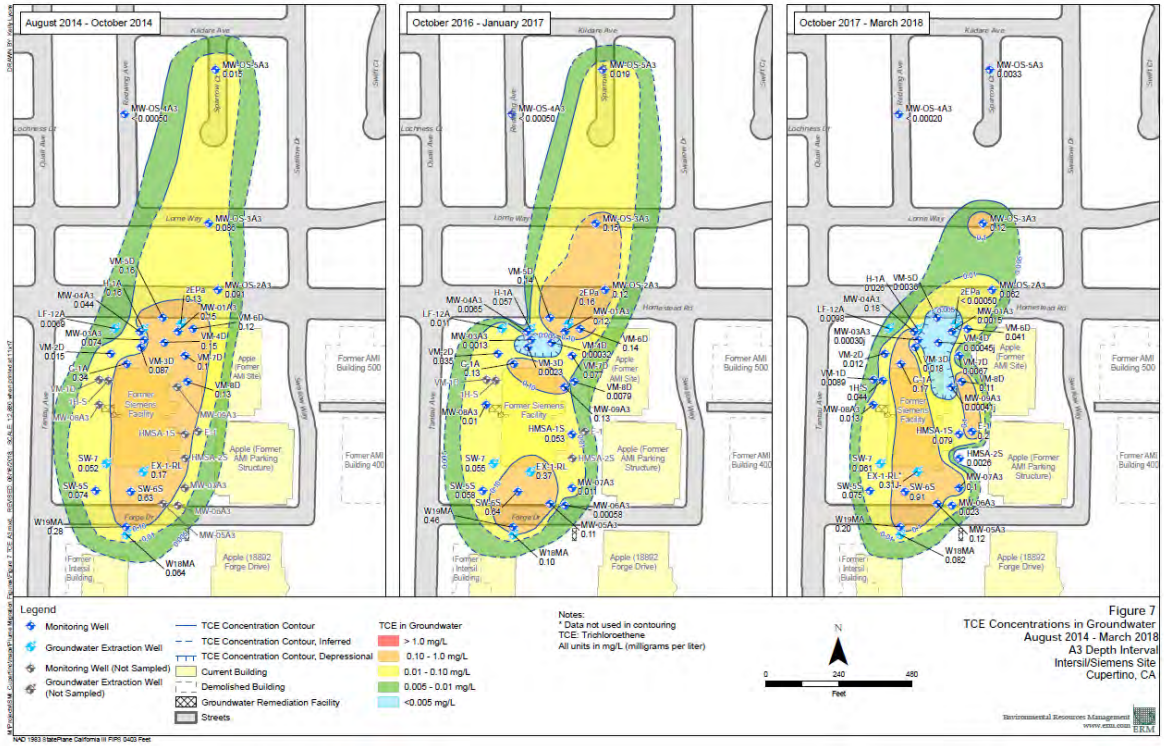
TCE concentrations within the ROD-defined A4 Zone decreased within the last five years and the plume decreased slightly. Decreasing or no trends in downgradient and mid-plume wells show that the A4 Zone plume is not migrating further downgradient into the Off-Property Study Area.

B Zone TCE mostly decreased in the last five years. The plume size is the same and the plume is not migrating further downgradient into the Off-Property Study Area. TCE shows no trend in downgradient wells. B-Zone TCE has been non-detectable in one of the wells relatively low in the other.

C Zone TCE concentrations from sampled wells over the last five years have been nondetectable or below the MCL, indicating the that plume has either decreased or stabilized.

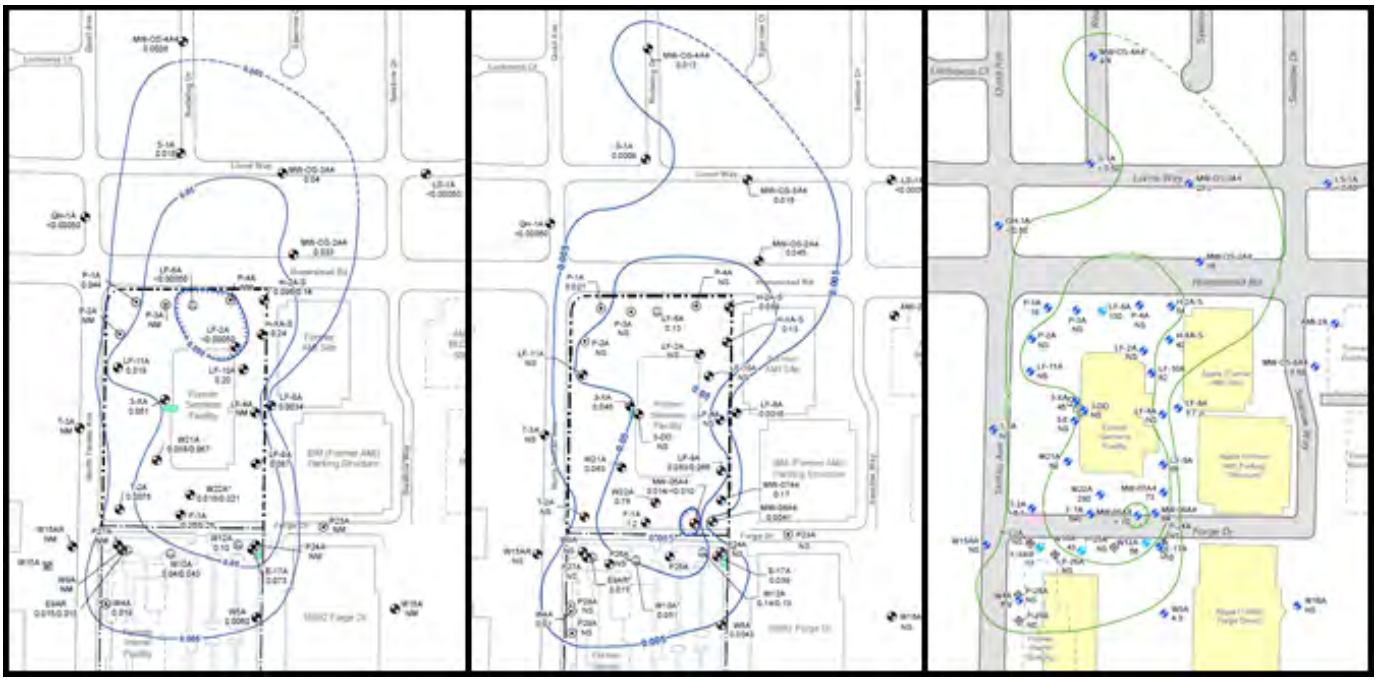
Note: Concentration units change [2015 (mg/L), 2018 (mg/L), and 2019 (µg/L)]

Figure 2. Resaturated Zone (A1/A2) TCE Concentrations Comparison 2014 to 2019



Note: Concentration units change [2015 (mg/L), 2018 (mg/L), and 2019 (µg/L)]

Figure 3. Resaturated Zone (A3) TCE Concentrations Comparison 2014 to 2019



Note: Concentration units change [2015 (mg/L), 2018 (mg/L), and 2019 (µg/L)]

Figure 4. A4 Zone TCE Concentrations Comparison 2015 to 2019

Regression Analysis: USACE performed a regression analysis using groundwater-TCE data from 2009-2019 for select wells currently above TCE ROD cleanup level of 5 µg/L. The timeframe to reach the cleanup level for wells with decreasing concentrations of TCE ranged from approximately 9 to 23 years. Not all wells have decreasing trends, however. Wells F-1A and W18B (located at the southern border of the former Siemens property and the northern border of the former Intersil property, respectively) have stable or no trend based on the Mann-Kendall analysis, but have a positive slope, and thus increasing trends based on the regression analysis.

The regression analysis is complicated by Siemens completing ERD pilot study activities and mitigation measures in recent years, which have accelerated TCE destruction and the lowering of TCE concentrations. The cleanup timeframes therefore do not strictly evaluate the number of years until meeting cleanup levels near the Siemens property. Furthermore, the regression analysis was only performed for TCE concentrations. The ERD pilot study activities on the former Siemens property also addresses relatively higher concentrations of TCE daughter products such as cis-1,2-dichloroethylene and vinyl chloride, which are being addressed under the pilot study.

4.3. Site Inspection

USEPA, USACE, and the RWQCB conducted a Site inspection on February 6, 2020. Michael Schulman (EPA), Roger Papler (RWQCB), Benino McKenna (USACE), Matt Scheeline (ERM), and Harold Rush and Grey Melgard (Wood Group) attended the inspection. The purpose of the inspection was to assess the protectiveness of the remedy.

The agencies found the remedy components on both the former Intersil and former Siemens properties to be in adequate condition and functioning as intended. GWET system components and extraction wells are inspected biweekly at former Intersil and weekly at former Siemens. GWET treatment vessels are changed out annually at the Intersil Site, and every two months at the Siemens Site. Minor corrosion was noted on the bag filtration units for the Siemens GWET system. At the time of the Site inspection, several extraction wells at the former Siemens property were temporarily shut down due to ongoing ERD pilot testing. The agencies observed that the off-property extraction wells in the Study Area were operating. Trip Report and photos of the Site are included in Appendix H.

5. Technical Assessment

5.1. Question A: Is the remedy functioning as intended by the decision documents?

Yes, the remedy is functioning as intended. The initial soil excavation and soil vapor extraction worked as intended to significantly reduce the contaminant mass in soil at the Site. Since then, the GWET systems deployed in both the former Intersil and former Siemens properties have continued to contain the TCE groundwater plume and reduce contaminant concentrations in groundwater. The GWET systems are generally operating and functioning as designed.

The ROD recognized that the use of the GWET remedy may not be able reduce Site contaminants to cleanup levels. It states that "If it becomes apparent, during implementation or operation of the system, that contaminant levels have ceased to decline and are remaining constant at levels higher than the remediation goal, that goal and the remedy may be reevaluated." The ROD goes on to state that "The selected remedy will include groundwater extraction for a period of 45 to 85 years, during which the system's performance will be carefully monitored on a regular basis and adjusted as warranted by the performance data collected during operation."

Groundwater extraction began in 1986 at the former Siemens property and 1987 at the former Intersil property with projected groundwater extraction timeframes respectively spanning from 2031 to 2071 and 2032 to 2072. The extraction efficiencies of the GWET systems have decreased dramatically since they were first started, which was expected. Asymptotic conditions have been documented in previous Five-Year Reviews and within Annual Self-Monitoring Reports. Some monitoring wells evaluated within the current Five-Year Review period show increasing, stable, or no trend for TCE with concentrations above the ROD cleanup level, but most wells show decreasing trends (many of which had shown stable or increasing trends during the previous Five-Year Review period). The positive change to more decreasing trends of TCE on the former Siemens property is due, at least in part, to the alternative in-situ ERD remediation being pilot tested by Siemens.

Monitoring wells installed in 2019, at Forge Drive in the A Zone Resaturated Interval (i.e., A1 and partially A3), contain TCE concentrations ranging up to 370 µg/L (MW-OS-10A1, MW-OS-9A1). Additionally, higher TCE concentrations within the A4 Zone are also located at the former Intersil and

Siemens property boundary at concentration of 590 µg/L (F-1A). Based on historic and current groundwater TCE sample concentration results, this suggests that there may be a contaminant mass present at the former Intersil property. Additional evidence of a relatively shallow localized contaminant mass on the former Intersil property is documented in the 2011 Hydrogeologic Framework Report, which identified a high concentration of TCE (9,000 µg/L) in a grab groundwater sample from the A3 Zone on the northern portion of the former Intersil property south of Forge Drive. Without knowing the magnitude of contamination within the Resaturated Interval, estimated cleanup timeframes using current remedial methods may be unreliable.

In general, current operating procedures are maintaining the remedy's effectiveness. Both GWET systems are inspected regularly and have remote monitoring systems, which ensure the systems remain running and any repairs are completed in a timely fashion. The GWET system on the former Siemens property needs to have the carbon treatment vessels replaced more frequently due to rapid corrosion, which contributes to slightly higher costs and more frequent maintenance but does not indicate a potential remedy problem.

Although the ROD did not initially identify institutional controls as part of the remedy, deed restrictive covenants have been recorded for both the former Intersil and former Siemens properties (Appendix E). These deed restrictions restricted the use of the properties to industrial, commercial, office space, and recreational uses. No residences or sensitive land use facilities can be located on the properties and groundwater use is restricted throughout the Site. The institutional controls are effective in preventing exposure.

5.2. Question B: Are the exposure assumptions, Toxicity Data, Cleanup Levels, and Remedial Action Objectives (RAOs) Used at the Time of Remedy Selection Still Valid?

Yes. The current and future exposure pathways identified in the ROD are still valid. Extensive vapor intrusion assessments have concluded that there is no unacceptable indoor air risk on any areas of the Site, including the residential Off-Property Study Area. There have been no changes in land use since the last Five-Year Review and deed restrictions have been put in place that limit future use to prevent exposure.

Toxicity data and cleanup levels are still valid. Vinyl chloride, a degradation byproduct of TCE, is not listed as a Site contaminant within the ROD. However, vinyl chloride is regularly monitored in groundwater at the Site and concentrations are compared to its respective MCL.

The remedial action objective is still valid. The remedial action objective for the Site is to "restore groundwater to its beneficial use." The Site lies within the Santa Clara Valley Subbasin, which is designated for municipal beneficial use (municipal and domestic water supply) by the RWQCB. The beneficial use designation is considered unlikely to change given the importance of groundwater to local water supplies.

There have been no changes to cleanup standards or Applicable or Relevant and Appropriate Requirements that have affected the protectiveness of the remedy since the time of remedy selection (Appendix D).

5.3. Question C: Has Any Other Information Come to Light That Could Call Into Question the Protectiveness of the Remedy?

The Site was identified in an October 2019 report by the U.S. Government Accountability Office to be located within an area with high flood hazard potential.

The Site is located in a seismically active region with high earthquake potential. An earthquake may cause damage to infrastructure that could affect operation of the GWET systems. A facility emergency action contingency plan is warranted under this scenario.

No other information has come to light that could call into question the protectiveness of the remedy.

6. Issues/Recommendations

Table 7. Issues and Recommendations Identified in the Five-Year Review

Issues and Recommendations Identified in the Five-Year Review:				
Operable Unit(s): 1	**Issue Category: Monitoring**			
	Issue: The contaminant plume is not fully delineated within the A1 and A3 Zones of the Resaturated Interval south of Forge Ave Drive within the former Intersil Property, where the magnitude of potential source contamination needs to be further understood for determining if cleanup timeframes will be met under the current methods of remediation.			
	Recommendation: Install additional monitoring wells to delineate groundwater contamination within the A1 and A3 Zones of the Resaturated Interval, south of Forge Drive within the former Intersil property.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	State	12/30/2024

6.1. Other Findings

The GWET system on the former Intersil property is not currently optimized to treat groundwater within the Resaturated Interval A1 Zone and possibly the A3 of the A Zone. GWET system optimization or alternative methods of remediation may be warranted, if the magnitude of remaining contamination effects projected cleanup timeframes.

Groundwater investigations were completed in the Off-Property Study Area in 2015 and 2016. Detected VOCs were below MCLs within the A1 and A4 Zones downgradient of the former Siemens property; however, TCE was detected above MCLs and not defined in the A3 Zone to the northeast of the Siemens Site, to the east of the roads Swallow Drive and Swift Court. Further investigation should be completed.

7. Protectiveness Statement

Table 8. Protectiveness Statement

Protectiveness Statement(s)		
Operable Unit: OU-1	*Protectiveness Determination:* Short-term Protective	*Planned Addendum Completion Date:* Click here to enter a date
Protectiveness Statement: The remedy at the Intersil Inc,/Siemens Components Superfund Site currently protects human health and the environment by maintaining capture of the contaminant plume and eliminating off-property exposure pathways. Institutional controls eliminate exposure pathways on the former Intersil and Siemens properties. In order for the remedy to be protective in the long-term, additional delineation of the Resaturated Interval of the A Zone should be completed.		

8. Next Review

The next five-year review report for the Intersil Inc./Siemens Components Superfund Site is required five years from the completion date of this review.

Appendix A: List of Documents Reviewed

AMEC Foster Wheeler and ERM. 2016. *Annual Self-Monitoring Report, January 1 through December 31, 2015*. January 2016.

AMEC Foster Wheeler and ERM. 2017. *Annual Self-Monitoring Report, January 1 through December 31, 2016*. January 2017.

AMEC Foster Wheeler and ERM. 2018. *Annual Self-Monitoring Report, January 1 through December 31, 2017*. January 2018.

AMEC Geomatrix and ARCADIS. 2011. *Hydrogeologic Framework Report – Intersil/Siemens Site*. February 2011.

California Regional Water Quality Control Board, San Francisco Bay Region. 1990. *Board Order # 90-119*. August 1990.

EPA. 1990. *EPA Superfund Record of Decision: Intersil Inc./Siemens Components*. September 1990.

ERM. 2014. *Extraction Well Trichloroethene Time-Concentration Graphs Intersil/Siemens Site, Indoor Air Study Area*. February 2014.

ERM. 2016a. *Phase II Enhanced Reductive Dechlorination – Former Siemens Facility*. April 2016.

ERM. 2016b. *Onsite Characterization Completion Report – Former Siemens Facility*. June 2016.

ERM. 2016c. *2016 Additional Off-Site Study Area Groundwater Characterization Summary Report*. December 2016.

ERM. 2018a. *Phase III Enhanced Reductive Dechlorination Pilot Study 12-Month Summary Report*. July 2018.

ERM. 2018b. *Vapor Concentration Investigation Summary Report – Former Siemens Facility*. August 2018.

ERM. 2018c. *Final Monitoring Well Installation and Bench Test Work Plan*. April 2018.

ERM. 2019a. *Monitoring Well Installation Summary Report – Former Siemens Facility*. June 2019.

ERM. 2019b. *On-site Sub-Building Soil Investigation Summary Report – Former Siemens Facility*. August 2019.

ERM. 2019c. *Shallow Soil and Groundwater Investigation Summary Report, Southern Portion of Former Siemens Property*. September 2019.

ERM. 2019d. *Mitigation Measures Summary Report – Former Siemens Facility*. October 2019.

ERM. 2020. *Nuclear Magnetic Resonance and Passive Flux Meter™ Data Summary Report*. January 2020.

Pristine Earth, Inc., and ARCADIS. *Off-Site Study Area Investigation Report – Intersil/Siemens Site*. September 2011.

Santa Clara County. 2005. *Covenant and Environmental Restriction on Property – Former Intersil Facility, 10900 North Tantau Avenue, Cupertino, Santa Clara County*. October 2005.

Santa Clara County. 2009. *Covenant and Environmental Restriction on Property – Former Siemens Facility Located At 10950 North Tantau Avenue, Cupertino, Santa Clara County, California*. December 2009.

U.S. Government Accountability Office. 2019. *SUPERFUND – EPA Should Take Additional Actions to Manage Risks from Climate Change*. October 2019.

Valley Water. 2020. *Annual Groundwater Report for Calendar Year 2018*. January 2020.

Wood. 2018. *Subject: Water Code Section 13267 Technical Report Order Requiring Submittal of Information on Sulfate in Groundwater and Calabazas Creek – Former Intersil Facility*. June 2018.

Wood and ERM. 2019. *Annual Self-Monitoring Report, January 1 through December 31, 2018*. January 2019.

Wood and ERM. 2020. *Annual Self-Monitoring Report, January 1 through December 31, 2019*. January 2020.

Appendix B: Site Chronology

Event	Date
Former Intersil Facility	
Intersil used solvents during fabrication of integrated circuits, transistors, diodes, and other semiconductor devices at the former Intersil property	1967-1988
Intersil initiated investigations and removed in-ground waste handling units	1983-1986
California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) issued Waste Discharge Requirements/Site Cleanup Requirements (SCR), Order No. 86-49	1986
RWQCB issued Cleanup and Abatement Order No. 87-133	1987
Intersil started groundwater extraction and treatment (GWET) system, consisting of four A Zone wells	1987
Intersil removed in-ground waste handling units and ceased operation at facility and started soil vapor extraction and treatment (SVET) system	1988
RWQCB issued SCR Order No. 89-038	1989
RWQCB issued SCR Order No. 90-119 (Final SCR) and EPA included site on final listing on National Priorities List and issued the Record of Decision (ROD) based on Final SCR	1990
The final remedy included expanding the GWET system with the addition of one A Zone extraction well and one B Zone extraction well and expanding the SVET system to four well pairs.	1991
General Electric (GE), parent company of Intersil, purchased the property from Vallco Park, Ltd.	1992
Groundwater levels rose approximately 50 feet, reducing the vadose zone to the interval from surface level to 45 feet below ground surface (bgs)	1993-1998
GE decommissioned the SVET system with RWQCB approval; the long-screened SVET wells were then used as groundwater monitoring wells	1993
RWQCB and EPA complete first Five-Year Review, which includes all 3 properties	1995
Manufacturing building demolished	1997
RWQCB and EPA completed second Five-Year Review, which includes all 3 properties	2000
RWQCB and EPA completed third Five-Year Review, which includes all 3 properties	2005
GE filed a Covenant and Environmental Restriction, including a Soil Management Plan	2005
Soil vapor survey conducted; only benzene, TCE, and 1,3-butadiene were detected above California Environmental Screening Levels or Human Health Screening Levels for commercial/industrial land use	2006
Air strippers replaced by granular activated carbon treatment vessels	2007
Four monitoring wells were abandoned, after showing consistently low concentrations of Site contaminants	2007
Tantau Investments constructed a commercial building on the property, including a 15-milliliter vapor barrier	2008
Membrane interface probe subsurface investigation conducted to assess residual VOC concentrations and detected trichloroethene levels up to 9,000 micrograms per liter in one of the resaturated A Zones.	2008

Event	Date
RWQCB and EPA completed fourth Five-Year Review, which includes all 3 properties	2010
Hydrogeologic Framework Report written	2011
Second supplemental groundwater investigation conducted, concluding that VOC-impacted groundwater in the A1, A2, and A3 Zones along the northern boundary of the former Intersil property and in Forge Drive is captured by the current extraction well network	2011-2012
Off-Property residential soil vapor intrusion evaluation conducted	2013-2014
Evaluation of discharge of sulfate to Calabazas Creek by the GWET was completed. Sulfate concentrations were within allowable sulfate ranges under NPDES general permit	2018

Former Siemens Facility	
Litronix used solvents during fabrication of semiconductor devices	1970-1995
Litronix stopped using trichloroethene (TCE)	1980
Litronix removed underground storage tanks (USTs), began soil and groundwater investigation, and discovered groundwater contamination. Siemens purchased property from Litronix	1982
Siemens installed and started up SVET system with one soil vapor extraction (SVE) well	1983
Siemens expanded SVET with two additional SVE wells.	1985
Siemens installed and started up GWET system with air stripping towers, expanded SVET system with one additional SVE well, and removed inactive neutralization system	1986
Siemens conducted soil vapor sampling and hydraulic testing of the three groundwater zones	1987
EPA listed the Site on the National Priorities List under the Federal Superfund program; Siemens performed additional soil vapor sampling, vapor extraction testing, and soil investigation to 105 feet bgs	1989
Siemens started remedial investigation	1990
RWQCB issued SCR Order No. 90-119 (Final SCR) and EPA included Site on final listing on National Priorities List and issued the ROD based on Final SCR	1990
Siemens expanded the SVET system with 16 SVE wells and the GWET system to include 13 On-Property extraction wells	1991
Siemens excavated soil where former underground storage tanks were located	1991
Siemens reduced the SVET system to four SVE wells	1995
Siemens curtailed groundwater extraction from Well W21A with RWQCB approval	1999
Siemens sold property to Tantau Partners, LLC. Siemens performed indoor air quality evaluation that did not reveal indoor air vapor intrusion	2000
Primary treatment of extracted groundwater was changed from an air stripper to granular activated carbon.	2002
Tantau Partners sold the property to Inland Western Cupertino Tantau, LLC. Siemens shut down the SVET system and started rebound study	2005
Siemens voluntarily initiated an initial Enhanced Reductive Dechlorination (ERD) Pilot Study, expanded GWET system with two wells, and permanently shut down the SVET system after completing rebound study. The draft pilot study report concluded that a northeast-trending preferential pathway exists in the Upper Resaturated Zone, currently designated as the A1 and A2 Zones	2006

Event	Date
Current Siemens property occupant Kaiser Permanente conducted indoor air quality investigation and risk assessment indicating ambient and indoor levels of PCE slightly above, and TCE below, RWQCB commercial/industrial Environmental Screening Levels (ESLs). The study concluded that the PCE detections were probably from indoor sources.	2007
Siemens conducted membrane interface probe investigation	2007
Siemens postponed supplemental ERD Pilot Study due to decline in groundwater level elevations in the A1 Zone of the Upper Resaturated Interval	2008
Deed Restriction recorded by SMI Holding, LLC (Siemens) and Tantau Partners, LLC	2009
Hydrogeologic Framework Report written	2011
Northside groundwater investigation conducted and confirmed the northeast-trending preferential pathway in the A1 and A2 Zones.	2011
Potential vapor intrusion evaluation at the Former Siemens Facility completed	2014
Phase II ERD Pilot Study initiated	2014
Phase III ERD Pilot Study initiated, which included injecting carbon-zero valent iron product and emulsified vegetable oil into groundwater	2017
Phase III ERD Pilot Study additional injections into groundwater of KB-1 ® Primer and/or emulsified vegetable oil were completed	2018
Soil vapor investigation under the building at the former Siemens property completed and concluded insignificant residual VOC source likely exists beneath the building.	2018
Well evaluation and data logger survey was conducted	2018
Nuclear magnetic resonance and passive flux meter data collected from existing monitoring wells in both the former Siemens property and Off-Property Study Area	2019
Mitigation measures (targeted SVE and injections of potassium permanganate) for the ERD Phase III Pilot Study were completed in April 2019 to address increases of vinyl chloride in groundwater and support ongoing remediation enhancement efforts.	2019
Sub-building investigation - completed beneath the building on the former Siemens property - determined that significant residual VOCs are not present beneath building.	2019
Shallow soil and groundwater investigation completed at the southern portion of the former Siemens property. Elevated TCE concentrations discovered in the A1 and A3 Zones for groundwater.	2019

Off-Property Study Area	
GE and Siemens began groundwater investigations	1986
GE and Siemens began groundwater extraction from two B Zone wells	1990
RWQCB issued SCR Order No. 90-119 (Final SCR) and EPA included Site on final listing on National Priorities List and issued the ROD based on Final SCR	1990
GE and Siemens expanded the GWET system from two B Zone wells to three B Zone wells	1991
GE and Siemens reduced the GWET system from three B Zone wells to two B Zone wells	2004
Membrane interface probe and additional groundwater investigation conducted	2011
Vapor intrusion indoor air evaluation conducted	2013-2014
Off-property monitoring well installation completed	2014

Event	Date
Follow-up off-property monitoring well installation workplan approved.	2015
Groundwater investigation conducted to further delineate groundwater contaminants in A1 and A3 Zones. Included advancement of membrane interface probe/cone penetration test borings.	2015
Additional groundwater investigation conducted to further delineate groundwater contaminants in the A1 and A3 Zones. Included advancement of membrane interface probe/cone penetration test borings.	2016
Twelve additional monitoring wells were installed in the A and B Zones. Soil and groundwater samples were collected.	2019

Appendix C: Data Review

The groundwater elevation measurements for A, B, and C Zones showed very little groundwater directional change throughout the entire year and are consistent with historical observations.

- The groundwater for the A1 Zone flows slightly to the northeast of the former Intersil and Siemens properties.
- The groundwater for the A3 Zone flows slightly to northwest of the former Intersil and Siemens properties.
- The groundwater for the A4 Zone flows to northwest of the former Intersil and Siemens properties.
- The groundwater for the B Zone flows to north of the former Intersil and Siemens properties, however, highly influenced by the extraction well pumping.
- The groundwater for the C Zone flows to north of the former Intersil and Siemens properties.

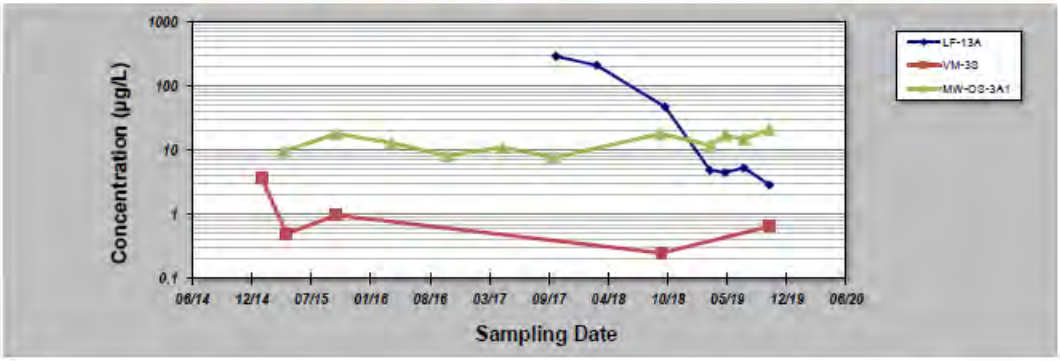
For this Five-Year Review, the U.S. Army Corps of Engineers conducted a trend analysis (using Mann-Kendall statistical analysis tool) of TCE concentrations on 19 monitoring locations that were good lateral and vertical representatives. The groundwater analytical data used for the Mann-Kendall analyses was taken from the Annual Self-Monitoring Reports, between 2015 through 2019. Estimated values were included for the analyses. If a sample had a field duplicate, the value for the field duplicate was used if it was higher. Half of the laboratory method detection limit was used for non-detect values, unless half of the non-detect value was more than other values used in the analysis, in which case the non-detect value was excluded from the analysis. Some wells had more data than others due to either a less frequent sampling schedule, the well-being dry during sampling, the well having been installed recently within the Five-Year Review period or having non-detect values excluded from the analysis.

The Mann-Kendall statistic (S) is a non-parametric statistical procedure that is well suited for analyzing increasing or decreasing trends in data over time. Positive values indicate an increase in contaminant concentrations over time, whereas negative values indicate a decrease in contaminant concentrations over time. The Mann-Kendal Analysis results are summarized on Table 6 and calculations are presented in this appendix (Calcs 1-5).

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-20	Job ID:	
Facility Name:	Intersil/Siemens	Constituent:	TCE
Conducted By:	L. Scott	Concentration Units:	µg/L

Sampling Point ID:	LF-13A	VM-3S	MW-OS-3A1				
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	1/29/2015		3.7					
2	4/13/2015			9.6				
3	4/23/2015		0.5					
4	10/7/2015		0.97	18				
5	4/11/2016			13				
6	10/12/2016			8.2				
7	4/19/2017			11				
8	10/11/2017			7.7				
9	10/16/2017	290						
10	3/2/2018	210						
11	10/2/2018			18				
12	10/5/2018		0.25					
13	10/18/2018	47						
14	3/18/2019	4.9		12				
15	5/8/2019	4.5		17				
16	7/10/2019	5.3		15				
17	10/4/2019	2.9	0.65	21				
18								
19								
20								
Coefficient of Variation:		1.48	1.16	0.32				
Mann-Kendall Statistic (S):		-17	-4	16				
Confidence Factor:		99.5%	75.8%	87.5%				
Concentration Trend:		Decreasing	No Trend	No Trend				



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

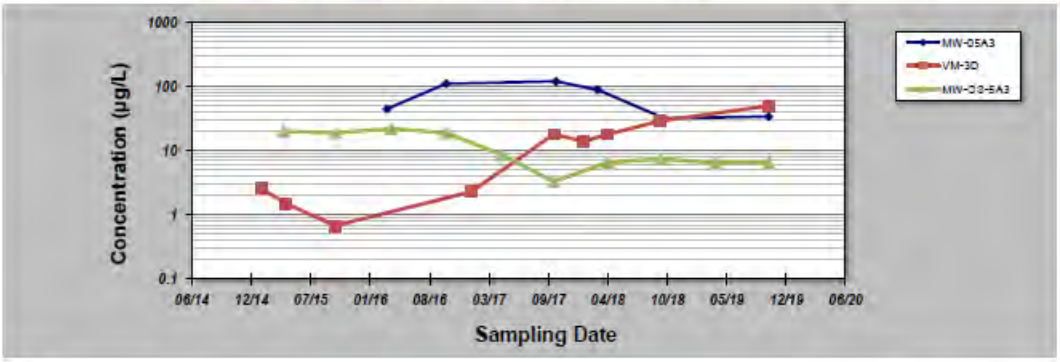
GSI Environmental Inc., www.gsi-net.com

Calc. 1: Mann-Kendall Trend Analysis A1 Zone Wells LF-13A, VM-3S, & MW-OS-3A1

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-20	Job ID:	
Facility Name:	Intersil/Siemens	Constituent:	TCE
Conducted By:	L. Scott	Concentration Units:	µg/L

Sampling Point ID:	MW-05A3	VM-3D	MW-OS-5A3				
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	29-Jan-15		2.6					
2	16-Apr-15			20				
3	23-Apr-15		1.5					
4	6-Oct-15		0.68	19				
5	28-Mar-16	45						
6	11-Apr-16			22				
7	12-Oct-16	110		19				
8	5-Jan-17		2.3					
9	19-Apr-17			8.6				
10	10-Oct-17		18	3.3				
11	18-Oct-17	120						
12	7-Mar-18	89						
13	19-Jan-18		14					
14	10-Apr-18		18	6.6				
15	4-Oct-18		29	7.4				
16	16-Oct-18	32						
17	8-Apr-19			6.5				
18	4-Oct-19	34	50	6.5				
19								
20								
Coefficient of Variation:		0.55	1.08	0.60				
Mann-Kendall Statistic (S):		-5	25	-29				
Confidence Factor:		76.5%	99.6%	99.5%				
Concentration Trend:		Stable	Increasing	Decreasing				



Notes:

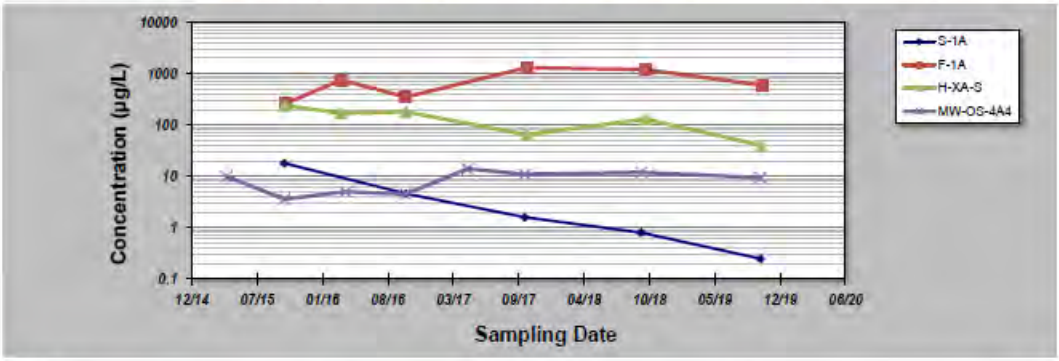
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

Calc. 2: Mann-Kendall Trend Analysis A3 Zone Wells MW-5A3, MW-OS-5A3, & VM-3D

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-20	Job ID:	
Facility Name:	Intersil/Siemens	Constituent:	TCE
Conducted By:	L. Scott	Concentration Units:	µg/L

Sampling Point ID:	S-1A	F-1A	H-XA-S	MW-OS-4A4			
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	13-Apr-15				10			
2	6-Oct-15	18		240	3.6			
3	9-Oct-15		260					
4	28-Mar-16		750	170				
5	11-Apr-16				5			
6	12-Oct-16	4.6	350	180	4.5			
7	19-Apr-17				14			
8	11-Oct-17	1.6			11			
9	16-Oct-17		1300	65				
10	2-Oct-18	0.8			12			
11	16-Oct-18		1200	130				
12	10/2/2019	0.25			9.4			
13	10/4/2019			40				
14	10/9/2019		590					
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		1.47	0.58	0.55	0.44			
Mann-Kendall Statistic (S):		-10	5	-11	8			
Confidence Factor:		99.2%	76.5%	97.2%	80.1%			
Concentration Trend:		Decreasing	No Trend	Decreasing	No Trend			



Notes:

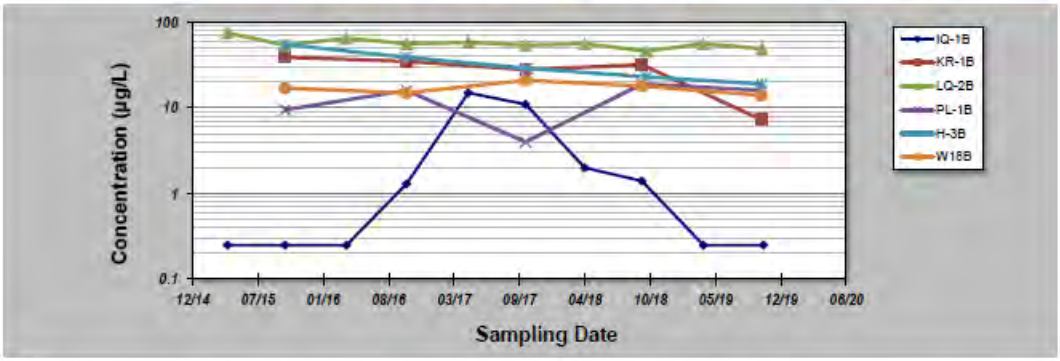
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

Calc. 3: Mann-Kendall Trend Analysis A4 Zone Wells S-1A, F-1A, H-XA-S, & MW-OS-4A4

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: 10-Jul-20
Facility Name: Intersil/Siemens
Conducted By: L. Scott
Job ID:
Constituent: TCE
Concentration Units: µg/L

Sampling Point ID:	IQ-1B	KR-1B	LQ-2B	PL-1B	H-3B	W18B	
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	13-Apr-15	0.25		75				
2	6-Oct-15	0.25	39	54	9.5	55	17	
3	11-Apr-16	0.25		65				
4	12-Oct-16	1.3	35	56	16	39	15	
5	19-Apr-17	15		58				
6	11-Oct-17	11	28	54	4		21	
7	17-Oct-17					29		
8	10-Apr-18	2		56				
9	2-Oct-18	1.4	32		19		18	
10	4-Oct-18							
11	16-Oct-18			46		23		
12	8-Apr-19	0.25		56				
13	2-Oct-19		7.3		16		14	
14	4-Oct-19			49		19		
15	9-Oct-19	0.25						
16								
17								
18								
19								
20								
Coefficient of Variation:		1.71	0.51	0.10	0.39	0.45	0.15	
Mann-Kendall Statistic (S):		-4	-13	-23	7	-17	-5	
Confidence Factor:		58.0%	96.5%	93.3%	80.9%	99.5%	71.9%	
Concentration Trend:		No Trend	Decreasing	Prob. Decreasing	No Trend	Decreasing	Stable	



Notes:

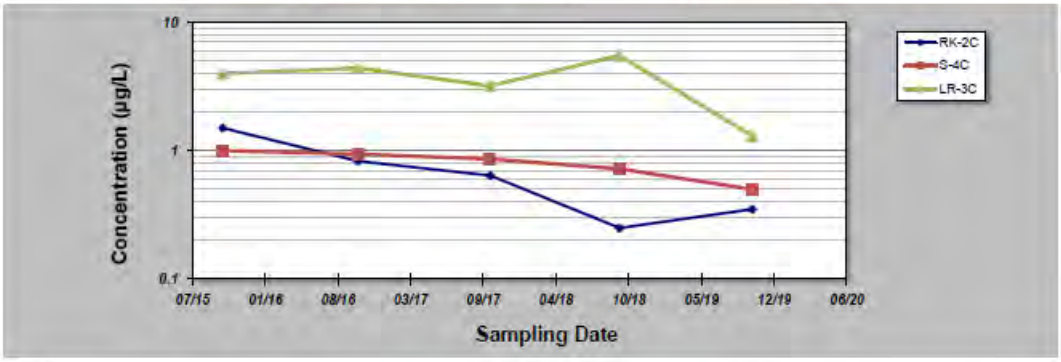
1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

Calc. 4: Mann-Kendall Trend Analysis B Zone Wells W18-B, KR-1B, LQ-2B, PL-1B, H-3B & IQ-1B

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-20	Job ID:	
Facility Name:	Intersil/Siemens	Constituent:	TCE
Conducted By:	L. Scott	Concentration Units:	µg/L

Sampling Point ID:	RK-2C	S-4C	LR-3C				
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	6-Oct-15	1.5	1	4				
2	12-Oct-16	0.83	0.94	4.4				
3	11-Oct-17	0.64	0.86	3.2				
4	2-Oct-18	0.25	0.72	5.5				
5	2-Oct-19	0.35	0.5	1.3				
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.69	0.25	0.43				
Mann-Kendall Statistic (S):		-8	-10	-2				
Confidence Factor:		95.8%	99.2%	59.2%				
Concentration Trend:		Decreasing	Decreasing	Stable				



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing: < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

Calc. 5: Mann-Kendall Trend Analysis C Zone Wells RK-2C, S-4C, & LR-3C

A1 Zone

TCE isoconcentration contours for the A1 Zone of the Resaturated Interval show that the downgradient portion of the TCE plume decreased in concentrations between 2015 and 2019 (Figure C-1). While the furthest off-property downgradient well (MW-OS-3A1) shows no trend for TCE, TCE decreased in wells upgradient closer to the former Siemens property and the ERD remedy pilot studies. It is worth noting though that while the spatial distribution of monitoring wells down and side gradient into the Off-Property Study Area for each of the Resaturated Intervals A1 and A3 Zones, the A Zone has a whole as presented in the ROD is reasonably delineated. This is partially supported by a 2016 TCE groundwater grab sample collected from the A1 Zone and A4 Zone for boring MIP-OS-28 downgradient of AMI, which had a TCE concentration of 1.8 µg/L. It should also be noted that during a November 2015 investigation, grab groundwater samples in the Off-Property Study Area collected from MIP-OS-16 and MIP-OS-17 were dry to 60 feet bgs, indicating that the A1 Zone in the Off-Property Study Area may not be widespread.

In January 2019, five additional A1 Zone wells (MW-OS-8A1 through MW-OS-12A1) were installed between the former Siemens property and the former Intersil property along Forge Drive (ERM 2019a). Prior to the well installations, there were no upgradient wells from the former Siemens property in the A1 Zone of the Resaturated Interval. These new wells had some of the highest current concentrations of all the wells in the A1 zone, ranging up to 370 µg/L. The elevated TCE concentrations detected in these newly installed wells suggests the plume may not be fully delineated upgradient in the A1 Zone.

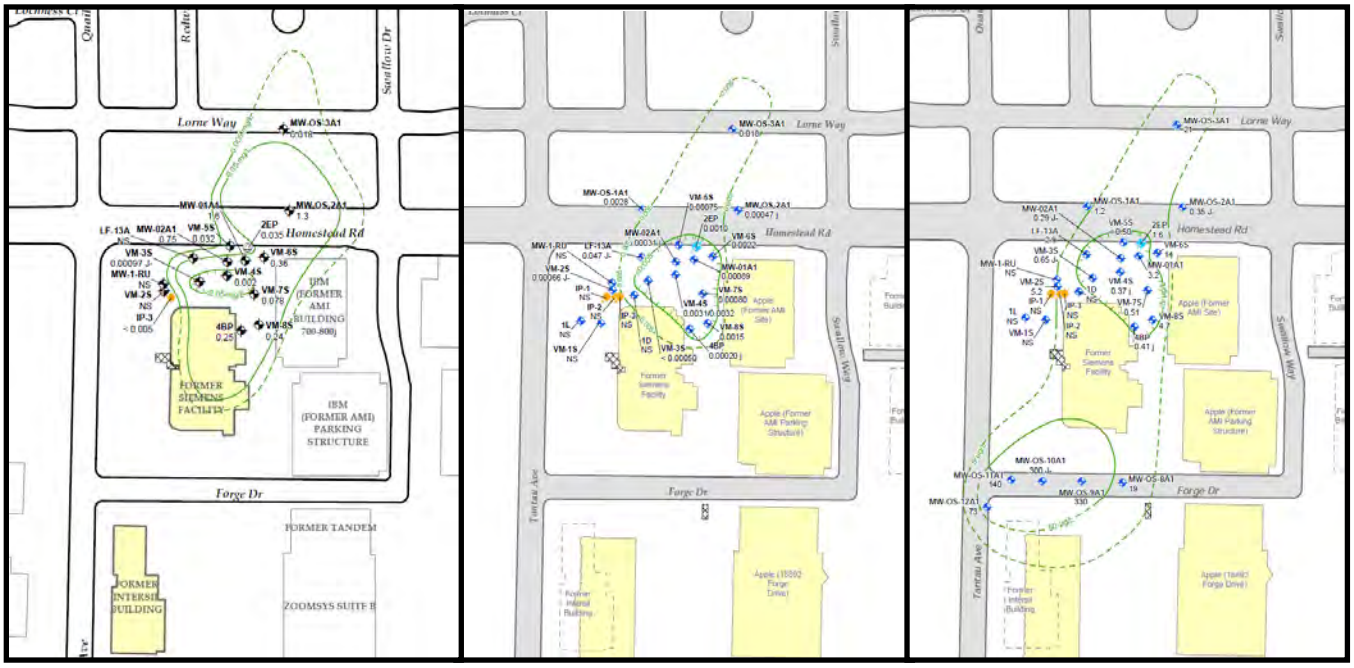


Figure C-1. Comparison A-1 zone. TCE plume 2015(mg/L), 2018(mg/L) and 2019(µg/L) (Left to Right) (AMEC Foster Wheeler and ERM, 2016; Wood and ERM, 2019 & 2020); isoconcentration images are in different units, however, the contours are equivalent (0.05 mg/L=50 µg/L). Note, TCE concentrations on the Siemens site were treated during ERD pilot studies.

A3 Zone

TCE isoconcentration contours for the A3 Zone of the Resaturated Interval show that the TCE plume decreased in concentrations in the mid- to downgradient portions of the plume from 2015 to 2019. These concentrations declines are supported by the ERD pilot study remedies in the northern portion of the Siemens site. The furthest downgradient well at the northern tip of plume (MW-OS-5A3), shows a decreasing concentration trend for TCE, indicating full capture of the contamination plume downgradient to the north. One mid-plume well has an increasing trend for TCE (VM-3D), with concentrations increasing to 50 µg/L in 2019.

In February 2019, additional A3 Zone wells (MW-OS-8A3, MW-OS-10A3, MW-OS-11A3, and MW-OS-12A3) were installed between the former Siemens property and the former Intersil property along Forge Drive in the A3 Zone (ERM 2019a). TCE groundwater concentrations in these wells ranged from 20 to 270 µg/L. Similar to the A1 zone, elevated TCE concentrations indicate there may be a larger plume upgradient of the former Siemens property (i.e., to the south of Forge Drive) that is not fully delineated.

In 2015 and 2016 a membrane interface probe (MIP) groundwater investigation was conducted in the Off-Property Study Area and grab groundwater samples were also collected. The grab groundwater data results indicate that TCE concentrations north of the AMI property at the intersection of Swallow Drive and Lorne Way were elevated, ranging from 120 µg/L to 170 µg/ L. However, further downgradient of Lorne Way, grab groundwater samples results were typically less than MCL values, indicating that the A3 Zone in the Off-Property Study Area is largely delineated, with the exception of MIP-OS-28 (bounded by MIP-OS-23 and MIP-OS-25) with a grab groundwater TCE sample result of 120 µg/L. It is noted that grab groundwater samples from borings are not as accurate as groundwater samples collected from established monitoring wells.

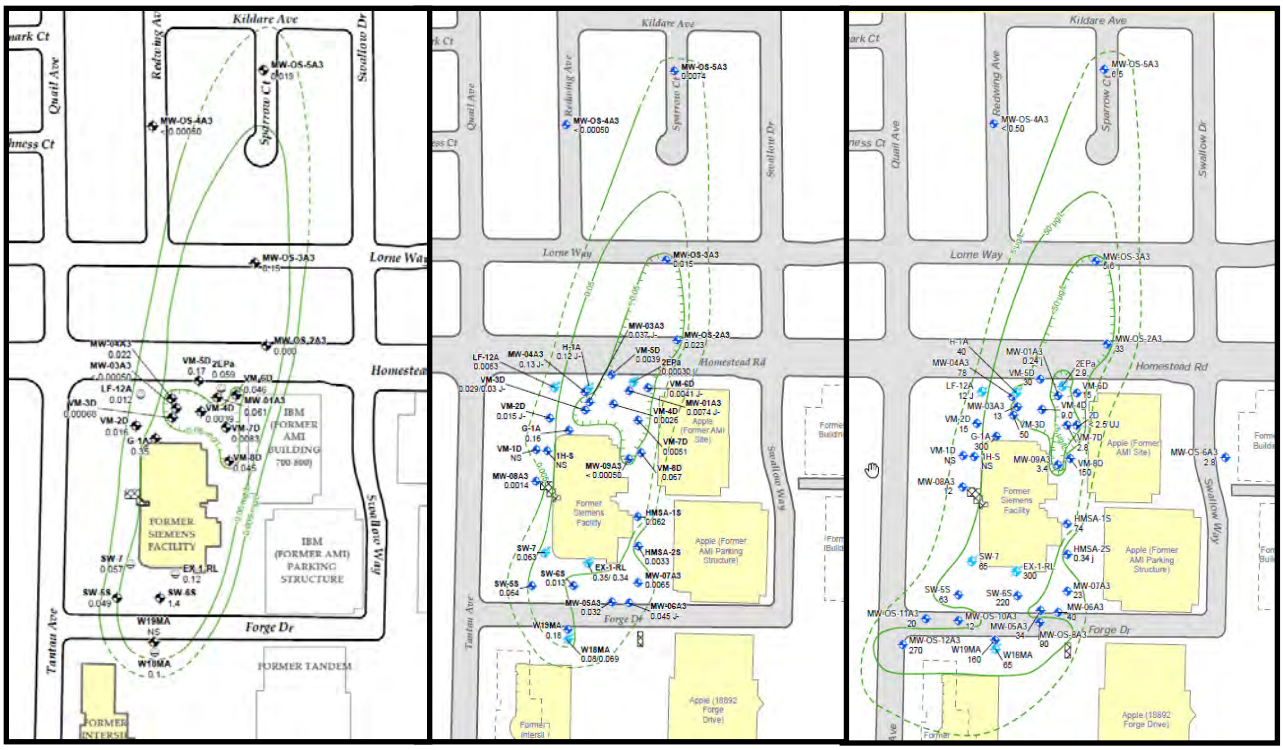


Figure C-2. TCE Plume in A3 Z**one**; 2015(mg/L), 2018(mg/L) and 2019(µg/L) (Left to Right) **(AMEC Foster Wheeler and ERM, 2016; Wood and ERM, 2019 & 2020);** isoconcentration images are in different units, however, the contours are equivalent (0.05 mg/L=**50 µg/L).**

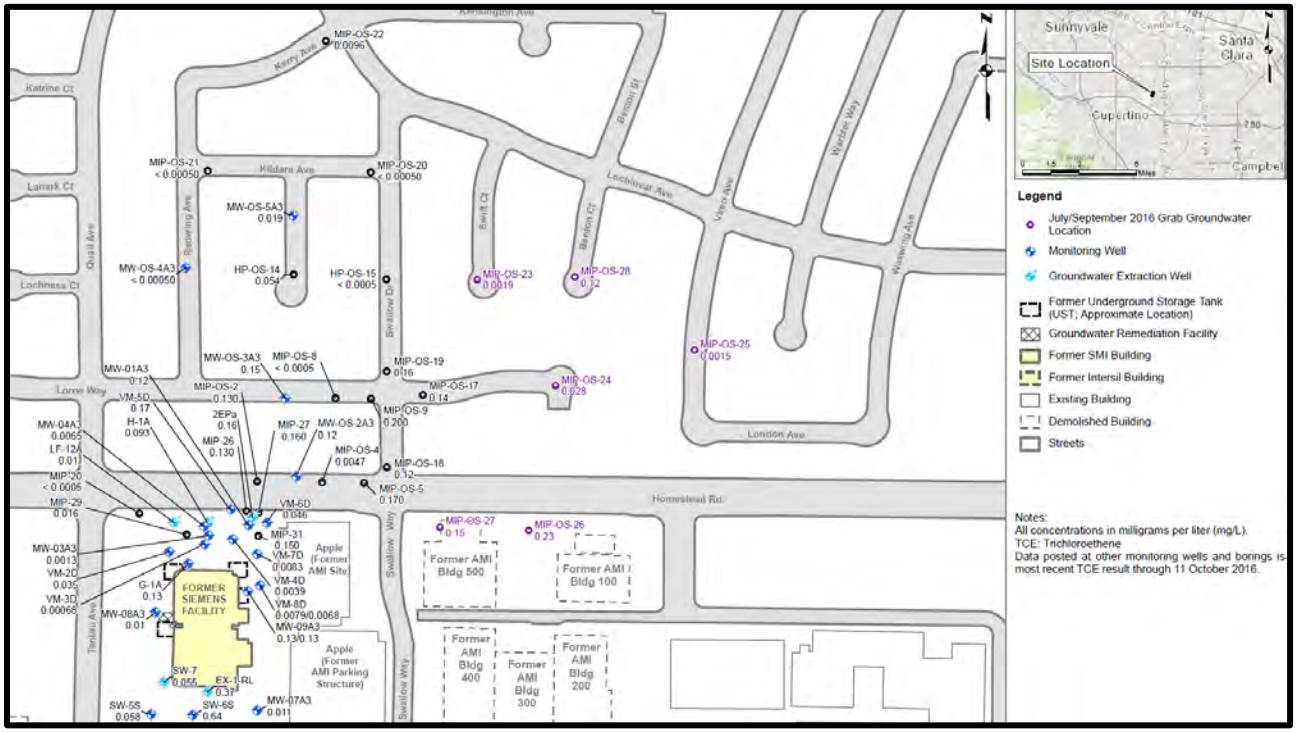


Figure C-3. 2015 **and 2016 Off-Property Study Area Groundwater TCE Concentrations in the A3 Zone** (ERM, 2016c)

A4 Zone

TCE isoconcentration contours for the A4 Zone show that the TCE plume decreased in concentrations in the mid- to downgradient portions of the plume, to the north and northwest, from 2015 to 2019 (Figure C-4). The furthest downgradient well at the northern tip of plume (MW-OS-4A4), shows no trend, with concentrations ranging between 3.6 and 14 µg/L during the current Five-Year Review period. Well S-1A, just upgradient of MW-OS-4A4, shows a significant decreasing trend, indicating capture of the contamination plume downgradient to the north.

Trend analysis for the last 5 years, shows no trend in the source zone area well F-1A, located near the center of the southern border of the former Siemens property on the north edge of Forge Drive. TCE analytical results have varied in F-1A during this Five-Review Period, with concentrations as low as 320 µg/L (October 2014) and as high as 1,300 µg/L (October 2017). TCE concentrations dropped down to 590 µg/L by October 2019. It is unclear if the changes in concentration may be related to changes in the GWET system pumping.

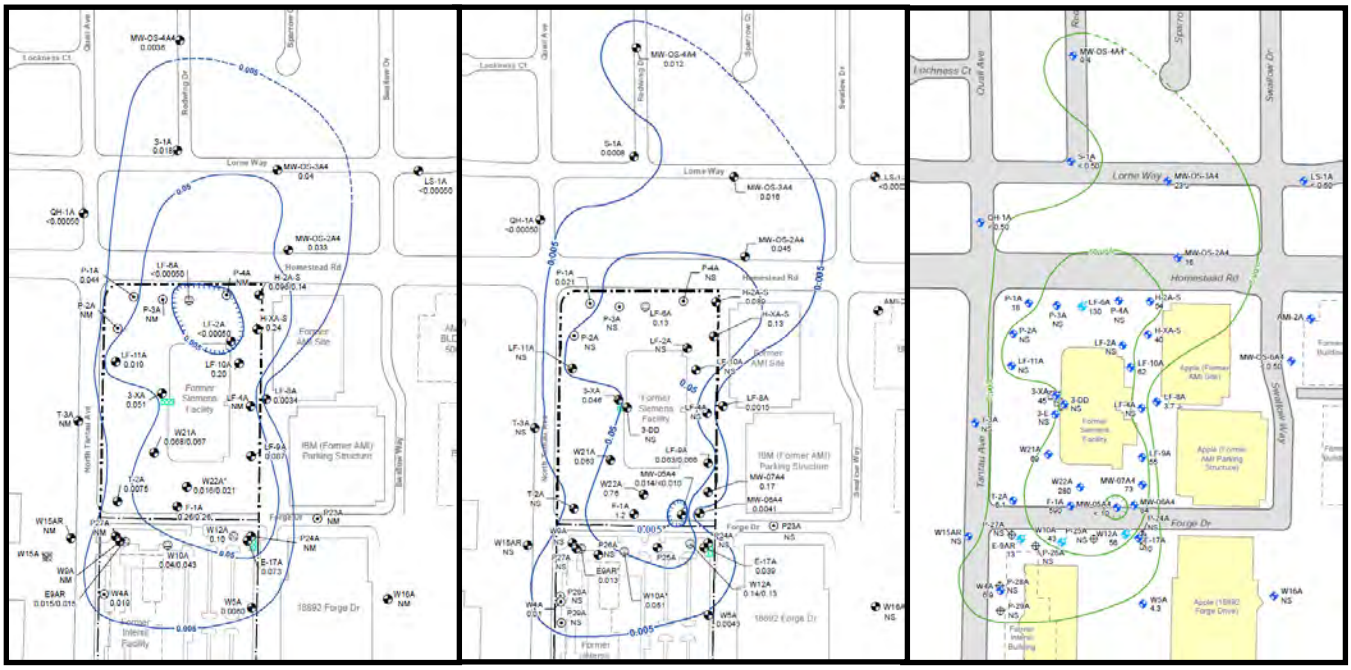


Figure C-4. Comparison A-4 zone. TCE plume 2015 (mg/L), 2018 (mg/L) and 2019 (µg/L) (Left to Right) (AMEC Foster Wheeler and ERM, 2016; Wood and ERM, 2019 & 2020); isoconcentration images are in different units, however, they contours are equivalent (0.05 mg/L=50 µg/L).

B Zone

The lateral extent of the TCE plume and concentrations within the B Zone plume have remained approximately the same in the last five years (Figure C-5). Wells within the plume show decreasing, probably decreasing, stable, and no trend for TCE concentrations. Within the last decade, TCE concentrations at the downgradient end of the B Zone plume in well IQ-1B have typically been non-detect, with minor fluctuations in 2016 to 2018 into single digit concentrations near the MCL cleanup level of 5 µg/L, and estimated concentrations of TCE above the MCL in 2017. Despite the fluctuation in TCE concentration, there is no trend for the TCE concentration in IQ-1B according to the Mann-Kendall, and it should be considered stable below detection limits since it typically has been non-detect over the last decade (Figure C-6).

The highest concentration of TCE is in the B Zone plume is in well H-5B, which decreased in concentration from 160 to 130 µg/L during the Five-Year Review period. Since the groundwater monitoring started in 1987, the TCE concentration in H-5B has declined an order of magnitude from a maximum concentration of 5,080 µg/L to 130 ug/L.

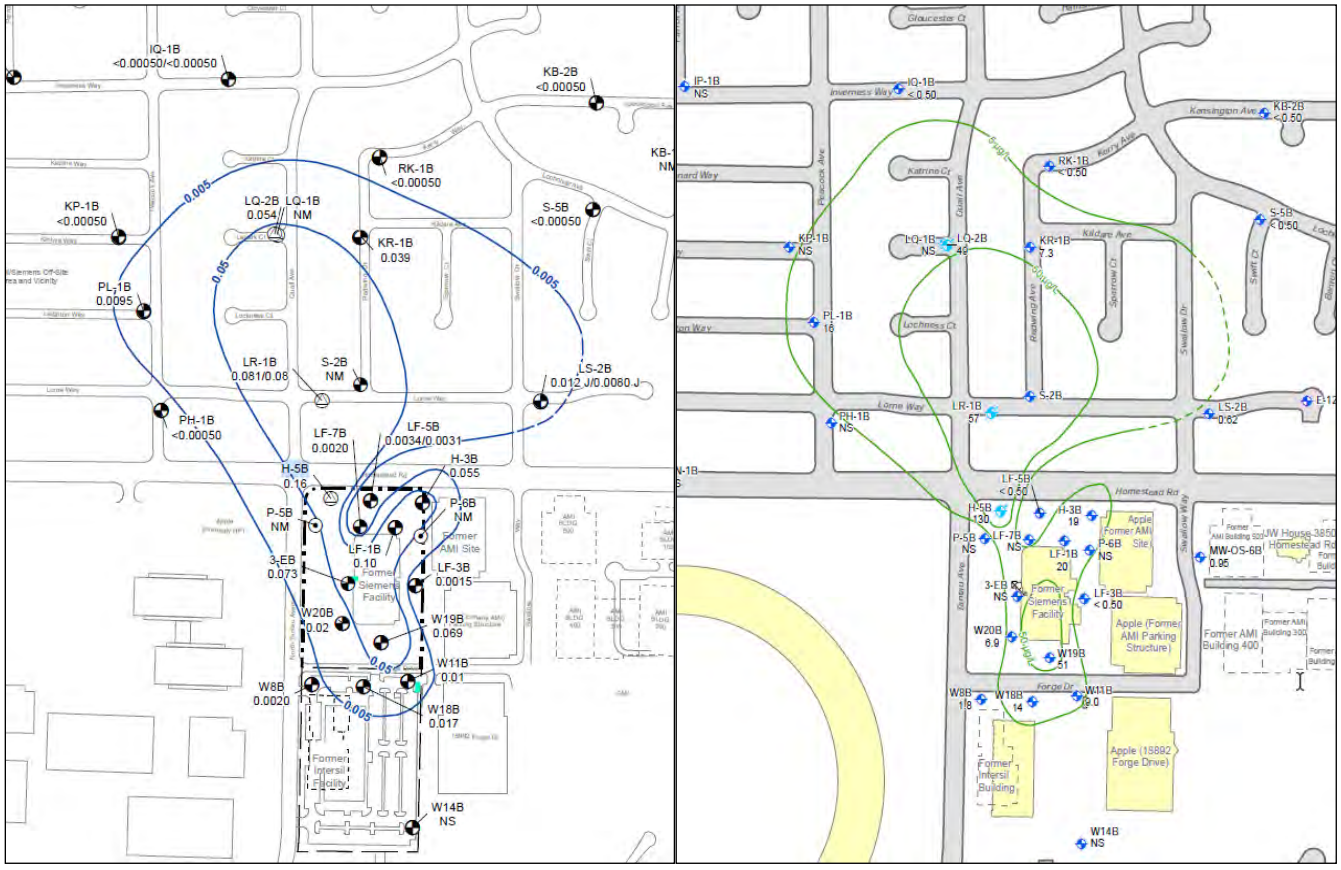


Figure C-5. Comparison **B zone. TCE plume 2015 (mg/L) and 2019 (µg/L) (Left to Right)** (AMEC Foster Wheeler and ERM, 2016; Wood and ERM, 2020); isoconcentration images are in different units, however, they contours are equivalent (0.05mg/L=50 µg/L).

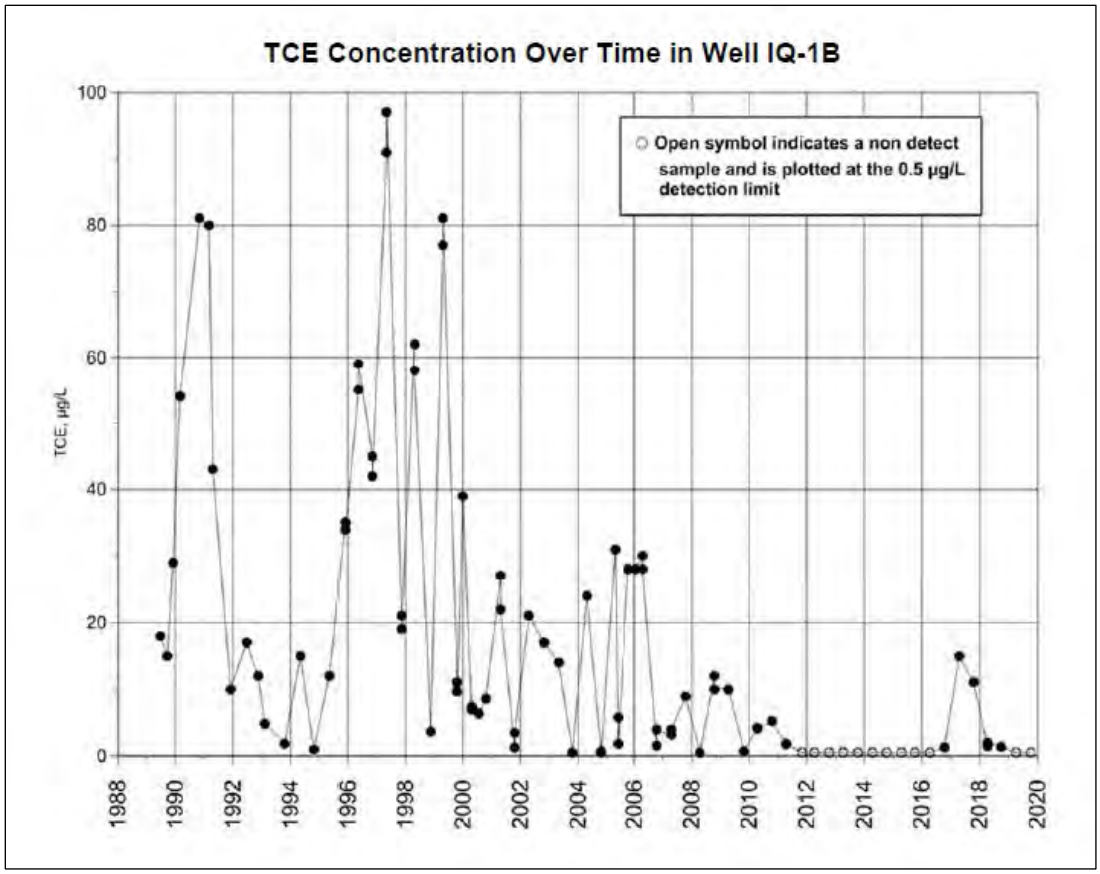


Figure C-6. TCE Concentration **Over Time in Well IQ-1B** (Wood and ERM, 2020)

Table C-1: Summary of VOC Concentrations Jan-Dec 2019 (Wood and ERM, 2020)

Table 3
Summary of VOC Concentrations in Groundwater Monitoring Wells, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
Former Intersil Facility													
W18MA	10/01/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	65	< 0.50	1.7	< 1.0	--	< 0.50
W19MA	10/01/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	160	0.21 j	0.87	< 1.0	--	< 0.50
E-17A	10/01/2019	N	A4	< 0.50	0.64	< 0.50	< 0.50	10	< 0.50	3.9	< 1.0	--	1.2
E-9AR	10/01/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	13	< 0.50	6.3	< 1.0	--	< 0.50
W10A	10/01/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	43	< 0.50	6.1	< 1.0	--	< 0.50
W12A	10/01/2019	N	A4	0.39 j	1.1	< 0.50	0.50	56	< 0.50	12	< 1.0	--	< 0.50
W12A	10/01/2019	FD	A4	0.37 j	1.2	< 0.50	0.50	54	< 0.50	10	< 1.0	--	< 0.50
W4A	10/01/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	6.9	< 0.50	0.24 j	< 1.0	--	< 0.50
W5A	10/03/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	4.3	< 0.50	15	< 1.0	--	< 0.50
W11B	10/01/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	9.0	< 0.50	5.7	< 1.0	--	< 0.50
W18B	10/01/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	14	< 0.50	3.3	< 1.0	--	< 0.50
W8B	10/01/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	1.8	< 0.50	< 0.50	< 1.0	--	< 0.50
Former Siemens Facility													
2EP	03/19/2019	N	A1	< 2.5	120	< 2.5	< 2.5	63	< 2.5	< 2.5	< 5.0	< 2.5	43
2EP	05/07/2019	N	A1	2.7	1,100	5.4	< 0.50	14 j	0.23 j	4.6	< 1.0	1.1	50
2EP	07/09/2019	N	A1	0.90	330	4.4	< 0.50	11	< 0.50	0.19 j	< 1.0	0.90	110
2EP	07/09/2019	FD	A1	0.92	330	4.3	< 0.50	11	< 0.50	< 0.50	< 1.0	1.0	110
2EP	10/03/2019	N	A1	< 0.50	18	1.4	< 0.50	1.6	< 0.50	< 0.50	< 1.0	0.45 j	9.0
4BP	03/18/2019	N	A1	< 0.50	0.68	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	8.6	< 0.50
4BP	03/18/2019	FD	A1	< 0.50	0.65	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	8.6	< 0.50
4BP	05/07/2019	N	A1	0.54	20	0.24 j	0.23 j	1.6	< 0.50	< 0.50	< 1.0	2.4	2.9
4BP	07/09/2019	N	A1	< 0.50	2.1	0.20 j	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	0.53	1.4
4BP	10/04/2019	N	A1	< 0.50	2.0	0.49 j	0.80	0.41 j	< 0.50	< 0.50	< 1.0	0.32 j	1.2
4BP	10/04/2019	FD	A1	< 0.50	2.5	0.44 j	0.80	0.43 j	< 0.50	< 0.50	< 1.0	0.38 j	1.3
LF-13A	03/18/2019	N	A1	< 0.50	28	< 0.50	< 0.50	4.9	< 0.50	13	< 1.0	< 0.50	70
LF-13A	05/07/2019	N	A1	< 0.50	12	0.38 j	< 0.50	4.5	< 0.50	14	< 1.0	< 0.50	30
LF-13A	07/10/2019	N	A1	< 0.50	3.9	0.63	< 0.50	5.3	< 0.50	3.1	< 1.0	< 0.50	3.3
LF-13A	10/03/2019	N	A1	< 0.50	2.4	0.74	< 0.50	2.9	< 0.50	0.29 j	< 1.0	0.43 j	1.1
MW-01A1	03/19/2019	N	A1	< 2.5	130	< 2.5	< 2.5	19	< 2.5	< 2.5	< 5.0	< 2.5	12
MW-01A1	05/07/2019	N	A1	4.0	1,200	3.5	< 0.50	290	1.2	11	0.49 j	0.42 j	93
MW-01A1	07/09/2019	N	A1	1.3	300	2.2	< 0.50	110	0.83	3.5	< 1.0	1.0	38
MW-01A1	10/03/2019	N	A1	< 2.5	110	2.4 j	< 2.5	3.2	< 2.5	1.3 j	< 5.0	< 2.5	38
MW-01A1	10/03/2019	FD	A1	< 2.5	110	2.5	< 2.5	3.5	< 2.5	< 2.5	< 5.0	< 2.5	37
MW-02A1	03/19/2019	N	A1	< 0.50	31	0.77	< 0.50	1.4	< 0.50	< 0.50	< 1.0	0.55	9.1
MW-02A1	05/07/2019	N	A1	< 0.50	7.0	1.4	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	1.3	14
MW-02A1	07/09/2019	N	A1	< 0.50	1.7	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	0.42 j	4.9
MW-02A1	10/04/2019	N	A1	< 0.50 UJ	4.4 J-	1.3 J-	< 0.50 UJ	0.29 J-	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	0.29 J-	6.0 J-
MW-02A1	10/04/2019	FD	A1	< 0.50 UJ	5.4 J-	1.2 J-	< 0.50 UJ	0.21 J-	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	0.32 J-	7.1 J-
VM-2S	10/04/2019	N	A1	< 0.50	17	3.6	< 0.50	5.2	< 0.50	< 0.50	< 1.0	< 0.50	23
VM-3S	10/03/2019	N	A1	< 0.50 UJ	2.9 J-	0.49 J-	< 0.50 UJ	0.65 J-	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	1.7 J-	< 0.50 UJ
VM-4S	10/04/2019	N	A1	< 0.50	1.1	0.55	< 0.50	0.37 j	< 0.50	< 0.50	< 1.0	0.54	0.35 j
VM-5S	03/19/2019	N	A1	< 2.5	110	< 2.5	< 2.5	15	< 2.5	< 2.5	< 5.0	< 2.5	58
VM-5S	05/07/2019	N	A1	1.1	1,000	3.0	< 0.50	19	< 0.50	9.0	< 1.0	< 0.50	120
VM-5S	07/09/2019	N	A1	< 0.50	60	1.5	< 0.50	0.25 j	< 0.50	< 0.50	< 1.0	< 0.50	47
VM-5S	10/03/2019	N	A1	< 0.50	0.66 J+	0.80	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	0.36 j	1.8
VM-6S	03/18/2019	N	A1	< 10	530	< 10	< 10	320	< 10	< 10	< 20	< 10	25
VM-6S	07/10/2019	N	A1	0.49 j	170	1.6	< 0.50	3.1	< 0.50	1.0	< 1.0	< 0.50	83

Table 3
Summary of VOC Concentrations in Groundwater Monitoring Wells, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
VM-6S	10/03/2019	N	A1	0.98	210	1.6	< 0.50	14	< 0.50	0.13 j	< 1.0	< 0.50	45
VM-7S	03/18/2019	N	A1	1.2	19	< 0.50	1.1	0.72	< 0.50	< 0.50	< 1.0	< 0.50	0.94
VM-7S	05/07/2019	N	A1	7.5	71	0.28 j	4.5	0.55	< 0.50	< 0.50	< 1.0	< 0.50	7.5
VM-7S	07/09/2019	N	A1	0.30 j	6.1	0.39 j	1.8	0.27 j	< 0.50	< 0.50	< 1.0	0.69	8.7
VM-7S	10/03/2019	N	A1	0.27 j	1.9	0.58	0.51	0.51	< 0.50	< 0.50	< 1.0	3.5	2.7
VM-8S	03/19/2019	N	A1	< 0.50	6.3	0.59	< 0.50	1.6	< 0.50	< 0.50	< 1.0	14	5.9
VM-8S	05/07/2019	N	A1	< 0.50	5.1	0.26 j	< 0.50	0.79	< 0.50	< 0.50	< 1.0	4.1	4.2
VM-8S	07/10/2019	N	A1	< 0.50	7.8	0.47 j	0.22 j	3.2	< 0.50	< 0.50	< 1.0	0.74	10
VM-8S	10/03/2019	N	A1	< 0.50	7.9	0.53	< 0.50	4.7	< 0.50	< 0.50	< 1.0	0.52	10
2D	03/18/2019	N	A2	< 0.50	2.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	4.3
2D	05/08/2019	N	A2	< 0.50	2.0	0.19 j	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	3.6
2D	07/09/2019	N	A2	< 0.50	2.0	0.24 j	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	4.6
2D	10/04/2019	N	A2	< 2.5 UJ	0.64 J-	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 5.0 UJ	< 2.5 UJ	< 2.5 R
HMSA-1S	10/04/2019	N	A2	7.6	< 0.50	< 0.50	4.0	74	< 0.50	0.89	< 1.0	< 0.50	< 0.50
2EPa	03/19/2019	N	A3	< 0.50	0.98	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	0.74
2EPa	05/07/2019	N	A3	< 0.50	1.3	< 0.50	< 0.50	2.1	< 0.50	< 0.50	< 1.0	1.0	1.3
2EPa	07/09/2019	N	A3	0.25 j	83	0.35 j	< 0.50	2.2	< 0.50	0.40 j	< 1.0	0.67	12
2EPa	10/03/2019	N	A3	0.29 j	39	0.46 j	< 0.50	2.9	< 0.50	< 0.50	< 1.0	< 0.50	13
EX-1-RL	10/03/2019	N	A3	2.1 j	< 5.0	< 5.0	< 5.0	300	< 5.0	1.3 j	< 10	< 5.0	< 5.0
G-1A	10/04/2019	N	A3	1.9 j	530	2.3 j	< 2.5	300	1.0 j	5.1	< 5.0	< 2.5	13
H-1A	10/09/2019	N	A3	< 5.0	100	< 5.0	< 5.0	40	< 5.0	< 5.0	< 10	< 5.0	3.6 j
HMSA-2S	10/04/2019	N	A3	< 0.50	1.2	< 0.50	< 0.50	0.34 j	< 0.50	< 0.50	< 1.0	0.23 j	< 0.50
LF-12A	10/03/2019	N	A3	< 0.50 UJ	3.0 J	< 0.50 UJ	< 0.50 UJ	12 J	< 0.50 UJ	1.2 J	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ
MW-01A3	10/04/2019	N	A3	< 0.50	0.33 j	< 0.50	< 0.50	0.24 j	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
MW-03A3	10/04/2019	N	A3	1.1	22	< 0.50	< 0.50	13	< 0.50	0.13 j	< 1.0	< 0.50	6.4
MW-04A3	10/04/2019	N	A3	2.7	290	0.91 j	< 1.0	78	< 1.0	1.2	< 2.0	< 1.0	45
MW-05A3	10/04/2019	N	A3	< 0.50	2.7	0.24 j	0.27 j	34	< 0.50	1.6	< 1.0	< 0.50	2.4
MW-06A3	10/04/2019	N	A3	0.58	4.4	< 0.50	0.25 j	40	< 0.50	0.74	< 1.0	< 0.50	0.70
MW-07A3	10/04/2019	N	A3	0.39 j	3.4	< 0.50	< 0.50	23	< 0.50	0.74	< 1.0	< 0.50	0.54
MW-08A3	10/04/2019	N	A3	< 0.50	0.11 j	< 0.50	< 0.50	12	< 0.50	0.59	< 1.0	< 0.50	0.63
MW-09A3	10/04/2019	N	A3	0.42 j	17	0.45 j	< 0.50	3.4	< 0.50	< 0.50	< 1.0	< 0.50	11
SW-5S	10/04/2019	N	A3	< 0.50	6.3	< 0.50	< 0.50	63	0.20 j	0.51	< 1.0	< 0.50	< 0.50
SW-6S	10/04/2019	N	A3	< 10	250	< 10	< 10	220	< 10	< 10	< 20	< 10	73
SW-7	10/01/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	65	< 0.50	0.58	< 1.0	< 0.50	< 0.50
VM-2D	10/04/2019	N	A3	< 0.50	1.9	< 0.50	< 0.50	15	< 0.50	0.72	< 1.0	< 0.50	< 0.50
VM-3D	10/03/2019	N	A3	1.6	6.2	< 0.50	0.92	50	< 0.50	0.38 j	< 1.0	< 0.50	1.2
VM-4D	10/04/2019	N	A3	0.55	30	0.49 j	< 0.50	9.0	< 0.50	< 0.50	< 1.0	< 0.50	25
VM-5D	03/19/2019	N	A3	1.2	13	< 0.50	< 0.50	20	< 0.50	< 0.50	< 1.0	< 0.50	7.5
VM-5D	05/07/2019	N	A3	< 0.50	9.9	0.25 j	< 0.50	1.6	< 0.50	< 0.50	< 1.0	< 0.50	7.5
VM-5D	07/10/2019	N	A3	1.1	12	0.31 j	< 0.50	15	< 0.50	< 0.50	< 1.0	< 0.50	7.7
VM-5D	10/04/2019	N	A3	1.4	13	0.34 j	< 0.50	30	< 0.50	< 0.50	< 1.0	< 0.50	10
VM-5D	10/04/2019	FD	A3	1.5	17	0.30 j	< 0.50	31	< 0.50	< 0.50	< 1.0	< 0.50	12
VM-6D	03/18/2019	N	A3	< 0.50 UJ	36 J-	0.55 J-	< 0.50 UJ	6.2 J-	< 0.50 UJ	< 0.50 R	< 1.0 UJ	< 0.50 UJ	13 J-
VM-6D	05/07/2019	N	A3	0.22 j	29	0.24 j	< 0.50	10	< 0.50	0.25 j	< 1.0	< 0.50	8.0
VM-6D	07/09/2019	N	A3	0.21 j	38	0.43 j	< 0.50	6.1	< 0.50	< 0.50	< 1.0	< 0.50	10
VM-6D	10/03/2019	N	A3	0.63	49	0.98	0.35 j	15	< 0.50	0.36 j	< 1.0	< 0.50	13
VM-7D	10/04/2019	N	A3	< 1.0	12	0.55 j	< 1.0	2.8	< 1.0	< 1.0	< 2.0	0.44 j	13
VM-8D	10/04/2019	N	A3	1.1	0.48 j	< 1.0	0.70 j	150	< 1.0	1.2	< 2.0	< 1.0	< 1.0

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Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
3-XA	10/04/2019	N	A4	1.1	0.30 j	< 0.50	< 0.50	45	< 0.50	2.0	< 1.0	< 0.50	< 0.50
F-1A	10/09/2019	N	A4	< 10	< 10	< 10	< 10	590	< 10	< 10	< 20	< 10	< 10
H-2A-S	10/04/2019	N	A4	7.5	0.88	< 0.50	4.3	54	< 0.50	1.8	< 1.0	< 0.50	0.40 j
H-2A-S	10/04/2019	FD	A4	8.2	0.87	< 0.50	4.8	59	< 0.50	2.0	< 1.0	< 0.50	0.37 j
H-XA-S	10/04/2019	N	A4	2.7	1.7	0.34 j	2.4	40	< 0.50	1.5	< 1.0	< 0.50	1.7
LF-10A	10/09/2019	N	A4	4.3	48	0.16 j	3.3	62	< 0.50	2.4	< 1.0	0.75	9.7
LF-6A	10/04/2019	N	A4	1.6	0.72	< 0.50	1.2	130	< 0.50	3.7	< 1.0	< 0.50	< 0.50
LF-6A	10/04/2019	FD	A4	< 5.0	< 5.0	< 5.0	< 5.0	130	< 5.0	3.1 j	< 10	< 5.0	< 5.0
LF-8A	10/02/2019	N	A4	0.66 J-	0.46 J-	< 0.50 UJ	0.45 J-	3.7 J-	< 0.50 UJ	0.21 J-	< 1.0 UJ	< 0.50 R	< 0.50 UJ
LF-9A	10/04/2019	N	A4	0.35 j	< 0.50	< 0.50	0.68	55	< 0.50	8.5	< 1.0	< 0.50	< 0.50
MW-05A4	10/04/2019	N	A4	< 10	290	14	< 10	< 10	< 10	< 10	< 20	< 10	33
MW-06A4	10/04/2019	N	A4	0.23 j	1.9	< 0.50	0.45 j	84	< 0.50	7.7	< 1.0	< 0.50	1.2
MW-07A4	10/04/2019	N	A4	1.1	3.6	0.18 j	1.3	73	< 0.50	2.5	< 1.0	< 0.50	< 0.50
MW-07A4	10/04/2019	FD	A4	< 2.5	1.9 j	< 2.5	< 2.5	110	< 2.5	3.1	< 5.0	< 2.5	< 2.5
P-1A	10/04/2019	N	A4	< 0.50	0.51	< 0.50	< 0.50	18	< 0.50	1.5	< 1.0	< 0.50	< 0.50
T-2A	10/04/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	6.1	< 0.50	3.0	< 1.0	< 0.50	< 0.50
W21A	10/04/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	69	< 0.50	7.4	< 1.0	< 0.50	< 0.50
W22A	10/04/2019	N	A4	< 5.0	9.7	< 5.0	< 5.0	280	< 5.0	< 5.0	< 10	< 5.0	6.4
W22A	10/04/2019	FD	A4	< 10	5.7 j	< 10	< 10	990	< 10	2.1 j	< 20	< 10	< 10
H-3B	10/04/2019	N	B	< 0.50	0.36 j	< 0.50	< 0.50	19	< 0.50	2.0	< 1.0	< 0.50	1.2
H-5B	10/03/2019	N	B	< 1.0	< 1.0	< 1.0	< 1.0	130	< 1.0	3.2	< 2.0	< 1.0	< 1.0
LF-1B	10/09/2019	N	B	1.0	46	< 0.50	0.32 j	20	< 0.50	2.9	< 1.0	< 0.50	< 0.50
LF-3B	10/04/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
LF-5B	10/09/2019	N	B	< 0.50	0.94	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	0.29 j	< 0.50
LF-5B	10/09/2019	FD	B	< 0.50	1.4	< 0.50	< 0.50	0.27 j	< 0.50	< 0.50	< 1.0	0.32 j	< 0.50
W19B	10/04/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	51	< 0.50	2.6	< 1.0	< 0.50	< 0.50
W20B	10/09/2019	N	B	0.23 j	< 0.50	< 0.50	< 0.50	6.9	< 0.50	0.51	< 1.0	< 0.50	< 0.50
Intersil/Siemens Off-Site Study Area													
MW-OS-1A1	03/18/2019	N	A1	1.1 J-	13 J-	< 0.50 UJ	0.94 J-	2.2 J-	< 0.50 UJ	2.5 J-	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ
MW-OS-1A1	04/08/2019	N	A1	1.4	18	< 0.50	0.88	3.9	< 0.50	4.1	< 1.0	--	< 0.50
MW-OS-1A1	05/08/2019	N	A1	1.2	13	0.27 j	0.94	2.3	< 0.50	4.3	< 1.0	< 0.50	< 0.50
MW-OS-1A1	07/09/2019	N	A1	0.93	10	< 0.50	0.70	1.8	< 0.50	2.8	< 1.0	< 0.50	< 0.50
MW-OS-1A1	10/04/2019	N	A1	0.45 j	6.1	< 0.50	0.40 j	1.2	< 0.50	1.8	< 1.0	< 0.50	< 0.50
MW-OS-2A1	03/18/2019	N	A1	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 5.0	100	< 2.5
MW-OS-2A1	04/08/2019	N	A1	< 0.50	1.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	--	< 0.50
MW-OS-2A1	05/08/2019	N	A1	< 0.50	2.1	0.27 j	< 0.50	0.93	< 0.50	< 0.50	< 1.0	19	< 0.50
MW-OS-2A1	05/08/2019	FD	A1	< 0.50	2.0	0.19 j	< 0.50	0.82	< 0.50	< 0.50	< 1.0	17	< 0.50
MW-OS-2A1	07/09/2019	N	A1	< 0.50	1.9	0.18 j	< 0.50	0.56	< 0.50	< 0.50	< 1.0	0.58	< 0.50
MW-OS-2A1	10/04/2019	N	A1	< 0.50 UJ	2.6 J-	0.20 J-	< 0.50 UJ	0.35 J-	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	0.96 J-	< 0.50 UJ
MW-OS-3A1	03/18/2019	N	A1	2.9 J-	4.2 J-	< 0.50 UJ	2.1 J-	12 J-	< 0.50 UJ	0.86 J-	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ
MW-OS-3A1	05/08/2019	N	A1	4.3	4.5	< 0.50	2.8	17	< 0.50	1.8	< 1.0	< 0.50	0.21 j
MW-OS-3A1	07/10/2019	N	A1	5.3	5.7	< 0.50	3.4	15	< 0.50	2.1	< 1.0	1.0	0.71
MW-OS-3A1	10/04/2019	N	A1	4.6	6.0	< 0.50	4.1	21	< 0.50	2.1	< 1.0	0.26 j	0.93
MW-OS-8A1	03/09/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	62	< 0.50	0.26 j	< 1.0	< 0.50	< 0.50
MW-OS-8A1	10/03/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	19	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
MW-OS-9A1	03/09/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	370	0.45 j	0.39 j	< 1.0	< 0.50	< 0.50
MW-OS-9A1	10/03/2019	N	A1	< 5.0	3.0 j	< 5.0	< 5.0	330	< 5.0	< 5.0	< 10	< 5.0	< 5.0
MW-OS-10A1	03/09/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	370	6.5	0.29 j	0.46 j	< 0.50	< 0.50

Table 3
Summary of VOC Concentrations in Groundwater Monitoring Wells, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
MW-OS-10A1	10/03/2019	N	A1	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	300 J-	6.1 J-	< 5.0 UJ	< 10 UJ	< 5.0 UJ	< 5.0 UJ
MW-OS-11A1	03/09/2019	N	A1	< 0.50	0.15 j	< 0.50	< 0.50	200	6.0	0.94	0.80 j	< 0.50	< 0.50
MW-OS-11A1	10/03/2019	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	140	4.2 j	< 5.0	< 10	< 5.0	< 5.0
MW-OS-12A1	03/09/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	64	1.2	0.27 j	< 1.0	< 0.50	< 0.50
MW-OS-12A1	10/04/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	73	1.2	0.24 j	< 1.0	< 0.50	< 0.50
MW-OS-2A3	03/18/2019	N	A3	1.2 J-	12 J-	< 0.50 UJ	< 0.50 UJ	23 J-	< 0.50 UJ	< 0.50 R	< 1.0 UJ	< 0.50 UJ	13 J-
MW-OS-2A3	05/08/2019	N	A3	1.2	12	0.28 j	< 0.50	25	< 0.50	< 0.50	< 1.0	< 0.50	12
MW-OS-2A3	07/09/2019	N	A3	0.84	9.9	0.16 j	< 0.50	17	< 0.50	< 0.50	< 1.0	< 0.50	12
MW-OS-2A3	10/04/2019	N	A3	1.2	11	0.36 j	< 0.50	33	< 0.50	< 0.50	< 1.0	< 0.50	20
MW-OS-3A3	10/09/2019	N	A3	< 0.50	5.7	< 0.50	0.54	5.6	< 0.50	1.3	< 1.0	< 0.50	< 0.50
MW-OS-4A3	10/02/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
MW-OS-5A3	04/08/2019	N	A3	0.50	1.0	< 0.50	< 0.50	6.5	< 0.50	< 0.50	< 1.0	--	< 0.50
MW-OS-5A3	10/02/2019	N	A3	0.44 j	1.2	< 0.50	0.41 j	6.5	< 0.50	0.40 j	< 1.0	< 0.50	< 0.50
MW-OS-6A3	03/09/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	23	< 0.50	1.8	0.45 j	< 0.50	< 0.50
MW-OS-6A3	10/02/2019	N	A3	< 0.50	7.0	< 0.50	< 0.50	2.8	< 0.50	1.5	< 1.0	< 0.50	< 0.50
MW-OS-8A3	03/09/2019	N	A3	0.26 j	0.32 j	< 0.50	0.38 j	120	< 0.50	4.3	< 1.0	0.28 j	< 0.50
MW-OS-8A3	03/09/2019	FD	A3	0.27 j	0.22 j	< 0.50	0.35 j	90	< 0.50	4.5	< 1.0	< 0.50	< 0.50
MW-OS-8A3	10/03/2019	N	A3	0.28 j	< 0.50	< 0.50	0.28 j	90	< 0.50	4.6	< 1.0	< 0.50	< 0.50
MW-OS-10A3	03/09/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	42	< 0.50	1.1	< 1.0	< 0.50	< 0.50
MW-OS-10A3	10/03/2019	N	A3	< 0.50	14 J+	< 0.50	< 0.50	12	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
MW-OS-11A3	03/09/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	49	< 0.50	1.1	< 1.0	< 0.50	< 0.50
MW-OS-11A3	10/03/2019	N	A3	< 0.50	4.1	< 0.50	< 0.50	20	< 0.50	0.56	< 1.0	< 0.50	< 0.50
MW-OS-12A3	03/09/2019	N	A3	< 0.50	0.087 j	< 0.50	< 0.50	350	< 0.50	2.1	0.65 j	0.18 j	< 0.50
MW-OS-12A3	10/04/2019	N	A3	< 1.0	0.39 j	< 1.0	< 1.0	270	< 1.0	2.2	< 2.0	< 1.0	< 1.0
LS-1A	10/09/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 1.0	< 0.50	< 0.50
MW-OS-2A4	10/02/2019	N	A4	3.9	0.22 J+	< 0.50	2.4	16	< 0.50	1.9	< 1.0	< 0.50	< 0.50
MW-OS-3A4	10/09/2019	N	A4	0.41 J	18 J	< 0.50 UJ	< 0.50 R	23 J	< 0.50 UJ	< 0.50 R	< 1.0 UJ	< 0.50 R	9.5 J
MW-OS-4A4	10/02/2019	N	A4	0.42 j	< 0.50	< 0.50	0.80	9.4	< 0.50	1.5	< 1.0	< 0.50	< 0.50
MW-OS-6A4	03/09/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	0.43 j	< 0.50	4.3	< 1.0	< 0.50	< 0.50
MW-OS-6A4	10/02/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.1	< 1.0	< 0.50	< 0.50
QH-1A	10/02/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	0.83	< 0.50
S-1A	10/02/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
IQ-1B	04/08/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	--	< 0.50
IQ-1B	04/08/2019	FD	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	--	< 0.50
IQ-1B	10/09/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
KR-1B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	7.3	< 0.50	0.43 j	< 1.0	< 0.50	< 0.50
LQ-2B	04/08/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	56	< 0.50	1.6	< 1.0	--	< 0.50
LQ-2B	10/03/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	49	< 0.50	1.1	< 1.0	< 0.50	< 0.50
LR-1B	04/08/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	66	< 0.50	4.5	< 1.0	--	< 0.50
LR-1B	10/03/2019	N	B	0.44 j	< 0.50	< 0.50	0.36 j	57	< 0.50	3.3	< 1.0	< 0.50	< 0.50
LS-2B	10/09/2019	N	B	0.29 j	0.10 j	< 0.50	< 0.50	0.62	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
KB-2B	10/09/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 1.0	< 0.50	< 0.50
MW-OS-6B	03/09/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	0.65	< 0.50	4.0	< 1.0	< 0.50	< 0.50
MW-OS-6B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	0.95	< 0.50	3.7	< 1.0	< 0.50	< 0.50
PG-1B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	0.25 j	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
PL-1B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	16	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
RK-1B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
S-3B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50

Table 3
Summary of VOC Concentrations in Groundwater Monitoring Wells, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
S-5B	10/02/2019	N	B	**0.34 j**	< 0.50	< 0.50	**0.51**	< 0.50	< 0.50	**2.9**	< 1.0	< 0.50	< 0.50
S-5B	10/02/2019	FD	B	**0.98 J**	< 0.50 UJ	< 0.50 UJ	**1.5 J**	< 0.50 UJ	< 0.50 UJ	**7.3 J**	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ
LR-3C	10/02/2019	N	C	< 0.50	< 0.50	< 0.50	< 0.50	**1.3**	< 0.50	**0.96**	< 1.0	< 0.50	< 0.50
RK-2C	10/02/2019	N	C	< 0.50	< 0.50	< 0.50	< 0.50	**0.35 j**	< 0.50	**0.12 j**	< 1.0	< 0.50	< 0.50
S-4C	10/02/2019	N	C	< 0.50	< 0.50	< 0.50	< 0.50	**0.50**	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
S-8C	10/02/2019	N	C	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	**0.26 j**	< 0.50	< 1.0	< 0.50	< 0.50
TB	03/09/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
TB	03/18/2019	TB	--	< 0.50 R	< 0.50 R	< 0.50 R	< 0.50 R	< 0.50 R	< 0.50 R	< 0.50 R	< 0.50 R	< 0.50 R	< 0.50 R
TB	03/19/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
TB	04/08/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	--	< 0.50
FB	04/08/2019	FB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	--	< 0.50
TB	05/07/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
TB	05/08/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
TB	07/09/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
TB	07/10/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
TB	10/02/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
TB	10/03/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
TB	10/09/2019	TB	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50

Notes:
< = Compound not detected. Reportable detection limit shown.
-- = Not analyzed or not applicable
Units are in µg/L = micrograms per liter
Bolded values indicate concentrations above the Reportable Detection Limit.
FD = Field Duplicate Sample
N = Normal Environmental Sample
TB = Trip Blank
FB = Field Blank
SW8260B analyses performed by TestAmerica - Pleasanton (San Francsco), CA

Abbreviations:

Abbreviation	*Compound*
PCE	*Tetrachloroethene*
cis-1,2-DCE	*cis-1,2-Dichloroethene*
trans-1,2-DCE	*trans-1,2-Dichloroethene*
1,1,1-TCA	*1,1,1-Trichloroethane*
1,1-DCE	*1,1-Dichloroethene*
Freon 113	*Freon 113*
TCE	*Trichloroethene*
VOC	*Volatile organic compound*

Table C-2: Summary of System Flow Rates Jan-Dec 2019 (Wood and ERM, 2020)

	January–March 2019	April–June 2019	July–September 2019	October–December 2019
Former Intersil Facility Groundwater Extraction and Treatment System[1]				
Average Quarterly Flow Rate (gallons per minute)	31	32	31	29
Total Volume Extracted (gallons)	3,862,700	4,065,600	4,075,300	3,987,200
Estimated VOC Mass Removed (pounds)	2.3	2.1	2.3	1.7
Former Siemens Facility Groundwater Extraction and Treatment System[2]				
Average Quarterly Flow Rate (gallons per minute)	38	62	65	58
Total Volume Extracted (gallons)	4,808,532	7,193,288	7,425,924	6,786,976
Estimated VOC Mass Removed (pounds)[4]	4.1	5.8	5.8	4.9
Off-Site Study Area Groundwater Extraction and Treatment System[3]				
Average Quarterly Flow Rate (gallons per minute)	30	52	52	51
Total Volume Extracted (gallons)	3,816,478	6,054,525	5,899,752	5,999,088
Estimated VOC Mass Removed (pounds)[5]	1.4	3.4	3.0	3.0

Notes:

1. *Former Intersil facility groundwater extraction and treatment system included extraction wells E9AR, W10A, W12A, and W18MA.*
2. *Former Siemens facility groundwater extraction and treatment system includes on-site extraction wells 2EP, 2EPa, H-1A, H-5B, LF-6A, LF-12A, EX-1-RL, and SW-7. Note that 2EP, 2EPa and H-1A were shut down in September/October/November 2014 facilitate the Phase II ERD Pilot Study.*
3. *Off-Site Study Area groundwater extraction system includes wells LR-1B and LQ-2B.*
4. *VOC mass removed from the former Siemens facility is calculated by subtracting the VOC mass removed from the Off-Site Study Area from the total mass removed by the treatment system. The total mass removed by the treatment system is calculated using the influent VOC concentrations and the total combined volume of groundwater extracted from the on-site and off-site extraction wells.*
5. *VOC mass removed from the Off-site Study Area is calculated by using VOC concentrations and groundwater extraction volume for the individual off-site wells.*

Abbreviations:
ERD = enhanced reductive dechlorination
VOC = volatile organic compound

Appendix D: Applicable or Relevant and Appropriate Requirements Assessment

Section 121(d)(1)(A) of the Comprehensive Environmental Response, Compensation, and Liability Act requires that remedial actions at Superfund sites attain (or justify the waiver of) any federal or state environmental standards, requirements, criteria, or limitations that are determined to be legally applicable or relevant and appropriate requirements (ARARs). Federal ARARs may include requirements promulgated under any federal environmental laws. State ARARs may only include promulgated, enforceable environmental or facility-siting laws of general application that are more stringent or broader in scope than federal requirements and that are identified by the state in a timely manner. ARARs are identified on a site-specific basis from information about the chemicals at the site, the physical characteristics of the site, and other appropriate factors. ARARs include only substantive, not administrative, requirements and pertain only to onsite activities. There are three general categories of ARARs: chemical-specific, location-specific, and action-specific.

Chemical-specific ARARs for groundwater are identified in Section 18 of Board Order No. 90-115 and are referenced in the 1990 ROD. The chemical-specific ARARs are evaluated for this Five-Year Review (Table 11). Achieving drinking water quality is an ARAR for this site.

Table D-1. Summary of Chemical-Specific ARARs

Contaminants of Concern	1990 ROD Cleanup Standard (mg/L)	Basis	Current Regulation (mg/L)		ARARs Changed since 1990 ROD?
			Federal MCL[1]	State MCL[2]	
Trichloroethene (TCE)	0.005	Federal / State	0.005	0.005	No
Tetrachloroethene (PCE)	0.005	Federal / State	0.005	0.005	No
1,1-dichloroethene	0.006	State	0.007	0.006	No
cis-1,2-dichloroethene	0.006	State	0.07	0.006	No
trans-1,2-dichloroethene	0.01	State	0.1	0.01	No
1,1,1-trichloroethane (1,1,1-TCA)	0.2	Federal / State	0.2	0.2	No
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.2	State	None	1.2	No
Toluene	0.15[3]	State	1.0	0.15	Yes[3]

Notes:
MCL – Maximum contaminant level
mg/L = milligrams per liter
[1] Federal MCL (*National Primary Drinking Water Regulations: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels*; 40 C.F.R. §§ 141.60 – 141-66). Last amendment October 12, 2018.

[2] California Maximum Contaminant Levels (*Maximum Contaminant Levels – Organic Chemicals*; C.C.R., Title 22, Division 4, Chapter 15, Article 5.5, § 64444). Last amendment December 14, 2017.

[3] The groundwater cleanup standard for toluene was listed in Board Order No. 90-115 as the California State Recommended Drinking Water Action Level at the time of 0.1 mg/L. A footnote provided for this cleanup level stated that "If the State of California proposes or adopts a MCL for toluene, the MCL shall at that time become the cleanup standard to toluene at this Site." The cleanup standard is therefore considered as the current California MCL.

Federal and State laws and regulations, other than the chemical-specific ARARs, that are still pertinent to the Site but have not changed in the past five years are listed below. The list does not include those ARARs identified in the ROD that no longer apply. For example, ARARs that are related to remedial design and construction are no longer pertinent if they do not continue into long-term operations, monitoring, and maintenance. There have been no revisions to the following laws and regulations that affect the protectiveness of the remedy:

- Safe Drinking Water Act, 40 Code of Federal Regulations (C.F.R.) 141
- Clean Air Act, 42 U.S. Code 85
- Clean Water Act, 40 C.F.R. Part 122-125
- Porter-Cologne Water Quality Control Act, Division 7 of the California Water Code
- California Regulations Related to Drinking Water, Title 22 California Code of Regulations (C.C.R.) § 64444
- California Hazardous Waste Control Regulations, Title 22 C.C.R., Division 4.5
- State Water Resources Control Board Resolution 68-16
- Water Quality Control Plan for the San Francisco Bay Basin
- Bay Area Quality Management District, Reg 8, Rule 47
- Bay Area Quality Management District, Reg 8, Rule 40
- EPA's Office of Solid Waste and Emergency Response dir. 9355.0-28

Appendix E: Institutional Control Assessment

No institutional controls were mandated by the original 1990 ROD or by the RWQCB Order 90-119, and the RAO of the ROD was to restore the groundwater to its beneficial use.

However, deed restrictions were filed subsequent to the ROD and RWQCB order, and these remain in place for both the former Intersil and former Siemens properties. In 2005, General Electric recorded a deed restriction that limited the future use of the former Intersil property. The property cannot be used for residential development, hospitals, schools, or day cares, and no excavation can occur on the property.

Similarly, in 2010 Siemens recorded a deed restriction for the former Siemens portion of the Site with virtually the same restrictions and limitations as the former Intersil property.

Table E-1. Institutional Control Summary Table – Former Intersil Property

Media	Impacted Parcel(s)	Institutional Control Objective	Instrument in Place	Notes
Ground water	Portions of 3 parcels as described in Exhibit A of the 2005 Covenant and Environmental Restriction	Prevent exposure to groundwater contaminants through direct contact or ingestion	Covenant and Environmental Restriction on Property, Article III Section 3.1.i: Prohibits use of groundwater with exception of for existing monitoring or remediation	On property only
Indoor Air		Prevent exposure to soil vapor through indoor air vapor intrusion	Covenant and Environmental Restriction on Property, Article III Section 3.1.g: Prohibits construction of new buildings without evaluating for vapor intrusion and taking mitigation measures as needed	
Soil		Prevent exposure to soil contaminants through direct contact or ingestion	Covenant and Environmental Restriction on Property, Article III Section 3.1.f: Prohibits soil excavation without notifying the Regional Water Board	

Table E-2. Institutional Control Summary Table – Former Siemens Property

Media	Impacted Parcel(s)	Institutional Control Objective	Instrument in Place	Notes
Ground water	Portions of 2 parcels as described in Exhibit A of the 2009 Covenant and Environmental Restriction	Prevent exposure to groundwater contaminants through direct contact or ingestion	Covenant and Environmental Restriction on Property, Article III Section 3.1.h: Prohibits use of groundwater with exception of for existing monitoring or remediation	On property only
Indoor Air		Prevent exposure to soil vapor through indoor air vapor intrusion	Covenant and Environmental Restriction on Property, Article III Section 3.1.f(2): Prohibits construction of new buildings without evaluating for vapor intrusion and taking mitigation measures as needed	
Soil		Prevent exposure to soil contaminants through direct contact or ingestion	Covenant and Environmental Restriction on Property, Article III Section 3.1.f(1): Prohibits soil excavation without notifying the Regional Water Board	

Appendix F: Public Notice

The Cupertino Courier
c/o Bay Area News Group
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I am a citizen of the United States. I am over the age of eighteen years and I am not a party to or interested in the above entitled matter. I am the Legal Advertising Clerk of the printer and publisher of the Cupertino Courier, a newspaper published in the English language in the City of Cupertino, County of Santa Clara, State of California.

I declare that the Cupertino Courier is a newspaper of general circulation as defined by the laws of the State of California as determined by court decree dated November 13, 1956, Case Number 100637. Said decree states that the Cupertino Courier is adjudged to be a newspaper of general circulation for the City of Cupertino, County of Santa Clara and State of California. Said order has not been revoked.

I declare that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

03/13/2020

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated: March 13, 2020

Public Notice Advertising Clerk

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PUBLIC NOTICE

U.S. EPA BEGINS FIVE-YEAR REVIEW OF INTERSIL INC./SIEMENS COMPONENTS SUPERFUND SITE CLEANUP

The CalEPA California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) and the U.S. Environmental Protection Agency (EPA) began the sixth Five-Year Review of cleanup actions completed at the Intersil Inc./Siemens Components Superfund site (site) located in Cupertino, CA. The review evaluates whether cleanup work at the site continues to protect human health and the environment.

The site includes two properties at 10900 and 10950 North Tantau Avenue and a groundwater plume that extends to the north. From 1967 to 1995 the two properties were used for semiconductor manufacturing. The semiconductor manufacturing involved the use of various chemicals, which were released to soil and groundwater from localized spills and from leaking underground storage tanks and piping.

Five-Year Review Process:
According to the Superfund law, if a cleanup takes more than five years to complete or hazardous wastes remain on the site, the cleanup will be reviewed every five years. The last Five-Year Review, completed in 2015, found the remedy for the site still protected human health and the environment. It also had a recommendation to improve the performance of the remedy and to improve EPA's understanding of the movement of the contaminated groundwater plume.

The 2020 Five-Year Review report will be finished no later than September 30, 2020 and will be available online and at the information repositories listed below. The Five-Year Review process continues every five years until the site has been cleaned up to allow unrestricted use. The next Five-Year Review will be done in 2025.

As part of the review, the Regional Water Board and EPA will review:
- the movement and breakdown of remaining chemicals at the site;
- the operation of the groundwater treatment systems;
- the application and monitoring of the deed restrictions; and
- the changes in scientific knowledge about the site contaminants.

Cleanup Plan (Remedy):
In the 1980s the Regional Water Board's underground storage tank leak detection program found contamination in the soil on- and off-site. The primary site contaminant of concern is trichloroethene (TCE), which was used as a degreasing solvent. The cleanup included the removal of all tanks and structures and contaminated soils, installation of a subsurface vapor extraction network system to remove TCE vapors from soil, and the operation of a groundwater extraction system with a granular activated carbon filtration system to remove and treat contaminated groundwater. The treated groundwater is discharged under a Regional Water Board permit to Calabazas Creek.

How to Get Involved:
The Regional Water Board and EPA are interested in hearing from the public through interviews how the cleanup has been working. Please contact Roger Papler, Regional Water Board project manager, at roger.papler@waterboards.ca.gov or 510-622-2435. You may also contact Michael Schulman, EPA project manager, at schulman.michael@epa.gov or 415-972-3064. Please contact either Mr. Papler or Mr. Schulman **no later than April 30, 2020**.

For a copy of reports and other site documents, please visit the Regional Water Board's website at https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL721101218 (Siemens site) and https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL720641214 (Intersil Inc. site). From each site link, then click on the tab "Site Maps / Documents", and then scroll down to the section: "Site Documents". You can also visit EPA's webpage at http://www.epa.gov/superfund/intersil-siemens. An information repository that contains the site's Administrative Records, project reports, documents, fact sheets and other reference material is located at:

Sunnyvale Public Library
665 West Olive Avenue
Sunnyvale, CA 94086
(408) 730-7300

San Francisco Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
(510) 622-2300

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Appendix G: Interview Forms

Site: Former Intersil Facility

EPA ID No: CAC001245344

Interview Type: Email

Location of Visit: N/A

Date: March 4, 2020

Time: N/A

Interviewers

Name	Title	Organization
Benino Mckenna	Geologist	U.S. Army Corps of Engineers
Roger Papler	Engineering Geologist	California Environmental Protection Agency San Francisco Regional Water Quality Control Board
Michael Schulman	NA	U.S. Environmental Protection Agency

Interviewees

Name	Organization	Title	Telephone	Email
Grey Melgard	Wood PLC	Tech. Professional II	510-388-2984	grace.melgard@woodplc.com
Harold Rush	Wood PLC	Associate Engineer	510-663-4234	harold.rush@woodplc.com
Frank Szerdy	Wood PLC	Principal Engineer	510-663-4113	frank.szerdy@woodplc.om

Summary of Conversation

What is your overall impression of the project?

The former Intersil facility (Site) groundwater extraction and treatment system (GWETS) has been operating since November 1987 and is functioning as designed and continues to provide hydraulic containment and some mass removal of VOC-impacted groundwater.

Is the remedy functioning as expected? How well is the remedy performing?

Yes, the remedy is functioning as expected and as designed. The GWETS removed an estimated 8.41 pounds of VOCs in 2019 with an extracted groundwater volume of 15.9 million gallons.

What does the monitoring data show? Are there any trends that show contaminant levels are decreasing?

Yearly average TCE concentrations in wells W12A and W18B have decreased over 90% since system start up, from approximately 300 µg/L to 20 µg/L as described in the annual self-monitoring report for 2019. More information regarding decreasing concentrations of COCs in extraction and monitoring wells can be found in the historic annual groundwater and semiannual GETS reports.

Is there a continuous O&M presence? If so, please describe staff and activities. If there is not a continuous on-site presence, describe staff and frequency of site inspections and activities.

There is no continuous on-site O&M presence, but the site is remotely monitored with an alarm notification system to engineers and technicians and alarms are responded to promptly. On-site visits are conducted on a biweekly basis. The system uptime has exceeded 99 percent on an annual basis.

Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines in the last five years? If so, do they affect protectiveness of the remedy? Please describe changes and impacts.

There have not been any significant changes in the O&M requirements for the site in the last 5 years. In order to renew the permitted monitoring exemptions for the Site under the old National Pollution Discharge Elimination System permit [(NPDES Permit) Order R2-2012-0012], additional sampling for influent containments was conducted at the beginning of 2019. All results from these additional samples were non-detect and the monitoring exemptions were reinstated for the new NPDES Permit [Order R2-2017-0048] for the Site. Monthly sampling for the effluent stream now includes volatile organic compounds (VOCs), turbidity, and total dissolved solids (TDS).

What are the annual operating costs for your organization's involvement with the site?

The 2019 annual operating and monitoring costs were approximately $300,000.

Have there been unexpected O&M difficulties or costs at the site in the last five years? If so, please give details.

There have not been any unexpected O&M difficulties or costs at the site.

Have there been opportunities to optimize O&M or sampling efforts? Please describe changes and resultant or desired cost savings or improved efficiency.

Following the approval of influent monitoring exemptions for the Site under the new NPDES Permit [Order R2-2017-0048], there is an expected estimated $15,000 in annual savings. These savings include laboratory analytical costs, on-site labor charges for sample collection, and off-site labor for monthly data validation and QA/QC evaluation activities.

Intersil conducted groundwater quality investigations of the property from 1983 through 1988, which included the installation and sampling of groundwater monitoring wells. Under the 1990 Water Board Site Cleanup Requirements (SCR) and Record of Decision (ROD), quarterly and semiannual groundwater monitoring was required. The sampling frequency was amended in 1993 to semiannual and annual monitoring and again in 2000 to annual and biennial sampling. No changes to sampling frequency have been made in the last five years.

Are you aware of any changes in Federal/State/County/Local laws and regulations that may impact the protectiveness of the remedy?

Wood is not aware of any changes in applicable laws and regulations that would impact the protectiveness of the remedy.

Do you have any comments, suggestions, or recommendations regarding the project?

Since 1986, site remediation has consisted of:

1. A soil vapor extraction (SVE) system operated from May 1988 to August 1993, when it was decommissioned with Water Board approval. The SVE system removed approximately 3,000 pounds of VOCs, based on the findings described in the May 1993 *Proposal to Curtail Soil Vapor Extraction* prepared by Geomatrix Consultants, Inc.
2. Groundwater extraction and treatment has removed approximately 600 pounds of VOCs since system startup and achieved significant reduction in VOC concentrations. Over time, the influent concentrations and mass removal rates have decreased significantly. To provide for a more sustainable remediation approach, we recommend assessing if cessation of the extraction and treatment system and changing the remedy to monitored natural attenuation would also be protective of human health and the environment.

Five-Year Review Interview Record

Site:	Former Siemens Facility	**EPA ID No.:**	CAD053236212
Interview Type:	Email		
Location of Visit:	Cupertino, California (6 February 2020)		
Date:	10-Mar-20		
Time:	N/A		

Interviewers

Name	Title	Organization
Benino McKenna	Geologist	US Army Corp of Engineers
Roger Papler	Engineering Geologist	San Francisco Regional Water Quality Control Board
Michael Schulman	Remedial Project Manager	US Environmental Protection Agency - Region 9

Interviewees

Name	Organization	Title	Telephone	Email
Matt Scheeline	ERM	Senior Geologist	916-396-8528	Matt.Scheeline@erm.com
Heather Balfour	ERM	Principal Engineer	916-296-5132	Heather.Balfour@erm.com

Summary of Conversation

1) What is your overall impression of the project?

The former Siemens facility (Site) groundwater extraction and treatment (GWET) system has been operating since 1986, is functioning as designed, and continues to provide hydraulic containment and mass removal of VOC-impacted groundwater.

2) Is the remedy functioning as expected? How well is the remedy performing?

Yes, the remedy is functioning as expected and as designed. The GWET system removed an estimated 31.4 pounds of VOCs in 2019 with an extracted groundwater volume of 48 million gallons (from the former Siemens facility and the Intersil/Siemens Off-Site Study Area).

3) What does the monitoring data show? Are there any trends that show contaminant levels are decreasing?

Monitoring data for TCE concentrations (the primary COC monitored for the site) indicated a stable or decreasing trend for the majority of wells in 2019. More information regarding concentrations of COCs in extraction and monitoring wells is presented in the annual groundwater and semiannual NPDES reports.

4) Is there a continuous O&M presence? If so, please describe staff and activities. If there is not a continuous on-site presence, describe staff and frequency of site inspections and activities.

There is no continuous on-site O&M presence, but the site is remotely monitored with an alarm notification system to engineers and technicians, and alarms are responded to promptly. On-site visits are typically conducted on a weekly basis. The system uptime is typically approximately 99 percent on an annual basis in recent years.

5) Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines in the last 5 years? If so, do they affect protectiveness of the remedy? Please describe changes and impacts.

A new National Pollution Discharge Elimination System (NPDES) permit (General Waste Discharge Requirements for the Discharge or Reclamation of Extracted and Treated Groundwater Resulting from the Cleanup of Groundwater Polluted by Volatile Organic Compounds, Fuel Leaks, Fuel Additives, and Other Related Wastes [VOC and Fuel General Permit] under Order No. R2-2017-0050, NPDES No. CAG912002, which was adopted by the RWQCB on 14 November 2018) became effective on 1 January 2019 and is an amendment of VOC and Fuel General Permit Order R2-2017-0048, which was adopted by the RWQCB on 13 December 2017. Additional sampling for influent contaminants applies. The protectiveness of the remedy is not affected, and NPDES Reports are submitted to RWQCB semiannually.

A new totalizer was installed in November 2018. The totalizer is remote-accessible and provides real-time system flow data. Additional activities include installation of an HMI, replacement of failing equipment (e.g., extraction pumps, transfer pump), and redevelopment of several extraction wells. This has increased the system runtime in recent years.

6) What are the annual operating costs for the organization's involvement with the site?

The 2019 annual operating and monitoring costs were approximately $630,000.

7) Have there been unexpected O&M difficulties or costs at the site in the last 5 years? If so, please give details.

The GWET system consists of two 5,000-pound carbon vessels in series. The vessels were upgraded/replaced in December 2014 (lead vessel) and June 2015 (other vessel). Various other upgrades (extraction well redevelopment) and replacement activities (transfer pump, extraction well pumps) have taken place over the past 5 years.

8) Have there been opportunities to optimize O&M or sampling efforts? Please describe changes and resultant or desired cost savings or improved efficiency.

Siemens is in the process of optimizing the site remedy and has conducted several phases of pilot testing (using EHC in the NE portion of the site where the GWET system has reduced effectiveness in the shallow zones). Several extraction wells are temporarily shut down while pilot testing is ongoing.

9) Are you aware of any changes in Federal/State/County/Local laws and regulations that may impact the protectiveness of the remedy?

ERM is not aware of any changes in applicable laws and regulations that would impact the protectiveness of the remedy.

10) Do you have any comments, suggestions, or recommendations regarding the project?
Groundwater extraction and treatment has removed over 3,700 pounds of VOCs since system startup and achieved significant reduction in VOC concentrations. Over time, the influent concentrations and mass removal rates have decreased. To provide for a more sustainable remediation approach, we recommend assessing if cessation of the extraction and treatment system and changing the remedy to monitored natural attenuation would also be protective of human health and the environment.
Additional Site-Specific Questions

Appendix H: Site Inspection Report and Photos

Trip Report
Intersil-Siemens Superfund Site, Cupertino, California

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1. INTRODUCTION

a. Date of Visit: 6 February 2020

b. Location: Cupertino, California

c. Purpose: A site visit was conducted to visually inspect and document the conditions of the remedy, the site, and the surrounding area for inclusion into the Five-Year Review Report.

d. Participants: *List all attendees*

Michael Schulman	USEPA Region 9 Remedial Project Manager (RPM)	(415) 972-3064
Roger Papler	California Regional Water Quality Control Board	(510) 622-2435
Benino McKenna	USACE Seattle District Hydrogeologist	(206) 764-3803
Matt Schoeline	ERM, Project Manager	(916) 999-8939
Harold Rush	Wood Group, Project Manager	(510) 663-4234
Grey Melgard	Wood Group, System Engineer	(510) 663-4192

2. SUMMARY

A site visit to the combined Intersil-Siemens Superfund Site was conducted on 6 February 2020. All participants met on site for preliminary briefings and health and safety check in. The Intersil site is currently comprised of commercial business office buildings and customer parking. The Siemens site is currently comprised of a hospital building and customer parking. The Off property study area consists of a residential neighborhood north of the sites. The Active groundwater extraction and remediation is currently being conducted on all sites. Participants toured the site and observed the remediation compounds, groundwater treatment systems and extraction well networks.

3. DISCUSSION

On 3 February, Ben McKenna flew to San Jose, California to meet with multiple parties for five Year Review Site Visits at multiple sites. On 6 February Ben McKenna met the Intersil-Siemens participants at the site. The weather was sunny and cool (temperature approximately 58° F). The site is accessed from Interstate 280 West and North Wolfe Road and is located approximately 6.5 miles west of downtown San Jose.

Mr. McKenna arrived at the site at 1030 and did a preliminary walk around the site to note the locations of the remediation compounds and existing wells in the parking lots. The other participants arrived at 1100 and met at the Intersil remediation compound. USEPA gave an overview of the objectives of the site visit and the representing consultants provided a health and safety briefing.

After the briefing the team proceeded to inspect the Intersil groundwater extraction and treatment (GWET) system. Extracted groundwater is passed through a bag filtration unit and then treated via two granular activated carbon (GAC) vessels. Treated groundwater is then discharged to

Calabazas Creek under an existing National Pollutant Discharge Elimination System (NPDES) permit. All components of the GWET system were operational and appeared in good condition. After viewing the Intersil GWET system the participants proceeded to inspect the onsite groundwater extraction well network. All existing wells were secured, locked and in good condition.

After inspecting the remedy components for the Intersil Site the participants proceeded to inspect the Siemens GWET system. Extracted groundwater is passed through two 50-micron bag filtration units and then treated via two GAC vessels. Treated groundwater is then discharged to Calabazas Creek under an existing NPDES permit. All components of the GWET system were operational and appeared in good condition. Minor corrosion was noted on the bag filtration units. After viewing the Siemens GWET system the participants proceeded to inspect the onsite groundwater extraction well network. All existing wells were secured, locked and in good condition.

After inspecting the Siemens extraction well network participants walked to the adjacent Off Site Study Area to document the extraction wells for this area. Extraction wells installed along Lorne Way for the Off Site Study Area supply groundwater to the Siemens GWET system. Participants viewed extraction well LR-1B and all observable components appeared in good condition.

After viewing the Off Site Study Area the site inspection was concluded and the representing consultants left the site by 1330. USACE, EPA and Regional Water Board participants elected to remain at the site for additional discussions.

4. ACTIONS

The USACE will incorporate information obtained from the site visit into the Five Year Review report.

Benino McKenna, P.G.
Geologist/Hydrogeologist
CENWS-ENT-G

Trip Report
Intersil-Siemens FYR

	
Intersil GWET Compound	Intersil GWET Influent & Effluent Manifolds
	
Intersil GWET Influent Bag Filtration Unit	Intersil GWET GAC Vessels

Trip Report
Intersil-Siemens FYR 3

	
Intersil Extraction Well 12A	Intersil Extraction Well 12A Interior
	
Siemens Remediation Compound	Siemens GWET Bag Filtration Units
	
Siemens GWET GAC Vessels	Siemens GWET Influent Sample Port

Trip Report
Intersil-Siemens FYR 4

	
Siemens GWET System Control Panel	Siemens Extraction Well LF-12A
	
Siemens Extraction Well LF-12A Detail	Siemens Extraction Well LR-1B (Off Site Study Area)

Prepared for:

SMI Holding LLC

General Electric Company

Annual Self-Monitoring Report – 1 January through 31 December 2019

Intersil/Siemens Site
Cupertino, California

January 30, 2020

Project No.: 0373679.05SA

wood.

ERM

Lance M. Hauer, P.E.
Senior Project Manager –
Environmental Remediation

GE
Global Operations - EHS
412 Creamery Way
Exton, PA 19341

January 30, 2020

Project 0373679.05SA

Mr. Roger Papler
Water Resources Control Engineer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Subject: Annual Self-Monitoring Report, January 1 through December 31, 2019, Intersil/Siemens Site, Cupertino, California, Site Cleanup Requirements Order No. 90-119

Dear Mr. Papler:

Enclosed is a copy of the report titled "Annual Self-Monitoring Report, January 1 through December 31, 2019, Intersil/Siemens Site, Cupertino, California," dated January 30, 2020, and prepared by ERM-West, Inc. (ERM), and Wood Environment & Infrastructure, Inc. (Wood) on the joint behalf of SMI Holding LLC (SMI; formerly Siemens) and General Electric Company (GE; formerly Intersil, Inc.).

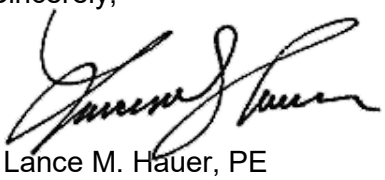
This self-monitoring report presents results of groundwater sampling activities conducted from January 1 through December 31, 2019 at the Intersil/Siemens Site, which is located in Cupertino, California. This annual report is for the following three areas: the former Intersil facility, the former Siemens facility, and the Off-Site Study Area. This report is submitted pursuant to the requirements of the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), Site Cleanup Requirements (SCR) Order No. 90-119, dated August 15, 1990, and amended by Order R2-2013-0002 on January 9, 2013. SMI performs sampling at the former Siemens facility; GE performs sampling at the former Intersil facility; and SMI and GE jointly perform monitoring activities conducted in the Off-Site Study Area.

Pursuant to the requirements of Section G.4 (a) of the SCR Self-Monitoring Program, GE and SMI note that no violations of the SCR occurred during this reporting period. The

groundwater treatment system was shut down for approximately two (2) days during the annual reporting period. These shutdowns were necessary to perform equipment adjustments, conduct analytical testing, optimize the efficiency and operation of the systems, change carbon vessels, replace system totalizers, and repair extraction well vaults.

We certify under penalty of law that this document and all attachments are prepared under our direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on our inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Lance M. Hauer, PE
Senior Project Manager
GE Global Operations – EHS

Enclosure

cc: Rick Miller, City of Sunnyvale (rmiller@ci.sunnyvale.ca.us)
Michael Schulman, U.S. EPA (schulman.michael@epa.gov)
Robin Saunders, City of Santa Clara (rsaunders@ci.santa-clara.ca.us)
Lance M. Hauer, GE (lance.hauer@ge.com)
Harold C. Rush, Wood (harold.rush@woodplc.com)
David Allbut, Wood (david.allbut@woodplc.com)
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Steven Pierce, Stantec (Steven.Pierce@stantec.com)
Heather Balfour, ERM (heather.balfour@erm.com)
Matt Scheeline, ERM (matt.scheeline@erm.com)

SIEMENS

January 30, 2020

Project 0373679.05SA

Mr. Roger Papler
Water Resources Control Engineer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Subject: Annual Self-Monitoring Report, January 1 through December 31, 2019, Intersil/Siemens Site, Cupertino, California, Site Cleanup Requirements Order No. 90-119

Dear Mr. Papler:

Enclosed is a copy of the report titled "Annual Self-Monitoring Report, January 1 through December 31, 2019, Intersil/Siemens Site, Cupertino, California," dated January 30, 2020, and prepared by ERM-West, Inc. (ERM), and Wood Environment & Infrastructure, Inc. (Wood) on the joint behalf of SMI Holding LLC (SMI; formerly Siemens) and General Electric Company (GE; formerly Intersil, Inc.).

This self-monitoring report presents results of groundwater sampling activities conducted from January 1 through December 31, 2019 at the Intersil/Siemens Site, which is located in Cupertino, California. This annual report is for the following three areas: the former Intersil facility, the former Siemens facility, and the Off-Site Study Area. This report is submitted pursuant to the requirements of the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), Site Cleanup Requirements (SCR) Order No. 90-119, dated August 15, 1990, and amended by Order R2-2013-0002 on January 9, 2013. SMI performs sampling at the former Siemens facility; GE performs sampling at the former Intersil facility; and SMI and GE jointly perform monitoring activities conducted in the Off-Site Study Area.

Pursuant to the requirements of Section G.4 (a) of the SCR Self-Monitoring Program, GE and SMI note that no violations of the SCR occurred during this reporting period. Throughout the annual reporting period, the groundwater treatment systems were shut down for a period of approximately 22 days. These shutdowns were necessary to perform equipment adjustments, testing, and modifications to improve the efficiency and operation of the systems, change carbon vessels, replace system totalizers, and to repair extraction well vaults.

We certify under penalty of law that this document and all attachments are prepared under our direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on our inquiry of

Siemens Corporation

527 Madison Avenue
8th Floor
New York, NY 10022-4376

the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

O'Connor Susan

Digitally signed by O'Connor Susan
DN: cn=O'Connor Susan, o=Siemens, email=sue.oconnor@siemens.com
Date: 2020.01.21 14:03:17 -05'00'

Kenneth Meyers
President, SMI Holding LLC

Susan R. O'Connor
Vice President, SMI Holding LLC

Enclosure

cc: Rick Miller, City of Sunnyvale (rmiller@ci.sunnyvale.ca.us)
Michael Schulman, U.S. EPA (schulman.michael@epa.gov)
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Heather Balfour, ERM (heather.balfour@erm.com)
Matt Scheeline, ERM (matt.scheeline@erm.com)

Annual Self-Monitoring Report – 1 January through 31 December 2019

Intersil/Siemens Site
Cupertino, California

CERTIFICATIONS

Hydrogeologic and geologic information, conclusions, and recommendations in Sections 3 and 4 of this document have been prepared by ERM under the supervision of and reviewed by a California Professional Geologist and Professional Engineer.

Matthew A. Scheeline, PG
Project Manager
ERM
California Professional Geologist (8987)

January 30, 2020
Date

Heather D. Balfour, PE
Principal in Charge
ERM
California Professional Engineer (64854)

January 30, 2020
Date

The hydrogeologic and geologic information, conclusions, and recommendations in Section 2 of this document have been prepared by Wood Environment & Infrastructure Solutions, Inc., under the supervision of a Professional Engineer registered in the State of California whose seal and signature appears hereon. The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.

Frank S. Szerdy, PhD, PE
Principal Engineer
Wood Environment & Infrastructure Solutions, Inc.
California Professional Engineer (43037)

January 30, 2020
Date

CONTENTS

List of Figures

List of Tables

Acronyms and Abbreviations

µg/L	micrograms per liter
AMEC	AMEC Environment & Infrastructure, Inc.
bgs	below ground surface
DCE	dichloroethene
ERM	ERM-West, Inc.
ERD	enhanced reductive dechlorination
FID	flame ionization detector
GE	General Electric Company
Geomatrix	Geomatrix Consultants, Inc.
gpm	gallons per minute
GWETS	Groundwater extraction and treatment system
Intersil	Intersil, Inc.
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LFR	LFR, Inc.
MCL	Maximum Contaminant Level
MiHPT	membrane interface probe and hydraulic profiling tool
NMR	Nuclear Magnetic Resonance
NPDES	National Pollutant Discharge Elimination System
PFM	Passive Flux Meter
PID	photoionization detector
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RPD	relative percent difference
SCR	Site Cleanup Requirements
Siemens	Siemens Components, Inc.
SMI	SMI Holding, LLC
SVE	Soil vapor extraction
TCE	trichloroethene
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound
XSD	halogen specific detector
Water Board	California Regional Water Quality Control Board, San Francisco Bay Region
Wood E&IS	Wood Environment & Infrastructure Solutions, Inc.

1. INTRODUCTION

This *Annual Self-Monitoring Report* has been prepared for the Intersil/Siemens site by ERM-West, Inc. (ERM) and Wood Environment and Infrastructure Solutions, Inc. (Wood E&IS) on behalf of SMI Holding LLC (SMI) and General Electric Company (GE). This annual report is for the following three areas in Cupertino, California (Figure 1):

- The former Intersil, Inc. (Intersil) facility (Figure 2) at 10900 North Tantau Avenue
- The former Siemens Components, Inc. (Siemens) facility (Figure 3) at 19000 Homestead Road
- The Off-Site Study Area (Figure 4), north of and hydraulically downgradient from the two former facilities

This report presents annual self-monitoring results for 1 January through 31 December 2019 (the reporting period) in accordance with the Site Cleanup Requirements (SCR) Order No. 90-119 issued by the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board) to Siemens Components, Inc. (now SMI), Intersil (now GE), and Vallco Park, Ltd., on 15 August 1990, and amended by Order R2-2013-0002 on 9 January 2013. Order 90-119 was amended by Order R2-2013-0002 and is referred to herein as the SCR.

The current sampling schedule (Table 1) was approved by the Water Board in a letter dated 20 December 2000 (2000b). The schedule was subsequently modified as follows:

- Include off-site extraction wells LQ-2B and LR-1B in the semiannual sampling event conducted in April of each year, and exclude wells W2A, W3A, W13A, and W6B at the former Intersil facility after they were destroyed with Water Board approval on 27 July 2007.
- Include the 10 monitoring wells installed in the Off-Site Study Area in August 2014. These wells were sampled semiannually following installation in October 2014. However, with Water Board approval in emails dated 13 April 2017 and 5 April 2018, the sampling frequency of these wells was reduced to annual, with the exception of wells MW-OS-1A1, MW-OS-2A1, and MW-OS-5A3, for which sampling will continue semiannually.
- Include the 13 monitoring wells installed in 2014 and 2016 at the former Siemens facility to support ongoing characterization and pilot study activities. As stated in the previous Annual Self-Monitoring Report, these wells are sampled annually.
- Include 12 new monitoring wells installed in January/February 2019 within Forge Drive (7), Tantau Avenue (2), and on the former AMI site (3). These wells are currently sampled semiannually.

As required by the SCR, this report contains the following information for this annual sampling period:

- Summary of the activities performed to comply with the SCR
- Quarterly groundwater level data for wells on the former Intersil (Section 2) and Siemens (Section 3) facilities, and the Intersil/Siemens Off-Site Study Area (Section 4)
- Sampling and chemical analysis data from groundwater monitoring wells designated for sampling at the former Intersil (Section 2) and Siemens (Section 3) facilities, and the Intersil/Siemens Off-Site Study Area (Section 4)
- Summary of the treatment system quarterly groundwater extraction rate, total volume extracted, and mass removed for the former Intersil (Section 2) and Siemens (Section 3) facilities, and the Intersil/Siemens Off-Site Study Area (Section 4)

- Annual compliance summaries for the former Intersil (Section 2) and Siemens (Section 3) facilities, and the Intersil/Siemens Off-Site Study Area (Section 4)
- Quarterly potentiometric surface maps of the A1, A3, and A4 depth intervals; B zone; and C zone

Historically, the shallow saturated sediments at the site were divided into three water-yielding zones: the A zone (from the top of the groundwater table to 120 feet below ground surface [bgs]), the B zone (from approximately 130 to 150 feet bgs), and the C zone (from approximately 180 to 210 feet bgs). Regional groundwater elevations rose approximately 50 to 55 feet between 1993 and 1998 from a historical depth of approximately 100 feet bgs. Based on recent water level measurements in monitoring wells screened across the water table, groundwater is first encountered beneath the site at depths ranging from approximately 40 to 74 feet bgs.

Because water levels rose approximately 50 feet during the 1990s, the A zone was further subdivided into A1, A2, A3, and A4 depth intervals. Former vadose zone wells that became saturated are now designated as A1, A2, or A3 depth interval wells based on the depths of their screened intervals. The depth ranges for the A1, A2, A3, and A4 depth intervals at the former Intersil and Siemens facilities are shown below:

Depth Interval	Former Intersil Facility Approximate Depth (feet bgs)	Former Siemens Facility Approximate Depth (feet bgs)
A1 depth interval	38 to 56	40 to 60
A2 depth interval	58 or 60 to 69	58 or 60 to 70
A3 depth interval	69 or 74 to 80 or 90	70 or 74 to 90
A4 depth interval	80 or 90 to 125	90 to125

Groundwater levels have decreased significantly over the last several years. From 2011 to 2016, several A1 through A3 depth interval wells became dry, and water levels decreased approximately 17 feet in the A4 depth interval, 10 feet in the B zone, and 12 feet in the C zone. In 2018 and 2019, water levels increased approximately 3 feet in the A1 depth interval, 2 feet in the A3 zone, 6 feet in the A4 depth interval, 7 feet in the B zone, and 10 feet in the C zone relative to 2017.

2. FORMER INTERSIL FACILITY

Tantau Cupertino Development One LLC currently owns the former Intersil facility property; however, GE retains responsibility for operation and maintenance of the groundwater extraction and treatment system (GWETS).

A soil vapor extraction (SVE) system operated at the former Intersil facility from May 1988 to August 1993. Following review of soil data collected to confirm that the system had achieved remedial objectives, the Water Board approved shutdown. The system consisted of seven vapor extraction wells and eight vent wells. The SVE system removed approximately 3,000 pounds of volatile organic compounds (VOCs) from the vadose zone, which at that time extended to approximately 100 feet bgs.

2.1 Groundwater Monitoring

Wood E&IS and subcontractor Blaine Tech Services, Inc., performed the annual groundwater sampling and collected water level measurements on 1 and 3 October 2019. Locations of monitoring and extraction wells at 10900 North Tantau Avenue are shown on Figure 2.

2.1.1 Groundwater-Level Measurements

Groundwater levels were measured with an electric sounder in January, April, July, and October (Table 2), in wells at the former Intersil facility (Figure 2), in accordance with the Sampling Plan (Geomatrix Consultants Inc. [Geomatrix] 1994a).

Figures 6, 11, 16, and 21 show the groundwater potentiometric surface of the A3 depth interval, for January, April, July, and October, respectively. These figures also illustrate the estimated extent of hydraulic containment (capture zone) in the A3 depth interval provided by on-site extraction wells. Figures 7, 12, 17, and 22 show the groundwater potentiometric surface of the A4 depth interval, for January, April, July, and October, respectively. These figures also illustrate the estimated extent of hydraulic containment (capture zone) in the A4 depth interval provided by on-site extraction wells. Figures 8, 13, 18, and 23 show the groundwater potentiometric surface of the B zone beneath the former Intersil facility for January, April, July, and October, respectively. Groundwater potentiometric contours were drawn based on interpolation of groundwater levels in the 22 on-site wells and piezometers and incorporate judgment based on the hydrogeologic setting. The groundwater potentiometric surfaces, contours, and capture zones in the A4 depth interval and B zone are consistent with historical observations.

2.1.2 Groundwater Sampling and Analysis

2.1.2.1 Sampling and Analysis

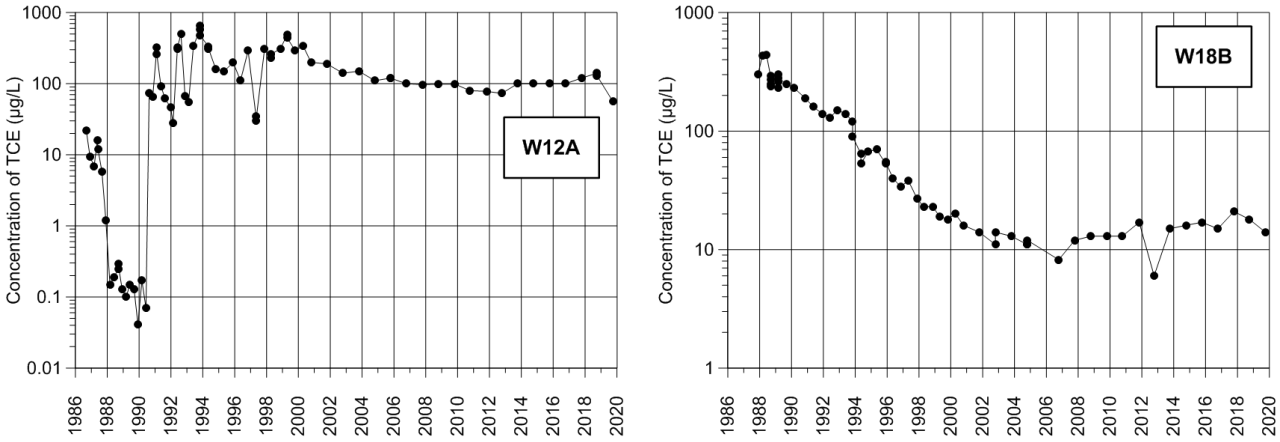
Annual samples shown in Table 3 were collected using HydraSleeves or from extraction well sample ports in accordance with the Sampling Plan and the Technical and Regulatory Guidance. HydraSleeves were initially installed in monitoring wells on 4 September 2014 and are replaced in the well during each sampling event. Groundwater samples were collected using sampling methods in accordance with *Standard Operating Procedure 2 – Groundwater Sampling Rev. 2* (Appendix A).

Eurofins TestAmerica of Pleasanton, California (TestAmerica), a state-certified laboratory, performed the analyses of groundwater samples in accordance with the specifications in the *Quality Assurance Project Plan* (QAPP; Geomatrix 1994b) prepared for the former Intersil facility. TestAmerica analyzed samples, blanks, and spikes in accordance with United States Environmental Protection Agency (USEPA) Method 8260B (8010 list) for purgeable VOCs.

2.1.2.2 Analytical Results

Table 3 presents results of the chemical analyses performed on the annual groundwater samples collected during October. Additional results are found in Appendix B. The primary VOC detected is trichloroethene (TCE). This year, the highest TCE concentrations detected were 160 micrograms per liter (µg/L) in W19MA in the A3 depth interval, 56 µg/L in extraction well W12A (a 97.3 percent reduction since extraction began) in the A4 depth interval, and 14 µg/L in well W18B in the B zone. Analytical results from these sampling rounds are consistent with historical trends, as shown below for wells W12A and W18B. Laboratory analytical reports are maintained with the project files.

TCE Concentration over Time in Wells W12A and W18B



TCE concentrations for the site are also shown on Figures 25 through 29 for the A1, A3, and A4 depth intervals and B and C zone groundwater. Isoconcentration contours are not shown for the C zone because there are insufficient sitewide data to draw contours.

2.1.2.3 Quality Assurance/Quality Control

Wood E&IS follows established procedures for quality assurance and quality control (QA/QC) at the former Intersil facility. Protocols followed by Wood E&IS, as well as by the analytical laboratory, are detailed in the former Intersil facility's *Sampling Plan* and QAPP (Geomatrix 1994a, b). These procedures are part of Wood E&IS's standard practice during hydrogeologic investigations and remedial action activities, and are followed to obtain data that are representative of field conditions. During the sampling event, trip blanks and duplicate samples were collected for QA/QC purposes.

Tables 4 and 5 summarize sampling and analytical QA/QC, respectively. The data generated meet the requirements of precision, accuracy, and completeness as described in the QAPP. No VOCs were detected in the field equipment and trip blanks for the sampling events. A detailed description of the protocol followed by the analytical laboratory to achieve the precision, accuracy, and completeness goals for analysis of samples collected by Wood E&IS is presented in the former Intersil facility's QAPP.

Data precision is estimated by comparing analytical results from duplicate samples and calculating the relative percent difference (RPD). Duplicate samples were generated by the laboratory and by Wood E&IS during the annual reporting period. The RPDs for all constituents meet the QA goal of plus or minus 25 percent.

Data accuracy is evaluated based on recoveries, expressed as the percent of the true or known concentration. Recoveries may be calculated from laboratory matrix spikes, matrix spike duplicates, and

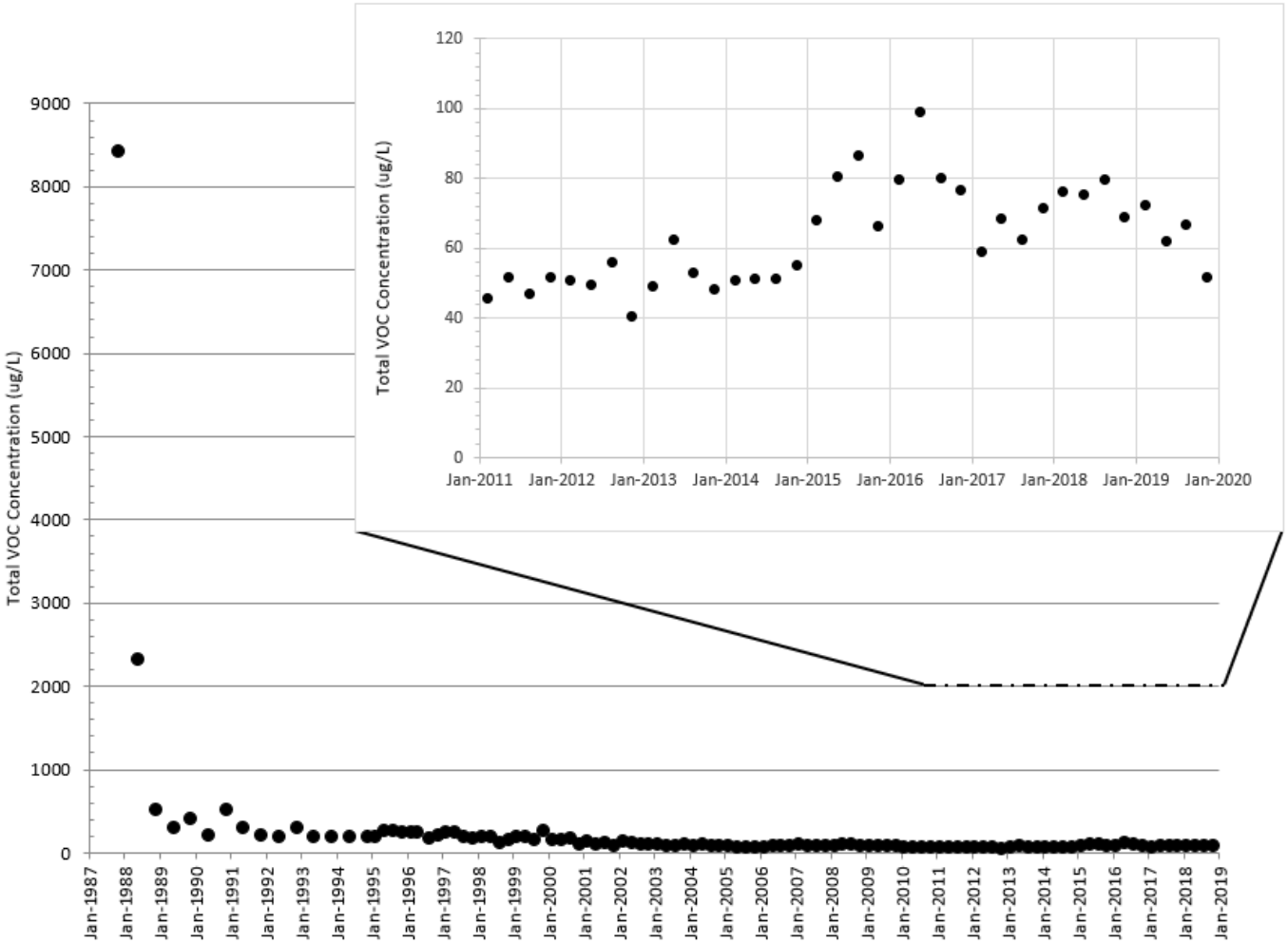
calibration standards generated as QA/QC samples by the analytical laboratory. The equation for calculating percent recovery is presented in the QAPP. The percent recovery of cis-1,2-dichloroethene (DCE) was above control limits in the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) from batch 720-274276. Detections of cis-1,2-DCE in wells E17A and W12A were qualified with J+ to indicate that the associated concentrations were approximate, biased high. The average percent recoveries from other analyses of spiked samples, using USEPA Method 8260B, for this annual period meet the current QA goal.

2.2 Groundwater Extraction and Treatment System Operation

The GWETS at the former Intersil facility has been operating since November 1987. The system currently includes extraction wells E9AR, W10A, W12A, and W18MA. A granular activated carbon treatment system replaced the former air stripping treatment system in 2007.

Average quarterly flow rates, total volume extracted, and estimates of chemical mass removed are presented in Table 6. During the annual reporting period, the total volume of groundwater pumped was approximately 16 million gallons (the average pumping rate was 31 gallons per minute [gpm]), and a total of approximately 8.41 pounds of VOCs were removed. As shown in the following graph, VOC influent concentrations have generally reached asymptotic conditions.

Total VOCs over Time in Treatment Plant Influent



During this annual reporting period, occasional shutdowns occurred for periods of less than 24 hours to perform equipment adjustments and design modifications to improve or maintain the efficiency and operation of the system. There were no unscheduled shutdowns during the reporting period.

Detailed information on the operation of the groundwater extraction system is presented in the semiannual National Pollutant Discharge Elimination System (NPDES) reports for the facility.

2.3 Additional Work Conducted During the Annual Reporting Period

During this reporting period, a carbon change out for two GAC vessels was performed on 30 September 2019. Additionally, the totalizer for E9AR was replaced on 17 December 2019.

3. FORMER SIEMENS FACILITY

SMI, as successor by merger to Siemens Microelectronics, Inc., sold the property to Tantau Investments, LLC, Partners in 2000. The property has been through multiple acquisitions since 2000. 19000 Homestead Associates, LLC, and Firewish 19000, LLC, are the current owners of the property, which they lease to Kaiser Permanente. SMI maintains the responsibility of implementing remedial actions at the former Siemens facility.

SMI and its predecessor operated an SVE system at the former Siemens facility beginning in 1983. The system was shut down on 16 December 2005 after removing approximately 17,310 pounds of VOCs from the vadose zone. A VOC rebound study conducted in 2006 showed no significant rebound in VOC concentrations compared to the baseline samples. With Water Board approval (Water Board 2005), the system was permanently shut off in August 2006 following the sampling for the rebound study.

3.1 Groundwater Monitoring

During the annual reporting period, SMI measured groundwater elevations and collected groundwater samples at the former Siemens facility, in compliance with the SCR and the schedule approved by the Water Board in a letter dated 20 December 2000 (Water Board 2000b; Table 1). Although not required by the 20 December 2000 Water Board letter, additional groundwater samples were collected from select A1 through A3 depth interval wells, in accordance with the schedule proposed in the *Annual Self-Monitoring Report, January 1 through December 31, 2000* (LFR 2001). Additional groundwater samples were also collected from:

- Select A1 and A3 well locations to support the Phase III Enhanced Reductive Dechlorination (ERD) Pilot Study. Samples were collected in March, May, July, and October 2019 as part of the ERD performance monitoring, and in May, July, and October 2019 to evaluate the status of mitigation measures conducted. ERD performance monitoring data is included in Appendix C.

3.1.1 Groundwater Level Measurements

Groundwater elevation levels in the extraction and monitoring wells and piezometers were measured with an electric water-level sounder quarterly on 14-16 January, 8 April, 8 July, and 1 October 2019 (Table 2) as part of the self-monitoring program. Locations of former Siemens facility groundwater monitoring wells and piezometers are shown on Figure 3.

From these data, a groundwater potentiometric surface map of the A1, A3, and A4 depth intervals, and B and C zones was constructed for each calendar quarter of 2019, as illustrated on Figures 5 through 24. Groundwater potentiometric contours were drawn by interpolating the groundwater levels between groundwater measurement locations and incorporated judgment that was based upon knowledge of the local hydrogeologic setting.

Figures 5 (January), 10 (April), 15 (July), and 20 (October) present the groundwater potentiometric surface for the A1 depth interval. A1 depth interval extraction well 2EP was offline during collection of water levels as part of the ERD Pilot Study. Figures 6 (January), 11 (April), 16 (July), and 21 (October) present the groundwater potentiometric surface for the A3 depth interval and the estimated zone of capture induced by the extraction from on-site extraction wells in the A3 depth interval: LF-12A, SW-7, and EX-1 RL. A3 depth interval extraction wells 2EPa and H-1A were offline during collection of water levels as part of the ERD Pilot Study.

Figures 7 (January), 12 (April), 17 (July), and 22 (October) present the groundwater potentiometric surface for the A4 depth interval and the estimated zone of capture induced by extraction from the on-site extraction well in the A4 depth interval well, LF-6A, and from the on-site extraction wells in other zones in

the area, LF-12A and H-5B. Figures 8 (January), 13 (April), 18 (July), and 23 (October) present the groundwater potentiometric surface for the B zone and estimated zone of capture induced by the extraction from the on-site B zone extraction well, H 5B. Figures 9 (January), 14 (April), 19 (July), and 24 (October) present the groundwater potentiometric surface for the C zone.

3.1.2 Groundwater Sampling and Analysis

3.1.2.1 Sampling and Analysis

Between 1 and 9 October 2019, groundwater samples were collected in accordance with the current sampling and analysis schedule (Table 1) from 47 wells located at the former Siemens facility. Samples were collected from all the wells on the schedule. Groundwater samples were also collected from additional former Siemens facility wells, as discussed in Section 3.3.

During this annual event, groundwater samples from the on-site monitoring wells were collected using either HydraSleeves or low-flow purging and sampling methods in accordance with *Standard Operating Procedure 2 – Groundwater Sampling Rev. 2* (Appendix A). HydraSleeves were deployed into the monitoring wells, allowed to equilibrate in each well for a minimum of 2 days, and retrieved on 2, 3, 4, and 9 October 2019. The samples collected to support the ERD Pilot Study were collected utilizing low-flow purge and sample methods. Groundwater samples from the active extraction wells were collected from the sampling port located at each wellhead.

All groundwater samples for the annual event and QA/QC samples were submitted to TestAmerica of Pleasanton, California, for purgeable VOC analyses, using USEPA Method 8260B (8010 list).

3.1.2.2 Analytical Results

Table 3 presents the results of VOC analysis of samples from groundwater monitoring wells at the former Siemens facility for the annual reporting period. The primary VOC detected in all groundwater zones at the former Siemens facility is TCE. The following VOCs that have historically been reported were also detected during the annual reporting period: 1,1,1-trichloroethane; 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113); 1,1-DCE; cis-1,2-DCE; tetrachloroethene; trans-1,2-DCE. In addition, the following VOCs were detected during the reporting period: 1,1-dichloroethane; 1,2-dichloroethane; 4-isopropyltoluene, acetone, benzene, 2-butanone; carbon disulfide; chloroethane; chloroform; dibromochloromethane; methyl ethyl ketone; toluene; and vinyl chloride.

Groundwater analytical results for the annual reporting period are generally similar to historical results or slightly lower within the A3 depth interval, A4 depth interval, and B zone. The concentrations within the A1 and A3 depth intervals continue to show a decrease in TCE, cis-1,2-DCE, and trans-1,2-DCE concentrations at most of the wells in the vicinity of the Phase III ERD Pilot Study. Further discussion regarding the results within the Phase III ERD Pilot Study Area is provided in Section 3.3. TCE concentrations for the site are shown on Figures 25 through 29 for the A1, A3, and A4 depth intervals, and B and C zone groundwater.

Toluene was detected in the May 2017 sample event at 780 µg/L in inactive extraction well 2EPa (A3 depth interval). Toluene was previously non-detect at this well. This was documented in the 2017 Annual Report with a notation that ERM would investigate the potential for a surface spill to have occurred in this area. The concentrations of toluene decreased at this well in subsequent sample events: August 2017 (530 µg/L), October 2017 (610 µg/L), March 2018 (25 µg/L), and October 2018 through October 2019 (non-detect). SMI will continue to monitor toluene concentrations at 2EPa and downgradient wells.

3.1.2.3 Quality Assurance/Quality Control

The quality of the October 2019 data was assessed following the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review*, January 2017. Data quality assessment for 2019 sampling events prior to the annual event were provided in separate documentation. Tables 7 and 8 present a QA/QC review of former Siemens facility groundwater sampling and analytical results for VOCs, and are provided in lieu of raw data such as field data sheets, laboratory data sheets, QA/QC data, and chain-of-custody forms. In accordance with the Water Board's letter dated 20 December 2000 (Water Board 2000b), this report does not include such raw data; however, these data are kept on file at ERM's office in Walnut Creek, California.

QA/QC measures were implemented for the purpose of maintaining data quality, and documenting data precision and accuracy. QA/QC procedures included collecting trip blank and sampling equipment rinsate blank samples. As presented in Table 7, the case narratives for some data reports described headspace as a bubble greater than 6 millimeters in diameter. Due to the headspace greater than that established in USEPA guidelines (2017), the non-detect results for these samples have been qualified as estimates (J-/UJ), and if samples did not agree or historical data were not available, the results were rejected (R). As noted in Table 8, several samples reported a pH greater than 2 for VOC analysis; however, no qualifications were necessary. As noted in Table 8, several samples were analyzed outside the 7-day holding time. Where results were in agreement with historical data, the samples were qualified as estimated (J-/UJ).

The quality of all data generated during this investigation are acceptable for the preparation of technically defensible documents.

3.2 Groundwater Extraction and Treatment System Operation

SMI and its predecessor have operated a GWETS at the former Siemens facility since July 1986. The GWETS treats groundwater from extraction wells at the former Siemens facility. Since 20 July 1990, the GWETS has also treated groundwater from extraction wells in the Intersil/Siemens Off-Site Study Area, which are the joint responsibility of SMI and GE. The operation of Off-Site Study Area groundwater extraction wells is also discussed in Section 4.2. Between 1986 and 2002, the primary treatment method was air stripping with two towers in series. In March 2002, four 2,000-pound carbon vessels were installed in place of the air stripping towers. The GWETS was upgraded in February 2004 to replace the existing carbon vessels with two 5,000-pound carbon vessels in series. In December 2014, the lead carbon vessel was replaced, followed by replacement of the other carbon vessel in June 2015.

Figure 3 shows locations of former Siemens facility groundwater extraction wells and groundwater treatment facilities. The groundwater extraction wells located at the former Siemens facility are wells 2EP, 2EPa, LF-6A, H-5B, LF-12A, SW-7, EX-1-RL, and H-1A, with the following notes:

- 2EP (A1 depth interval extraction well) has been offline since 23 September 2014 due to a decrease in water elevation (causing the well to become dry) and in accordance with the Phase II ERD Pilot Study Work Plan (ERM, 2014)
- H-1A and 2EPa (A3 depth interval extraction wells) have been offline since 8 October and 25 November 2014, respectively, to facilitate the ERD Pilot Study
- EX-1-RL was offline between 19 December 2018 and 29 March 2019 due to damage to an underground conveyance line. After excavation and installation of a new vault, the well was brought back on line.

During this annual reporting period, occasional shutdowns occurred for periods of less than 5 hours to perform equipment maintenance, with the following exception:

- The system was offline periodically between 8 February and 1 March 2019 for system testing and maintenance, which included repair of the extraction well vault at EX-1-RL. The system was restarted for continuous operation on 1 March 2019 following carbon vessel change-out.

Detailed information on GWETS operation is presented in the semiannual NPDES reports for the facility.

During the annual reporting period, there were no permit effluent limitation exceedances. There was an individual effluent sample that exceeded the Monthly Average limit concentration for total zinc on 6 November 2019; however, a second effluent sample was collected on 21 November 2019 and the average zinc concentration of the two samples was below the Monthly Average limit concentration. Both zinc samples were below the permitted Daily Maximum value.

During the annual reporting period, the GWETS removed an estimated 31.4 pounds of VOCs and extracted a total of approximately 48.0 million gallons of groundwater from the former Siemens facility and the Intersil/Siemens Off-Site Study Area (Table 6). Of this, approximately 20.6 pounds of VOCs and 26.2 million gallons of groundwater was extracted from the former Siemens facility. Sampling and analytical results for the GWETS are included in separate Self-Monitoring Reports, as required by the General Permit.

3.3 Additional Work Completed During the Annual Reporting Period

Additional work conducted during the reporting period included:

- Enhanced Reductive Dechlorination (ERD) Pilot Study activities
- An investigation beneath the on-site buildings
- A shallow soil and groundwater (A1 depth interval) investigation at the southern end of the former Siemens facility

These activities are summarized in the sections below.

3.3.1 Enhanced Reductive Dechlorination Pilot Study Activities

The groundwater extraction and treatment systems at the Intersil/Siemens site have been reducing concentrations of VOCs in groundwater and hydraulically controlling the plume (RWQCB 2010); although the amount of VOC mass being removed has declined and the VOC concentrations have stabilized at concentrations above groundwater restoration goals. In response to declining mass removal, SMI has conducted three phases of ERD Pilot Studies since March 2006 to evaluate the feasibility and effectiveness of ERD in the shallow groundwater to improve both the rate and efficiency of VOC mass removal as compared to the groundwater extraction and treatment system. The most recent evaluation, Phase III ERD Pilot Study, was implemented in 2017 with performance monitoring continuing since that time.

The Phase III ERD Pilot Study included a Mitigation Plan to be implemented if vinyl chloride or other undesirable pilot study end products exhibited the potential for off-site migration. Mitigation Plan measures include increased monitoring, bioaugmentation, EHC® treatment, and groundwater extraction responses. Throughout 2019, ERM performed the following sampling and activities to support the Pilot Study:

- March 2019 – 14 wells (2EP, 2EPA, 4BP, MW-01A1, MW-02A1, MW-OS-1A1, MW-OS-2A1, MW-OS-3A1, MW-OS-2A3, VM-5S, VM-5D, VM-6S, VM-6D, and VM-7S) were sampled for VOCs.
- April 2019 – The following mitigation measures were conducted in accordance with the RWQCB conditionally-approved *Final Mitigation Measure Work Plan, Former Siemens Facility,*

Intersil/Siemens Site, Cupertino, California (ERM, 30 January 2019). The Work Plan was approved by the Water Board in a 5 February 2019 email. The complete summary and results for the activities and associated performance monitoring are provided in *Mitigation Measures Summary Report, Intersil/Siemens Site, Cupertino, California* (ERM, 29 October 2019).

- Chemical oxidant batch injection was conducted along the northern property line of the former Siemens property to address potential migration of vinyl chloride in the shallow groundwater from the property boundary. The injection activities included borehole drilling; potassium permanganate solution preparation/on-site mixing; and injection of potassium permanganate. The injection points were spaced approximately 30 to 40 feet apart at five locations near the intersection of the northern and eastern property lines within the A1 depth interval. A total of 3,087 pounds of permanganate was injected between these five injection points.

  Performance monitoring for the potassium permanganate injection activities included baseline sampling of groundwater prior to initiation of the batch injection and three regular events following completion of the injections (May, July, and October 2019). In addition, performance monitoring included collection of soil vapor samples from two existing soil vapor probes (SVP-4 and SVP-5) near the northern property line to support a better understanding of the response of soil vapor just outside the boundary of the ERD Pilot Study (baseline conditions) and changes that may occur because of the chemical oxidation. Samples were collected from SVP-4 and SVP-5 and submitted for VOC analysis on a monthly basis for a period of 3 months following injection.

  The field observations, field parameters, VOC data, and general chemistry data were inconclusive on the effectiveness of chemical oxidation in the treatment area to reduce by-product (cis-1,2-DCE and vinyl chloride) concentrations in the A1 depth interval. The vinyl chloride concentrations in the treatment area wells increased in concentration. The vinyl chloride at A1 wells located off site and downgradient of the ERD treatment area (MW-OS-1A1, MW-OS-2A1, and MW-OS-3A1) remain below MCLs. Through the 3-month sample event, the detected TCE; cis-1,2-DCE; and vinyl chloride were generally low and remained constant during the performance monitoring. SMI will continue to monitor the cis-1,2-DCE and vinyl chloride concentrations in the downgradient wells and the treatment area wells.

- SVE and treatment around SVP-7 was performed to remove VOC and methane mass as a mitigation measure for soil vapor and to increase air flow in the area. Existing SVE wells and a trailer-mounted SVE system were used to conduct the SVE mitigation measure test. The test was conducted over a 5-day testing period utilizing existing wells VM-7S and VM-8S and monitoring was conducted at other nearby monitoring/former SVE wells and soil vapor probes SVP-6 and SVP-7. An estimated 0.19 and 0.02 pound of TCE and vinyl chloride, respectively, were removed during operation of the SVE mitigation measure.

  Following completion of the SVE test, monthly soil vapor samples were collected from SVP-6 and SVP-7 for 3 months. Generally, the concentrations at SVP-6 remained the same during the 3 months of performance monitoring. The VOC concentrations detected in SVP-7 did rebound slightly following completion of the test period, but the concentrations are lower than the 2018 detected values. SMI continues to monitor VOCs in soil vapor at SVP-7 on a quarterly basis to evaluate the increasing trends at SVP-7, and SMI will continue to evaluate the data collected and evaluate options in accordance with the Mitigation Plan.

- October 2019 – 15 wells (2EP, 2EPA, 4BP, MW-01A1, MW-01A3, MW-02A1, MW-OS-1A1, MW-OS-2A1, MW-OS-2A3, MW-OS-3A1, VM-5S, VM-5D, VM-6S, VM-6D, VM-7D, and VM-8D) were sampled for VOCs as the 6-month performance monitoring following the April 2019 chemical injections. Generally, the cis-1,2-DCE and vinyl chloride concentrations were consistent or lower than the previous 3-month sample event.

- December 2019 – Soil vapor samples were collected from SVP-5 and SVP-7 (along the property line) in December 2019 as part of the quarterly evaluation.

Plots of concentration versus time and molar ratios prepared for key monitoring wells in the Phase III ERD Pilot Study treatment area, upgradient/cross-gradient of the treatment area, and downgradient of the treatment area have been updated to include the 2019 VOC data (Appendix C). Appendix C also includes the analytical data collected for the Phase II and III ERD Pilot Studies.

As noted in the *Mitigation Measures Summary Report, Intersil/Siemens Site, Cupertino, California,* the VOC concentrations detected in SVP-7 did rebound slightly following completion of the test period, but the concentrations are lower than the 2018 detected values. The December 2019 concentration was slightly higher than July 2019 data. SMI will continue to monitor VOCs in soil vapor at SVP-7 on a quarterly basis to evaluate the increasing trends at SVP-7. SMI will continue to evaluate the data collected and evaluate options in accordance with the Mitigation Plan.

3.3.2 Sub-Building Investigation (May-June 2019)

In addition to the ERD Pilot Studies, SMI is considering other remedy technologies to enhance VOC removal at the former Siemens facility. Identifying significant residual VOCs beneath the building, if present, will support determining an appropriate path towards closure. Therefore, SMI proposed to collect samples beneath the existing building to evaluate if residual VOCs exist to indicate that a previously unknown source is present in shallow soil beneath the on-site buildings within *Final On-site Sub-Building Soil Investigation Work Plan* (Work Plan) submitted on 5 April 2019 (ERM 5 April 2019). The Work Plan was approved by the Water Board in a 16 April 2019 email.

Borings were advanced in May and June 2019 using a limited-access, direct-push drilling rig equipped with the membrane interface probe and hydraulic profiling tool (MiHPT) to total depths ranging from 26 to 40 feet bgs at 11 locations. Data were recorded continually within each borehole using the MiHPT, including a halogen specific detector (XSD), photoionization detector (PID), and flame ionization detector (FID).

Soil borings were advanced to total depths ranging from 13 to 40 feet bgs at four locations using direct-push drilling techniques. The soil column at each drilling location was field-screened using a PID at a minimum of 2-foot intervals. Soil samples were collected based on field observations and monitoring of organic vapors using a handheld PID.

MiHPT data indicate that elevated chlorinated VOCs are not present beneath the on-site buildings, with the exception of detections at 26 to 28 and 37 to 38.5 feet bgs in one location (SB-309 in the northwestern portion of the southern building). However, these detections were unable to be verified using soil samples analyzed at a laboratory, as the co-located soil boring SB-310 encountered refusal at 13 feet bgs.

Soil sample data indicate that elevated chlorinated VOCs are not present beneath the on-site buildings, with the exception of detections at 15 and 20 feet bgs in boring SB-317 (northeastern portion of the northern building) and at 25, 30, and 40 feet bgs in boring SB-318 (northwestern portion of the northern building). However, these detections were not confirmed using the XSD- and PID-combined data results from co-located MiHPT borings SB-302 and SB-301, respectively, and it should be noted these soil borings are near several historical tanks.

Evaluation of the MiHPT and soil boring results indicates no evidence of a shallow unknown contaminant source beneath the on-site buildings. Based on these results, additional investigation work beneath the

on-site buildings was not proposed. The complete results for this investigation are provided in the *On-site Sub-Building Soil Investigation Summary Report* (ERM 2019c).

3.3.3 Shallow Soil and Groundwater Investigation at Southern Portion of Former Siemens Facility (June-July 2019)

The primary objective of this shallow soil and groundwater investigation was to collect VOC data to determine the extent of chlorinated VOC concentrations within the unsaturated zone and shallow (A1 depth interval) groundwater in the southern portion of the former Siemens facility. The scope of work was proposed in the *Shallow Soil and Groundwater Investigation Work Plan* (Work Plan) submitted on 13 June 2019 (ERM 2019).

Borings were advanced using a limited-access, direct-push drilling rig equipped with MiHPT at three locations (MIP-322, MIP-323, and MIP-328) to total depths ranging from 21 to 41.5 feet bgs. Data were recorded continually to the total depth of each borehole using the MiHPT, which included rate of penetration; temperature; electrical conductivity; XSD, electron capture detector, PID, and FID readings; and hydraulic profiling tool pressure and flow. Soil borings were advanced using direct-push drilling techniques at nine locations to total depths ranging from 52 to 60 feet bgs. Soil samples were collected from each borehole based on field observations and monitoring of organic vapors using a handheld PID.

The MiHPT data showed no presence of chlorinated VOCs in the soil for the depths reached. The MiHPT results correlate well with the associated non-detect soil sample results from co-located soil borings. Soil sample data indicated that chlorinated VOCs are not present in the southern portion of the former Siemens facility within the top 25 feet bgs, and this lack of detections was confirmed by the results from co-located or nearby MiHPT borings.

VOCs were detected in soil samples at depths between 30 and 50 feet bgs (water table logged at depths that ranged between 49 and 52 feet bgs) at concentrations that ranged from 4.0 to 120 micrograms per kilogram, with the highest detections in the deeper samples collected in the central portion of the southern area. These soil concentrations are consistent with previous soil investigations.

Chlorinated VOCs, primarily TCE, were detected in grab groundwater samples from all nine borings (water table logged at depths ranging between 49 and 52 feet bgs and samples collected at depths ranging from 52 to 53 feet bgs) at concentrations ranging from 29 to 270 µg/L. The highest groundwater concentrations were detected in the central portion (laterally) of the investigated area (which is where TCE was also detected in the deeper soil samples) and in the new wells located in Forge Drive.

The highest detections of TCE in soil samples were generally reported in the deepest sample collected just above or within the shallow groundwater surface (logged at depths ranging between 49 and 52 feet bgs), and grab groundwater sample results correlated well with relative soil concentrations. No additional characterization activities for the southern portion of the former Siemens property were proposed by SMI. The summary and complete results for this investigation are provided in the *Shallow Soil and Groundwater Investigation Summary Report, Southern Portion of Former Siemens Property* (ERM 2019d).

4. OFF-SITE STUDY AREA

4.1 Groundwater Monitoring

Wood E&IS and Blaine Tech Services, Inc., performed semiannual groundwater monitoring on 14 through 16 April 2019 in accordance with the 20 December 2000 and 15 October 2004 Water Board letters (2000b; 2004). ERM and Blaine Tech Services, Inc., performed annual groundwater sampling on 1 through 9 October 2019 at Off-Site Study Area wells.

4.1.1 Groundwater-Level Measurements

During the annual reporting period, groundwater levels were measured in January, April, July, and October in wells and piezometers in the Off-Site Study Area using an electric well sounder. Locations of off-site monitoring and extraction wells are shown on Figure 4. Groundwater level data for the annual monitoring period are presented in Table 2.

Figures 5 through 24 show the groundwater potentiometric surface of the A1, A3, and A4 depth intervals, and the B and C zones, and illustrate the estimated extent of hydraulic containment (capture zone) provided by the off-site B zone extraction wells, LQ-2B and LR-1B. Groundwater potentiometric contours were drawn using interpolation of groundwater levels between measured groundwater levels and judgment based on the hydrogeologic setting. The groundwater potentiometric surfaces are generally consistent with historical observations.

4.1.2 Groundwater Sampling and Analysis

4.1.2.1 Sampling and Analysis

During this groundwater monitoring period, semiannual and annual samples were collected in accordance with the sampling schedule in Table 1. Semiannual samples were collected on 9 March 2019 (12 newly installed wells) and 8 April 2019, and annual samples were collected 2 through 9 October 2019. Groundwater samples were collected using a HydraSleeve, via low-flow purging and sampling methods, or from an extraction well sampling port in accordance with the Sampling Plan (Geomatrix Consultants Inc., 1994a) and the Technical and Regulatory Guidance (Interstate Technology & Regulatory Council, 2007) and/or *Standard Operating Procedure 2 – Groundwater Sampling Rev. 2* (Appendix A).

Groundwater samples were analyzed using USEPA Method 8260B (8010 list). As specified in the SCR, samples from two monitoring wells (S-3B and LR-3C) also were analyzed for aromatic VOCs using USEPA Method 8260B. TestAmerica analyzed groundwater samples, blanks, and spikes in accordance with the specifications in the QAPP (Geomatrix 1994b) prepared for the former Intersil facility.

4.1.2.2 Analytical Results

Table 3 presents the results of chemical analyses performed on groundwater samples collected during the semiannual and annual monitoring events. Groundwater analytical results were similar to those obtained in previous sampling events, with a few exceptions. TCE concentrations for the site are shown on Figures 25 through 29 for the A1, A3, and A4 depth intervals and B and C zone groundwater.

Analytical results for groundwater samples collected from nine of the new A1 and A3 depth interval wells installed in 2014 have been similar and consistent in concentration since the August 2014 baseline event following well installation, with the exception of the wells associated with the ERD Pilot Study (MW-OS-1A1, MW-OS-2A1, and MW-OS-5A3). These three wells will still be monitored semiannually. The 12 new wells installed in 2019 as described in Section 4.3.1, were sampled after installation in March

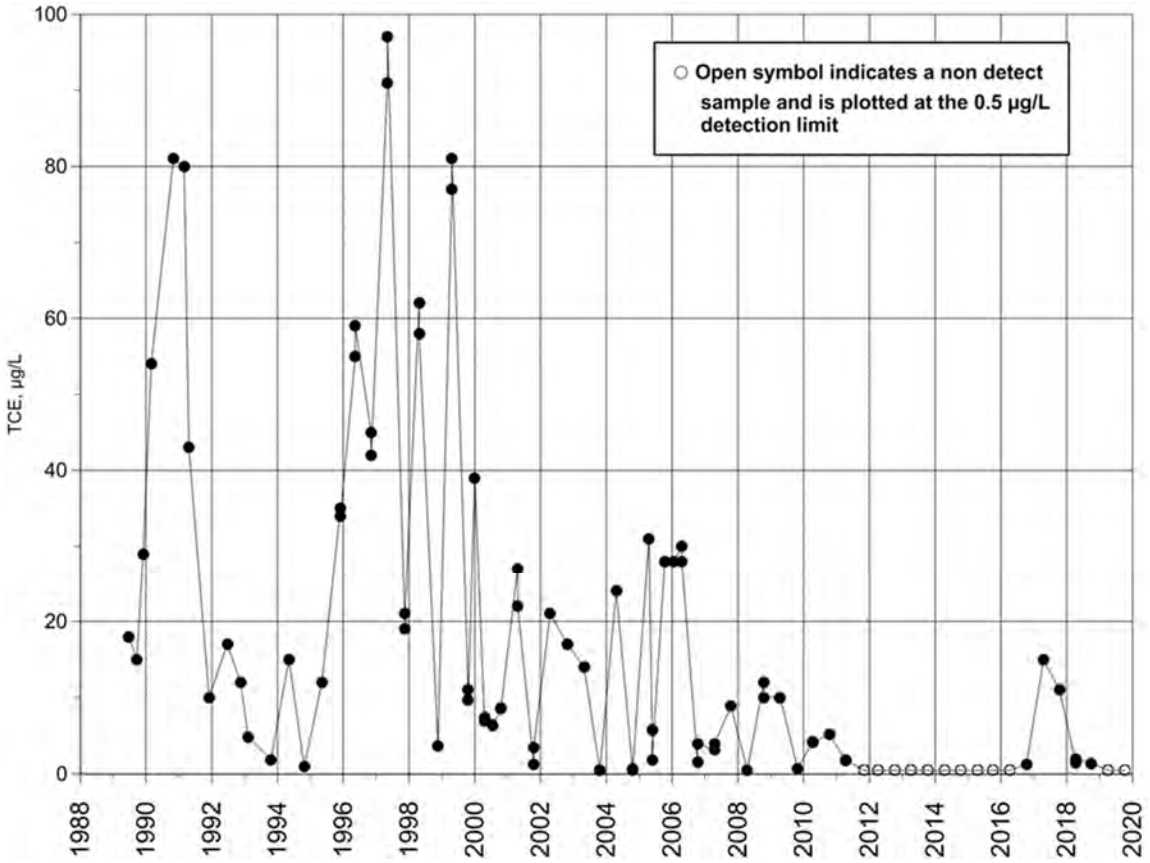
2019 and during the annual sampling event in October 2019. These wells will continue to be monitored semiannually.

Historically, concentrations of TCE in well S-1A, at the northwestern corner of the intersection of Lorne Way and Ringwood Avenue, were below the laboratory detection limit of 0.5 µg/L. However, the concentration of TCE in well S-1A increased from 2.7 µg/L in October 1999 to 58 µg/L in October 2005. Although the groundwater near well S-1A is within the calculated extent of containment provided by pumping from off-site extraction wells LR-1B and LQ-2B, SMI increased pumping by a total of approximately 7 to 9 gpm in November 2005 from its on-site wells LF-6A, LF-12A, and H-1A. These wells have been pumping at their maximum pump capacity, except for well H-1A, which was taken offline in 2014 for the ERD Pilot Study at the former Siemens facility. Although TCE concentrations in well S-1A have fluctuated the past few years (from a maximum TCE concentration of 49 µg/L in 2013 to non-detect in 2019), TCE concentrations have generally decreased.

As noted in previous annual reports, TCE concentrations in well IQ-1B appear to be influenced by seasonally fluctuating groundwater levels. In April 2005, the TCE concentration increased to 31 µg/L. Because this concentration appeared to be an outlier based on recent trends, the well was resampled on 24 May 2005. TCE concentrations in this sample and a duplicate sample were 5.8 and 1.8 µg/L, respectively. In October 2005, the TCE concentration was 28 µg/L, with the duplicate sample reporting the same concentration.

Because the TCE concentration exceeded 20 µg/L in downgradient well IQ-1B for two consecutive semiannual monitoring events, in accordance with the Water Board 15 October 2004 letter, pumping was increased on 25 October 2005 in well LQ-2B from approximately 17 to 40 gpm, which was the average pumping rate before flow rates were reduced in December 2004. In October 2017, TCE was detected for the fourth time since 2012 in well IQ-1B (1.3 µg/L in October 2016, 15 µg/L in April 2017, 11 µg/L in October 2017, and 1.5 µg/L in October 2018). IQ-1B was non-detect for TCE in October 2019. A time-series graph of TCE concentrations in well IQ-1B, shown below, illustrates the fluctuating TCE concentrations, but with a mostly deceasing trend over the last 10-plus years.

TCE Concentration Over Time in Well IQ-1B



Concentrations of TCE in groundwater in the C zone in the Off-Site Study Area are consistent with historical trends.

4.1.2.3 Quality Assurance/Quality Control

Wood E&IS and ERM followed the same QA/QC procedures in the Off-Site Study Area as those for work at the former Intersil and Siemens facilities. During the sampling event, equipment, field, and trip blanks and duplicate samples were collected for QA/QC purposes.

Tables 7 and 8 summarize sampling and analytical QA/QC, respectively. The data generated meet the requirements of precision, accuracy, and completeness as described in the QAPP. Several samples were analyzed with sample container headspace described as a bubble greater than 6 millimeters in diameter. Due to the headspace greater than USEPA guidelines, the non-detect results for these samples have been qualified as estimates (J-/UJ), and if samples did not agree or if historical data were not available, the results were rejected (R).

Data precision is estimated by comparing analytical results from duplicate samples and calculating the RPD. Duplicate samples were generated by the laboratory and by Wood E&IS and ERM during the annual reporting period. ERM calculated the RPD between detected results. The USEPA has not established control criteria for field duplicate samples; therefore, sample data are not qualified on the basis of field duplicate imprecision.

Data accuracy is evaluated based on recoveries, expressed as the percent of the true or known concentration. Recoveries may be calculated from laboratory matrix spikes, matrix spike duplicates, and

calibration standards generated as QA/QC samples by the analytical laboratory. The average percent recoveries from analyses of spiked samples using USEPA Method 8260B for this annual period met the current QA goal.

4.2 Groundwater Extraction and Treatment System Operation

As discussed in Section 3.2, the groundwater extracted from B zone wells located in the Intersil/Siemens Off-Site Study Area (wells LR-1B and LQ-2B) is piped to the former Siemens facility GWETS.

During this annual reporting period, occasional shutdowns occurred for periods of less than 24 hours to perform equipment maintenance with the following exceptions:

- Well LQ-2B was offline from 19 December 2018 until 10 January 2019 while the flow meter in the extraction vault was replaced.
- Well LQ-2B was offline for a total of approximately 28 hours from 16 to 18 July 2019 during aquifer testing activities.
- The system operated intermittently from 8 February to 1 March 2019 due to system testing and maintenance, which included repair of the extraction well vault at EX-1-RL. The system was restarted for continuous operation on 1 March 2019 following carbon change-out.

During the annual reporting period, the system removed an estimated 10.8 pounds of VOCs and extracted a total of approximately 21.8 million gallons of groundwater from the Intersil/Siemens Off-Site Study Area (Table 6). The extraction system is operating as designed in remediating VOCs in B zone groundwater in the Off-Site Study Area. Sampling and analytical results for the groundwater treatment system are included in separate semiannual NPDES reports.

4.3 Additional Work Completed During the Annual Reporting Period

Additional work conducted during the reporting period included:

- Installation of 12 additional monitoring wells
- A nuclear magnetic resonance and groundwater contaminant flux assessment

These tasks are described in the subsections below.

4.3.1 Installation of Additional Monitoring Wells (January-February 2019)

In January and February 2019, 12 new monitoring wells (six wells in each of the A1 and A3 depth intervals, one well in the A4 depth interval, and one well in the B Zone) were installed. Three wells (MW-OS-6A3/-6A4/-6B) were installed on the former AMI site/east of the former Siemens property, seven wells (MW-OS-8A1/-8A3, MW-OS-9A1, MW-OS-10A1/-10A3, and MW-OS-11A1/-11A3) were installed along Forge Drive between the former Siemens and Intersil facilities, and two wells (MW-OS-12A1/-12A3) were installed along Tantau Avenue west of the former Intersil property.

The wells were installed for the following purposes:

- Tracking and monitoring VOCs in groundwater
- Filling potential data gaps in the A zone (A1, A3, and A4 depth intervals) and B zone for specific areas
- Collecting soil and groundwater samples for the purpose of bench test analysis
- Performing bench-scale testing of *in situ* chemical reduction compounds

During initial sample collection, the following constituents exceeded Maximum Contaminant Levels (MCLs):

- A1 depth interval – TCE was detected in groundwater samples from all five wells at concentrations ranging from 62 micrograms per liter (µg/L) (MW-OS-8A1) to 370 µg/L (MW-OS-9A1 and MW-OS-10A1). Tetrachloroethene was also detected at two locations; detections ranged from 0.45 µg/L (MW-OS-9A1) to 6.5 µg/L (MW-OS-10A1).
- A3 depth interval – TCE was detected in groundwater samples from all five wells at concentrations ranging from 23 µg/L (MW-OS-6A3) to 350 µg/L (MW-OS-12A3).
- A4 depth interval – No constituents were detected above MCLs from the one well (MW-OS-6A4) in the A4 depth interval.
- B Zone – No constituents were detected above MCLs from the one well (MW-OS-6B) in the B Zone.

The complete results for soil and groundwater samples collected are provided in *Monitoring Well Installation Summary Report* (ERM 2019a). Results from bench testing analyses will be presented to the Water Board under separate document cover.

4.3.2 Nuclear Magnetic Resonance (February 2019) and Groundwater and Contaminant Flux Assessment (April 2019)

Nuclear Magnetic Resonance (NMR) and Passive Flux Meter (PFM) data were collected to evaluate potential preferential pathways of groundwater flow, contaminant transport, and contaminant storage zones to further evaluate:

- Potential enhancements to the groundwater extraction systems to improve performance and accelerate the cleanup process
- Identify areas with the greatest contaminant flux for potential future remedy enhancements

The Water Board was notified of this scope of work via email on 14 February 2019.

NMR logs were collected from 10 existing wells in February 2019. NMR measurements within the various depth intervals and stratigraphic zones at these locations indicate strong correlation with the generalized lithology and hydrology in the Conceptual Site Model. Increased mobile groundwater was detected in the A1, A3, and A4 depth intervals, B zone, and C zone groundwater-bearing zones and, to a lesser extent, the A2 depth interval locally. These groundwater-bearing zones appear to be contiguous across the study area in most areas. Groundwater velocities were consistently high in these zones, but appear to decrease to the north of the former Siemens facility and to the east by Swallow Way. Hydraulic conductivities were measured to be on average in the 10's of feet per day based on NMR results.

Based on the NMR logs, stratigraphy, groundwater data, monitoring well locations, contaminant plume extents, and monitoring well screen intervals, 16 PFMs were deployed/retrieved at 14 existing wells in April 2019. The PFM sample analysis provided data on groundwater velocity, contaminant concentration, and contaminant flux in the study area. TCE flux values calculated from the investigation data indicate that TCE flux is relatively high in the A1 depth interval along Forge Drive, but decreases to the north. This same decrease in TCE flux from Forge Drive to the north was also detected in the A4 depth interval. TCE flux values were similar in the A3 depth interval from Forge Drive to the north.

The investigation results appear helpful in assessing where TCE mass is the most mobile and, therefore, support optimization of the groundwater extraction remedy. It can also be used to identify where potential

remedy enhancements, such as *in situ*-based remedial alternatives using injection technologies, may be more effective to address secondary sources. The complete results for the NMR and PFM studies will be presented to the Water Board under separate document cover during the first quarter of 2020.

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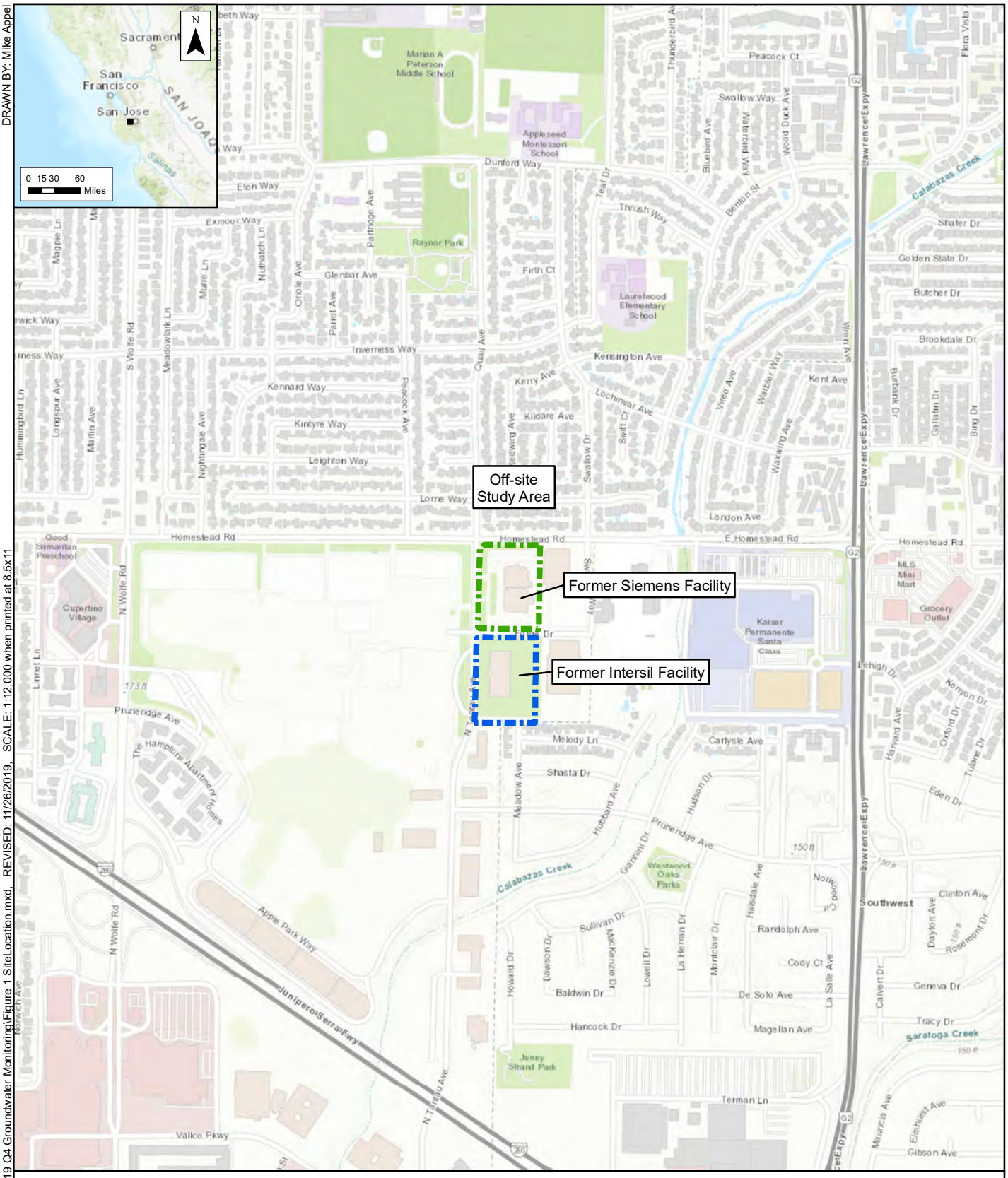
FIGURES



Legend

- Former Siemens Facility
- Former Intersil Facility

N

0 1,000 2,000

Feet

Figure 1
Site Location Map
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com

Source: Esri - World Topoographic Map; NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Mike Appel

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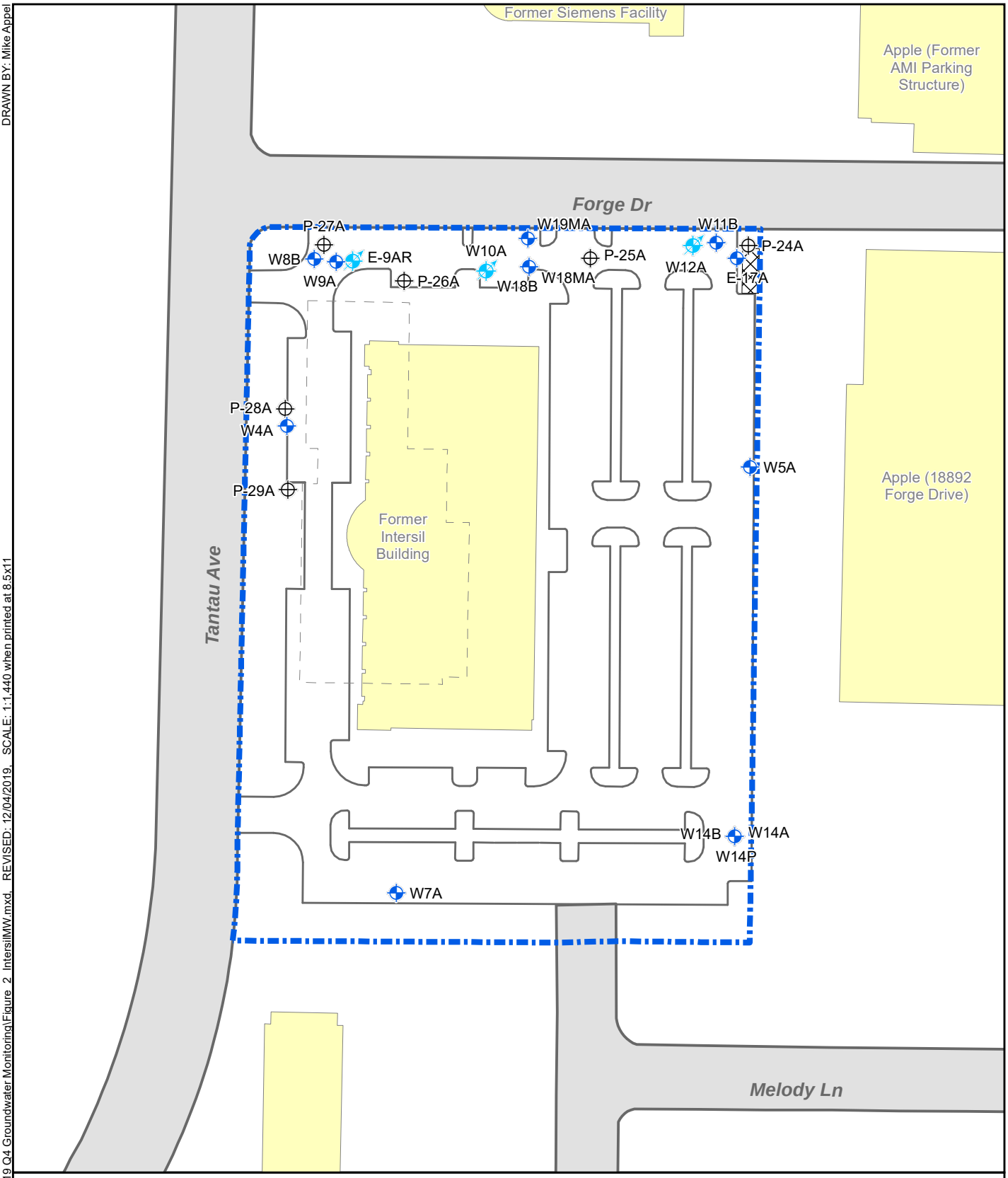

Legend

- Monitoring Well
- Groundwater Extraction Well
- Piezometer
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Figure 2
Groundwater Monitoring and Extraction Wells
Former Intersil Facility
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com

Source: Esri - World Topoographic Map; NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Mike Appel

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Homestead Rd

N

VM-5D
SVP-4
VM-5S
2EP
SVP-5
2EPa
VM-6S
H-2A-S
VM-6D
P-1A
H-5B
LF-12A
LF-13A
H-1A
P-4A
MW-01A1
MW-01A3
P-3A
LF-6A
LF-5B
MW-04A3
MW-02A1
H-3B
H-4C
MW-03A3
VM-4S
VM-4D
VM-3S
VM-3D
MW-1-RU
VM-2S
VM-2D
SVP-6
VM-7D
2D
P-2A
P-5B
1K
H-XA-S
VM-7S
LF-7B
1D
2B-S
LF-1B
G-1A
SVP-2
SVP-1
SVP-3
LF-2A
P-6B
SVP-7
1L
VM-1D
VM-1S
1H-S
VM-8D
VM-8S
LF-11A
LF-10A
MW-09A3
4BP
Former Siemens Facility
MW-08A3
3-XA
LF-8A
3-DD
LF-4A
3-EB
LF-3B
3-E
E-1
HMSA-1S
SW-3
HMSA-2S
W21A
LF-9A
W20B
SW-7
EX-1-RL
W22A
W19B
MW-07A4
MW-07A3
SW-5S
SW-6S
T-2A
F-1A
MW-05A3
MW-06A4
MW-05A4
MW-06A3
MW-OS-11A1
MW-OS-11A3
MW-OS-10A3
MW-OS-10A1
MW-OS-9A1
MW-OS-8A3
MW-OS-8A1
Forge Dr

Legend

- Monitoring Well
- Groundwater Extraction Well
- Soil Vapor Point
- Approximate Location of Aboveground Utility
- Approximate Location of Underground Utility
- Current Building
- Groundwater Remediation Facility
- Streets

0 50 100 Feet

Figure 3
Groundwater Monitoring Wells, Extraction Wells, and Treatment System Locations
Former Siemens Facility
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

NAD 1983 StatePlane California III FIPS 0403 Feet

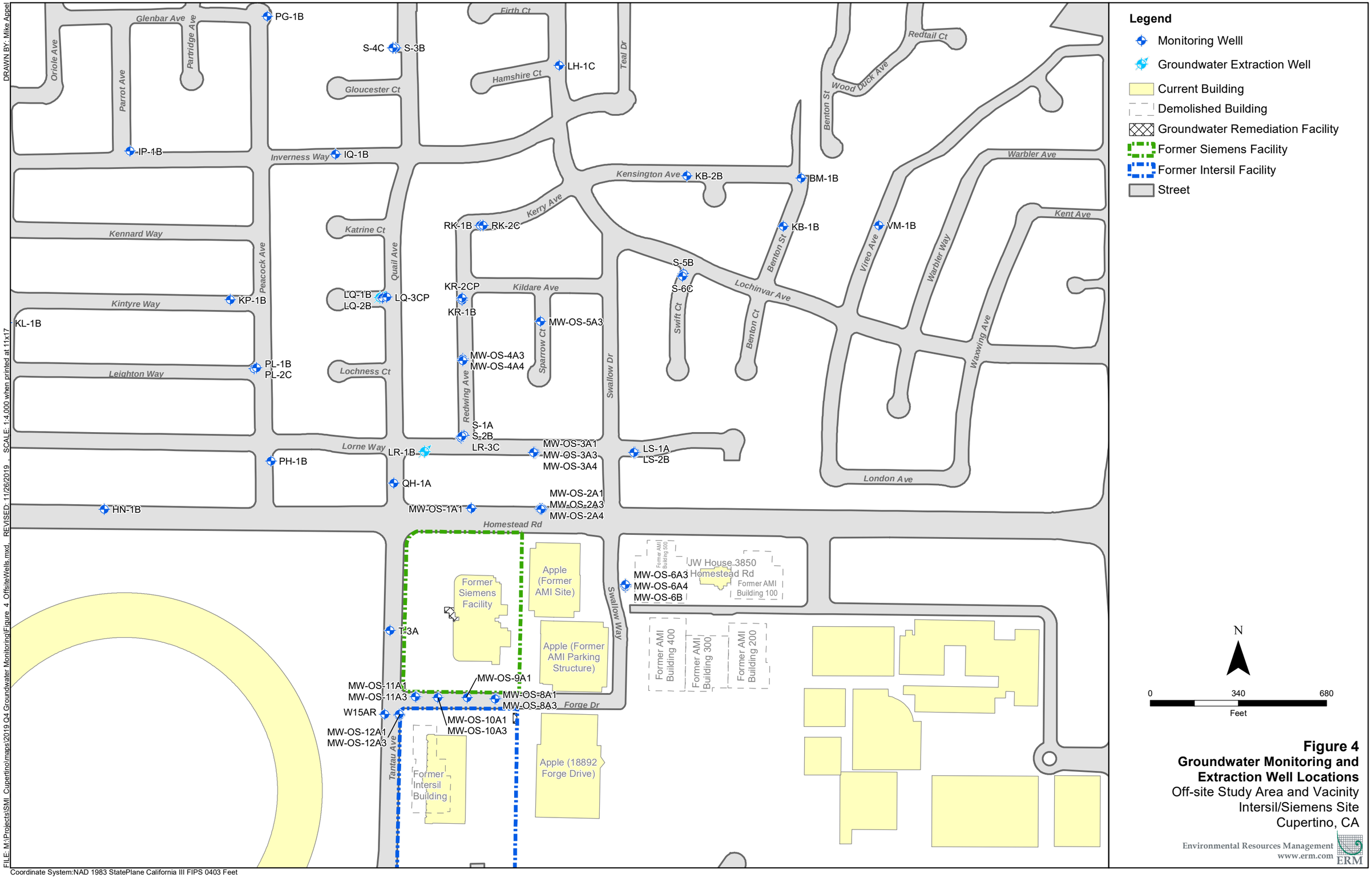
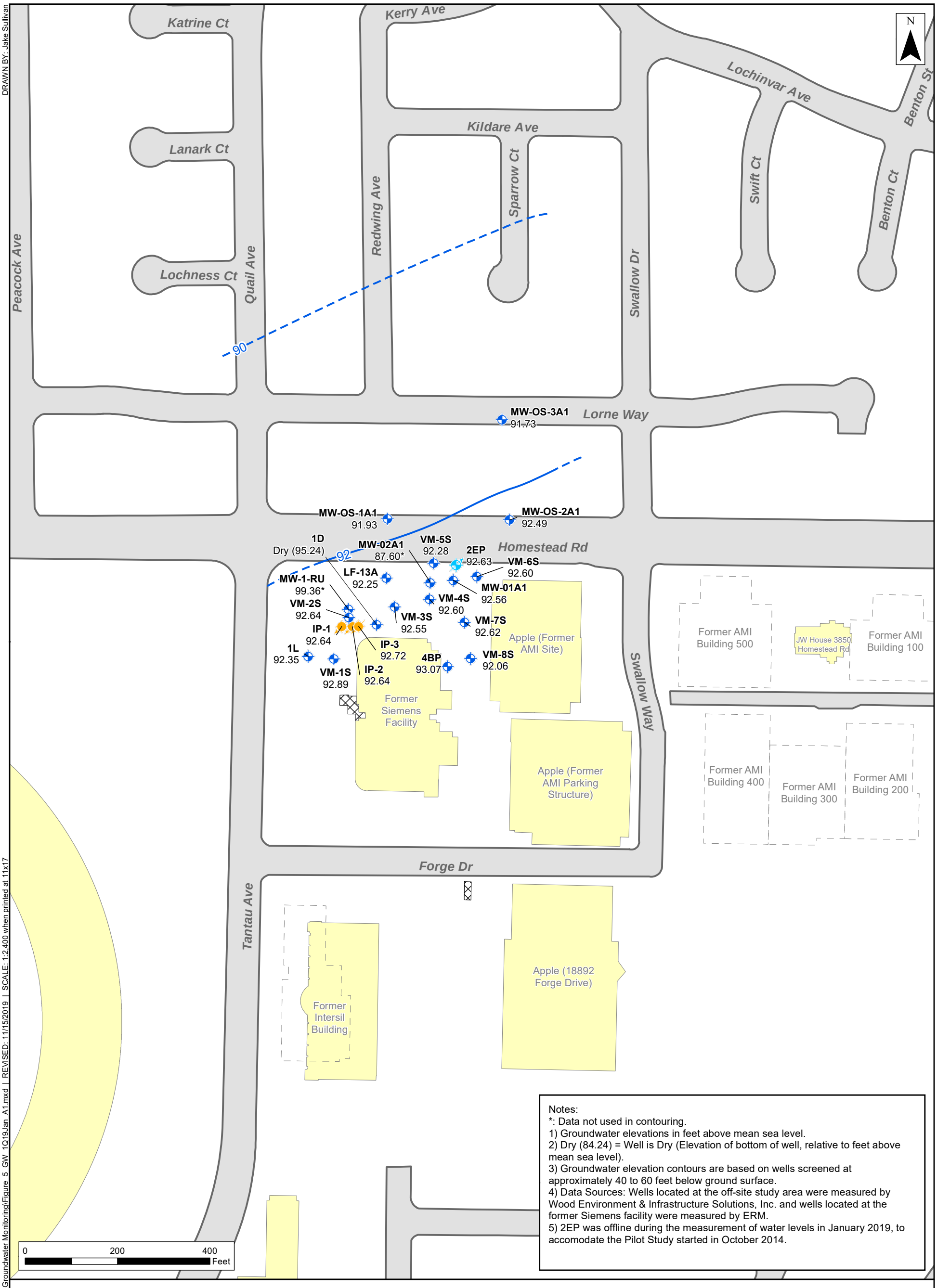


Figure 4
Groundwater Monitoring and Extraction Well Locations
Off-site Study Area and Vacinity
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com

DRAWN BY: Jake Sullivan



Notes:
*: Data not used in contouring.
1) Groundwater elevations in feet above mean sea level.
2) Dry (84.24) = Well is Dry (Elevation of bottom of well, relative to feet above mean sea level).
3) Groundwater elevation contours are based on wells screened at approximately 40 to 60 feet below ground surface.
4) Data Sources: Wells located at the off-site study area were measured by Wood Environment & Infrastructure Solutions, Inc. and wells located at the former Siemens facility were measured by ERM.
5) 2EP was offline during the measurement of water levels in January 2019, to accomodate the Pilot Study started in October 2014.

Legend

- Monitoring Well
- Groundwater Extraction Well
- Injection Point
- Groundwater Elevation Contour (2 ft) (Dashed Where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Figure 5
Groundwater Elevation Contours
A1 Depth Interval
January 14, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q1 Groundwater Monitoring\Figure_5_GW_1Q19Jan_A1.mxd | REVISED: 11/15/2019 | SCALE: 1:2,400 when printed at 11x17

NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Jake Sullivan

Katrine Ct
Kerry Ave
Lanark Ct
Redwing Ave
Kildare Ave
Lochinvar Ave
Benton St
Swift Ct
Benton Ct
Peacock Ave
Lochness Ct
Quail Ave
Sparrow Ct
Swallow Dr
Lorne Way
Homestead Rd
Forge Dr
Tantau Ave
Swallow Way

N

90.5
91.0
91.5
92.0
92.5
93.0

MW-OS-5A3 90.58
MW-OS-4A3 90.87
MW-OS-3A3 91.55
MW-OS-2A3 91.85
H-1A 92.17
MW-04A3 92.18
2EPA 92.15
VM-5D 92.20
VM-6D 92.15
LF-12A 90.84
MW-01A3 92.54*
VM-3D 92.30
VM-4D 92.37
VM-2D 92.43
MW-03A3 92.23
VM-7D 92.27
G-1A 91.38*
VM-1D 92.50
1H-S 92.51
MW-09A3 92.40
VM-8D 92.39
MW-08A3 92.59
HMSA-1S 93.09
E-1 90.37*
HMSA-2S 92.95
SW-7 91.65
EX-1-RL 93.30
SW-5S 93.02
SW-6S 93.08
MW-07A3 92.89
MW-05A3 92.98
MW-06A3 92.88
W19MA 92.48
W18MA 84.96

Former AMI Building 500
JW House 3850 Homestead Rd
Former AMI Building 100
Former AMI Building 400
Former AMI Building 300
Former AMI Building 200
Apple (Former AMI Site)
Former Siemens Facility
Apple (Former AMI Parking Structure)
Former Intersil Building
Apple (18892 Forge Drive)

0 200 400 Feet

Notes:
*: Data not used in contouring.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 70 or 74 to 90 feet below ground surface.
3) Data Sources: Wells located at the off-site study area and the former Intersil facility were measured by Wood Environment & Infastructure Solutions Inc. and wells located at the former Siemens facility were measured by ERM.
4) H-1A and 2EPa were offline during the measurement of water levels in January 2019, to accomodate the Pilot Study started in October 2014. As a result, the capture zone depicted on this figure is not consistent with typical conditions experienced when these wells are pumping.

Legend

- Monitoring Well
- Groundwater Extraction Well
- Groundwater Elevation Contour (0.5 ft) (Dashed Where Inferred)
- Estimated Capture Zone
- Depression in Groundwater Surface
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

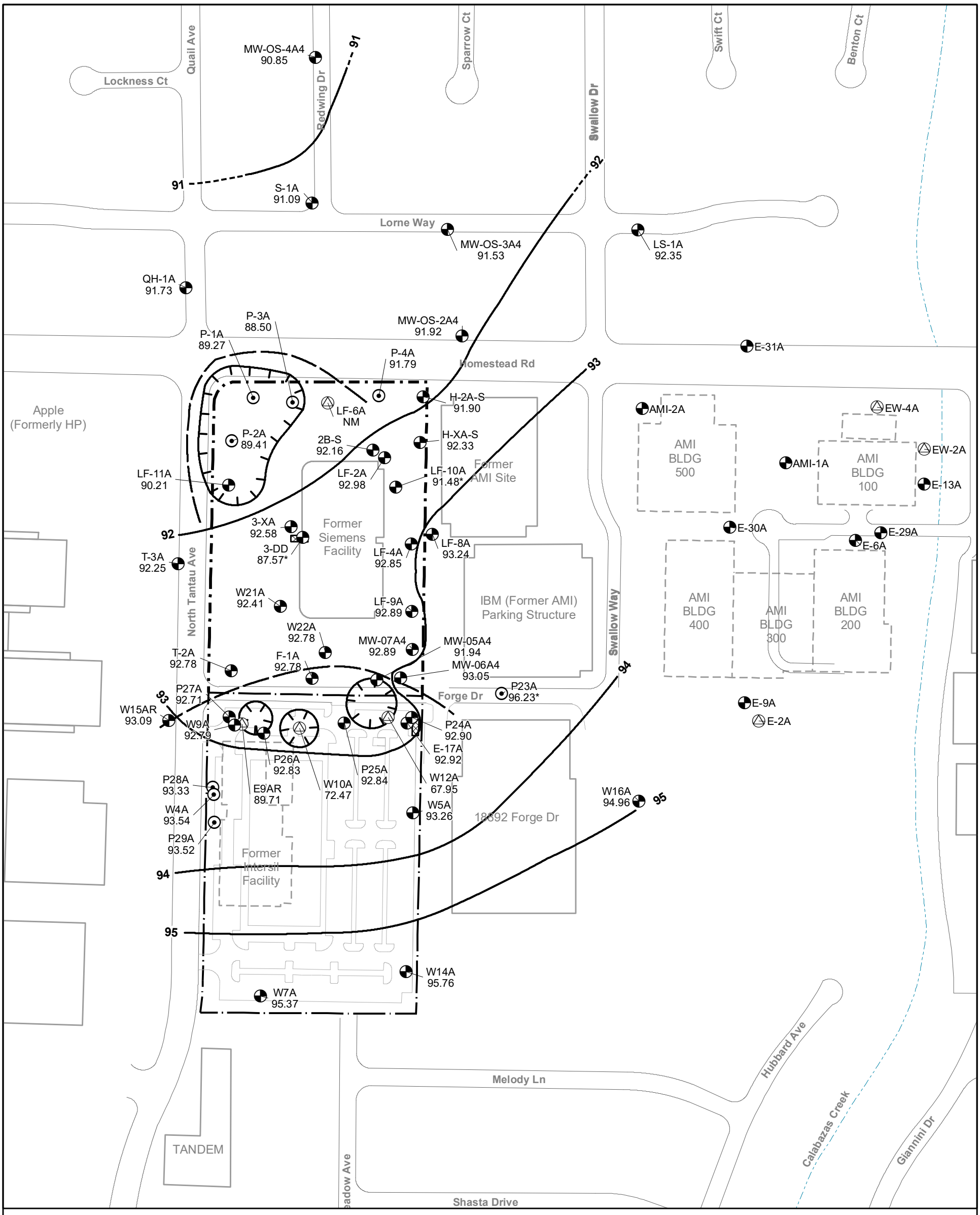
Figure 6
Groundwater Elevation Contours
A3 Depth Interval
January 14, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q1 Groundwater Monitoring\Figure_6_GW_1Q19Jan_A3.mxd | REVISED: 12/27/2019 | SCALE: 1:2,400 when printed at 11x17

NAD 1983 StatePlane California III FIPS 0403 Feet

S:\OD11\161053\task_02\19_0125_1Q19_fig_07_Azone-gwe_1q2019.mxd



EXPLANATION

- 95 — Groundwater elevation contour
- Depression in groundwater surface
- Estimated capture zone
- 95.76 — Groundwater elevation (in feet NAVD88)
- Monitoring well
- Groundwater extraction well
- Piezometer
- Groundwater treatment system
- Property boundary
- Existing building
- Demolished building

Abbreviations:

*	Data not used in contouring
NAVD88	North Americal Vertical Datum of 1988
NM	Not Measured

Notes:

1. Groundwater elevation contours for the A4 depth interval are based only on wells screened in the lower interval (approximately 90 to 120 feet below ground surface).
2. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
3. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Amec Foster Wheeler.

N

0 200

APPROXIMATE SCALE IN FEET

A4 DEPTH INTERVAL GROUNDWATER ELEVATION CONTOURS, JANUARY 14-16, 2019
Intersil/Siemens Site
Cupertino, California

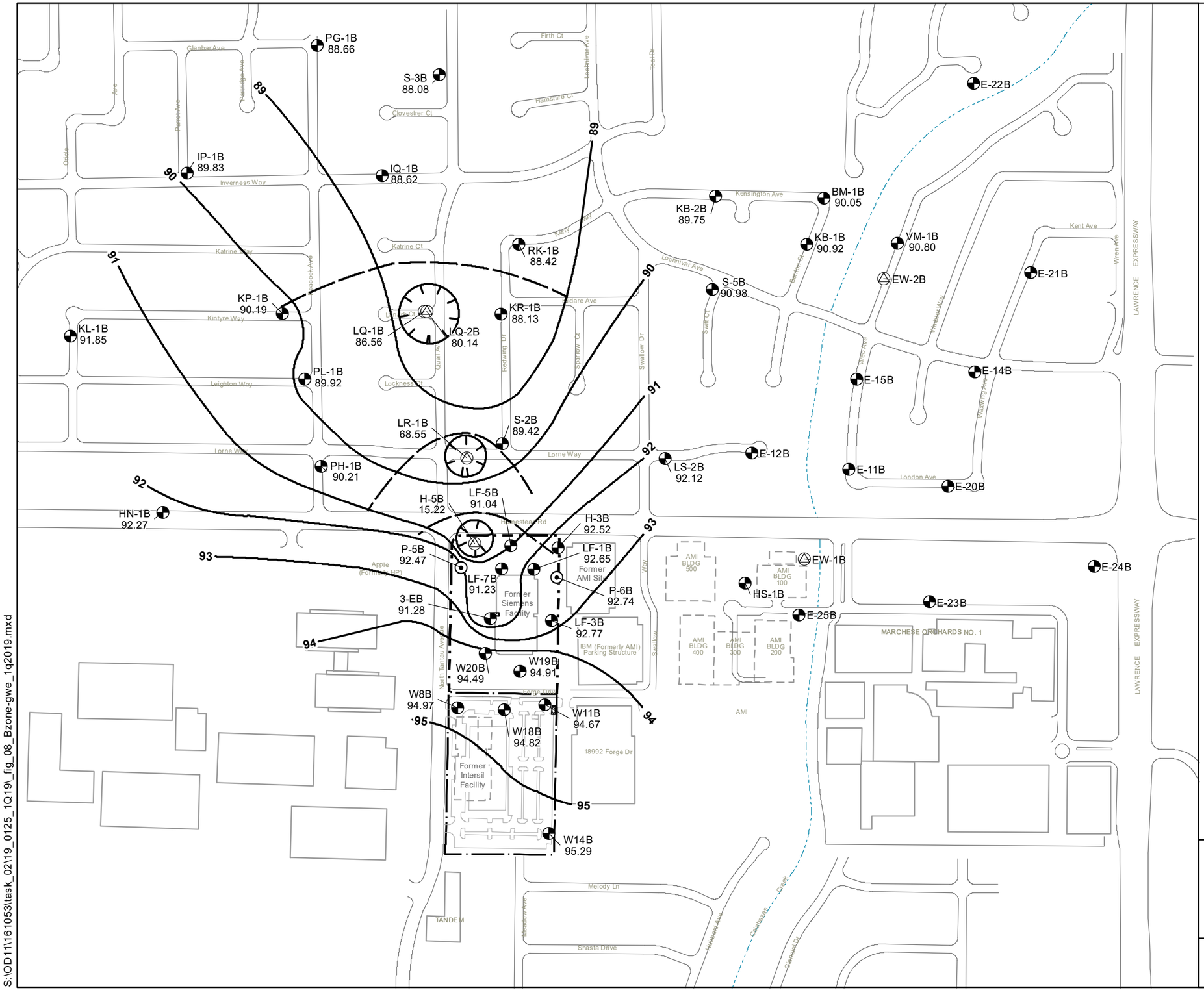
wood.

By: KLU

Date: 09/27/2019

Prj. No. 8618161053.02

Figure 7



EXPLANATION

- 89 — Groundwater elevation contour
- Depression in groundwater surface
- Estimated capture zone
- 88.42 Groundwater elevation (in feet NAVD88)
- Monitoring well
- Groundwater extraction well
- Piezometer
- Groundwater treatment system
- Property boundary
- Existing building
- Demolished building

Abbreviations:

* Data not used in contouring

NAVD88 North Americal Vertical Datum of 1988

NM Not measured

Notes:

1. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
2. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Amec Foster Wheeler.

N

0 400

APPROXIMATE SCALE IN FEET

B-ZONE AQUIFER
GROUNDWATER ELEVATION CONTOURS
JANUARY 14-16, 2019
Intersil/Siemens Site
Cupertino, California

wood.

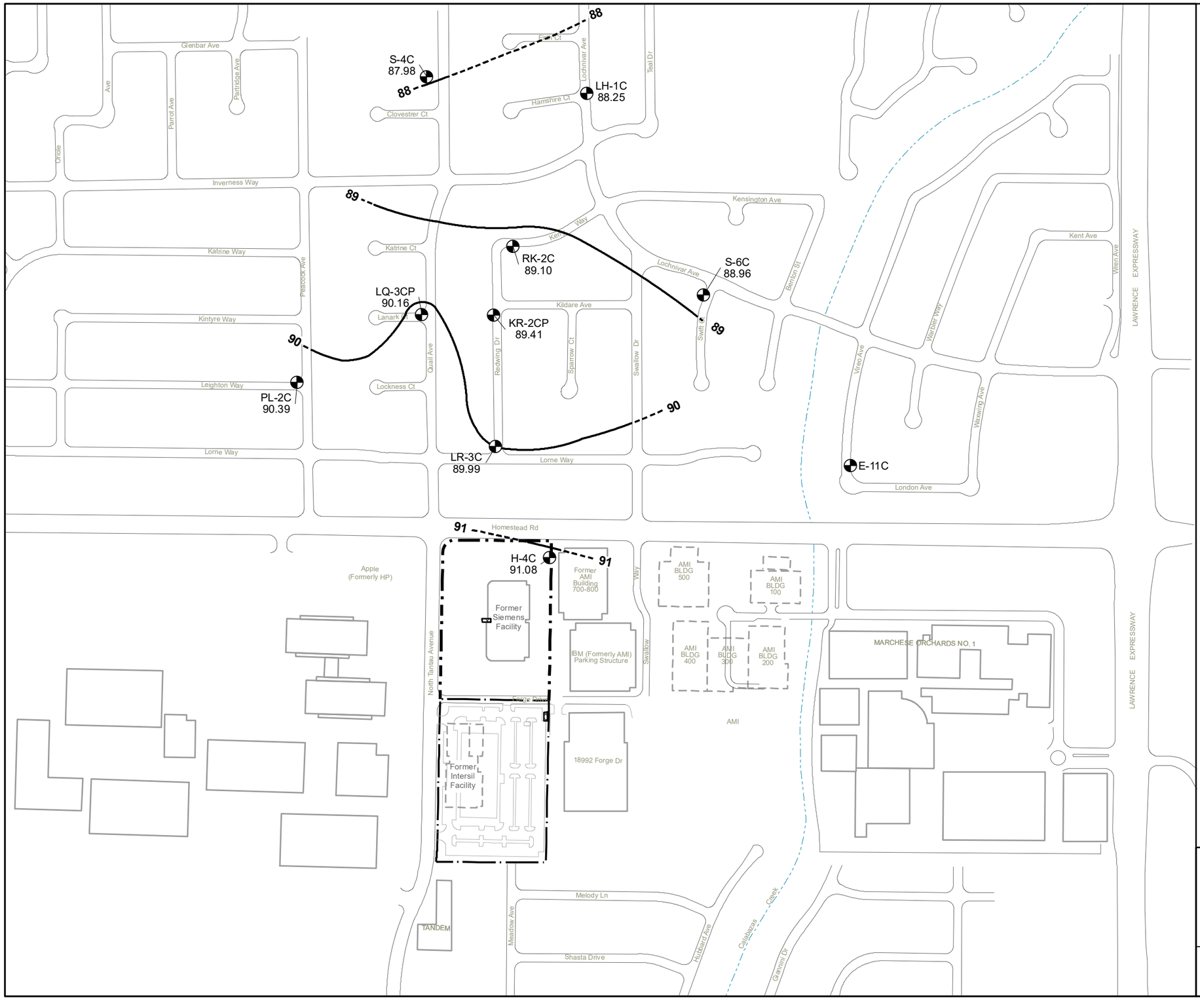
By: KLU

Date:07/11/2019

Prj. No. 8618161053.02

Figure 8

S:\OD11\16\1053\task_02\19_0125_1Q19_fig_08_Bzone-gwe_1q2019.mxd



S:\OD11\1161053\task_02\19_0125_1Q19_fig_09_Czone-gwe_1q2019.mxd

EXPLANATION

- 90 — Groundwater elevation contour
- 89.99 Groundwater elevation (in feet NAVD88)
- Monitoring well
- Groundwater treatment system
- Property boundary
- Existing building
- Demolished building

Abbreviations:

NAVD88 North Americal Vertical Datum of 1988

Notes:

1. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
2. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Amec Foster Wheeler.

N

0 400

APPROXIMATE SCALE IN FEET

C-ZONE AQUIFER
GROUNDWATER ELEVATION CONTOURS
JANUARY 14-16, 2019
Intersil/Siemens Site
Cupertino, California

wood.

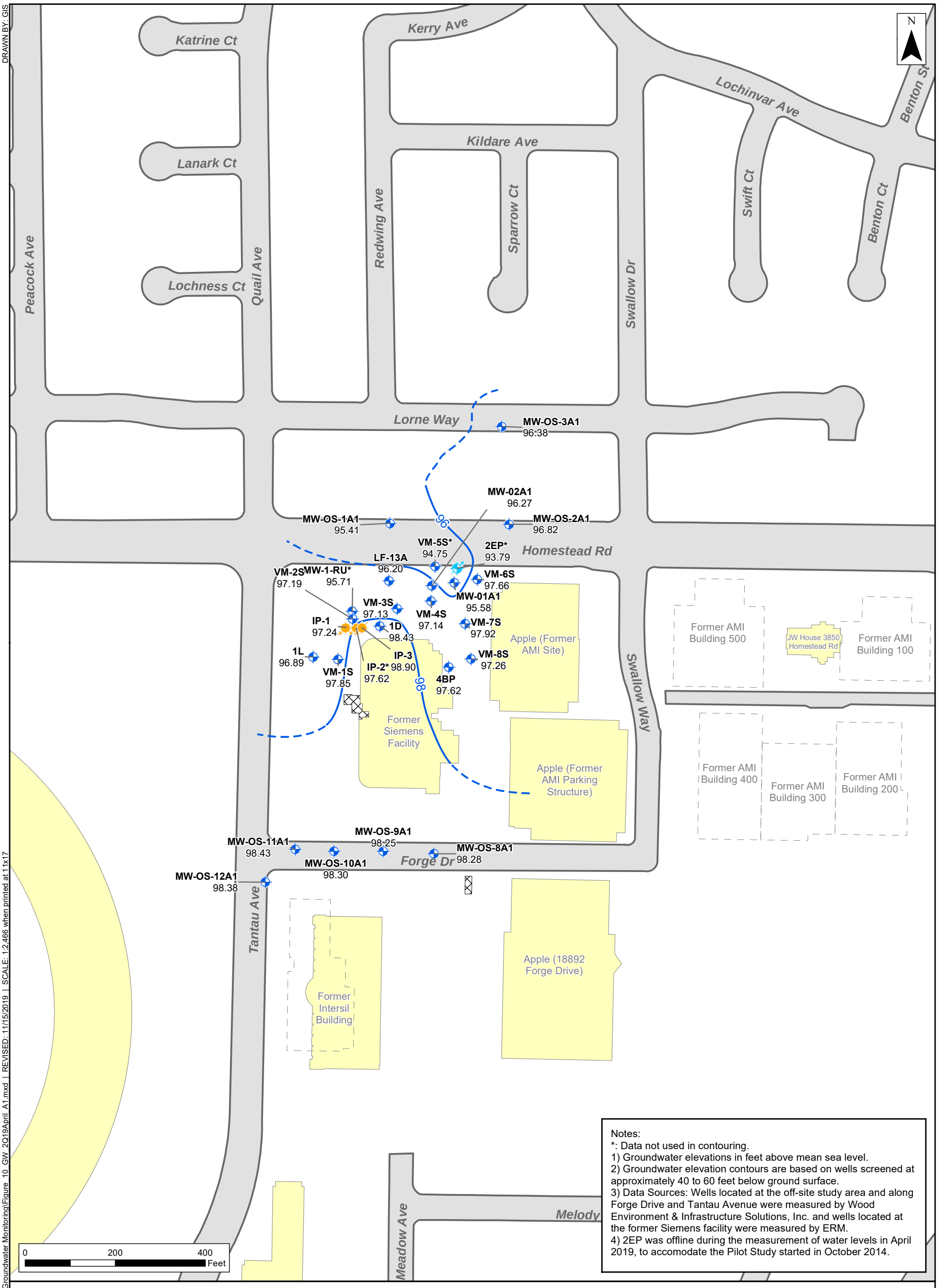
By: KLU

Date: 09/27/2019

Prj. No. 8618161053.02

Figure 9

DRAWN BY: GIS



Notes:
*: Data not used in contouring.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 40 to 60 feet below ground surface.
3) Data Sources: Wells located at the off-site study area and along Forge Drive and Tantau Avenue were measured by Wood Environment & Infrastructure Solutions, Inc. and wells located at the former Siemens facility were measured by ERM.
4) 2EP was offline during the measurement of water levels in April 2019, to accomodate the Pilot Study started in October 2014.

Legend

- Monitoring Well
- Groundwater Extraction Well
- Injection Point
- Groundwater Elevation Contour (2 ft) (Dashed Where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Figure 10
Groundwater Elevation Contours
A1 Depth Interval
April 8, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q2 Groundwater Monitoring\Figure_10_GW_2Q19April_A1.mxd | REVISED: 11/15/2019 | SCALE: 1:2,466 when printed at 11x17

NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Kara Batdorff

Katrine Ct
Kerry Ave
Lochinvar Ave
Benton St
Lanark Ct
Kildare Ave
Redwing Ave
Sparrow Ct
Swift Ct
Benton Ct
Peacock Ave
Quail Ave
Lochness Ct
Swallow Dr
Lorne Way
Homestead Rd
Swallow Way
Forge Dr
Tantau Ave

N

MW-OS-5A3
83.43*

MW-OS-4A3
94.87

MW-OS-3A3
96.12

MW-OS-2A3
96.53

H-1A
94.66*

2EPA
96.75

VM-5D
96.77

VM-6D
96.81

LF-12A
94.72

MW-04A3
96.90

MW-03A3
96.91

VM-4D
96.99

MW-01A3
96.82

VM-2D
97.11

VM-3D
97.01

VM-7D
97.07

G-1A
96.02*

VM-1D
97.33

1H-S
97.27

MW-09A3
97.11

VM-8D
97.11

MW-OS-6A3
96.58

MW-08A3
97.37

E-1
NM

SW-7
96.98

EX-1-RL
93.62

HMSA-2S
96.22*

SW-5S
97.90

SW-6S
96.88

MW-07A3
97.71

MW-OS-11A3
97.66

MW-05A3
97.77

MW-06A3
97.73

MW-OS-8A3
97.60

MW-OS-12A3
97.90

MW-OS-10A3
98.05

W19MA
97.49

W18MA
89.71

95
95.5
96
96.5
97
97.5
98

Former AMI Building 500
JW House 3850 Homestead Rd
Former AMI Building 100
Former AMI Building 400
Former AMI Building 300
Former AMI Building 200
Former Siemens Facility
Apple (Former AMI Site)
Apple (Former AMI Parking Structure)
Apple (18892 Forge Drive)
Former Intersil Building

0 200 400 Feet

Notes:
*: Data not used in contouring.
NM - Not Monitored.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 70 or 74 to 90 feet below ground surface.
3) Data Sources: Wells located at the off-site study area and along Forge Drive and Tantau Avenue were measured by Wood Environment & Infrastructure Solutions, Inc. and wells located at the former Siemens facility were measured by ERM.
4) H-1A and 2EPa were offline during the measurement of water levels in April 2019, to accomodate the Pilot Study started in October 2014. As a result, the capture zone depicted on this figure is not consistent with typical conditions experienced when these wells are pumping.

Legend

- Monitoring Well
- Groundwater Extraction Well
- Groundwater Elevation Contour (0.5 ft) (Dashed Where Inferred)
- Estimated Capture Zone
- Depression in Groundwater Surface
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Figure 11
Groundwater Elevation Contours
A3 Depth Interval
April 8, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q2 Groundwater Monitoring\Figure_11_GW_2Q19April_A3.mxd | REVISED: 12/27/2019 | SCALE: 1:2,400 when printed at 11x17

NAD 1983 StatePlane California III FIPS 0403 Feet

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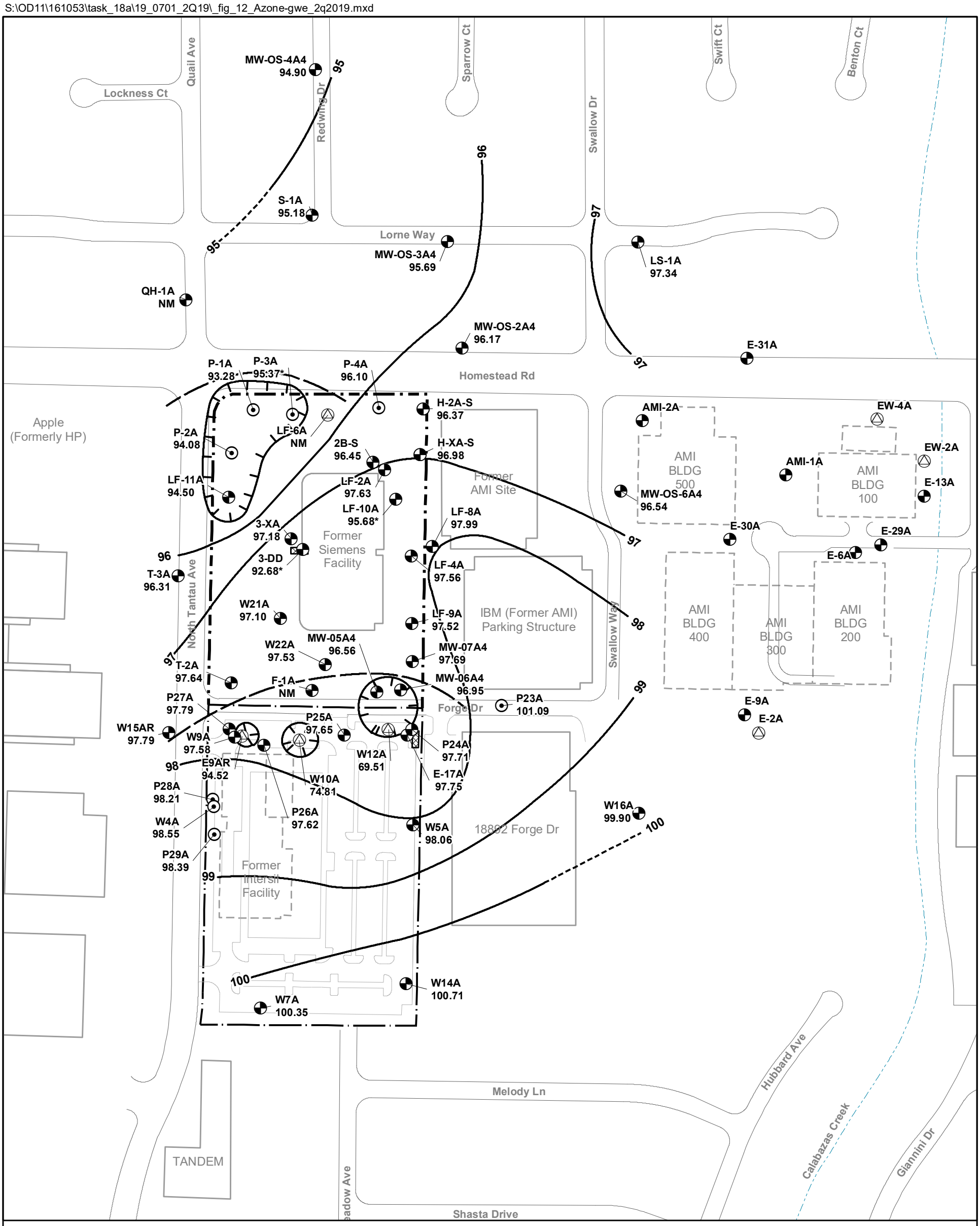


EXPLANATION

- 95 — Groundwater elevation contour
- Depression in groundwater surface
- Estimated capture zone
- 94.90 — Groundwater elevation (in feet NAVD88)
- Monitoring well
- Groundwater extraction well
- Piezometer
- Groundwater treatment system
- Property boundary
- Existing building
- Demolished building

Abbreviations:

*	Data not used in contouring
NM	not measured
NAVD88	North Americal Vertical Datum of 1988

Notes:

1. Groundwater elevation contours for the A4 depth interval are based only on wells screened in the lower interval (approximately 90 to 120 feet below ground surface).
2. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
3. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Amec Foster Wheeler.

N

0 200

APPROXIMATE SCALE IN FEET

A4 DEPTH INTERVAL GROUNDWATER ELEVATION CONTOURS, APRIL 8, 2019
Intersil/Siemens Site
Cupertino, California

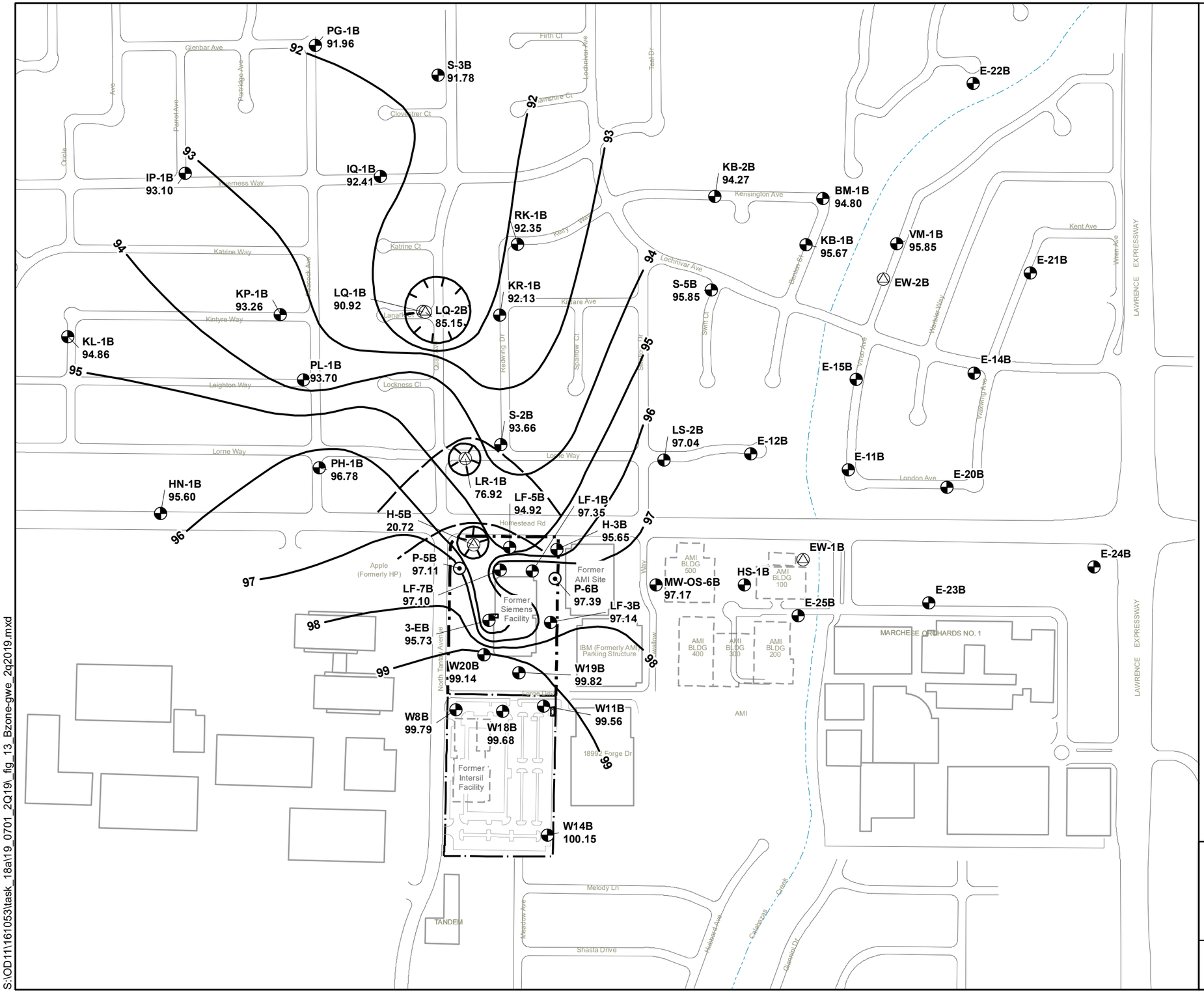
wood.

By: KLU

Date: 09/27/2019

Project No. OD11161053.18A

Figure 12



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EXPLANATION

- 92 — Groundwater elevation contour
- Depression in groundwater surface
- Estimated capture zone
- 92.13 Groundwater elevation (in feet NAVD88)
- Monitoring well
- Groundwater extraction well
- Piezometer
- Groundwater treatment system
- Property boundary
- Existing building
- Demolished building

Abbreviations:

* Data not used in contouring

NAVD88 North Americal Vertical Datum of 1988

Notes:

1. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
2. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Amec Foster Wheeler.

N

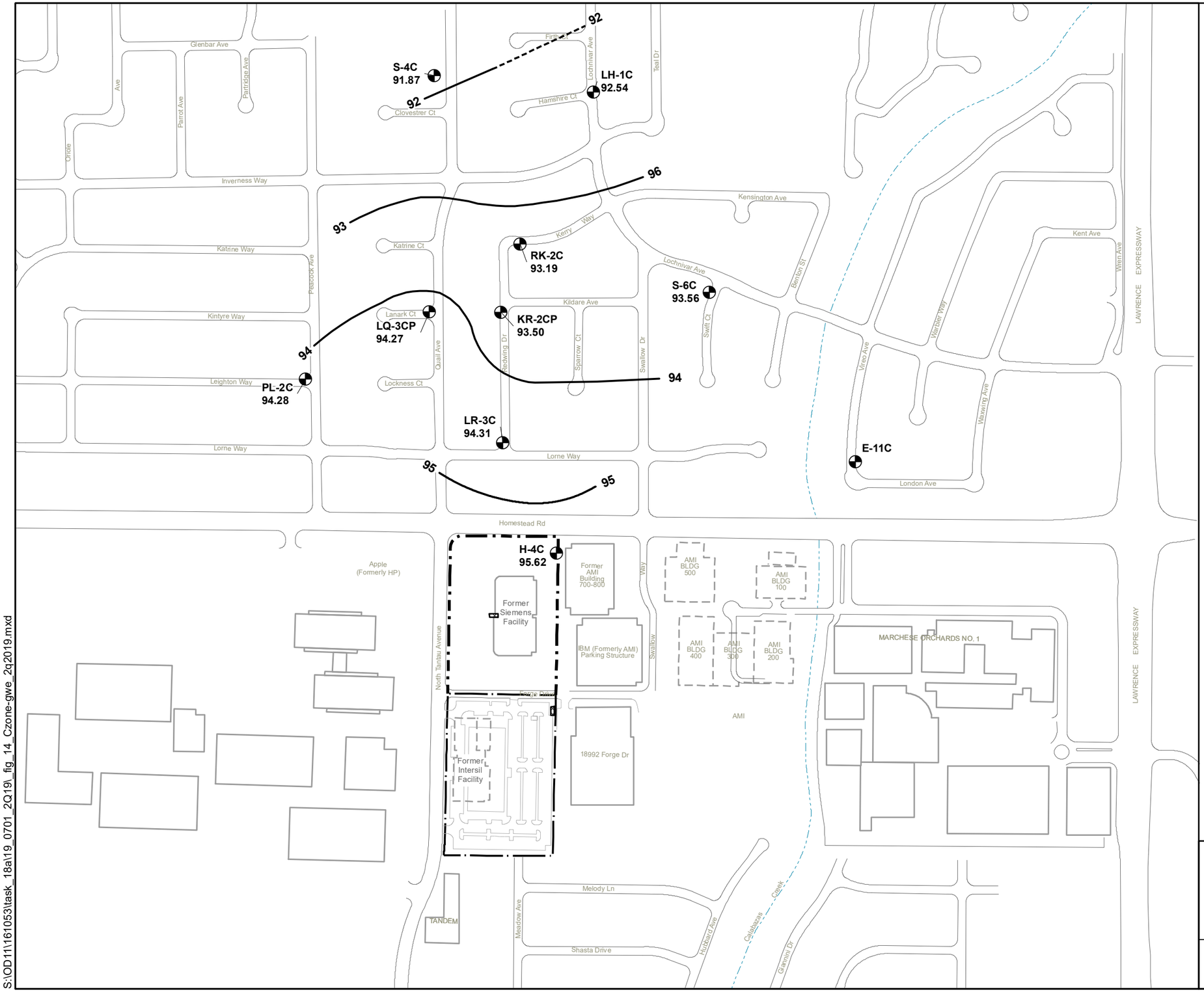
0 400

APPROXIMATE SCALE IN FEET

B-ZONE AQUIFER GROUNDWATER ELEVATION CONTOURS APRIL 8, 2019 Intersil/Siemens Site Cupertino, California

wood.

	By: DA	Prj. No. OD11161053.18A
	Date: 09/27/2019	Figure 13



EXPLANATION

92 Groundwater elevation contour

91.87 Groundwater elevation (in feet NAVD88)

Monitoring well

Groundwater treatment system

Property boundary

Existing building

Demolished building

Abbreviations:

* Data not used in contouring

NAVD88 North Americal Vertical Datum of 1988

Notes:

1. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
2. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Amec Foster Wheeler.

N

0 400

APPROXIMATE SCALE IN FEET

C-ZONE AQUIFER
GROUNDWATER ELEVATION CONTOURS
APRIL 8, 2019
Intersil/Siemens Site
Cupertino, California

wood.

By: DA

Date: 09/27/2019

Prj. No. OD11161053.18A

Figure 14

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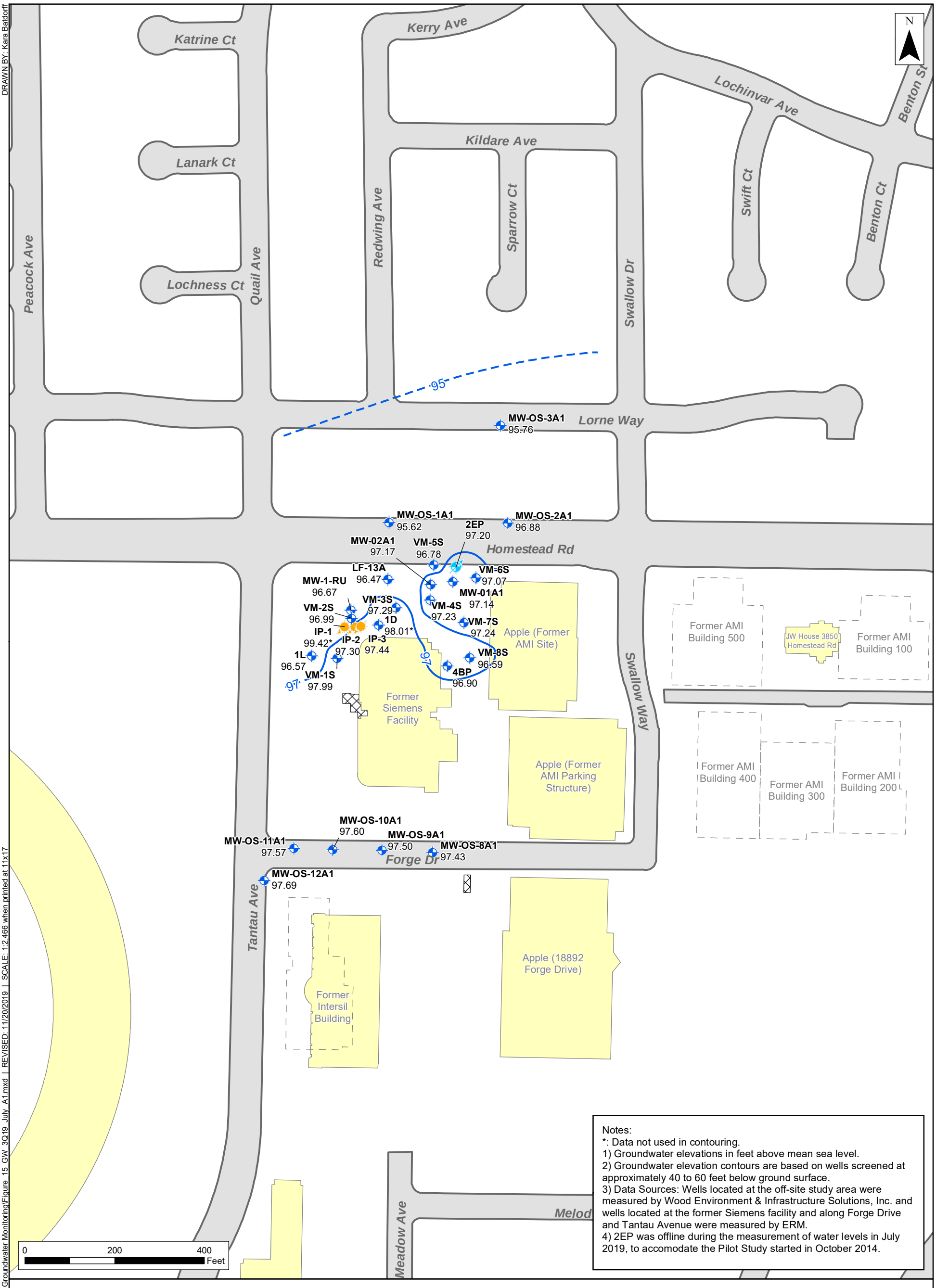
DRAWN BY: Kara Batdorff



Notes:
*: Data not used in contouring.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 40 to 60 feet below ground surface.
3) Data Sources: Wells located at the off-site study area were measured by Wood Environment & Infrastructure Solutions, Inc. and wells located at the former Siemens facility and along Forge Drive and Tantau Avenue were measured by ERM.
4) 2EP was offline during the measurement of water levels in July 2019, to accomodate the Pilot Study started in October 2014.

Legend

- Monitoring Well
- Groundwater Extraction Well
- Injection Point
- Groundwater Elevation Contour (2 ft) (Dashed Where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Figure 15
Groundwater Elevation Contours
A1 Depth Interval
July 8, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI Cupertino\maps\2019 Q3 Groundwater Monitoring\Figure 15 GW 3Q19 July A1.mxd | REVISED: 11/20/2019 | SCALE: 1:2,466 when printed at 11x17

NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Tyler Harris

Katrine Ct
Kerry Ave
Lochinvar Ave
Benton St
Kildare Ave
Lanark Ct
Redwing Ave
Sparrow Ct
Swift Ct
Benton Ct
Peacock Ave
Quail Ave
Lochness Ct
Swallow Dr
Lorne Way
Homestead Rd
Forge Dr
Tantau Ave
Swallow Way

N

MW-OS-5A3
94.61

MW-OS-4A3
94.43

94.5

95.0

95.5

MW-OS-3A3
95.59

MW-OS-2A3
95.92

MW-04A3
95.82*

H-1A
96.12

VM-5D
96.19

2EPA
96.18

96.0

LF-12A
94.94

VM-6D
96.17

VM-2D
96.43

VM-3D
96.32

VM-4D
96.35

VM-7D
96.34

G-1A
95.38*

VM-1D
96.62

1H-S
96.68

MW-09A3
96.42

VM-8D
96.40

MW-OS-6A3
95.85

MW-08A3
96.70

96.5

E-1
94.08*

SW-7
96.13

EX-1-RL
69.34

HMSA-2S
97.00

MW-07A3
96.79

MW-OS-10A3
96.94

SW-5S
97.17

97.0

SW-6S
97.12

MW-05A3
95.75*

MW-06A3
96.86

MW-OS-11A3
97.02

MW-OS-8A3
96.71

MW-OS-12A3
97.23

W19MA
96.70

W18MA
85.75

Apple (Former AMI Site)
Former Siemens Facility
Apple (Former AMI Parking Structure)
Former AMI Building 500
JW House 3850 Homestead Rd
Former AMI Building 100
Former AMI Building 400
Former AMI Building 300
Former AMI Building 200
Former Intersil Building
Apple (18892 Forge Drive)

0 200 400 Feet

Notes:
*: Data not used in contouring.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 70 or 74 to 90 feet below ground surface.
3) Data Sources: Wells located at the off-site study area and the former Intersil facility were measured by Wood Environment & Infrastructure Solutions, Inc. and wells located at the former Siemens facility and along Forge Drive and Tantau Avenue were measured by ERM.
4) H-1A and 2EPa were offline during the measurement of water levels in July 2019, to accomodate the Pilot Study started in October 2014. As a result, the capture zone depicted on this figure is not consistent with typical conditions experienced when these wells are pumping.

Legend

- Monitoring Well
- Groundwater Extraction Well
- Groundwater Elevation Contour (0.5 ft) (Dashed where Inferred)
- Estimated Capture Zone
- Depression in Groundwater Surface
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Figure 16
Groundwater Elevation Contours
A3 Depth Interval
July 8, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI Cupertino\maps\2019 Q3 Groundwater Monitoring\Figure 16 GW 3Q19 July A3.mxd | REVISED: 12/27/2019 | SCALE: 1:2,400 when printed at 11x17

NAD 1983 StatePlane California III FIPS 0403 Feet

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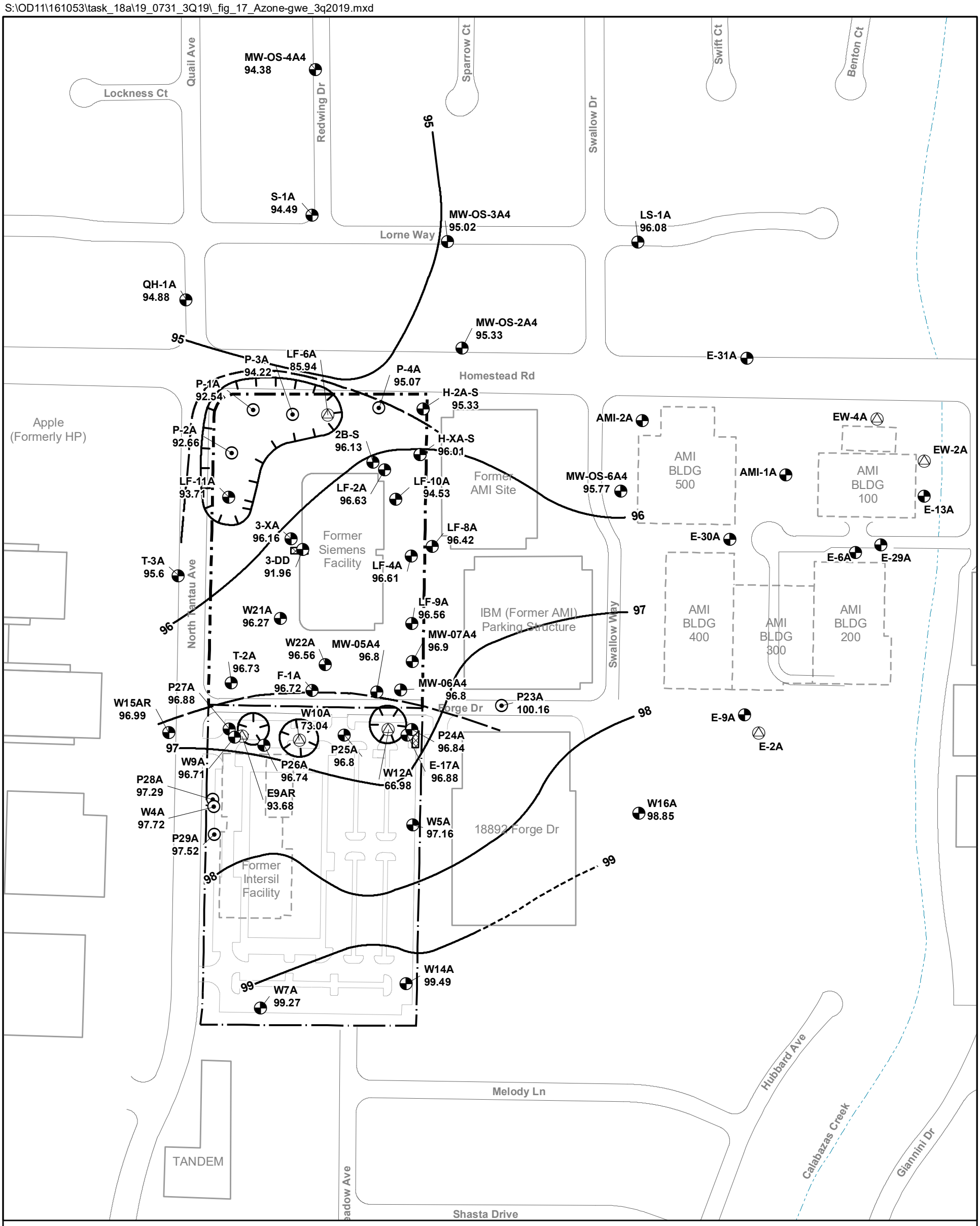


EXPLANATION

- 95 — Groundwater elevation contour
- Depression in groundwater surface
- Estimated capture zone
- 94.38 — Groundwater elevation (in feet NAVD88)
- Monitoring well
- Groundwater extraction well
- Piezometer
- Groundwater treatment system
- Property boundary
- Existing building
- Demolished building

Abbreviations:

* Data not used in contouring

NAVD88 North Americal Vertical Datum of 1988

Notes:

1. Groundwater elevation contours for the A4 depth interval are based only on wells screened in the lower interval (approximately 90 to 120 feet below ground surface).
2. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
3. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Amec Foster Wheeler.

N

0 200

APPROXIMATE SCALE IN FEET

A4 DEPTH INTERVAL GROUNDWATER ELEVATION CONTOURS JULY 8, 2019 Intersil/Siemens Site Cupertino, California

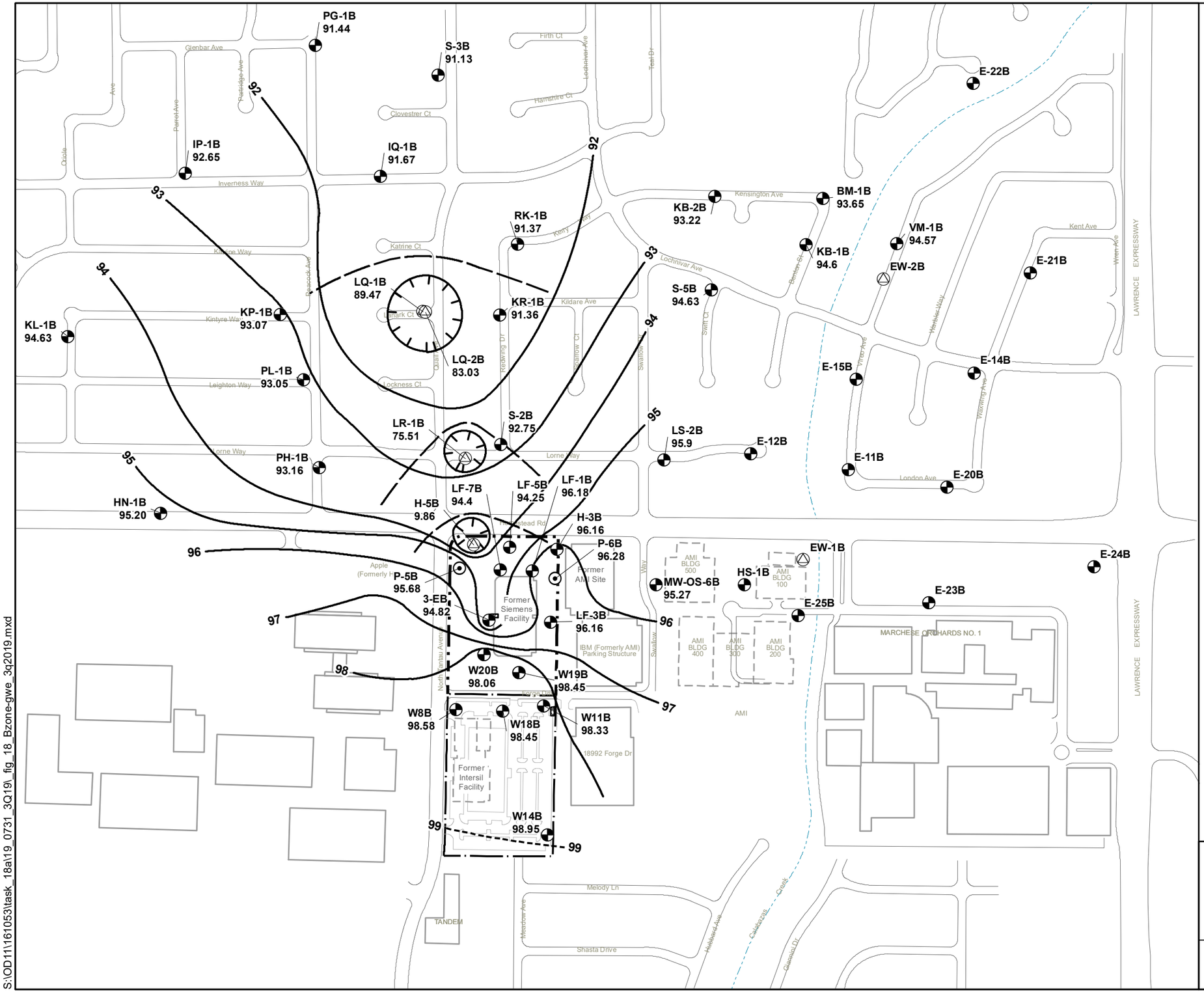
wood.

By: KLU

Date: 09/27/2019

Project No. OD11161053.18A

Figure 17



EXPLANATION

- 92 — Groundwater elevation contour
- Depression in groundwater surface
- Estimated capture zone
- 91.44 Groundwater elevation (in feet NAVD88)
- Monitoring well
- Groundwater extraction well
- Piezometer
- Groundwater treatment system
- Property boundary
- Existing building
- Demolished building

Abbreviations:

* Data not used in contouring

NAVD88 North Americal Vertical Datum of 1988

Notes:

1. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
2. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Wood, E & IS.

N

0 400

APPROXIMATE SCALE IN FEET

B-ZONE AQUIFER
GROUNDWATER ELEVATION CONTOURS
JULY 8, 2019
Intersil/Siemens Site
Cupertino, California

wood.

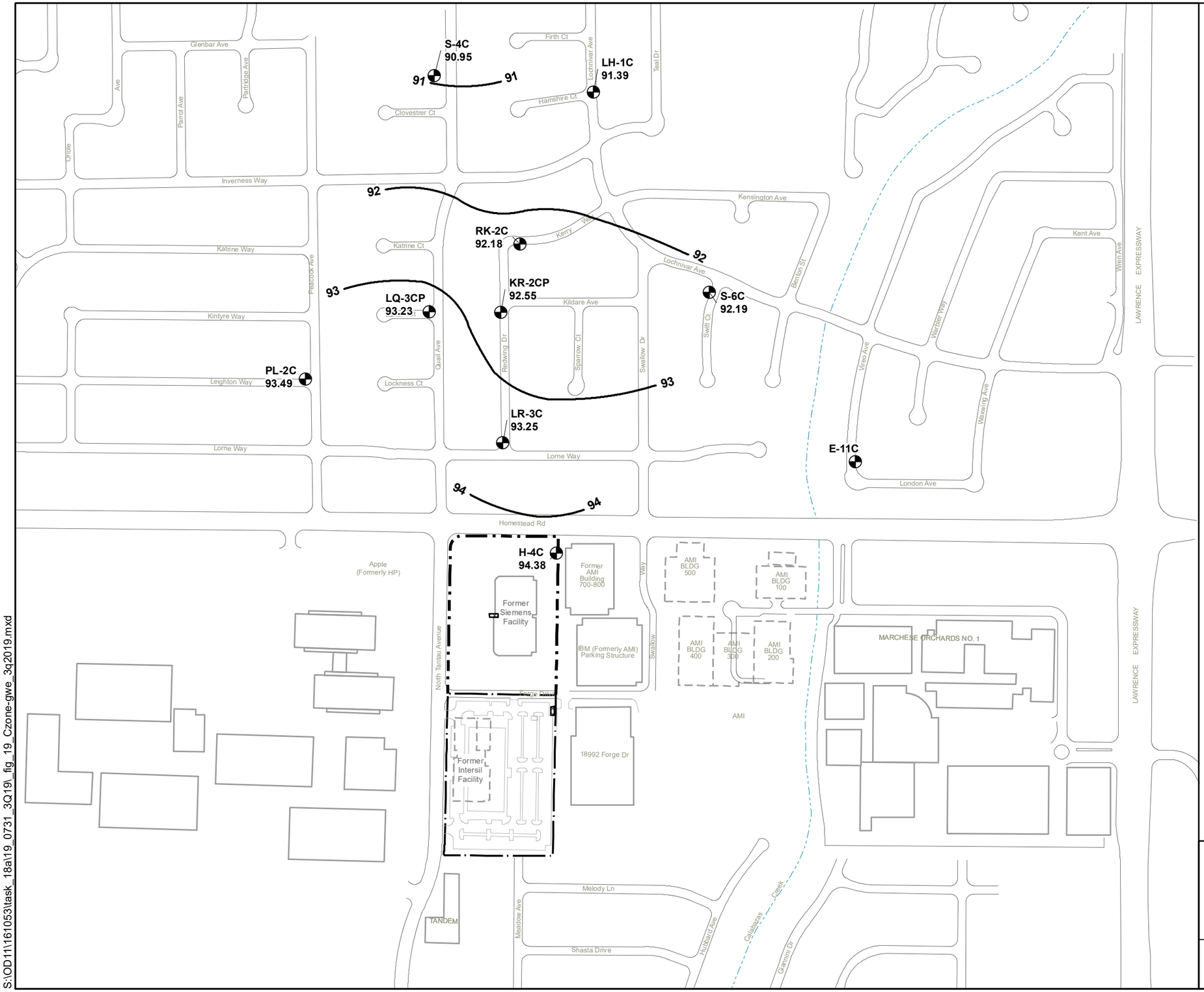
By: KLU

Date: 09/27/2019

Prj. No. OD11161053.18A

Figure 18

S:\OD11\161053\task_18a\19_0731_3Q19_fig_18_Bzone-gwe_3q2019.mxd



EXPLANATION

92 Groundwater elevation contour

90.95 Groundwater elevation (in feet NAVD88)

Monitoring well

Groundwater treatment system

Property boundary

Existing building

Demolished building

Abbreviations:

* Data not used in contouring

NAVD88 North Americal Vertical Datum of 1988

Notes:

1. Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
2. Data Sources: Wells located at the former Siemens facility measured by ERM, and wells located at the off-site study area and the former Intersil facility measured by Wood E & IS.

N

0 400

APPROXIMATE SCALE IN FEET

C-ZONE AQUIFER GROUNDWATER ELEVATION CONTOURS JULY 8, 2019 Intersil/Siemens Site Cupertino, California

wood.	By: DA	Prj. No. OD11161053.18A
	Date: 09/27/2019	Figure 19

S:\OD11\11161053\task_18a\19_0731_3Q19_fig_19_Czone-gwe_3q2019.mxd

DRAWN BY: Mike Appel

Katrine Ct
Lanark Ct
Lochness Ct
Quail Ave
Redwing Ave
Kildare Ave
Sparrow Ct
Swallow Dr
Swift Ct
Lochinvar Ave
Benton Ct
Benton St
N
94
Lorne Way
MW-OS-3A1
94.11
MW-OS-1A1
94.66
MW-OS-2A1
94.43
VM-5S
95.75
2EP
96.13*
MW-02A1
95.90
Homestead Rd
LF-13A
95.25
VM-6S
95.59
MW-1-RU
95.25
VM-4S
95.02
MW-01A1
95.91
VM-2S
95.30
VM-3S
96.53*
VM-7S
95.65
1D
96.14*
IP-1
95.40
IP-2
95.58
IP-3
95.75
Apple (Former AMI Site)
1L
94.99
VM-8S
94.95
4BP
95.30
VM-1S
97.95*
Former Siemens Facility
Swallow Way
Former AMI Building 500
JW House 3850 Homestead Rd
Former AMI Building 100
P-8
P-6
Apple (Former AMI Parking Structure)
Former AMI Building 400
Former AMI Building 300
P-5
Former AMI Building 200
MW-OS-11A1
95.62
MW-OS-8A1
95.18
MW-OS-10A1
95.98
MW-OS-9A1
95.85
Forge Dr
P-3
MW-OS-12A1
96.05
96
Tantau Ave
Apple (18892 Forge Drive)
P-10
Former Intersil Building
Meadow Ave
Melody Ln
0
200
400
Feet

Notes:
*: Data not used in contouring.
NM: Not monitored.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 40 to 60 feet below ground surface.
3) Data Sources: Wells located at the former Intersil facility were measured by Wood Environment & Infrastructure Solutions Inc. and wells located at the offsite study area, the former Siemens facility, and along Forge Drive and Tantau Avenue were measured by ERM.
4) 2EP was offline during the measurement of water levels in October 2019, to accomodate the Pilot Study started in October 2014.
5) Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown in this figure without data) are presented in AMI's respective self-monitoring report.

Legend

- Monitoring Welll
- Groundwater Extraction Well
- Injection Well
- Groundwater Elevation Contour (2 ft) (Dashed Where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

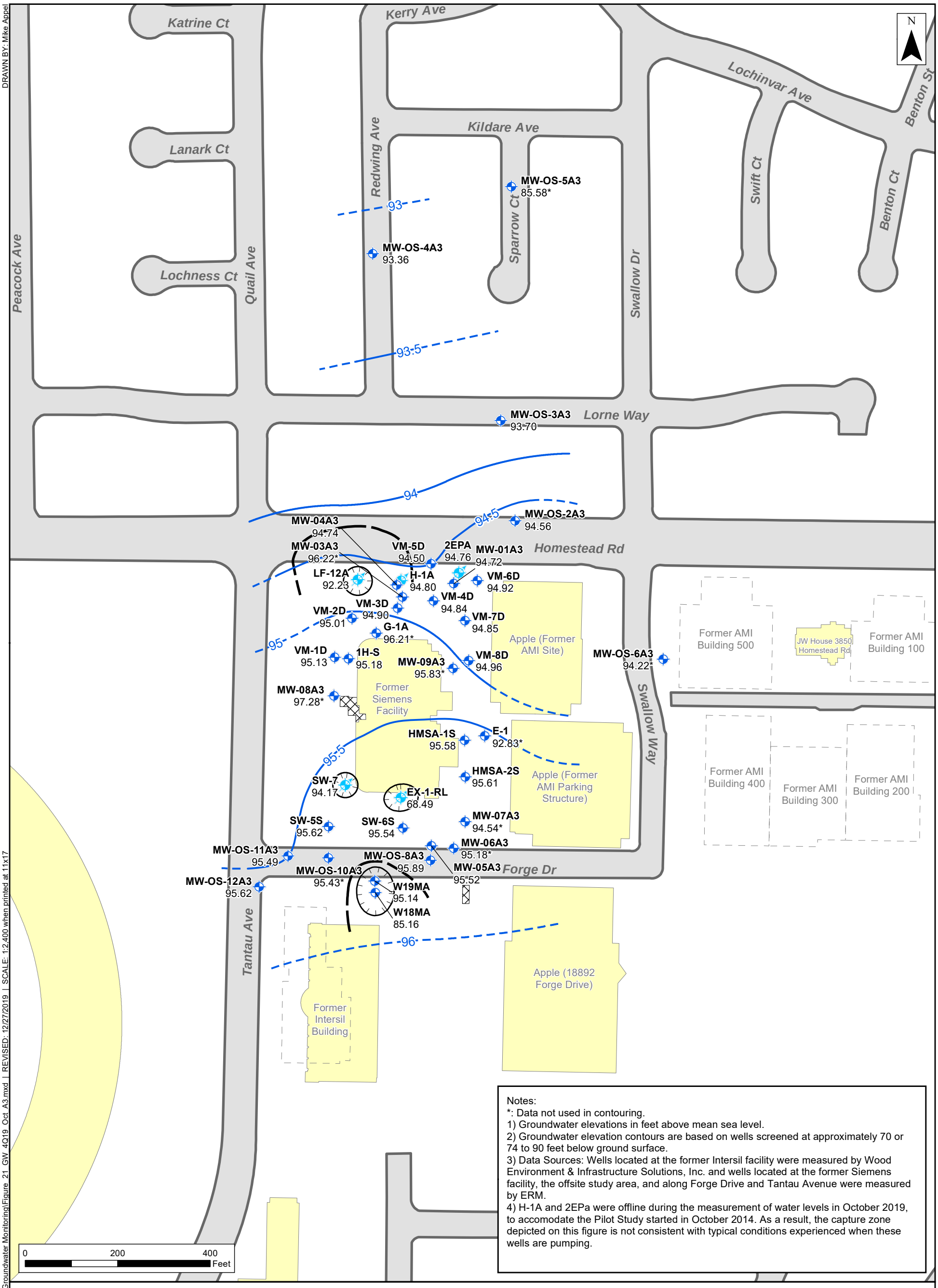
Figure 20
Groundwater Elevation Contours
A1 Depth Interval
October 1, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_20_GW_4Q19_Oct_A1.mxd | REVISED: 11/21/2019 | SCALE: 1:2,400 when printed at 11x17

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Mike Appel



Notes:
*: Data not used in contouring.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 70 or 74 to 90 feet below ground surface.
3) Data Sources: Wells located at the former Intersil facility were measured by Wood Environment & Infrastructure Solutions, Inc. and wells located at the former Siemens facility, the offsite study area, and along Forge Drive and Tantau Avenue were measured by ERM.
4) H-1A and 2EPa were offline during the measurement of water levels in October 2019, to accomodate the Pilot Study started in October 2014. As a result, the capture zone depicted on this figure is not consistent with typical conditions experienced when these wells are pumping.

Legend

- Monitoring Welll
- Groundwater Extraction Well
- Groundwater Elevation Contour (0.5 ft) (Dashed where Inferred)
- Estimated Capture Zone
- Depression in Groundwater Surface
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Figure 21
Groundwater Elevation Contours
A3 Depth Interval
October 1, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_21_GW_4Q19_Oct_A3.mxd | REVISED: 12/27/2019 | SCALE: 1:2,400 when printed at 11x17

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Kara Batdorff

Katrine Ct
Lanark Ct
Lochness Ct
Quail Ave
Redwing Ave
Kildare Ave
Sparrow Ct
Swallow Dr
Swift Ct
Lochinvar Ave
Benton St
Benton Ct
Homestead Rd
Forge Dr
Swallow Way
Tantau Ave
Melody Ln

N

MW-OS-4A4
93.31

S-1A
93.30

MW-OS-3A4
94.44

LS-1A
94.54

QH-1A
93.59

MW-OS-2A4
94.06

E-31A

LF-6A
84.10

P-1A
91.03

P-3A
92.79

P-4A
93.65

H-2A-S
94.91

P-2A
91.47

2B-S
94.27

H-XA-S
94.59

LF-2A
95.14*

LF-10A
93.32*

LF-11A
92.14

Apple (Former AMI Site)

3-XA
94.76

3-DD
90.51*

3-E
NM

LF-4A
95.11

LF-8A
95.47

Former Siemens Facility

T-3A
94.29

W21A
94.58

LF-9A
94.90

Apple (Former AMI Parking Structure)

W22A
95.02

MW-07A4
94.34

T-2A
95.21

F-1A
95.18

MW-05A4
95.32*

MW-06A4
94.49

P-23A
98.42*

W15AR
95.45

P-27A
95.28

E-9AR
92.73

W9A
95.16

W10A
73.29

W12A
89.40

P-24A
95.27

E-17A
95.31

P-25A
95.26

P-28A
95.75

W4A
96.15*

P-26A
95.21

P-29A
95.95

Former Intersil Building

W5A
96.24

Apple (18892 Forge Drive)

W16A
97.16

W14A
98.25

W7A
97.58

EW-4A

AMI-2A

Former AMI Building 500

AMI-1A

JW House
3850 Homestead Rd

Former AMI Building 100

EW-2A

MW-OS-6A4
94.31

E-13A

E-30A

E-6A

E-29A

Former AMI Building 400

Former AMI Building 300

Former AMI Building 200

E-9A

E-2A

93
94
95
96
97
98

0 200 400 Feet

Notes:
*: Data not used in contouring.
NM - Not Monitored.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 90 to 120 feet below ground surface.
3) Data Sources: Wells located at the former Intersil facility were measured by Wood Environment & Infrastructure Solutions, Inc. and wells located at the former Siemens facility and off-site study area were measured by ERM.
4) Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown in this figure without data) are presented in AMI's respective self-monitoring report.

Legend

- Monitoring Welll
- Groundwater Extraction Well
- Depression in Groundwater Surface
- Groundwater Elevation Contour (1 ft) (Dashed where Inferred)
- Estimated Capture Zone
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Figure 22
Groundwater Elevation Contours
A4 Depth Interval
October 1, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_22_GW_4Q19_Oct_A4.mxd | REVISED: 12/08/2019 | SCALE: 1:2,400 when printed at 11x17

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Mike Appel

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_23_GW_4Q19_Oct_B.mxd, REVISED: 12/09/2019 , SCALE: 1:4,080 when printed at 11x17

Coordinate System:NAD 1983 StatePlane California III FIPS 0403 Feet

PG-1B 90.85
S-3B 95.31*
IP-1B 91.95
IQ-1B 90.97
RK-1B 90.66
KB-2B 91.86
BM-1B 92.17
KB-1B 93.07
VM-1B
EW-2B
E-21B
S-5B 93.13
LQ-1B 89.07
LQ-2B 91.16*
KP-1B 92.29
KR-1B 90.49
KL-1B 94.03
PL-1B 92.26
E-15B
E-14B
S-2B 91.60
LR-1B 89.77
LS-2B 94.24
E-12B
E-11B
E-20B
PH-1B 92.22
HN-1B 94.48
H-5B 9.50
LF-5B 93.14
H-3B 94.54
P-5B 94.69
LF-7B 93.36
P-6B 94.75
LF-1B 94.71
3-EB 93.51
LF-3B 94.87
W20B 96.64
W19B 96.89
W8B 97.00
W18B 96.81
W11B 96.41
W14B 97.31
EW-1B
LF-1B(AMI)
E-24B
MW-OS-6B 94.36
HS-1B
E-23B
E-25B

Parrot Ave
Partridge Ave
Glenbar Ave
Oriole Ave
Inverness Way
Gloucester Ct
Firth Ct
Hamshire Ct
Teal Dr
Redtail Ct
Wood Duck Ave
Benton St
Vireo Ave
Warbler Ave
Kent Ave
Warbler Way
Waxwing Ave
Wren Ave
Kensington Ave
Kerry Ave
Katrine Ct
Quail Ave
Peacock Ave
Kennard Way
Kintyre Way
Leighton Way
Lochness Ct
Redwing Ave
Sparrow Ct
Kildare Ave
Swallow Dr
Swift Ct
Benton Ct
Lochinvar Ave
Lorne Way
London Ave
Homestead Rd
Tantau Ave
Forge Dr

90
91
92
93
94
95
96
97

Former AMI Building 500
JW House 3850 Homestead Rd
Former AMI Building 100
Former AMI Building 400
Former AMI Building 300
Former AMI Building 200
Apple (Former AMI Site)
Former Siemens Facility
Apple (Former AMI Parking Structure)
Former Intersil Building
Apple (18892 Forge Drive)

Legend

- Monitoring Welll
- Groundwater Extraction Well
- Groundwater Elevation Contour (1 ft) (Dashed where Inferred)
- Estimated Capture Zone
- Depression in Groundwater Surface
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

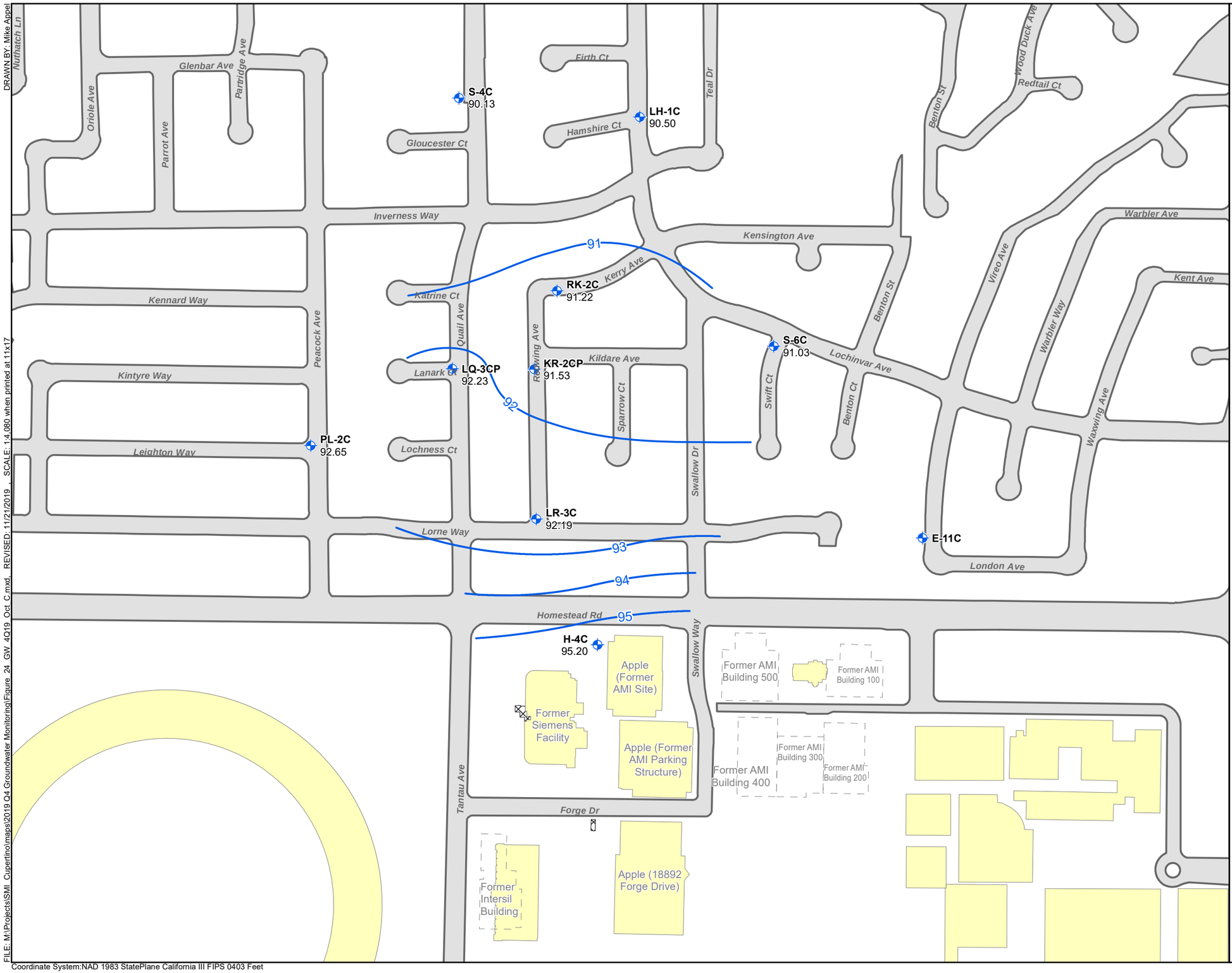
Notes:
*: Data not used in contouring.
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 130 to 150 feet below ground surface.
3) Data Sources: Wells located at the former Intersil facility were measured by Wood Environment & Infrastructure Solutions, Inc. and wells located at the former Siemens facility and off-site study area were measured by ERM.
4) Groundwater elevation data for the American Microsystems, Inc. (AMI) site wells (shown in this figure without data) are presented in AMI's respective self-monitoring report.

N

0 340 680
Feet

Figure 23
Groundwater Elevation Contours
B Zone Aquifer
October 1, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM



Legend

- Monitoring Welll
- Groundwater Elevation Contour (1 ft) (Dashed where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Notes:
1) Groundwater elevations in feet above mean sea level.
2) Groundwater elevation contours are based on wells screened at approximately 180 to 210 feet below ground surface.
3) Data Sources: Wells located at the former Siemens facility and off-site study area were measured by ERM.
4) Groundwater elevation data for the American Microsystems, Inc. (AMI) site well (shown in this figure without data) is presented in AMI's respective self-monitoring report.

N

0 340 680
Feet

Figure 24
Groundwater Elevation Contours
C Zone Aquifer
October 1, 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com

DRAWN BY: Mike Appel
FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_24_GW_4Q19_Oct_C.mxd REVISED: 11/21/2019 , SCALE: 14,080 when printed at 11x17
Coordinate System:NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Mike Appel

Katrine Ct
Lanark Ct
Lochness Ct
Quail Ave
Redwing Ave
Kildare Ave
Sparrow Ct
Swallow Dr
Swift Ct
Benton Ct
Lochinvar Ave
Benton St
N

MW-OS-3A1 21
Lorne Way
MW-OS-1A1 1.2
MW-OS-2A1 0.35 J-
MW-02A1 0.29 J-
LF-13A 2.9
VM-5S <0.50
2EP 1.6
Homestead Rd
VM-6S 14
VM-3S 0.65 J-
MW-01A1 3.2
MW-1-RU NS
VM-2S 5.2
VM-4S 0.37 j
1D NS
IP-1 NS
IP-3 NS
IP-2 NS
1L NS
VM-1S NS
VM-7S 0.51
VM-8S 4.7
4BP 0.41 j
5 µg/L
Former Siemens Facility
Apple (Former AMI Site)
Apple (Former AMI Parking Structure)
Former AMI Building 500
JW House 3850 Homestead Rd
Former AMI Building 100
Former AMI Building 400
Former AMI Building 300
Former AMI Building 200
Swallow Way
MW-OS-10A1 300 J-
MW-OS-11A1 140
MW-OS-8A1 19
MW-OS-9A1 330
Forge Dr
MW-OS-12A1 73
50 µg/L
Tantau Ave
Former Intersil Building
Apple (18892 Forge Drive)
Meadow Ave
Melody Ln
Hubbard Ave
Giannini Dr
0 200 400 Feet

Legend

- Monitoring Well
- Groundwater Extraction Well
- Injection Point
- TCE Contour (Dashed where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Streets

Notes:
Concentration of Trichloroethene (TCE) in micrograms per liter (µg/L)
NS : Location Not Sampled in October 2019
< 0.5 = TCE not detected at or above the listed reporting limit.
j = Estimated value detected above the MDL but below reporting limit
J- = Detected results are estimated with a low bias.
The general direction of groundwater flow in the A1 Depth Interval during the October 2019 sampling event was to the north.

Figure 25
TCE Isoconcentration Map
A1 Depth Interval
October 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
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ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure 25_TCE_4Q19_Oct_A1.mxd | REVISED: 12/08/2019 | SCALE: 1:2,400 when printed at 11x17

NAD 1983 StatePlane California III FIPS 0403 Feet

DRAWN BY: Mike Appel

Katrine Ct
Lanark Ct
Lochness Ct
Quail Ave
Redwing Ave
Kildare Ave
Sparrow Ct
Swallow Dr
Swift Ct
Lochinvar Ave
Benton Ct
Benton St
Lorne Way
Homestead Rd
Forge Dr
Swallow Way
Tantau Ave
Meadow Ave
Melody Ln
Hubbard Ave
Giannini Dr

N

MW-OS-5A3
6.5

MW-OS-4A3
< 0.50

5 µg/L
50 µg/L

MW-OS-3A3
5.6

MW-OS-2A3
33

H-1A
40

MW-01A3
0.24 j

MW-04A3
78

2EPa
2.9

VM-5D
30

VM-6D
15

LF-12A
12 J

MW-03A3
13

VM-4D
9.0

2D
< 2.5 UJ

VM-2D
15

VM-3D
50

25 µg/L

VM-7D
2.8

G-1A
300

VM-1D
NS

1H-S
NS

MW-09A3
3.4

VM-8D
150

MW-OS-6A3
2.8

MW-08A3
12

HMSA-1S
74

HMSA-2S
0.34 j

SW-7
65

EX-1-RL
300

SW-5S
63

SW-6S
220

MW-07A3
23

MW-06A3
40

MW-OS-11A3
20

MW-OS-10A3
12

MW-05A3
34

MW-OS-8A3
90

MW-OS-12A3
270

W19MA
160

W18MA
65

Former AMI Building 500
JW House 3850 Homestead Rd
Former AMI Building 100
Apple (Former AMI Site)
Former Siemens Facility
Apple (Former AMI Parking Structure)
Former AMI Building 400
Former AMI Building 300
Former AMI Building 200
Former Intersil Building
Apple (18892 Forge Drive)

0 200 400 Feet

Legend

- Monitoring Well
- Groundwater Extraction Well
- TCE Contour (Dashed where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Streets

Notes:
Concentration of Trichloroethene (TCE) in micrograms per liter (µg/L).
NS : Location Not Sampled in October 2019.
< 0.05 = TCE not detected at or above the listed reporting limit.
j = Estimated value detected above the MDL but below reporting limit.
J = Estimated value based on QC assessment.
UJ = TCE not detected, listed reporting limit is an estimate.
The general direction of groundwater flow in the A3 Depth Interval during the October 2019 sampling event was to the north.

Figure 26
TCE Isoconcentration Map
A3 Depth Interval
October 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
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ERM

NAD 1983 StatePlane California III FIPS 0403 Feet

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_26_TCE_4Q19_Oct_A3.mxd | REVISED: 12/08/2019 | SCALE: 1:2,400 when printed at 11x17

DRAWN BY: Mike Appel

Katrine Ct
Lanark Ct
Lochness Ct
Quail Ave
Redwing Ave
Kildare Ave
Sparrow Ct
Swallow Dr
Swift Ct
Lochinvar Ave
Benton St
Benton Ct
Lorne Way
Homestead Rd
Forge Dr
Tantau Ave
Swallow Way
Meadow Ave
Melody Ln
Hubbard Ave
Giannini Dr

N

E-27A
MW-OS-4A4 9.4
S-1A < 0.50
MW-OS-3A4 23 J
LS-1A < 0.50
E-19A
QH-1A < 0.50
MW-OS-2A4 16
E-31A
50 µg/L
5 µg/L
P-1A 18
P-3A NS
LF-6A 130
P-4A NS
H-2A-S 54
P-2A NS
H-XA-S 40
LF-2A NS
LF-11A NS
LF-10A 62
Apple (Former AMI Site)
3-XA 45
3-DD NS
3-E NS
LF-4A NS
LF-8A 3.7 J-
Former Siemens Facility
T-3A NS
W21A 69
LF-9A 55
Apple (Former AMI Parking Structure)
W22A 280
MW-07A4 73
T-2A 6.1
F-1A 590
MW-05A4 < 10
MW-06A4 84
P-24A NS
W15AR NS
P-27A NS
W10A 43
P-25A NS
W12A 56
E-17A 10
E-9AR 13
P-26A NS
W4A 6.9
P-28A NS
P-29A NS
Former Intersil Building
W5A 4.3
Apple (18892 Forge Drive)
W16A NS
W14A NS
W7A NS
EW-4A
AMI-2A
Former AMI Building 500
JW-House 3850 Homestead Rd
AMI-1A
Former AMI Building 100
EW-2A
E-13A
MW-OS-6A4 < 0.50
E-30A
E-6A
E-29A
Former AMI Building 400
Former AMI Building 300
Former AMI Building 200
E-9A
E-2A

0 200 400 Feet

Legend

- Monitoring Well
- Groundwater Extraction Well
- Piezometer
- TCE Contour (Dashed where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Streets

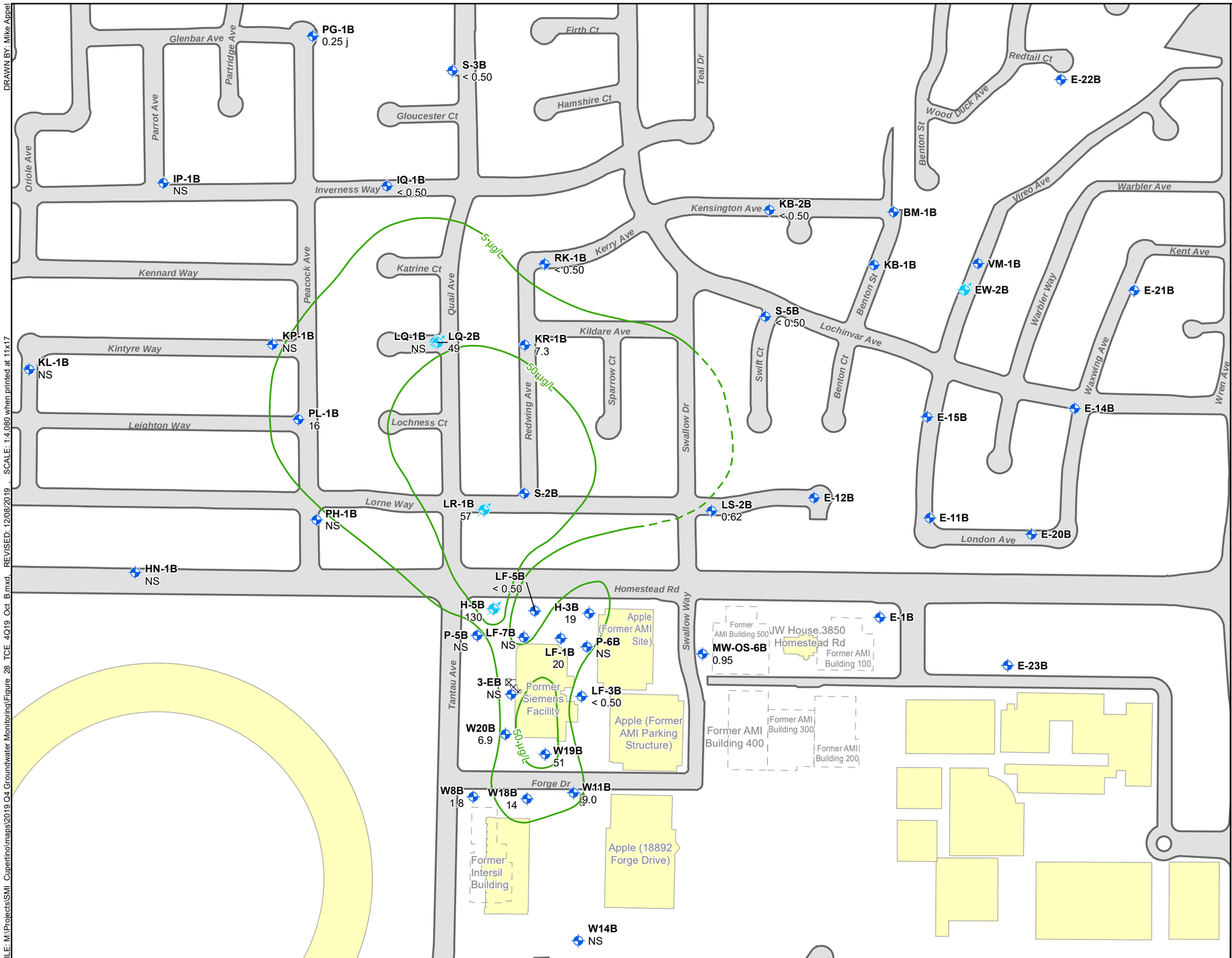
Notes:
Concentration of Trichloroethene (TCE) in micrograms per liter (µg/L).
NS : Location Not Sampled in October 2019.
< 0.05 = TCE not detected at or above the listed reporting limit.
J = Estimated value based on QC assessment.
J- = Detected results are estimated with a low bias.
TCE concentration data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
The general direction of groundwater flow in the A4 Depth Interval during the October 2019 sampling event was to the northwest.

Figure 27
TCE Isoconcentration Map
A4 Depth Interval
October 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com
ERM

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_27_TCE_4Q19_Oct_A4.mxd | REVISED: 12/09/2019 | SCALE: 1:2,400 when printed at 11x17

NAD 1983 StatePlane California III FIPS 0403 Feet



Legend

- Monitoring Well
- Groundwater Extraction Well
- TCE Contour (Dashed where Inferred)
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Notes:
Concentration of Trichloroethene (TCE) in micrograms per liter (µg/L).
NS : Location Not Sampled in October 2019.
< 0.05 = TCE not detected at or above the listed reporting limit.
j = Estimated value detected above the MDL but below reporting limit.
TCE concentration data for the American Microsystems, Inc. (AMI) site wells (shown on this figure without data) are presented in AMI's respective self-monitoring report.
The general direction of groundwater flow in the B Zone during the October 2019 sampling event ranged from northwest to northeast.

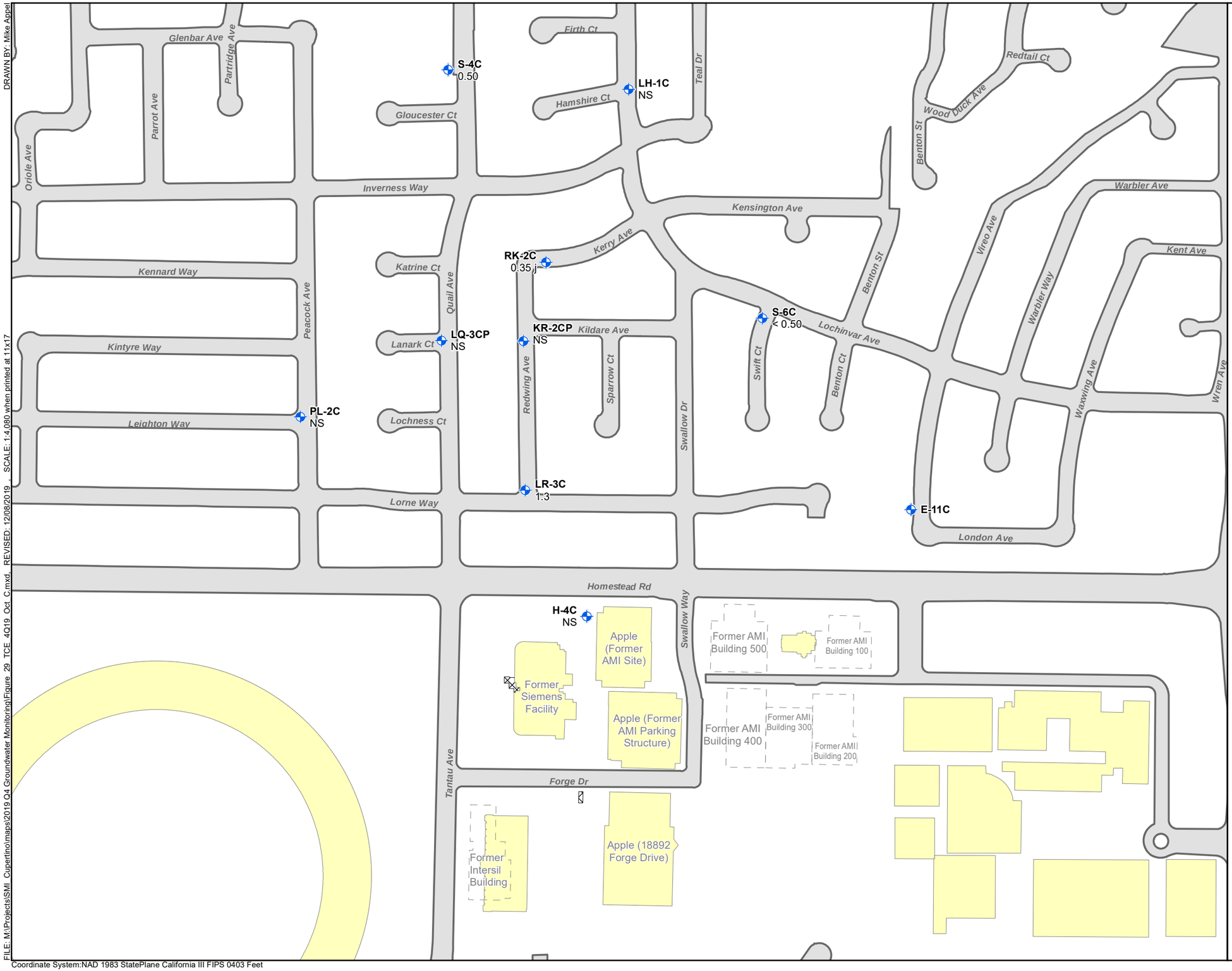
N

0 340 680
Feet

Figure 28
TCE Isoconcentration Map
B Zone Groundwater
October 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_28_TCE_4Q19_Oct_B.mxd, REVISED: 12/08/2019 , SCALE: 1:4,080 when printed at 11x17
DRAWN BY: Mike Appel
Coordinate System:NAD 1983 StatePlane California III FIPS 0403 Feet



Legend

- Monitoring Well
- Groundwater Extraction
- Current Building
- Demolished Building
- Groundwater Remediation Facility
- Street

Notes:
Concentration of Trichloroethene (TCE) in micrograms per liter (µg/L).
NS : Location Not Sampled in October 2019.
< 0.05 = TCE not detected at or above the listed reporting limit.
j = Estimated value detected above the MDL but below reporting limit.
TCE concentration data for the American Microsystems, Inc. (AMI) site well (shown on this figure without data) is presented in AMI's respective self-monitoring report.
Isoconcentration contours not shown due to insufficient data.
The general direction of groundwater flow in the C Zone during the October 2019 sampling event was to the north.

N

0 340 680
Feet

Figure 29
TCE Isoconcentration Map
C Zone Groundwater
October 2019
Intersil/Siemens Site
Cupertino, CA

Environmental Resources Management
www.erm.com

FILE: M:\Projects\SMI_Cupertino\maps\2019 Q4 Groundwater Monitoring\Figure_29_TCE_4Q19_Oct_C.mxd, REVISED: 12/08/2019 , SCALE: 1:4,080 when printed at 11x17
DRAWN BY: Mike Appel
Coordinate System:NAD 1983 StatePlane California III FIPS 0403 Feet

TABLES

Table 1
Approved Schedule for Sampling
Groundwater[1] Monitoring Wells
Intersil/Siemens Site
Cupertino, California

Well Number	Notes	Zone/Depth Interval	Sampling Frequency [2,3]	EPA Method
Former Intersil Facility [4]				
E17A		A4 Depth Interval	Annual	8010
E9AR		A4 Depth Interval	Annual	8010
W10A		A4 Depth Interval	Annual	8010
W11B		A4 Depth Interval	Annual	8010
W12A		A4 Depth Interval	Annual	8010
W13A	(5)	A4 Depth Interval	Destroyed	8010
W14A		A4 Depth Interval	Every 2 Years	8010
W2A	(5)	A4 Depth Interval	Destroyed	8010
W3A	(5)	A4 Depth Interval	Destroyed	8010
W4A		A4 Depth Interval	Annual	8010
W5A		A4 Depth Interval	Annual	8010
W7A		A4 Depth Interval	Every 2 Years	8010
W8B		B Zone	Annual	8010
W14B		B Zone	Every 2 Years	8010
W18B		B Zone	Annual	8010
W6B	(5)	B Zone	Destroyed	8010
Former Siemens Facility [6]				
2-EP		A1 Depth Interval	Annual	8010
4BP		A1 Depth Interval	Annual	8010
LF-13A	(8)	A1 Depth Interval	Annual	8010
VM-2S	(1)	A1 Depth Interval	Annual	8010
VM-8S	(1)	A1 Depth Interval	Annual	8010
MW-01A1	(12)	A1 Depth Interval	Annual	8010
MW-02A1	(12)	A1 Depth Interval	Annual	8010
2-EPA	(1)	A3 Depth Interval	Annual	8010
EX-1-RL	(7)	A3 Depth Interval	Annual	8010
G-1A		A3 Depth Interval	Annual	8010
H-1A		A3 Depth Interval	Annual	8010
LF-12A	(8)	A3 Depth Interval	Annual	8010
SW-5S	(1)	A3 Depth Interval	Annual	8010
SW-6S	(1)	A3 Depth Interval	Annual	8010
SW-7	(7)	A3 Depth Interval	Annual	8010
VM-2D	(1)	A3 Depth Interval	Annual	8010
VM-8D	(1)	A3 Depth Interval	Annual	8010
MW-01A3	(12)	A3 Depth Interval	Annual	8010
MW-03A3	(12)	A3 Depth Interval	Annual	8010
MW-04A3	(12)	A3 Depth Interval	Annual	8010
MW-05A3	(13)	A3 Depth Interval	Annual	8010
MW-06A3	(13)	A3 Depth Interval	Annual	8010
MW-07A3	(13)	A3 Depth Interval	Annual	8010
MW-08A3	(13)	A3 Depth Interval	Annual	8010
MW-09A3	(13)	A3 Depth Interval	Annual	8010
3-XA		A4 Depth Interval	Annual	8010
F-1A		A4 Depth Interval	Annual	8010
H-2A-S		A4 Depth Interval	Annual	8010
H-XA-S		A4 Depth Interval	Annual	8010
LF-10A		A4 Depth Interval	Every 2 Years	8010

Table 1
Approved Schedule for Sampling
Groundwater[1] Monitoring Wells
Intersil/Siemens Site
Cupertino, California

Well Number	Notes	Zone/Depth Interval	Sampling Frequency [2,3]	EPA Method
LF-11A		A4 Depth Interval	Every 2 Years	8010
LF-2A		A4 Depth Interval	Every 4 Years	8010
LF-6A		A4 Depth Interval	Annual	8010
LF-9A		A4 Depth Interval	Annual	8010
P-1A	(9)	A4 Depth Interval	Annual	8010
T-2A		A4 Depth Interval	Every 2 Years	8010
W21A		A4 Depth Interval	Annual	8010
W22A		A4 Depth Interval	Annual	8010
MW-05A4	(13)	A4 Depth Interval	Annual	8010
MW-06A4	(13)	A4 Depth Interval	Annual	8010
MW-07A4	(13)	A4 Depth Interval	Annual	8010
3-EB		B Zone	Every 4 Years	8010
H-3B		B Zone	Annual	8010
H-5B		B Zone	Annual	8010
LF-1B		B Zone	Every 2 Years	8010
LF-3B		B Zone	Annual	8010
LF-5B		B Zone	Annual	8010
LF-7B		B Zone	Every 4 Years	8010
W19B		B Zone	Annual	8010
W20B		B Zone	Annual	8010
H-4C		C Zone	Every 4 Years	8010
Intersil/Siemens Off-Site Study Area [3, 6]				
MW-OS-1A1	(10)	A1 Depth Interval	Semiannual	8010
MW-OS-2A1	(10)	A1 Depth Interval	Semiannual	8010
MW-OS-3A1	(10)	A1 Depth Interval	Semiannual	8010
MW-OS-8A1	(10)	A1 Depth Interval	Semiannual	8010
MW-OS-9A1	(10)	A1 Depth Interval	Semiannual	8010
MW-OS-10A1	(10)	A1 Depth Interval	Semiannual	8010
MW-OS-11A1	(10)	A1 Depth Interval	Semiannual	8010
MW-OS-12A1	(10)	A1 Depth Interval	Semiannual	8010
MW-OS-2A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-3A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-4A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-6A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-5A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-8A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-10A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-11A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-12A3	(10)	A3 Depth Interval	Semiannual	8010
MW-OS-2A4	(10)	A4 Depth Interval	Semiannual	8010
MW-OS-3A4	(10)	A4 Depth Interval	Semiannual	8010
MW-OS-4A4	(10)	A4 Depth Interval	Semiannual	8010
MW-OS-6A4	(10)	A4 Depth Interval	Semiannual	8010
LF-8A		A4 Depth Interval	Annual	8010
LS-1A		A4 Depth Interval	Annual	8010
QH-1A		A4 Depth Interval	Annual	8010
S-1A		A4 Depth Interval	Annual	8010
IQ-1B		B Zone	Semiannual	8010
KB-2B		B Zone	Every 2 Years	8010
KR-1B		B Zone	Annual	8010

Table 1
Approved Schedule for Sampling
Groundwater[1] Monitoring Wells
Intersil/Siemens Site
Cupertino, California

Well Number	Notes	Zone/Depth Interval	Sampling Frequency [2,3]	EPA Method
LQ-1B	(11)	B Zone	None	8010
LQ-2B		B Zone	Semiannual	8010
LR-1B		B Zone	Semiannual	8010
LS-2B		B Zone	Annual	8010
PG-1B		B Zone	Annual	8010
PH-1B		B Zone	Every 4 Years	8010
PL-1B		B Zone	Annual	8010
RK-1B		B Zone	Annual	8010
S-3B		B Zone	Annual	8010/8020
S-5B		B Zone	Annual	8010
MW-OS-6B		B Zone	Semiannual	8010
LH-1C		C Zone	Every 4 Years	8010/8020
LR-3C		C Zone	Annual	8010/8020
PL-2C		C Zone	Every 4 Years	8010
RK-2C		C Zone	Annual	8010
S-4C		C Zone	Annual	8010
S-6C		C Zone	Every 2 Years	8010

Notes

1. *Schedule approved by the Water Board in letters dated December 20, 2000, October 15, 2004, and July 26, 2007. Selected A2 and A3 depth interval wells located at the former Siemens facility are monitored in accordance with the schedule schedule proposed in the Annual Report for the reporting year 2000 for the former Siemens facility (LFR, 2001).*
2. *Water level measurements will be collected quarterly, in January, April, July, and October.*
3. *Annual groundwater samples are collected in October.*
4. *Wells maintained and monitored by Wood Environment & Infrastructure, Inc.*
5. *Wells W2A, W3A, W13A and W6B were destroyed in September and October 2007 with the Water Board's July 27, 2007 approval.*
6. *Wells maintained and monitored by ERM. A-zone groundwater monitoring wells located at the former Siemens facility are further classified as A1 depth interval (approximately 45 to 60 feet below ground surface [bgs]), A3 depth interval (approximately 60 to 90 feet bgs), and A4 depth interval (approximately 90 to 120 feet bgs).*
7. *Wells EX-1-RL and SW-7 were added to the GWETS on May 2, 2006.*
8. *Wells installed in April 2002.*
9. *Former groundwater monitoring Well 1-1D was abandoned in July 2001 because this former extraction well was screened in multiple groundwater zones. This well was replaced with Well P-1A on the sampling schedule. Groundwater quality in the downgradient vicinity of this well is assessed by monitoring groundwater extraction Well LF-6A and Well P-1A.*
10. *It is recommended that these wells be analyzed annually in the future because VOC concentrations have been consistent.*
11. *This well is not sampled with Water Board approval dated March 22, 2005.*
12. *Well installed to support Enhanced Reductive Dechlorination Pilot Study activities.*
13. *Well installed to support additional characterization activities at former Siemens facility.*

Table 2
Groundwater Elevation Data, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Zone/Depth Interval	Top of Casing Elevation	Water Level Elevations [1]			
			Q1-2019 [2]	Q2-2019 [2]	Q3-2019 [2]	Q4-2019 [3]
Former Intersil Facility						
W18MA	A3	146.94	84.96	89.71	85.75	85.16
W19MA	A3	146.94	92.48	97.49	96.70	95.14
E-17A	A4	148.25	92.92	97.75	96.88	95.31
E-9AR	A4	146.10	89.71	94.52	93.68	92.73
P-24A	A4	147.45	92.90	97.71	96.84	95.27
P-25A	A4	147.46	92.84	97.65	96.80	95.26
P-26A	A4	147.85	92.83	97.62	96.74	95.21
P-27A	A4	145.90	92.71	97.79	96.88	95.28
P-28A	A4	148.72	93.33	98.21	97.29	95.75
P-29A	A4	149.33	93.52	98.39	97.52	95.95
W10A	A4	147.25	72.47	74.81	73.04	73.29
W12A	A4	146.64	67.95	69.51	66.98	89.40
W14A	A4	150.74	95.76	100.71	99.49	98.25
W15AR	A4	146.39	93.09	97.79	96.99	95.45
W4A	A4	148.35	93.54	98.55	97.72	96.15
W5A	A4	148.61	93.26	98.06	97.16	96.24
W7A	A4	151.52	95.37	100.35	99.27	97.58
W11B	B	148.15	94.67	99.56	98.33	96.41
W14B	B	150.74	95.29	100.15	98.95	97.31
W14P	B	150.65	95.79	--	--	--
W18B	B	147.79	94.82	99.68	98.45	96.81
W8B	B	145.94	94.97	99.79	98.58	97.00
W9A	B	146.55	92.79	97.58	96.71	95.16
Former Siemens Facility						
1D	A1	143.14	--	98.43	98.01	96.14
1L	A1	143.69	92.35	96.89	96.57	94.99
2EP	A1	139.84	92.63	93.79	97.20	96.13
4BP	A1	141.92	93.07	97.62	96.90	95.30
IP-1	A1	142.73	92.64	97.24	99.42	95.40
IP-2	A1	143.55	92.64	97.62	97.30	95.58
IP-3	A1	143.58	92.72	98.90	97.44	95.75
LF-13A	A1	141.60	92.25	96.20	96.47	95.25
MW-01A1	A1	141.46	92.56	95.58	97.14	95.91
MW-02A1	A1	142.58	87.60	96.27	97.17	95.90
MW-1-RU	A1	141.18	99.36	95.71	96.67	95.25
VM-1S	A1	144.16	92.89	97.85	97.99	97.95
VM-2S	A1	142.22	92.64	97.19	96.99	95.30
VM-3S	A1	143.07	92.55	97.13	97.29	96.53
VM-4S	A1	142.33	92.60	97.14	97.23	95.02
VM-5S	A1	141.58	92.28	94.75	96.78	95.75
VM-6S	A1	141.59	92.60	97.66	97.07	95.59
VM-7S	A1	141.44	92.62	97.92	97.24	95.65
VM-8S	A1	141.14	92.06	97.26	96.59	94.95
1K	A2	142.93	92.28	97.08	96.38	94.74
2D	A2	141.77	92.05	96.88	96.17	94.72
HMSA-1S	A2	143.48	93.09	97.21	97.42	95.58
SW-3	A2	143.98	92.57	97.49	96.71	95.20
1H-S	A3	143.80	92.51	97.27	96.68	95.18
2EPA	A3	139.87	92.15	96.75	96.18	94.76
E-1	A3	139.38	90.37	--	94.08	92.83
EX-1-RL	A3	144.84	93.30	93.62	69.34	68.49
G-1A	A3	143.40	91.38	96.02	95.38	96.21
H-1A	A3	141.64	92.17	94.66	96.12	94.80
HMSA-2S	A3	143.35	92.95	96.22	97.00	95.61
LF-12A	A3	141.36	90.84	94.72	94.94	92.23
MW-01A3	A3	141.57	92.54	96.82	96.04	94.72
MW-03A3	A3	142.99	92.23	96.91	96.14	96.22
MW-04A3	A3	142.75	92.18	96.90	95.82	94.74
MW-05A3	A3	147.24	92.98	97.77	95.75	95.52

Table 2
Groundwater Elevation Data, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Zone/Depth Interval	Top of Casing Elevation	Water Level Elevations [1]			
			Q1-2019 [2]	Q2-2019 [2]	Q3-2019 [2]	Q4-2019 [3]
MW-06A3	A3	147.03	92.88	97.73	96.86	95.18
MW-07A3	A3	146.01	92.89	97.71	96.79	94.54
MW-08A3	A3	144.30	92.59	97.37	96.70	97.28
MW-09A3	A3	142.54	92.40	97.11	96.42	95.83
SW-5S	A3	144.47	93.02	97.90	97.17	95.62
SW-6S	A3	146.08	93.08	96.88	97.12	95.54
SW-7	A3	143.28	91.65	96.98	96.13	94.17
VM-1D	A3	144.25	92.50	97.33	96.62	95.13
VM-2D	A3	141.96	92.43	97.11	96.43	95.01
VM-3D	A3	143.00	92.30	97.01	96.32	94.90
VM-4D	A3	142.28	92.37	96.99	96.35	94.84
VM-5D	A3	141.71	92.20	96.77	96.19	94.50
VM-6D	A3	141.24	92.15	96.81	96.17	94.92
VM-7D	A3	141.48	92.27	97.07	96.34	94.85
VM-8D	A3	141.90	92.39	97.11	96.40	94.96
2B-S	A4	142.48	92.16	96.45	96.13	94.27
3-DD	A4	142.54	87.57	92.68	91.96	90.51
3-XA	A4	145.09	92.58	97.18	96.16	94.76
F-1A	A4	146.86	92.78	--	96.72	95.18
H-2A-S	A4	140.87	91.90	96.37	95.33	94.91
H-XA-S	A4	141.31	92.33	96.98	96.01	94.59
LF-10A	A4	140.75	91.48	95.68	94.53	93.32
LF-11A	A4	142.95	90.21	94.50	93.71	92.14
LF-2A	A4	144.24	92.98	97.63	96.63	95.14
LF-4A	A4	143.68	92.85	97.56	96.61	95.11
LF-6A	A4	141.00	--	--	85.94	84.10
LF-8A	A4	141.54	93.24	97.99	96.42	95.47
LF-9A	A4	144.68	92.89	97.52	96.56	94.90
MW-05A4	A4	147.16	91.94	96.56	96.80	95.32
MW-06A4	A4	146.85	93.05	96.95	96.80	94.49
MW-07A4	A4	146.01	92.89	97.69	96.90	94.34
P-1A	A4	142.57	89.27	93.28	92.54	91.03
P-2A	A4	143.28	89.41	94.08	92.66	91.47
P-3A	A4	141.76	88.50	95.37	94.22	92.79
P-4A	A4	142.32	91.79	96.10	95.07	93.65
T-2A	A4	146.23	92.78	97.64	96.73	95.21
T-3A	A4	143.97	92.25	96.31	95.60	94.29
W21A	A4	143.20	92.41	97.10	96.27	94.58
W22A	A4	145.02	92.78	97.53	96.56	95.02
3-EB	B	143.53	91.28	95.73	94.82	93.51
H-3B	B	140.39	92.52	95.65	96.16	94.54
H-5B	B	140.95	15.22	20.72	9.86	9.50
LF-1B	B	143.10	92.65	97.35	96.18	94.71
LF-3B	B	143.87	92.77	97.14	96.16	94.87
LF-5B	B	142.46	91.04	94.92	94.25	93.14
LF-7B	B	143.20	91.23	97.10	94.40	93.36
P-5B	B	143.41	92.47	97.11	95.68	94.69
P-6B	B	142.00	92.74	97.39	96.28	94.75
W19B	B	145.22	94.91	99.82	98.45	96.89
W20B	B	144.14	94.49	99.14	98.06	96.64
H-4C	C	141.57	91.08	95.62	94.38	95.20
Intersil/Siemens Off-Site Study Area						
MW-OS-10A1	A1	145.66	--	98.30	97.60	95.98
MW-OS-11A1	A1	145.74	--	98.43	97.57	95.62
MW-OS-12A1	A1	146.76	--	98.38	97.69	96.05
MW-OS-1A1	A1	141.24	91.93	95.41	95.62	94.66
MW-OS-2A1	A1	140.69	92.49	96.82	96.88	94.43
MW-OS-3A1	A1	136.38	91.73	96.38	95.76	94.11
MW-OS-8A1	A1	146.43	--	98.28	97.43	95.18
MW-OS-9A1	A1	146.20	--	98.25	97.50	95.85

Table 2
Groundwater Elevation Data, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Zone/Depth Interval	Top of Casing Elevation	Water Level Elevations [1]			
			Q1-2019 [2]	Q2-2019 [2]	Q3-2019 [2]	Q4-2019 [3]
P-23A	A4	147.83	96.23	101.09	100.16	98.42
MW-OS-10A3	A3	145.75	--	97.75	96.94	95.43
MW-OS-11A3	A3	145.61	--	97.66	97.02	95.49
MW-OS-12A3	A3	146.80	--	97.90	97.23	95.62
MW-OS-2A3	A3	140.53	91.85	96.53	95.92	94.56
MW-OS-3A3	A3	136.42	91.55	96.12	95.59	93.70
MW-OS-4A3	A3	134.87	90.87	94.87	94.43	93.36
MW-OS-5A3	A3	132.93	90.58	83.43	94.61	85.58
MW-OS-6A3	A3	141.60	--	96.58	95.85	94.22
MW-OS-8A3	A3	146.40	--	97.60	96.71	95.89
LS-1A	A4	135.84	92.35	97.38	96.11	94.54
MW-OS-2A4	A4	140.52	91.92	96.17	95.33	94.06
MW-OS-3A4	A4	136.35	91.53	95.69	95.02	94.44
MW-OS-4A4	A4	134.52	90.85	94.90	94.38	93.31
MW-OS-6A4	A4	141.67	--	96.54	95.77	94.31
QH-1A	A4	139.91	91.73	--	94.88	93.59
S-1A	A4	137.39	91.09	95.18	94.49	93.30
W16A	A4	146.71	94.96	99.90	98.85	97.16
BM-1B	B	128.10	90.05	94.80	93.65	92.17
HN-1B	B	150.39	92.27	95.60	95.20	94.48
IP-1B	B	139.62	89.83	93.10	92.65	91.95
IQ-1B	B	133.99	88.62	92.41	91.67	90.97
KB-1B	B	129.02	90.92	95.67	94.60	93.07
KB-2B	B	129.19	89.75	94.27	93.22	91.86
KL-1B	B	147.26	91.85	94.86	94.63	94.03
KP-1B	B	140.50	90.19	93.26	93.07	92.29
KR-1B	B	133.13	88.13	92.13	91.36	90.49
LQ-1B	B	132.56	86.56	90.92	89.47	89.07
LQ-2B	B	132.55	80.14	85.15	83.03	91.16
LR-1B	B	136.55	68.55	76.92	75.51	89.77
LS-2B	B	135.72	92.12	97.10	95.90	94.24
MW-OS-6B	B	141.65	--	97.17	--	94.36
PG-1B	B	132.67	88.66	91.96	91.44	90.85
PH-1B	B	140.52	90.21	96.78	93.16	92.22
PL-1B	B	139.70	89.92	93.70	93.05	92.26
RK-1B	B	130.92	88.42	92.35	91.37	90.66
S-2B	B	137.21	89.42	93.66	92.75	91.60
S-3B	B	129.75	88.08	91.78	91.13	95.31
S-5B	B	130.45	90.98	95.85	94.63	93.13
KR-2CP	C	133.02	89.41	93.50	92.55	91.53
LH-1C	C	127.73	88.25	92.54	91.39	90.50
LQ-3CP	C	133.72	90.16	94.27	93.23	92.23
LR-3C	C	136.70	89.99	94.31	93.25	92.19
PL-2C	C	139.77	90.39	94.28	93.49	92.65
RK-2C	C	130.98	89.10	93.19	92.18	91.22
S-4C	C	130.10	87.98	91.87	90.95	90.13
S-6C	C	130.47	88.96	93.56	92.19	91.03

Notes:

1. Elevations in feet, North American Vertical Datum of 1988 (NAVD88).

2. Water levels for the former Siemens facility were measured by ERM, unless otherwise noted. Water levels for the former Intersil Facility and Intersil/Siemens Off-Site Study Area were measured by Wood Environment & Infrastructure, Inc., unless otherwise noted.

3. Water levels for the former Siemens facility and Intersil/Siemens Off-Site Study Area were measured by ERM, unless otherwise noted. Water levels for the former Intersil Facility were measured by Wood Environment & Infrastructure, Inc., unless otherwise noted.

Abbreviations:

** indicates groundwater extraction well*

'-- = no measurement available

NA = not available; well not accessible

Table 3
Summary of VOC Concentrations in Groundwater Monitoring Wells, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
Former Intersil Facility													
W18MA	10/01/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	**65**	< 0.50	**1.7**	< 1.0	--	< 0.50
W19MA	10/01/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	**160**	**0.21 j**	**0.87**	< 1.0	--	< 0.50
E-17A	10/01/2019	N	A4	< 0.50	**0.64**	< 0.50	< 0.50	**10**	< 0.50	**3.9**	< 1.0	--	**1.2**
E-9AR	10/01/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	**13**	< 0.50	**6.3**	< 1.0	--	< 0.50
W10A	10/01/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	**43**	< 0.50	**6.1**	< 1.0	--	< 0.50
W12A	10/01/2019	N	A4	**0.39 j**	**1.1**	< 0.50	**0.50**	**56**	< 0.50	**12**	< 1.0	--	< 0.50
W12A	10/01/2019	FD	A4	**0.37 j**	**1.2**	< 0.50	**0.50**	**54**	< 0.50	**10**	< 1.0	--	< 0.50
W4A	10/01/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	**6.9**	< 0.50	**0.24 j**	< 1.0	--	< 0.50
W5A	10/03/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	**4.3**	< 0.50	**15**	< 1.0	--	< 0.50
W11B	10/01/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	**9.0**	< 0.50	**5.7**	< 1.0	--	< 0.50
W18B	10/01/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	**14**	< 0.50	**3.3**	< 1.0	--	< 0.50
W8B	10/01/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	**1.8**	< 0.50	< 0.50	< 1.0	--	< 0.50
Former Siemens Facility													
2EP	03/19/2019	N	A1	< 2.5	**120**	< 2.5	< 2.5	**63**	< 2.5	< 2.5	< 5.0	< 2.5	**43**
2EP	05/07/2019	N	A1	**2.7**	**1,100**	**5.4**	< 0.50	**14 j**	**0.23 j**	**4.6**	< 1.0	**1.1**	**50**
2EP	07/09/2019	N	A1	**0.90**	**330**	**4.4**	< 0.50	**11**	< 0.50	**0.19 j**	< 1.0	**0.90**	**110**
2EP	07/09/2019	FD	A1	**0.92**	**330**	**4.3**	< 0.50	**11**	< 0.50	< 0.50	< 1.0	**1.0**	**110**
2EP	10/03/2019	N	A1	< 0.50	**18**	**1.4**	< 0.50	**1.6**	< 0.50	< 0.50	< 1.0	**0.45 j**	**9.0**
4BP	03/18/2019	N	A1	< 0.50	**0.68**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	**8.6**	< 0.50
4BP	03/18/2019	FD	A1	< 0.50	**0.65**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	**8.6**	< 0.50
4BP	05/07/2019	N	A1	**0.54**	**20**	**0.24 j**	**0.23 j**	**1.6**	< 0.50	< 0.50	< 1.0	**2.4**	**2.9**
4BP	07/09/2019	N	A1	< 0.50	**2.1**	**0.20 j**	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	**0.53**	**1.4**
4BP	10/04/2019	N	A1	< 0.50	**2.0**	**0.49 j**	**0.80**	**0.41 j**	< 0.50	< 0.50	< 1.0	**0.32 j**	**1.2**
4BP	10/04/2019	FD	A1	< 0.50	**2.5**	**0.44 j**	**0.80**	**0.43 j**	< 0.50	< 0.50	< 1.0	**0.38 j**	**1.3**
LF-13A	03/18/2019	N	A1	< 0.50	**28**	< 0.50	< 0.50	**4.9**	< 0.50	**13**	< 1.0	< 0.50	**70**
LF-13A	05/07/2019	N	A1	< 0.50	**12**	**0.38 j**	< 0.50	**4.5**	< 0.50	**14**	< 1.0	< 0.50	**30**
LF-13A	07/10/2019	N	A1	< 0.50	**3.9**	**0.63**	< 0.50	**5.3**	< 0.50	**3.1**	< 1.0	< 0.50	**3.3**
LF-13A	10/03/2019	N	A1	< 0.50	**2.4**	**0.74**	< 0.50	**2.9**	< 0.50	**0.29 j**	< 1.0	**0.43 j**	**1.1**
MW-01A1	03/19/2019	N	A1	< 2.5	**130**	< 2.5	< 2.5	**19**	< 2.5	< 2.5	< 5.0	< 2.5	**12**
MW-01A1	05/07/2019	N	A1	**4.0**	**1,200**	**3.5**	< 0.50	**290**	**1.2**	**11**	**0.49 j**	**0.42 j**	**93**
MW-01A1	07/09/2019	N	A1	**1.3**	**300**	**2.2**	< 0.50	**110**	**0.83**	**3.5**	< 1.0	**1.0**	**38**
MW-01A1	10/03/2019	N	A1	< 2.5	**110**	**2.4 j**	< 2.5	**3.2**	< 2.5	**1.3 j**	< 5.0	< 2.5	**38**
MW-01A1	10/03/2019	FD	A1	< 2.5	**110**	**2.5**	< 2.5	**3.5**	< 2.5	< 2.5	< 5.0	< 2.5	**37**
MW-02A1	03/19/2019	N	A1	< 0.50	**31**	**0.77**	< 0.50	**1.4**	< 0.50	< 0.50	< 1.0	**0.55**	**9.1**
MW-02A1	05/07/2019	N	A1	< 0.50	**7.0**	**1.4**	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	**1.3**	**14**
MW-02A1	07/09/2019	N	A1	< 0.50	**1.7**	**1.6**	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	**0.42 j**	**4.9**
MW-02A1	10/04/2019	N	A1	< 0.50 UJ	**4.4 J-**	**1.3 J-**	< 0.50 UJ	**0.29 J-**	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	**0.29 J-**	**6.0 J-**
MW-02A1	10/04/2019	FD	A1	< 0.50 UJ	**5.4 J-**	**1.2 J-**	< 0.50 UJ	**0.21 J-**	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	**0.32 J-**	**7.1 J-**
VM-2S	10/04/2019	N	A1	< 0.50	**17**	**3.6**	< 0.50	**5.2**	< 0.50	< 0.50	< 1.0	< 0.50	**23**
VM-3S	10/03/2019	N	A1	< 0.50 UJ	**2.9 J-**	**0.49 J-**	< 0.50 UJ	**0.65 J-**	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	**1.7 J-**	< 0.50 UJ
VM-4S	10/04/2019	N	A1	< 0.50	**1.1**	**0.55**	< 0.50	**0.37 j**	< 0.50	< 0.50	< 1.0	**0.54**	**0.35 j**
VM-5S	03/19/2019	N	A1	< 2.5	**110**	< 2.5	< 2.5	**15**	< 2.5	< 2.5	< 5.0	< 2.5	**58**
VM-5S	05/07/2019	N	A1	**1.1**	**1,000**	**3.0**	< 0.50	**19**	< 0.50	**9.0**	< 1.0	< 0.50	**120**
VM-5S	07/09/2019	N	A1	< 0.50	**60**	**1.5**	< 0.50	**0.25 j**	< 0.50	< 0.50	< 1.0	< 0.50	**47**
VM-5S	10/03/2019	N	A1	< 0.50	**0.66 J+**	**0.80**	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	**0.36 j**	**1.8**
VM-6S	03/18/2019	N	A1	< 10	**530**	< 10	< 10	**320**	< 10	< 10	< 20	< 10	**25**
VM-6S	07/10/2019	N	A1	**0.49 j**	**170**	**1.6**	< 0.50	**3.1**	< 0.50	**1.0**	< 1.0	< 0.50	**83**

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Intersil/Siemens Site
Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
VM-6S	10/03/2019	N	A1	**0.98**	**210**	**1.6**	*< 0.50*	**14**	*< 0.50*	**0.13 j**	*< 1.0*	*< 0.50*	**45**
VM-7S	03/18/2019	N	A1	**1.2**	**19**	*< 0.50*	**1.1**	**0.72**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**0.94**
VM-7S	05/07/2019	N	A1	**7.5**	**71**	**0.28 j**	**4.5**	**0.55**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**7.5**
VM-7S	07/09/2019	N	A1	**0.30 j**	**6.1**	**0.39 j**	**1.8**	**0.27 j**	*< 0.50*	*< 0.50*	*< 1.0*	**0.69**	**8.7**
VM-7S	10/03/2019	N	A1	**0.27 j**	**1.9**	**0.58**	**0.51**	**0.51**	*< 0.50*	*< 0.50*	*< 1.0*	**3.5**	**2.7**
VM-8S	03/19/2019	N	A1	*< 0.50*	**6.3**	**0.59**	*< 0.50*	**1.6**	*< 0.50*	*< 0.50*	*< 1.0*	**14**	**5.9**
VM-8S	05/07/2019	N	A1	*< 0.50*	**5.1**	**0.26 j**	*< 0.50*	**0.79**	*< 0.50*	*< 0.50*	*< 1.0*	**4.1**	**4.2**
VM-8S	07/10/2019	N	A1	*< 0.50*	**7.8**	**0.47 j**	**0.22 j**	**3.2**	*< 0.50*	*< 0.50*	*< 1.0*	**0.74**	**10**
VM-8S	10/03/2019	N	A1	*< 0.50*	**7.9**	**0.53**	*< 0.50*	**4.7**	*< 0.50*	*< 0.50*	*< 1.0*	**0.52**	**10**
2D	03/18/2019	N	A2	*< 0.50*	**2.7**	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**4.3**
2D	05/08/2019	N	A2	*< 0.50*	**2.0**	**0.19 j**	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**3.6**
2D	07/09/2019	N	A2	*< 0.50*	**2.0**	**0.24 j**	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**4.6**
2D	10/04/2019	N	A2	*< 2.5 UJ*	**0.64 J-**	*< 2.5 UJ*	*< 2.5 UJ*	*< 2.5 UJ*	*< 2.5 UJ*	*< 2.5 UJ*	*< 5.0 UJ*	*< 2.5 UJ*	*< 2.5 R*
HMSA-1S	10/04/2019	N	A2	**7.6**	*< 0.50*	*< 0.50*	**4.0**	**74**	*< 0.50*	**0.89**	*< 1.0*	*< 0.50*	*< 0.50*
2EPa	03/19/2019	N	A3	*< 0.50*	**0.98**	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**0.74**
2EPa	05/07/2019	N	A3	*< 0.50*	**1.3**	*< 0.50*	*< 0.50*	**2.1**	*< 0.50*	*< 0.50*	*< 1.0*	**1.0**	**1.3**
2EPa	07/09/2019	N	A3	**0.25 j**	**83**	**0.35 j**	*< 0.50*	**2.2**	*< 0.50*	**0.40 j**	*< 1.0*	**0.67**	**12**
2EPa	10/03/2019	N	A3	**0.29 j**	**39**	**0.46 j**	*< 0.50*	**2.9**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**13**
EX-1-RL	10/03/2019	N	A3	**2.1 j**	*< 5.0*	*< 5.0*	*< 5.0*	**300**	*< 5.0*	**1.3 j**	*< 10*	*< 5.0*	*< 5.0*
G-1A	10/04/2019	N	A3	**1.9 j**	**530**	**2.3 j**	*< 2.5*	**300**	**1.0 j**	**5.1**	*< 5.0*	*< 2.5*	**13**
H-1A	10/09/2019	N	A3	*< 5.0*	**100**	*< 5.0*	*< 5.0*	**40**	*< 5.0*	*< 5.0*	*< 10*	*< 5.0*	**3.6 j**
HMSA-2S	10/04/2019	N	A3	*< 0.50*	**1.2**	*< 0.50*	*< 0.50*	**0.34 j**	*< 0.50*	*< 0.50*	*< 1.0*	**0.23 j**	*< 0.50*
LF-12A	10/03/2019	N	A3	*< 0.50 UJ*	**3.0 J**	*< 0.50 UJ*	*< 0.50 UJ*	**12 J**	*< 0.50 UJ*	**1.2 J**	*< 1.0 UJ*	*< 0.50 UJ*	*< 0.50 UJ*
MW-01A3	10/04/2019	N	A3	*< 0.50*	**0.33 j**	*< 0.50*	*< 0.50*	**0.24 j**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
MW-03A3	10/04/2019	N	A3	**1.1**	**22**	*< 0.50*	*< 0.50*	**13**	*< 0.50*	**0.13 j**	*< 1.0*	*< 0.50*	**6.4**
MW-04A3	10/04/2019	N	A3	**2.7**	**290**	**0.91 j**	*< 1.0*	**78**	*< 1.0*	**1.2**	*< 2.0*	*< 1.0*	**45**
MW-05A3	10/04/2019	N	A3	*< 0.50*	**2.7**	**0.24 j**	**0.27 j**	**34**	*< 0.50*	**1.6**	*< 1.0*	*< 0.50*	**2.4**
MW-06A3	10/04/2019	N	A3	**0.58**	**4.4**	*< 0.50*	**0.25 j**	**40**	*< 0.50*	**0.74**	*< 1.0*	*< 0.50*	**0.70**
MW-07A3	10/04/2019	N	A3	**0.39 j**	**3.4**	*< 0.50*	*< 0.50*	**23**	*< 0.50*	**0.74**	*< 1.0*	*< 0.50*	**0.54**
MW-08A3	10/04/2019	N	A3	*< 0.50*	**0.11 j**	*< 0.50*	*< 0.50*	**12**	*< 0.50*	**0.59**	*< 1.0*	*< 0.50*	**0.63**
MW-09A3	10/04/2019	N	A3	**0.42 j**	**17**	**0.45 j**	*< 0.50*	**3.4**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**11**
SW-5S	10/04/2019	N	A3	*< 0.50*	**6.3**	*< 0.50*	*< 0.50*	**63**	**0.20 j**	**0.51**	*< 1.0*	*< 0.50*	*< 0.50*
SW-6S	10/04/2019	N	A3	*< 10*	**250**	*< 10*	*< 10*	**220**	*< 10*	*< 10*	*< 20*	*< 10*	**73**
SW-7	10/01/2019	N	A3	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**65**	*< 0.50*	**0.58**	*< 1.0*	*< 0.50*	*< 0.50*
VM-2D	10/04/2019	N	A3	*< 0.50*	**1.9**	*< 0.50*	*< 0.50*	**15**	*< 0.50*	**0.72**	*< 1.0*	*< 0.50*	*< 0.50*
VM-3D	10/03/2019	N	A3	**1.6**	**6.2**	*< 0.50*	**0.92**	**50**	*< 0.50*	**0.38 j**	*< 1.0*	*< 0.50*	**1.2**
VM-4D	10/04/2019	N	A3	**0.55**	**30**	**0.49 j**	*< 0.50*	**9.0**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**25**
VM-5D	03/19/2019	N	A3	**1.2**	**13**	*< 0.50*	*< 0.50*	**20**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**7.5**
VM-5D	05/07/2019	N	A3	*< 0.50*	**9.9**	**0.25 j**	*< 0.50*	**1.6**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**7.5**
VM-5D	07/10/2019	N	A3	**1.1**	**12**	**0.31 j**	*< 0.50*	**15**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**7.7**
VM-5D	10/04/2019	N	A3	**1.4**	**13**	**0.34 j**	*< 0.50*	**30**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**10**
VM-5D	10/04/2019	FD	A3	**1.5**	**17**	**0.30 j**	*< 0.50*	**31**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**12**
VM-6D	03/18/2019	N	A3	*< 0.50 UJ*	**36 J-**	**0.55 J-**	*< 0.50 UJ*	**6.2 J-**	*< 0.50 UJ*	*< 0.50 R*	*< 1.0 UJ*	*< 0.50 UJ*	**13 J-**
VM-6D	05/07/2019	N	A3	**0.22 j**	**29**	**0.24 j**	*< 0.50*	**10**	*< 0.50*	**0.25 j**	*< 1.0*	*< 0.50*	**8.0**
VM-6D	07/09/2019	N	A3	**0.21 j**	**38**	**0.43 j**	*< 0.50*	**6.1**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	**10**
VM-6D	10/03/2019	N	A3	**0.63**	**49**	**0.98**	**0.35 j**	**15**	*< 0.50*	**0.36 j**	*< 1.0*	*< 0.50*	**13**
VM-7D	10/04/2019	N	A3	*< 1.0*	**12**	**0.55 j**	*< 1.0*	**2.8**	*< 1.0*	*< 1.0*	*< 2.0*	**0.44 j**	**13**
VM-8D	10/04/2019	N	A3	**1.1**	**0.48 j**	*< 1.0*	**0.70 j**	**150**	*< 1.0*	**1.2**	*< 2.0*	*< 1.0*	*< 1.0*

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Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
3-XA	10/04/2019	N	A4	**1.1**	**0.30 j**	*< 0.50*	*< 0.50*	**45**	*< 0.50*	**2.0**	*< 1.0*	*< 0.50*	*< 0.50*
F-1A	10/09/2019	N	A4	*< 10*	*< 10*	*< 10*	*< 10*	**590**	*< 10*	*< 10*	*< 20*	*< 10*	*< 10*
H-2A-S	10/04/2019	N	A4	**7.5**	**0.88**	*< 0.50*	**4.3**	**54**	*< 0.50*	**1.8**	*< 1.0*	*< 0.50*	**0.40 j**
H-2A-S	10/04/2019	FD	A4	**8.2**	**0.87**	*< 0.50*	**4.8**	**59**	*< 0.50*	**2.0**	*< 1.0*	*< 0.50*	**0.37 j**
H-XA-S	10/04/2019	N	A4	**2.7**	**1.7**	**0.34 j**	**2.4**	**40**	*< 0.50*	**1.5**	*< 1.0*	*< 0.50*	**1.7**
LF-10A	10/09/2019	N	A4	**4.3**	**48**	**0.16 j**	**3.3**	**62**	*< 0.50*	**2.4**	*< 1.0*	**0.75**	**9.7**
LF-6A	10/04/2019	N	A4	**1.6**	**0.72**	*< 0.50*	**1.2**	**130**	*< 0.50*	**3.7**	*< 1.0*	*< 0.50*	*< 0.50*
LF-6A	10/04/2019	FD	A4	*< 5.0*	*< 5.0*	*< 5.0*	*< 5.0*	**130**	*< 5.0*	**3.1 j**	*< 10*	*< 5.0*	*< 5.0*
LF-8A	10/02/2019	N	A4	**0.66 J-**	**0.46 J-**	*< 0.50 UJ*	**0.45 J-**	**3.7 J-**	*< 0.50 UJ*	**0.21 J-**	*< 1.0 UJ*	*< 0.50 R*	*< 0.50 UJ*
LF-9A	10/04/2019	N	A4	**0.35 j**	*< 0.50*	*< 0.50*	**0.68**	**55**	*< 0.50*	**8.5**	*< 1.0*	*< 0.50*	*< 0.50*
MW-05A4	10/04/2019	N	A4	*< 10*	**290**	**14**	*< 10*	*< 10*	*< 10*	*< 10*	*< 20*	*< 10*	**33**
MW-06A4	10/04/2019	N	A4	**0.23 j**	**1.9**	*< 0.50*	**0.45 j**	**84**	*< 0.50*	**7.7**	*< 1.0*	*< 0.50*	**1.2**
MW-07A4	10/04/2019	N	A4	**1.1**	**3.6**	**0.18 j**	**1.3**	**73**	*< 0.50*	**2.5**	*< 1.0*	*< 0.50*	*< 0.50*
MW-07A4	10/04/2019	FD	A4	*< 2.5*	**1.9 j**	*< 2.5*	*< 2.5*	**110**	*< 2.5*	**3.1**	*< 5.0*	*< 2.5*	*< 2.5*
P-1A	10/04/2019	N	A4	*< 0.50*	**0.51**	*< 0.50*	*< 0.50*	**18**	*< 0.50*	**1.5**	*< 1.0*	*< 0.50*	*< 0.50*
T-2A	10/04/2019	N	A4	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**6.1**	*< 0.50*	**3.0**	*< 1.0*	*< 0.50*	*< 0.50*
W21A	10/04/2019	N	A4	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**69**	*< 0.50*	**7.4**	*< 1.0*	*< 0.50*	*< 0.50*
W22A	10/04/2019	N	A4	*< 5.0*	**9.7**	*< 5.0*	*< 5.0*	**280**	*< 5.0*	*< 5.0*	*< 10*	*< 5.0*	**6.4**
W22A	10/04/2019	FD	A4	*< 10*	**5.7 j**	*< 10*	*< 10*	**990**	*< 10*	**2.1 j**	*< 20*	*< 10*	*< 10*
H-3B	10/04/2019	N	B	*< 0.50*	**0.36 j**	*< 0.50*	*< 0.50*	**19**	*< 0.50*	**2.0**	*< 1.0*	*< 0.50*	**1.2**
H-5B	10/03/2019	N	B	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	**130**	*< 1.0*	**3.2**	*< 2.0*	*< 1.0*	*< 1.0*
LF-1B	10/09/2019	N	B	**1.0**	**46**	*< 0.50*	**0.32 j**	**20**	*< 0.50*	**2.9**	*< 1.0*	*< 0.50*	*< 0.50*
LF-3B	10/04/2019	N	B	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
LF-5B	10/09/2019	N	B	*< 0.50*	**0.94**	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	**0.29 j**	*< 0.50*
LF-5B	10/09/2019	FD	B	*< 0.50*	**1.4**	*< 0.50*	*< 0.50*	**0.27 j**	*< 0.50*	*< 0.50*	*< 1.0*	**0.32 j**	*< 0.50*
W19B	10/04/2019	N	B	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**51**	*< 0.50*	**2.6**	*< 1.0*	*< 0.50*	*< 0.50*
W20B	10/09/2019	N	B	**0.23 j**	*< 0.50*	*< 0.50*	*< 0.50*	**6.9**	*< 0.50*	**0.51**	*< 1.0*	*< 0.50*	*< 0.50*
Intersil/Siemens Off-Site Study Area													
MW-OS-1A1	03/18/2019	N	A1	**1.1 J-**	**13 J-**	*< 0.50 UJ*	**0.94 J-**	**2.2 J-**	*< 0.50 UJ*	**2.5 J-**	*< 1.0 UJ*	*< 0.50 UJ*	*< 0.50 UJ*
MW-OS-1A1	04/08/2019	N	A1	**1.4**	**18**	*< 0.50*	**0.88**	**3.9**	*< 0.50*	**4.1**	*< 1.0*	--	*< 0.50*
MW-OS-1A1	05/08/2019	N	A1	**1.2**	**13**	**0.27 j**	**0.94**	**2.3**	*< 0.50*	**4.3**	*< 1.0*	*< 0.50*	*< 0.50*
MW-OS-1A1	07/09/2019	N	A1	**0.93**	**10**	*< 0.50*	**0.70**	**1.8**	*< 0.50*	**2.8**	*< 1.0*	*< 0.50*	*< 0.50*
MW-OS-1A1	10/04/2019	N	A1	**0.45 j**	**6.1**	*< 0.50*	**0.40 j**	**1.2**	*< 0.50*	**1.8**	*< 1.0*	*< 0.50*	*< 0.50*
MW-OS-2A1	03/18/2019	N	A1	*< 2.5*	*< 2.5*	*< 2.5*	*< 2.5*	*< 2.5*	*< 2.5*	*< 2.5*	*< 5.0*	**100**	*< 2.5*
MW-OS-2A1	04/08/2019	N	A1	*< 0.50*	**1.4**	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	--	*< 0.50*
MW-OS-2A1	05/08/2019	N	A1	*< 0.50*	**2.1**	**0.27 j**	*< 0.50*	**0.93**	*< 0.50*	*< 0.50*	*< 1.0*	**19**	*< 0.50*
MW-OS-2A1	05/08/2019	FD	A1	*< 0.50*	**2.0**	**0.19 j**	*< 0.50*	**0.82**	*< 0.50*	*< 0.50*	*< 1.0*	**17**	*< 0.50*
MW-OS-2A1	07/09/2019	N	A1	*< 0.50*	**1.9**	**0.18 j**	*< 0.50*	**0.56**	*< 0.50*	*< 0.50*	*< 1.0*	**0.58**	*< 0.50*
MW-OS-2A1	10/04/2019	N	A1	*< 0.50 UJ*	**2.6 J-**	**0.20 J-**	*< 0.50 UJ*	**0.35 J-**	*< 0.50 UJ*	*< 0.50 UJ*	*< 1.0 UJ*	**0.96 J-**	*< 0.50 UJ*
MW-OS-3A1	03/18/2019	N	A1	**2.9 J-**	**4.2 J-**	*< 0.50 UJ*	**2.1 J-**	**12 J-**	*< 0.50 UJ*	**0.86 J-**	*< 1.0 UJ*	*< 0.50 UJ*	*< 0.50 UJ*
MW-OS-3A1	05/08/2019	N	A1	**4.3**	**4.5**	*< 0.50*	**2.8**	**17**	*< 0.50*	**1.8**	*< 1.0*	*< 0.50*	**0.21 j**
MW-OS-3A1	07/10/2019	N	A1	**5.3**	**5.7**	*< 0.50*	**3.4**	**15**	*< 0.50*	**2.1**	*< 1.0*	**1.0**	**0.71**
MW-OS-3A1	10/04/2019	N	A1	**4.6**	**6.0**	*< 0.50*	**4.1**	**21**	*< 0.50*	**2.1**	*< 1.0*	**0.26 j**	**0.93**
MW-OS-8A1	03/09/2019	N	A1	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**62**	*< 0.50*	**0.26 j**	*< 1.0*	*< 0.50*	*< 0.50*
MW-OS-8A1	10/03/2019	N	A1	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**19**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
MW-OS-9A1	03/09/2019	N	A1	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**370**	**0.45 j**	**0.39 j**	*< 1.0*	*< 0.50*	*< 0.50*
MW-OS-9A1	10/03/2019	N	A1	*< 5.0*	**3.0 j**	*< 5.0*	*< 5.0*	**330**	*< 5.0*	*< 5.0*	*< 10*	*< 5.0*	*< 5.0*
MW-OS-10A1	03/09/2019	N	A1	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**370**	**6.5**	**0.29 j**	**0.46 j**	*< 0.50*	*< 0.50*

Table 3
Summary of VOC Concentrations in Groundwater Monitoring Wells, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
MW-OS-10A1	10/03/2019	N	A1	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	300 J-	6.1 J-	< 5.0 UJ	< 10 UJ	< 5.0 UJ	< 5.0 UJ
MW-OS-11A1	03/09/2019	N	A1	< 0.50	0.15 j	< 0.50	< 0.50	200	6.0	0.94	0.80 j	< 0.50	< 0.50
MW-OS-11A1	10/03/2019	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	140	4.2 j	< 5.0	< 10	< 5.0	< 5.0
MW-OS-12A1	03/09/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	64	1.2	0.27 j	< 1.0	< 0.50	< 0.50
MW-OS-12A1	10/04/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	73	1.2	0.24 j	< 1.0	< 0.50	< 0.50
MW-OS-2A3	03/18/2019	N	A3	1.2 J-	12 J-	< 0.50 UJ	< 0.50 UJ	23 J-	< 0.50 UJ	< 0.50 R	< 1.0 UJ	< 0.50 UJ	13 J-
MW-OS-2A3	05/08/2019	N	A3	1.2	12	0.28 j	< 0.50	25	< 0.50	< 0.50	< 1.0	< 0.50	12
MW-OS-2A3	07/09/2019	N	A3	0.84	9.9	0.16 j	< 0.50	17	< 0.50	< 0.50	< 1.0	< 0.50	12
MW-OS-2A3	10/04/2019	N	A3	1.2	11	0.36 j	< 0.50	33	< 0.50	< 0.50	< 1.0	< 0.50	20
MW-OS-3A3	10/09/2019	N	A3	< 0.50	5.7	< 0.50	0.54	5.6	< 0.50	1.3	< 1.0	< 0.50	< 0.50
MW-OS-4A3	10/02/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
MW-OS-5A3	04/08/2019	N	A3	0.50	1.0	< 0.50	< 0.50	6.5	< 0.50	< 0.50	< 1.0	--	< 0.50
MW-OS-5A3	10/02/2019	N	A3	0.44 j	1.2	< 0.50	0.41 j	6.5	< 0.50	0.40 j	< 1.0	< 0.50	< 0.50
MW-OS-6A3	03/09/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	23	< 0.50	1.8	0.45 j	< 0.50	< 0.50
MW-OS-6A3	10/02/2019	N	A3	< 0.50	7.0	< 0.50	< 0.50	2.8	< 0.50	1.5	< 1.0	< 0.50	< 0.50
MW-OS-8A3	03/09/2019	N	A3	0.26 j	0.32 j	< 0.50	0.38 j	120	< 0.50	4.3	< 1.0	0.28 j	< 0.50
MW-OS-8A3	03/09/2019	FD	A3	0.27 j	0.22 j	< 0.50	0.35 j	90	< 0.50	4.5	< 1.0	< 0.50	< 0.50
MW-OS-8A3	10/03/2019	N	A3	0.28 j	< 0.50	< 0.50	0.28 j	90	< 0.50	4.6	< 1.0	< 0.50	< 0.50
MW-OS-10A3	03/09/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	42	< 0.50	1.1	< 1.0	< 0.50	< 0.50
MW-OS-10A3	10/03/2019	N	A3	< 0.50	14 J+	< 0.50	< 0.50	12	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
MW-OS-11A3	03/09/2019	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	49	< 0.50	1.1	< 1.0	< 0.50	< 0.50
MW-OS-11A3	10/03/2019	N	A3	< 0.50	4.1	< 0.50	< 0.50	20	< 0.50	0.56	< 1.0	< 0.50	< 0.50
MW-OS-12A3	03/09/2019	N	A3	< 0.50	0.087 j	< 0.50	< 0.50	350	< 0.50	2.1	0.65 j	0.18 j	< 0.50
MW-OS-12A3	10/04/2019	N	A3	< 1.0	0.39 j	< 1.0	< 1.0	270	< 1.0	2.2	< 2.0	< 1.0	< 1.0
LS-1A	10/09/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 1.0	< 0.50	< 0.50
MW-OS-2A4	10/02/2019	N	A4	3.9	0.22 J+	< 0.50	2.4	16	< 0.50	1.9	< 1.0	< 0.50	< 0.50
MW-OS-3A4	10/09/2019	N	A4	0.41 J	18 J	< 0.50 UJ	< 0.50 R	23 J	< 0.50 UJ	< 0.50 R	< 1.0 UJ	< 0.50 R	9.5 J
MW-OS-4A4	10/02/2019	N	A4	0.42 j	< 0.50	< 0.50	0.80	9.4	< 0.50	1.5	< 1.0	< 0.50	< 0.50
MW-OS-6A4	03/09/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	0.43 j	< 0.50	4.3	< 1.0	< 0.50	< 0.50
MW-OS-6A4	10/02/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.1	< 1.0	< 0.50	< 0.50
QH-1A	10/02/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	0.83	< 0.50
S-1A	10/02/2019	N	A4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
IQ-1B	04/08/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	--	< 0.50
IQ-1B	04/08/2019	FD	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	--	< 0.50
IQ-1B	10/09/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
KR-1B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	7.3	< 0.50	0.43 j	< 1.0	< 0.50	< 0.50
LQ-2B	04/08/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	56	< 0.50	1.6	< 1.0	--	< 0.50
LQ-2B	10/03/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	49	< 0.50	1.1	< 1.0	< 0.50	< 0.50
LR-1B	04/08/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	66	< 0.50	4.5	< 1.0	--	< 0.50
LR-1B	10/03/2019	N	B	0.44 j	< 0.50	< 0.50	0.36 j	57	< 0.50	3.3	< 1.0	< 0.50	< 0.50
LS-2B	10/09/2019	N	B	0.29 j	0.10 j	< 0.50	< 0.50	0.62	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
KB-2B	10/09/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 1.0	< 0.50	< 0.50
MW-OS-6B	03/09/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	0.65	< 0.50	4.0	< 1.0	< 0.50	< 0.50
MW-OS-6B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	0.95	< 0.50	3.7	< 1.0	< 0.50	< 0.50
PG-1B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	0.25 j	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
PL-1B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	16	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
RK-1B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50
S-3B	10/02/2019	N	B	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50

Table 3
Summary of VOC Concentrations in Groundwater Monitoring Wells, January through December 2019
Intersil/Siemens Site
Cupertino, California

Well ID	Sample Date	Sample Type	Zone/Depth Interval	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,1-TCA	TCE	PCE	Freon 113	Chloroform	Toluene	Vinyl Chloride
S-5B	10/02/2019	N	B	**0.34 j**	*< 0.50*	*< 0.50*	**0.51**	*< 0.50*	*< 0.50*	**2.9**	*< 1.0*	*< 0.50*	*< 0.50*
S-5B	10/02/2019	FD	B	**0.98 J**	*< 0.50 UJ*	*< 0.50 UJ*	**1.5 J**	*< 0.50 UJ*	*< 0.50 UJ*	**7.3 J**	*< 1.0 UJ*	*< 0.50 UJ*	*< 0.50 UJ*
LR-3C	10/02/2019	N	C	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**1.3**	*< 0.50*	**0.96**	*< 1.0*	*< 0.50*	*< 0.50*
RK-2C	10/02/2019	N	C	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**0.35 j**	*< 0.50*	**0.12 j**	*< 1.0*	*< 0.50*	*< 0.50*
S-4C	10/02/2019	N	C	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**0.50**	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
S-6C	10/02/2019	N	C	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**0.26 j**	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	03/09/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	03/18/2019	TB	--	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*
TB	03/19/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	04/08/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	--	*< 0.50*
FB	04/08/2019	FB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	--	*< 0.50*
TB	05/07/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	05/08/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	07/09/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	07/10/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	10/02/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	10/03/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*
TB	10/09/2019	TB	--	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 0.50*	*< 0.50*

Notes:
< = Compound not detected. Reportable detection limit shown.
-- = Not analyzed or not applicable
Units are in µg/L = micrograms per liter
Bolded values indicate concentrations above the Reportable Detection Limit.
FD = Field Duplicate Sample
N = Normal Environmental Sample
TB = Trip Blank
FB = Field Blank
SW8260B analyses performed by TestAmerica - Pleasanton (San Francisco), CA

Abbreviations:

Abbreviation	*Compound*
PCE	*Tetrachloroethene*
cis-1,2-DCE	*cis-1,2-Dichloroethene*
trans-1,2-DCE	*trans-1,2-Dichloroethene*
1,1,1-TCA	*1,1,1-Trichloroethane*
1,1-DCE	*1,1-Dichloroethene*
Freon 113	*Freon 113*
TCE	*Trichloroethene*
VOC	*Volatile organic compound*

Table 4
Summary of Sampling QA/QC
Former Intersil Facility
Cupertino, California

QA/QC Criterion	Criterion Met?
Chain-of-custody forms completed for all samples?	Yes
Field parameters stabilize prior to taking sample?	Yes
Zero headspace in sample containers?	Yes
Samples preserved according to analytical method?	Yes
Required field QA/QC samples collected?	Yes

Notes:
NA = Not applicable
QA/QC = Quality Assurance/Quality Control

Table 5
Summary of Analytical QA/QC
Intersil/Siemens Site
Cupertino, California

Laboratory Information	April and October 2019
Lab Name:	Eurofins TestAmerica
Lab Address:	1220 Quarry Lane Pleasanton, California 94566-4756
Lab Contact:	Afsaneh Salimpour
Lab Phone Number:	(925) 484-1919
Analytical Method:	U.S. EPA Method 8260B U.S. EPA Method 8021B

QA/QC Criterion	Criterion Met?
Is lab state-certified for above analytical methods?	Yes
Analyses performed according to standard methods?	Yes
Sample holding times met?	Yes
Analytical results reported for all values above MDL?	Yes
QA/QC analyses run consistent with analytical methods?	Yes
Samples preserved according to analytical method?	Yes
QA/QC results meet all acceptance criteria?	Yes
QA/QC results and acceptance criteria on file?	Yes

Notes:
QA/QC = Quality Assurance/Quality Control
MDL = Maximum Detectable Limit

Table 6
Summary of System Flow Rates,
Volume Extracted, and VOC Mass Removed
Intersil/Siemens Site
Cupertino, California

	January–March 2019	April–June 2019	July–September 2019	October–December 2019
Former Intersil Facility Groundwater Extraction and Treatment System[1]				
Average Quarterly Flow Rate (gallons per minute)	31	32	31	29
Total Volume Extracted (gallons)	3,862,700	4,065,600	4,075,300	3,987,200
Estimated VOC Mass Removed (pounds)	2.3	2.1	2.3	1.7
Former Siemens Facility Groundwater Extraction and Treatment System[2]				
Average Quarterly Flow Rate (gallons per minute)	38	62	65	58
Total Volume Extracted (gallons)	4,808,532	7,193,288	7,425,924	6,786,976
Estimated VOC Mass Removed (pounds)[4]	4.1	5.8	5.8	4.9
Off-Site Study Area Groundwater Extraction and Treatment System[3]				
Average Quarterly Flow Rate (gallons per minute)	30	52	52	51
Total Volume Extracted (gallons)	3,816,478	6,054,525	5,899,752	5,999,088
Estimated VOC Mass Removed (pounds)[5]	1.4	3.4	3.0	3.0

Notes:

1. *Former Intersil facility groundwater extraction and treatment system included extraction wells E9AR, W10A, W12A, and W18MA.*
2. *Former Siemens facility groundwater extraction and treatment system includes on-site extraction wells 2EP, 2EPa, H-1A, H-5B, LF-6A, LF-12A, EX-1-RL, and SW-7. Note that 2EP, 2EPa and H-1A were shut down in September/October/November 2014 facilitate the Phase II ERD Pilot Study.*
3. *Off-Site Study Area groundwater extraction system includes wells LR-1B and LQ-2B.*
4. *VOC mass removed from the former Siemens facility is calculated by subtracting the VOC mass removed from the Off-Site Study Area from the total mass removed by the treatment system. The total mass removed by the treatment system is calculated using the influent VOC concentrations and the total combined volume of groundwater extracted from the on-site and off-site extraction wells.*
5. *VOC mass removed from the Off-site Study Area is calculated by using VOC concentrations and groundwater extraction volume for the individual off-site wells.*

Abbreviations:
ERD = enhanced reductive dechlorination
VOC = volatile organic compound

Table 7
Summary of Sampling QA/QC
January through December 2019
Former Siemens Facility and Off-Site Study Area
Cupertino, California

Site Name:	Site Address:	Monitoring Period Covered:
Former Siemens Facility and Off-Site Study Area	19000 E. Homestead Road, Cupertino, California	January through December 2019

Sampling performed by: Colin Rowland
Firm name: Blaine Tech Services, Inc. on behalf of ERM West
Firm address: 980 9th Street, Suite 750, Sacramento, CA 95814
Firm contact: Matthew Scheeline
Firm phone number: (916) 924-9378

Were chain-of-custody forms completed for all samples?	☐ Yes	☑ No
Were field parameters stabilized prior to taking sample?	☑ Yes	☐ No
For VOC samples, was there zero head space in sample containers?	☐ Yes	☑ No
Were samples preserved according to analytical method?	☑ Yes	☐ No
Were required QA/QC samples taken?	☑ Yes	☐ No
For any questions above answered with "No", please provide an explanation:		

Data entered by PO. Quality Assurance/Quality Control (QA/QC) by SM.

Notes:
There were a few issues between the Chain of Custody forms (COCs) and the laboratory report. Report 720-95398-1's MW-OS-10A3-10032019 sample was listed as MW-OS-10A3 in the COC. The laboratory also has a sample listed as "MW-05-10A3" in the narrative, but "MW-OS-10A3-10032019" in the report. The sample also had a discrepancy between the COC and the label on the sample container; the label listed the time as 07:55, whereas the COC listed the time as 07:56. The job narrative also noted that the Sample 720-95398 #05 received unpreserved containers with "FF" written on the labels. It was unclear if there was a difference in two of the HNO_3 bottles received. The J95379-1 report's job narrative also noted that the COC lists a sample "SW-7-10012019", while the container listed a sample labelled as "SW-7-10022019", though the COC attached the report lists "SW-7-10022019" as the sample name.

Report 720-95419-1 has a sample listed in the COC as "MW-OS1-A1-10042019", but the laboratory report lists it as "MW-OS-1A1-10042019." Also, "DUP-1-10042019", "DUP-2-10042019", "DUP-3-10042019", and "DUP-4-10042019" are not included in the COCs. The samples for the duplicates were received without times listed on the labels.

All of the discrepancies on the COCs listed above were resolved through communication with the lab and is included in the analytical laboratory reports.

Additionally, three samples were submitted with significant headspace (>6mm). The results were compared to historical data. If data were in agreement with historical or a field duplicate, then results were qualified as estimated (J/UJ). If results were not in agreement, or if historical data were not available, the results were rejected (R).

Table 8
Summary of Analytical QA/QC
January through December 2019
Former Siemens Facility and Off-Site Study Area
Cupertino, California

Site Name:	Site Address:	Monitoring Period Covered:
Former Siemens Facility and Off-Site Study Area	19000 E. Homestead Road, Cupertino, California	January to December, 2019

Lab name:	Test America
Lab address:	1220 Quarry Lane, Pleasanton, California 94566
Afsaneh Salimpour	Afsaneh Salimpour
Lab phone number:	(925) 484-1919

Analytical method used: (check applicable methods)

- ☐ Total Dissolved Solids by EPA Method 360.1
- ☐ Bioassay 96-hr % survival by Standard Method
- ☐ Turbidity (NTU)
- ☐ Dissolved Oxygen (mg/l and % saturation) by Standard Method
- ☐ Ammonia as Nitrogen by EPA 350.2/.3
- ☐ Unionized Ammonia as Nitrogen
- ☐ Hardness (mg/l CaCO3) by EPA Method SM 2340B
- ☐ Arsenic by EPA Method 6010B
- ☐ Cadmium by EPA Method 6010B
- ☐ Chromium (total) by EPA Method 6010B
- ☐ Chromium (hexavalent) EPA Method _____
- ☐ Copper by EPA Method 6010B
- ☐ Lead by EPA Method 6010B
- ☐ Mercury by EPA Method 7470A
- ☐ Nickel by EPA Method 6010B
- ☐ Selenium by EPA Method 6010B
- ☐ Silver by EPA Method 6010B
- ☐ Zinc by EPA Method 6010B
- ☐ Halogenated Volatile Organics by EPA Method 601 or 8010 or H8021 or 8260
- ☐ Aromatic and Unsaturated Volatile Organics by EPA 602
- ☑ Volatile Organics by EPA Method 8260B
- ☐ Semivolatile Organics by EPA Method 625 or 8270
- ☐ EDB and DBCP by EPA Method 504
- ☐ Alcohols and Glycols by EPA Method 8015 modified
- ☐ TPH gasoline by EPA Method 8015 modified
- ☐ TPH diesel by EPA Method 8015 modified
- ☐ Chlorinated Hydrocarbons by EPA Method 8260A
- ☐ Methanol, IPA, and ethylene glycol by EPA Method 8015 modified Ethylene Glycol Only

Is the lab state-certified for the above analytical method(s)?	☑ Yes	☐ No
Was analysis performed according to standard methods?	☑ Yes	☐ No
Were sample holding times met?	☐ Yes	☑ No
Were all reported analytical results values above MDLs?	☑ Yes	☐ No
Were QA/QC samples (i.e. blanks, field replicates, spikes, and surrogates) analyzed in accordance and consistent with the analytical method?	☑ Yes	☐ No
Did QA/QC results meet all acceptance criteria?	☑ Yes	☐ No
Are QA/QC results and acceptance criteria on file?	☑ Yes	☐ No
For any questions above answered with "No", please provide an explanation: *		

Data entered by PO. QA/QC by SM.

**The explanation should describe any modifications to standard methods and whether approved by RWQCB staff, and describe corrective actions taken in response to any QA/QC results that fall outside acceptance criteria.*

Several samples from reports 720-95379-1, 72095398-1, and 720-95419-1 reported a pH greater than 2 for volatile organic compound (VOC) analysis. This means that the 8260B holding time is 7 days for unpreserved samples. Several samples from reports 720-95379-1 720-95398-1, and 720-95419-1, were analyzed outside the 7 day holding time. Results were compared to historical data. Where results were in agreement, the samples were qualified as estimated (J-/UJ). If samples did not agree or if historical data were not available, the results were rejected (R).

APPENDIX A STANDARD OPERATING PROCEDURE NO. 2 – GROUNDWATER SAMPLING, FORMER SIEMENS FACILITY

Standard Operating Procedure No. 2
Groundwater Sampling
Rev. 2 (December 2017)

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1.0 INTRODUCTION

This Standard Operation Procedure (SOP) has been developed for the former Siemens facility to direct field personnel in the sampling of monitoring wells during groundwater investigation activities and groundwater remediation activities at the site.

1.1 OVERVIEW

This SOP will be implemented in accordance with the following documents:

- 15 August 1990, California Regional Water Quality Control Board, San Francisco Bay Region, *Site Cleanup Requirements Order No. 90-119*, as amended by the 9 January 2013 Order R2-2013-002.
- *Health and Safety Plan*, which will identify risks to human health and the environment associated with known and potential chemical impacts at the site and the applicable technologies presented herein.

Investigation and remedial design rationale; scope of work; boring, well, and/or injection point locations; and sampling frequency will be submitted to SMI for approval in a separate document.

The relevant operational documents that cover the use of substrate are:

- Work Plan, Sampling and Analysis Plan, or equivalent; and
- Health and Safety Plan.

1.2 PURPOSE AND OBJECTIVES

The purpose of this SOP is to present the methodologies for sampling and collection of groundwater samples from site monitoring and remediation wells. The objective of the SOP is to provide procedures, methods, and considerations to be used and observed by field personnel to obtain groundwater samples that meet acceptable standards of accuracy, precision, comparability, representativeness, and completeness.

This SOP describes equipment, field procedures, sample containers, decontamination, documentation, storage, holding times, and field quality assurance/quality control (QA/QC) procedures necessary to develop

existing groundwater monitoring wells and to collect water samples from the site wells.

2.0 EQUIPMENT AND SUPPLIES

Sample bottles will be obtained from the analytical laboratory for collecting and testing. Trip blanks for volatile organic compounds will also be obtained from the analytical laboratory.

Typical equipment and forms for well evacuation and sampling include:

- Personal protective equipment, including nitrile or powderless surgical gloves and safety glasses;
- Multi-parameter water quality meter, with flow-through cell (250 milliliters [mL] or less capacity) and calibration standards, capable of collecting the following parameters:
    - pH;
    - Specific conductivity;
    - Oxidation reduction potential;
    - Dissolved oxygen; and
    - Temperature.
- Water level meter;
- Tubing (Teflon, polyethylene, Tygon, and/or medical-grade silicone);
- Non-dedicated pumps:
    - 2-inch bladder pump with variable flow controller; and
    - Peristaltic pump.
- Power source (e.g., gas generator, electric compressor, carbon dioxide);
- Flow measurement device (e.g., 1-liter graduated cylinder);
- Calibration Logsheet (Figure 1);
- Groundwater Sampling Forms (Figure 2);
- Data recording sheets;
- Field notebook;
- Chain-of-Custody (COC) forms (Figure 3);
- Labels (Figure 4);
- Appropriate sample containers;
- Self-sealing plastic bags;

- Ice chest or cooler;
- Ice or frozen ice packs;
- Spray bottle for deionized water;
- Deionized water; and
- 55-gallon drums or other type of portable storage container.

Equipment used during decontamination:

- Liquinox, Alconox detergent (or equivalent);
- Deionized water; and
- Containers, brushes, paper towels, and plastic sheeting.

3.0 GROUNDWATER MONITORING PROCEDURE

3.1 PRE-PURGING AND SAMPLING ACTIVITIES

The following subsections present tasks that should be conducted prior to any purging and sampling activities.

3.1.1 New and Decontaminated Equipment

All equipment that will come in contact with the groundwater should be either new (tubing, sample containers, Hydrasleeve™ samplers, etc.) or decontaminated (water level probes, pumps, etc.). Decontamination procedures are presented in Section 5.0.

3.1.2 Groundwater Level Measurement

Prior to purging and sampling activities, groundwater level measurements will be collected. Depth to water will be measured at one time (over the course of a day or two) using a hand-held, electronic water level indicator graduated to 0.01-foot increments and recorded on field data sheets. The depth to water will be measured from the northern side of the top of the well casing.

3.1.3 Calibration of Multi-Parameter Instrument

If groundwater will be sampled using low-flow collection methods, the multi-parameter instrument must be calibrated at the beginning of each day per the manufacturer's specifications. If field measurements fall outside anticipated values, a calibration check (conducted in measurement mode) must be conducted and the instrument should be re-calibrated in the event the instrument is out of range. A calibration check shall also be completed at the end of each day to verify the instrument has remained in calibration throughout the day. Daily calibration shall be documented on a calibration logsheet and kept with the instrument in the field. Specific instructions for calibrating the instruments are presented as Attachment A. An example calibration logsheet is presented as Figure 1.

3.2 SAMPLE COLLECTION

3.2.1 Sample Collection using HydraSleeve™ Sampler

3.2.1.1 HydraSleeve™ Sampling Procedure

When sampling groundwater using HydraSleeve™ samplers, the HydraSleeve™ will be deployed/lowered to the mid-point of the screened interval immediately following water level measurement. The sampler is slim and displaces very little water during deployment; therefore, it does not disturb the water column to the point at which long equilibration times are necessary to ensure recovery of a representative sample. The HydraSleeve™ SOP (GeoInsight Inc. 2010), included in Attachment B, contains diagrams illustrating the steps required for HydraSleeve™ sampler deployment, retrieval, and sample recovery.

3.2.1.2 HydraSleeve™ Sampler Assembly/Deployment

The following steps will be taken when deploying the HydraSleeve™ sampler:

1. Remove the sampler from the packaging and crease the reinforced fins outward to open the top of the sampler.
2. Attach a calibrated tether to one of the holes at the top of the sampler.
3. Fold the bottom of the sampler, aligning the two holes, and attach the weight using the stainless-steel clip.
4. Lower the weighted sampler to the desired depth of the boring or well screen interval.
5. Secure the sampler at the top of the well by attaching the tether to the well cap. Once the sampler is secure at the surface, the well will be given a minimum of 24 hours to equilibrate before the groundwater sample is collected.

3.2.1.3 HydraSleeve™ Sampler Retrieval/Sample Collection

The following steps will be taken when collecting a groundwater sample using the HydraSleeve™ sampler:

1. The sampler will fill as it is pulled upward (out of the well) at a rate of 1 to 2 feet per second.
2. Once the sampler is at the surface, it will be grabbed just below the top to expel water resting on top of the check valve.

3. Using the appropriate tubing, the sampler will be punctured approximately 3 to 4 inches below the white reinforcing strips located at the top of the sampler.
4. Water will be decanted from the sampler through the discharge tube into the appropriate containers for desired laboratory analysis.
5. Any excess water from the HydraSleeve™ will be collected from designated areas, properly characterized, and either shipped offsite or treated through the existing onsite system in accordance with all regulatory requirements.

3.2.2 Sample Collection Using Low Flow Purging and Sampling

3.2.2.1 Low Flow Purging and Sampling Procedure

When sampling groundwater using low flow purging and sampling methods, sampling will be conducted as follows:

- Place equipment on clean portable table or a plastic sheet to prevent the ground surface from coming in contact with purging and sampling equipment.
- Remove the well cover and unlock cap.
- Evacuate any standing water within the well box prior to removing the inner well cap(s), as necessary.
- Remove the inner well cap and perform head space analysis using a photoionization detector.
- Measure and record the depth to static water level from the measuring point on the PVC inner well casing. Repeat the measurement process until values agree within +/- 0.01 feet. Indicate the time of measurement.
- Record the total depth of well (measured during water level measurement process); lower the probe into the well as slow as possible and make a note if the bottom is "soft" (indicating sediment may be present). Total depth cannot be measured on wells containing dedicated pump systems (extraction wells); therefore, record the total depth of the well from the well construction table.
- For wells in which a non-dedicated submersible pump is to be utilized, slowly lower (to minimize the disturbance of the water column) the pump, tubing, power source line, and safety line into the well to a pre-determined depth within the screen interval. If possible, the pump

should remain at least 2 feet above the bottom of the well to minimize mobilization of any particulates settled on the bottom of the well.

- Minimize tubing lengths on the ground surface to reduce exposure of the groundwater to sunlight and ambient air temperatures.
- Begin purging at a flow rate of 100 to 500 mL per minute. Attempt to match pumping rate used during previous sampling event(s).
- Decrease flow, as required, to keep drawdown to less than 0.3 foot. The initial purging time should be spent adjusting flow to minimize drawdown.
- If drawdown is greater than 0.3 foot, with the pump at lowest setting (100 mL per minute) and stabilizes, calculate the volume of the water between the initial water level and stabilized water level. Add the volume of water within the tubing to this calculation. This combined volume of water needs to be purged from the well after the water level has stabilized, but before samples are collected.
- If the drawdown continues to decrease with the pump at its lowest setting, contact the Project Manager for additional guidance.
- Record the depth to water, flow rate, and stabilization parameters (pH, electrical conductivity, temperature, dissolved oxygen, and oxidation/reduction potential) every 3 to 5 minutes (or as appropriate) on the low flow sample logsheet (Figure 2). Stabilization parameters will be measured within a flow-through cell with a volume of 250 mL or less to minimize retention time. Note visual description of the turbidity on the field sheet, if any color other than clear is observed, and if any detectable odor is observed.
- Stabilization is considered to be achieved when three consecutive readings, taken at 3- to 5-minute intervals, are within the following limits:
    - Dissolved oxygen (in milligrams per liter) – 10 percent;
    - Specific Conductance (in MicroSiemens per centimeter) – 3 percent;
    - Temperature (in degrees Celsius) – 3 percent;
    - pH – +/- 0.1 unit; and
    - Oxidation/reduction potential (in millivolts) – +/- 10 millivolts.
- Sampling may begin upon stabilization, or after 1 hour of purging, whichever occurs first. Prior to sampling, the tubing must be disconnected from the flow cell and clean nitrile gloves must be donned. Regardless of the sampling equipment utilized, groundwater

samples will be collected in a manner free of entrapped air bubbles throughout the entire sampling assembly.

- Replace the well cap, close the well cover, and lock the well.

4.0 SAMPLING INSTRUCTIONS

4.1 CONTAINERS, PRESERVATION, AND HOLDING TIMES

Certified clean sample containers and trip blanks will be obtained from the contract analytical laboratory. The bottles will be labeled to indicate the type of analysis to be performed, and necessary preservatives will be present in the bottles when received from the laboratory.

Table 1 summarizes the sampling containers, preservation, and holding times for the various types of analyses.

4.2 SAMPLE TRACKING

Documents for tracking the samples are generated in the field. This documentation includes field notes, sample labeling, and COC forms.

4.2.1 Sample Labeling

Each sample will be labeled prior to collection. The sample label (Figure 4) will be filled out with waterproof ink. Each sample label contains the following information:

- Project number;
- Company name;
- Site/project name;
- Sample number (well location);
- Parameters for analysis;
- Date and time of collection;
- Preservative; and
- Sampler's signature (or initials).

Information pertinent to field survey measurements and sampling will be recorded on the field forms and/or in the field notebook.

4.2.2 Chain-of-Custody Forms

A COC form (Figure 3) will be filled out in the field and will accompany every shipment of samples to the analytical laboratory. The purpose of the

COC form is to document possession of a sample from the time of collection in the field to its final disposal by the laboratory.

The laboratory will enter the following information on the form:

- Name of persons receiving the sample;
- Date of sample receipt; and
- Sample condition.

All corrections to the COC record will be initialed and dated by the person making the corrections.

Each COC form will include signatures of the appropriate individuals indicated on the form.

4.3 SAMPLES FOR ASSESSING QUALITY ASSURANCE/QUALITY CONTROL

To identify potential errors, four types of QC samples may be included for analysis. All QC samples shall be labeled and sent to the laboratory along with the actual samples for analysis. QC sample frequencies are summarized below. The three types of QC samples are as follows:

4.3.1 Trip Blanks

Trip blanks check for contamination due to handling, transport, contact with other samples during storage, or laboratory error. A Volatile Organic Analysis (VOA) bottle set is filled with deionized water by the laboratory. This set is taken to the field; labeled with company name, date, and cooler ID; and stored with the other samples until they are delivered for analysis to the laboratory. Trip blanks are opened by laboratory personnel only. One trip blank set is sent per cooler of samples for volatiles analysis per day.

4.3.2 Field Duplicates

Sometimes referred to as a split or replicate, a field duplicate is a check on field and laboratory precision. Two samples from a single HydraSleeve™ sampler or consecutive samples collected by means of a bladder pump are filled at the same sampling location. One is labeled as the actual well sample and the other is labeled as a duplicate sample. Preservation and shipping of samples and their duplicates is identical. One duplicate will

be submitted per 10 samples, or one per sampling event if fewer than 10 samples are collected.

4.3.3 Rinsate Samples

Bailer or sampling equipment rinsate blanks verify that chemicals are not being carried from one sample to the next via the bladder pump or other equipment used in the transfer of water samples. Rinsate field blanks will be taken after sampling the wells known to historically contain the highest chemical concentrations for the group of wells sampled. The bladder pump and/or other equipment are first decontaminated with deionized water. Deionized water is then poured from the bladder pump (and/or other equipment) into sample bottles labeled with a QC number. One rinsate sample will be submitted per 20 samples collected with a bladder pump.

Rinsate samples will not be collected for wells to which specific or disposable sampling equipment (HydraSleeve™ sampler or dedicated pump) has been dedicated, as no likelihood of transferring chemicals to other samples exists.

5.0 EQUIPMENT DECONTAMINATION

Decontamination will be performed on all non-dedicated sampling equipment that may contact potentially contaminated water, including water level meters, bladder pumps, and other sampling equipment. Clean nitrile gloves or powderless surgical gloves are to be worn during decontamination.

An equipment decontamination station will be centrally located onsite. Each piece of sampling equipment will be decontaminated before each sampling period and between each well. Plastic sheeting will be laid down around each well during sampling to protect decontaminated equipment from contact with the ground surface. The decontamination procedure for most equipment will be as follows:

- Wash equipment in an Alconox (or equivalent) and water solution using a brush or clean cloth to ensure removal of all contaminants;
- Rinse equipment in fresh tap water;
- Rinse again with deionized water; and
- Dry equipment with paper towel and place in clean plastic, if appropriate.

The effectiveness of these decontamination procedures will be verified by vigorous QA/QC protocols, including blanks and duplicates.

Decontamination water will be collected from designated areas, properly characterized, and either shipped offsite or treated through the existing onsite system in accordance with all regulatory requirements.

6.0 DOCUMENTATION

Thorough documentation in the field is required to ensure proper labeling and tracking of samples, identify potential sources of error, and maintain accountability among field personnel.

6.1 FIELD NOTES AND DATA COLLECTION FORMS

Field notes shall be kept in a bound notebook. The following information will be included in the field notes and/or on data collection forms:

General Information:

- Names of personnel;
- Weather;
- Date and time of sampling;
- Location and well number;
- Condition of the well;
- Times that procedures and measurements are completed;
- Calibration of meters at start of day;
- Decontamination times; and
- Initial static water level and total well depth.

Sampling Information:

- Volume of water evacuated before sampling;
- General description of sample procedures, or reference the SOP;
- Time of sample collection;
- Number of samples collected;
- Sample identification numbers;
- Preservation and storage of samples;
- Record of any QC samples from site;
- Any irregularities or problems that may have a bearing on sampling quality; and
- Type of sampling equipment.

FIGURES

ERM-WEST, INC.	YSI MULTIPARAMETER METER

Site Name: _____ Job No.: _____

Serial No.: _____ Model No.: _____

Date:	Pre Calibration Reading	Post Calibration Reading	Calibration Std Lot No.	Lot Expiration Date	Remarks
pH = 4					
pH = 7					
pH = 10					
DO mg/L @ 0% Saturation					
DO mg/L @ 100% Saturation					
Specific Conductance = 445 us/cm					
Specific Conductance = 1,000 us/cm					
ORP = 237.5 mV @ 20°C					
Temp °C					
Pressure mm Hg					

Date:					
pH = 4					
pH = 7					
pH = 10					
DO mg/L @ 0% Saturation					
DO mg/L @ 100% Saturation					
Specific Conductance = 445 us/cm					
Specific Conductance = 1,000 us/cm					
ORP = 237.5 mV @ 20°C					
Temp °C					
Pressure mm Hg					

Figure 1
Calibration Logsheet
Standard Operating Procedure No. 2
Groundwater Sampling
Former Siemens Facility
Cupertino, California

Former SMI Site ***10950 North Tantau, Cupertino, CA*** ***QUARTERLY GROUNDWATER SAMPLING*** ***FIELD NOTES / ERM 0201040***	Date: Set up time: Weather: Samplers:

WELL #

Location: ERP	Construction Depth:
Construction:	Measured Depth:
Groundwater Zone:	Depth to Packer:
Screened Interval:	Pump Intake:

Purge Setting: Discharge: / Refill:	Depth to Water:
Sample Setting: Discharge:	Height of Water Column:
	Volume of one casing:

Packer Pressure:	Purge calculations
Purge Start Time:	_____ ft. x gals ___ / ft. x 3 =
Discharge Rate:	_____ gallons
Purge End Time:	

Time	Purge Volume (Gallons)	Temp. (°C)	pH		ORP	DO (mg/L)	Turbidity

ANALYSES REQUIRED	SAMPLE TIME	CONTAINER TYPE	FILTRATION?

FIELD OBSERVATIONS (Well condition, repairs needed)

Disposal method of purge water:

Decontamination procedure:

Other notes:

Sampler Signature(s) :

Figure 2
Groundwater Sampling Form
Standard Operating Procedure No. 2
Groundwater Sampling
Former Siemens Facility
Cupertino, California

Environmental Resources Management

CHAIN OF CUSTODY RECORD

NO: 07889

1277 Treat Boulevard, Suite 500 • Walnut Creek, CA • 94597 • (925) 946-0455 • FAX (925) 946-9968

Page _____ of _____

PROJECT #	PROJECT NAME

SAMPLER: **(PRINT NAME)**	**(SIGNATURE)**

RECEIVING LABORATORY

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESER-VATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	REQUESTED PARAMETERS

RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME	FIELD REMARKS
RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME	
RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME	

REMARKS ON SAMPLE RECEIPT	ERM REMARKS	**SEND REPORT TO:**
☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED ☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS		

WHITE – LABORATORY COPY CANARY – FIELD COPY PINK – DATABASE GOLD – PROJECT FILE

Figure 3
Chain of Custody Form
Standard Operating Procedure No. 2
Groundwater Sampling
Former Siemens Facility
Cupertino, California

Figure 4
Sample Label
Standard Operating Procedure No. 2
Groundwater Sampling
Former Siemens Facility
Cupertino, California

TABLE

Table 1 Sample Containers, Preservatives, and Holding Times for Test Parameters

Parameter	Container	Preservative	Lab Holding Times
Volatile organic compounds	3 x 40 mL vial with Teflon faced septa cap	Acidity to pH of <2 with hydrochloric acid. Refrigerate at 4° ±2°C	Analysis performed within 14 days from sample collection date
Methane, ethane, and ethene	2 x 40 mL vial with Teflon faced septa cap	Acidity to pH of <2 with hydrochloric acid. Refrigerate at 4° ±2°C	Analysis performed within 14 days from sample collection date
Chloride, nitrate, and sulfate	250 mL polyethylene vial	Refrigerate at 4° ±2°C	Analysis performed within 28 days from sample collection date
Total organic carbon	50 mL polyethylene vial	Acidity to pH of <2 with hydrochloric acid. Refrigerate at 4° ±2°C	Analysis performed within 28 days from sample collection date
Dehalobacter and dehalococcoides	1L polyethylene vial	Refrigerate at 4° ±2°C	Analysis performed within 10 days from sample collection date

ATTACHMENT A
INSTRUMENT CALIBRATION INSTRUCTIONS

STANDARD OPERATING PROCEDURE – CALIBRATION OF THE YSI DISSOLVED OXYGEN PROBE

The following procedure calibrates the dissolved oxygen (DO) probe for the YSI Multi-Parameter Instrument:

1. Place approximately 3 millimeter (mm) (1/8 inch) of water in the bottom of the calibration cup.

2. Place the probe end of the sonde into the cup.

3. Make certain that the DO and temperature probes are not immersed in water.

4. Engage only 1 or 2 threads of the calibration cup to insure the DO probe is vented to the atmosphere.

5. Wait approximately 10 minutes for the air in the calibration cup to become water saturated and for the temperature to equilibrate.

6. From the calibration menu, select **Dissolved Oxy**, then the **1-DO** % to access the DO percent calibration procedure.

7. Enter the current barometric pressure in mm of mercury (Hg). (Inches of Hg x 25.4 = mm Hg).

8. Press **Enter** and the current values of all the enabled sensors will appear on the screen and change with time as they stabilize.

9. Observe the readings under DO%. When they show no significant change for approximately 30 seconds, press **Enter**.

10. The screen will indicate that the calibration has been accepted and prompt you to press **Enter** again to return to the Calibrate menu.

The following procedure calibrates the oxidation reduction potential (ORP) probe for the YSI Multi-Parameter Instrument:

1. Rinse the probe with deionized water and dry.
2. Prepare the Zobell solution, with a known ORP value, according to the manufacturer's instructions.
3. Fill a clean and dry calibration cup with the Zobell solution.
4. Carefully immerse the probe end of the sonde into the Zobell solution. The level of the ORP solution should be of sufficient height to cover at least one-half inch of the ORP probe and the temperature sensor.
5. From the Main sonde menu, select **2-Calibrate**. The calibrate menu will be displayed.
6. Select **5-ISE2 ORP** to calibrate the ORP sensor.
7. Enter the ORP value of the Zobell solution.
8. Press **Enter** and monitor the stabilization of the ORP and temperature readings.
9. After no change has occurred for approximately 30 seconds, press **Enter** to confirm the calibration.

ORP readings for the same solution can vary up to 100 millivolts (mV) depending on the temperature. However, no standard compensation algorithms exist for this parameter. This should be factored into account when reporting ORP values and sensor calibrations. For the Zobell solution, consult the following chart.

Temperature (Celsius)	Zobell Solution Value (mV)
-5	270
0	263.5
5	257
10	250.5
15	244
20	237.5
25	231
30	224.5
35	218
40	211.5
45	205
50	198.5

The following procedure calibrates the pH probe for the YSI Multi-Parameter Instrument:

1. Fill a clean and dry calibration cup with the pH 7 buffer standard.

2. Carefully immerse the probe end of the sonde into the pH 7 buffer standard. The level of the buffer solution should be of sufficient height to cover at least 1 inch of the pH probe.

3. Enter the Calibrate menu, select **pH** to access the pH calibration choices, and then press **3- 3-Point**.

4. Press **Enter** and input the value of the buffer (7 in this case) at the prompt.

5. Press **Enter** and the current values of all enabled sensors will appear on the screen and change with time as they stabilize in the solution.

6. Observe the readings under the pH, and when they show no significant change for approximately 30 seconds, press **Enter**.

7. The display will indicate that the calibration is accepted. After the pH 7 calibration is complete, press **Enter** again, as instructed on the screen, to continue.

8. Rinse the sonde in deionized water and dry before proceeding.

9. Repeat steps 4 through 8 for pH 4 and pH 10 buffer solutions.

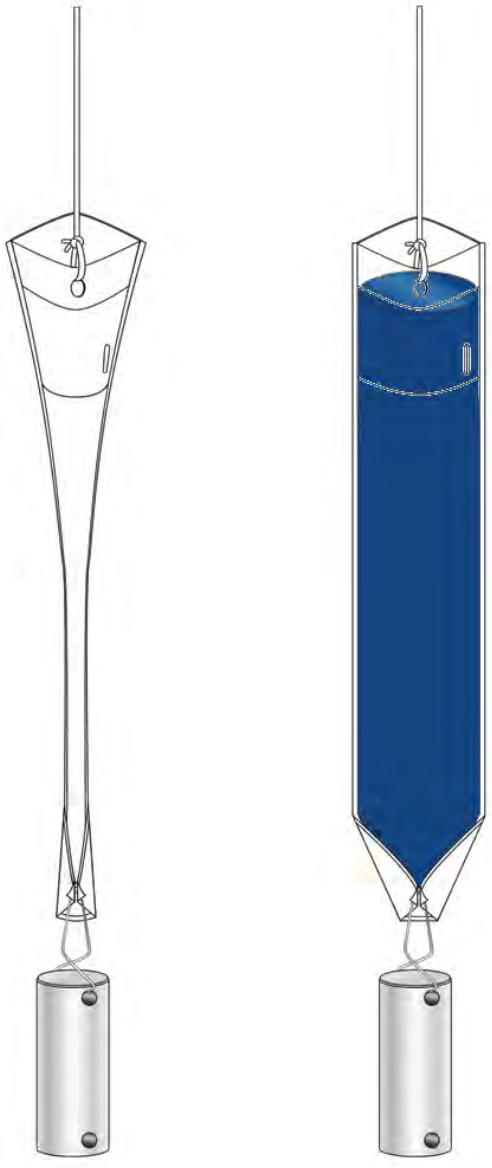
ATTACHMENT B
THE HYDRASLEEVE™
STANDARD OPERATING PROCEDURE

HYDRASleeve™

Simple by Design

US Patent No. 6,481,300; No. 6,837,120 others pending

Standard Operating Procedure: Sampling Ground Water with a HydraSleeve



This Guide should be used in addition to field manuals appropriate to sampling device (i.e., HydraSleeve or Super Sleeve).

Find the appropriate field manual on the HydraSleeve website at http://www.hydrasleeve.com.

For more information about the HydraSleeve, or if you have questions, contact: GeoInsight, 2007 Glass Road, Las Cruces, NM 88005, 1-800-996-2225, info@hydrasleeve.com.

Table of Contents

Introduction

The HydraSleeve is classified as a no-purge (passive) grab sampling device, meaning that it is used to collect ground-water samples directly from the screened interval of a well without having to purge the well prior to sample collection. When it is used as described in this Standard Operating Procedure (SOP), the HydraSleeve causes no drawdown in the well (until the sample is withdrawn from the water column) and only minimal disturbance of the water column, because it has a very thin cross section and it displaces very little water (<100 ml) during deployment in the well. The HydraSleeve collects a sample from within the screen only, and it excludes water from any other part of the water column in the well through the use of a self-sealing check valve at the top of the sampler. It is a single-use (disposable) sampler that is not intended for reuse, so there are no decontamination requirements for the sampler itself.

The use of no-purge sampling as a means of collecting representative ground-water samples depends on the natural movement of ground water (under ambient hydraulic head) from the formation adjacent to the well screen through the screen. Robin and Gillham (1987) demonstrated the existence of a dynamic equilibrium between the water in a formation and the water in a well screen installed in that formation, which results in formation-quality water being available in the well screen for sampling at all times. No-purge sampling devices like the HydraSleeve collect this formation-quality water as the sample, under undisturbed (non-pumping) natural flow conditions. Samples collected in this manner generally provide more conservative (i.e., higher concentration) values than samples collected using well-volume purging, and values equivalent to samples collected using low-flow purging and sampling (Parsons, 2005).

Applications of the HydraSleeve

The HydraSleeve can be used to collect representative samples of ground water for all analytes (volatile organic compounds [VOCs], semi-volatile organic compounds [SVOCs], common metals, trace metals, major cations and anions, dissolved gases, total dissolved solids, radionuclides, pesticides, PCBs, explosive compounds, and all other analytical parameters). Designs are available to collect samples from wells from 1” inside diameter and larger. The HydraSleeve can collect samples from wells of any yield, but it is especially well-suited to collecting samples from low-yield wells, where other sampling methods can’t be used reliably because their use results in dewatering of the well screen and alteration of sample chemistry (McAlary and Barker, 1987).

The HydraSleeve can collect samples from wells of any depth, and it can be used for single-event sampling or long-term ground-water monitoring programs. Because of its thin cross section and flexible construction, it can be used in narrow, constricted or damaged wells where rigid sampling devices may not fit. Using multiple HydraSleeves deployed in series along a single suspension line or tether, it is also possible to conduct in-well vertical profiling in wells in which contaminant concentrations are thought to be stratified.

As with all groundwater sampling devices, HydraSleeves should not be used to collect groundwater samples from wells in which separate (non-aqueous) phase hydrocarbons (i.e., gasoline, diesel fuel or jet fuel) are present because of the possibility of incorporating some of the separate-phase hydrocarbon into the sample.

Description of the HydraSleeve

The HydraSleeve (Figure 1) consists of the following basic components:

- A suspension line or tether (A.), attached to the spring clip or directly to the top of the sleeve to deploy the device into and recover the device from the well. Tethers with depth indicators marked in 1-foot intervals are available from the manufacturer.
- A long, flexible, 4-mil thick lay-flat polyethylene sample sleeve (C.) sealed at the bottom (this is the sample chamber), which comes in different sizes, as discussed below with a self-sealing reed-type flexible polyethylene check valve built into the top of the sleeve (B.) to prevent water from entering or exiting the sampler except during sample acquisition.
- A reusable stainless-steel weight with clip (D.), which is attached to the bottom of the sleeve to carry it down the well to its intended depth in the water column. Bottom weights available from the manufacturer are 0.75" OD and are available in three sizes: 5 oz. (2.5" long); 8 oz. (4" long); and 16 oz. (8" long). In lieu of a bottom weight, an optional top weight may be attached to the top of the HydraSleeve to carry it to depth and to compress it at the bottom of the well (not shown in Figure 1);
- A discharge tube that is used to puncture the HydraSleeve after it is recovered from the well so the sample can be decanted into sample bottles (not shown).
- Just above the self-sealing check valve at the top of the sleeve are two holes which provide attachment points for the spring clip and/or suspension line or tether. At the bottom of the sample sleeve are two holes which provide attachment points for the weight clip and weight.

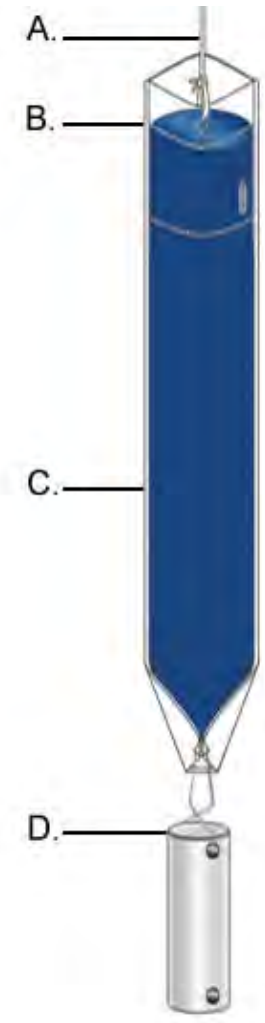


Figure 1. HydraSleeve components.

Note: The sample sleeve and the discharge tube are designed for one-time use and are disposable. The spring clip, weight and weight clip may be reused after thorough cleaning. Suspension cord is generally disposed after one use although, if it is dedicated to the well, it may be reused at the discretion of the sampling personnel.

Selecting the HydraSleeve Size to Meet Site-Specific Sampling Objectives

It is important to understand that each HydraSleeve is able to collect a finite volume of sample because, after the HydraSleeve is deployed, you only get one chance to collect an undisturbed sample. Thus, the volume of sample required to meet your site-specific sampling and analytical requirements will dictate the size of HydraSleeve you need to meet these requirements.

The volume of sample collected by the HydraSleeve varies with the diameter and length of the HydraSleeve. Dimensions and volumes of available HydraSleeve models are detailed in Table 1.

Table 1. Dimensions and volumes of HydraSleeve models.

Diameter	Volume	Length	Lay-Flat Width	Filled Dia.
2-Inch HydraSleeves				
Standard 625-ml HydraSleeve	625 ml	< 30”	2.5”	1.4”
Standard 1-Liter HydraSleeve	1 Liter	38”	3”	1.9”
1-Liter HydraSleeve SS	1 Liter	36”	3”	1.9”
2-Liter HydraSleeve SS	2 Liters	60”	3”	1.9”
4-Inch HydraSleeves				
Standard 1.6-Liter HydraSleeve	1.6 Liters	30”	3.8”	2.3”
Custom 2-Liter HydraSleeve	2 Liters	36”	4”	2.7”

HydraSleeves can be custom-fabricated by the manufacturer in varying diameters and lengths to meet specific volume requirements. HydraSleeves can also be deployed in series (i.e., multiple HydraSleeves attached to one tether) to collect additional sample to meet specific volume requirements, as described below.

If you have questions regarding the availability of sufficient volume of sample to satisfy laboratory requirements for analysis, it is recommended that you contact the laboratory to discuss the minimum volumes needed for each suite of analytes. Laboratories often require only 10% to 25% of the volume they specify to complete analysis for specific suites of analytes, so they can often work with much smaller sample volumes that can easily be supplied by a HydraSleeve.

HydraSleeve Deployment

Information Required Before Deploying a HydraSleeve

Before installing a HydraSleeve in any well, you will need to know the following:

- The inside diameter of the well
- The length of the well screen
- The water level in the well
- The position of the well screen in the well
- The total depth of the well

The inside diameter of the well is used to determine the appropriate HydraSleeve diameter for use in the well. The other information is used to determine the proper placement of the HydraSleeve in the well to collect a representative sample from the screen (see HydraSleeve Placement, below), and to determine the appropriate length of tether to attach to the HydraSleeve to deploy it at the appropriate position in the well.

Most of this information (with the exception of the water level) should be available from the well log; if not, it will have to be collected by some other means. The inside diameter of the well can be measured at the top of the well casing, and the total depth of the well can be measured by sounding the bottom of the well with a weighted tape. The position and length of the well screen may have to be determined using a down-hole camera if a well log is not available. The water level in the well can be measured using any commonly available water-level gauge.

HydraSleeve Placement

The HydraSleeve is designed to collect a sample directly from the well screen, and it fills by pulling it up through the screen a distance equivalent to 1 to 1.5 times its length. This upward motion causes the top check valve to open, which allows the device to fill. To optimize sample recovery, it is recommended that the HydraSleeve be placed in the well so that the bottom weight rests on the bottom of the well and the top of the HydraSleeve is as close to the bottom of the well screen as possible. This should allow the sampler to fill before the top of the device reaches the top of the screen as it is pulled up through the water column, and ensure that only water from the screen is collected as the sample. In short-screen wells, or wells with a short water column, it may be necessary to use a top-weight on the HydraSleeve to compress it in the bottom of the well so that, when it is recovered, it has room to fill before it reaches the top of the screen.

Example

2" ID PVC well, 50' total depth, 10' screen at the bottom of the well, with water level above the screen (the entire screen contains water).

Correct Placement (figure 2): Using a standard HydraSleeve for a 2" well (2.6" flat width/1.5" filled OD x 30" long, 650 ml volume), deploy the sampler so the weight (an 8 oz., 4"-long weight with a 2"-long clip) rests at the bottom of the well. The top of the sleeve is thus set at about 36" above the bottom of the well. When the sampler is recovered, it will be pulled upward approximately 30" to 45" before it is filled; therefore, it is full (and the top check valve closes) at approximately 66" (5 ½ feet) to 81" (6 ¾ feet) above the bottom of the well, which is well before the sampler reaches the top of the screen. In this example, only water from the screen is collected as a sample.

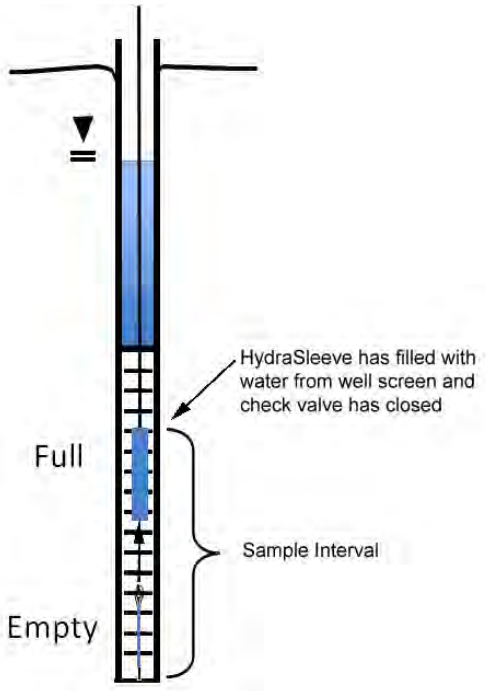


Figure 2. Correct placement of HydraSleeve.

Incorrect Placement (figure 3): If the well screen in this example was only 5' long, and the HydraSleeve was placed as above, it would not fill before the top of the device reached the top of the well screen, so the sample would include water from above the screen, which may not have the same chemistry.

The solution? Deploy the HydraSleeve with a top weight, so that it is collapsed to within 6" to 9" of the bottom of the well. When the HydraSleeve is recovered, it will fill within 39" (3 ¼ feet) to 54" (4 ½ feet) above the bottom of the well, or just before the sampler reaches the top of the screen, so it collects only water from the screen as the sample.

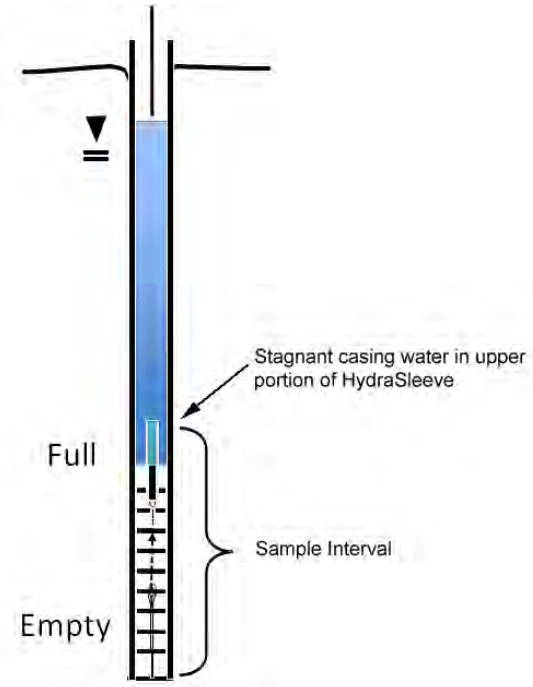


Figure 3. Incorrect placement of HydraSleeve.

This example illustrates one of many types of HydraSleeve placements. More complex placements are discussed in a later section.

Procedures for Sampling with the HydraSleeve

Collecting a ground-water sample with a HydraSleeve is a simple one-person operation.

Note: Before deploying the HydraSleeve in the well, collect the depth-to-water measurement that you will use to determine the preferred position of the HydraSleeve in the well. This measurement may also be used with measurements from other wells to create a ground-water contour map. If necessary, also measure the depth to the bottom of the well to verify actual well depth to confirm your decision on placement of the HydraSleeve in the water column.

Measure the correct amount of tether needed to suspend the HydraSleeve in the well so that the weight will rest on the bottom of the well (or at your preferred position in the well). Make sure to account for the need to leave a few feet of tether at the top of the well to allow recovery of the sleeve

Note: Always wear sterile gloves when handling and discharging the HydraSleeve.

I. Assembling the HydraSleeve

1. Remove the HydraSleeve from its packaging, unfold it, and hold it by its top.

2. Crimp the top of the HydraSleeve by folding the hard polyethylene reinforcing strips at the holes.

3. Attach the spring clip to the holes to ensure that the top will remain open until the sampler is retrieved.

4. Attach the tether to the spring clip by tying a knot in the tether.

Note: Alternatively, attach the tether to one (NOT both) of the holes at the top of the Hydrasleeve by tying a knot in the tether.

5. Fold the flaps with the two holes at the bottom of the HydraSleeve together and slide the weight clip through the holes.

6. Attach a weight to the bottom of the weight clip to ensure that the HydraSleeve will descend to the bottom of the well.

II. Deploying the HydraSleeve

1. Using the tether, carefully lower the HydraSleeve to the bottom of the well, or to your preferred depth in the water column

   During installation, hydrostatic pressure in the water column will keep the self-sealing check valve at the top of the HydraSleeve closed, and ensure that it retains its flat, empty profile for an indefinite period prior to recovery.

Note: Make sure that it is not pulled upward at any time during its descent. If the HydraSleeve is pulled upward at a rate greater than 0.5'/second at any time prior to recovery, the top check valve will open and water will enter the HydraSleeve prematurely.

2. Secure the tether at the top of the well by placing the well cap on the top of the well casing and over the tether.

Note: Alternatively, you can tie the tether to a hook on the bottom of the well cap (you will need to leave a few inches of slack in the line to avoid pulling the sampler up as the cap is removed at the next sampling event).

III. Equilibrating the Well

The equilibration time is the time it takes for conditions in the water column (primarily flow dynamics and contaminant distribution) to restabilize after vertical mixing occurs (caused by installation of a sampling device in the well).

- Situation: The HydraSleeve is deployed for the first time or for only one time in a well

  The HydraSleeve is very thin in cross section and displaces very little water (<100 ml) during deployment so, unlike most other sampling devices, it does not disturb the water column to the point at which long equilibration times are necessary to ensure recovery of a representative sample.

  In most cases, the HydraSleeve can be recovered immediately (with no equilibration time) or within a few hours. In regulatory jurisdictions that impose specific requirements for equilibration times prior to recovery of no-purge sampling devices, these requirements should be followed.

- Situation: The HydraSleeve is being deployed for recovery during a future sampling event

  In periodic (i.e., quarterly or semi-annual) sampling programs, the sampler for the current sampling event can be recovered and a new sampler (for the next sampling event)

deployed immediately thereafter, so the new sampler remains in the well until the next sampling event.

Thus, a long equilibration time is ensured and, at the next sampling event, the sampler can be recovered immediately. This means that separate mobilizations, to deploy and then to recover the sampler, are not required. HydraSleeves can be left in a well for an indefinite period of time without concern.

IV. HydraSleeve Recovery and Sample Collection

1. Hold on to the tether while removing the well cap.

2. Secure the tether at the top of the well while maintaining tension on the tether (but without pulling the tether upwards)

3. Measure the water level in the well.

4. In one smooth motion, pull the tether up between 30” to 45” (36” to 54” for the longer HydraSleeve) at a rate of about 1’ per second (or faster).

   The motion will open the top check valve and allow the HydraSleeve to fill (it should fill in about 1 to 1.5 times the length of the HydraSleeve). This is analogous to coring the water column in the well from the bottom up.

   When the HydraSleeve is full, the top check valve will close. You should begin to feel the weight of the HydraSleeve on the tether and it will begin to displace water. The closed check valve prevents loss of sample and entry of water from zones above the well screen as the HydraSleeve is recovered.

5. Continue pulling the tether upward until the HydraSleeve is at the top of the well.

6. Decant and discard the small volume of water trapped in the Hydrasleeve above the check valve by turning the sleeve over.

V. Sample Collection

Note: Sample collection should be done immediately after the HydraSleeve has been brought to the surface to preserve sample integrity.

1. Remove the discharge tube from its sleeve.

2. Hold the HydraSleeve at the check valve.

3. Puncture the HydraSleeve just below the check valve with the pointed end of the discharge tube

4. Discharge water from the HydraSleeve into your sample containers.

Control the discharge from the HydraSleeve by either raising the bottom of the sleeve, by squeezing it like a tube of toothpaste, or both.

5. Continue filling sample containers until all are full.

Measurement of Field Indicator Parameters

Field indicator parameter measurement is generally done during well purging and sampling to confirm when parameters are stable and sampling can begin. Because no-purge sampling does not require purging, field indicator parameter measurement is not necessary for the purpose of confirming when purging is complete.

If field indicator parameter measurement is required to meet a specific non-purging regulatory requirement, it can be done by taking measurements from water within a HydraSleeve that is not used for collecting a sample to submit for laboratory analysis (i.e., a second HydraSleeve installed in conjunction with the primary sample collection HydraSleeve [see Multiple Sampler Deployment below]).

Alternate Deployment Strategies

Deployment in Wells with Limited Water Columns

For wells in which only a limited water column exists to be sampled, the HydraSleeve can be deployed with an optional top weight instead of a bottom weight, which collapses the HydraSleeve to a very short (approximately 6” to 9”) length, and allows the HydraSleeve to fill in a water column only 36” to 45” in height.

Multiple Sampler Deployment

Multiple sampler deployment in a single well screen can accomplish two purposes:

- It can collect additional sample volume to satisfy site or laboratory-specific sample volume requirements.
- It can accommodate the need for collecting field indicator parameter measurements.
- It can be used to collect samples from multiple intervals in the screen to allow identification of possible contaminant stratification.

It is possible to use up to 3 standard 30" HydraSleeves deployed in series along a single tether to collect samples from a 10' long well screen without collecting water from the interval above the screen.

The samplers must be attached to the tether at both the top and bottom of the sleeve. Attach the tether at the top with a stainless-steel clip (available from the manufacturer). Attach the tether at the bottom using a cable tie. The samplers must be attached as follows (figure 4):

- The first (attached to the tether as described above, with the weight at the bottom) at the bottom of the screen
- The second attached immediately above the first
- The third (attached the same as the second) immediately above the second

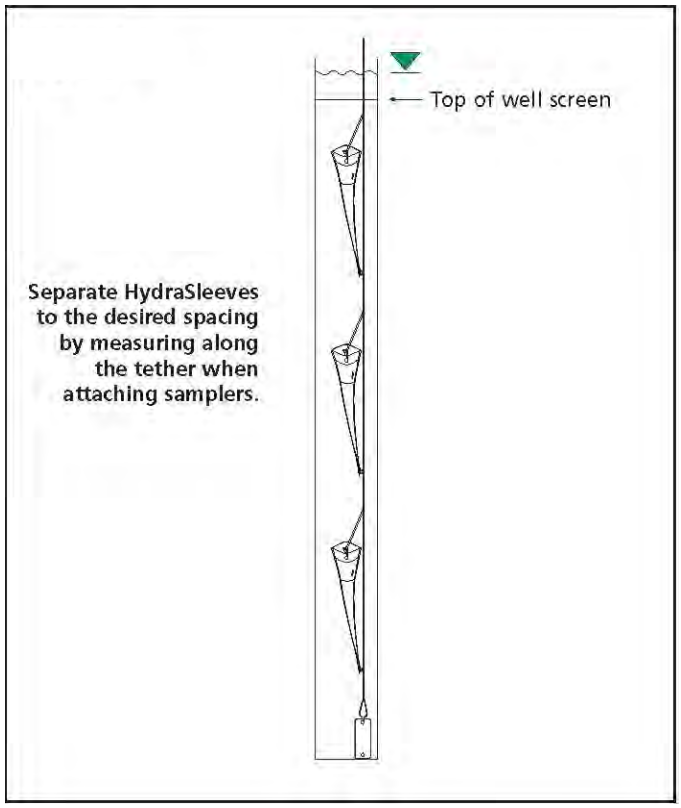


Figure 4. Multiple HydraSleeve deployment.

Alternately, the first sampler can be attached to the tether as described above, a second attached to the bottom of the first using a short length of tether (in place of the weight), and the third attached to the bottom of the second in the same manner, with the weight attached to the bottom of the third sampler (figure 5).

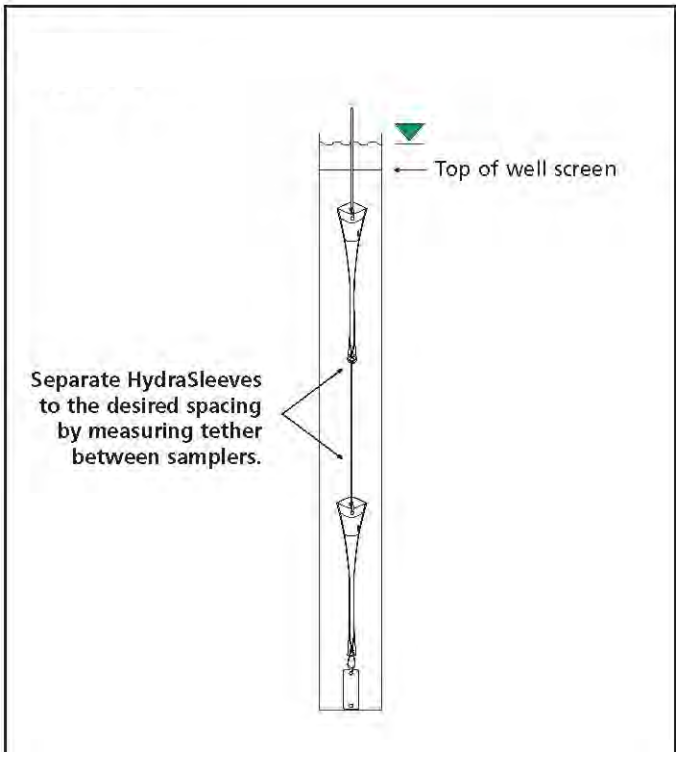


Figure 5. Alternative method for deploying multiple HydraSleeves.

In either case, when attaching multiple HydraSleeves in series, more weight may be required to hold the samplers in place in the well than would be required with a single sampler. Recovery of multiple samplers and collection of samples is done in the same manner as for single sampler deployments.

Post-Sampling Activities

The recovered HydraSleeve and the sample discharge tubing should be disposed as per the solid waste management plan for the site. To prepare for the next sampling event, a new HydraSleeve can be deployed in the well (as described previously) and left in the well until the next sampling event, at which time it can be recovered.

The weight and weight clip can be reused on this sampler after they have been thoroughly cleaned as per the site equipment decontamination plan. The tether may be dedicated to the well and reused or discarded at the discretion of sampling personnel.

References

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APPENDIX B ADDITIONAL GROUNDWATER SAMPLING ACTIVITIES DATA

Table B-1
Summary of Detected Volatile Organic Compounds in Groundwater - 2019
Former Siemens/Intersil Site
Cupertino, California

Location ID	Sample Date	Sample Type	Zone/Depth Interval	Area	1,1,1-TCA	1,1-DCA	1,1-DCE	4-ISPT	ACE	BZ	cis-1,2-DCE	CDSD	CE	CF	DBCM	Freon 113	MEK	PCE	trans-1,2-DCE	TCE	TOL	VC
W18MA	10/1/2019	N	A3	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	**1.7**	--	< 0.50	< 0.50	**65**	--	< 0.50
W19MA	10/1/2019	N	A3	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	**0.87**	--	**0.21 j**	< 0.50	**160**	--	< 0.50
E-9AR	10/1/2019	N	A4	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	**6.3**	--	< 0.50	< 0.50	**13**	--	< 0.50
E-17A	10/1/2019	N	A4	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	**0.64**	--	< 1.0	< 1.0	< 0.50	**3.9**	--	< 0.50	< 0.50	**10**	--	**1.2**
W4A	10/1/2019	N	A4	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	**0.24 j**	--	< 0.50	< 0.50	**6.9**	--	< 0.50
W5A	10/3/2019	N	A4	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	**15**	--	< 0.50	< 0.50	**4.3**	--	< 0.50
W10A	10/1/2019	N	A4	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	**6.1**	--	< 0.50	< 0.50	**43**	--	< 0.50
W12A	10/1/2019	N	A4	Former Intersil Facility	**0.50**	< 0.50	**0.39 j**	--	--	--	**1.1**	--	< 1.0	< 1.0	< 0.50	**12**	--	< 0.50	< 0.50	**56**	--	< 0.50
W12A	10/1/2019	FD	A4	Former Intersil Facility	**0.50**	< 0.50	**0.37 j**	--	--	--	**1.2**	--	< 1.0	< 1.0	< 0.50	**10**	--	< 0.50	< 0.50	**54**	--	< 0.50
W8B	10/1/2019	N	B	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	< 0.50	--	< 0.50	< 0.50	**1.8**	--	< 0.50
W11B	10/1/2019	N	B	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	**5.7**	--	< 0.50	< 0.50	**9.0**	--	< 0.50
W18B	10/1/2019	N	B	Former Intersil Facility	< 0.50	< 0.50	< 0.50	--	--	--	< 0.50	--	< 1.0	< 1.0	< 0.50	**3.3**	--	< 0.50	< 0.50	**14**	--	< 0.50
2EP	3/19/2019	N	A1	Former Siemens Facility	< 2.5	< 2.5	< 2.5	< 5.0	< 250	< 2.5	**120**	< 25	< 5.0	< 5.0	< 2.5	< 2.5	< 250	< 2.5	< 2.5	**63**	< 2.5	**43**
2EP	5/7/2019	N	A1	Former Siemens Facility	< 0.50	**0.50**	**2.7**	< 1.0	< 50	< 0.50	**1,100**	< 5.0	< 1.0	< 1.0	< 0.50	**4.6**	< 50	**0.23 j**	**5.4**	**14 j**	**1.1**	**50**
2EP	7/9/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	**0.90**	< 1.0	< 50	< 0.50	**330**	< 5.0	< 1.0	< 1.0	< 0.50	**0.19 j**	< 50	< 0.50	**4.4**	**11**	**0.90**	**110**
2EP	7/9/2019	FD	A1	Former Siemens Facility	< 0.50	< 0.50	**0.92**	< 1.0	< 50	< 0.50	**330**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**4.3**	**11**	**1.0**	**110**
2EP	10/3/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	**0.48 j**	**18**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**1.4**	**1.6**	**0.45 j**	**9.0**
4BP	3/18/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**0.68**	< 5.0	**1.5**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	< 0.50	**8.6**	< 0.50
4BP	3/18/2019	FD	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**0.65**	< 5.0	**2.6**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	< 0.50	**8.6**	< 0.50
4BP	5/7/2019	N	A1	Former Siemens Facility	**0.23 j**	**1.7**	**0.54**	< 1.0	< 50	< 0.50	**20**	< 5.0	**2.1**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.24 j**	**1.6**	**2.4**	**2.9**
4BP	7/9/2019	N	A1	Former Siemens Facility	< 0.50	**1.6**	< 0.50	< 1.0	< 50	< 0.50	**2.1**	< 5.0	**2.4**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.20 j**	< 0.50	**0.53**	**1.4**
4BP	10/4/2019	N	A1	Former Siemens Facility	**0.80**	**4.6**	< 0.50	< 1.0	< 50	< 0.50	**2.0**	< 5.0	**2.5**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.49 j**	**0.41 j**	**0.32 j**	**1.2**
4BP	10/4/2019	FD	A1	Former Siemens Facility	**0.80**	**5.7**	< 0.50	< 1.0	< 50	< 0.50	**2.5**	< 5.0	**3.6**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.44 j**	**0.43 j**	**0.38 j**	**1.3**
LF-13A	3/18/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**28**	< 5.0	< 1.0	< 1.0	< 0.50	**13**	< 50	< 0.50	< 0.50	**4.9**	< 0.50	**70**
LF-13A	5/7/2019	N	A1	Former Siemens Facility	< 0.50	**0.11 j**	< 0.50	< 1.0	< 50	< 0.50	**12**	< 5.0	< 1.0	< 1.0	< 0.50	**14**	< 50	< 0.50	**0.38 j**	**4.5**	< 0.50	**30**
LF-13A	7/10/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**3.9**	< 5.0	< 1.0	< 1.0	< 0.50	**3.1**	< 50	< 0.50	**0.63**	**5.3**	< 0.50	**3.3**
LF-13A	10/3/2019	N	A1	Former Siemens Facility	< 0.50	**0.14 j**	< 0.50	< 1.0	< 50	< 0.50	**2.4**	< 5.0	< 1.0	< 1.0	< 0.50	**0.29 j**	< 50	< 0.50	**0.74**	**2.9**	**0.43 j**	**1.1**
MW-01A1	3/19/2019	N	A1	Former Siemens Facility	< 2.5	< 2.5	< 2.5	< 5.0	< 250	< 2.5	**130**	< 25	< 5.0	< 5.0	< 2.5	< 2.5	< 250	< 2.5	< 2.5	**19**	< 2.5	**12**
MW-01A1	5/7/2019	N	A1	Former Siemens Facility	< 0.50	**1.4**	**4.0**	< 1.0	< 50	< 0.50	**1,200**	< 5.0	< 1.0	**0.49 j**	< 0.50	**11**	< 50	**1.2**	**3.5**	**290**	**0.42 j**	**93**
MW-01A1	7/9/2019	N	A1	Former Siemens Facility	< 0.50	**1.3**	**1.3**	< 1.0	< 50	< 0.50	**300**	< 5.0	< 1.0	< 1.0	< 0.50	**3.5**	< 50	**0.83**	**2.2**	**110**	**1.0**	**38**
MW-01A1	10/3/2019	N	A1	Former Siemens Facility	< 2.5	**0.64 j**	< 2.5	< 5.0	< 250	< 2.5	**110**	< 25	< 5.0	< 5.0	< 2.5	**1.3 j**	< 250	< 2.5	**2.4 j**	**3.2**	< 2.5	**38**
MW-01A1	10/3/2019	FD	A1	Former Siemens Facility	< 2.5	< 2.5	< 2.5	< 5.0	< 250	< 2.5	**110**	< 25	< 5.0	< 5.0	< 2.5	< 2.5	< 250	< 2.5	**2.5**	**3.5**	< 2.5	**37**
MW-02A1	3/19/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	**260**	< 0.50	**31**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.77**	**1.4**	**0.55**	**9.1**
MW-02A1	5/7/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	**25 j**	< 0.50	**7.0**	< 5.0	**0.36 j**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**1.4**	< 0.50	**1.3**	**14**
MW-02A1	7/9/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	**0.35 j**	**1.7**	< 5.0	**0.49 j**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**1.6**	< 0.50	**0.42 j**	**4.9**
MW-02A1	10/4/2019	N	A1	Former Siemens Facility	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	< 50 UJ	**0.28 J-**	**4.4 J-**	< 5.0 UJ	**0.42 J-**	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ	< 50 UJ	< 0.50 UJ	**1.3 J-**	**0.29 J-**	**0.29 J-**	**6.0 J-**
MW-02A1	10/4/2019	FD	A1	Former Siemens Facility	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	< 50 UJ	**0.32 J-**	**5.4 J-**	< 5.0 UJ	**0.55 J-**	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ	< 50 UJ	< 0.50 UJ	**1.2 J-**	**0.21 J-**	**0.32 J-**	**7.1 J-**
VM-2S	10/4/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**17**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**3.6**	**5.2**	< 0.50	**23**
VM-3S	10/3/2019	N	A1	Former Siemens Facility	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	**870 J-**	< 0.50 UJ	**2.9 J-**	**0.89 J-**	< 1.0 UJ	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ	< 50 UJ	< 0.50 UJ	**0.49 J-**	**0.65 J-**	**1.7 J-**	< 0.50 UJ
VM-4S	10/4/2019	N	A1	Former Siemens Facility	< 0.50	**0.16 j**	< 0.50	< 1.0	< 50	< 0.50	**1.1**	< 5.0	**1.3**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.55**	**0.37 j**	**0.54**	**0.35 j**
VM-5S	3/19/2019	N	A1	Former Siemens Facility	< 2.5	< 2.5	< 2.5	< 5.0	< 250	< 2.5	**110**	< 25	< 5.0	< 5.0	< 2.5	< 2.5	< 250	< 2.5	< 2.5	**15**	< 2.5	**58**
VM-5S	5/7/2019	N	A1	Former Siemens Facility	< 0.50	**0.19 j**	**1.1**	< 1.0	< 50	< 0.50	**1,000**	< 5.0	< 1.0	< 1.0	< 0.50	**9.0**	< 50	< 0.50	**3.0**	**19**	< 0.50	**120**
VM-5S	7/9/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	**69**	< 0.50	**60**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**1.5**	**0.25 j**	< 0.50	**47**
VM-5S	10/3/2019	N	A1	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	**28 j**	< 0.50	**0.66 J+**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.80**	< 0.50	**0.36 j**	**1.8**
VM-6S	3/18/2019	N	A1	Former Siemens Facility	< 10	< 10	< 10	< 20	< 1,000	< 10	**530**	< 100	< 20	< 20	< 10	< 10	< 1,000	< 10	< 10	**320**	< 10	**25**
VM-6S	7/10/2019	N	A1	Former Siemens Facility	< 0.50	**0.65**	**0.49 j**	< 1.0	< 50	< 0.50	**170**	< 5.0	**1.9**	< 1.0	< 0.50	**1.0**	< 50	< 0.50	**1.6**	**3.1**	< 0.50	**83**
VM-6S	10/3/2019	N	A1	Former Siemens Facility	< 0.50	**0.70**	**0.98**	< 1.0	< 50	< 0.50	**210**	< 5.0	**5.2**	< 1.0	< 0.50	**0.13 j**	< 50	< 0.50	**1.6**	**14**	< 0.50	**45**
VM-7S	3/18/2019	N	A1	Former Siemens Facility	**1.1**	**2.6**	**1.2**	< 1.0	< 50	< 0.50	**19**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	**0.72**	< 0.50	**0.94**
VM-7S	5/7/2019	N	A1	Former Siemens Facility	**4.5**	**8.0**	**7.5**	< 1.0	**41 j**	< 0.50	**71**	< 5.0	**1.8**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.28 j**	**0.55**	< 0.50	**7.5**
VM-7S	7/9/2019	N	A1	Former Siemens Facility	**1.8**	**8.1**	**0.30 j**	< 1.0	< 50	< 0.50	**6.1**	< 5.0	**3.5**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.39 j**	**0.27 j**	**0.69**	**8.7**
VM-7S	10/3/2019	N	A1	Former Siemens Facility	**0.51**	**9.8**	**0.27 j**	< 1.0	**27 j**	< 0.50	**1.9**	< 5.0	**3.2**	< 1.0	< 0.50	< 0.50	**8.5 j**	< 0.50	**0.58**	**0.51**	**3.5**	**2.7**
VM-8S	3/19/2019	N	A1	Former Siemens Facility	< 0.50	**4.6**	< 0.50	< 1.0	< 50	< 0.50	**6.3**	< 5.0	**5.7**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.59**	**1.6**	**14**	**5.9**
VM-8S	5/7/2019	N	A1	Former Siemens Facility	< 0.50	**3.8**	< 0.50	< 1.0	< 50	< 0.50	**5.1**	< 5.0	**3.5**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.26 j**	**0.79**	**4.1**	**4.2**
VM-8S	7/10/2019	N	A1	Former Siemens Facility	**0.22 j**	**6.8**	< 0.50	< 1.0	< 50	< 0.50	**7.8**	< 5.0	**6.5**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.47 j**	**3.2**	**0.74**	**10**
VM-8S	10/3/2019	N	A1	Former Siemens Facility	< 0.50	**6.7**	< 0.50	< 1.0	< 50	< 0.50	**7.9**	< 5.0	**4.3**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.53**	**4.7**	**0.52**	**10**

Table B-1
Summary of Detected Volatile Organic Compounds in Groundwater - 2019
Former Siemens/Intersil Site
Cupertino, California

Location ID	Sample Date	Sample Type	Zone/Depth Interval	Area	1,1,1-TCA	1,1-DCA	1,1-DCE	4-ISPT	ACE	BZ	cis-1,2-DCE	CDSD	CE	CF	DBCM	Freon 113	MEK	PCE	trans-1,2-DCE	TCE	TOL	VC
2D	3/18/2019	N	A2	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**2.7**	< 5.0	**1.2**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	**4.3**
2D	5/8/2019	N	A2	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**2.0**	< 5.0	**0.65 j**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.19 j**	< 0.50	< 0.50	**3.6**
2D	7/9/2019	N	A2	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**2.0**	< 5.0	**0.73 j**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.24 j**	< 0.50	< 0.50	**4.6**
2D	10/4/2019	N	A2	Former Siemens Facility	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 5.0 UJ	< 250 UJ	< 2.5 UJ	**0.64 J-**	**88 J-**	< 5.0 UJ	< 5.0 UJ	< 2.5 UJ	< 2.5 UJ	< 250 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	R
HMSA-1S	10/4/2019	N	A2	Former Siemens Facility	**4.0**	< 0.50	**7.6**	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	**0.89**	< 50	< 0.50	< 0.50	**74**	< 0.50	< 0.50
2EPa	3/19/2019	N	A3	Former Siemens Facility	< 0.50	**1.0**	< 0.50	< 1.0	< 50	< 0.50	**0.98**	< 5.0	**3.6**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	**0.74**
2EPa	5/7/2019	N	A3	Former Siemens Facility	< 0.50	**1.1**	< 0.50	< 1.0	**29 j**	< 0.50	**1.3**	**1.0 j**	**4.1**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	**2.1**	**1.0**	**1.3**
2EPa	7/9/2019	N	A3	Former Siemens Facility	< 0.50	**0.84**	**0.25 j**	< 1.0	< 50	< 0.50	**83**	< 5.0	**1.9**	< 1.0	< 0.50	**0.40 j**	< 50	< 0.50	**0.35 j**	**2.2**	**0.67**	**12**
2EPa	10/3/2019	N	A3	Former Siemens Facility	< 0.50	**1.4**	**0.29 j**	< 1.0	< 50	< 0.50	**39**	< 5.0	**3.0**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.46 j**	**2.9**	< 0.50	**13**
EX-1-RL	10/3/2019	N	A3	Former Siemens Facility	< 5.0	< 5.0	**2.1 j**	< 10	< 500	< 5.0	< 5.0	< 50	< 10	< 10	< 5.0	**1.3 j**	< 500	< 5.0	< 5.0	**300**	< 5.0	< 5.0
G-1A	10/4/2019	N	A3	Former Siemens Facility	< 2.5	< 2.5	**1.9 j**	< 5.0	< 250	< 2.5	**530**	< 25	< 5.0	< 5.0	< 2.5	**5.1**	< 250	**1.0 j**	**2.3 j**	**300**	< 2.5	**13**
H-1A	10/9/2019	N	A3	Former Siemens Facility	< 5.0	< 5.0	< 5.0	< 10	< 500	< 5.0	**100**	< 50	< 10	< 10	< 5.0	< 5.0	< 500	< 5.0	< 5.0	**40**	< 5.0	**3.6 j**
HMSA-2S	10/4/2019	N	A3	Former Siemens Facility	< 0.50	< 0.50	< 0.50	**0.39 j**	**150**	**0.25 j**	**1.2**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	**22 j**	< 0.50	< 0.50	**0.34 j**	**0.23 j**	< 0.50
LF-12A	10/3/2019	N	A3	Former Siemens Facility	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	< 50 UJ	< 0.50 UJ	**3.0 J**	< 5.0 UJ	< 1.0 UJ	< 1.0 UJ	< 0.50 UJ	**1.2 J**	< 50 UJ	< 0.50 UJ	< 0.50 UJ	**12 J**	< 0.50 UJ	< 0.50 UJ
MW-01A3	10/4/2019	N	A3	Former Siemens Facility	< 0.50	**0.30 j**	< 0.50	< 1.0	< 50	< 0.50	**0.33 j**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	**0.24 j**	< 0.50	< 0.50
MW-03A3	10/4/2019	N	A3	Former Siemens Facility	< 0.50	**1.1**	**1.1**	< 1.0	< 50	< 0.50	**22**	< 5.0	< 1.0	< 1.0	< 0.50	**0.13 j**	< 50	< 0.50	< 0.50	**13**	< 0.50	**6.4**
MW-04A3	10/4/2019	N	A3	Former Siemens Facility	< 1.0	**0.92 j**	**2.7**	< 2.0	< 100	< 1.0	**290**	< 10	< 2.0	< 2.0	< 1.0	**1.2**	< 100	< 1.0	**0.91 j**	**78**	< 1.0	**45**
MW-05A3	10/4/2019	N	A3	Former Siemens Facility	**0.27 j**	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**2.7**	< 5.0	< 1.0	< 1.0	< 0.50	**1.6**	< 50	< 0.50	**0.24 j**	**34**	< 0.50	**2.4**
MW-06A3	10/4/2019	N	A3	Former Siemens Facility	**0.25 j**	< 0.50	**0.58**	< 1.0	< 50	< 0.50	**4.4**	< 5.0	< 1.0	< 1.0	< 0.50	**0.74**	< 50	< 0.50	< 0.50	**40**	< 0.50	**0.70**
MW-07A3	10/4/2019	N	A3	Former Siemens Facility	< 0.50	< 0.50	**0.39 j**	< 1.0	< 50	< 0.50	**3.4**	< 5.0	< 1.0	< 1.0	< 0.50	**0.74**	< 50	< 0.50	< 0.50	**23**	< 0.50	**0.54**
MW-08A3	10/4/2019	N	A3	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**0.11 j**	< 5.0	< 1.0	< 1.0	< 0.50	**0.59**	< 50	< 0.50	< 0.50	**12**	< 0.50	**0.63**
MW-09A3	10/4/2019	N	A3	Former Siemens Facility	< 0.50	**0.76**	**0.42 j**	< 1.0	< 50	< 0.50	**17**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.45 j**	**3.4**	< 0.50	**11**
SW-5S	10/4/2019	N	A3	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**6.3**	< 5.0	< 1.0	< 1.0	< 0.50	**0.51**	< 50	**0.20 j**	< 0.50	**63**	< 0.50	< 0.50
SW-6S	10/4/2019	N	A3	Former Siemens Facility	< 10	< 10	< 10	< 20	< 1,000	< 10	**250**	< 100	< 20	< 20	< 10	< 10	< 1,000	< 10	< 10	**220**	< 10	**73**
SW-7	10/1/2019	N	A3	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	**0.58**	< 50	< 0.50	< 0.50	**65**	< 0.50	< 0.50
VM-2D	10/4/2019	N	A3	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**1.9**	< 5.0	< 1.0	< 1.0	< 0.50	**0.72**	< 50	< 0.50	< 0.50	**15**	< 0.50	< 0.50
VM-3D	10/3/2019	N	A3	Former Siemens Facility	**0.92**	**0.63**	**1.6**	< 1.0	< 50	< 0.50	**6.2**	< 5.0	< 1.0	< 1.0	< 0.50	**0.38 j**	< 50	< 0.50	< 0.50	**50**	< 0.50	**1.2**
VM-4D	10/4/2019	N	A3	Former Siemens Facility	< 0.50	**1.5**	**0.55**	< 1.0	< 50	< 0.50	**30**	< 5.0	**0.77 j**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.49 j**	**9.0**	< 0.50	**25**
VM-5D	3/19/2019	N	A3	Former Siemens Facility	< 0.50	**1.7**	**1.2**	< 1.0	< 50	< 0.50	**13**	< 5.0	**1.5**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	**20**	< 0.50	**7.5**
VM-5D	5/7/2019	N	A3	Former Siemens Facility	< 0.50	**1.0**	< 0.50	< 1.0	< 50	< 0.50	**9.9**	< 5.0	**1.1**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.25 j**	**1.6**	< 0.50	**7.5**
VM-5D	7/10/2019	N	A3	Former Siemens Facility	< 0.50	**1.7**	**1.1**	< 1.0	< 50	< 0.50	**12**	< 5.0	**0.76 j**	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.31 j**	**15**	< 0.50	**7.7**
VM-5D	10/4/2019	N	A3	Former Siemens Facility	< 0.50	**1.5**	**1.4**	< 1.0	< 50	< 0.50	**13**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.34 j**	**30**	< 0.50	**10**
VM-5D	10/4/2019	FD	A3	Former Siemens Facility	< 0.50	**2.0**	**1.5**	< 1.0	< 50	< 0.50	**17**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.30 j**	**31**	< 0.50	**12**
VM-6D	3/18/2019	N	A3	Former Siemens Facility	< 0.50 UJ	R	< 0.50 UJ	< 1.0 UJ	< 50 UJ	< 0.50 UJ	**36 J-**	< 5.0 UJ	< 1.0 UJ	< 1.0 UJ	< 0.50 UJ	R	< 50 UJ	< 0.50 UJ	**0.55 J-**	**6.2 J-**	< 0.50 UJ	**13 J-**
VM-6D	5/7/2019	N	A3	Former Siemens Facility	< 0.50	< 0.50	**0.22 j**	< 1.0	< 50	< 0.50	**29**	< 5.0	< 1.0	< 1.0	< 0.50	**0.25 j**	< 50	< 0.50	**0.24 j**	**10**	< 0.50	**8.0**
VM-6D	7/9/2019	N	A3	Former Siemens Facility	< 0.50	**0.28 j**	**0.21 j**	< 1.0	< 50	< 0.50	**38**	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	**0.43 j**	**6.1**	< 0.50	**10**
VM-6D	10/3/2019	N	A3	Former Siemens Facility	**0.35 j**	< 0.50	**0.63**	< 1.0	< 50	< 0.50	**49**	< 5.0	< 1.0	< 1.0	< 0.50	**0.36 j**	< 50	< 0.50	**0.98**	**15**	< 0.50	**13**
VM-7D	10/4/2019	N	A3	Former Siemens Facility	< 1.0	**1.3**	< 1.0	< 2.0	< 100	< 1.0	**12**	< 10	< 2.0	< 2.0	< 1.0	< 1.0	< 100	< 1.0	**0.55 j**	**2.8**	**0.44 j**	**13**
VM-8D	10/4/2019	N	A3	Former Siemens Facility	**0.70 j**	< 1.0	**1.1**	< 2.0	< 100	< 1.0	**0.48 j**	< 10	< 2.0	< 2.0	< 1.0	**1.2**	< 100	< 1.0	< 1.0	**150**	< 1.0	< 1.0
3-XA	10/4/2019	N	A4	Former Siemens Facility	< 0.50	< 0.50	**1.1**	< 1.0	< 50	< 0.50	**0.30 j**	< 5.0	< 1.0	< 1.0	< 0.50	**2.0**	< 50	< 0.50	< 0.50	**45**	< 0.50	< 0.50
F-1A	10/9/2019	N	A4	Former Siemens Facility	< 10	< 10	< 10	< 20	< 1,000	< 10	< 10	< 100	< 20	< 20	< 10	< 10	< 1,000	< 10	< 10	**590**	< 10	< 10
H-2A-S	10/4/2019	N	A4	Former Siemens Facility	**4.3**	**0.24 j**	**7.5**	< 1.0	< 50	< 0.50	**0.88**	< 5.0	< 1.0	< 1.0	< 0.50	**1.8**	< 50	< 0.50	< 0.50	**54**	< 0.50	**0.40 j**
H-2A-S	10/4/2019	FD	A4	Former Siemens Facility	**4.8**	**0.24 j**	**8.2**	< 1.0	< 50	< 0.50	**0.87**	< 5.0	< 1.0	< 1.0	< 0.50	**2.0**	< 50	< 0.50	< 0.50	**59**	< 0.50	**0.37 j**
H-XA-S	10/4/2019	N	A4	Former Siemens Facility	**2.4**	**2.6**	**2.7**	< 1.0	< 50	< 0.50	**1.7**	< 5.0	< 1.0	< 1.0	< 0.50	**1.5**	< 50	< 0.50	**0.34 j**	**40**	< 0.50	**1.7**
LF-6A	10/4/2019	N	A4	Former Siemens Facility	**1.2**	< 0.50	**1.6**	< 1.0	< 50	< 0.50	**0.72**	< 5.0	< 1.0	< 1.0	< 0.50	**3.7**	< 50	< 0.50	< 0.50	**130**	< 0.50	< 0.50
LF-6A	10/4/2019	FD	A4	Former Siemens Facility	< 5.0	< 5.0	< 5.0	< 10	< 500	< 5.0	< 5.0	< 50	< 10	< 10	< 5.0	**3.1 j**	< 500	< 5.0	< 5.0	**130**	< 5.0	< 5.0
LF-8A	10/2/2019	N	A4	Former Siemens Facility	**0.45 J-**	**0.15 J-**	**0.66 J-**	< 1.0	< 50	< 0.50	**0.46 J-**	< 5.0	< 1.0 UJ	< 1.0 UJ	< 0.50 UJ	**0.21 J-**	< 50	< 0.50 UJ	< 0.50 UJ	**3.7 J-**	R	< 0.50 UJ
LF-9A	10/4/2019	N	A4	Former Siemens Facility	**0.68**	< 0.50	**0.35 j**	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	**8.5**	< 50	< 0.50	< 0.50	**55**	< 0.50	< 0.50
LF-10A	10/9/2019	N	A4	Former Siemens Facility	**3.3**	**1.7**	**4.3**	< 1.0	< 50	< 0.50	**48**	< 5.0	**0.61 j**	< 1.0	< 0.50	**2.4**	< 50	< 0.50	**0.16 j**	**62**	**0.75**	**9.7**
MW-05A4	10/4/2019	N	A4	Former Siemens Facility	< 10	< 10	< 10	< 20	< 1,000	< 10	**290**	< 100	< 20	< 20	< 10	< 10	< 1,000	< 10	**14**	< 10	< 10	**33**
MW-06A4	10/4/2019	N	A4	Former Siemens Facility	**0.45 j**	< 0.50	**0.23 j**	< 1.0	< 50	< 0.50	**1.9**	< 5.0	< 1.0	< 1.0	< 0.50	**7.7**	< 50	< 0.50	< 0.50	**84**	< 0.50	**1.2**
MW-07A4	10/4/2019	N	A4	Former Siemens Facility	**1.3**	**0.32 j**	**1.1**	< 1.0	< 50	< 0.50	**3.6**	< 5.0	< 1.0	< 1.0	< 0.50	**2.5**	< 50	< 0.50	**0.18 j**	**73**	< 0.50	< 0.50
MW-07A4	10/4/2019	FD	A4	Former Siemens Facility	< 2.5	< 2.5	< 2.5	**1.1 j**	< 250	< 2.5	**1.9 j**	< 25	< 5.0	< 5.0	< 2.5	**3.1**	< 250	< 2.5	< 2.5	**110**	< 2.5	< 2.5
P-1A	10/4/2019	N	A4	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	**0.51**	< 5.0	< 1.0	< 1.0	< 0.50	**1.5**	< 50	< 0.50	< 0.50	**18**	< 0.50	< 0.50
T-2A	10/4/2019	N	A4	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	**3.0**	< 50	< 0.50	< 0.50	**6.1**	< 0.50	< 0.50
W21A	10/4/2019	N	A4	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	**7.4**	< 50	< 0.50	< 0.50	**69**	< 0.50	< 0.50
W22A	10/4/2019	N	A4	Former Siemens Facility	< 5.0	< 5.0	< 5.0	< 10	< 500	< 5.0	**9.7**	< 50	< 10	< 10	< 5.0	< 5.0	< 500	< 5.0	< 5.0	**280**	< 5.0	**6.4**
W22A	10/4/2019	FD	A4	Former Siemens Facility	< 10	< 10	< 10	< 20	< 1,000	< 10	**5.7 j**	< 100	< 20	< 20	< 10	**2.1 j**	< 1,000	< 10	< 10	**990**	< 10	< 10

Table B-1
Summary of Detected Volatile Organic Compounds in Groundwater - 2019
Former Siemens/Intersil Site
Cupertino, California

Location ID	Sample Date	Sample Type	Zone/Depth Interval	Area	1,1,1-TCA	1,1-DCA	1,1-DCE	4-ISPT	ACE	BZ	cis-1,2-DCE	CDSD	CE	CF	DBCM	Freon 113	MEK	PCE	trans-1,2-DCE	TCE	TOL	VC
H-3B	10/4/2019	N	B	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	0.36 j	< 5.0	< 1.0	< 1.0	< 0.50	2.0	< 50	< 0.50	< 0.50	19	< 0.50	1.2
H-5B	10/3/2019	N	B	Former Siemens Facility	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 1.0	< 1.0	< 10	< 2.0	< 2.0	< 1.0	3.2	< 100	< 1.0	< 1.0	130	< 1.0	< 1.0
LF-1B	10/9/2019	N	B	Former Siemens Facility	0.32 j	0.21 j	1.0	< 1.0	< 50	< 0.50	46	< 5.0	< 1.0	< 1.0	< 0.50	2.9	< 50	< 0.50	< 0.50	20	< 0.50	< 0.50
LF-3B	10/4/2019	N	B	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
LF-5B	10/9/2019	N	B	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	0.94	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	< 0.50	0.29 j	< 0.50
LF-5B	10/9/2019	FD	B	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	1.4	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	0.27 j	0.32 j	< 0.50
W19B	10/4/2019	N	B	Former Siemens Facility	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	2.6	< 50	< 0.50	< 0.50	51	< 0.50	< 0.50
W20B	10/9/2019	N	B	Former Siemens Facility	< 0.50	< 0.50	0.23 j	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	0.51	< 50	< 0.50	< 0.50	6.9	< 0.50	< 0.50
MW-OS-1A1	3/18/2019	N	A1	Intersil/Siemens Off-Site Study Area	0.94 J-	< 0.50 UJ	1.1 J-	< 1.0 UJ	< 50 UJ	< 0.50 UJ	13 J-	< 5.0 UJ	< 1.0 UJ	< 1.0 UJ	< 0.50 UJ	2.5 J-	< 50 UJ	< 0.50 UJ	< 0.50 UJ	2.2 J-	< 0.50 UJ	< 0.50 UJ
MW-OS-1A1	4/8/2019	N	A1	Intersil/Siemens Off-Site Study Area	0.88	< 0.50	1.4	--	--	--	18	--	< 1.0	< 1.0	< 0.50	4.1	--	< 0.50	< 0.50	3.9	--	< 0.50
MW-OS-1A1	5/8/2019	N	A1	Intersil/Siemens Off-Site Study Area	0.94	< 0.50	1.2	< 1.0	< 50	< 0.50	13	< 5.0	< 1.0	< 1.0	< 0.50	4.3	< 50	< 0.50	0.27 j	2.3	< 0.50	< 0.50
MW-OS-1A1	7/9/2019	N	A1	Intersil/Siemens Off-Site Study Area	0.70	< 0.50	0.93	< 1.0	< 50	< 0.50	10	< 5.0	< 1.0	< 1.0	< 0.50	2.8	< 50	< 0.50	< 0.50	1.8	< 0.50	< 0.50
MW-OS-1A1	10/4/2019	N	A1	Intersil/Siemens Off-Site Study Area	0.40 j	< 0.50	0.45 j	< 1.0	< 50	< 0.50	6.1	< 5.0	< 1.0	< 1.0	< 0.50	1.8	< 50	< 0.50	< 0.50	1.2	< 0.50	< 0.50
MW-OS-2A1	3/18/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 2.5	< 2.5	< 2.5	< 5.0	< 250	< 2.5	< 2.5	< 25	< 5.0	< 5.0	< 2.5	< 2.5	< 250	< 2.5	< 2.5	< 2.5	100	< 2.5
MW-OS-2A1	4/8/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	--	--	--	1.4	--	< 1.0	< 1.0	< 0.50	< 0.50	--	< 0.50	< 0.50	< 0.50	--	< 0.50
MW-OS-2A1	5/8/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	40 j	< 0.50	2.1	< 5.0	0.45 j	< 1.0	< 0.50	< 0.50	< 50	< 0.50	0.27 j	0.93	19	< 0.50
MW-OS-2A1	5/8/2019	FD	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	41 j	< 0.50	2.0	< 5.0	0.40 j	< 1.0	< 0.50	< 0.50	< 50	< 0.50	0.19 j	0.82	17	< 0.50
MW-OS-2A1	7/9/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	22 j	< 0.50	1.9	< 5.0	0.46 j	< 1.0	< 0.50	< 0.50	< 50	< 0.50	0.18 j	0.56	0.58	< 0.50
MW-OS-2A1	10/4/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 1.0 UJ	< 50 UJ	< 0.50 UJ	2.6 J-	< 5.0 UJ	< 1.0 UJ	< 1.0 UJ	< 0.50 UJ	< 0.50 UJ	< 50 UJ	< 0.50 UJ	0.20 J-	0.35 J-	0.96 J-	< 0.50 UJ
MW-OS-3A1	3/18/2019	N	A1	Intersil/Siemens Off-Site Study Area	2.1 J-	< 0.50 UJ	2.9 J-	< 1.0 UJ	< 50 UJ	< 0.50 UJ	4.2 J-	< 5.0 UJ	< 1.0 UJ	< 1.0 UJ	< 0.50 UJ	0.86 J-	< 50 UJ	< 0.50 UJ	< 0.50 UJ	12 J-	< 0.50 UJ	< 0.50 UJ
MW-OS-3A1	5/8/2019	N	A1	Intersil/Siemens Off-Site Study Area	2.8	0.60	4.3	< 1.0	< 50	< 0.50	4.5	< 5.0	< 1.0	< 1.0	< 0.50	1.8	< 50	< 0.50	< 0.50	17	< 0.50	0.21 j
MW-OS-3A1	7/10/2019	N	A1	Intersil/Siemens Off-Site Study Area	3.4	0.79	5.3	< 1.0	< 50	< 0.50	5.7	< 5.0	< 1.0	< 1.0	< 0.50	2.1	< 50	< 0.50	< 0.50	15	1.0	0.71
MW-OS-3A1	10/4/2019	N	A1	Intersil/Siemens Off-Site Study Area	4.1	0.75	4.6	< 1.0	< 50	< 0.50	6.0	< 5.0	< 1.0	< 1.0	< 0.50	2.1	< 50	< 0.50	< 0.50	21	0.26 j	0.93
MW-OS-8A1	3/9/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	0.26 j	< 50	< 0.50	< 0.50	62	< 0.50	< 0.50
MW-OS-8A1	10/3/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	19	< 0.50	< 0.50
MW-OS-9A1	3/9/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	0.39 j	< 50	0.45 j	< 0.50	370	< 0.50	< 0.50
MW-OS-9A1	10/3/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 5.0	< 5.0	< 5.0	< 10	< 500	< 5.0	3.0 j	< 50	< 10	< 10	< 5.0	< 5.0	< 500	< 5.0	< 5.0	330	< 5.0	< 5.0
MW-OS-10A1	3/9/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	0.46 j	< 0.50	0.29 j	< 50	6.5	< 0.50	370	< 0.50	< 0.50
MW-OS-10A1	10/3/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 10 UJ	< 500 UJ	< 5.0 UJ	< 5.0 UJ	< 50 UJ	< 10 UJ	< 10 UJ	< 5.0 UJ	< 5.0 UJ	< 500 UJ	6.1 J-	< 5.0 UJ	300 J-	< 5.0 UJ	< 5.0 UJ
MW-OS-11A1	3/9/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	0.15 j	< 5.0	< 1.0	0.80 j	< 0.50	0.94	< 50	6.0	< 0.50	200	< 0.50	< 0.50
MW-OS-11A1	10/3/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 5.0	< 5.0	< 5.0	< 10	< 500	< 5.0	< 5.0	< 50	< 10	< 10	< 5.0	< 5.0	< 500	4.2 j	< 5.0	140	< 5.0	< 5.0
MW-OS-12A1	3/9/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	0.27 j	< 50	1.2	< 0.50	64	< 0.50	< 0.50
MW-OS-12A1	10/4/2019	N	A1	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	0.24 j	< 50	1.2	< 0.50	73	< 0.50	< 0.50
MW-OS-2A3	3/18/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50 UJ	0.97 J-	1.2 J-	< 1.0 UJ	< 50 UJ	< 0.50 UJ	12 J-	< 5.0 UJ	R	< 1.0 UJ	< 0.50 UJ	R	< 50 UJ	< 0.50 UJ	< 0.50 UJ	23 J-	< 0.50 UJ	13 J-
MW-OS-2A3	5/8/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	1.1	1.2	< 1.0	< 50	< 0.50	12	< 5.0	0.47 j	< 1.0	< 0.50	< 0.50	< 50	< 0.50	0.28 j	25	< 0.50	12
MW-OS-2A3	7/9/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	0.80	0.84	< 1.0	< 50	< 0.50	9.9	3.5 j	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	0.16 j	17	< 0.50	12
MW-OS-2A3	10/4/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	0.97	1.2	< 1.0	< 50	< 0.50	11	< 5.0	0.50 j	< 1.0	< 0.50	< 0.50	< 50	< 0.50	0.36 j	33	< 0.50	20
MW-OS-3A3	10/9/2019	N	A3	Intersil/Siemens Off-Site Study Area	0.54	0.23 j	< 0.50	< 1.0	< 50	< 0.50	5.7	< 5.0	< 1.0	< 1.0	< 0.50	1.3	< 50	< 0.50	< 0.50	5.6	< 0.50	< 0.50
MW-OS-4A3	10/2/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MW-OS-5A3	4/8/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	0.50	--	--	--	1.0	--	< 1.0	< 1.0	< 0.50	< 0.50	--	< 0.50	< 0.50	6.5	--	< 0.50
MW-OS-5A3	10/2/2019	N	A3	Intersil/Siemens Off-Site Study Area	0.41 j	< 0.50	0.44 j	< 1.0	< 50	< 0.50	1.2	< 5.0	< 1.0	< 1.0	< 0.50	0.40 j	< 50	< 0.50	< 0.50	6.5	< 0.50	< 0.50
MW-OS-6A3	3/9/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	0.45 j	< 0.50	1.8	< 50	< 0.50	< 0.50	23	< 0.50	< 0.50
MW-OS-6A3	10/2/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	7.0	< 5.0	< 1.0	< 1.0	< 0.50	1.5	< 50	< 0.50	< 0.50	2.8	< 0.50	< 0.50
MW-OS-8A3	3/9/2019	N	A3	Intersil/Siemens Off-Site Study Area	0.38 j	< 0.50	0.26 j	< 1.0	< 50	< 0.50	0.32 j	< 5.0	< 1.0	< 1.0	< 0.50	4.3	< 50	< 0.50	< 0.50	120	0.28 j	< 0.50
MW-OS-8A3	3/9/2019	FD	A3	Intersil/Siemens Off-Site Study Area	0.35 j	< 0.50	0.27 j	< 1.0	< 50	< 0.50	0.22 j	< 5.0	< 1.0	< 1.0	< 0.50	4.5	< 50	< 0.50	< 0.50	90	< 0.50	< 0.50
MW-OS-8A3	10/3/2019	N	A3	Intersil/Siemens Off-Site Study Area	0.28 j	< 0.50	0.28 j	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	4.6	< 50	< 0.50	< 0.50	90	< 0.50	< 0.50
MW-OS-10A3	3/9/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	1.1	< 50	< 0.50	< 0.50	42	< 0.50	< 0.50
MW-OS-10A3	10/3/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	14 J+	< 5.0	< 1.0	< 1.0	< 0.50	< 0.50	< 50	< 0.50	< 0.50	12	< 0.50	< 0.50
MW-OS-11A3	3/9/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	1.1	< 50	< 0.50	< 0.50	49	< 0.50	< 0.50
MW-OS-11A3	10/3/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	4.1	< 5.0	< 1.0	< 1.0	< 0.50	0.56	< 50	< 0.50	< 0.50	20	< 0.50	< 0.50
MW-OS-12A3	3/9/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	0.087 j	< 5.0	< 1.0	0.65 j	1.1	2.1	< 50	< 0.50	< 0.50	350	0.18 j	< 0.50
MW-OS-12A3	10/4/2019	N	A3	Intersil/Siemens Off-Site Study Area	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 1.0	0.39 j	< 10	< 2.0	< 2.0	< 1.0	2.2	< 100	< 1.0	< 1.0	270	< 1.0	< 1.0
LS-1A	10/9/2019	N	A4	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	1.1	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MW-OS-2A4	10/2/2019	N	A4	Intersil/Siemens Off-Site Study Area	2.4	< 0.50	3.9	< 1.0	< 50	< 0.50	0.22 J+	< 5.0	< 1.0	< 1.0	< 0.50	1.9	< 50	< 0.50	< 0.50	16	< 0.50	< 0.50
MW-OS-3A4	10/9/2019	N	A4	Intersil/Siemens Off-Site Study Area	R	0.24 J	0.41 J	R	R	R	18 J	R	< 1.0 UJ	< 1.0 UJ	< 0.50 UJ	R	R	< 0.50 UJ	< 0.50 UJ	23 J	R	9.5 J
MW-OS-4A4	10/2/2019	N	A4	Intersil/Siemens Off-Site Study Area	0.80	< 0.50	0.42 j	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	1.5	< 50	< 0.50	< 0.50	9.4	< 0.50	< 0.50
MW-OS-6A4	3/9/2019	N	A4	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	4.3	< 50	< 0.50	< 0.50	0.43 j	< 0.50	< 0.50
MW-OS-6A4	10/2/2019	N	A4	Intersil/Siemens Off-Site Study Area	< 0.50	< 0.50	< 0.50	< 1.0	< 50	< 0.50	< 0.50	< 5.0	< 1.0	< 1.0	< 0.50	6.1	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Table B-1
Summary of Detected Volatile Organic Compounds in Groundwater - 2019
Former Siemens/Intersil Site
Cupertino, California

Location ID	Sample Date	Sample Type	Zone/Depth Interval	Area	1,1,1-TCA	1,1-DCA	1,1-DCE	4-ISPT	ACE	BZ	cis-1,2-DCE	CDSD	CE	CF	DBCM	Freon 113	MEK	PCE	trans-1,2-DCE	TCE	TOL	VC
QH-1A	10/2/2019	N	A4	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	*< 0.50*	**0.83**	*< 0.50*
S-1A	10/2/2019	N	A4	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*
IQ-1B	4/8/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	--	--	--	*< 0.50*	--	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	--	*< 0.50*	*< 0.50*	*< 0.50*	--	*< 0.50*
IQ-1B	4/8/2019	FD	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	--	--	--	*< 0.50*	--	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	--	*< 0.50*	*< 0.50*	*< 0.50*	--	*< 0.50*
IQ-1B	10/9/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*
KB-2B	10/9/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**1.3**	*< 50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*
KR-1B	10/2/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**0.43 j**	*< 50*	*< 0.50*	*< 0.50*	**7.3**	*< 0.50*	*< 0.50*
LQ-2B	4/8/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	--	--	--	*< 0.50*	--	*< 1.0*	*< 1.0*	*< 0.50*	**1.6**	--	*< 0.50*	*< 0.50*	**56**	--	*< 0.50*
LQ-2B	10/3/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**1.1**	*< 50*	*< 0.50*	*< 0.50*	**49**	*< 0.50*	*< 0.50*
LR-1B	4/8/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	--	--	--	*< 0.50*	--	*< 1.0*	*< 1.0*	*< 0.50*	**4.5**	--	*< 0.50*	*< 0.50*	**66**	--	*< 0.50*
LR-1B	10/3/2019	N	B	Intersil/Siemens Off-Site Study Area	**0.36 j**	*< 0.50*	**0.44 j**	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**3.3**	*< 50*	*< 0.50*	*< 0.50*	**57**	*< 0.50*	*< 0.50*
LS-2B	10/9/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	**0.29 j**	*< 1.0*	*< 50*	*< 0.50*	**0.10 j**	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	**0.62**	*< 0.50*	*< 0.50*
MW-OS-6B	3/9/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**4.0**	*< 50*	*< 0.50*	*< 0.50*	**0.65**	*< 0.50*	*< 0.50*
MW-OS-6B	10/2/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**3.7**	*< 50*	*< 0.50*	*< 0.50*	**0.95**	*< 0.50*	*< 0.50*
PG-1B	10/2/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	**0.25 j**	*< 0.50*	*< 0.50*
PL-1B	10/2/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	**16**	*< 0.50*	*< 0.50*
RK-1B	10/2/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*
S-3B	10/2/2019	N	B	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*
S-5B	10/2/2019	N	B	Intersil/Siemens Off-Site Study Area	**0.51**	*< 0.50*	**0.34 j**	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**2.9**	*< 50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*
S-5B	10/2/2019	FD	B	Intersil/Siemens Off-Site Study Area	**1.5 J**	*< 0.50 UJ*	**0.98 J**	*< 1.0 UJ*	*< 50 UJ*	*< 0.50 UJ*	*< 0.50 UJ*	*< 5.0 UJ*	*< 1.0 UJ*	*< 1.0 UJ*	*< 0.50 UJ*	**7.3 J**	*< 50 UJ*	*< 0.50 UJ*	*< 0.50 UJ*	*< 0.50 UJ*	*< 0.50 UJ*	*< 0.50 UJ*
LR-3C	10/2/2019	N	C	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**0.96**	*< 50*	*< 0.50*	*< 0.50*	**1.3**	*< 0.50*	*< 0.50*
RK-2C	10/2/2019	N	C	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	**0.12 j**	*< 50*	*< 0.50*	*< 0.50*	**0.35 j**	*< 0.50*	*< 0.50*
S-4C	10/2/2019	N	C	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	*< 0.50*	*< 0.50*	**0.50**	*< 0.50*	*< 0.50*
S-6C	10/2/2019	N	C	Intersil/Siemens Off-Site Study Area	*< 0.50*	*< 0.50*	*< 0.50*	*< 1.0*	*< 50*	*< 0.50*	*< 0.50*	*< 5.0*	*< 1.0*	*< 1.0*	*< 0.50*	*< 0.50*	*< 50*	**0.26 j**	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*

Notes:
Concentrations reported in micrograms per liter (µg/L).
< = Compound not detected. Reportable detection limit shown.
Bolded values indicate concentrations above the Reportable Detection Limit.
FD = Field Duplicate Sample
N = Normal Environmental Sample
-- = Not analyzed

ERM Qualifiers:
J = The analyte was positively identified; the associated numerical value is the approximate concentration.
J- = The analyte was positively identified; the associated numerical value is the approximate concentration, biased low.
R = Result rejected during validation due to QA/QC failure.
UJ = The result was not detected above the reported sample quantitation limit, however the quantitation limit is approximate.

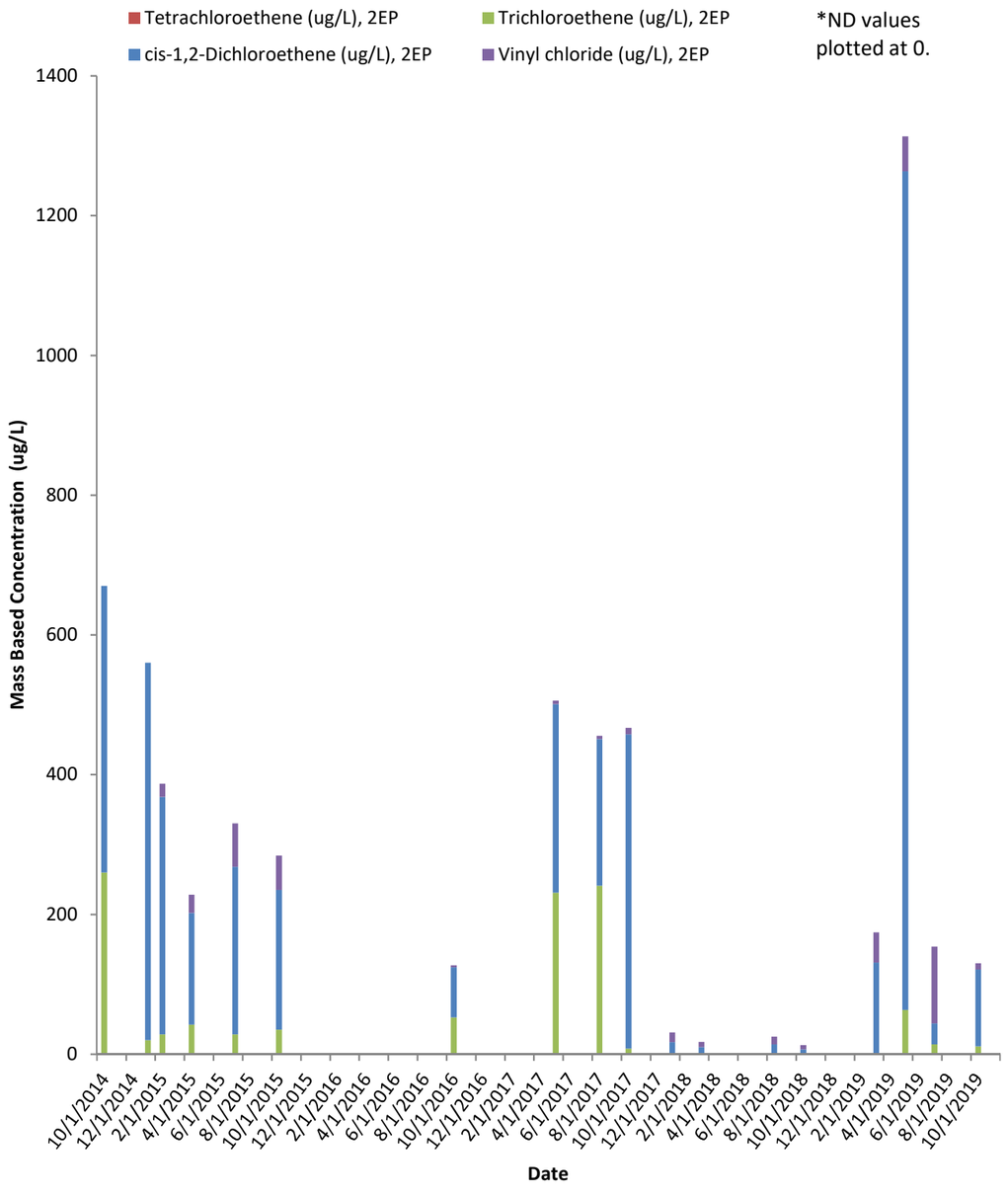
Laboratory Qualifier:
j = The analyte was positively identified; the concentration was between the laboratory reporting limit and the method detection limit.

Abbreviation
1,1,1-TCA = 1,1,1-Trichloroethane
1,1,2-TCA = 1,1,2-Trichloroethane
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCA = 1,2-Dichloroethane
1,2-DCP = 1,2-Dichloropropane
2-BUT = 2-Butanone
2-HEX = 2-Hexanone
4-ISPT = 4-Isopropyltoluene
ACE = Acetone
BDCM = Bromodichloromethane
BZ = Benzene
CDSD = Carbon disulfide
CE = Chloroethane
CF = Chloroform
cis-1,2-DCE = cis-1,2-Dichloroethene
DBCM = Dibromochloromethane
DCM = Methylene chloride
EB = Ethylbenzene
Freon 113 = Freon 113
NAP = Naphthalene
PCE = Tetrachloroethene
STY = Styrene
TCE = Trichloroethene
TOL = Toluene
trans-1,2-DCE = trans-1,2-Dichloroethene
VA = Vinyl acetate
VC = Vinyl chloride
XYL = Xylenes

APPENDIX C GROUNDWATER ANALYTICAL DATA, ERD PILOT STUDY, FORMER SIEMENS FACILITY

Figure C-1

2EP - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



2EP - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

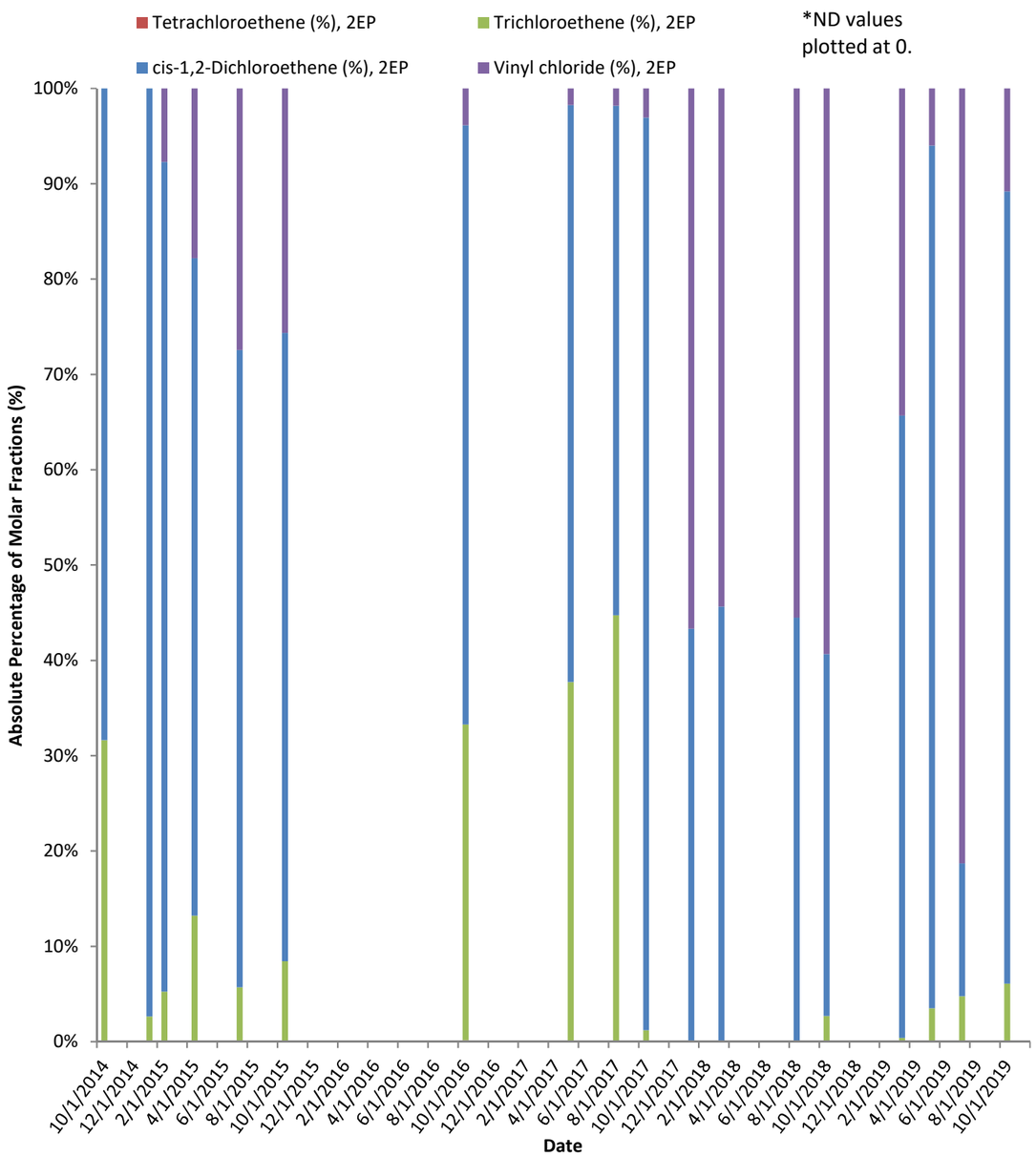
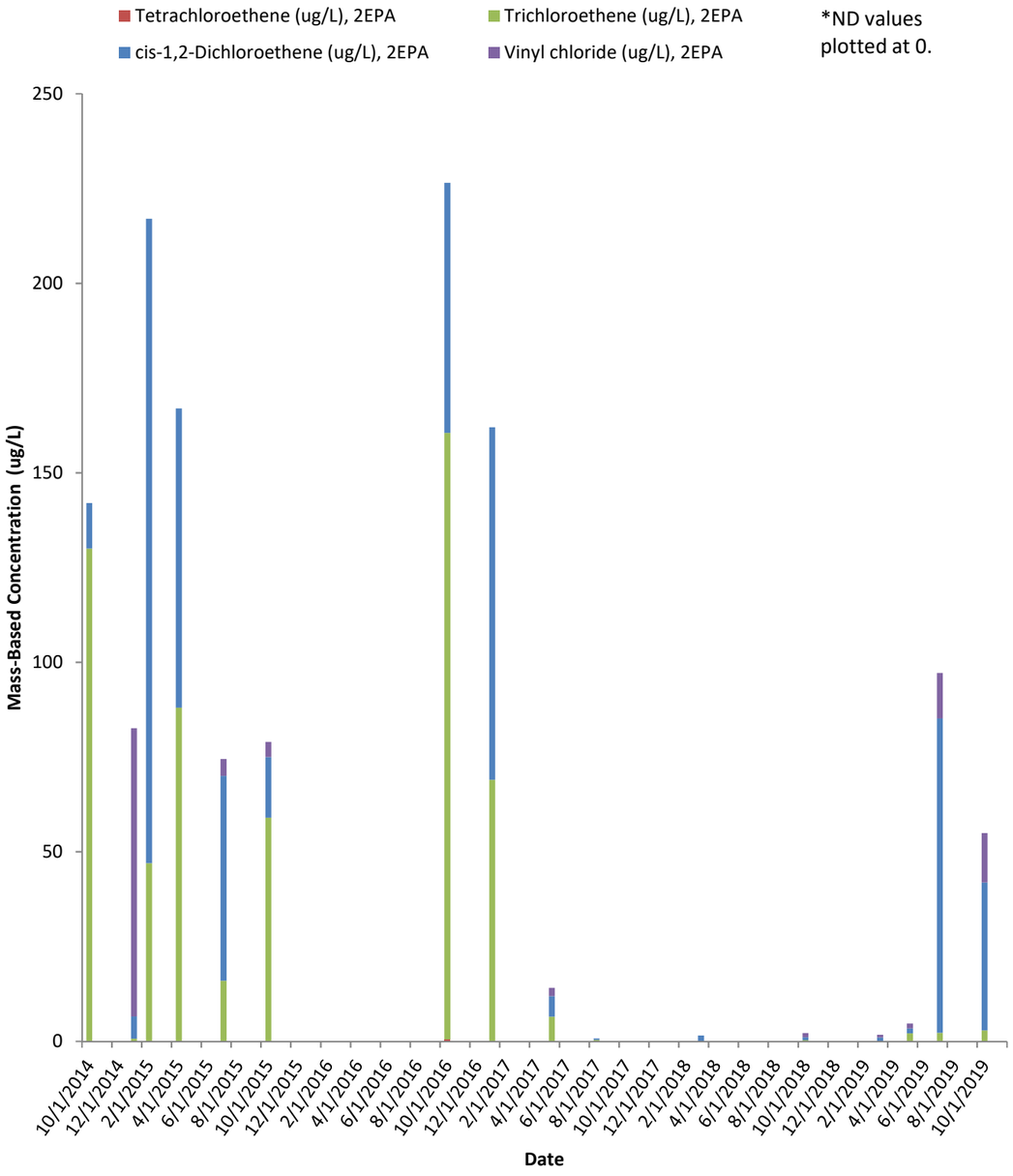


Figure C-2

2EPA - Treatment Zone
Mass-Based Concentration of Selected Chlorinated Compounds



2EPA - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

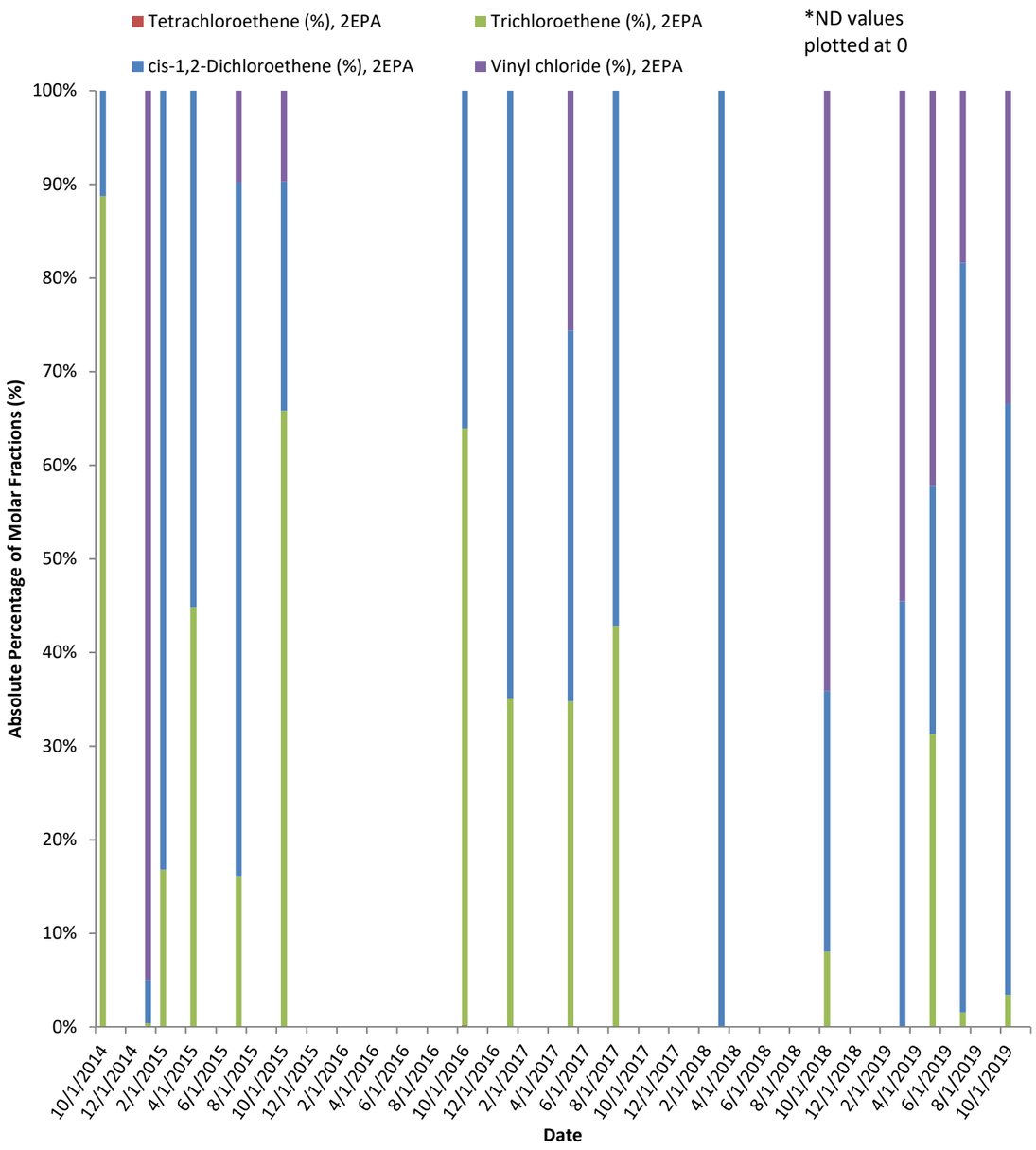
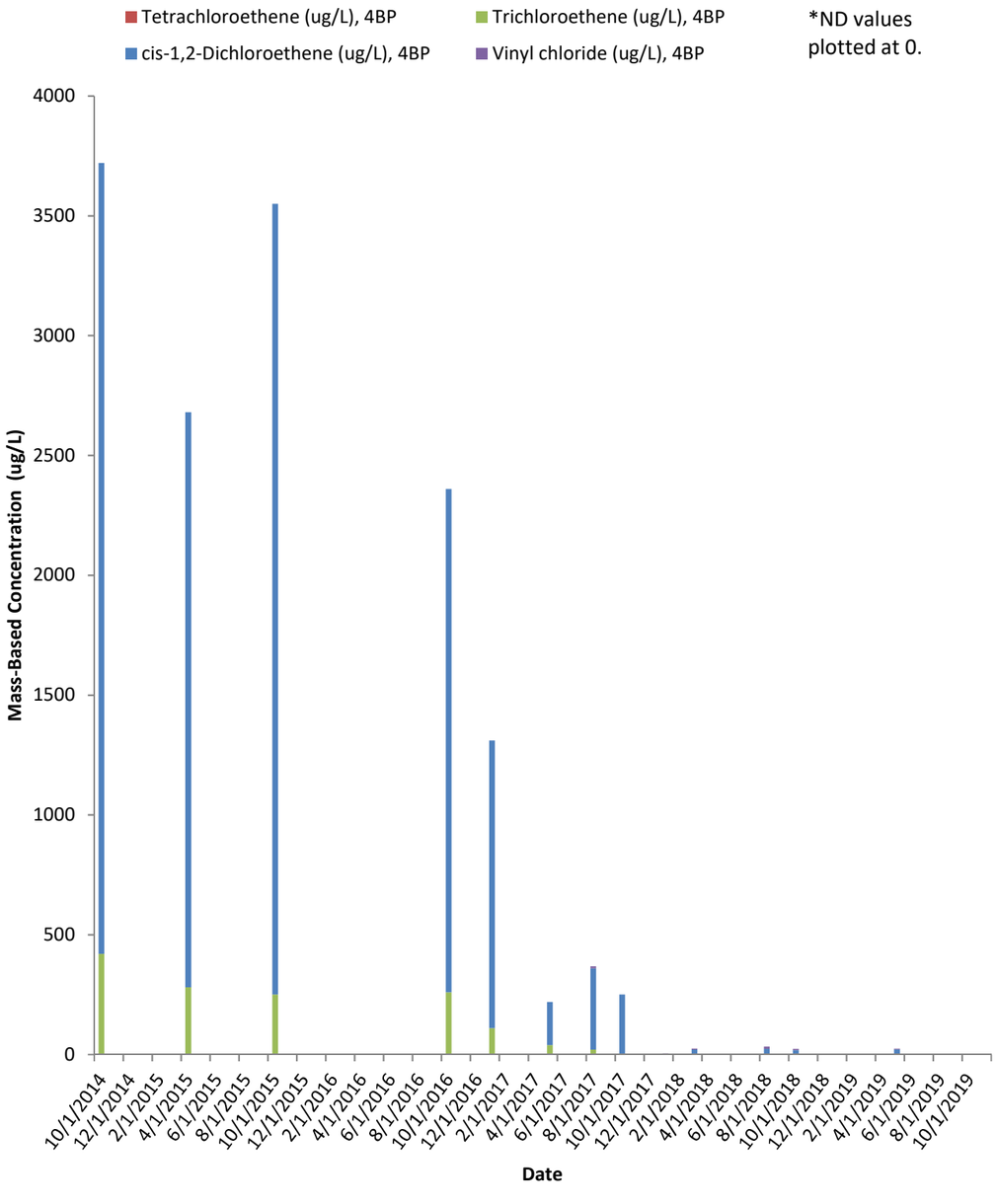


Figure C-3

4BP - Treatment Zone
Mass-Based Concentration of Selected Chlorinated Compounds



4BP - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

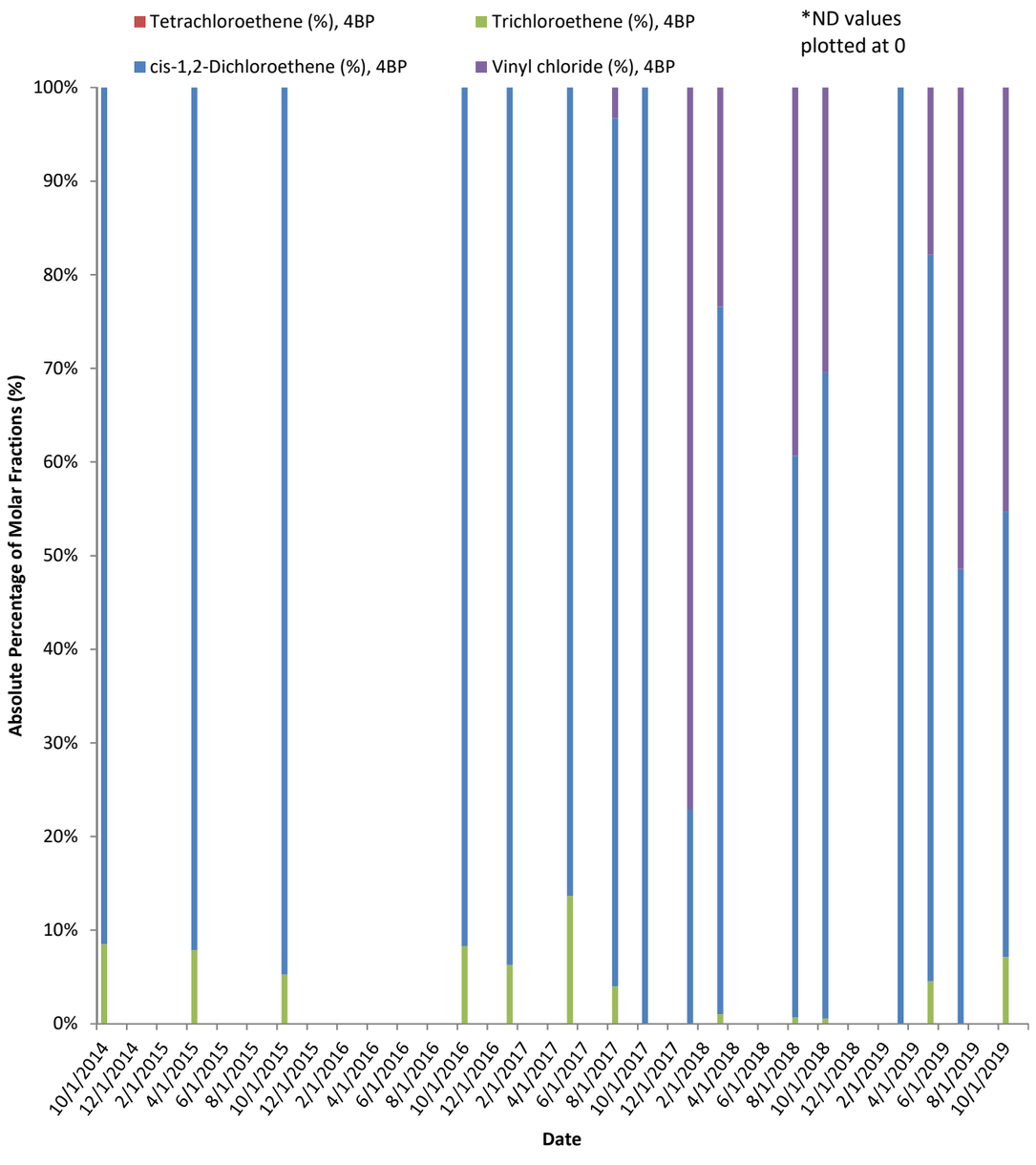
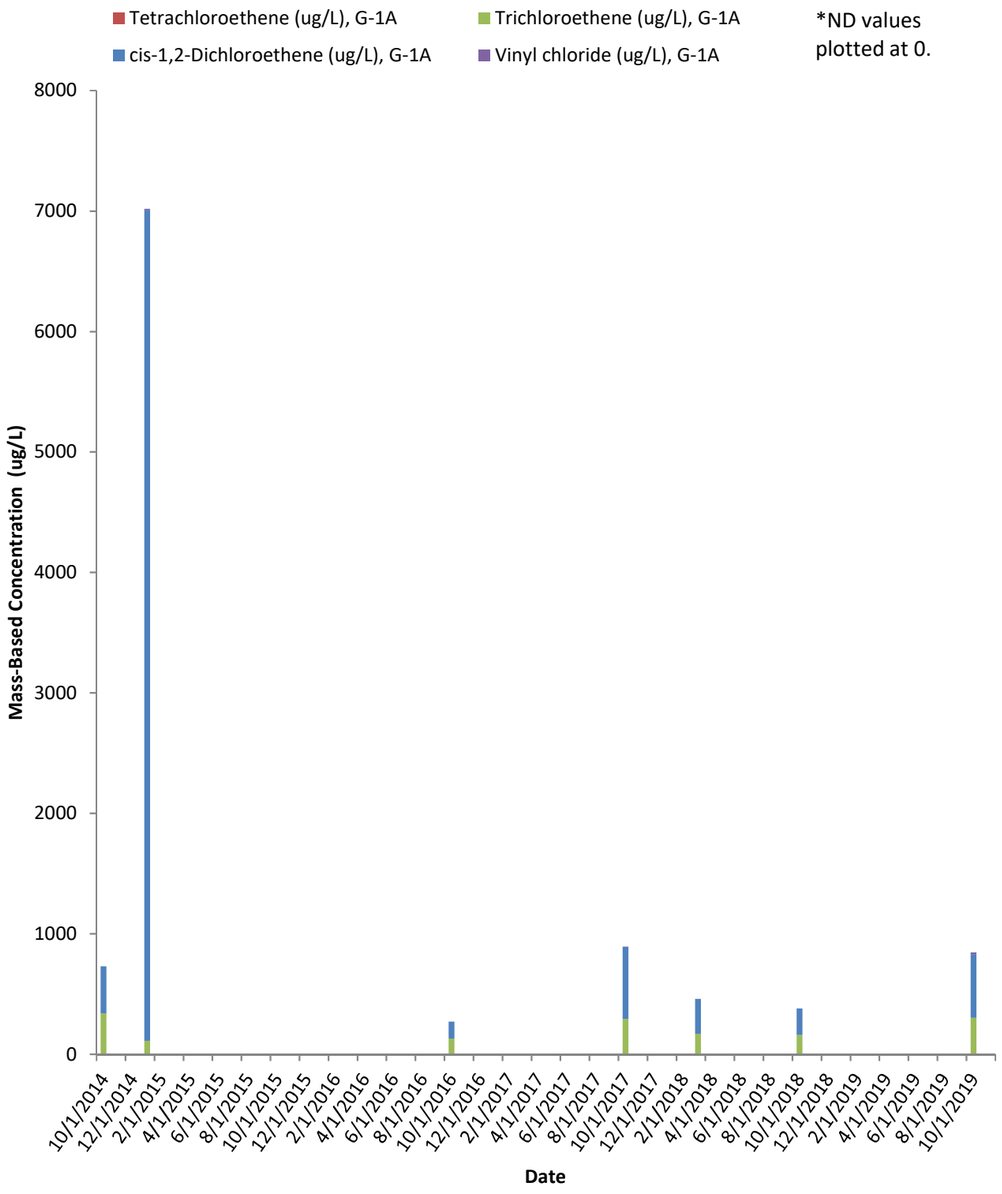


Figure C-4

G-1A - Cross Gradient
Mass-Based Concentration of Selected Chlorinated Compounds



G-1A - Cross Gradient
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

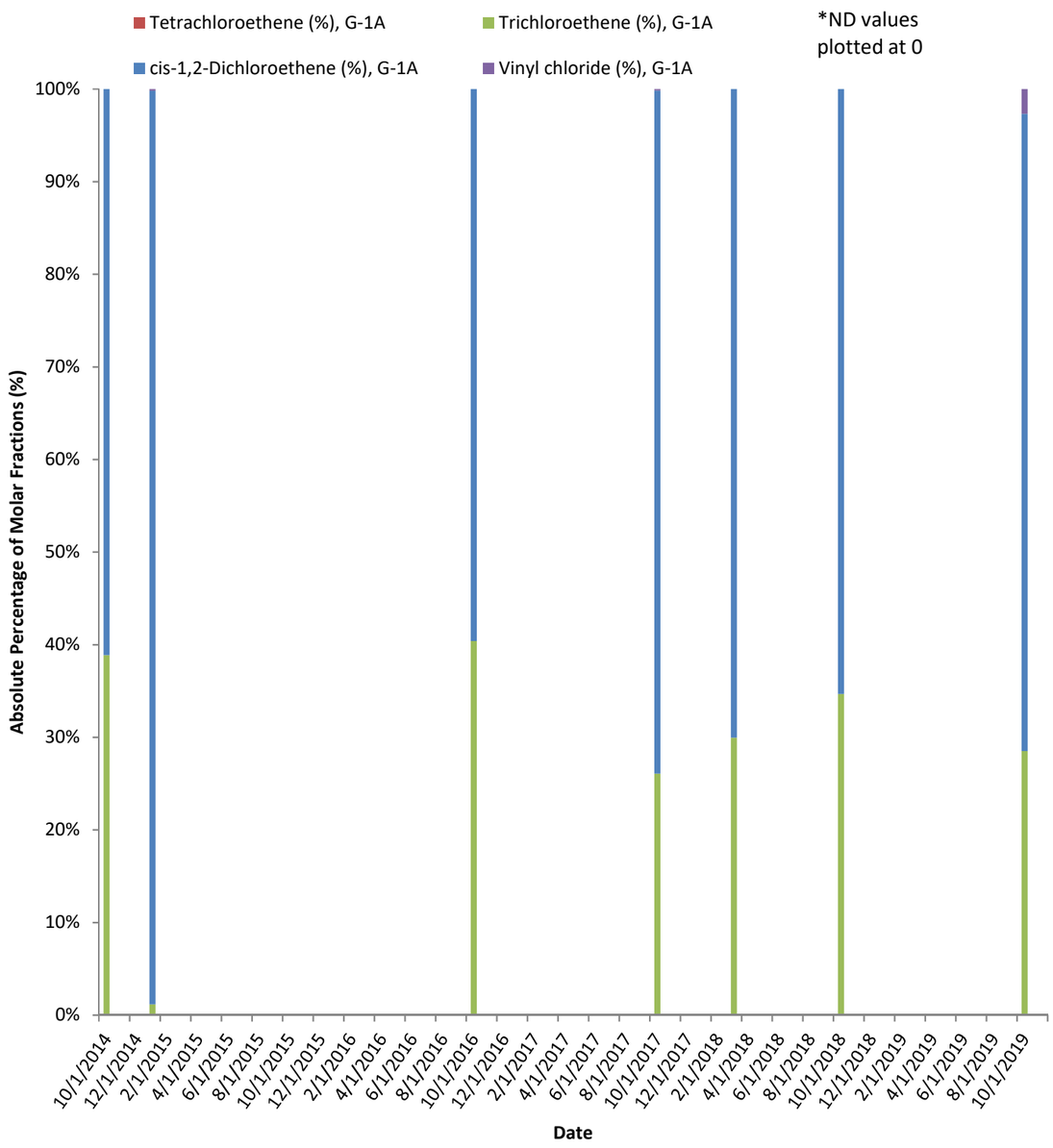
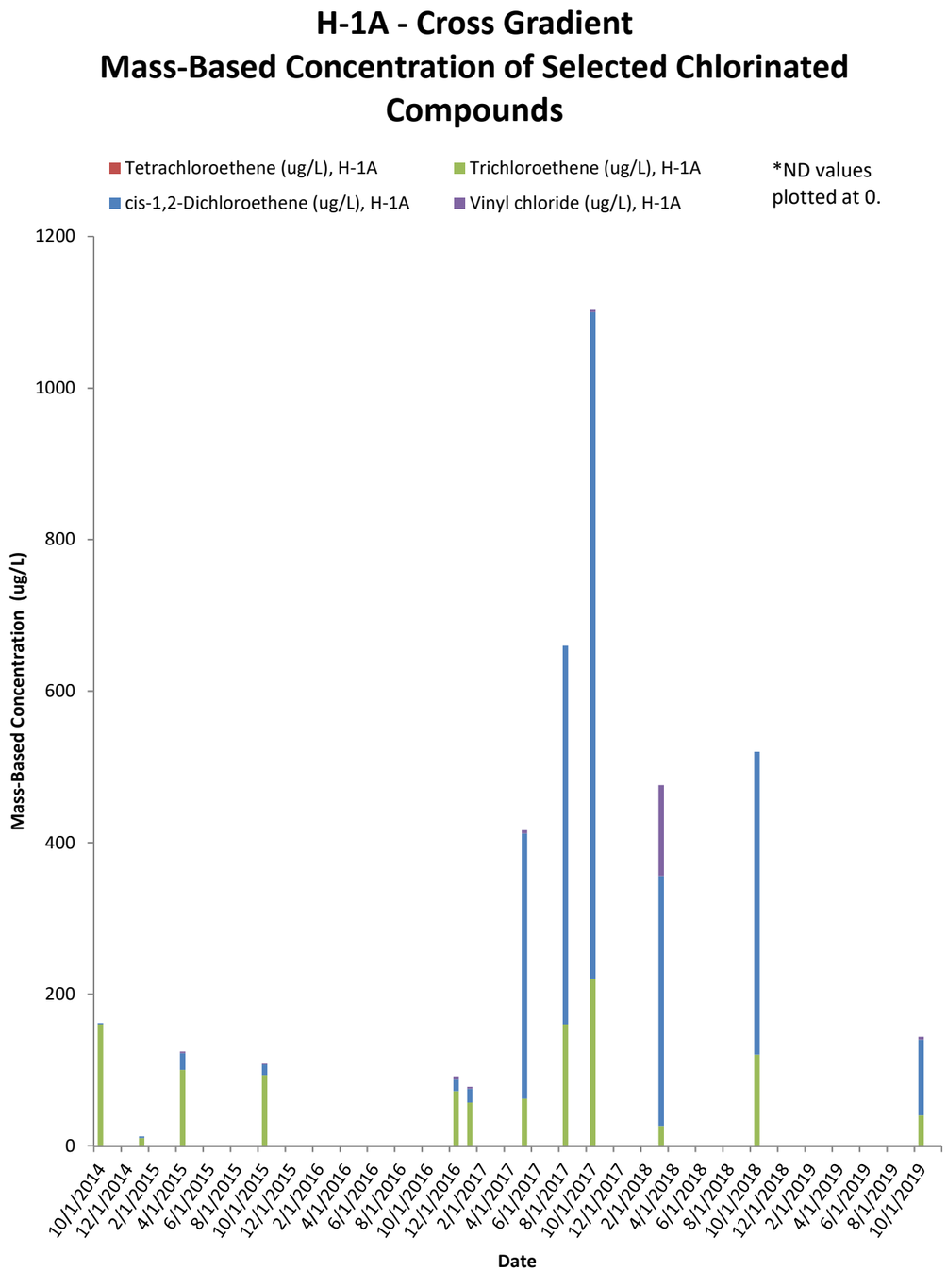


Figure C-5


H-1A - Cross Gradient
Mass-Based Concentration of Selected Chlorinated Compounds
Tetrachloroethene (ug/L), H-1A
Trichloroethene (ug/L), H-1A
cis-1,2-Dichloroethene (ug/L), H-1A
Vinyl chloride (ug/L), H-1A
*ND values plotted at 0.
Mass-Based Concentration (ug/L)
1200
1000
800
600
400
200
0
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

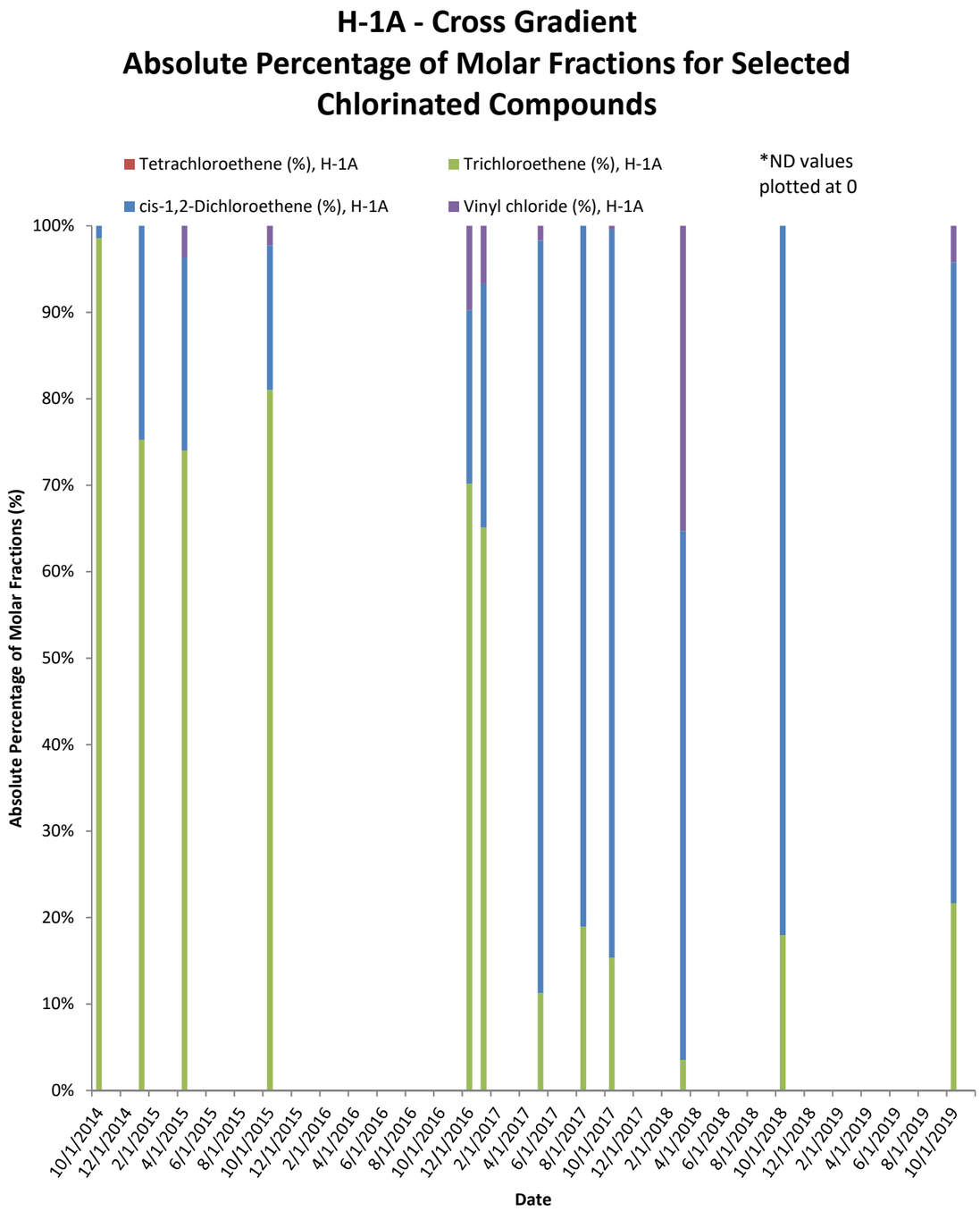
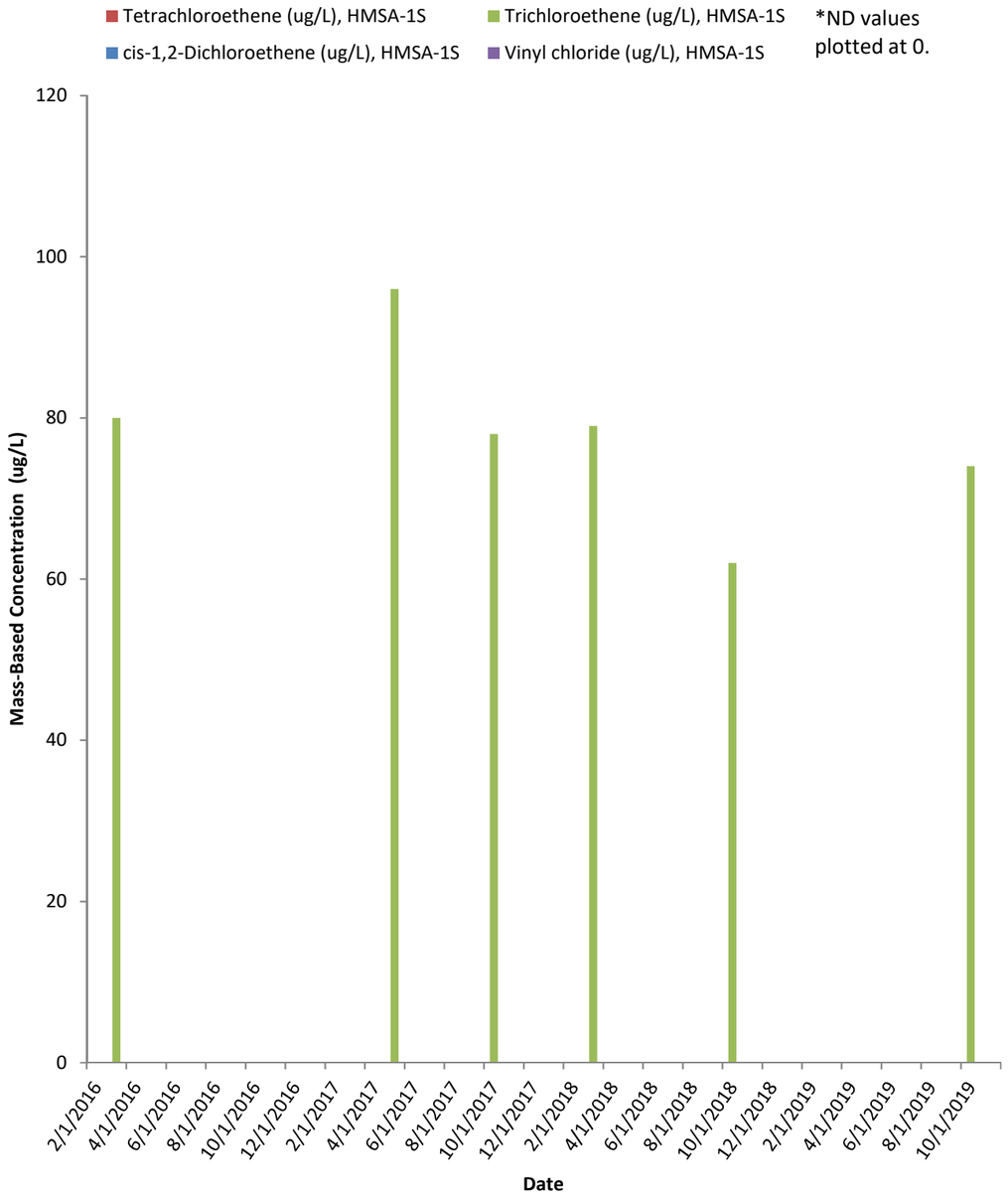

H-1A - Cross Gradient
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds
Tetrachloroethene (%), H-1A
Trichloroethene (%), H-1A
cis-1,2-Dichloroethene (%), H-1A
Vinyl chloride (%), H-1A
*ND values plotted at 0
Absolute Percentage of Molar Fractions (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

Figure C-6

HMSA-1S - Upgradient Area
Mass-Based Concentration of Selected Chlorinated Compounds



HMSA-1S - Upgradient Area
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

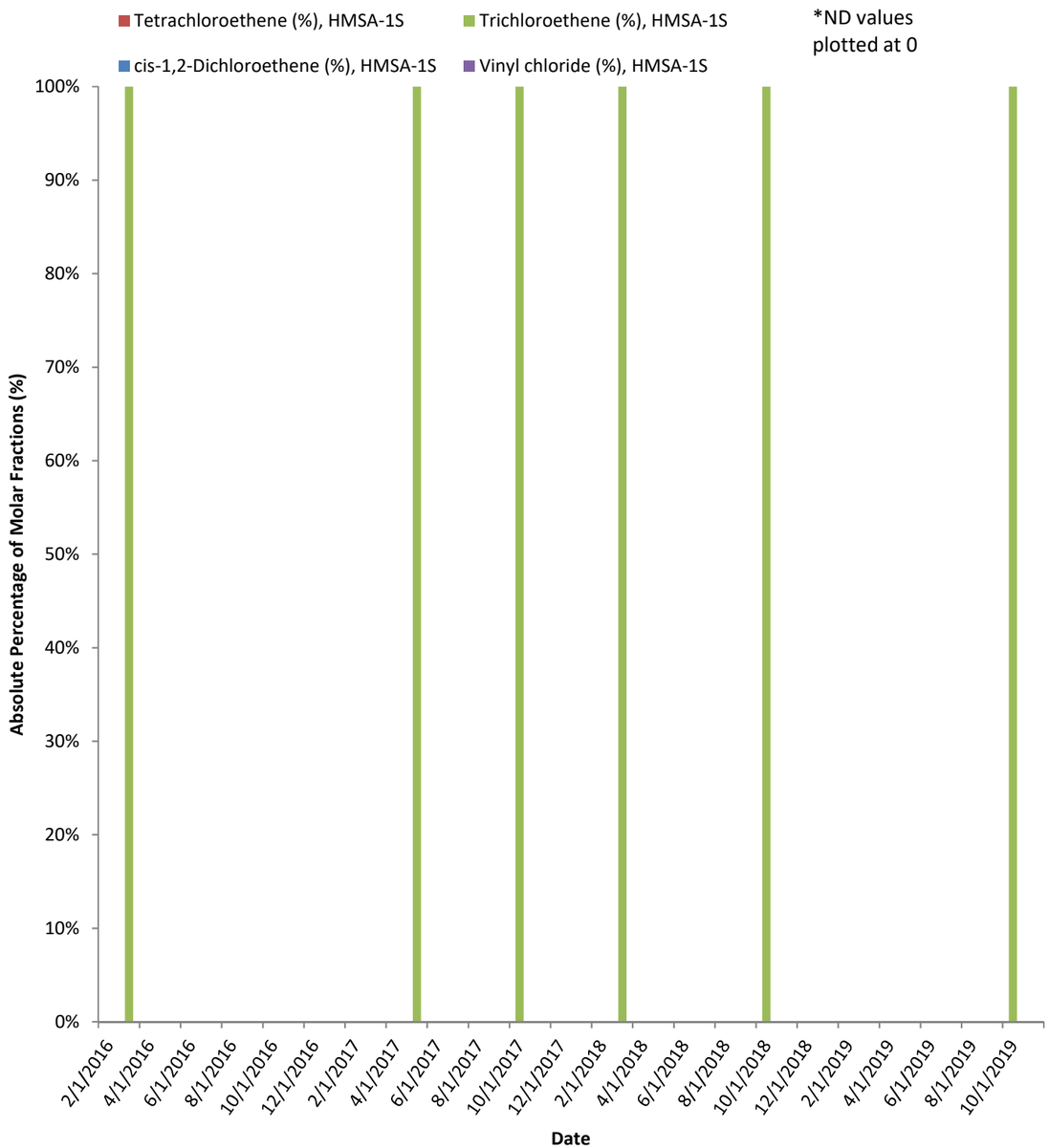
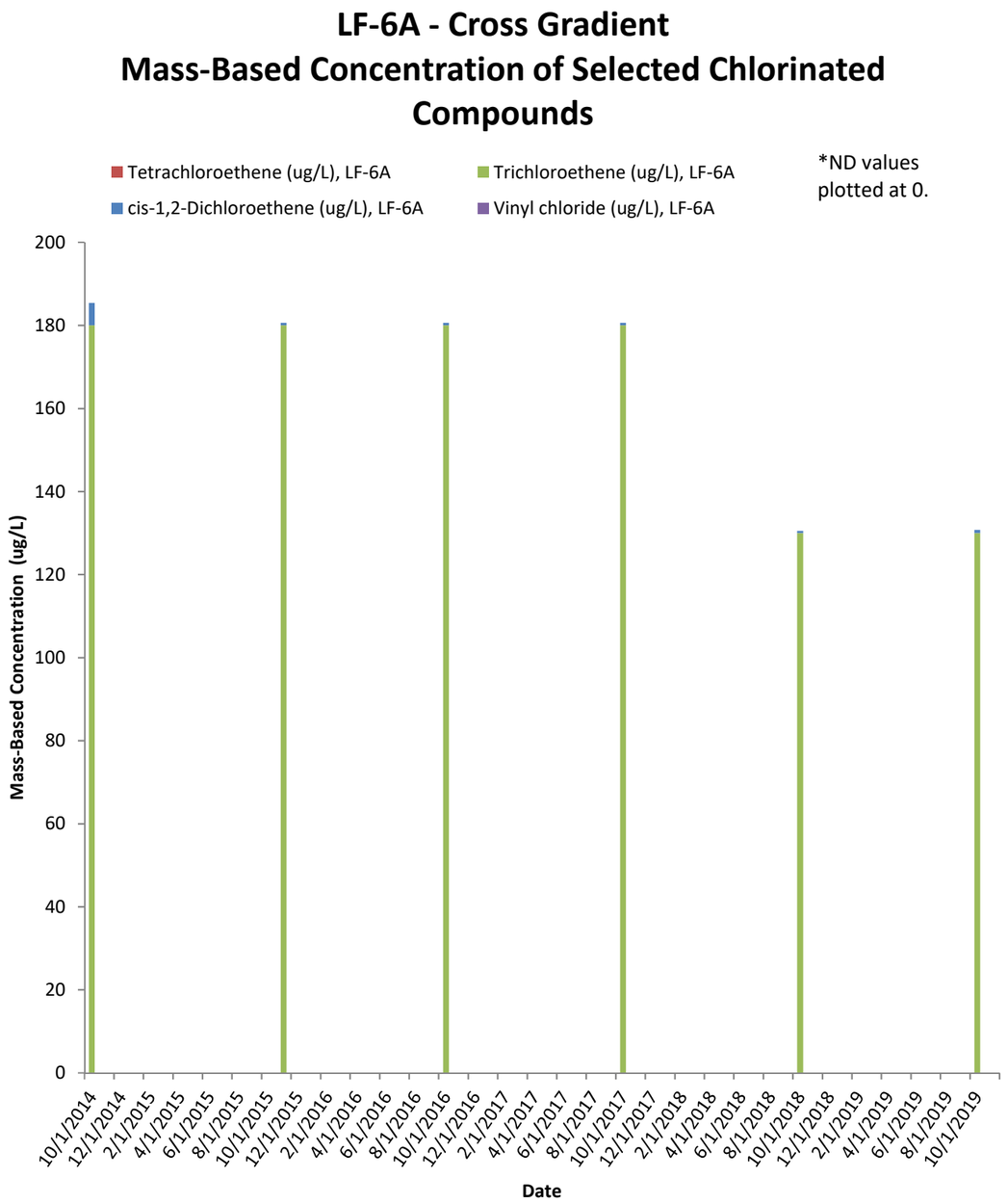


Figure C-7


LF-6A - Cross Gradient
Mass-Based Concentration of Selected Chlorinated Compounds
Tetrachloroethene (ug/L), LF-6A
Trichloroethene (ug/L), LF-6A
cis-1,2-Dichloroethene (ug/L), LF-6A
Vinyl chloride (ug/L), LF-6A
*ND values plotted at 0.
Mass-Based Concentration (ug/L)
0
20
40
60
80
100
120
140
160
180
200
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

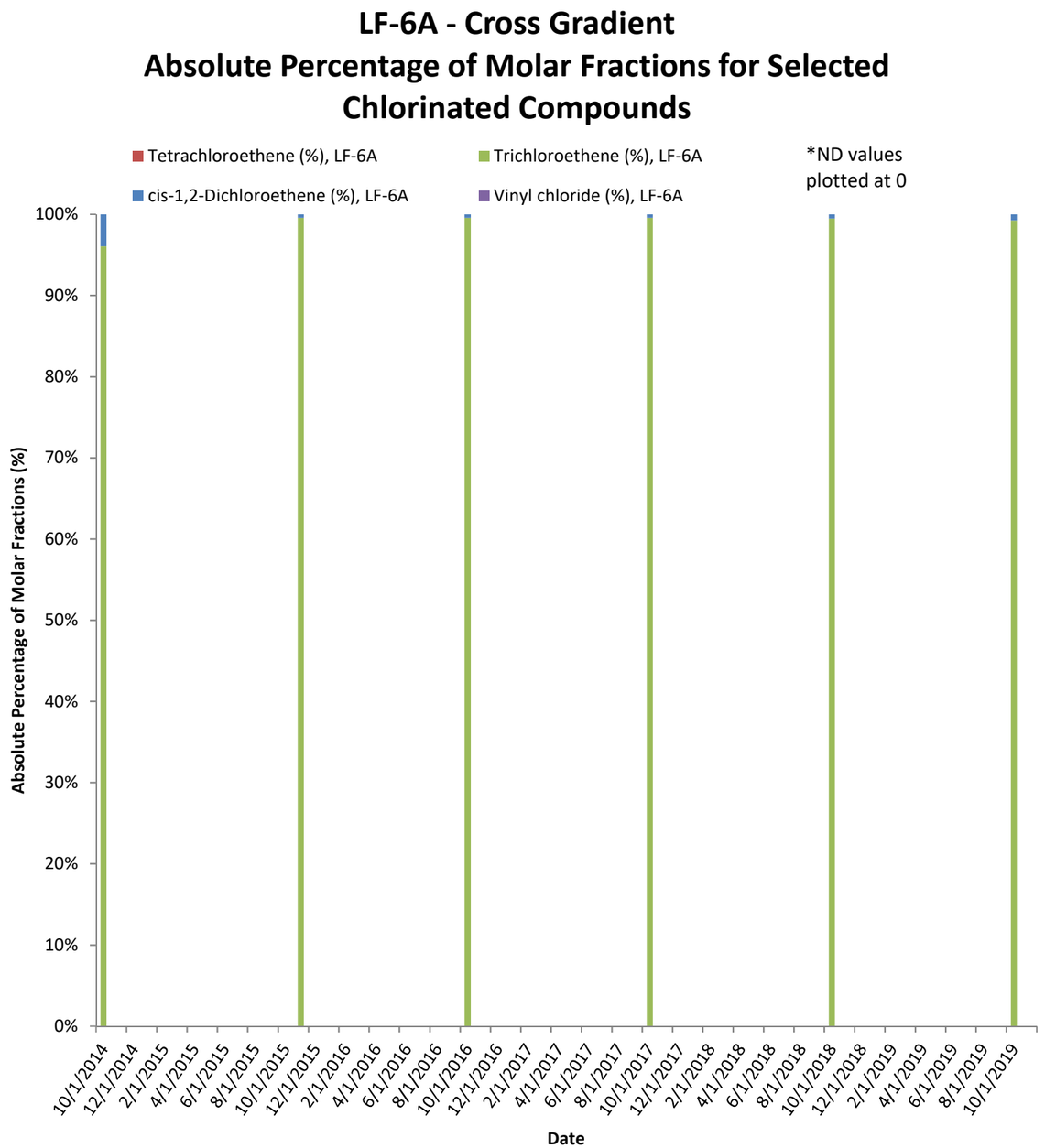
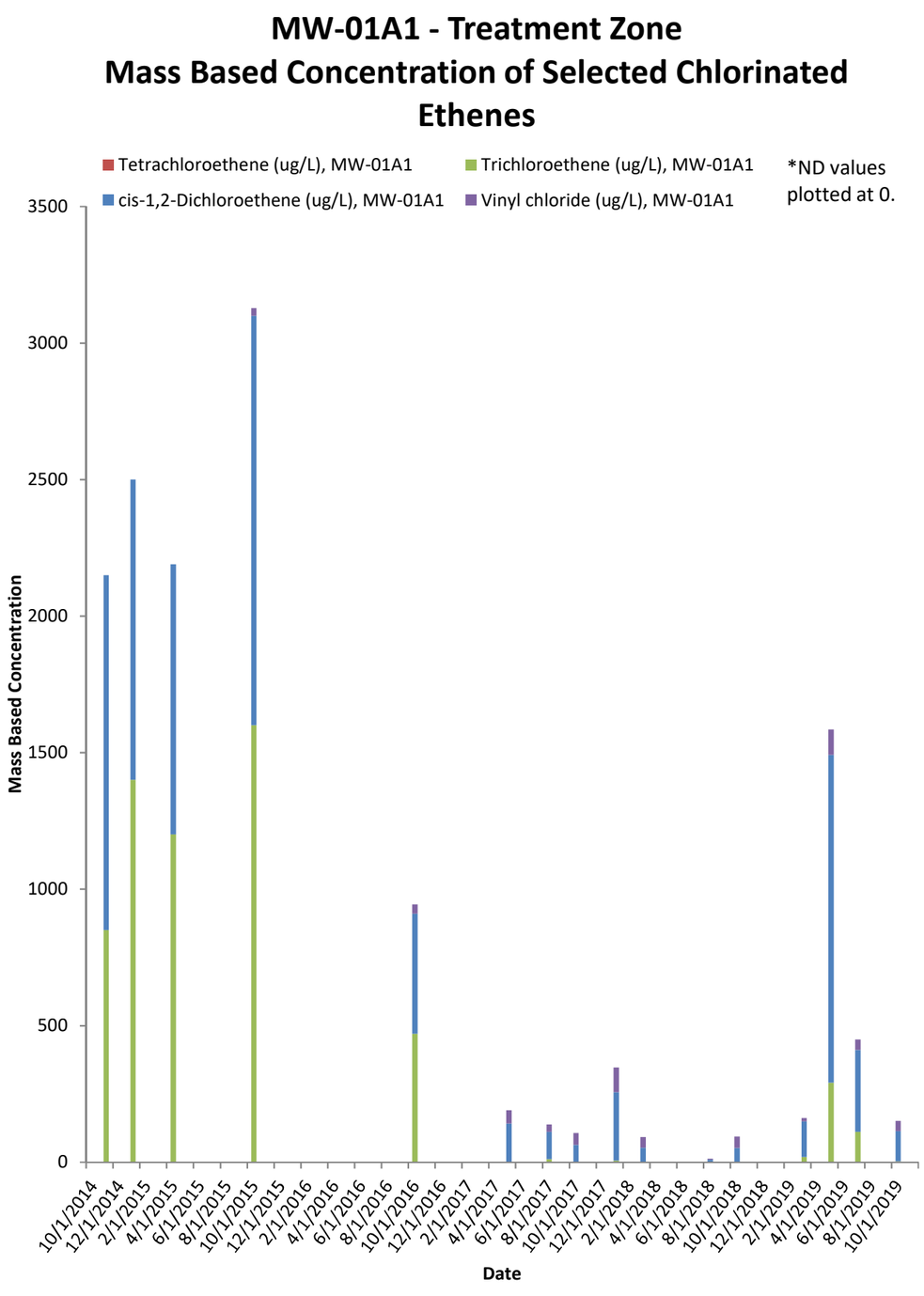

LF-6A - Cross Gradient
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds
Tetrachloroethene (%), LF-6A
Trichloroethene (%), LF-6A
cis-1,2-Dichloroethene (%), LF-6A
Vinyl chloride (%), LF-6A
*ND values plotted at 0
Absolute Percentage of Molar Fractions (%)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

Figure C-8


MW-01A1 - Treatment Zone
Mass Based Concentration of Selected Chlorinated Ethenes
Tetrachloroethene (ug/L), MW-01A1
Trichloroethene (ug/L), MW-01A1
cis-1,2-Dichloroethene (ug/L), MW-01A1
Vinyl chloride (ug/L), MW-01A1
*ND values plotted at 0.
Mass Based Concentration
3500
3000
2500
2000
1500
1000
500
0
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

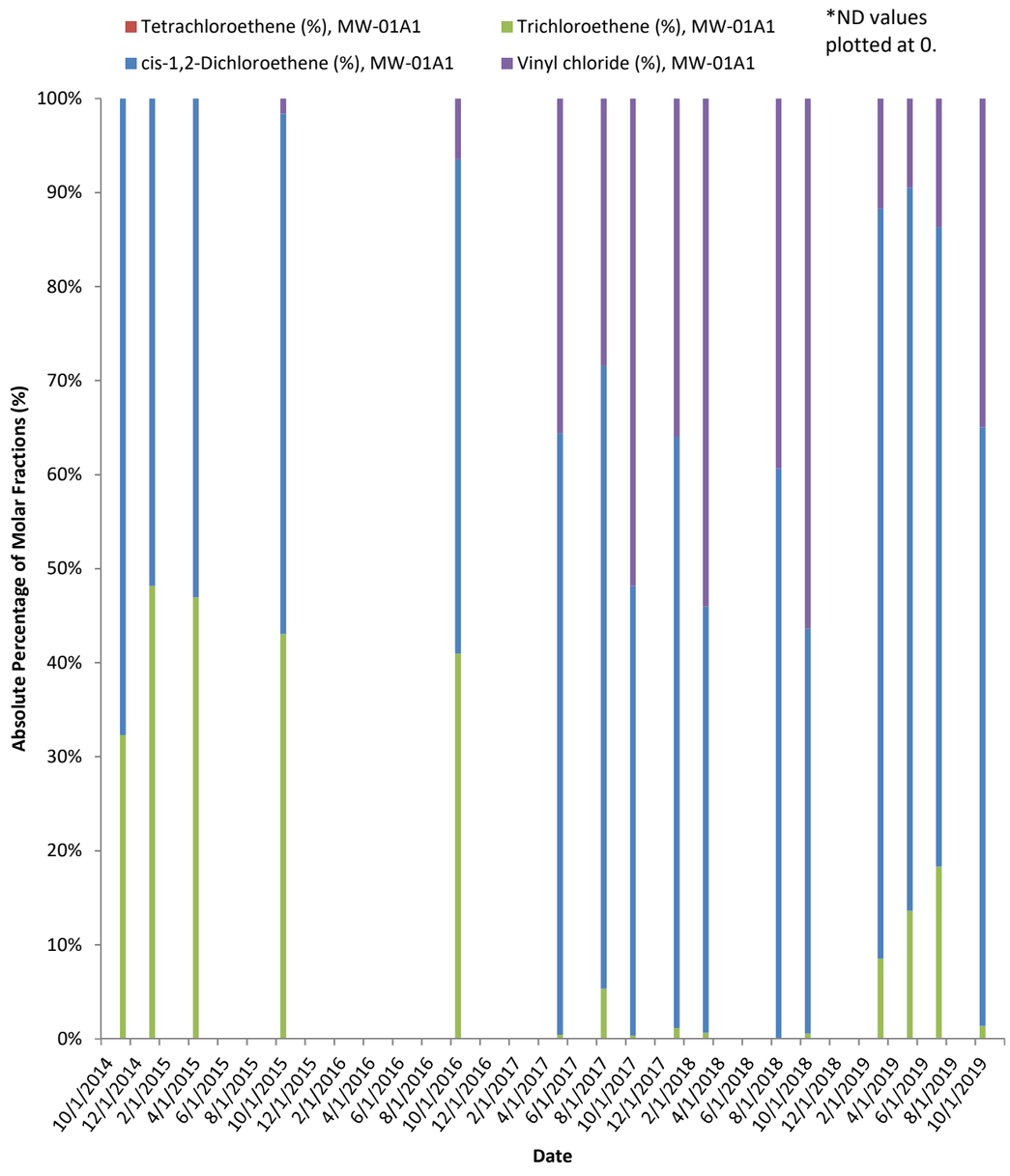
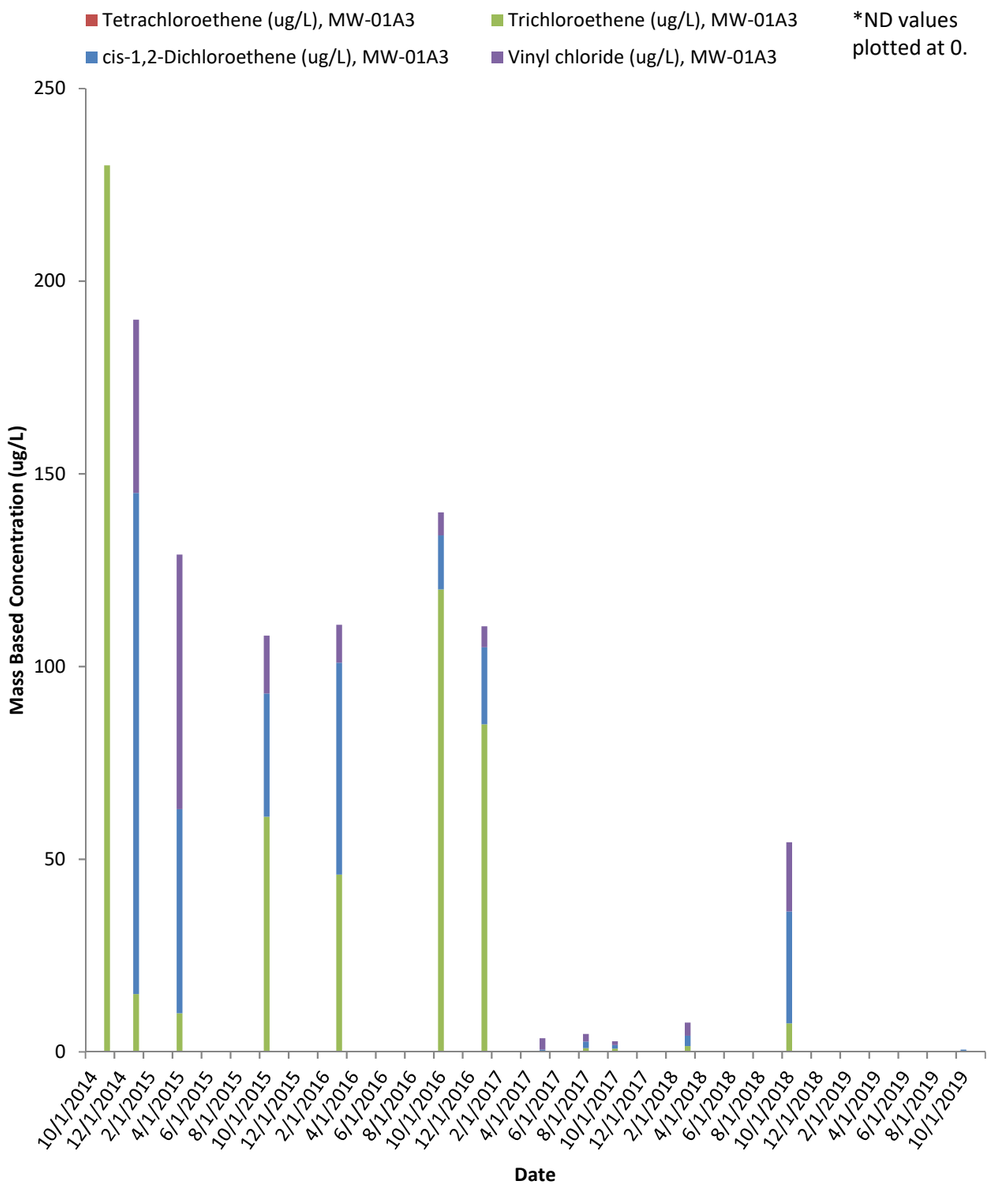

MW-01A1 - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds
Tetrachloroethene (%), MW-01A1
Trichloroethene (%), MW-01A1
cis-1,2-Dichloroethene (%), MW-01A1
Vinyl chloride (%), MW-01A1
*ND values plotted at 0.
Absolute Percentage of Molar Fractions (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

Figure C-9

MW-01A3 - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



MW-01A3 - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

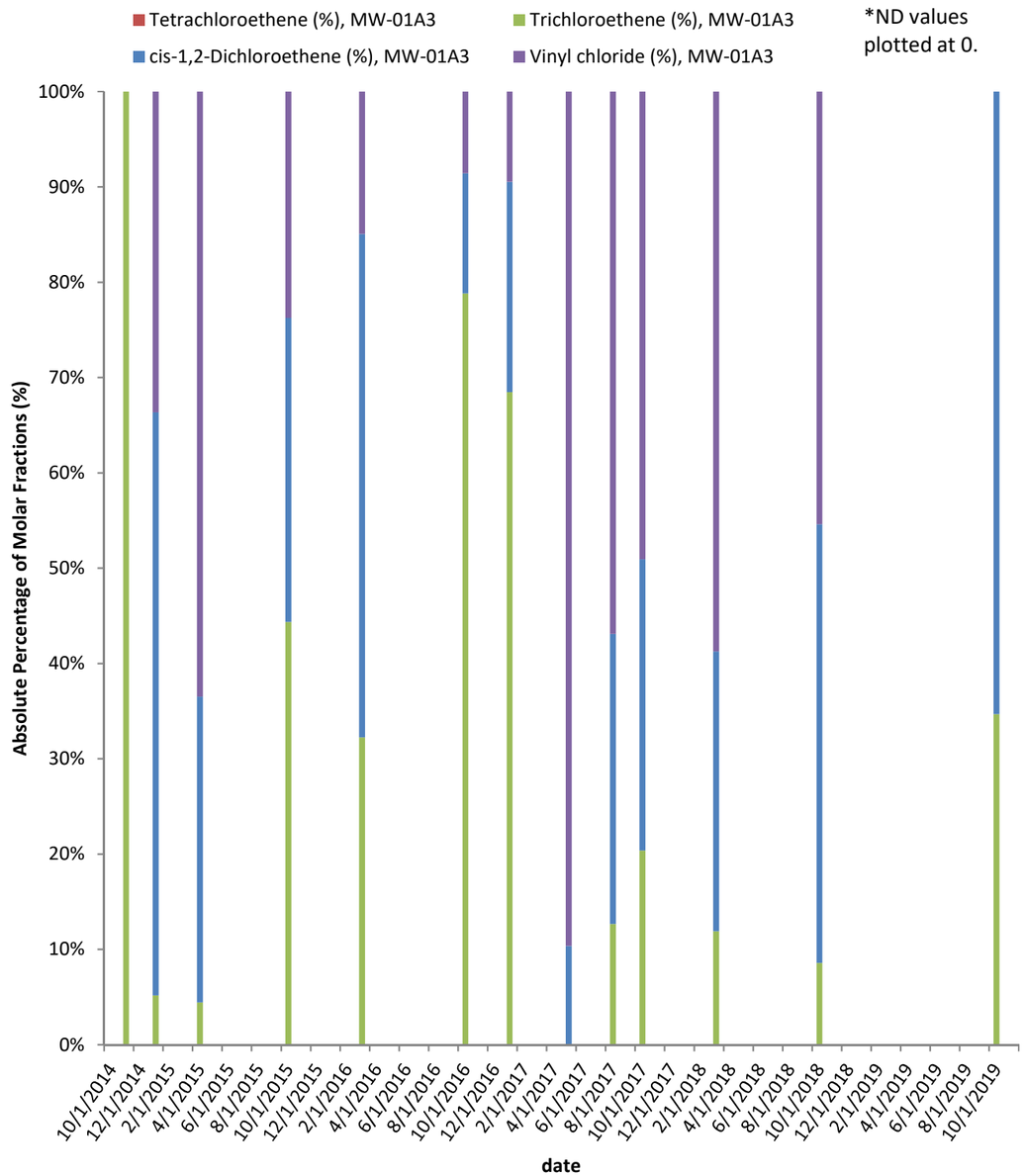
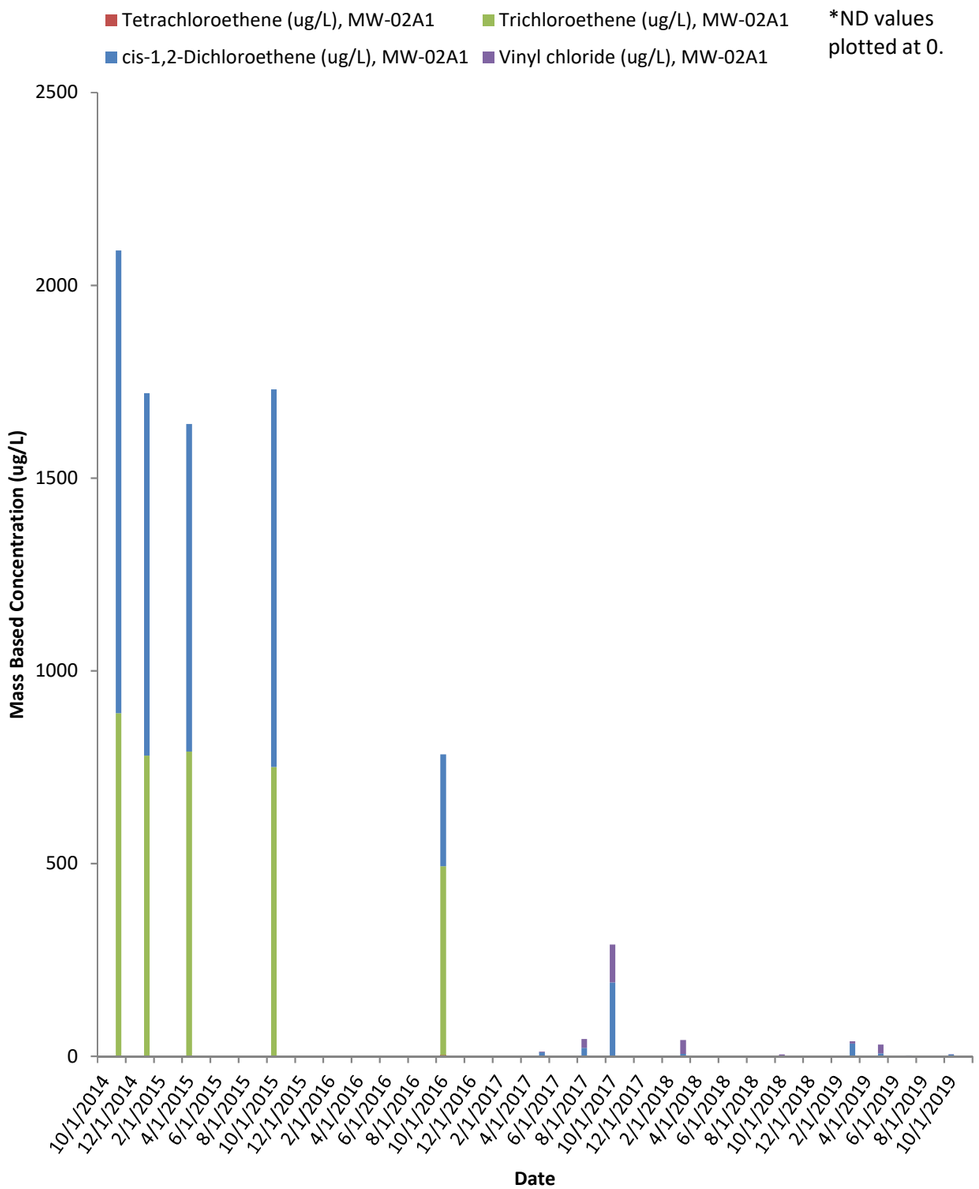


Figure C-10

MW-02A1 - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



MW-02A1 - Teatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

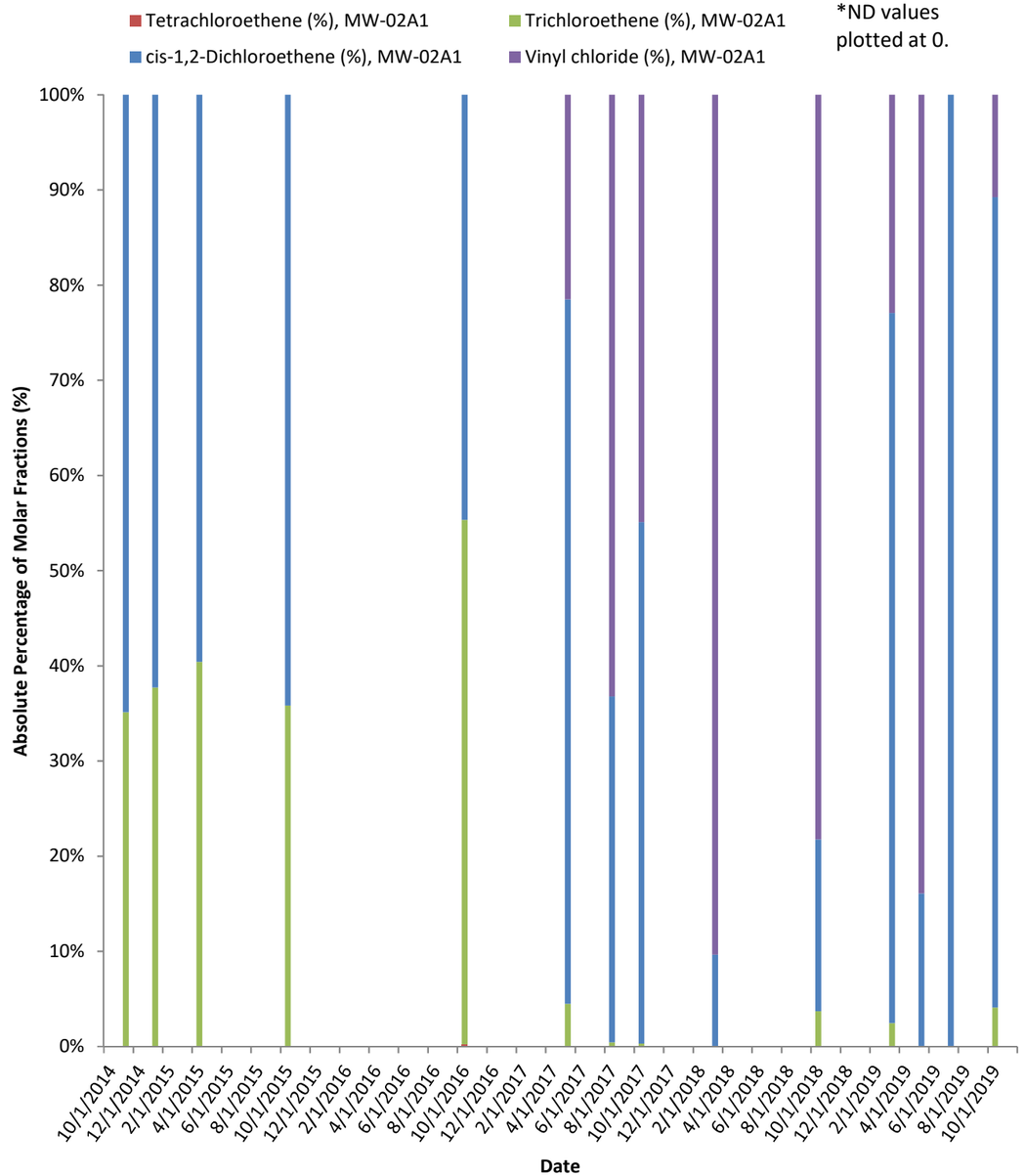
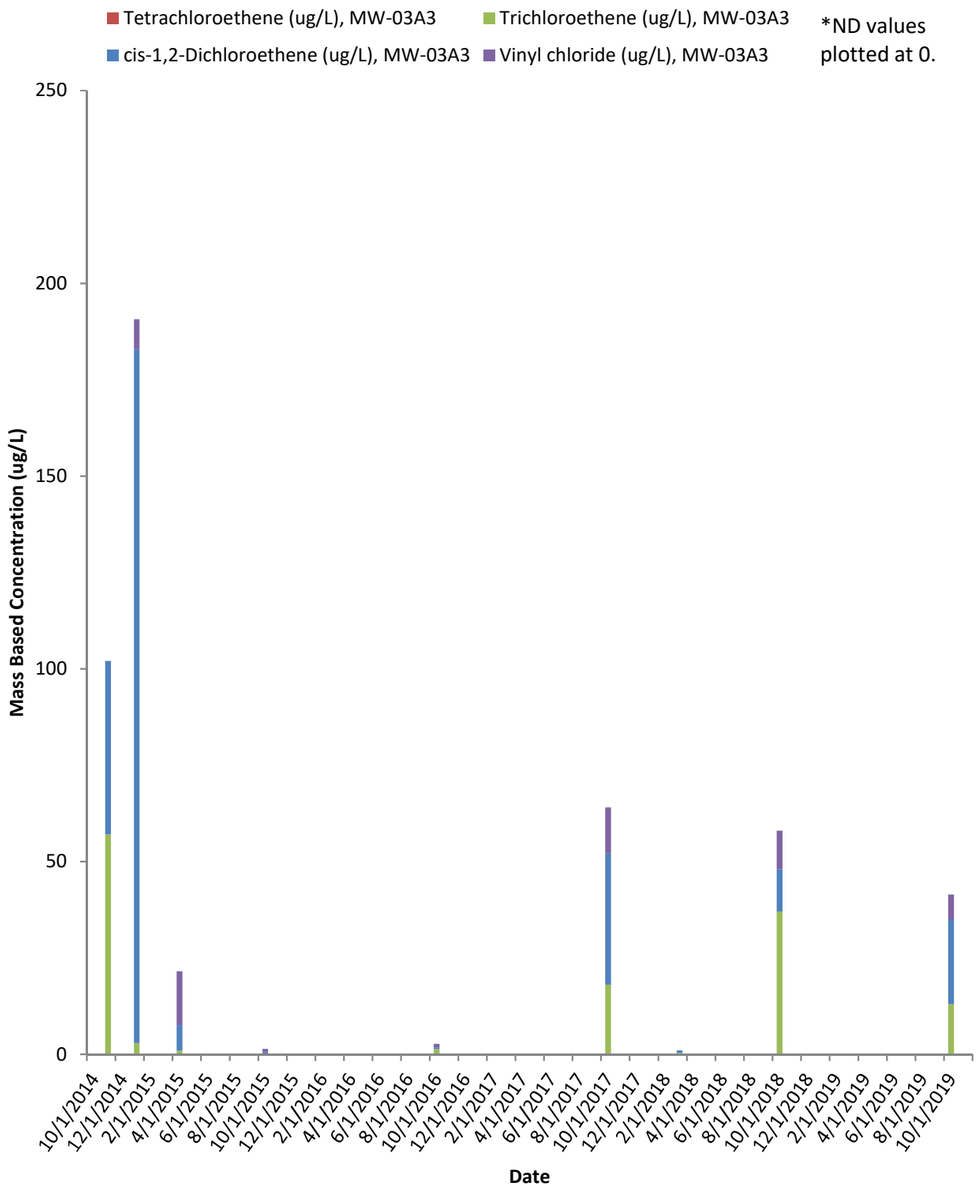


Figure C-11

MW-03A3 - Cross Gradient (Phase II Pilot Area)
Mass Based Concentration of Selected Chlorinated Compounds



MW-03A3 - Cross Gradient (Phase II Pilot Area)
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

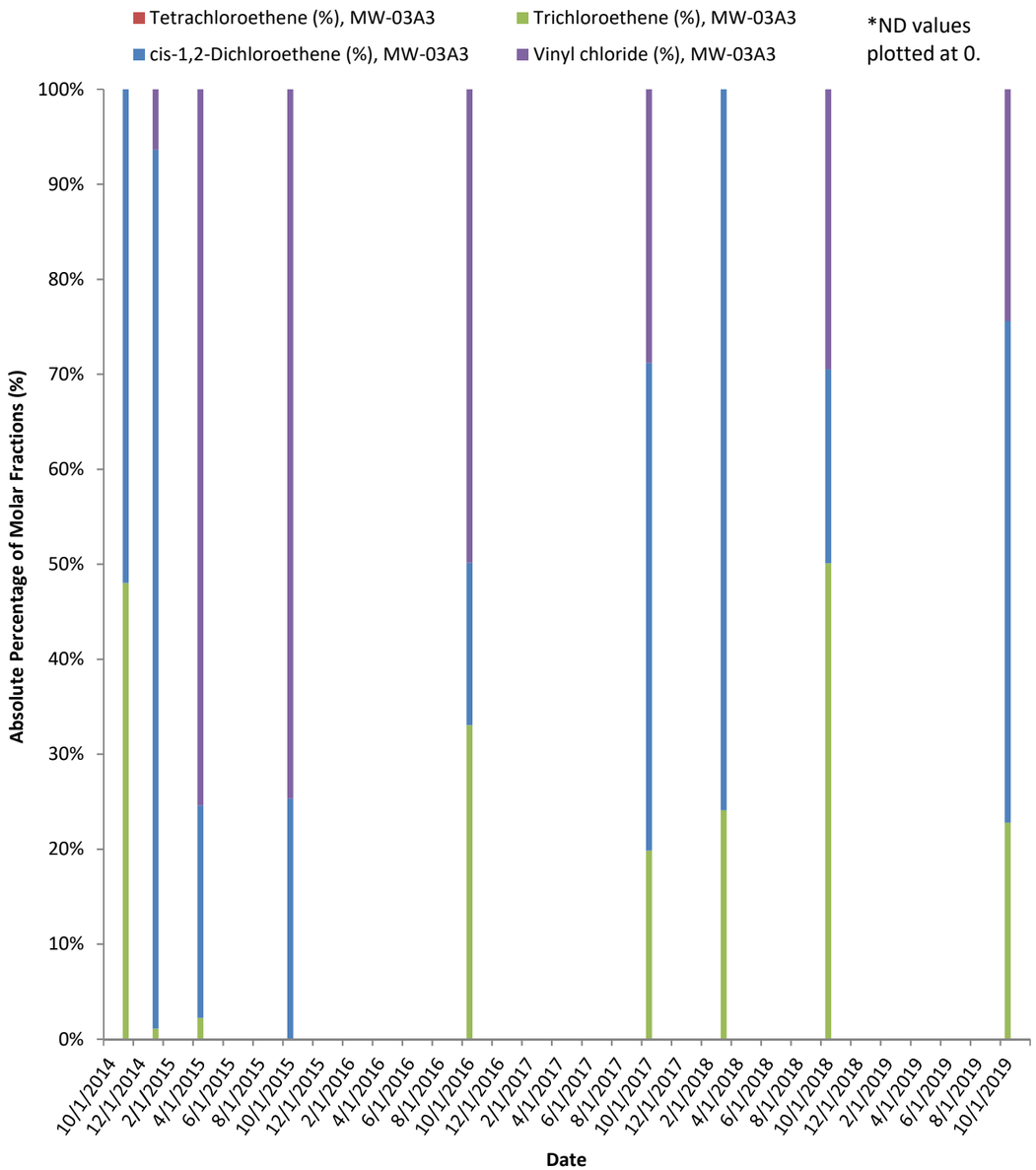
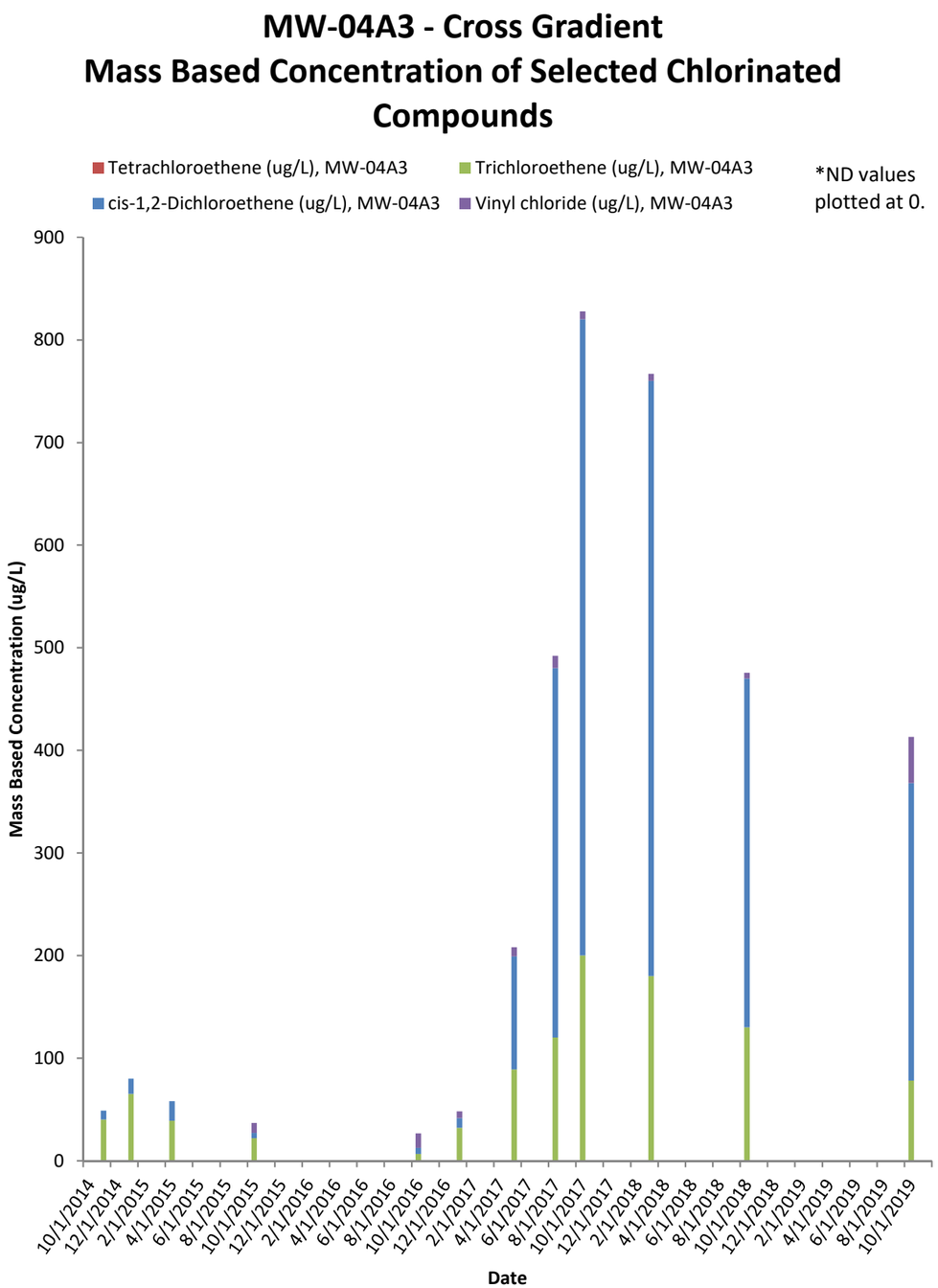


Figure C-12


MW-04A3 - Cross Gradient
Mass Based Concentration of Selected Chlorinated Compounds
Tetrachloroethene (ug/L), MW-04A3
Trichloroethene (ug/L), MW-04A3
cis-1,2-Dichloroethene (ug/L), MW-04A3
Vinyl chloride (ug/L), MW-04A3
*ND values plotted at 0.
Mass Based Concentration (ug/L)
900
800
700
600
500
400
300
200
100
0
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

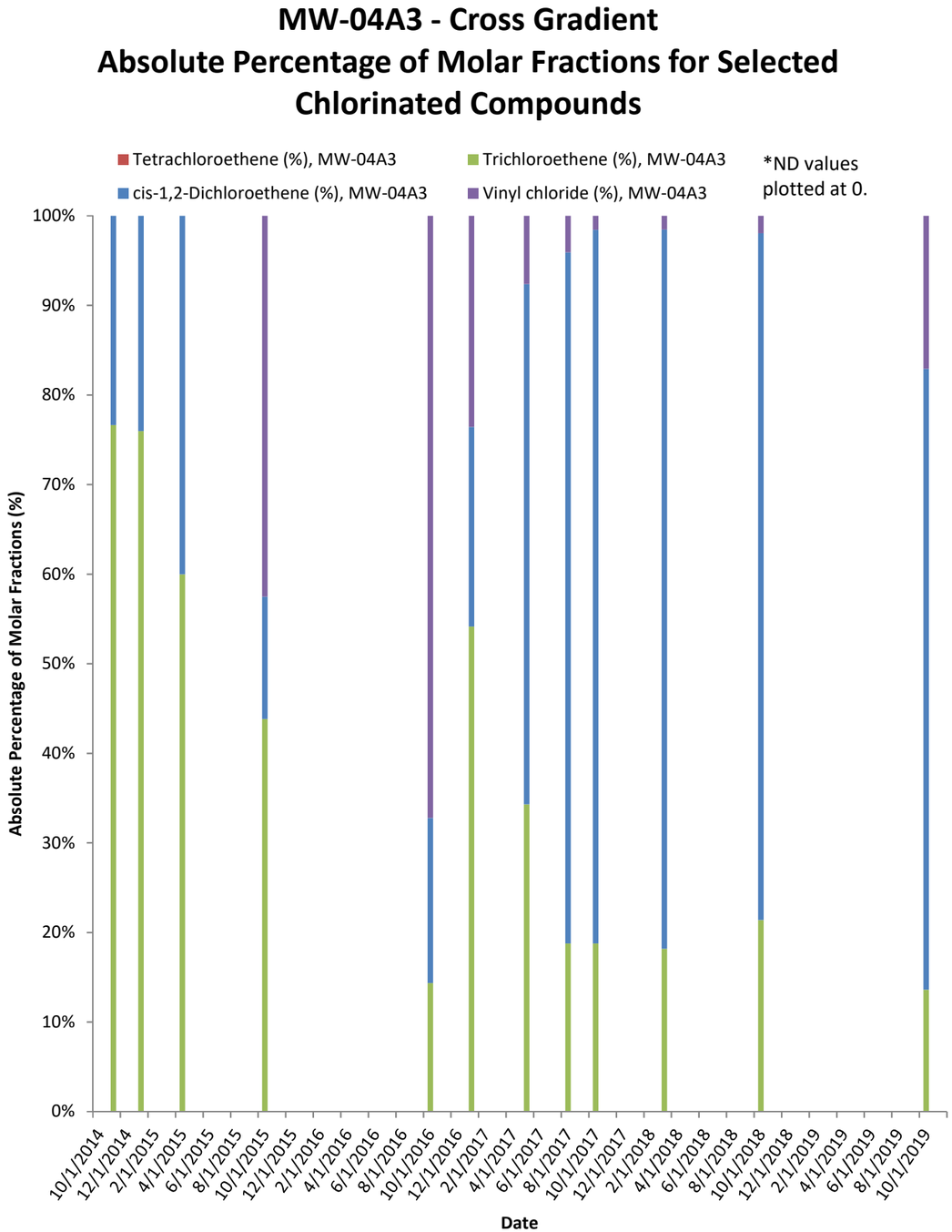
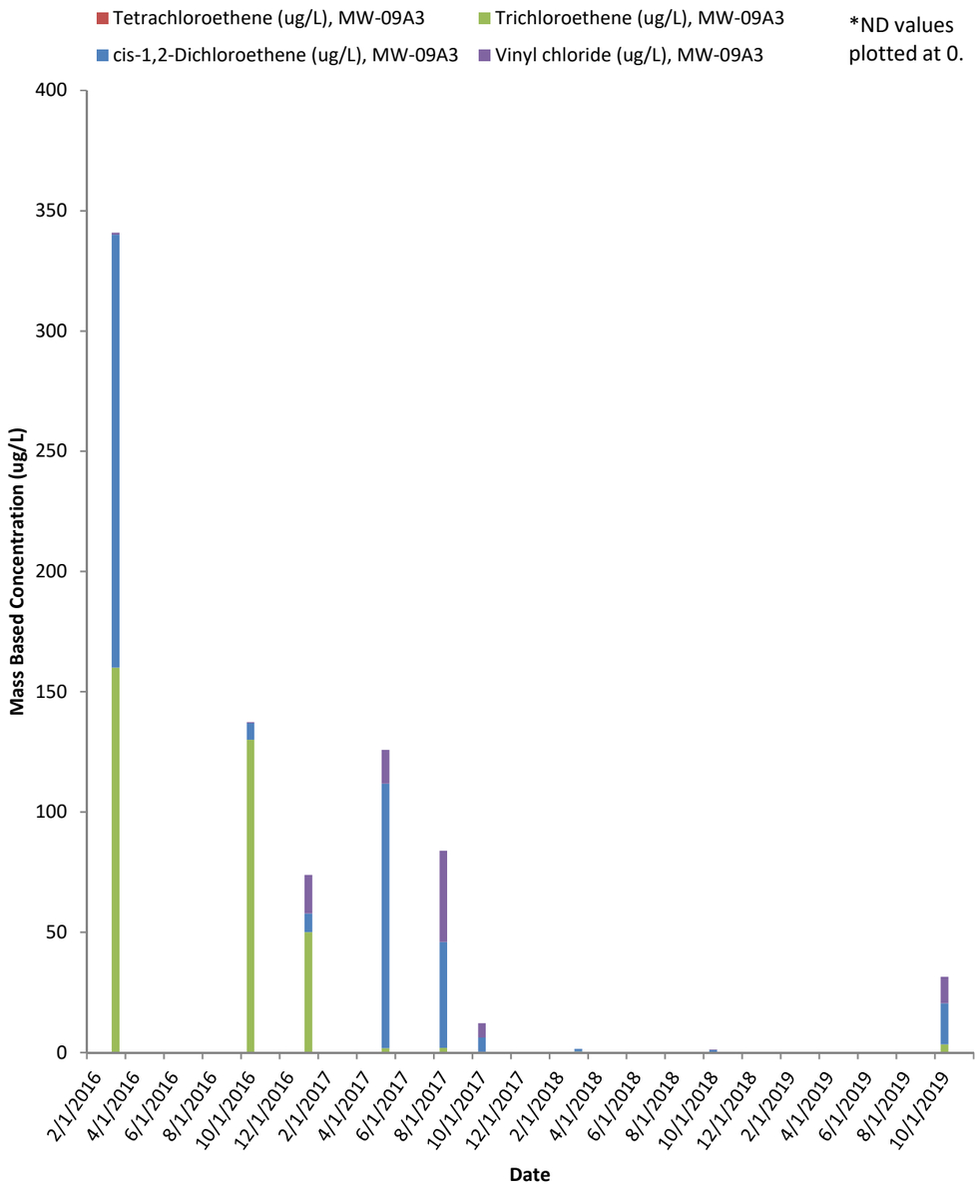

MW-04A3 - Cross Gradient
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds
Tetrachloroethene (%), MW-04A3
Trichloroethene (%), MW-04A3
cis-1,2-Dichloroethene (%), MW-04A3
Vinyl chloride (%), MW-04A3
*ND values plotted at 0.
Absolute Percentage of Molar Fractions (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

Figure C-13

MW-09A3 - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



MW-09A3 - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

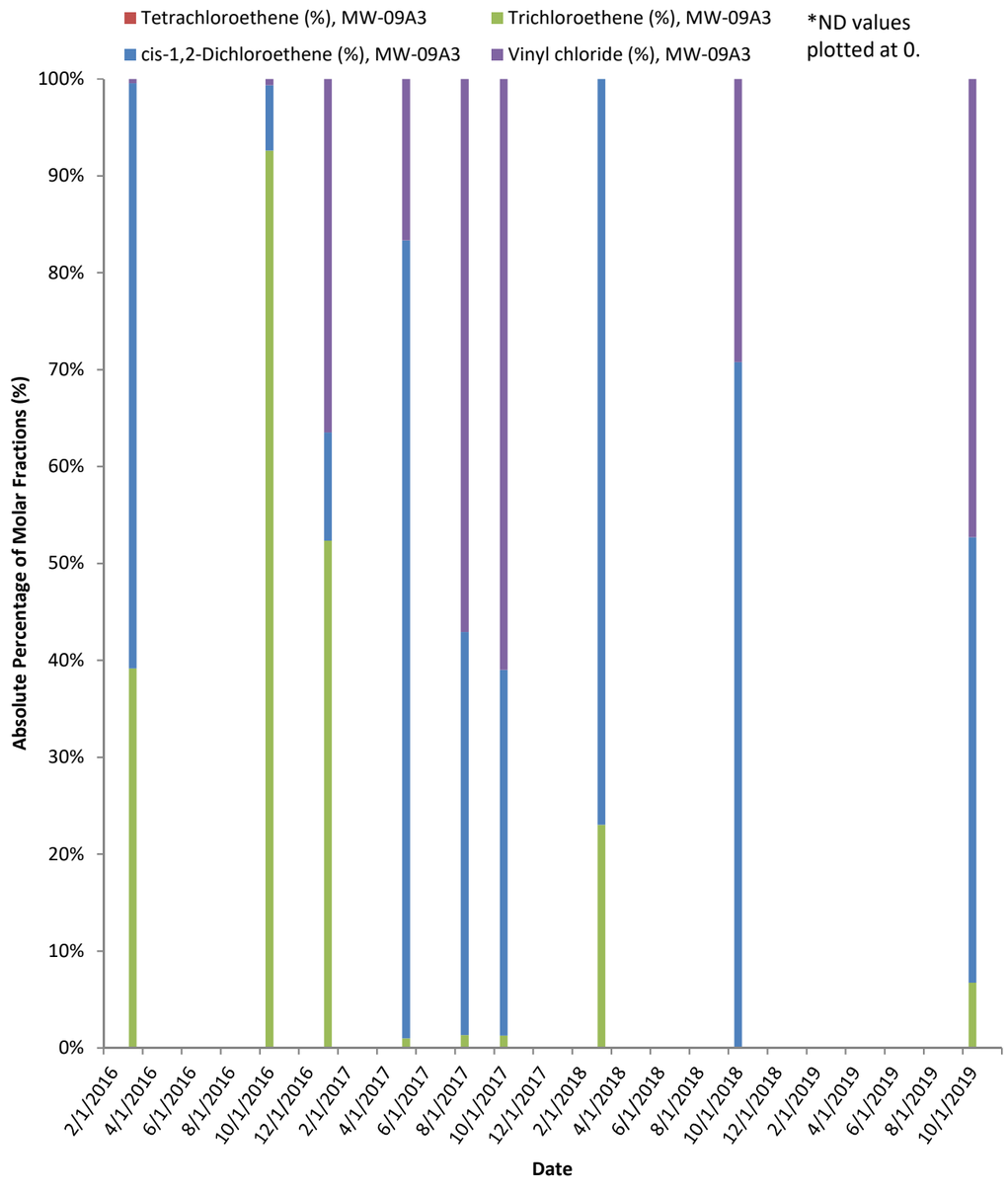
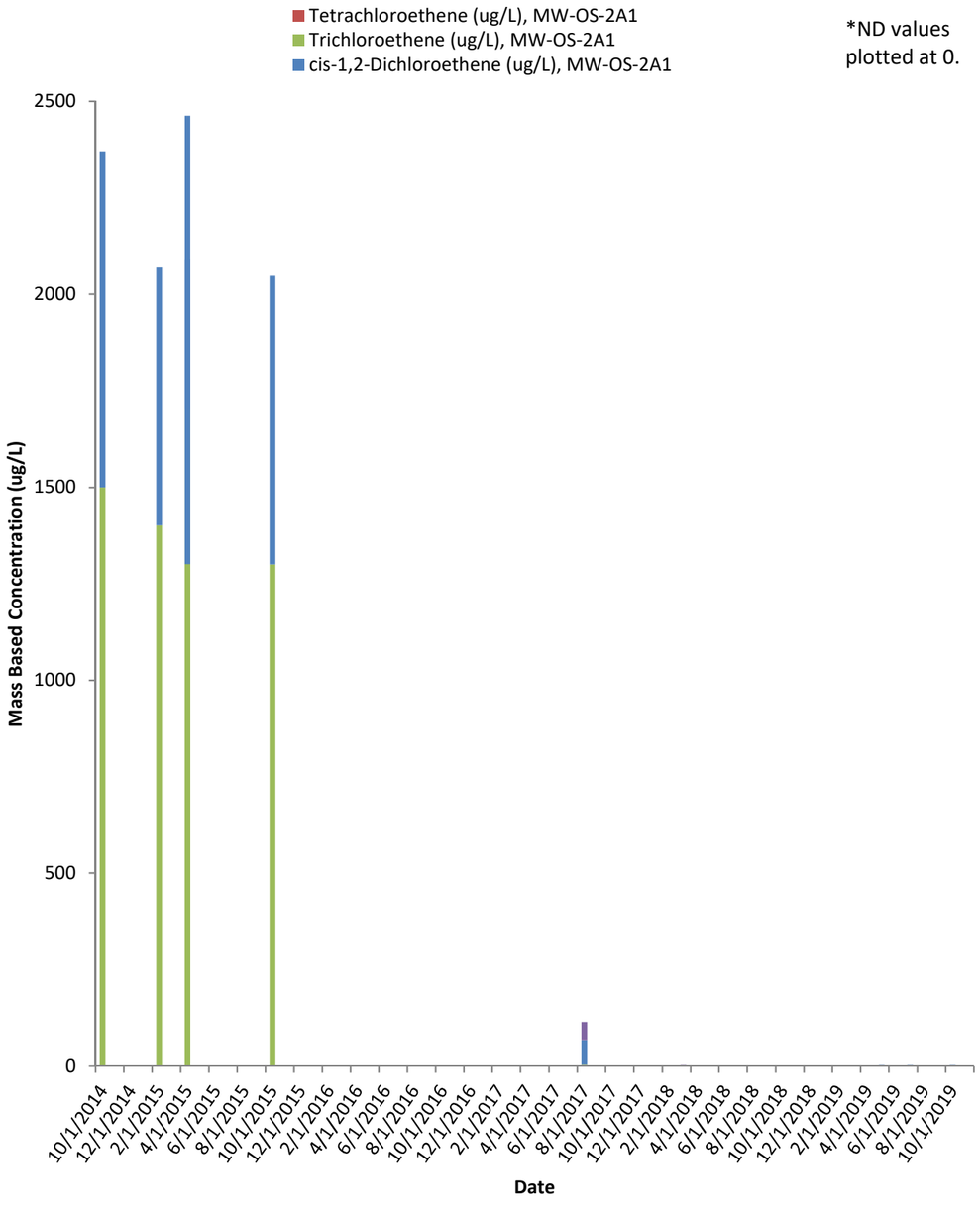


Figure C-14


MW-OS-2A1 - Downgradient Well
Mass Based Concentration of Selected Chlorinated Compounds
Tetrachloroethene (ug/L), MW-OS-2A1
Trichloroethene (ug/L), MW-OS-2A1
cis-1,2-Dichloroethene (ug/L), MW-OS-2A1
*ND values plotted at 0.
Mass Based Concentration (ug/L)
2500
2000
1500
1000
500
0
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

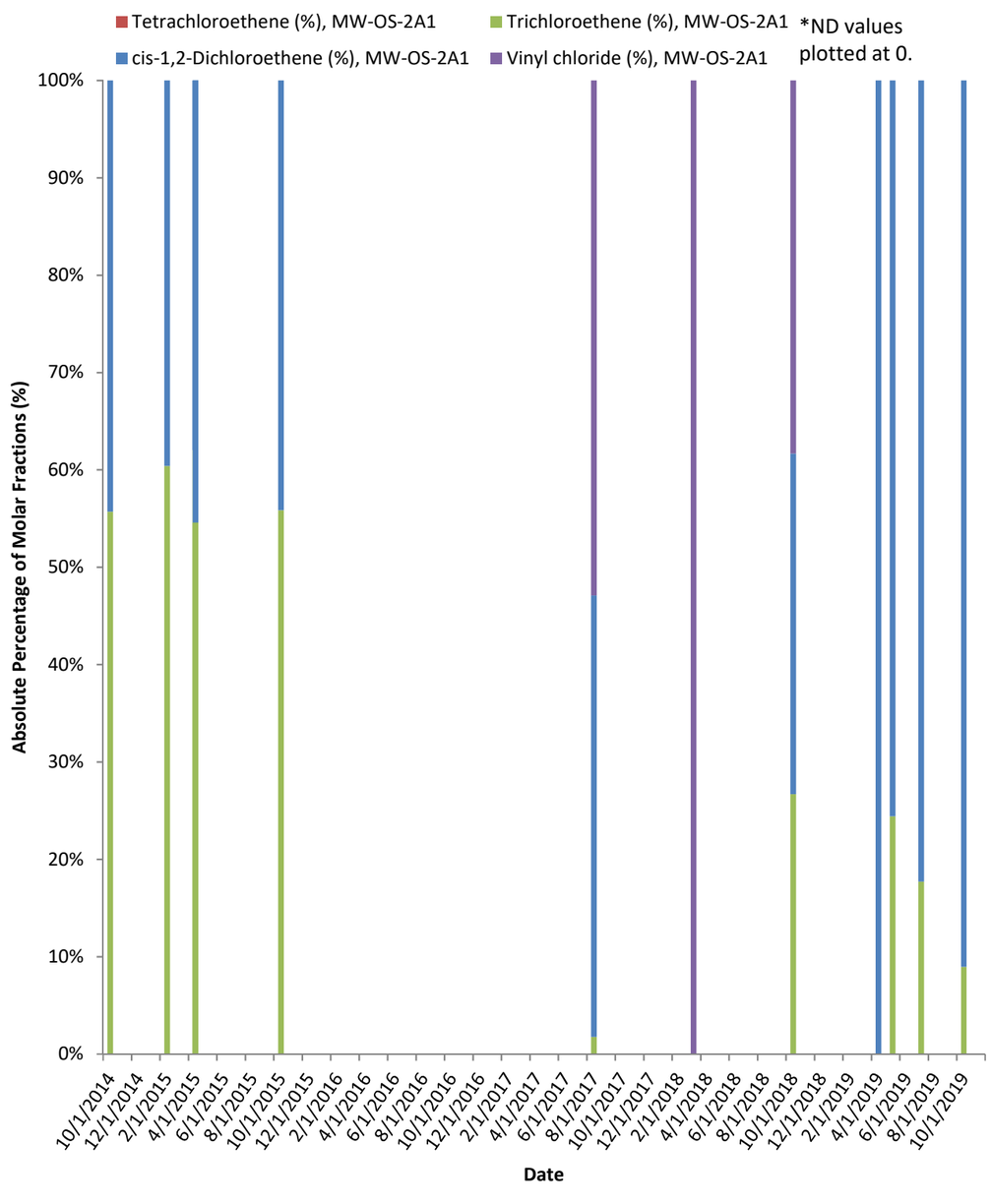
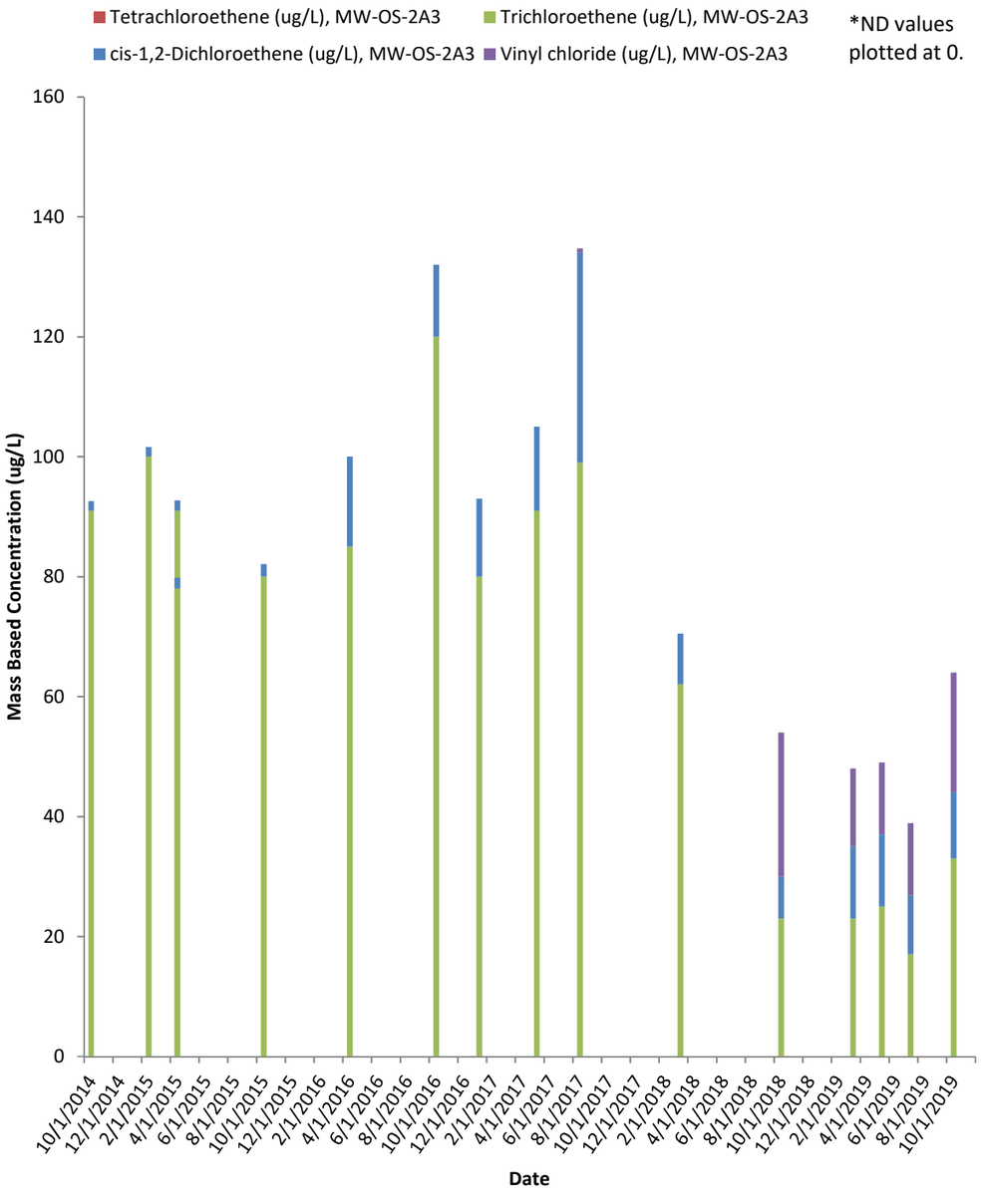

MW-OS-2A1 - Downgradient Well
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds
Tetrachloroethene (%), MW-OS-2A1
Trichloroethene (%), MW-OS-2A1
cis-1,2-Dichloroethene (%), MW-OS-2A1
Vinyl chloride (%), MW-OS-2A1
*ND values plotted at 0.
Absolute Percentage of Molar Fractions (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

Figure C-15

MW-OS-2A3 - Downgradient Well
Mass Based Concentration of Selected Chlorinated Compounds



MW-OS-2A3 - Downgradient Well
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

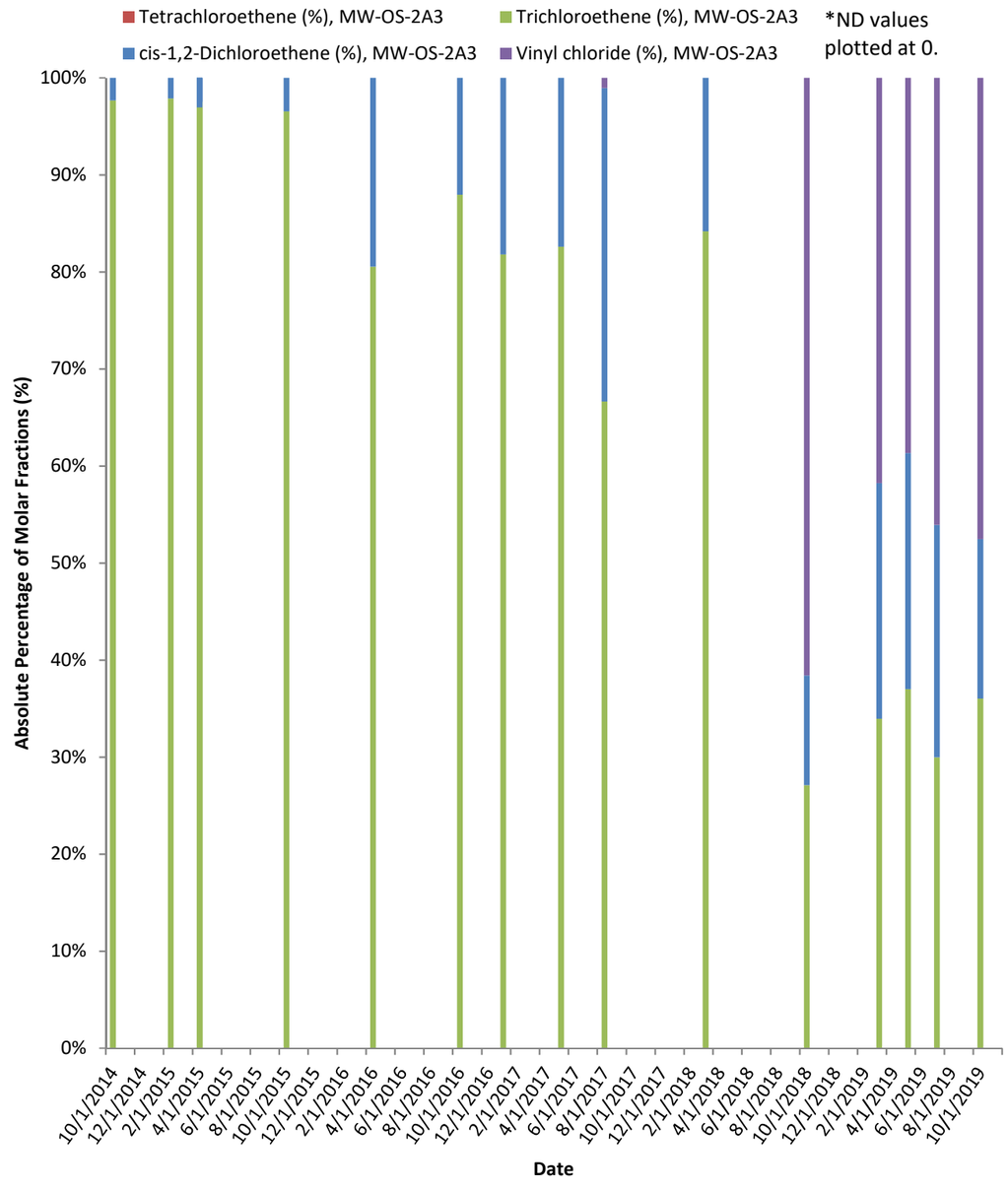
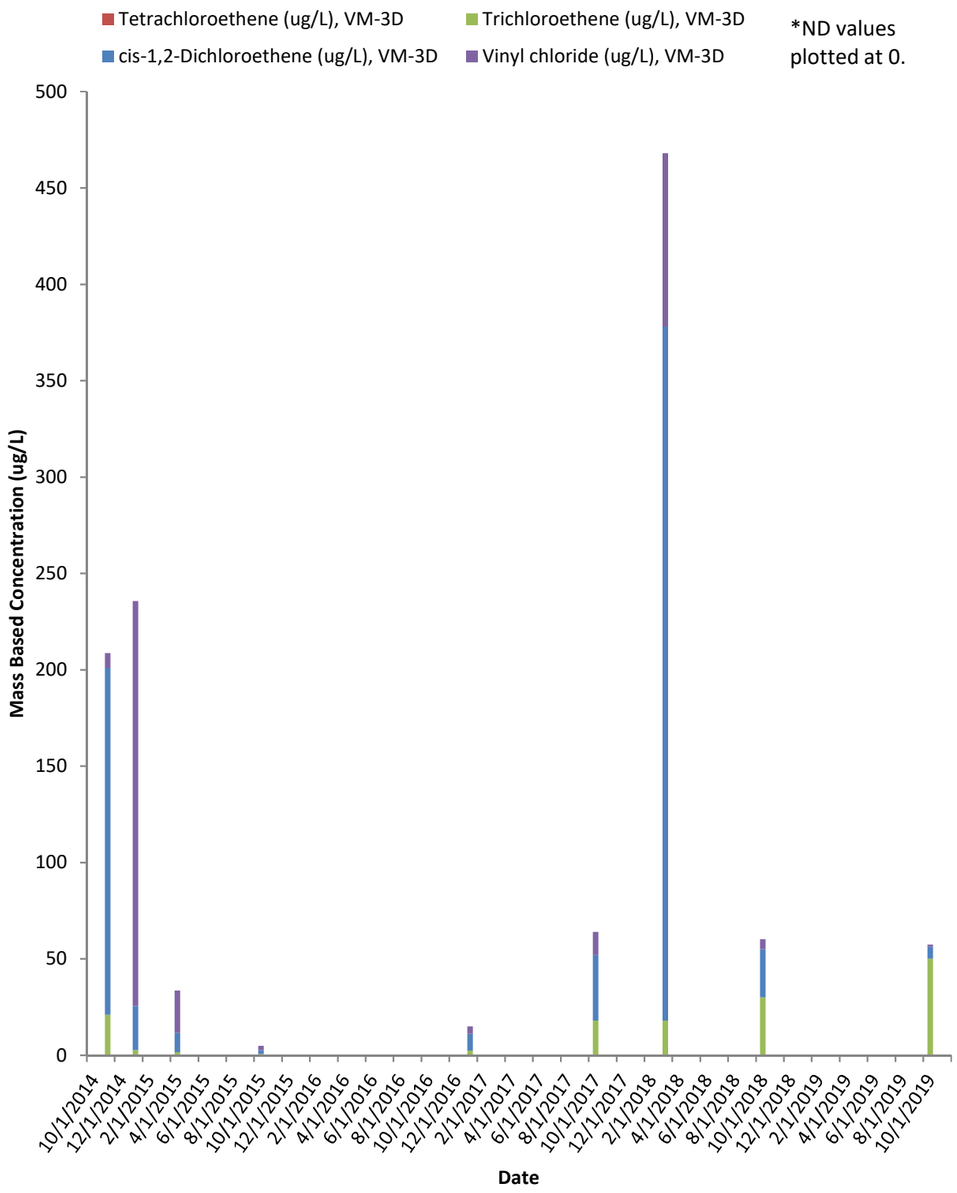


Figure C-16

VM-3D - Cross Gradient (Phase II Pilot Area)
Mass Based Concentration of Selected Chlorinated Compounds



VM-3D - Cross Gradient (Phase II Pilot Area)
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

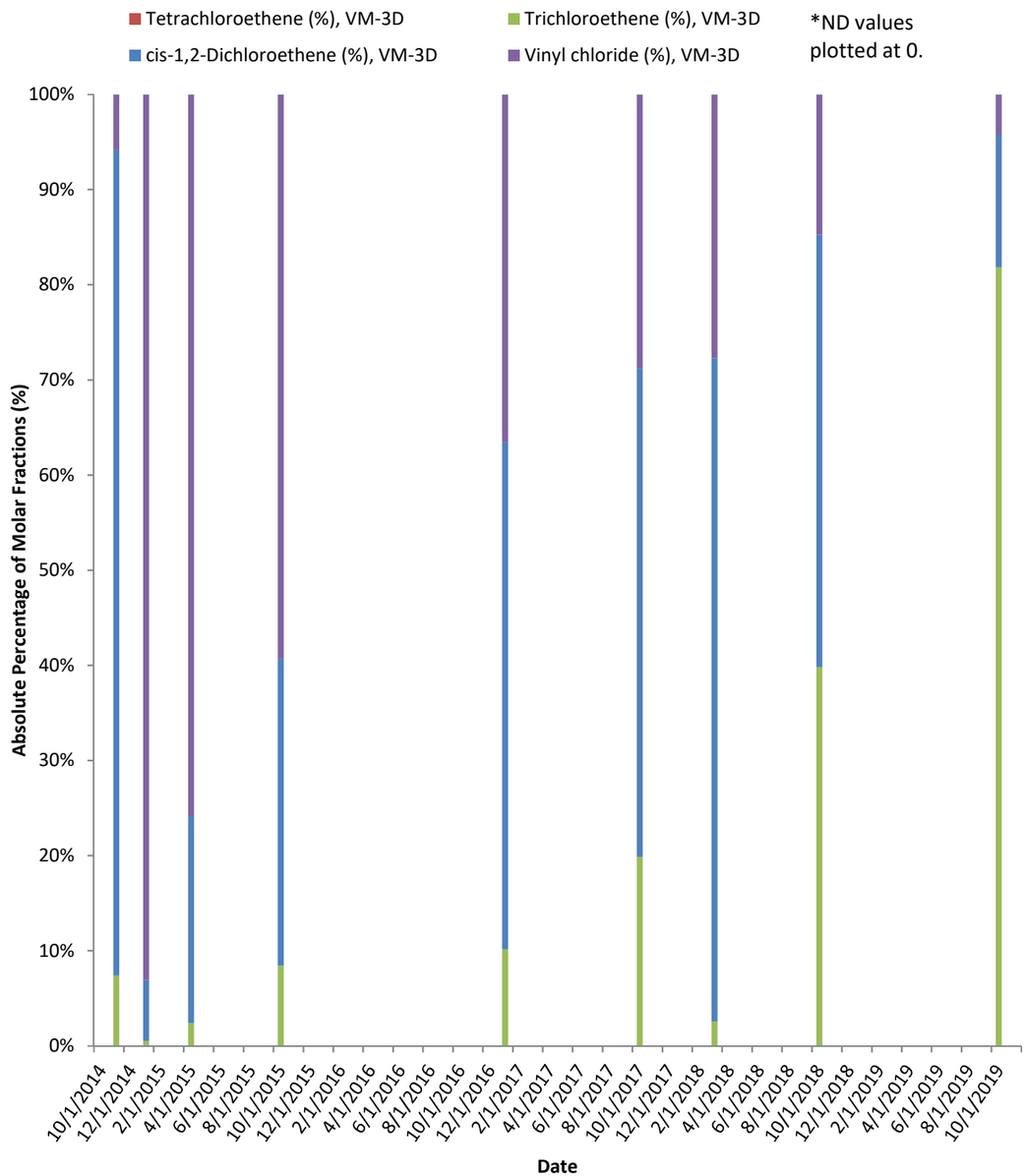
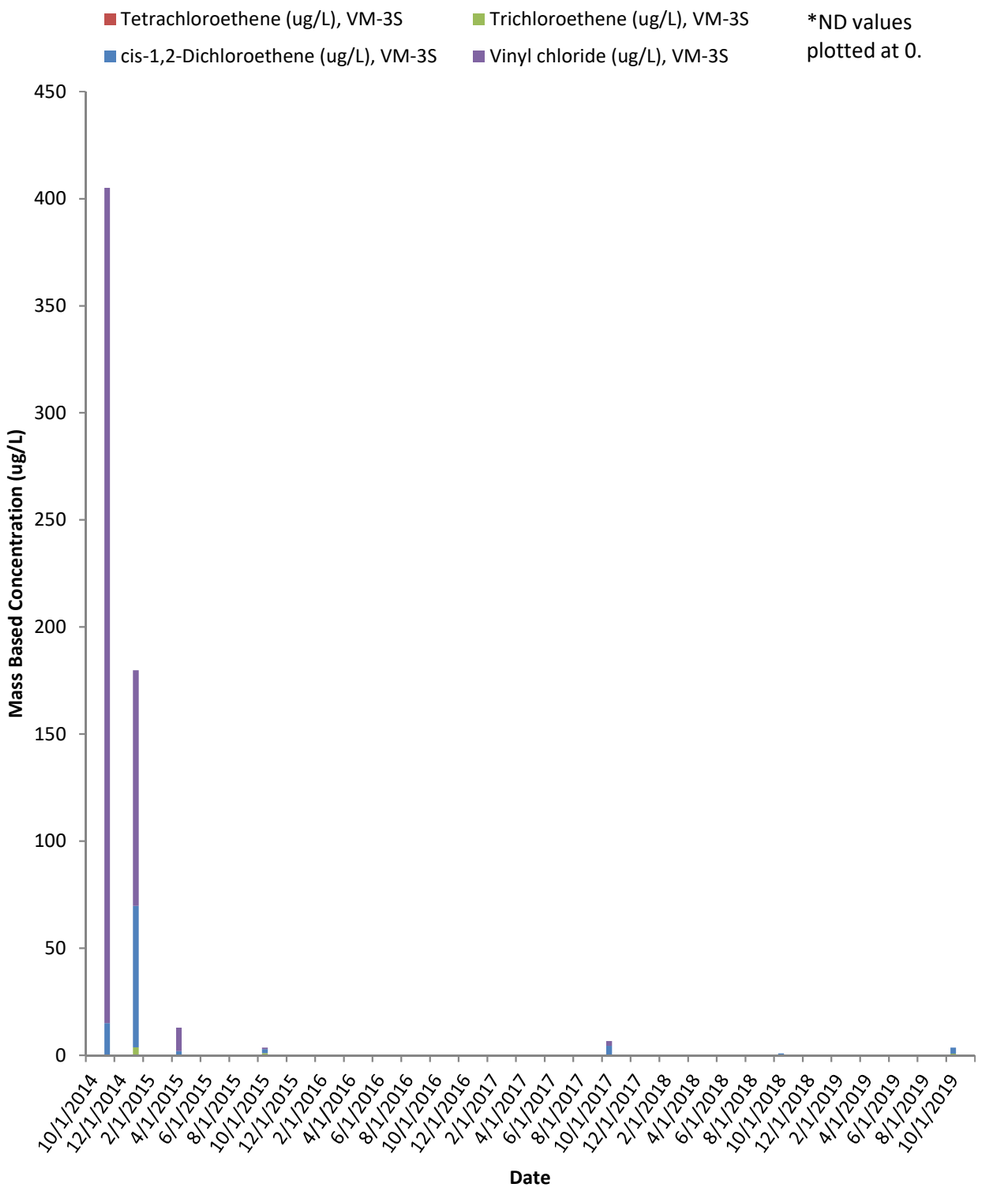


Figure C-17

VM-3S - Cross Gradient (Phase II Pilot Area)
Mass Based Concentration of Selected Chlorinated Compounds



VM-3S - Cross Gradient (Phase II Pilot Area)
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

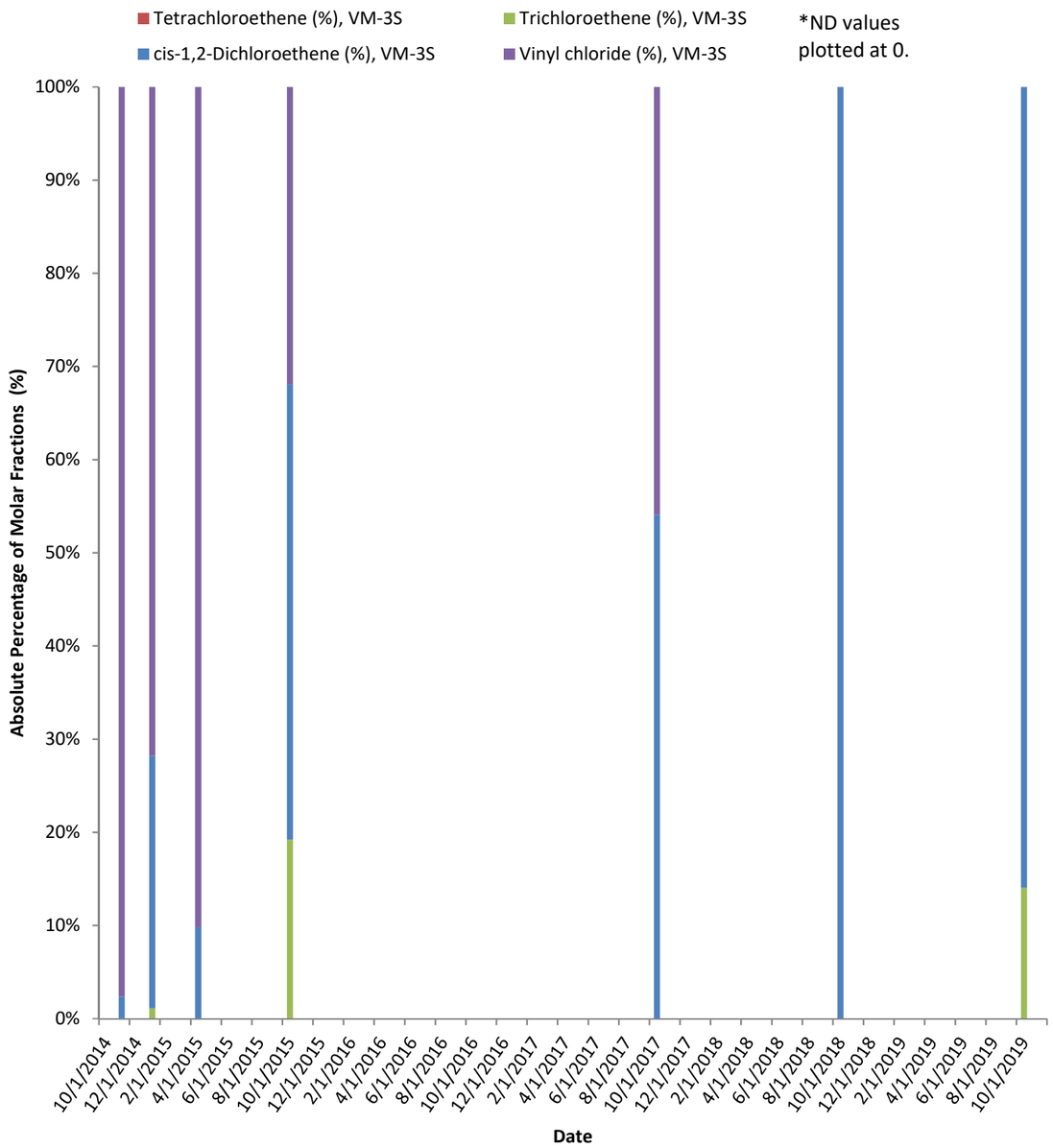
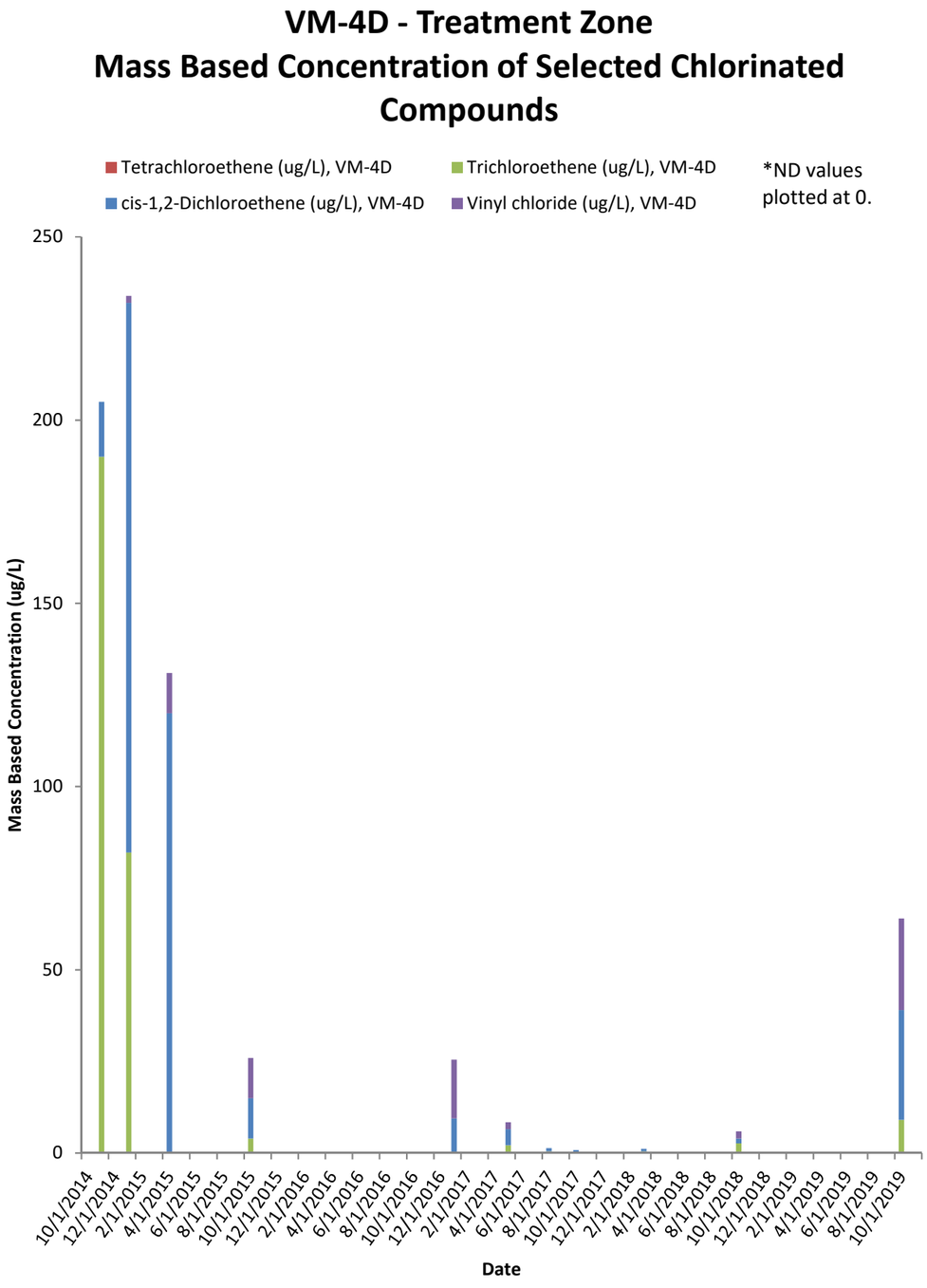


Figure C-18


VM-4D - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds
Tetrachloroethene (ug/L), VM-4D
Trichloroethene (ug/L), VM-4D
cis-1,2-Dichloroethene (ug/L), VM-4D
Vinyl chloride (ug/L), VM-4D
*ND values plotted at 0.
Mass Based Concentration (ug/L)
250
200
150
100
50
0
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

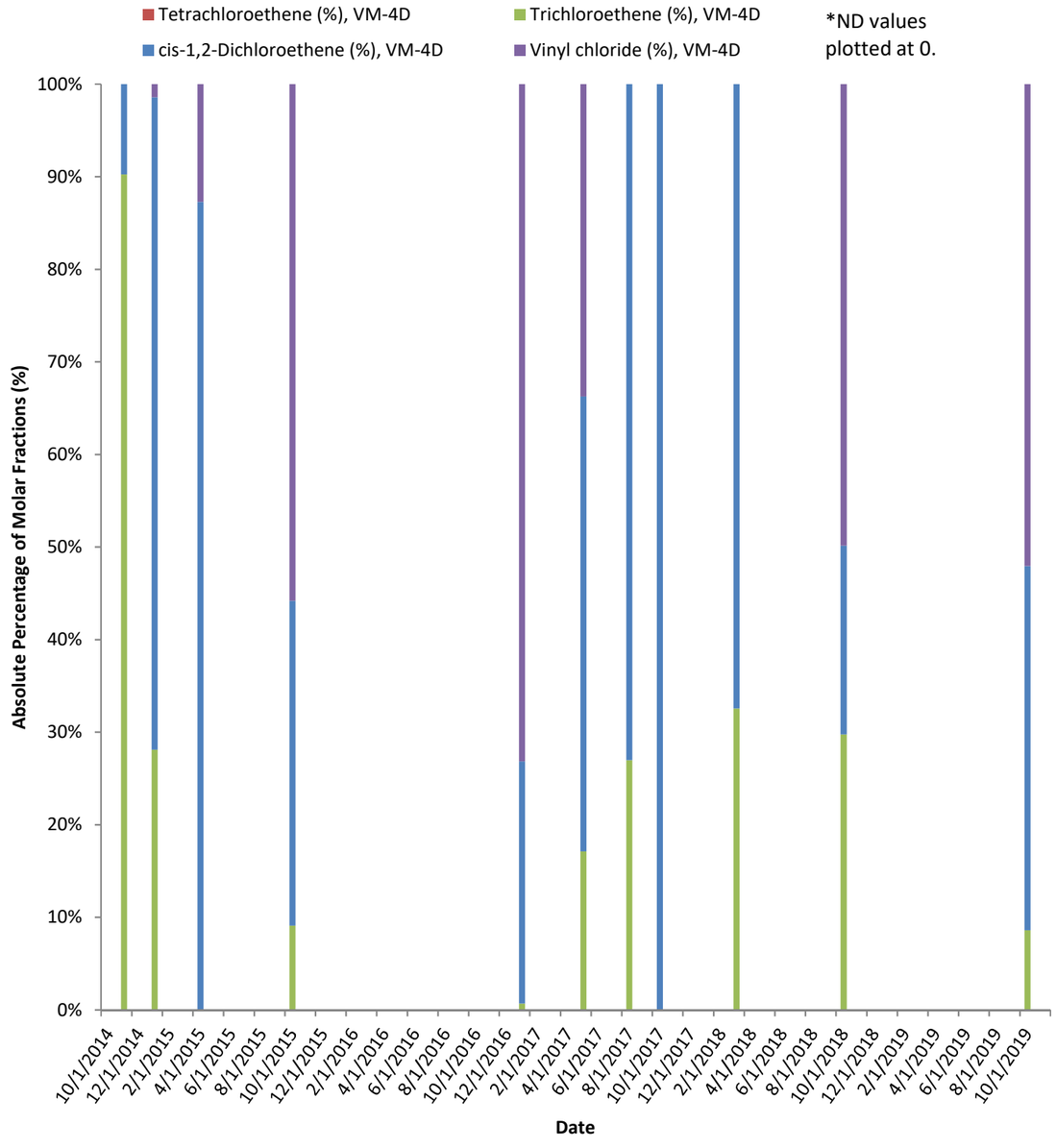
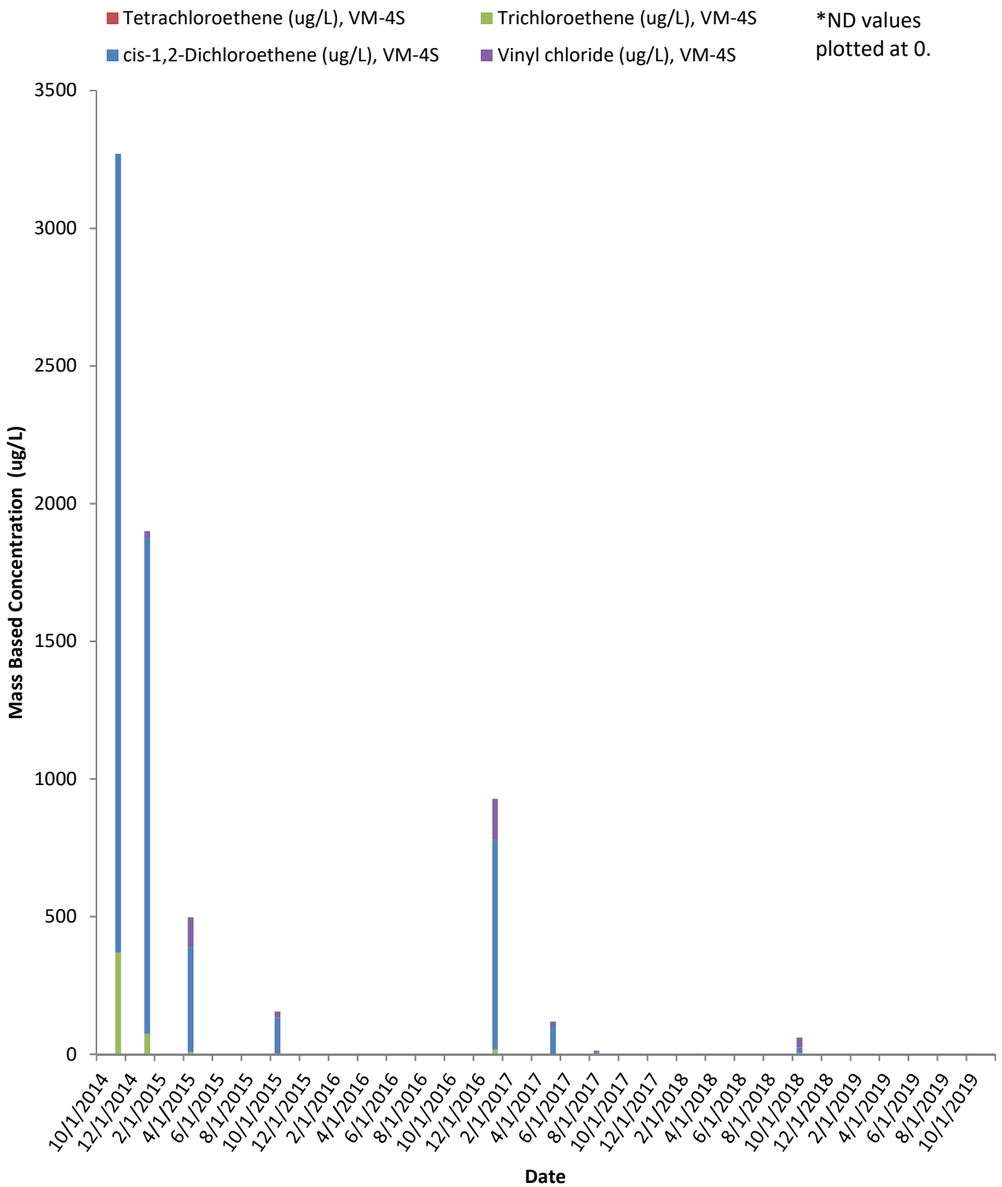

VM-4D - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds
Tetrachloroethene (%), VM-4D
Trichloroethene (%), VM-4D
cis-1,2-Dichloroethene (%), VM-4D
Vinyl chloride (%), VM-4D
*ND values plotted at 0.
Absolute Percentage of Molar Fractions (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

Figure C-19

VM-4S - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



VM-4S - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

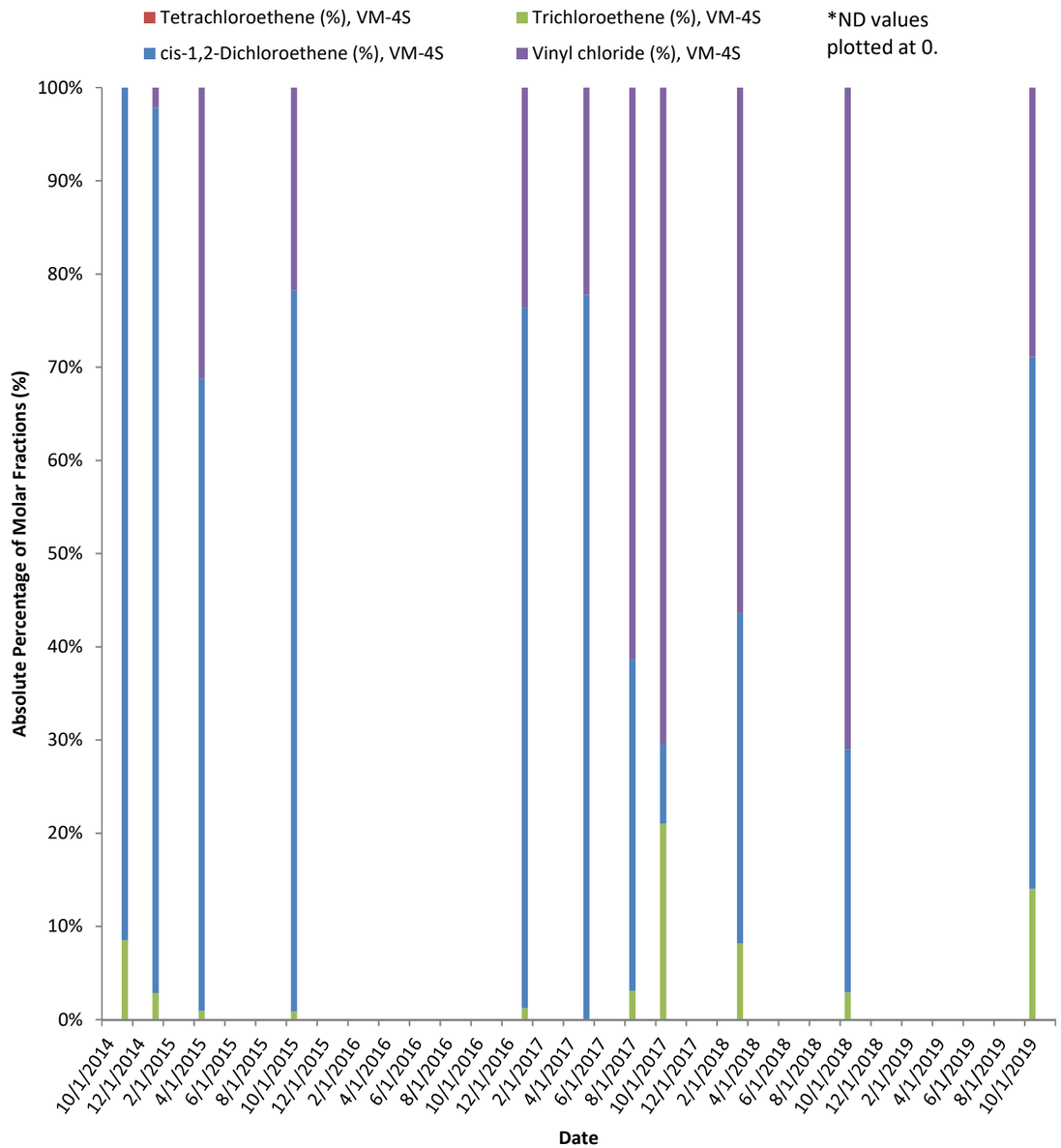
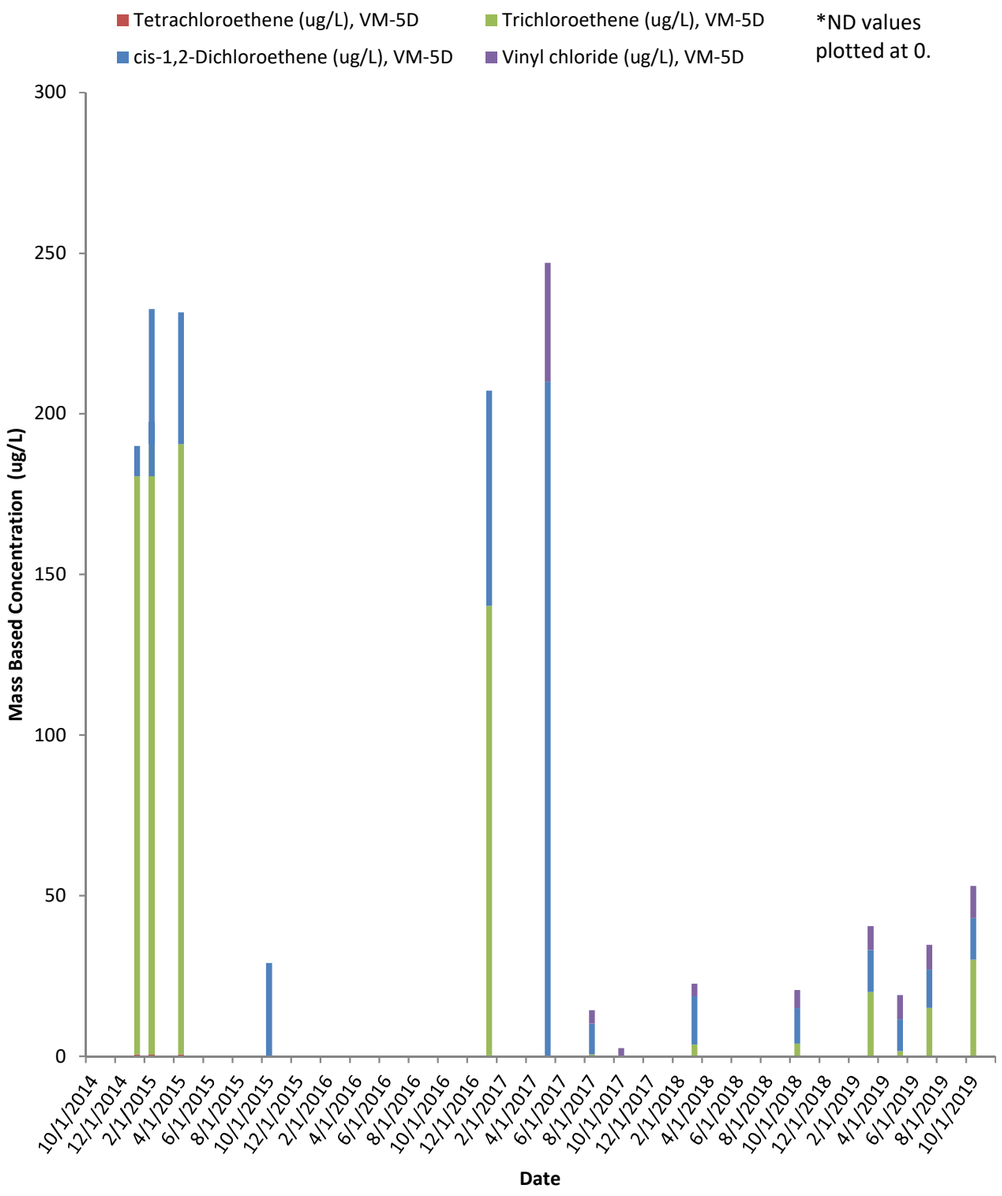


Figure C-20

VM-5D - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



VM-5D - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

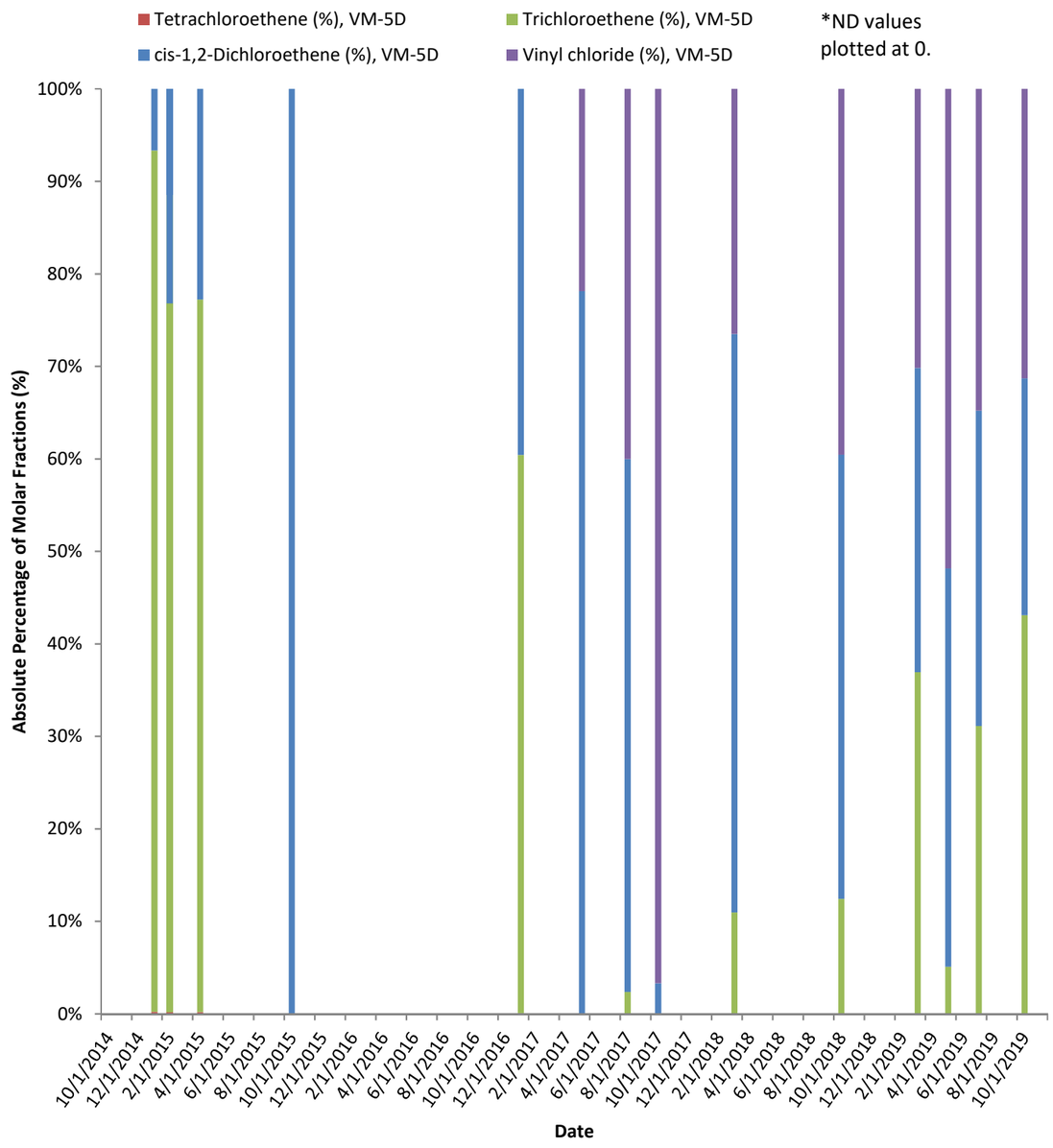
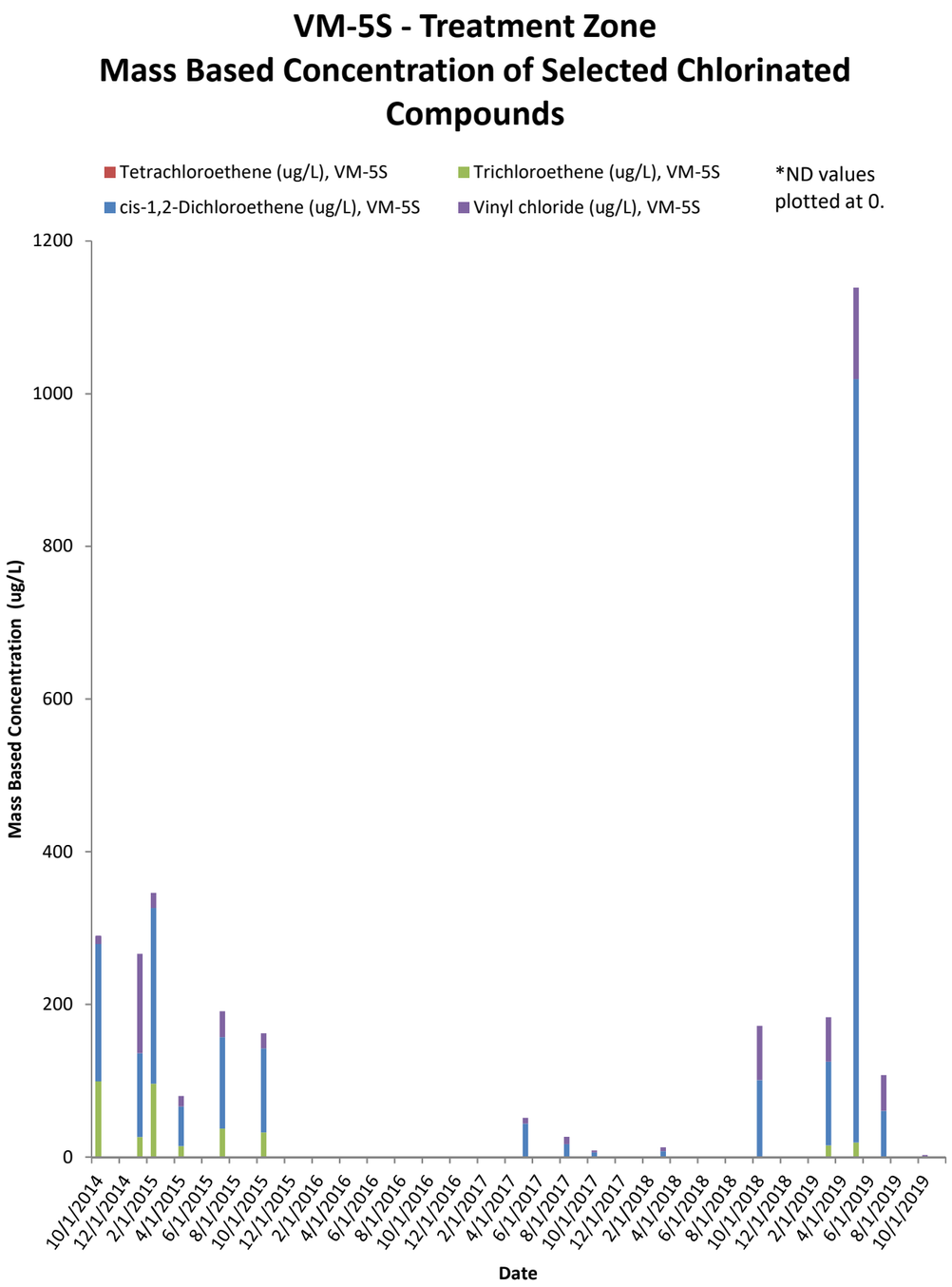


Figure C-21


VM-5S - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds
Tetrachloroethene (ug/L), VM-5S
Trichloroethene (ug/L), VM-5S
cis-1,2-Dichloroethene (ug/L), VM-5S
Vinyl chloride (ug/L), VM-5S
*ND values plotted at 0.
Mass Based Concentration (ug/L)
1200
1000
800
600
400
200
0
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

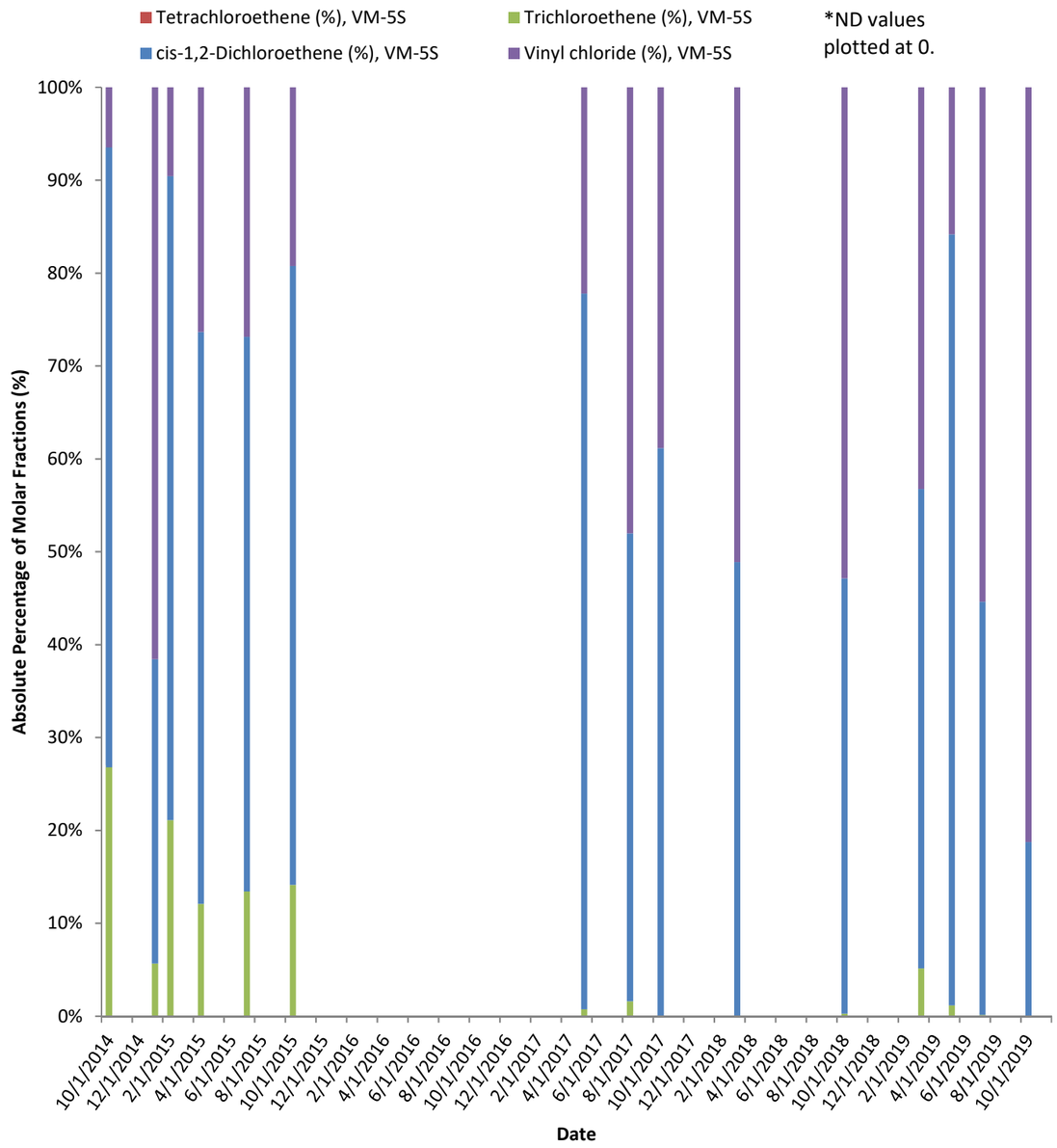
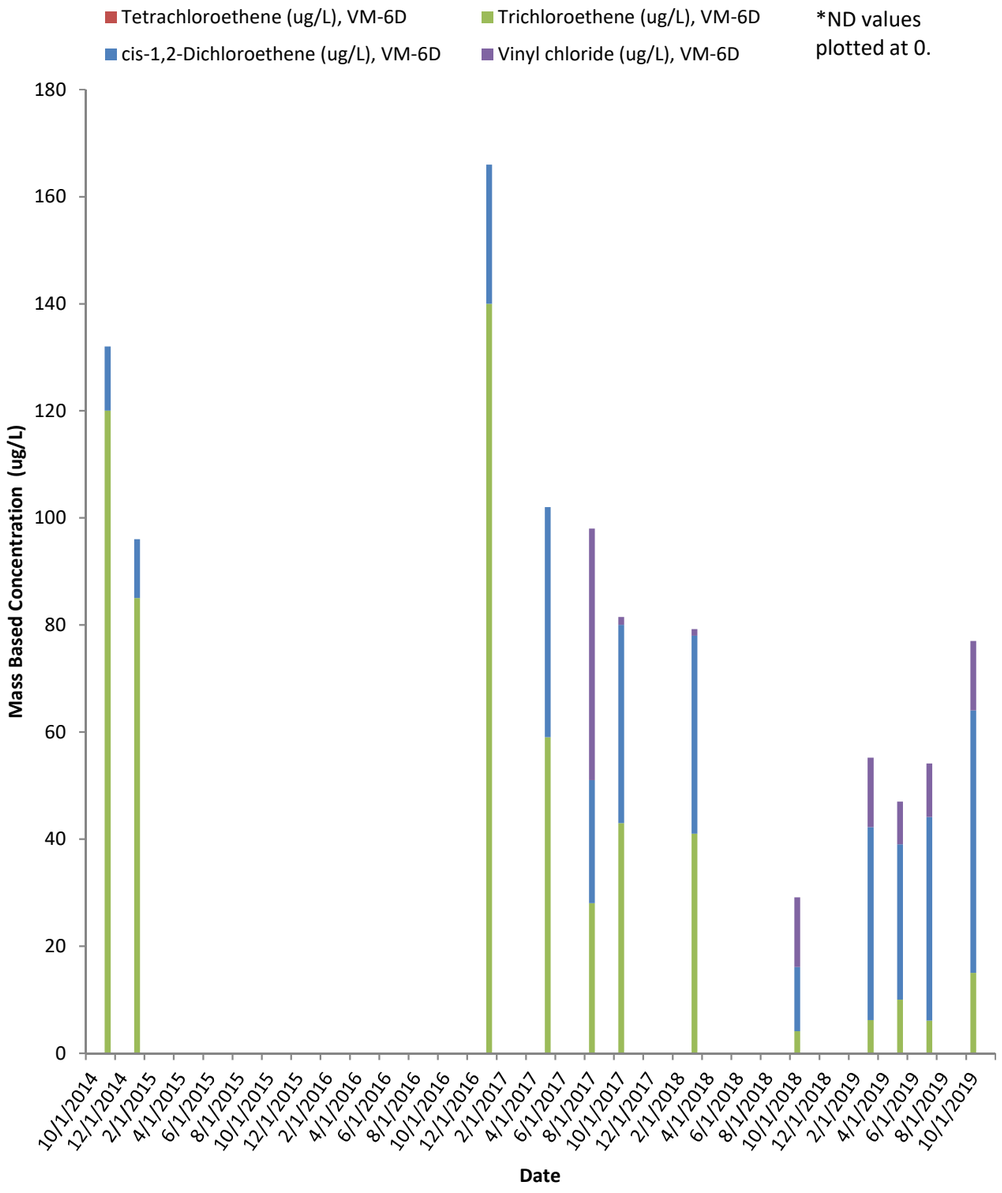

VM-5S - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds
Tetrachloroethene (%), VM-5S
Trichloroethene (%), VM-5S
cis-1,2-Dichloroethene (%), VM-5S
Vinyl chloride (%), VM-5S
*ND values plotted at 0.
Absolute Percentage of Molar Fractions (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

Figure C-22

VM-6D - East Property Line
Mass Based Concentration of Selected Chlorinated Compounds



VM-6D - East Property Line
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

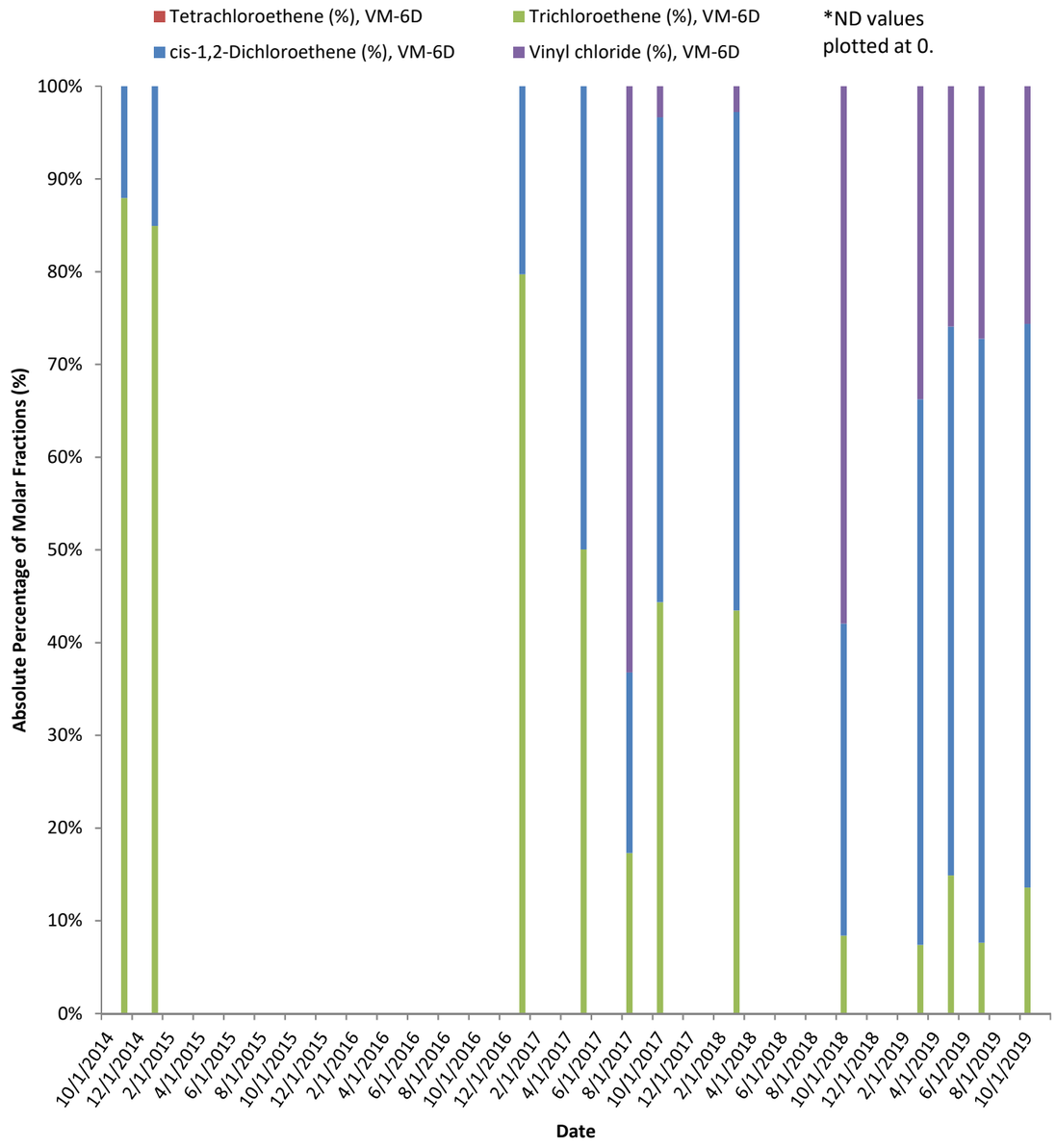
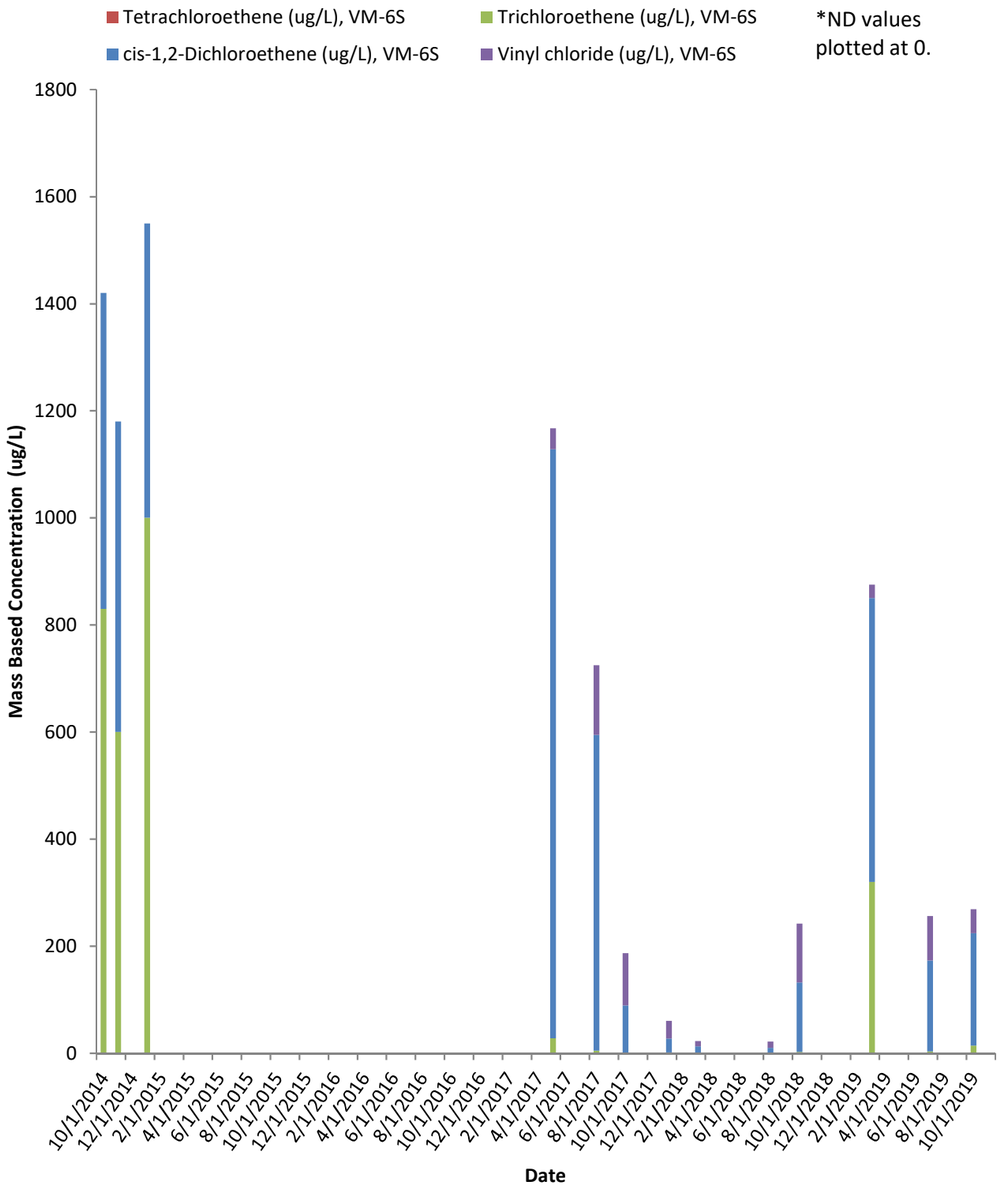


Figure C-23

VM-6S - East Property Line
Mass Based Concentration of Selected Chlorinated Compounds



VM-6S - East Property Line
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

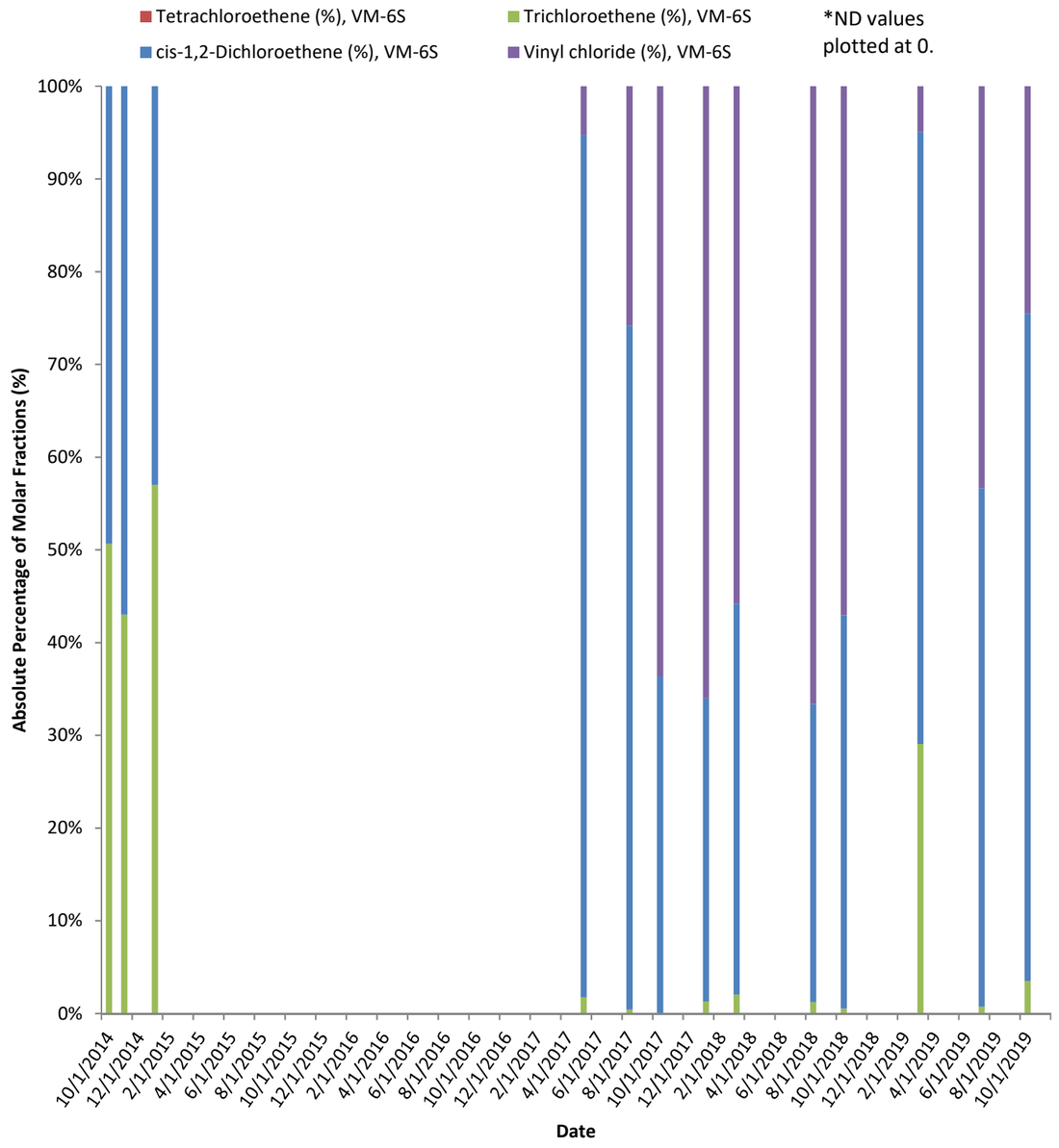
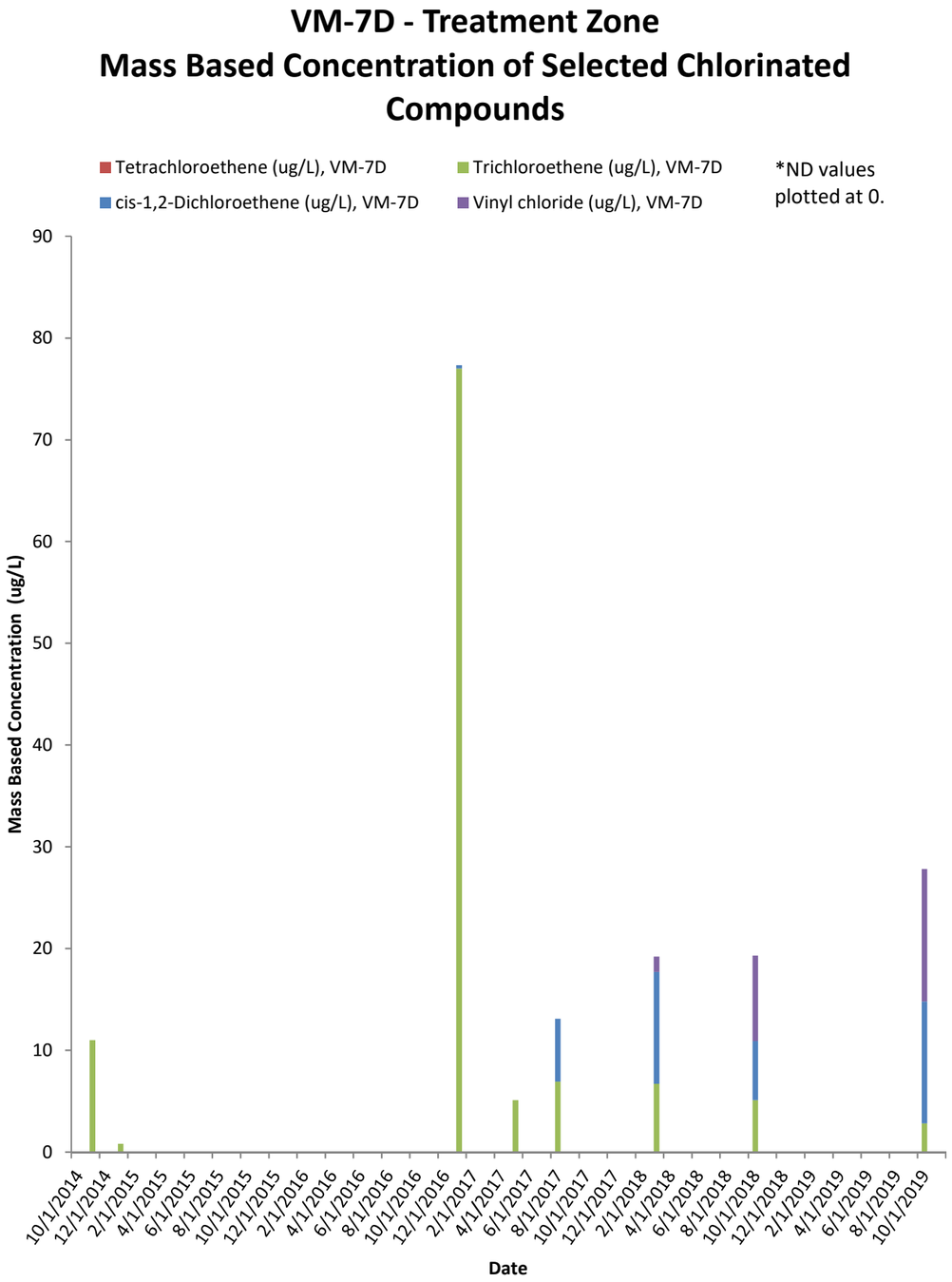


Figure C-24


VM-7D - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds
Tetrachloroethene (ug/L), VM-7D
Trichloroethene (ug/L), VM-7D
cis-1,2-Dichloroethene (ug/L), VM-7D
Vinyl chloride (ug/L), VM-7D
*ND values plotted at 0.
Mass Based Concentration (ug/L)
0
10
20
30
40
50
60
70
80
90
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

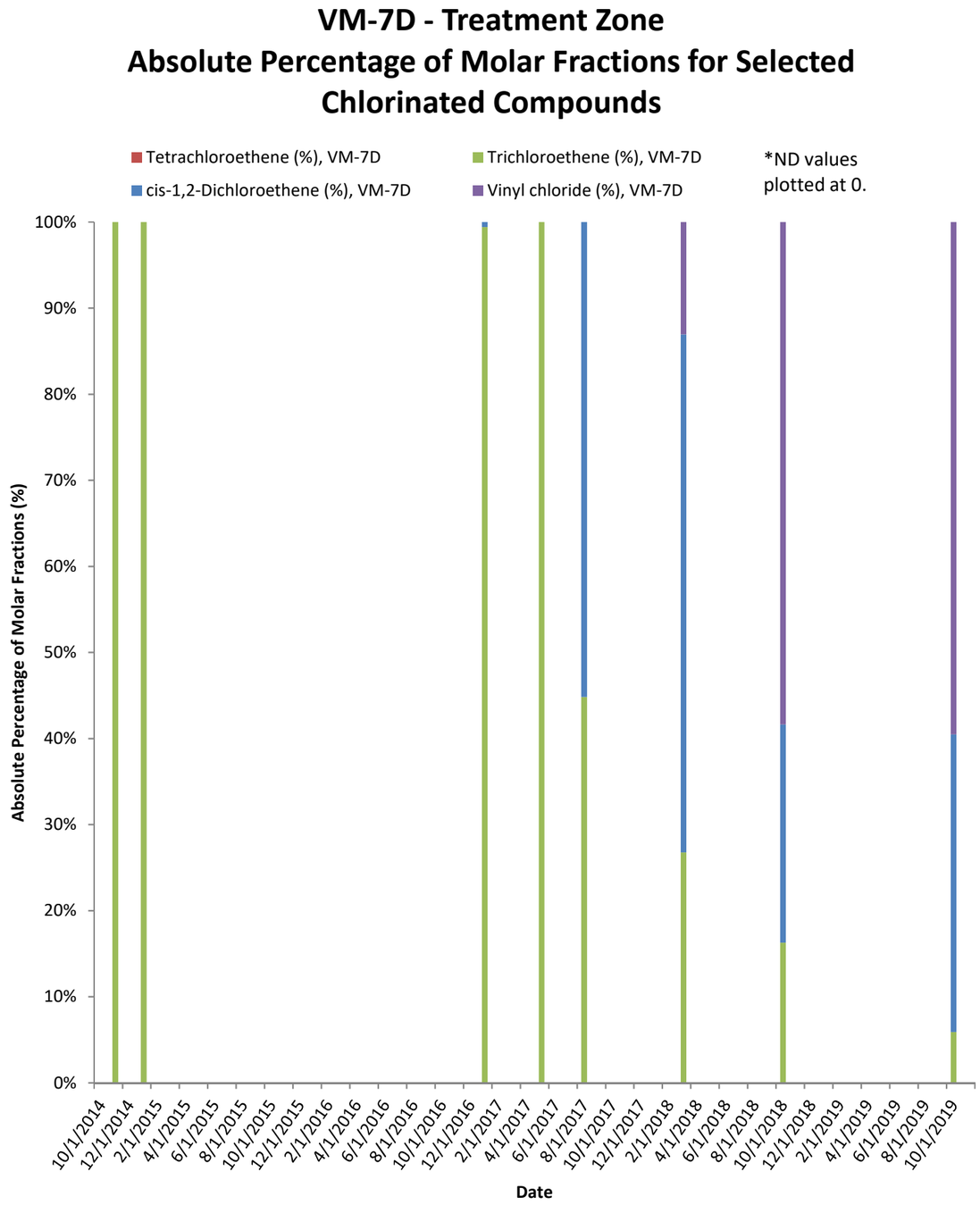
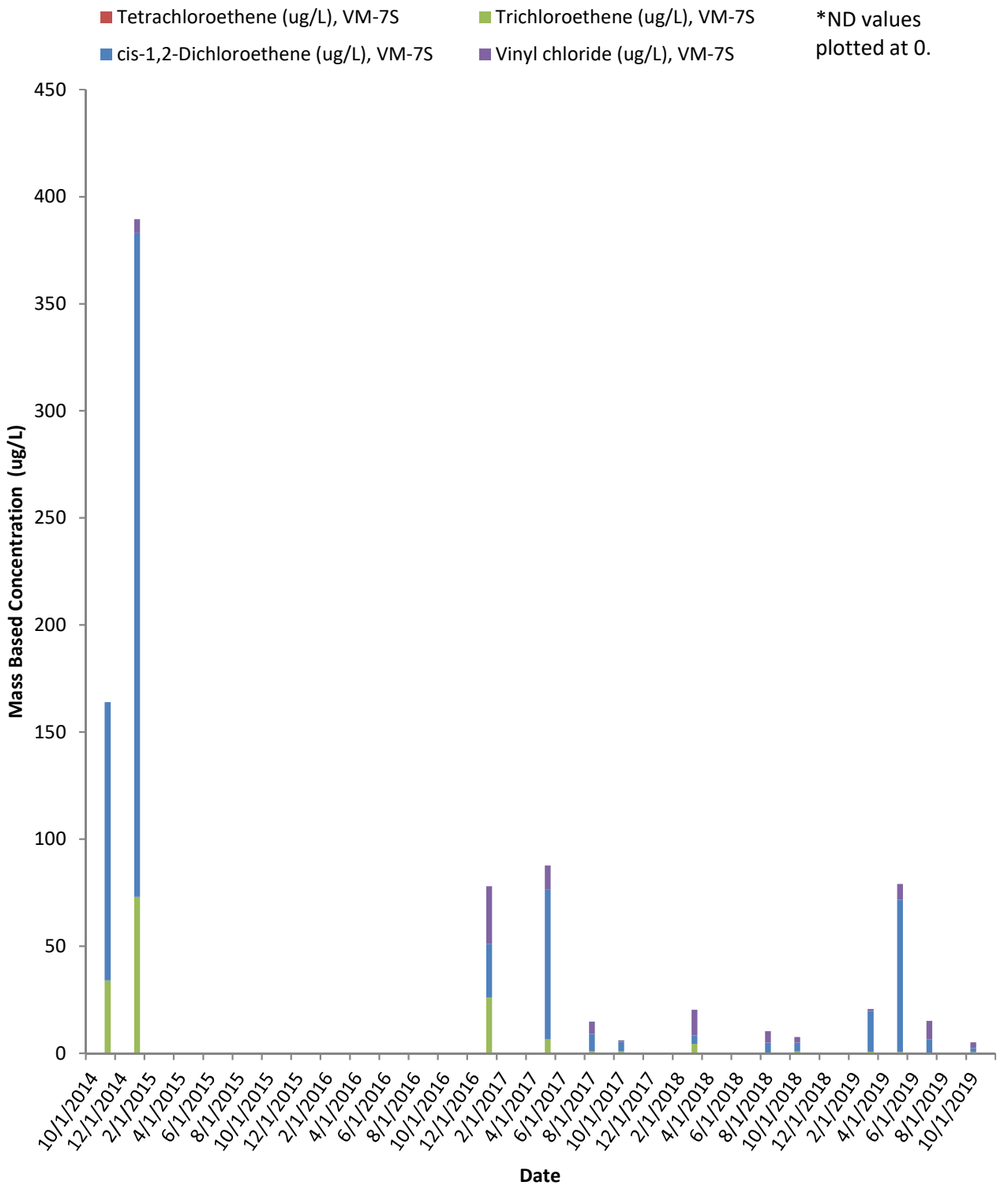

VM-7D - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds
Tetrachloroethene (%), VM-7D
Trichloroethene (%), VM-7D
cis-1,2-Dichloroethene (%), VM-7D
Vinyl chloride (%), VM-7D
*ND values plotted at 0.
Absolute Percentage of Molar Fractions (%)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
10/1/2014
12/1/2014
2/1/2015
4/1/2015
6/1/2015
8/1/2015
10/1/2015
12/1/2015
2/1/2016
4/1/2016
6/1/2016
8/1/2016
10/1/2016
12/1/2016
2/1/2017
4/1/2017
6/1/2017
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
Date

Figure C-25

VM-7S - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



VM-7S - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

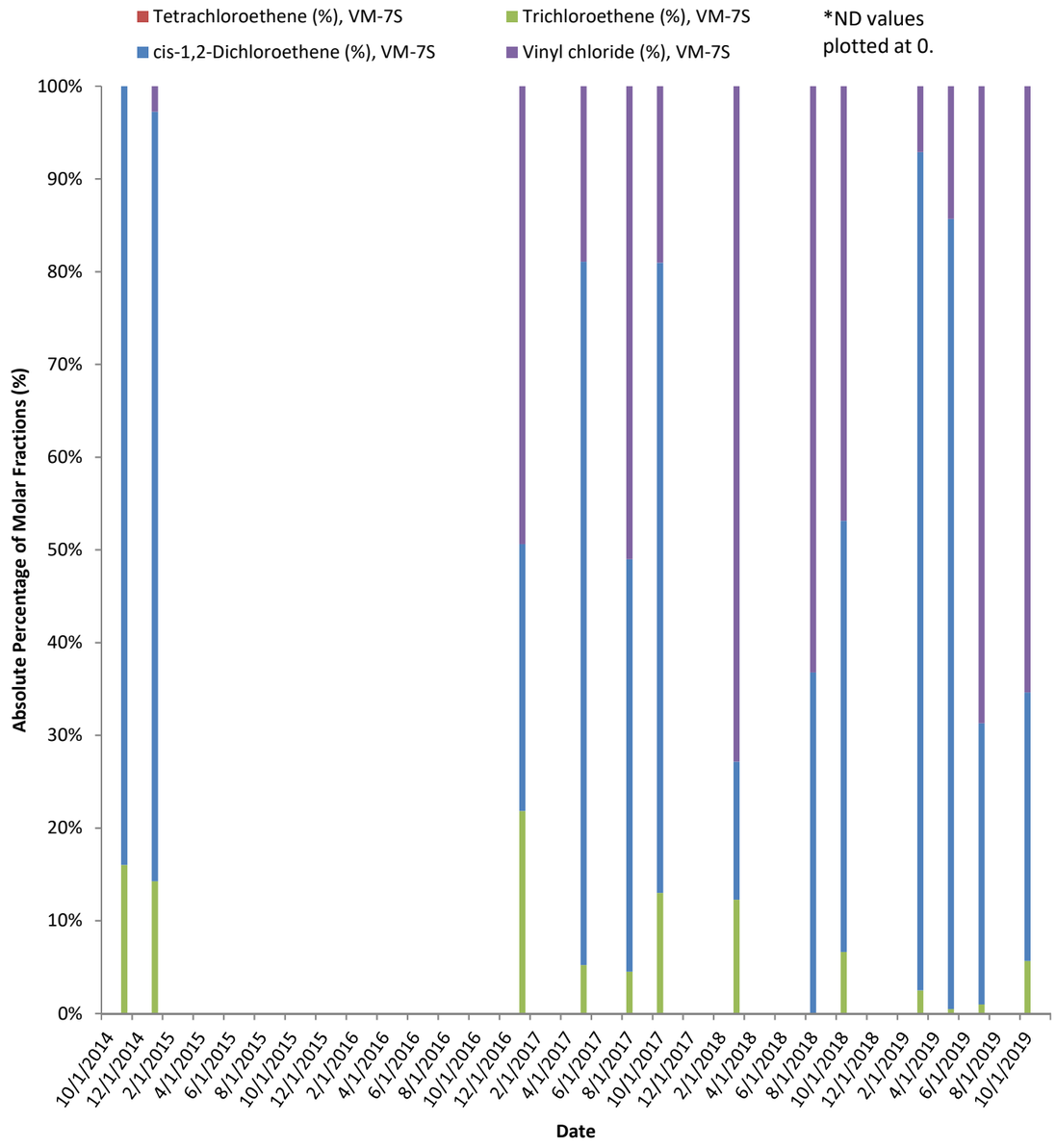
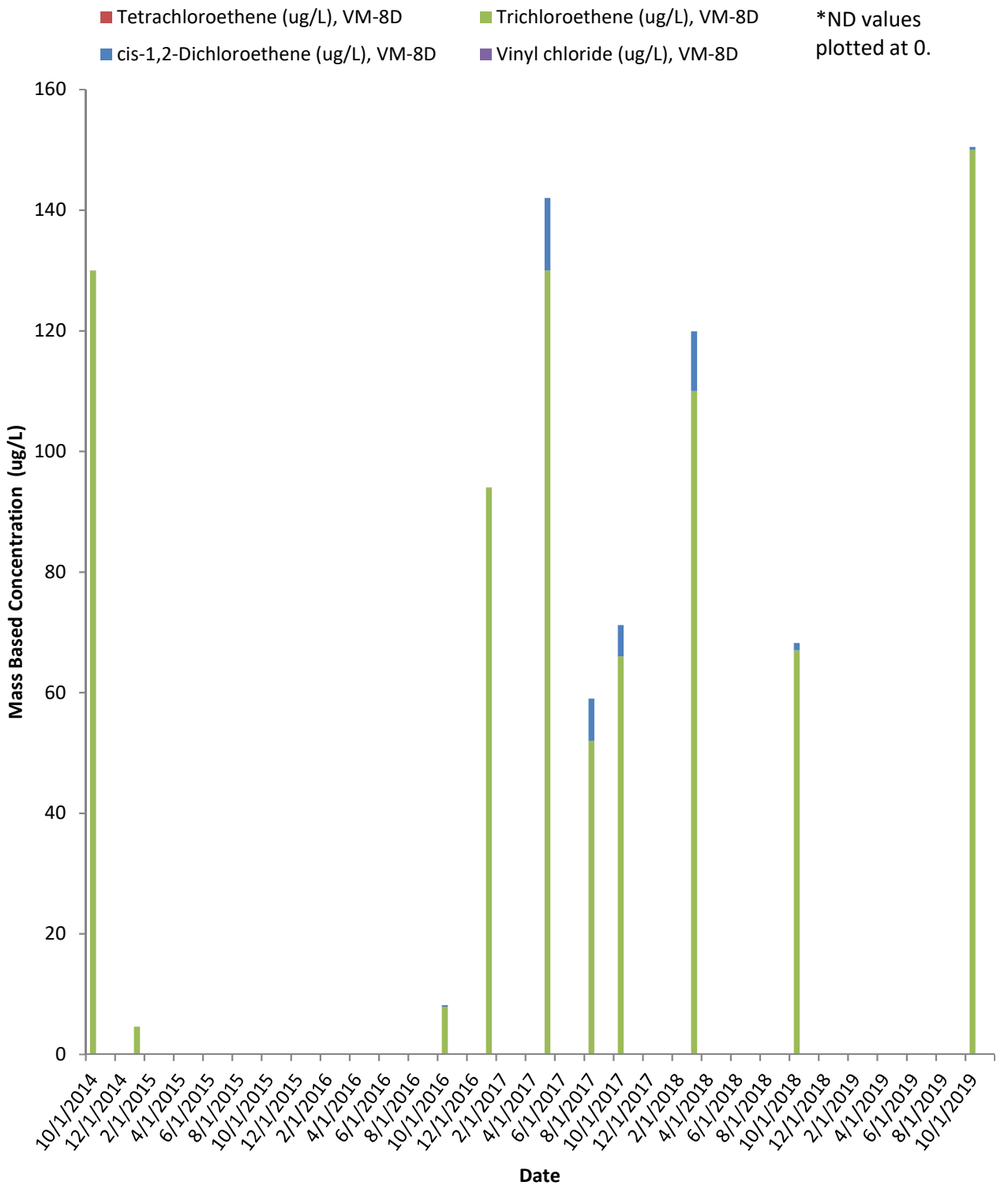


Figure C-26

VM-8D - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



VM-8D - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

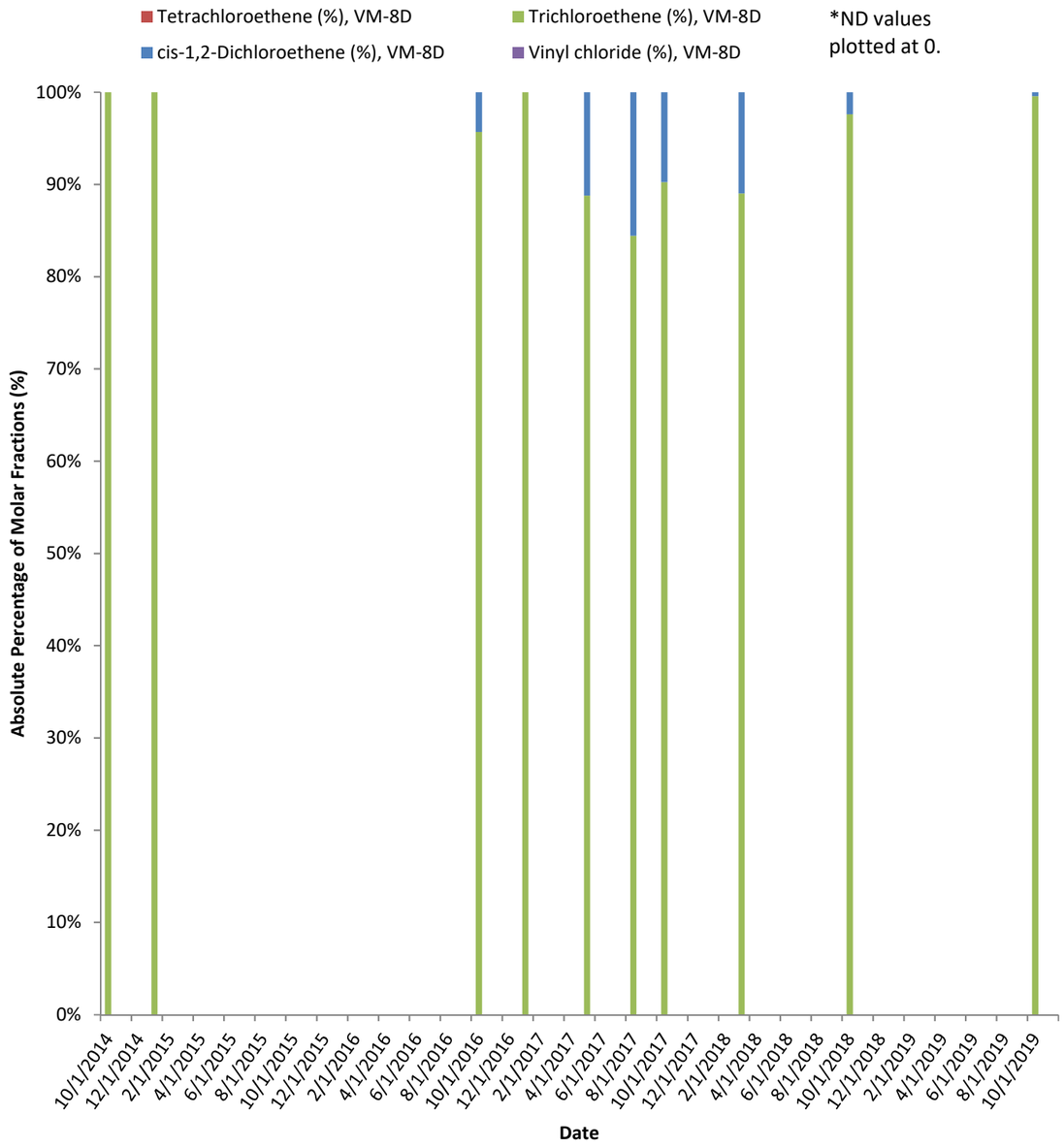
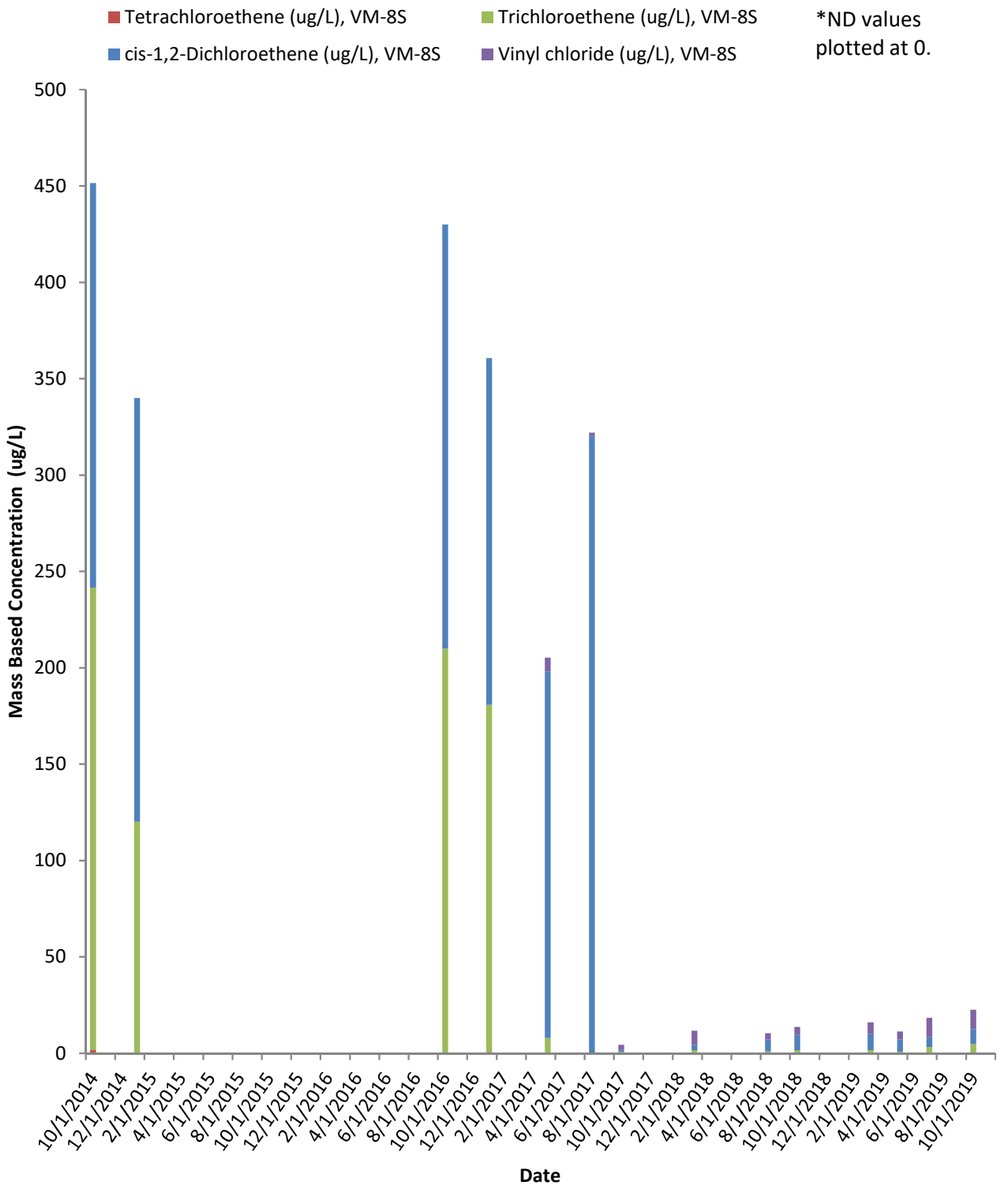


Figure C-27

VM-8S - Treatment Zone
Mass Based Concentration of Selected Chlorinated Compounds



VM-8S - Treatment Zone
Absolute Percentage of Molar Fractions for Selected Chlorinated Compounds

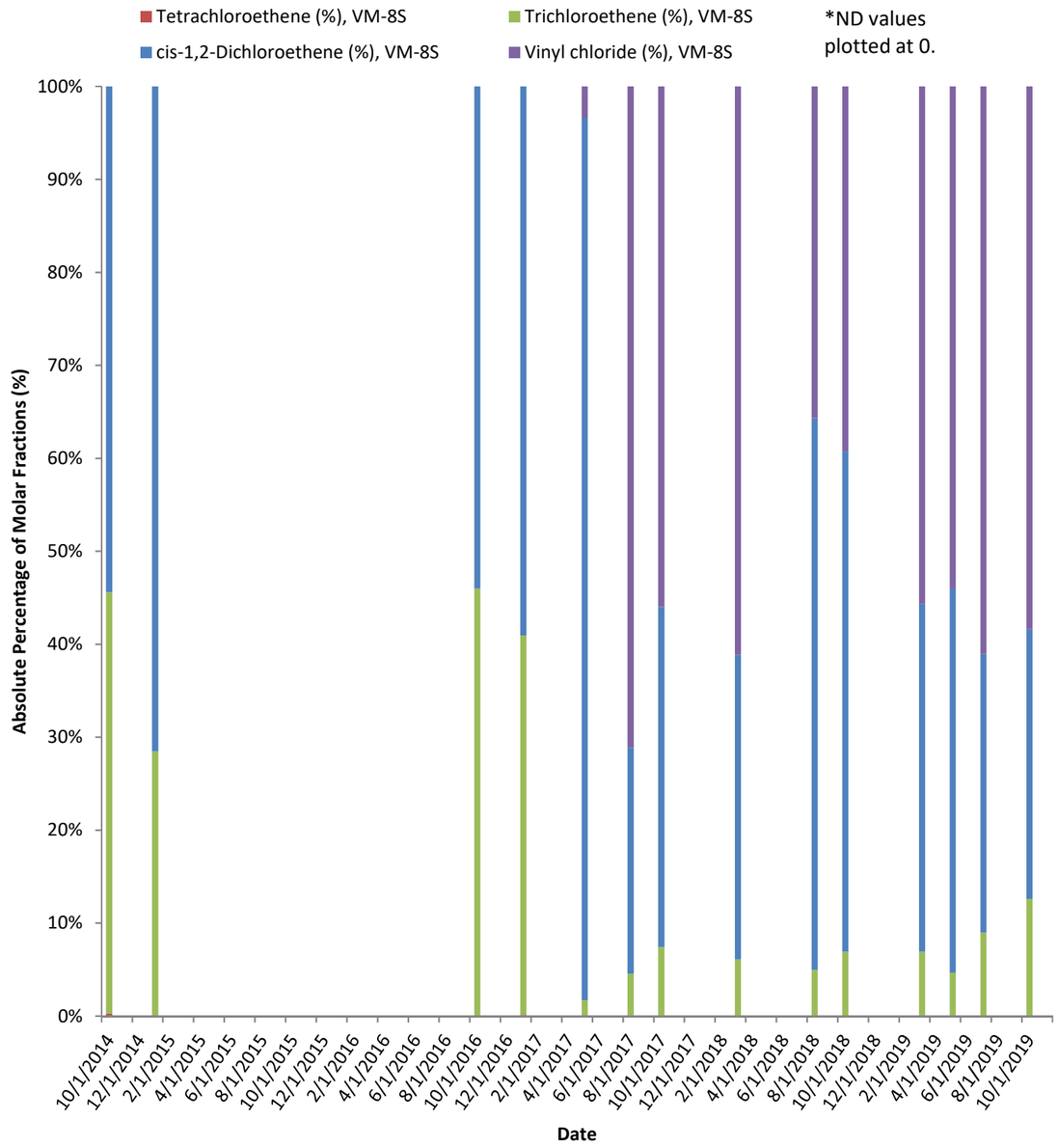


Table C-1
Field Parameters Measured in Groundwater
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	Sample Type	Location Description	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (millivolts)	pH (units)	Specific Conductivity (mS/cm)	Temperature (deg C)	Turbidity (NTU)	Groundwater Quality Notes
2EP	10/9/2014	N	A1	2.62	10	7.08	1.402	21.1	151	
2EP	1/29/2015	N	A1	0.97	-103	6.85	1.078	18.7	47	
2EP	2/27/2015	N	A1	1.88	-71.9	6.96	0.709	18.8	>1,000	
2EP	4/23/2015	N	A1	1.12	-65.2	7.48	0.681	16.61	731	
2EP	7/29/2015	N	A1	0.07	-99.6	7.1	0.722	19	728	
2EP	10/7/2015	N	A1	1.13	-37	6.57	1.059	19	>1,000	
2EP	5/16/2017	N	A1	1.01	-9.9	6.62	1.105	17.3	17	
2EP	6/15/2017	N	A1	1.92	-51.5	6.75	1.382	19.05	NA	
2EP	8/23/2017	N	A1	1.1	180.6	6.45	1.358	19.3	8.0	
2EP	10/13/2017	N	A1	0	-65.7	7.1	1.266	22.9	32	
2EP	1/19/2018	N	A1	2.78	-117.5	6.76	1.917	19.6	281	
2EP	3/1/2018	N	A1	0.93	168.4	6.5	2.938	16	37	
2EP	6/7/2018	N	A1	1.39	-128.7	6.99	1.607	18.62	NA	
2EP	8/9/2018	N	A1	0.25	-44.9	6.79	1.616	21.4	33	
2EP	10/3/2018	N	A1	1.22	93.6	6.21	1.727	19.5	7.0	
2EP	3/19/2019	N	A1	0.43	29.5	6.8	1.448	17.9	4.03	
2EP	5/7/2019	N	A1	0.36	-91.5	6.71	1.373	15.1	10	
2EP	7/9/2019	N	A1	0.43	83.0	6.79	1.877	19.3	5	
2EP	10/3/2019	N	A1	3.26	-73.6	6.76	2.095	19	13	
2EP	10/9/2019	N	A1	0.89	-109.2	6.55	2.449	18.02	6.99	
2EPa	8/28/2014	N	A3	2.52	216	6.61	0.732	23	7.0	
2EPa	10/8/2014	N	A3	3.78	134	8.45	0.748	20.8	8.0	
2EPa	1/29/2015	N	A3	0.79 R	-180 R	6.63 R	3.213 R	16.5 R	>1,000 R	odor, black
2EPa	2/27/2015	N	A3 (62-67 ft)	3.16	-29.3	6.8	1.287	18.8	110	
2EPa	2/27/2015	N	A3 (72-87 ft)	2.22	-57.4	6.75	1.29	18.7	118	
2EPa	4/23/2015	N	A3	3.17	-22.8	7.2	0.539	17.16	142	
2EPa	7/29/2015	N	A3	0.38	-51.8	7.23	0.766	18.7	121	
2EPa	10/7/2015	N	A3	1.61	-52	7.05	0.97	17.6	17	
2EPa	1/5/2017	N	A3	1.18	96.4	6.64	1.044	12.8	23	
2EPa	5/16/2017	N	A3	0.36	-117.8	6.48	1.439	17.5	10	slight odor
2EPa	6/15/2017	N	A3	2.84	-127.9	6.36	1.718	18.93	NA	
2EPa	8/23/2017	N	A3	2.24	-87.5	6.57	2.237	19.7	54	
2EPa	3/1/2018	N	A3	0.82	19.1	6.05	0.981	17.6	17	
2EPa	10/5/2018	N	A3	1.22	-92	6.49	1.723	19.2	12	
2EPa	3/19/2019	N	A3	1.80	6.91	6.58	1.622	18.1	6.25	
2EPa	5/7/2019	N	A3	0.36	-15.2	7.01	2.163	19.2	290	
2EPa	7/9/2019	N	A3	0.60	113.9	6.85	1.514	20.7	18	
2EPa	10/3/2019	N	A3	1.23	74.3	6.45	1.44	18	48	

Table C-1
Field Parameters Measured in Groundwater
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	Sample Type	Location Description	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (millivolts)	pH (units)	Specific Conductivity (mS/cm)	Temperature (deg C)	Turbidity (NTU)	Groundwater Quality Notes
4BP	10/8/2014	N	A1	0.89	100	7.3	1.186	21.4	>1,000	
4BP	4/23/2015	N	A1	1.75	-10.1	7.5	0.981	19.09	45	
4BP	10/8/2015	N	A1	3.65	-5.0	6.82	1.222	22.8	9.44	
4BP	1/5/2017	N	A1	1.63	151.8	6.64	0.837	13.5	17	
4BP	5/16/2017	N	A1	0.10	-3.8	4.99	7.337	20.1	>1000	white, odor
4BP	8/24/2017	N	A1	0.67	-18.6	4.95	6.17	24.2	187	white, odor
4BP	10/13/2017	N	A1	0	-66.1	5.78	5.12	14	>1000	
4BP	1/19/2018	N	A1	0.49	-157	6.74	2.535	15.3	>1000	
4BP	3/1/2018	N	A1	0.65	-131.5	6.69	2.869	18.3	>1000	white, odor
4BP	8/9/2018	N	A1	0.29	-190.1	6.98	3.238	22.5	179	
4BP	10/3/2018	N	A1	0.45	-126.3	6.48	2.801	20.5	134	
4BP	3/18/2019	N	A1	4.05	-32.7	6.59	1.64	21.0	14.6	
4BP	5/7/2019	N	A1	0.79	-141.0	6.67	2.008	23.7	52	
4BP	7/9/2019	N	A1	0.63	-99.8	6.41	1.84	19.5	13	
4BP	10/4/2019	N	A1	0.33	-22	6.44	1.805	21.1	46	
G-1A	8/28/2014	N	A3	2.53	115	7.13	0.654	20.4	184	
G-1A	10/9/2014	N	A3	3.24	50	7.8	0.686	17.8	156	
G-1A	1/29/2015	N	A3	1.16	58	6.95	1.152	17.5	258	
G-1A	2/27/2015	N	A3	1.48	139.5	6.79	1.01	18	33	
G-1A	4/23/2015	N	A3	7.75	60.7	6.47	0.971	19	48	
G-1A	10/7/2015	N	A3	2.42	-53	7.44	0.757	22.1	17	
G-1A	3/2/2018	N	A3	1.35	258.8	6.86	0.831	16.5	12	
G-1A	10/16/2018	N	A3	3.07	211	7.23	0.8769	18.9	17.5	
G-1A	10/4/2019	N	A3	NA	44.7	7.87	0.446	19.6	37	
H-1A	10/9/2014	N	A3	3.34	95	7.74	0.678	29.2	19	
H-1A	1/29/2015	N	A3	1.0	143	7.47	0.854	22.2	19	
H-1A	4/23/2015	N	A3	6.9	40.9	6.52	1.228	20.2	23	
H-1A	10/7/2015	N	A3	1.82	8.0	7.36	0.952	20.6	6.0	
H-1A	1/4/2017	N	A3	1.86	133.1	6.69	1.188	15.9	17	
H-1A	5/18/2017	N	A3	0.96	1.9	6.77	0.906	24.1	12	
H-1A	8/23/2017	N	A3	3.04	-2.6	6.95	0.949	23	54	
H-1A	3/2/2018	N	A3	1.09	-9.6	6.66	1.174	17.5	7.0	
H-1A	6/7/2018	N	A3	0.93	-24.1	7.14	0.868	18.17	NA	
H-1A	10/3/2018	N	A3	1.36	14.7	6.56	0.909	24.3	4	
H-1A	10/9/2019	N	A3	NA	89	7.08	0.973	18.2	8	
HMSA-1S	1/5/2017	N	A2/A3	2.07	168.5	6.97	1.178	15.7	15	
HMSA-1S	5/17/2017	N	A2/A3	0.55	-19.1	7.01	1.171	18.4	4.0	
HMSA-1S	8/24/2017	N	A2/A3	3.9	12.8	7.06	0.986	20	16	
HMSA-1S	3/2/2018	N	A2/A3	0.82	325	6.81	1.038	16.9	5.0	

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HMSA-1S	10/1/2018	N	A2/A3	3.39	16.9	6.48	1.085	22.7	6.0	
HMSA-1S	10/4/2019	N	A2/A3	NA	76	6.92	1.109	17.3	13	
LF-13A	8/28/2014	N	A1	Insufficient water for parameter measurements						
LF-13A	11/25/2014	N	A1	Insufficient water for parameter measurements						
LF-13A	3/2/2018	N	A1	0.82	-107.1	6.82	0.961	16.2	4.0	
LF-13A	10/18/2018	N	A1	2.18	118.8	6.86	1.32	18.8	10.2	
LF-13A	3/18/2019	N	A1	2.04	96.7	7.03	1.337	24.0	14.8	
LF-13A	5/7/2019	N	A1	0.95	-179.0	7.02	1.44	20.7	25	
LF-13A	7/10/2019	N	A1	1.37	176.6	6.98	1.497	19.9	9	
LF-13A	10/3/2019	N	A1	4.08	-114.5	7.04	1.535	20.4	12	
LF-2A	4/23/2015	N	A4	1.21	-119	6.98	0.628	19.4	11	
LF-2A	10/6/2015	N	A4	1.78	-222	7.46	0.605	19.66	3.0	
LF-6A	10/9/2014	N	A4	3.75	112	7.74	0.662	22.7	34	
LF-6A	11/26/2014	N	A4	2.61	140	7.18	0.701	20.2	3.0	
LF-6A	1/29/2015	N	A4	2.09	130	8.15	0.606	21.9	57	
LF-6A	4/23/2015	N	A4	7.08	159.7	6.5	0.802	18.6	20	
LF-6A	7/29/2015	N	A4	2.97	75.8	6.71	0.601	19.2	8.0	
LF-6A	10/7/2015	N	A4	2.53	4.0	7.46	0.755	20.6	3.0	
LF-6A	1/4/2017	N	A4	1.87	192.1	6.22	0.839	17.7	6.0	
LF-6A	5/16/2017	N	A4	4.7	-6.8	7.17	0.786	18.8	7.0	
LF-6A	8/23/2017	N	A4	2.27	-69.1	7.2	0.818	19.9	2.0	
LF-6A	3/2/2018	N	A4	4.53	-66.9	7.19	0.787	14.5	14	
LF-6A	10/1/2018	N	A4	1.37	166.6	6.68	0.75	20.8	26	
LF-6A	10/4/2019	N	A4	NA	161	6.95	0.796	17.5	2	
MW-01A1	8/28/2014	N	A1	NM	NM	NM	NM	NM	NM	
MW-01A1	10/9/2014	N	A1	1.59	136	7.7	1.514	20.4	34	
MW-01A1	11/25/2014	N	A1	0.62	13	7.37	1.445	17.6	NA	
MW-01A1	1/29/2015	N	A1	2.54	-6.0	7.18	1.582	16.5	531	
MW-01A1	4/23/2015	N	A1	2.21	23.8	7.36	0.615	18.34	NA	
MW-01A1	10/7/2015	N	A1	1.92	17	7.47	1.436	18.9	NA	
MW-01A1	5/16/2017	N	A1	0.35	-65.8	6.95	1.39	19.2	249	
MW-01A1	8/23/2017	N	A1	0.68	-79.4	6.75	1.243	21.2	48	
MW-01A1	1/19/2018	N	A1	2.27	-56.4	6.73	1.641	17.3	68	
MW-01A1	3/2/2018	N	A1	0.81	-110.9	6.24	3.381	14.5	156	strong odor
MW-01A1	8/9/2018	N	A1	1.41	100.3	6.61	2.076	22.6	33	
MW-01A1	10/2/2018	N	A1	0.83	-35.2	6.76	1.923	26.3	17	
MW-01A1	3/19/2019	N	A1	6.78	40.4	7.08	1.539	17.7	22.8	
MW-01A1	5/7/2019	N	A1	0.28	-50.6	6.6	1.797	15.2	7	
MW-01A1	7/9/2019	N	A1	3.74	89.0	6.73	1.703	20.2	16	

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MW-01A1	10/3/2019	N	A1	0.22	-6.1	6.24	1.892	21.1	5	
MW-01A3	8/28/2014	N	A3	2.88	49	7.92	0.732	20.9	728	
MW-01A3	11/25/2014	N	A3	1.73	-113	6.98	0.823	15.19	119	
MW-01A3	1/29/2015	N	A3	1.49	-46	6.36	1.027	16.8	>1,000	
MW-01A3	4/23/2015	N	A3	1.99	-76.9	6.96	0.964	18.83	>1,000	odor, black
MW-01A3	10/7/2015	N	A3	0.95	-53	7.05	0.885	18.9	>1,000	
MW-01A3	1/4/2017	N	A3	0.36	210.1	6.78	0.656	16.9	32	
MW-01A3	5/16/2017	N	A3	0.36	-79.6	6.77	1.349	18.9	40	
MW-01A3	8/23/2017	N	A3	0.64	9.7	6.89	0.927	21	18	
MW-01A3	3/2/2018	N	A3	1.47	-136.8	6.85	1.049	12.9	39	
MW-01A3	10/16/2018	N	A3	2.12	-84	6.91	0.949	20	8.19	
MW-01A3	10/4/2019	N	A3	1.30	-17	6.51	0.891	17.6	8	
MW-02A1	8/28/2014	N	A1	Insufficient water for parameter measurements						
MW-02A1	11/25/2014	N	A1	Insufficient water for parameter measurements						
MW-02A1	1/29/2015	N	A1	0.39	29	7.04	0.462	20	20	
MW-02A1	4/23/2015	N	A1	3.42	539	6.89	0.652	19.6	>1,000	
MW-02A1	10/7/2015	N	A1	1.52	-8.0	7.63	1.223	20.8	>1,000	
MW-02A1	5/17/2017	N	A1	0.17	-72.4	6.48	1.421	23.1	19	
MW-02A1	6/15/2017	N	A1	3.8	-73.4	6.67	1.646	19.78	NA	
MW-02A1	8/24/2017	N	A1	1.49	-107.8	6.45	1.838	20.9	14	
MW-02A1	1/19/2018	N	A1	2.16	-62.1	6.65	1.979	17.8	78	
MW-02A1	3/2/2018	N	A1	0.87	139.9	5.96	4.067	16.8	71	
MW-02A1	6/7/2018	N	A1	1.57	-115.1	6.89	2.334	19.13	NA	
MW-02A1	10/2/2018	N	A1	0.77	-97.8	6.17	2.441	26.5	17	
MW-02A1	3/19/2019	N	A1	3.76	18.6	6.79	1.63	18.4	18.6	
MW-02A1	5/7/2019	N	A1	0.15	-99.0	6.64	2.356	20.8	38	
MW-02A1	7/9/2019	N	A1	0.34	137.6	6.58	0.02498	20.0	10	
MW-02A1	10/4/2019	N	A1	0.37	-19.9	6.4	2.532	20.1	7	
MW-03A3	8/28/2014	N	A3	2.97	140	7.56	0.712	21.2	84	
MW-03A3	11/26/2014	N	A3	1.16	-114	6.83	0.779	18	>1,000	white, milky, cloudy
MW-03A3	1/29/2015	N	A3	1.46	-75	6.69	1.674	19.8	98	white, milky, cloudy
MW-03A3	4/23/2015	N	A3	2.02	-93.4	6.05	2.104	18.9	103	white, milky, cloudy
MW-03A3	10/7/2015	N	A3	0.34	-109	6.58	1.65	21.8	>1,000	
MW-03A3	1/19/2018	N	A3	0.77	-104.8	6.82	0.844	16.1	173	
MW-03A3	3/1/2018	N	A3	2.35	-229.4	6.65	0.838	15.7	14	
MW-03A3	10/5/2018	N	A3	1.29	-81	7.05	0.910	18.9	588	
MW-03A3	10/4/2019	N	A3	1.41	-47.9	7.28	0.897	18.3	28	
MW-04A3	8/28/2014	N	A3	2.55	71	7.34	0.818	20.2	>1,000	
MW-04A3	11/25/2014	N	A3	0.76	123	7.3	0.969	16.4	72	

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MW-04A3	1/29/2015	N	A3	0.68	100	7.7	1.082	21.8	99	
MW-04A3	4/23/2015	N	A3	2.11	-63.6	6.38	1.131	18.7	>1,000	
MW-04A3	10/7/2015	N	A3	1.47	16	7.1	1.185	20.4	13	
MW-04A3	1/4/2017	N	A3	0.48	209.2	6.64	0.753	18.7	>1000	
MW-04A3	5/17/2017	N	A3	0.14	-78.6	6.79	0.941	22	9.0	
MW-04A3	6/15/2017	N	A3	1.32	-54.9	6.83	0.816	19.09	NA	
MW-04A3	8/23/2017	N	A3	0.85	14.8	7.07	0.888	24.1	9.0	
MW-04A3	10/13/2017	N	A3	0.06	-24.1	7.27	0.9383	18.4	8.0	
MW-04A3	1/19/2018	N	A3	0.6	-18.5	6.87	0.853	17.6	12	
MW-04A3	3/2/2018	N	A3	1.22	-38.2	6.83	0.824	17.6	8.0	
MW-04A3	10/3/2018	N	A3	1.23	6.3	6.58	0.867	25	40	
MW-04A3	10/4/2019	N	A3	1.67	-11.7	7.17	0.857	19.7	27	
MW-09A3	1/4/2017	N	A3	2.74	103.6	7.07	1.027	17.2	>1000	
MW-09A3	5/16/2017	N	A3	0.10	-79.5	6.42	1.048	19.9	598	white, odor
MW-09A3	6/15/2017	N	A3	3.45	-22	5.52	0.882	18.94	NA	
MW-09A3	8/24/2017	N	A3	1.47	22.2	5.36	1.149	23.7	>1000	white, odor
MW-09A3	9/22/2017	N	A3	0.27	-91.5	5.95	1.008	19.2	NA	
MW-09A3	10/13/2017	N	A3	0.01	-121.2	7.34	2.473	15.4	>1000	
MW-09A3	1/19/2018	N	A3	0.64	-97.5	6.52	1.631	17.3	268	
MW-09A3	3/1/2018	N	A3	1.3	-120.4	6.60	2.05	17.8	265	
MW-09A3	10/3/2018	N	A3	1.19	-46.9	6.17	1.226	20.3	77	
MW-09A3	10/4/2019	N	A3	1.29	-9.4	7.3	0.882	16.1	318	
MW-OS-1A1	2/27/2015	N	A1	Insufficient water for parameter measurements						
MW-OS-1A1	1/4/2017	N	A1	Insufficient water for parameter measurements						
MW-OS-1A1	5/16/2017	N	A1	Insufficient water for parameter measurements						
MW-OS-1A1	8/23/2017	N	A1	3.27	-62.1	7.07	1.343	20.9	147	
MW-OS-1A1	3/1/2018	N	A1	2.55	37.3	7.04	1.262	17.3	440	
MW-OS-1A1	10/3/2018	N	A1	4.76	91.9	7.03	1.145	19.6	201	
MW-OS-1A1	3/18/2019	N	A1	5.44	104.4	7.09	1.034	21.6	23.1	
MW-OS-1A1	5/8/2019	N	A1	4.36	86.1	7	1.065	17.9	>1000	
MW-OS-1A1	7/9/2019	N	A1	2.81	50.6	6.93	1.16	19.5	332	
MW-OS-1A1	10/4/2019	N	A1	3.65	48.9	6.99	1.361	18.2	141	
MW-OS-2A1	8/13/2014	N	A1	2.72	137	7.76	1,289	21.9	>1,000	
MW-OS-2A1	2/27/2015	N	A1	1.98	141.8	7.11	1.625	18.4	>1,000	
MW-OS-2A1	4/23/2015	N	A1	3.58	23.5	7.38	0.689	18.79	>1,000	
MW-OS-2A1	1/4/2017	N	A1	Insufficient water for parameter measurements						
MW-OS-2A1	5/16/2017	N	A1	Insufficient water for parameter measurements						
MW-OS-2A1	8/23/2017	N	A1	0.37	-149.6	6.71	3.390	20.5	628	
MW-OS-2A1	9/22/2017	N	A1	0.28	-146.3	6.67	3.133	18.89	NA	

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MW-OS-2A1	1/19/2018	N	A1	2.13	-140.7	6.83	2.765	16.5	>1000	
MW-OS-2A1	3/2/2018	N	A1	0.38	-147.2	6.76	4.564	13.9	213	odor
MW-OS-2A1	10/3/2018	N	A1	0.83	-136.4	6.76	2.879	20.9	>1,000	
MW-OS-2A1	3/18/2019	N	A1	5.85	-66.3	6.95	2.911	21.7	149.9	
MW-OS-2A1	5/8/2019	N	A1	0.34	-151.2	6.69	2.742	17.7	688	
MW-OS-2A1	7/9/2019	N	A1	0.29	-108.4	6.63	2.809	19.8	132	
MW-OS-2A1	10/4/2019	N	A1	0.29	-146.8	6.61	2.96	19.5	109	
MW-OS-2A3	8/13/2014	N	A1	1.4	141	7.52	877	21.3	162	
MW-OS-2A3	2/27/2015	N	A3	0.18	-48.7	8.24	0.745	18.5	>1,000	
MW-OS-2A3	4/23/2015	N	A3	2.54	19.7	7.29	0.397	18.57	>1,000	
MW-OS-2A3	1/4/2017	N	A3	2.58	120.6	7.06	1.039	15.3	>1000	
MW-OS-2A3	5/18/2017	N	A3	1.28	2.2	6.93	0.842	19.6	>1000	
MW-OS-2A3	8/23/2017	N	A3	2.16	-21.8	6.99	1.046	18.5	489	
MW-OS-2A3	1/19/2018	N	A3	2	106.1	6.97	1.261	16.2	>1000	
MW-OS-2A3	3/1/2018	N	A3	1.21	222.8	7.27	1.321	16.6	60	
MW-OS-2A3	10/3/2018	N	A3	0.86	69.1	6.76	1.16	21.3	>1,000	
MW-OS-2A3	3/18/2019	N	A3	4.27	172.2	6.86	0.984	20.1	>1000	
MW-OS-2A3	5/8/2019	N	A3	2.42	-14.3	6.93	1.054	17.6	>1000	
MW-OS-2A3	7/9/2019	N	A3	0.93	-7.4	6.78	1.031	18.7	>1000	
MW-OS-2A3	10/4/2019	N	A3	1.93	-2	7	1.088	19.6	>1000	
MW-OS-2A4	8/13/2014	N	A4	1.09	120	7.5	995	22.6	78	
MW-OS-2A4	10/2/2019	N	A4	NA	321	7.47	0.7296	20.9	362	
MW-OS-3A1	8/13/2014	N	A1	4.07	162	7.34	841	18.9	121	
MW-OS-3A1	3/18/2019	N	A1	7.01	242.4	7.03	1.172	19.9	>1000	
MW-OS-3A1	5/8/2019	N	A1	0.37	448.6	6.91	1.23	20.4	29	
MW-OS-3A1	7/10/2019	N	A1	1.13	249.8	6.92	1.229	24.0	74	
MW-OS-3A1	10/4/2019	N	A1	0.48	59.2	6.88	1.154	19.9	48	
MW-OS-3A3	8/13/2014	N	A3	2.97	135	7.43	863	19	152	
MW-OS-3A3	10/9/2019	N	A3	NA	259	3.85	0.8291	17.7	57.3	
MW-OS-3A4	8/13/2014	N	A4	2.5	153	7.68	793	19.1	976	
MW-OS-3A4	10/9/2019	N	A4	NA	259	3.84	0.9592	17.5	9.1	
MW-OS-4A3	8/13/2014	N	A3	1.97	212	7.27	1,155	19.2	73	
MW-OS-4A3	10/2/2019	N	A3	NA	329	7.72	0.9985	23.11	346	
MW-OS-4A4	8/13/2014	N	A4	2.94	188	7.32	19	19	98	
MW-OS-4A4	10/2/2019	N	A4	NA	323	7.66	0.8483	22.08	>1000	
MW-OS-5A3	8/13/2014	N	A3	5.31	259	7.02	2,448	19.9	1,000	
MW-OS-5A3	10/2/2019	N	A3	NA	154	6.8	0.9532	21.8	14	
MW-OS-6A3	10/2/2019	N	A3	NA	-105	7.76	0.956	19.6	21	
MW-OS-6A4	10/2/2019	N	A4	NA	38	7.45	0.779	20.4	51	

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Location ID	Sample Date	Sample Type	Location Description	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (millivolts)	pH (units)	Specific Conductivity (mS/cm)	Temperature (deg C)	Turbidity (NTU)	Groundwater Quality Notes
MW-OS-6B	10/2/2019	N	B	NA	88	7.6	0.766	19.6	82	
MW-OS-8A1	10/3/2019	N	A1	NA	345	7.67	0.959	17.1	233	
MW-OS-8A3	10/3/2019	N	A3	NA	339	7.67	0.7413	21.2	NA	
MW-OS-9A1	10/3/2019	N	A1	NA	343	7.68	1.114	17.3	897	
VM-3D	8/28/2014	N	A3	3.69	89	7.3	0.71	18.9	123	
VM-3D	11/25/2014	N	A3	0.78	-70	6.76	1.214	19.6	179	
VM-3D	11/26/2014	N	A3	0.67	-46	6.92	1.125	20.2	69	
VM-3D	1/29/2015	N	A3	1.75	-28	6.07	0.164	16.7	608	odor
VM-3D	4/23/2015	N	A3	8.04	-49.8	6.14	1.038	20	>1,000	milky
VM-3D	10/8/2015	N	A3	1.31	-72	6.85	2.113	17.7	277	
VM-3D	1/5/2017	N	A3	0.49	-75.6	6.59	0.77	16	16	
VM-3D	1/19/2018	N	A3	0.69	-87.1	6.63	1.257	16.6	8.0	
VM-3D	3/2/2018	N	A3	1.12	277.6	6.51	1.079	17.4	11	
VM-3D	6/7/2018	N	A3	1.02	-101.4	6.95	0.868	18.02	NA	
VM-3D	10/3/2018	N	A3	0.68	-53.4	6.93	0.875	19.8	23	
VM-3D	10/3/2019	N	A3	1.27	25.4	6.98	1.073	22.4	37	
VM-3S	8/28/2014	N	A1	0.54	-107	6.92	1.693	18.9	>1,000	
VM-3S	11/25/2014	N	A1	0.68	-10	7.18	0.925	15.2	>1,000	
VM-3S	1/29/2015	N	A1	2.12	-54	5.82	1.712	17.5	>1,000	odor
VM-3S	4/23/2015	N	A1	6.4	-78.1	6.54	1.235	18.9	>1,000	milky
VM-3S	10/8/2015	N	A1	0.95	-63	6.82	2.278	18.1	2.32	
VM-3S	6/7/2018	N	A1	1.06	-140.2	6.97	2.166	18.73	NA	
VM-3S	10/5/2018	N	A1	3.10	-116	6.80	3.288	6.80	612	
VM-3S	10/3/2019	N	A1	0.50	-97.1	6.63	2.204	21.4	313	
VM-4D	8/28/2014	N	A3	3.71	152	6.92	0.904	18.9	73	
VM-4D	11/25/2014	N	A3	0.89	-74	7.26	1.166	19.2	89	
VM-4D	1/29/2015	N	A3	0.90	-33	7.01	1.248	18.2	19	odor
VM-4D	4/23/2015	N	A3	4.3	-145.3	6.79	1.509	17.02	42	
VM-4D	10/8/2015	N	A3	1.6	-61	6.74	1.398	20.2	37	
VM-4D	1/5/2017	N	A3	0.47	-39.1	6.52	1.240	16.5	76	
VM-4D	5/18/2017	N	A3	0.20	42.6	5.52	0.962	18.6	>1000	
VM-4D	6/15/2017	N	A3	1.80	-62.1	6.28	1.862	19.4	NA	
VM-4D	8/23/2017	N	A3	0.56	-114	6.76	1.996	20.6	>1000	
VM-4D	3/2/2018	N	A3	0.94	76.4	6.29	2.233	15.1	27	
VM-4D	10/2/2018	N	A3	0.93	46.7	6.23	1.120	20.8	20	
VM-4D	10/4/2019	N	A3	0.46	-74	6.55	1.106	19	9	
VM-4S	8/28/2014	N	A1	2.64	133	6.87	1.165	18.9	337	
VM-4S	11/25/2014	N	A1	0.49	7.0	6.87	0.97	15.1	NA	
VM-4S	1/29/2015	N	A1	2.26	-63	6.93	1.2	14.6	49	odor

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Location ID	Sample Date	Sample Type	Location Description	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (millivolts)	pH (units)	Specific Conductivity (mS/cm)	Temperature (deg C)	Turbidity (NTU)	Groundwater Quality Notes
VM-4S	4/23/2015	N	A1	3.59	-102.4	6.53	0.836	18	89	
VM-4S	10/8/2015	N	A1	1.96	-83	6.78	1.935	19.7	NA	
VM-4S	1/5/2017	N	A1	0.40	-55.7	6.61	1.041	17.7	13	
VM-4S	5/18/2017	N	A1	1.64	58.2	5.73	1.46	17.2	>1000	creamy white
VM-4S	6/15/2017	N	A1	2.31	-52.9	6.32	1.538	19.69	NA	
VM-4S	8/23/2017	N	A1	0.33	-83	6.62	1.885	21.5	325	
VM-4S	3/2/2018	N	A1	0.95	93.6	6.41	2.511	14.7	128	
VM-4S	10/2/2018	N	A1	0.57	-22.9	6.14	1.558	21.4	9.0	
VM-4S	10/4/2019	N	A1	1.01	-115.9	6.52	2.19	19.4	16	
VM-5D	8/28/2014	N	A3	2.84	132	7.36	0.844	21	58	
VM-5D	1/29/2015	N	A3	0.92	157	7.47	1.054	21.4	28	
VM-5D	2/27/2015	N	A3	3.88	104.1	6.74	1.121	18.6	323	
VM-5D	4/23/2015	N	A3	1.87	-35.2	6.75	1.056	18.67	103	odor
VM-5D	10/7/2015	N	A3	1.11	-19	7.36	1.287	22.1	7.0	
VM-5D	1/5/2017	N	A3	4.77	71.7	6.72	1.042	12.6	5.0	
VM-5D	5/17/2017	N	A3	0.69	-60.1	6.36	1.894	23.3	33	
VM-5D	8/24/2017	N	A3	3.54	-75.2	6.76	2.580	18.3	79	
VM-5D	3/1/2018	N	A3	1.80	67.9	6.42	1.896	12.8	10	
VM-5D	6/7/2018	N	A3	1.00	-75.8	6.97	1.770	18.46	NA	
VM-5D	10/2/2018	N	A3	1.08	-31.7	6.21	1.872	25.1	3.0	
VM-5D	3/19/2019	N	A3	3.15	-24.0	6.71	1.408	19.0	18.1	
VM-5D	5/7/2019	N	A3	0.75	-146.0	6.6	1.381	21.8	40	
VM-5D	7/10/2019	N	A3	1.37	119.3	6.6	1.453	19.7	17	
VM-5D	10/4/2019	N	A3	0.31	-60.7	6.34	1.218	18	4	
VM-5S	8/28/2014	N	A1	2.08	-31	7	2.488	21.9	100	
VM-5S	10/9/2014	N	A1	1.79	-74	7.1	2.821	22	NA	
VM-5S	1/29/2015	N	A1	2.91	10	7.83	0.92	20.1	37	
VM-5S	2/27/2015	N	A1	0.52	-81.5	6.79	2.64	18.7	89	
VM-5S	4/23/2015	N	A1	1.87	-118.8	6.29	2.693	19.57	>1,000	odor, black
VM-5S	7/29/2015	N	A1	0.85	-104.4	6.75	2.003	19	>1,000	
VM-5S	5/17/2017	N	A1	0.64	-108.7	6.61	4.266	22.4	22	slight odor
VM-5S	8/24/2017	N	A1	1.27	-122.6	6.61	4.219	17.7	24	
VM-5S	9/22/2017	N	A1	0.60	-103.6	6.66	3.041	19.17	NA	
VM-5S	3/1/2018	N	A1	0.54	-282.1	6.72	3.42	15.8	30	
VM-5S	10/2/2018	N	A1	0.86	-79.2	6.29	2.77	25.9	12	
VM-5S	3/19/2019	N	A1	2.25	-74.7	6.84	2.621	19.9	7.35	
VM-5S	5/7/2019	N	A1	0.30	-146.2	6.7	2.263	22.0	16	
VM-5S	7/9/2019	N	A1	0.16	-53.4	6.47	2.337	23.6	9	
VM-5S	10/3/2019	N	A1	0.26	15.7	6.3	2.499	22.5	16	

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VM-6D	8/28/2014	N	A3	2.47	111	7.57	0.714	19	128	
VM-6D	11/26/2014	N	A3	2.09	18	7.73	0.826	18.7	39	
VM-6D	1/29/2015	N	A3	2.37	31	7.52	0.601	18.9	47	
VM-6D	4/23/2015	N	A3	2.08	-51.7	7.29	0.699	18.37	108	
VM-6D	10/7/2015	N	A3	1.70	-21	7.07	0.933	19.1	47	
VM-6D	1/5/2017	N	A3	3.03	91.8	7.21	0.803	14.6	225	
VM-6D	5/17/2017	N	A3	0.14	-21.8	7.2	0.936	17.7	4.0	
VM-6D	6/15/2017	N	A3	2.08	70.5	7.14	0.885	18.9	NA	
VM-6D	8/23/2017	N	A3	0.39	76.9	7.44	0.89	21.3	8.0	
VM-6D	10/13/2017	N	A3	0.02	-14.7	7.48	1.009	16.5	11	
VM-6D	1/19/2018	N	A3	1.35	21.8	7.04	0.961	17.3	20	
VM-6D	3/1/2018	N	A3	0.78	167	6.89	1.39	17.4	13	
VM-6D	6/7/2018	N	A3	0.58	-110.2	7.22	0.887	18.15	NA	
VM-6D	10/2/2018	N	A3	0.83	83.6	6.53	1.003	20	4.0	
VM-6D	3/18/2019	N	A3	0.96	12.5	6.85	0.934	22.1	4.72	
VM-6D	5/7/2019	N	A3	0.51	-96.5	7.12	0.992	22.0	8	
VM-6D	7/9/2019	N	A3	3.33	224.8	6.99	0.959	23.5	25	
VM-6D	10/3/2019	N	A3	0.31	59.1	6.76	0.94	19.2	26	
VM-6S	8/28/2014	N	A1	3.24	24	7.12	1.157	20.6	138	
VM-6S	10/9/2014	N	A1	3.09	63	7.25	1.124	22.4	61	
VM-6S	11/26/2014	N	A1	3.36	43	6.77	1.171	18.4	85	
VM-6S	1/29/2015	N	A1	2.91	20	6.9	1.1	19	77	
VM-6S	4/23/2015	N	A1	5.94	46.3	6.7	0.945	18.48	85	
VM-6S	10/7/2015	N	A1	1.93	-29	6.85	1.181	19.1	17	
VM-6S	5/17/2017	N	A1	0.10	-48.1	6.8	1.603	18.4	62	
VM-6S	6/15/2017	N	A1	2.45	-101.9	6.72	1.748	18.88	NA	
VM-6S	8/23/2017	N	A1	0.55	-74.6	6.96	1.451	22	25	
VM-6S	9/22/2017	N	A1	0.45	-208.9	6.7	1.496	18.46	NA	
VM-6S	10/13/2017	N	A1	0.01	-109.61	6.19	2.582	15.4	174	
VM-6S	1/19/2018	N	A1	1.78	-106.9	6.65	1.981	17.7	59	
VM-6S	3/1/2018	N	A1	1.04	100.3	6.07	1.898	17.2	128	
VM-6S	6/7/2018	N	A1	1.09	-206	6.85	1.755	18.37	NA	
VM-6S	8/9/2018	N	A1	1.56	125.2	6.69	2.183	20.8	105	
VM-6S	10/2/2018	N	A1	1.18	166.5	6.27	1.738	19.8	50	
VM-6S	3/18/2019	N	A1	3.62	-2.40	6.76	1.429	20.8	11.56	
VM-6S	5/8/2019	N	A1	0.45	589.1	6.85	2.156	19.1	>1000	
VM-6S	7/10/2019	N	A1	0.52	197.9	6.76	1.893	20.3	105	
VM-6S	10/3/2019	N	A1	0.26	24.6	6.37	1.772	18.9	11	

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Location ID	Sample Date	Sample Type	Location Description	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (millivolts)	pH (units)	Specific Conductivity (mS/cm)	Temperature (deg C)	Turbidity (NTU)	Groundwater Quality Notes
VM-7D	8/28/2014	N	A3	2.37	139	7.72	0.735	19.9	236	
VM-7D	11/26/2014	N	A3	0.97	48	7.12	0.819	17.9	57	
VM-7D	1/29/2015	N	A3	0.90	108	7.64	0.877	19.2	137	
VM-7D	4/23/2015	N	A3	3.03	72.3	6.65	0.860	18.6	78	
VM-7D	10/8/2015	N	A3	0.90	-53	7.24	0.882	21.5	21	
VM-7D	1/5/2017	N	A3	2.36	38.7	6.52	0.944	11.7	28	
VM-7D	5/17/2017	N	A3	1.53	34.4	5.29	1.961	17.5	>1000	white, odor
VM-7D	6/15/2017	N	A3	3.17	60.6	4.99	2.153	18.91	NA	
VM-7D	8/24/2017	N	A3	0.48	-71.6	4.93	2.500	20.3	>1000	
VM-7D	3/2/2018	N	A3	3.78	-34.5	5.68	2.033	16.3	445	
VM-7D	6/7/2018	N	A3	0.59	-102.2	6.21	0.921	18.21	NA	white substance on probe
VM-7D	10/5/2018	N	A3	0.62	-135	6.36	1.087	21.2	119	
VM-7D	10/4/2019	N	A3	1.05	-24	6.98	0.957	17.8	>1000	
VM-7S	8/28/2014	N	A1	3.26	145	7.19	1.106	21	127	
VM-7S	11/25/2014	N	A1	1.01	-37	6.72	0.666	17.6	202	
VM-7S	1/29/2015	N	A1	1.14	-24	6.72	0.597	18.1	319	
VM-7S	4/23/2015	N	A1	1.69	-46.3	6.19	1.082	18.9	52	
VM-7S	10/8/2015	N	A1	1.93	-46	7.13	1.056	22.5	37	
VM-7S	1/5/2017	N	A1	1.26	-89.3	6.07	1.038	14.1	24	
VM-7S	5/17/2017	N	A1	0.24	-31.4	5.94	0.625	17	>1000	gray purge
VM-7S	6/15/2017	N	A1	3.12	-68.1	5.92	0.709	19.41	NA	
VM-7S	8/24/2017	N	A1	0.63	-216.6	6.34	1.087	21.5	70	
VM-7S	3/2/2018	N	A1	0.63	108.9	4.86	0.062	16.6	223	odor
VM-7S	6/7/2018	N	A1	0.88	-112.1	6.69	0.932	18.99	NA	
VM-7S	8/9/2018	N	A1	0.18	-195.7	6.86	3.184	27.4	27	
VM-7S	10/3/2018	N	A1	0.34	-107.5	6.20	1.918	23.3	51	
VM-7S	3/18/2019	N	A1	5.97	140.0	5.68	0.0944	25.6	19.2	
VM-7S	5/7/2019	N	A1	0.43	-66.1	6.21	0.906	21.5	24	
VM-7S	7/9/2019	N	A1	0.41	53.4	6.22	1.278	19.9	19	
VM-7S	10/3/2019	N	A1	0.35	-22	6.11	1.017	20.6	194	
VM-8D	10/8/2014	N	A3	2.51	143	7.36	0.672	19.8	178	
VM-8D	1/29/2015	N	A3	0.27	92	7.77	0.451	19.2	41	
VM-8D	10/8/2015	N	A3	3.17	-11	7.75	0.572	22.8	11	
VM-8D	1/5/2017	N	A3	3.64	187.1	7.04	0.914	16.9	72	
VM-8D	5/16/2017	N	A3	1.01	14.9	6.97	0.76	19.4	808	
VM-8D	6/15/2017	N	A3	3.08	-115	7.92	0.406	18.96	NA	
VM-8D	8/24/2017	N	A3	0.99	-267	7.43	0.562	23.8	100	
VM-8D	3/2/2018	N	A3	2.17	371	6.83	0.881	16.4	84	cloudy; small, dark suspended particles

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VM-8D	10/3/2018	N	A3	3.78	-17.8	6.45	0.889	22.5	26	
VM-8D	10/4/2019	N	A3	1.17	33.6	7.01	0.64	16.9	98	
VM-8S	8/28/2014	N	A1	4.52	138	6.83	1.237	20	167	
VM-8S	10/8/2014	N	A1	2.54	156	6.91	1.293	22.6	194	
VM-8S	1/29/2015	N	A1	0.69	-113.9	6.92	1.311	20.1	51	
VM-8S	10/8/2015	N	A1	3.55	-53	6.68	1.247	23.8	131	
VM-8S	1/5/2017	N	A1	1.87	161.6	6.78	1.239	15.3	44	
VM-8S	5/16/2017	N	A1	0.67	0.50	5.69	3.264	19.8	27	
VM-8S	6/15/2017	N	A1	2.69	-118.1	6.30	3.254	19.85	NA	
VM-8S	8/24/2017	N	A1	0.63	-177	6.71	3.209	24.3	105	
VM-8S	3/2/2018	N	A1	0.69	196.1	6.53	2.396	17.5	95	slightly cloudy/gray
VM-8S	6/7/2018	N	A1	0.65	-133.2	7.02	1.905	19.21	NA	
VM-8S	8/9/2018	N	A1	0.35	-92.4	6.83	2.611	25.1	45	odor
VM-8S	10/3/2018	N	A1	0.23	-87.1	6.26	1.991	21.6	37	
VM-8S	3/19/2019	N	A1	4.59	24.6	6.77	1.454	16.5	6.72	
VM-8S	5/7/2019	N	A1	3.12	-74.6	6.69	1.518	24.3	10	
VM-8S	7/10/2019	N	A1	0.46	213.4	6.55	1.455	20.7	14	
VM-8S	10/3/2019	N	A1	0.28	34.7	6.86	1.488	21.3	19	

Notes and Key:

< = Compound not detected. Reportable detection limit shown.
deg C = degrees Celsius
FD = Field duplicate sample
mg/L = milligrams per liter
millivolts = millivolts
mS/cm = milliSiemens per centimeter
N = Normal Environmental Sample
NA = not analyzed
NM = not measured
NTU = Nephelometric turbidity units

Table C-2
Dissolved Metals and Other Geochemical Constituents in Groundwater
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Location ID	Sample Date	Sample Type	Zone/Depth Interval	Chloride	Nitrate as N	Sulfate	Methane	Ethane	Ethene	Iron	Manganese	Total Organic Carbon
2EP	1/29/2015	N	A1	NA	NA	NA	NA	NA	NA	**1,300**	**5,000**	**3,800**
2EP	2/27/2015	N	A1	**32,000**	*< 230*	**16,000**	**39**	*< 2.0*	*< 2.8*	*< 500*	**5,400**	**5,800**
2EP	4/23/2015	N	A1	NA	**160 J**	NA	**40**	NA	NA	*< 500 U*	**7,300**	**3,700**
2EP	7/29/2015	N	A1	**61,000**	*< 58*	**49,000**	**150**	*< 0.50*	*< 0.53*	**240 J**	**7,500**	**3,700**
2EP	10/7/2015	N	A1	**74,000**	*< 230*	**97,000**	**38**	*< 2.0*	*< 2.8*	**720**	**6,000**	**3,000**
2EP	5/16/2017	N	A1	**120,000**	*< 230*	**130,000**	**71 J-**	*< 2.0 UJ*	*< 2.8 UJ*	**500 j**	**670**	**2,000**
2EP	8/23/2017	N	A1	NA	NA	NA	**210**	*< 2.0*	*< 2.8*	*< 1,000*	**1,000**	**1,700**
2EP	3/1/2018	N	A1	**180,000**	*< 230*	*< 1,000*	**7,400**	**21**	*< 2.8*	**81,000**	**5,200**	**26,000**
2EP	11/8/2018	N	A1	NA	NA	NA	NA	NA	NA	NA	NA	**6,200**
2EP	3/19/2019	N	A1	**140,000**	*< 230*	**62,000**	NA	NA	NA	**4,700**	**13,000**	NA
2EP	5/7/2019	N	A1	**140,000**	*< 230*	**110,000**	NA	NA	NA	**4,400**	**4,700 J-**	NA
2EP	7/9/2019	N	A1	**140,000**	*< 230*	**140,000**	NA	NA	NA	**6,000**	**14,000**	NA
2EP	7/9/2019	FD	A1	**140,000**	*< 230*	**130,000**	NA	NA	NA	**5,900**	**14,000**	NA
2EP	10/3/2019	N	A1	**140,000**	*< 230*	**100,000**	NA	NA	NA	NA	NA	NA
2EP	10/9/2019	N	A1	NA	NA	NA	NA	NA	NA	**10,000**	**17,000**	NA
2EPa	8/28/2014	N	A3	**78,000**	**2,400**	**49,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**5.7 J**	*< 1,000*
2EPa	1/29/2015	N	A3	NA	NA	NA	NA	NA	NA	**18,000**	**12,000**	**360,000**
2EPa	2/27/2015	N	A3	**130,000**	*< 230*	**96,000**	**87**	*< 2.0*	*< 2.8*	*< 500*	**5,800**	**1,600**
2EPa	2/27/2015	N	A3	**130,000**	*< 230*	**95,000**	**90**	*< 2.0*	*< 2.8*	*< 500*	**5,800**	*< 1,500 U*
2EPa	4/23/2015	N	A3	NA	**160 J**	NA	**3.0**	NA	NA	*< 500*	**3,700**	**1,400**
2EPa	7/29/2015	N	A3	**100,000**	*< 58*	**79,000**	**850**	*< 0.50*	*< 0.53*	*< 170*	**1,300**	**1,800**
2EPa	10/7/2015	N	A3	**91,000**	**1,000**	**75,000**	**460**	*< 2.0*	*< 2.8*	*< 500*	**2,000**	**1,700**
2EPa	1/5/2017	N	A3	**100,000**	**1,500**	**88,000**	**420**	*< 2.0*	*< 2.8*	*< 1,000*	**560**	**3,900**
2EPa	5/16/2017	N	A3	**62,000**	*< 230*	**430 j**	**8,400 J-**	*< 2.0 UJ*	*< 2.8 UJ*	**170,000**	**8,800**	**180,000**
2EPa	8/23/2017	N	A3	NA	NA	NA	**3,500**	*< 2.0*	*< 2.8*	**25,000**	**13,000**	**6,300**
2EPa	3/1/2018	N	A3	**22,000**	*< 230*	*< 1,000*	**9,000**	*< 2.0*	*< 2.8*	**15,000**	**1,300**	**9,200**
2EPa	3/19/2019	N	A3	**71,000**	*< 230*	**2,500**	NA	NA	NA	**9,500**	**9,400**	NA
2EPa	7/9/2019	N	A3	**85,000**	*< 230*	**62,000**	NA	NA	NA	**590 j**	**9,000**	NA
2EPa	10/3/2019	N	A3	**86,000**	*< 230*	**56,000**	NA	NA	NA	*< 1,000*	**9,700**	NA
4BP	4/23/2015	N	A1	**100,000**	*< 230*	**88,000**	**47**	*< 2.0*	*< 2.8*	*< 500*	**430**	**1,700**
4BP	10/8/2015	N	A1	**110,000**	*< 230*	**91,000**	**44**	*< 2.0*	*< 2.8*	*< 500*	**3,200**	**1,300**
4BP	1/5/2017	N	A1	**63,000**	**820**	**50,000**	**67**	*< 2.0*	*< 2.8*	*< 1,000*	**1,500**	**1,500**
4BP	5/16/2017	N	A1	**160,000**	*< 230*	**72,000**	**220 J-**	*< 2.0 UJ*	*< 2.8 UJ*	**1,300,000**	**350,000**	**7,500,000**
4BP	8/24/2017	N	A1	NA	NA	NA	**5,200**	*< 2.0*	*< 2.8*	**700,000**	**190,000**	**4,900,000**
4BP	3/1/2018	N	A1	**55,000**	**71 j**	*< 1,000*	**6,200**	*< 2.0*	*< 2.8*	**86,000**	**9,900**	**290,000**
G-1A	8/28/2014	N	A3	**75,000**	**1,400**	**45,000**	**0.50 J**	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**320 J**
G-1A	1/29/2015	N	A3	NA	**540**	NA	NA	NA	NA	*< 500*	**2,000**	**1,000**
G-1A	2/27/2015	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	*< 1,200 U*
G-1A	10/7/2015	N	A3	**73,000**	**1,700**	**53,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	*< 1,000 U*
G-1A	3/2/2018	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	*< 1,000*
H-1A	9/3/2014	N	A3	**80,000**	**2,600**	**52,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	*< 1,000*
H-1A	1/29/2015	N	A3	NA	NA	NA	NA	NA	NA	*< 500*	*< 20*	*< 1,000*
H-1A	4/23/2015	N	A3	**110,000**	**4,000**	**71,000**	NA	NA	NA	NA	NA	**1,100**
H-1A	10/7/2015	N	A3	**93,000**	**4,300**	**63,000**	**46**	*< 2.0*	*< 2.8*	*< 500*	*< 20*	*< 1,000 U*
H-1A	1/4/2017	N	A3	**76,000**	*< 11,000*	**51,000**	**2,000**	*< 2.0*	*< 2.8*	*< 1,000*	**9.1**	**1,300**
H-1A	5/18/2017	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**1,700**
H-1A	8/23/2017	N	A3	NA	NA	NA	**1,200**	*< 2.0*	*< 2.8*	*< 1,000*	**96 J+**	**490 j**

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Location ID	Sample Date	Sample Type	Zone/Depth Interval	Chloride	Nitrate as N	Sulfate	Methane	Ethane	Ethene	Iron	Manganese	Total Organic Carbon
H-1A	8/23/2017	FD	A3	NA	NA	NA	**1,200**	*< 2.0*	*< 2.8*	*< 1,000*	**93 J+**	**1,100**
H-1A	3/2/2018	N	A3	**84,000**	**170 j**	**38,000**	**4,600**	**2.5**	*< 2.8*	**650 j**	**370**	**870 j**
H-1A	10/3/2018	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**730 j**
LF-13A	8/28/2014	N	A1	**49,000**	**2,600**	**42,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**3.3 J**	**1,100**
LF-13A	3/2/2018	N	A1	NA	NA	NA	NA	NA	NA	NA	NA	**750 j**
LF-6A	9/3/2014	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	*< 1,000*
LF-6A	11/26/2014	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	*< 1,000 U*
LF-6A	1/29/2015	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**1,900**
LF-6A	4/23/2015	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**540 J**
LF-6A	7/29/2015	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**580 J**
LF-6A	10/7/2015	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**470 J**
LF-6A	1/4/2017	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**630**
LF-6A	5/16/2017	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**910 j**
LF-6A	8/23/2017	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**570 j**
LF-6A	8/23/2017	FD	A4	NA	NA	NA	NA	NA	NA	NA	NA	**730 j**
LF-6A	3/2/2018	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**2,200**
LF-6A	10/1/2018	N	A4	NA	NA	NA	NA	NA	NA	NA	NA	**600 j**
MW-01A1	8/28/2014	N	A1	**870,000**	**590**	**220,000**	**0.81 J**	*< 2.0*	*< 2.8*	*< 500*	**560**	**3,200**
MW-01A1	11/25/2014	N	A1	**230,000**	**1,200**	**130,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**400**	**1,600**
MW-01A1	1/29/2015	N	A1	**210,000**	**1,800**	**120,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**410**	**1,200**
MW-01A1	4/23/2015	N	A1	**170,000**	**2,200**	**120,000**	**4.1**	*< 2.0*	*< 2.8*	*< 500*	**560**	**1,900**
MW-01A1	10/7/2015	N	A1	**140,000**	**3,200**	**120,000**	**16**	*< 2.0*	*< 2.8*	*< 500*	**330**	**2,000**
MW-01A1	5/16/2017	N	A1	**120,000**	*< 230*	**55,000**	**2,400 J-**	**0.59 J-**	**130 J-**	**3,800**	**3,900**	**18,000**
MW-01A1	8/23/2017	N	A1	NA	NA	NA	**5,400**	**5.7**	**110**	**4,300**	**4,000**	**12,000**
MW-01A1	3/2/2018	N	A1	**150,000**	*< 2,300*	**4,200 j**	**3,900**	**14**	**46**	**130,000**	**8,000**	**540,000**
MW-01A1	3/19/2019	N	A1	**130,000**	*< 230*	**63,000**	NA	NA	NA	**3,100**	**6,100**	NA
MW-01A1	5/7/2019	N	A1	**120,000**	*< 230*	**81,000**	NA	NA	NA	**1,400**	**2,400 J-**	NA
MW-01A3	8/28/2014	N	A3	**77,000**	**2,200**	**47,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**56**	**480 J**
MW-01A3	11/25/2014	N	A3	**75,000**	*< 230*	**18,000**	*< 0.99*	**1.1 J**	*< 2.8*	**210 J**	**600**	**360,000**
MW-01A3	1/29/2015	N	A3	**74,000**	*< 230*	**3,400**	**2,100**	*< 2.0*	*< 2.8*	**1,800**	**4,000**	**30,000**
MW-01A3	4/23/2015	N	A3	**73,000**	*< 230*	**1,400**	**10,000**	*< 2.0*	**0.86 j**	*< 3,400 U*	**5,500**	**45,000**
MW-01A3	10/7/2015	N	A3	**79,000**	**2,000**	**59,000**	**11,000**	*< 2.0*	**1.7 J**	**780**	**1,600**	**1,900**
MW-01A3	1/4/2017	N	A3	**72,000**	**1,400**	**45,000**	**4,400**	*< 2.0*	*< 2.8*	*< 1,000*	**1,100**	**570**
MW-01A3	5/16/2017	N	A3	**72,000**	*< 230*	*< 1,000*	**13,000 J-**	*< 2.0 UJ*	**9.5 J-**	**6,800**	**7,200**	**86,000**
MW-01A3	8/23/2017	N	A3	NA	NA	NA	**14,000**	**1.0 j**	*< 2.8*	**4,800**	**5,800**	**2,500**
MW-01A3	3/2/2018	N	A3	**79,000**	*< 230*	**40,000**	**8,500**	**1.8 j**	*< 2.8*	**2,900**	**4,300**	**960 j**
MW-02A1	8/28/2014	N	A1	**250,000**	**5,400**	**100,000**	NA	NA	NA	*< 500*	**91**	NA
MW-02A1	11/25/2014	N	A1	**140,000**	**7,600**	**100,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**37**	**910 J**
MW-02A1	1/29/2015	N	A1	**4,900**	*< 230*	**17,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**18 J**	**11,000**
MW-02A1	4/23/2015	N	A1	**110,000**	**7,400**	**100,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**160**	**1,300**
MW-02A1	10/7/2015	N	A1	**110,000**	**7,700**	**100,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	*< 1,000 U*
MW-02A1	5/17/2017	N	A1	**72,000**	*< 230*	*< 1,000*	**4,500 J-**	**53 J-**	*< 2.8 UJ*	**9,900**	**8,100**	**49,000**
MW-02A1	8/24/2017	N	A1	NA	NA	NA	**3,700**	**40**	*< 2.8*	**9,500**	**6,800**	**4,600**
MW-02A1	3/2/2018	N	A1	**150,000**	*< 230*	*< 1,000*	**5,600**	**4.5**	*< 2.8*	**96,000**	**12,000**	**350,000**
MW-02A1	3/19/2019	N	A1	**75,000**	*< 230*	**5,800**	NA	NA	NA	**11,000**	**6,400**	NA
MW-02A1	5/7/2019	N	A1	**100,000**	*< 230*	*< 1,000*	NA	NA	NA	**17,000**	**9,200 J-**	NA

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Location ID	Sample Date	Sample Type	Zone/Depth Interval	Chloride	Nitrate as N	Sulfate	Methane	Ethane	Ethene	Iron	Manganese	Total Organic Carbon
MW-03A3	8/28/2014	N	A3	**75,000**	**1,400**	**47,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**77**	**1,000**
MW-03A3	11/26/2014	N	A3	**78,000**	*< 230*	**13,000**	**1.6**	**1.1 J**	*< 2.8*	*< 500*	**1,400**	**210,000**
MW-03A3	1/29/2015	N	A3	**84,000**	*< 230*	*< 1,000*	**4,300**	*< 2.0*	*< 2.8*	**1,100**	**11,000**	**57,000**
MW-03A3	4/23/2015	N	A3	**87,000**	*< 230*	**920 J**	**8,200**	*< 2.0*	**17**	*< 1,500 U*	**9,900**	**23,000**
MW-03A3	10/7/2015	N	A3	**85,000**	*< 230*	**4,700**	**9,000**	**7.5**	**5.6**	**2,400**	**9,700**	**4,200**
MW-03A3	3/1/2018	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**33,000**
MW-04A3	8/28/2014	N	A3	**83,000**	**2,500**	**58,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**59**	**550 J**
MW-04A3	11/25/2014	N	A3	**77,000**	**1,800**	**49,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**4.9 J**	**270 J**
MW-04A3	1/29/2015	N	A3	**84,000**	**3,200**	**65,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**810 J**
MW-04A3	4/23/2015	N	A3	**110,000**	**3,600**	**78,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**41**	**3,200**
MW-04A3	10/7/2015	N	A3	**110,000**	**3,000**	**79,000**	**8.5**	*< 2.0*	*< 2.8*	*< 500*	**18 J**	**5,600**
MW-04A3	1/4/2017	N	A3	**76,000**	*< 2,300*	**47,000**	**2,400**	*< 2.0*	*< 2.8*	*< 1,000*	**28**	**620**
MW-04A3	5/17/2017	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**1,300**
MW-04A3	5/17/2017	FD	A3	NA	NA	NA	NA	NA	NA	NA	NA	**1,200**
MW-04A3	8/23/2017	N	A3	NA	NA	NA	**3,900**	*< 2.0*	*< 2.8*	*< 1,000*	**8.4 j**	**860 j**
MW-04A3	3/2/2018	N	A3	**81,000**	**750**	**53,000**	**5,600**	*< 2.0*	*< 2.8*	*< 1,000*	**4.5 j**	**570 j**
MW-04A3	10/3/2018	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**840 j**
MW-OS-1A1	8/23/2017	N	A1	NA	NA	NA	*< 0.99*	*< 2.0*	*< 2.8*	*< 1,000*	**12 j**	**1,300**
MW-OS-1A1	3/1/2018	N	A1	**140,000**	**5,300**	**75,000**	*< 0.25*	*< 0.50*	*< 0.53*	*< 400*	**11 j**	**1,100**
MW-OS-1A1	3/18/2019	N	A1	**100,000**	**4,700**	**73,000**	NA	NA	NA	*< 1,000*	*< 20*	NA
MW-OS-1A1	5/8/2019	N	A1	**95,000**	**4,800**	**67,000**	NA	NA	NA	*< 1,000*	**21 J+**	NA
MW-OS-1A1	7/9/2019	N	A1	**100,000**	**12,000**	**78,000**	NA	NA	NA	*< 1,000*	**26**	NA
MW-OS-1A1	10/4/2019	N	A1	**110,000**	**10,000**	**88,000**	NA	NA	NA	*< 1,000*	**14 j**	NA
MW-OS-2A1	2/27/2015	N	A1	NA	NA	NA	NA	NA	NA	NA	NA	**1,700**
MW-OS-2A1	4/23/2015	N	A1	NA	NA	NA	NA	NA	NA	NA	NA	**1,800**
MW-OS-2A1	10/6/2015	N	A1	NA	NA	NA	NA	NA	NA	NA	NA	**2,200**
MW-OS-2A1	8/23/2017	N	A1	NA	NA	NA	**5,200**	*< 2.0*	*< 2.8*	**46,000**	**13,000**	**360,000**
MW-OS-2A1	3/2/2018	N	A1	**190,000**	*< 230*	**2,300**	**5,300**	*< 2.0*	*< 2.8*	**95,000**	**6,700**	**230,000**
MW-OS-2A1	3/2/2018	FD	A1	**180,000**	*< 230*	**1,200**	**4,900**	*< 2.0*	*< 2.8*	**76,000**	**8,800**	**220,000**
MW-OS-2A1	3/18/2019	N	A1	**140,000**	*< 230*	*< 1,000*	NA	NA	NA	**13,000**	**12,000**	NA
MW-OS-2A1	5/8/2019	N	A1	**130,000**	*< 230*	*< 1,000*	NA	NA	NA	**36,000**	**10,000**	NA
MW-OS-2A1	5/8/2019	FD	A1	**130,000**	*< 230*	*< 1,000*	NA	NA	NA	**34,000**	**9,200**	NA
MW-OS-2A1	7/9/2019	N	A1	**140,000**	*< 230*	*< 1,000*	NA	NA	NA	**32,000**	**9,400**	NA
MW-OS-2A1	10/4/2019	N	A1	**160,000**	**99 j**	*< 1,000*	NA	NA	NA	**35,000**	**9,300**	NA
MW-OS-2A3	2/27/2015	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**1,800**
MW-OS-2A3	4/23/2015	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**1,000**
MW-OS-2A3	10/6/2015	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**2,100**
MW-OS-2A3	1/4/2017	N	A3	**80,000**	**4,700**	**54,000**	*< 0.99*	*< 2.0*	*< 2.8*	**570**	**49**	**3,200**
MW-OS-2A3	5/18/2017	N	A3	**73,000**	**330**	**29,000**	**0.29 j**	*< 2.0*	*< 2.8*	**18,000**	**670**	**1,300**
MW-OS-2A3	8/23/2017	N	A3	NA	NA	NA	**1,500**	*< 2.0*	*< 2.8*	*< 1,000*	**240**	**1,900**
MW-OS-2A3	3/1/2018	N	A3	**75,000**	**2,200**	**45,000**	**140**	*< 2.0*	*< 2.8*	**670 j**	**48**	**670 j**
MW-OS-2A3	3/18/2019	N	A3	**86,000**	*< 230*	**55,000**	NA	NA	NA	*< 1,000*	**1,300**	NA
MW-OS-2A3	7/9/2019	N	A3	**79,000**	*< 230*	**60,000**	NA	NA	NA	**410 j**	**2,600**	NA
MW-OS-2A3	10/4/2019	N	A3	**79,000**	*< 230*	**66,000**	NA	NA	NA	**1,500**	**3,500**	NA
MW-OS-3A1	3/18/2019	N	A1	**96,000**	**1,200**	**52,000**	NA	NA	NA	**2,000**	**130**	NA
MW-OS-3A1	5/8/2019	N	A1	**94,000**	**1,500**	**59,000**	NA	NA	NA	*< 1,000*	**51 J+**	NA

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Location ID	Sample Date	Sample Type	Zone/Depth Interval	Chloride	Nitrate as N	Sulfate	Methane	Ethane	Ethene	Iron	Manganese	Total Organic Carbon
MW-OS-3A1	7/10/2019	N	A1	**90,000**	**2,100**	**69,000**	NA	NA	NA	*< 1,000*	**44**	NA
MW-OS-3A1	10/4/2019	N	A1	**85,000**	**2,700**	**70,000**	NA	NA	NA	*< 1,000*	**27**	NA
VM-3D	8/28/2014	N	A3	**74,000**	**2,200**	**48,000**	**5.6**	*< 2.0*	*< 2.8*	*< 500*	*< 20*	*< 1,000*
VM-3D	11/25/2014	N	A3	NA	NA	NA	**190**	*< 2.0*	*< 2.8*	NA	NA	**160,000**
VM-3D	11/26/2014	N	A3	**100,000**	*< 230*	*< 1,000*	NA	NA	NA	**1,600**	**5,600**	NA
VM-3D	1/29/2015	N	A3	**90,000**	*< 230*	*< 1,000*	**4,800**	*< 2.0*	*< 2.8*	**9,500**	**11,000**	**300,000**
VM-3D	4/23/2015	N	A3	**76,000**	*< 230*	*< 1,000*	**6,600**	*< 2.0*	*< 2.8*	**11,000**	**15,000**	**390,000**
VM-3D	10/8/2015	N	A3	**86,000**	*< 230*	**930 J**	**5,800**	*< 2.0*	*< 2.8*	*< 500*	**14,000**	**89,000**
VM-3D	1/5/2017	N	A3	**75,000**	*< 230*	**26,000**	**10,000**	**1.1**	*< 2.8*	**2,400**	**4,900**	**2,100**
VM-3D	3/2/2018	N	A3	**83,000**	*< 230*	**36,000**	**9,600**	**4.7**	*< 2.8*	**2,600**	**4,800**	**1,500**
VM-3S	8/28/2014	N	A1	**140,000**	*< 230*	**82,000**	**2,800**	*< 2.0*	*< 2.8*	*< 500*	**4,000**	**3,700**
VM-3S	11/25/2014	N	A1	**240,000**	*< 230*	**5,300**	**880**	*< 2.0*	*< 2.8*	*< 500*	**8,800**	**200,000**
VM-3S	1/29/2015	N	A1	**180,000**	**160 J**	**1,200**	**3,000**	*< 2.0*	**1.2 J**	**9,300**	**13,000**	**380,000**
VM-3S	4/23/2015	N	A1	**190,000**	*< 230*	*< 1,000*	**5,100**	*< 2.0*	**6.9**	*< 590 U*	**10,000**	**140,000**
VM-3S	10/8/2015	N	A1	**170,000**	*< 230*	**3,000**	**1,300 J-**	*< 2.0 R*	*< 2.8 R*	**360 J**	**6,800**	**60,000**
VM-4D	8/28/2014	N	A3	**83,000**	**4,200**	**61,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**260 J**
VM-4D	11/25/2014	N	A3	**110,000**	**230**	**89,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**8,700**	**1,100**
VM-4D	1/29/2015	N	A3	**110,000**	*< 230*	**39,000**	**150**	*< 2.0*	*< 2.8*	*< 500*	**3,000**	**5,600**
VM-4D	4/23/2015	N	A3	**120,000**	*< 230*	**6,200**	**2,700**	*< 2.0*	*< 2.8*	*< 500*	**1,800**	**29,000**
VM-4D	10/8/2015	N	A3	**84,000**	*< 230*	**82,000**	**8,800**	*< 2.0*	**14**	*< 500*	**3,800**	**3,900**
VM-4D	1/5/2017	N	A3	**110,000**	*< 230*	**80,000**	**8,400**	**0.66**	**10**	**3,000**	**5,400**	**18,000**
VM-4D	5/18/2017	N	A3	**95,000**	*< 230*	*< 1,000*	**9,100**	**2.1**	*< 2.8*	**11,000**	**8,100**	**400,000**
VM-4D	8/23/2017	N	A3	NA	NA	NA	**7,100**	*< 2.0*	*< 2.8*	**19,000**	**13,000**	**44,000**
VM-4D	3/2/2018	N	A3	**76,000**	*< 230*	**1,900**	**10,000**	**2.3**	*< 2.8*	**6,000**	**9,100**	**1,800**
VM-4S	8/28/2014	N	A1	**110,000**	**6,500**	**88,000**	**0.63 J**	*< 2.0*	*< 2.8*	*< 500*	**380**	**1,600**
VM-4S	11/25/2014	N	A1	NA	NA	NA	**0.47 J**	*< 2.0*	*< 2.8*	NA	NA	**2,600**
VM-4S	11/26/2014	N	A1	**120,000**	*< 230*	**93,000**	NA	NA	NA	*< 500*	**2,100**	NA
VM-4S	1/29/2015	N	A1	**110,000**	**220 J**	**78,000**	**10**	*< 2.0*	*< 2.8*	*< 500*	**2,700**	**5,100**
VM-4S	4/23/2015	N	A1	**110,000**	*< 230*	**3,800**	**75**	*< 2.0*	**150**	*< 500 U*	**5,100**	**66,000**
VM-4S	10/8/2015	N	A1	**110,000**	*< 230*	**27,000**	**6,300**	*< 2.0*	**38**	*< 500*	**10,000**	**34,000**
VM-4S	1/5/2017	N	A1	**110,000**	*< 230*	**31,000**	**7,400**	**92**	**190**	**5,400**	**7,600**	**1,300**
VM-4S	5/18/2017	N	A1	**100,000**	*< 230*	*< 1,000*	**8,400**	**11**	**31**	**30,000**	**14,000**	**650,000**
VM-4S	8/23/2017	N	A1	NA	NA	NA	**9,100**	**9.6**	*< 2.8*	**16,000**	**11,000**	**12,000**
VM-4S	3/2/2018	N	A1	**20,000**	*< 230*	**4,900**	**9,000**	**9.5**	*< 2.8*	**7,100**	**3,400**	**26,000**
VM-5D	8/28/2014	N	A3	**91,000**	**3,800**	**57,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**1,000**
VM-5D	1/29/2015	N	A3	**100,000**	**4,600**	**71,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**800 J**
VM-5D	2/27/2015	N	A3	NA	NA	NA	*< 0.99*	*< 2.0*	*< 2.8*	NA	NA	*< 1,000 U*
VM-5D	4/23/2015	N	A3	NA	NA	NA	NA	NA	NA	NA	NA	**1,000**
VM-5D	10/7/2015	N	A3	**120,000**	**4,900**	**98,000**	*< 0.99*	*< 2.0*	*< 2.8*	**340 J**	*< 20*	**1,100**
VM-5D	1/5/2017	N	A3	**110,000**	**4,600**	**89,000**	**3.2**	*< 2.0*	*< 2.8*	*< 1,000*	**8.8**	**650**
VM-5D	5/17/2017	N	A3	**100,000**	*< 230*	*< 1,000*	**630 J-**	*< 2.0 UJ*	*< 2.8 UJ*	**6,300**	**18,000**	**170,000**
VM-5D	8/24/2017	N	A3	NA	NA	NA	**1,700**	*< 2.0*	*< 2.8*	**6,500**	**19,000**	**250,000**
VM-5D	3/1/2018	N	A3	**87,000**	*< 230*	**4,300**	**10,000**	**1.0 j**	*< 2.8*	**5,300**	**11,000**	**3,600**
VM-5D	3/19/2019	N	A3	**84,000**	*< 230*	**11,000**	NA	NA	NA	**2,000**	**6,000**	NA
VM-5D	7/10/2019	N	A3	**86,000**	*< 230*	**21,000**	NA	NA	NA	**1,800**	**5,900**	NA
VM-5D	10/4/2019	N	A3	**87,000**	*< 230*	**33,000**	NA	NA	NA	**1,300**	**5,400**	NA

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Location ID	Sample Date	Sample Type	Zone/Depth Interval	Chloride	Nitrate as N	Sulfate	Methane	Ethane	Ethene	Iron	Manganese	Total Organic Carbon
VM-5S	8/28/2014	N	A1	**350,000**	*< 230*	**260,000**	**130**	*< 2.0*	*< 2.8*	*< 500*	**710**	**4,300**
VM-5S	1/29/2015	N	A1	**280,000**	*< 230*	**200,000**	**370**	*< 2.0*	*< 2.8*	**430 J**	**110**	**2,200**
VM-5S	2/27/2015	N	A1	NA	NA	NA	**82**	*< 2.0*	*< 2.8*	NA	NA	**1,900**
VM-5S	4/23/2015	N	A1	NA	NA	NA	NA	NA	NA	NA	NA	**650,000**
VM-5S	7/29/2015	N	A1	**360,000**	*< 58*	**190,000**	**4,200**	*< 0.50*	*< 0.53*	**17,000**	**1,200**	**30,000**
VM-5S	10/7/2015	N	A1	**310,000**	*< 230*	**130,000**	**5,100**	*< 2.0*	**4.0**	**24,000**	**850**	**14,000**
VM-5S	5/17/2017	N	A1	**820,000**	*< 230*	**90,000**	**3,300 J-**	*< 2.0 UJ*	**21 J-**	**24,000**	**8,300**	**110,000**
VM-5S	8/24/2017	N	A1	NA	NA	NA	**2,800**	**3.3**	*< 2.8*	**20,000**	**8,900**	**13,000**
VM-5S	3/1/2018	N	A1	**490,000**	**150 j**	*< 100,000*	**4,100**	**14**	*< 2.8*	**14,000**	**6,600**	**7,800**
VM-5S	11/8/2018	N	A1	NA	NA	NA	NA	NA	NA	NA	NA	**9,300**
VM-5S	3/19/2019	N	A1	**390,000**	*< 230*	**62,000**	NA	NA	NA	**7,700**	**4,800**	NA
VM-5S	5/7/2019	N	A1	**180,000**	*< 230*	**90,000**	NA	NA	NA	**15,000**	**4,400 J-**	NA
VM-5S	7/9/2019	N	A1	**180,000**	*< 230*	*< 1,000*	NA	NA	NA	**8,700**	**6,200**	NA
VM-5S	10/3/2019	N	A1	**170,000**	**4,500**	*< 1,000*	NA	NA	NA	**20,000**	**9,000**	NA
VM-6D	8/28/2014	N	A3	**77,000**	**3,300**	**43,000**	**0.48 J**	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**770 J**
VM-6D	11/25/2014	N	A3	**84,000**	**5,800**	**44,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**440 J**
VM-6D	1/29/2015	N	A3	**75,000**	**5,500**	**40,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**1,100**
VM-6D	4/23/2015	N	A3	NA	**7,500**	NA	*< 0.99*	NA	NA	*< 500*	**16 J**	**1,500**
VM-6D	10/7/2015	N	A3	**80,000**	**8,200**	**43,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**3.7 J**	**1,500**
VM-6D	1/5/2017	N	A3	**77,000**	**4,600**	**46,000**	**37**	*< 2.0*	*< 2.8*	*< 1,000*	**67**	**6,600**
VM-6D	5/17/2017	N	A3	**83,000**	**6,300**	**44,000**	**57 J-**	*< 2.0 UJ*	*< 2.8 UJ*	*< 1,000*	**34**	**1,300**
VM-6D	8/23/2017	N	A3	NA	NA	NA	**7,400**	*< 2.0*	**2.9**	**990 j**	**4,100**	**10,000**
VM-6D	3/1/2018	N	A3	**81,000**	**1,300**	**39,000**	**7,200**	**1.3 j**	*< 2.8*	*< 1,000*	**1,200**	**900 j**
VM-6D	3/18/2019	N	A3	**88,000**	*< 230*	**73,000**	NA	NA	NA	*< 1,000*	**3,900**	NA
VM-6D	7/9/2019	N	A3	**81,000**	*< 230*	**72,000**	NA	NA	NA	**2,100**	**3,100**	NA
VM-6D	10/3/2019	N	A3	**78,000**	*< 230*	**77,000**	NA	NA	NA	**720 j**	**3,300**	NA
VM-6S	8/28/2014	N	A1	**120,000**	**10,000**	**110,000**	**23**	*< 2.0*	*< 2.8*	*< 500*	**240**	**920 J**
VM-6S	11/25/2014	N	A1	**130,000**	**10,000**	**110,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**94**	**630 J**
VM-6S	1/29/2015	N	A1	**81,000**	**2,800**	**76,000**	**3.7**	*< 2.0*	*< 2.8*	*< 500*	**410**	**3,600**
VM-6S	4/23/2015	N	A1	NA	**5,900**	NA	**6.8**	NA	NA	*< 500*	**440**	**3,500**
VM-6S	10/7/2015	N	A1	**120,000**	**2,700**	**120,000**	**14**	*< 2.0*	*< 2.8*	*< 500*	**3,200**	**1,500**
VM-6S	5/17/2017	N	A1	**120,000**	*< 230*	**82,000**	**1,300 J-**	*< 2.0 UJ*	**5.9 J-**	**2,400**	**4,600**	**16,000**
VM-6S	8/23/2017	N	A1	NA	NA	NA	**2,000**	*< 2.0*	**33**	**3,500**	**4,600**	**1,700**
VM-6S	3/1/2018	N	A1	**170,000**	*< 230*	**2,500**	**7,400**	**3.1**	*< 2.8*	**82,000**	**7,500**	**280,000**
VM-6S	11/8/2018	N	A1	NA	NA	NA	NA	NA	NA	NA	NA	**15,000**
VM-6S	3/18/2019	N	A1	**120,000**	*< 230*	**88,000**	NA	NA	NA	**6,000**	**5,000**	NA
VM-6S	7/10/2019	N	A1	**88,000**	**77 j**	**97,000**	NA	NA	NA	**7,300**	**19,000**	NA
VM-6S	10/3/2019	N	A1	**100,000**	*< 230*	**96,000**	NA	NA	NA	**4,700**	**10,000**	NA
VM-7D	8/28/2014	N	A3	**73,000**	**5,900**	**36,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**620 J**
VM-7D	11/25/2014	N	A3	**77,000**	**9,600**	**21,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**150**	**2,400**
VM-7D	1/29/2015	N	A3	**86,000**	**12,000**	**23,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**33**	**900 J**
VM-7D	4/23/2015	N	A3	**83,000**	**12,000**	**24,000**	**0.77 J**	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**1,400**
VM-7D	10/8/2015	N	A3	**80,000**	**11,000**	**25,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**1,400**
VM-7D	1/5/2017	N	A3	**74,000**	**4,600**	**44,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 1,000*	*< 20*	**630**
VM-7D	5/17/2017	N	A3	*< 100,000*	*< 23,000*	*< 100,000*	**3,600 J-**	**3.3 J-**	*< 2.8 UJ*	**41,000**	**11,000**	**4,100,000**
VM-7D	8/24/2017	N	A3	NA	NA	NA	**7,700**	**0.90 j**	*< 2.8*	**34,000 J-**	**8,500**	**3,500,000**
VM-7D	3/2/2018	N	A3	**26,000**	**160 j**	**14,000**	**8,600**	*< 2.0*	*< 2.8*	**38,000**	**8,700**	**960,000**

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Location ID	Sample Date	Sample Type	Zone/Depth Interval	Chloride	Nitrate as N	Sulfate	Methane	Ethane	Ethene	Iron	Manganese	Total Organic Carbon
VM-7S	8/28/2014	N	A1	**110,000**	**6,400**	**91,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**850 J**
VM-7S	11/25/2014	N	A1	**63,000**	*< 230*	**42,000**	*< 0.99*	*< 2.0*	*< 2.8*	**450 J**	**950**	**29,000**
VM-7S	1/29/2015	N	A1	**77,000**	**520**	**35,000**	**7.9**	*< 2.0*	*< 2.8*	**270 J**	**1,400**	**17,000**
VM-7S	4/23/2015	N	A1	**99,000**	**3,000**	**83,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500 U*	**140**	**2,700**
VM-7S	10/8/2015	N	A1	**110,000**	**1,900**	**87,000**	**8.5**	*< 2.0*	*< 2.8*	*< 500*	**200**	**4,200**
VM-7S	1/5/2017	N	A1	**7,500**	**570**	**6,200**	**49**	*< 2.0*	*< 2.8*	*< 1,000*	**62**	**2,400**
VM-7S	5/17/2017	N	A1	**32,000**	*< 230*	*< 1,000*	**4,700 J-**	**0.72 J-**	*< 2.8 UJ*	**13,000**	**3,300**	**80,000**
VM-7S	8/24/2017	N	A1	NA	NA	NA	**8,500**	**1.8 j**	*< 2.8*	**27,000**	**5,700**	**49,000**
VM-7S	3/2/2018	N	A1	**12,000**	*< 230*	**1,000**	**3,000**	*< 2.0*	*< 2.8*	**7,300**	**2,700**	**7,500**
VM-8D	8/28/2014	N	A3	**73,000**	**3,000**	**32,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	*< 1,000*
VM-8D	1/29/2015	N	A3	NA	**130 J**	NA	NA	NA	NA	*< 500*	*< 20*	**2,400**
VM-8D	10/8/2015	N	A3	**33,000**	**4,500**	**30,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**11 J**	**6,600**
VM-8D	1/5/2017	N	A3	**76,000**	**4,600**	**51,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 1,000*	**14**	**620**
VM-8D	5/16/2017	N	A3	**77,000**	**2,800**	**40,000**	**3.7 J-**	*< 2.0 UJ*	*< 2.8 UJ*	*< 1,000*	**600**	**1,900**
VM-8D	8/24/2017	N	A3	NA	NA	NA	**20**	*< 2.0*	*< 2.8*	*< 1,000*	**310**	**2,700**
VM-8D	3/2/2018	N	A3	**77,000**	**3,900**	**50,000**	**5.0**	*< 2.0*	*< 2.8*	*< 1,000*	**130**	**600 j**
VM-8D	3/2/2018	FD	A3	**76,000**	**3,900**	**49,000**	**4.3**	*< 2.0*	*< 2.8*	*< 1,000*	**120**	**790 j**
VM-8S	8/28/2014	N	A1	**140,000**	**6,200**	**74,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	*< 20*	**880 J**
VM-8S	1/29/2015	N	A1	NA	**820**	NA	NA	NA	NA	*< 500*	**51**	**7,300**
VM-8S	10/8/2015	N	A1	**130,000**	**4,500**	**77,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 500*	**34**	**1,600**
VM-8S	1/5/2017	N	A1	**130,000**	**5,500**	**81,000**	*< 0.99*	*< 2.0*	*< 2.8*	*< 1,000*	**29**	**980**
VM-8S	5/16/2017	N	A1	**110,000**	*< 230*	*< 1,000*	**5,200 J-**	**6.4 J-**	*< 2.8 UJ*	**91,000**	**24,000**	**1,800,000**
VM-8S	8/24/2017	N	A1	NA	NA	NA	**4,900**	*< 2.0*	*< 2.8*	**24,000**	**17,000**	**34,000**
VM-8S	3/2/2018	N	A1	**120,000**	*< 230*	*< 1,000*	**6,700**	**1.8 j**	*< 2.8*	**22,000**	**12,000**	**16,000**

Notes and Key:
Concentrations reported in micrograms per liter (µg/L).
Bolded values indicate concentrations above the Reportable Detection Limit.
FD = Field Duplicate Sample
N = Normal Environmental Sample
NA = Not analyzed
< = Compound not detected. Reportable detection limit shown.

Laboratory Qualifiers
j = Result is less than the reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

Data Validation Qualifiers
J = Detected sample result is qualified as estimated.
J- = Detected sample result is qualified as estimated and biased low.
J+ = Detected sample result is qualified as estimated and biased high.
U = Compound not detected based on quality assurance review.
UJ = Nondetected sample result qualified as estimated.

Table C-3
Summary of Volatile Organic Compounds in Groundwater
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	Sample Type	Zone	1,1,1-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	Freon 113	Toluene	Tetra-chloro-ethene	Trichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl Chloride
		CALDPH MCL:		200	5.0	6.0	1,200	150	5.0	5.0	6.0	10	0.50
2EP	10/9/2014	N	A1	< 10	< 10	< 10	< 10	NA	< 10	260	410	< 10	< 10
2EP	1/29/2015	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	20	540	< 5.0	< 5.0
2EP	2/27/2015	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	28	340	< 5.0	19
2EP	4/23/2015	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	42	160	< 5.0	26
2EP	7/29/2015	N	A1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	28	240	1.2	62
2EP	10/7/2015	N	A1	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0	35	200	1.6	49
2EP	10/11/2016	N	A1	< 0.50	< 0.50	0.20 j	0.14 j	< 0.50	0.29 j	52	72	0.64	2.8
2EP	10/11/2016	FD	A1	< 0.50	< 0.50	< 0.50	0.12 j	< 0.50	0.32 j	51	72	0.64	2.7
2EP	5/16/2017	N	A1	< 1.0	< 1.0	< 1.0	3.2 j	< 1.0	0.85 j	230	270	1.4	4.9
2EP	8/23/2017	N	A1	< 1.0	< 1.0	< 1.0	2.3	< 1.0	0.93 j	240	210	1.0	4.5
2EP	10/13/2017	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	7.7	450	2.2 j	9.1
2EP	1/19/2018	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	1,000	< 5.0	< 5.0	17	< 5.0	14
2EP	1/19/2018	FD	A1	< 5.0	< 5.0	< 5.0	< 5.0	1,100	< 5.0	< 5.0	16	< 5.0	14
2EP	3/1/2018	N	A1	< 1.0	< 1.0	< 1.0	< 4.0	160	< 1.0	< 1.0	10	< 1.0	7.5
2EP	8/9/2018	N	A1	<0.50	0.16 J	<0.50	<0.50	1.1	<0.50	0.59	14	0.24 J	11
2EP	10/3/2018	N	A1	<0.50	0.18 J	<0.50	<0.50	<0.50	<0.50	1.0	6.1	0.44 J	6.0
2EP	3/19/2019	N	A1	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	63	120	< 2.5	43
2EP	5/7/2019	N	A1	< 0.50	0.50	2.7	4.6	1.1	0.23 j	14 j	1,100	5.4	50
2EP	7/9/2019	N	A1	< 0.50	< 0.50	0.90	0.19 j	0.90	< 0.50	11	330	4.4	110
2EP	7/9/2019	FD	A1	< 0.50	< 0.50	0.92	< 0.50	1.0	< 0.50	11	330	4.3	110
2EP	10/3/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	0.45 j	< 0.50	1.6	18	1.4	9.0
2EPa	8/28/2014	N	A3	1.2	< 1.0	1.2	1.1	NA	< 1.0	160	22	< 1.0	< 1.0
2EPa	10/8/2014	N	A3	< 2.5	< 2.5	3.0	< 2.5	NA	< 2.5	130	12	< 2.5	< 2.5
2EPa	1/29/2015	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.68	5.9	< 0.50	76
2EPa	2/27/2015	N	ვ (62-67 f	8.6	2.1	13	1.7	< 0.50	< 0.50	47	160	< 0.50	< 0.50
2EPa	2/27/2015	N	ვ (72-87 f	8.4	2.2	14	1.9	< 0.50	< 0.50	43	170	0.50	< 0.50
2EPa	4/23/2015	N	A3	5.8	1.2	7.6	0.58	< 0.50	< 0.50	88	79	< 0.50	< 0.50
2EPa	7/29/2015	N	A3	2.1	1.3	3.4	0.92	< 0.50	< 0.50	16	54	< 0.50	4.5
2EPa	10/7/2015	N	A3	2.7	1.1	2.7	1.3 J	< 0.50	< 0.50	59	16	< 0.50	4.0
2EPa	10/11/2016	N	A3	10	1.4	15	2.5	< 0.50	0.49 j	160	66	0.26 j	< 0.50
2EPa	1/5/2017	N	A3	8.7	1.5	12	1.9	< 1.0	< 1.0	69	93	< 1.0	< 1.0
2EPa	5/16/2017	N	A3	< 0.50	< 0.50	0.31 j	< 2.0	780	< 0.50	6.5	5.4	< 0.50	2.2
2EPa	8/23/2017	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	530	< 0.50	0.37 j	0.36 j	0.21 j	< 0.50
2EPa	10/13/2017	N	A3	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	610 J-	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ
2EPa	3/1/2018	N	A3	< 0.50	< 0.50	< 0.50	< 2.0	25	< 0.50	< 0.50	1.5	< 0.50	< 0.50
2EPa	10/5/2018	N	A3	< 0.50	0.36 J	< 0.50	< 0.50	< 0.50	< 0.50	0.30 J	0.76	0.14 J	1.1
2EPa	3/19/2019	N	A3	< 0.50	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.98	< 0.50	0.74
2EPa	5/7/2019	N	A3	< 0.50	1.1	< 0.50	< 0.50	1.0	< 0.50	2.1	1.3	< 0.50	1.3
2EPa	7/9/2019	N	A3	< 0.50	0.84	0.25 j	0.40 j	0.67	< 0.50	2.2	83	0.35 j	12
2EPa	10/3/2019	N	A3	< 0.50	1.4	0.29 j	< 0.50	< 0.50	< 0.50	2.9	39	0.46 j	13
4BP	10/8/2014	N	A1	< 5.0	11	70	8.0	NA	< 5.0	420	3,300	13	< 5.0
4BP	4/23/2015	N	A1	< 50	< 50	61	< 50	< 50	< 50	280	2,400	< 50	< 50
4BP	10/8/2015	N	A1	< 13	10 J	87	< 50	< 13	< 13	250	3,300	27	< 13
4BP	10/12/2016	N	A1	< 50	< 50	97	11 j	< 50	< 50	260	2,100	< 50	< 50
4BP	1/5/2017	N	A1	7.4	7.1	54	< 10	< 10	< 10	110	1,200	5.0	< 10
4BP	5/16/2017	N	A1	< 10 UJ	< 10 UJ	8.5 J-	< 40 UJ	< 10 UJ	< 10 UJ	39 J-	180 J-	< 10 UJ	< 10 UJ
4BP	8/24/2017	N	A1	< 10	< 10	8.1 j	< 10	< 10	< 10	20	340	< 10	7.6 j
4BP	10/13/2017	N	A1	< 50 UJ	< 50 UJ	< 50 UJ	< 50 UJ	< 50 UJ	< 50 UJ	< 50 UJ	250 J-	< 50 UJ	< 50 UJ
4BP	1/19/2018	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	0.29 j	< 0.50	< 0.50	1.6	0.35 j	3.4
4BP	3/1/2018	N	A1	< 0.50	0.40 j	< 0.50	< 2.0	0.26 j	< 0.50	0.37 j	20	0.38 j	3.9
4BP	8/9/2018	N	A1	< 0.50	1.6	0.31 J	< 0.50	27	< 0.50	0.34 J	23	0.34 J	9.5
4BP	8/9/2018	FD	A1	< 0.50	1.7	0.41 J	< 0.50	30	< 0.50	0.40 J	26	0.36 J	11
4BP	10/3/2018	N	A1	0.25 J	1.8	< 0.50	< 0.50	17	< 0.50	0.20 J	18	0.39 J	5.0
4BP	3/18/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	8.6	< 0.50	< 0.50	0.68	< 0.50	< 0.50
4BP	3/18/2019	FD	A1	< 0.50	< 0.50	< 0.50	< 0.50	8.6	< 0.50	< 0.50	0.65	< 0.50	< 0.50
4BP	5/7/2019	N	A1	0.23 j	1.7	0.54	< 0.50	2.4	< 0.50	1.6	20	0.24 j	2.9
4BP	7/9/2019	N	A1	< 0.50	1.6	< 0.50	< 0.50	0.53	< 0.50	< 0.50	2.1	0.20 j	1.4
4BP	10/4/2019	N	A1	0.80	4.6	< 0.50	< 0.50	0.32 j	< 0.50	0.41 j	2.0	0.49 j	1.2
4BP	10/4/2019	FD	A1	0.80	5.7	< 0.50	< 0.50	0.38 j	< 0.50	0.43 j	2.5	0.44 j	1.3
G-1A	8/28/2014	N	A3	< 5.0	< 5.0	< 5.0	12	NA	< 5.0	550	590	< 5.0	< 5.0
G-1A	10/9/2014	N	A3	< 5.0	< 5.0	< 5.0	6.1	NA	< 5.0	340	390	< 5.0	< 5.0
G-1A	1/29/2015	N	A3	< 5.0	< 5.0	17	39	< 5.0	< 5.0	110	6,900	27	8.8
G-1A	2/27/2015	N	A3	< 5.0	< 5.0	13	25	< 5.0	< 5.0	90	5,200	15	23
G-1A	4/23/2015	N	A3	< 50	< 50	< 50	< 50	< 50	< 50	310	3,000	< 50	< 50
G-1A	10/7/2015	N	A3	< 5.0	< 5.0	< 5.0	< 20	< 5.0	< 5.0	350	780	4.6 J	< 5.0
G-1A	10/12/2016	N	A3	< 1.0	< 1.0	0.67 j	1.8	< 1.0	< 1.0	130	140	1.1	< 1.0
G-1A	10/16/2017	N	A3	< 1.0	< 1.0	1.6	5.8	< 1.0	0.80 j	290	600	1.8	0.84 j
G-1A	3/2/2018	N	A3	< 2.0	< 2.0	< 2.0	4.1 j	< 2.0	< 2.0	170	290	< 2.0	< 2.0
G-1A	10/16/2018	N	A3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	160	220	< 5.0	< 5.0
G-1A	10/4/2019	N	A3	< 2.5	< 2.5	1.9 j	5.1	< 2.5	1.0 j	300	530	2.3 j	13
H-1A	9/3/2014	N	A3	1.0	< 0.50	1.9	1.3	NA	< 0.50	54	22	< 0.50	< 0.50
H-1A	10/9/2014	N	A3	1.9	< 0.50	2.5	7.7	NA	< 0.50	160	1.7	< 0.50	< 0.50
H-1A	1/29/2015	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10	2.4	< 0.50	< 0.50
H-1A	4/23/2015	N	A3	4.4	< 0.50	5.0	1.8	< 0.50	< 0.50	100	22	< 0.50	2.3
H-1A	10/7/2015	N	A3	3.0	< 0.50	3.2	1.5 J	< 0.50	< 0.50	93	14	< 0.50	1.2
H-1A	12/2/2016	N	A3	1.4	0.26	2.9	1.1	< 0.50	< 0.50	72	15	< 0.50	4.6
H-1A	1/4/2017	N	A3	1.5	0.37	2.9	2.1	< 0.50	< 0.50	57	18	< 0.50	2.7
H-1A	1/4/2017	FD	A3	1.3	0.33 j	2.4	1.7	< 0.50	< 0.50	53	17	< 0.50	2.7
H-1A	5/18/2017	N	A3	0.65 J-	1.3 J-	3.4 J-	5.3 J-	< 0.50 UJ	< 0.50 UJ	62 J-	350 J-	0.30 J-	4.3 J-

Table C-3
Summary of Volatile Organic Compounds in Groundwater
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	Sample Type	Zone	1,1,1-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	Freon 113	Toluene	Tetra-chloro-ethene	Trichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl Chloride
		CALDPH MCL:		200	5.0	6.0	1,200	150	5.0	5.0	6.0	10	0.50
H-1A	8/23/2017	N	A3	< 5.0	< 5.0	3.2 j	6.3	< 5.0	< 5.0	160	500	2.3 j	< 5.0
H-1A	8/23/2017	FD	A3	< 5.0	< 5.0	3.2 j	5.7	< 5.0	< 5.0	150	480	2.1 j	< 5.0
H-1A	10/16/2017	N	A3	< 5.0	< 5.0	6.5	10	< 5.0	< 5.0	220	880	< 5.0	3.0 j
H-1A	3/2/2018	N	A3	< 5.0	< 5.0	< 5.0	< 20	< 5.0	< 5.0	26	330	< 5.0	120
H-1A	10/3/2018	N	A3	< 5.0	< 5.0	2.4 J	1.1 J	< 5.0	< 5.0	120	400	< 5.0	< 5.0
H-1A	10/9/2019	N	A3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	40	100	< 5.0	3.6 j
HMSA-1S	3/28/2016	N	A2/A3	2.0	< 0.50	70	37	< 0.50	< 0.50	80	< 0.50	< 0.50	< 0.50
HMSA-1S	1/5/2017	N	A2/A3	2.2	0.25 j	72	42	< 1.0	< 1.0	53	< 1.0	< 1.0	< 1.0
HMSA-1S	5/17/2017	N	A2/A3	2.8	< 1.0	89	70	< 1.0	< 1.0	96	< 1.0	< 1.0	< 1.0
HMSA-1S	5/17/2017	FD	A2/A3	2.7	< 1.0	86	66	< 1.0	< 1.0	84	< 1.0	< 1.0	< 1.0
HMSA-1S	8/24/2017	N	A2/A3	4.3	< 0.50	24	4.2	0.38 j	< 0.50	69	< 0.50	< 0.50	< 0.50
HMSA-1S	10/18/2017	N	A2/A3	3.5	< 0.50	48	18	< 0.50	< 0.50	78	< 0.50	< 0.50	< 0.50
HMSA-1S	2/15/2018	N	A2/A3	3.2	< 0.50	59	9.0	< 0.50	< 0.50	94	0.12	< 0.50	< 0.50
HMSA-1S	3/2/2018	N	A2/A3	3.6	< 0.50	58	15	< 0.50	< 0.50	79	< 0.50	< 0.50	< 0.50
HMSA-1S	10/1/2018	N	A2/A3	2.4	< 0.50	37	5.7	< 0.50	< 0.50	62	< 0.50	< 0.50	< 0.50
HMSA-1S	10/4/2019	N	A2/A3	4.0	< 0.50	7.6	0.89	< 0.50	< 0.50	74	< 0.50	< 0.50	< 0.50
LF-6A	10/9/2014	N	A4	< 5.0	< 5.0	< 5.0	5.8	NA	< 5.0	180	5.4	< 5.0	< 5.0
LF-6A	11/24/2015	N	A4	2.0	< 0.50	2.3	6.2	NA	< 0.50	180	0.61	< 0.50	< 0.50
LF-6A	10/12/2016	N	A4	2.2	< 0.50	2.6	6.0	< 0.50	< 0.50	180	0.60	< 0.50	< 0.50
LF-6A	10/16/2017	N	A4	1.5	< 0.50	2.2	6.0	< 0.50	< 0.50	180	0.58	< 0.50	< 0.50
LF-6A	10/16/2017	N	A4	1.6	< 0.50	2.0	5.0	< 0.50	< 0.50	130	5.0	< 0.50	< 0.50
LF-6A	10/4/2019	N	A4	1.2	< 0.50	1.6	3.7	< 0.50	< 0.50	130	0.72	< 0.50	< 0.50
LF-6A	10/4/2019	FD	A4	< 5.0	< 5.0	< 5.0	3.1 j	< 5.0	< 5.0	130	< 5.0	< 5.0	< 5.0
MW-01A1	8/28/2014	N	A1	< 0.50	0.56	0.79	1.9	NA	0.82	510	480	2.3	< 0.50
MW-01A1	11/25/2014	N	A1	< 5.0	< 5.0	< 5.0	19	< 5.0	< 5.0	850	1,300	< 5.0	< 5.0
MW-01A1	1/29/2015	N	A1	< 5.0	< 5.0	< 5.0	28	< 5.0	< 5.0	1,400	1,100	5.6	< 5.0
MW-01A1	4/23/2015	N	A1	13	17	< 5.0	32	< 5.0	< 5.0	1,200	990	10	< 5.0
MW-01A1	10/7/2015	N	A1	< 10	< 10	< 10	53	< 10	< 10	1,600	1,500	< 10	28
MW-01A1	10/12/2016	N	A1	< 10	< 10	< 10	17	< 10	< 10	470	440	< 10	34
MW-01A1	5/16/2017	N	A1	< 1.0	1.3	< 1.0	7.8	< 1.0	< 1.0	1.3	140	2.1	49
MW-01A1	8/23/2017	N	A1	< 1.0	1.1	< 1.0	4.1	< 1.0	< 1.0	11	100	1.5	27
MW-01A1	10/13/2017	N	A1	< 0.50	0.92	0.29 j	0.87	< 0.50	< 0.50	0.62	63	1.5	43
MW-01A1	1/19/2018	N	A1	< 1.0	1.2	0.88 j	2.9	< 1.0	< 1.0	6.2	250	1.9	90
MW-01A1	3/2/2018	N	A1	< 1.0	1.1	< 1.0	1.1 j	< 1.0	< 1.0	1.0	52	1.0	39
MW-01A1	8/9/2018	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.49 J	9.3	< 0.50	3.8
MW-01A1	10/2/2018	N	A1	< 0.50	0.51	< 0.50	0.25 J	0.31 J	< 0.50	0.89	51	1.2	42
MW-01A1	3/19/2019	N	A1	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	19	130	< 2.5	12
MW-01A1	5/7/2019	N	A1	< 0.50	1.4	4.0	11	0.42 j	1.2	290	1,200	3.5	93
MW-01A1	7/9/2019	N	A1	< 0.50	1.3	1.3	3.5	1.0	0.83	110	300	2.2	38
MW-01A1	10/3/2019	N	A1	< 2.5	0.64 j	< 2.5	1.3 j	< 2.5	< 2.5	3.2	110	2.4 j	38
MW-01A1	10/3/2019	FD	A1	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	3.5	110	2.5	37
MW-01A3	8/28/2014	N	A3	0.73	< 0.50	0.5	1.1	NA	< 0.50	150	0.51	< 0.50	< 0.50
MW-01A3	11/25/2014	N	A3	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	230	< 2.5	< 2.5	< 2.5
MW-01A3	1/29/2015	N	A3	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	15	130	< 2.5	45
MW-01A3	4/23/2015	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10	53	0.6	66
MW-01A3	10/7/2015	N	A3	2.8	0.71	0.67	0.88 J	< 0.50	< 0.50	61	32	0.34 J	15
MW-01A3	3/28/2016	N	A3	2.2	0.64	0.89	1.0	< 0.50	< 0.50	46	55	< 0.50	9.8
MW-01A3	10/12/2016	N	A3	1.7	< 0.50	1.4	1.1	< 0.50	< 0.50	120	14	0.17 j	6.0
MW-01A3	1/4/2017	N	A3	1.2	0.35 j	0.89	0.92	< 0.50	< 0.50	85	20	< 0.50	5.4
MW-01A3	1/4/2017	FD	A3	1.2	0.37 j	0.82	0.90	< 0.50	< 0.50	83	21	0.14 j	5.6
MW-01A3	5/16/2017	N	A3	< 0.50	0.48 j	< 0.50	< 2.0	< 0.50	< 0.50	< 0.50	0.55	0.37 j	3.0
MW-01A3	8/23/2017	N	A3	< 0.50	0.36 J	< 0.50	< 0.50	< 0.50	< 0.50	0.97	1.7	0.27 j	2.0
MW-01A3	10/13/2017	N	A3	< 0.50	0.60	< 0.50	< 0.50	< 0.50	< 0.50	0.85	0.93	0.33 j	0.94
MW-01A3	3/2/2018	N	A3	< 0.50	0.61	< 0.50	< 2.0	< 0.50	< 0.50	1.5	2.7	< 0.50	3.4
MW-01A3	10/4/2019	N	A3	< 0.50	0.30 j	< 0.50	< 0.50	< 0.50	< 0.50	0.24 j	0.33 j	< 0.50	< 0.50
MW-02A1	8/28/2014	N	A1	< 10	< 10	< 10	29	NA	< 10	640	800	< 10	< 10
MW-02A1	11/25/2014	N	A1	< 10	< 10	< 10	36	< 10	< 10	890	1,200	< 10	< 10
MW-02A1	1/29/2015	N	A1	< 10	< 10	< 10	24	< 10	< 10	780	940	< 10	< 10
MW-02A1	4/23/2015	N	A1	< 10	< 10	< 10	24	< 10	< 10	790	850	< 10	< 10
MW-02A1	10/7/2015	N	A1	< 5.0	< 5.0	3.8 J	28	< 5.0	2.5 J	750	980	3.9 J	< 5.0
MW-02A1	10/12/2016	N	A1	< 5.0	< 5.0	5.1	15	< 5.0	2.7 j	490	290	< 5.0	< 5.0
MW-02A1	5/17/2017	N	A1	< 0.50	< 0.50	< 0.50	< 2.0	< 0.50	< 0.50	0.77	9.3	2.8	1.7
MW-02A1	8/24/2017	N	A1	< 0.50	< 0.50	< 0.50	0.44 j	0.64	< 0.50	0.35 j	21	2.2	23
MW-02A1	10/13/2017	N	A1	< 0.50	0.43 j	0.67	0.44 j	0.70	< 0.50	1.5	190	3.3	98
MW-02A1	1/19/2018	N	A1	< 0.50	0.30 j	0.48 j	0.49 j	0.25 j	< 0.50	0.32 j	40	2.8	54
MW-02A1	3/2/2018	N	A1	< 0.50	< 0.50	< 0.50	< 2.0	4.8	< 0.50	< 0.50	6.1	0.75	36
MW-02A1	10/2/2018	N	A1	< 0.50	< 0.50	< 0.50	0.16 J	1.5	< 0.50	0.31 J	1.1	0.59	3.0
MW-02A1	3/19/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	0.55	< 0.50	1.4	31	0.77	9.1
MW-02A1	5/7/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.50	7.0	1.4	14
MW-02A1	7/9/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	0.42 j	< 0.50	< 0.50	1.7	1.6	4.9
MW-02A1	10/4/2019	N	A1	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	0.29 J-	< 0.50 UJ	0.29 J-	4.4 J-	1.3 J-	6.0 J-
MW-02A1	10/4/2019	FD	A1	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	0.32 J-	< 0.50 UJ	0.21 J-	5.4 J-	1.2 J-	7.1 J-
MW-03A3	8/28/2014	N	A3	0.54	< 0.50	0.87	0.67	NA	< 0.50	74	1	< 0.50	< 0.50
MW-03A3	11/26/2014	N	A3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	57	45	< 5.0	< 5.0
MW-03A3	1/29/2015	N	A3	1.7	0.60	6.7	0.98	< 0.50	< 0.50	2.9	180	1.4	7.8
MW-03A3	4/23/2015	N	A3	1.8	0.57	< 0.50	0.77	< 0.50	< 0.50	0.9	6.6	0.84	14
MW-03A3	10/7/2015	N	A3	< 0.50	0.37 J	< 0.50	< 2.0	< 0.50	< 0.50	< 0.50	0.49 J	0.48 J	0.91
MW-03A3	10/12/2016	N	A3	< 0.50	0.36 j	< 0.50	< 0.50	< 0.50	< 0.50	1.3	0.49 j	0.29 j	0.9
MW-03A3	10/13/2017	N	A3	< 0.50	1.2	0.28 j	< 0.50	< 0.50	< 0.50	12	4.3	0.22 j	10

Table C-3
Summary of Volatile Organic Compounds in Groundwater
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Location ID	Sample Date	Sample Type	Zone	1,1,1-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	Freon 113	Toluene	Tetra-chloro-ethene	Trichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl Chloride
		CALDPH MCL:		200	5.0	6.0	1,200	150	5.0	5.0	6.0	10	0.50
MW-03A3	1/19/2018	N	A3	< 0.50	0.94	0.64	< 0.50	< 0.50	< 0.50	19	6.9	0.27 j	12
MW-03A3	3/1/2018	N	A3	< 0.50	0.34 j	< 0.50	< 2.0	0.47 j	< 0.50	0.30 j	0.69	< 0.50	< 0.50
MW-03A3	3/7/2018	N	A3	< 0.50	0.79	0.51	< 0.50	< 0.50	< 0.50	26	8.4	0.14 J	13
MW-03A3	3/7/2018	N	A3	< 0.50	0.79	0.51	< 0.50	< 0.50	< 0.50	26	8.4	0.14	13
MW-03A3	3/7/2018	FD	A3	< 0.50	0.82	0.48 j	< 0.50	< 0.50	< 0.50	26	8.5	0.17 j	13
MW-03A3	3/7/2018	FD	A3	< 0.50	0.82	0.48	< 0.50	< 0.50	< 0.50	26	8.5	0.17	13
MW-03A3	10/5/2018	N	A3	< 0.50	0.68	0.84	< 0.50	< 0.50	< 0.50	37	11	< 0.50	10
MW-03A3	10/5/2018	N	A3	< 0.50	0.68	0.84	< 0.50	< 0.50	< 0.50	37	11	< 0.50	10
MW-03A3	10/4/2019	N	A3	< 0.50	1.1	1.1	0.13 j	< 0.50	< 0.50	13	22	< 0.50	6.4
MW-04A3	8/28/2014	N	A3	0.95	< 0.50	2.5	1.0	NA	< 0.50	44	11	< 0.50	< 0.50
MW-04A3	11/25/2014	N	A3	1.1	< 0.50	1.7	1.1	< 0.50	< 0.50	40	8.9	< 0.50	< 0.50
MW-04A3	1/29/2015	N	A3	4.4	< 0.50	4.2	1.9	< 0.50	< 0.50	65	15	< 0.50	< 0.50
MW-04A3	4/23/2015	N	A3	3	< 0.50	3.3	1.5	< 0.50	< 0.50	39	19	< 0.50	< 0.50
MW-04A3	10/7/2015	N	A3	1.8	< 0.50	1.4	0.73 J	< 0.50	< 0.50	22	5	< 0.50	9.8
MW-04A3	10/12/2016	N	A3	0.95	< 0.50	0.58	0.41 j	< 0.50	< 0.50	6.5	6.1	< 0.50	14
MW-04A3	1/4/2017	N	A3	0.45	0.62	1.1	0.39	< 0.50	< 0.50	32	9.6	0.16	6.4
MW-04A3	5/17/2017	N	A3	0.96 j	1.3	3.9	5.5	< 1.0	< 1.0	69	110	0.50 j	11
MW-04A3	5/17/2017	N	A3	1.1	1.6	4.9	5.2	< 0.50	< 0.50	89	110	0.29 j	9.1
MW-04A3	8/23/2017	N	A3	0.44 j	1.4	5.0	4.8	0.18 j	< 0.50	120	360	0.52	12
MW-04A3	10/13/2017	N	A3	< 5.0	1.3 j	7.4	5.4	< 5.0	< 5.0	200	620	< 5.0	7.7
MW-04A3	1/19/2018	N	A3	0.51 J-	1.2 J-	6.8 J-	8.5 J-	< 0.50 R	< 0.50 R	300 J-	830 J-	1.1 J-	6.5 J-
MW-04A3	3/2/2018	N	A3	0.55	1.1	6.3	6.4	< 0.50	< 0.50	180	580	1.3	7.0
MW-04A3	10/3/2018	N	A3	< 5.0	< 5.0	3.1 J	0.92 J	< 5.0	< 5.0	130	340	3.3 J	5.5
MW-04A3	10/4/2019	N	A3	< 1.0	0.92 j	2.7	1.2	< 1.0	< 1.0	78	290	0.91 j	45
MW-09A3	3/28/2016	N	A3	1.8	1.2	6	2.1	< 0.50	< 0.50	160	180	0.61	0.84
MW-09A3	10/12/2016	N	A3	2.2	< 0.50	1.6	1.9	< 0.50	< 0.50	130	6.9	0.15 j	0.42 j
MW-09A3	10/12/2016	FD	A3	2	< 0.50	1.4	1.2	< 0.50	< 0.50	130	6.3	< 0.50	0.22 j
MW-09A3	1/4/2017	N	A3	1.3	0.35	1.1	0.82	< 0.50	< 0.50	50	7.8	0.13	16
MW-09A3	5/16/2017	N	A3	0.82	0.83	1.7	< 2.0	< 0.50	< 0.50	1.8	110	0.69	14
MW-09A3	8/24/2017	N	A3	< 0.50	0.58	0.81	< 0.50	0.19 j	< 0.50	1.9	44	0.42 j	38
MW-09A3	10/13/2017	N	A3	< 0.50 R	0.23 J-	< 0.50 R	< 0.50 R	0.62 J-	< 0.50 R	0.27 J-	5.9 J-	0.22 J-	6.0 J-
MW-09A3	1/19/2018	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	0.7	< 0.50	< 0.50	1.9	< 0.50	2.4
MW-09A3	3/1/2018	N	A3	< 0.50	< 0.50	< 0.50	< 2.0	0.46 j	< 0.50	0.41 j	1.0	< 0.50	< 0.50
MW-09A3	10/3/2018	N	A3	< 0.50	0.29 J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	0.19 J	0.26 J
MW-09A3	10/4/2019	N	A3	< 0.50	0.76	0.42 j	< 0.50	< 0.50	< 0.50	3.4	17	0.45 j	11
MW-OS-1A1	4/19/2017	N	A1	1.7	< 0.50	1.6	3.8	NA	< 0.50	4.9	7.5	< 0.50	< 0.50
MW-OS-1A1	8/23/2017	N	A1	1.3	< 0.50	1.2	3.5	< 0.50	< 0.50	3.8	5.2	< 0.50	< 0.50
MW-OS-1A1	10/12/2017	N	A1	1.5	< 0.20	1.1	4.2	NA	< 0.50	4.7	6.6	< 0.20	< 0.020
MW-OS-1A1	3/1/2018	N	A1	1.3	< 0.25	1.2	4.0	< 0.25	< 0.25	5.2	8.4	< 0.25	< 0.25
MW-OS-1A1	4/10/2018	N	A1	1.4	< 0.50	1.3	4.9	NA	<0.50	7.3	12	0.51	< 0.50
MW-OS-1A1	10/2/2018	N	A1	1.1	< 0.50	1.2	4.4	NA	<0.50	5.0	9.9	<0.50	< 0.50
MW-OS-1A1	10/3/2018	N	A1	1.2	< 0.50	1.2	3.6	<0.50	<0.50	2.8	7.1	<0.50	< 0.50
MW-OS-1A1	3/18/2019	N	A1	0.94 J-	< 0.50 UJ	1.1 J-	2.5 J-	< 0.50 UJ	< 0.50 UJ	2.2 J-	13 J-	< 0.50 UJ	< 0.50 UJ
MW-OS-1A1	4/8/2019	N	A1	0.88	< 0.50	1.4	4.1	NA	< 0.50	3.9	18	< 0.50	< 0.50
MW-OS-1A1	5/8/2019	N	A1	0.94	< 0.50	1.2	4.3	< 0.50	< 0.50	2.3	13	0.27 j	< 0.50
MW-OS-1A1	7/9/2019	N	A1	0.70	< 0.50	0.93	2.8	< 0.50	< 0.50	1.8	10	< 0.50	< 0.50
MW-OS-1A1	10/4/2019	N	A1	0.40 j	< 0.50	0.45 j	1.8	< 0.50	< 0.50	1.2	6.1	< 0.50	< 0.50
MW-OS-2A1	8/13/2014	N	A1	< 0.50	< 0.50	0.53	5.1	NA	1.0	1,000	560	1.8	< 0.50
MW-OS-2A1	10/7/2014	N	A1	< 10	< 10	< 10	< 40	NA	< 10	1,500	870	< 10	< 10
MW-OS-2A1	2/27/2015	N	A1	< 0.50	< 0.50	< 0.50	9.9	< 0.50	1.4	1,400	670	3.7	< 0.50
MW-OS-2A1	4/13/2015	N	A1	< 0.50	< 0.50	< 0.50	10	NA	2.4	1,700	760	18	< 0.50
MW-OS-2A1	4/23/2015	N	A1	< 0.50	< 0.50	< 0.50	4.9	< 0.50	0.69	1,300	790	2.6	< 0.50
MW-OS-2A1	10/6/2015	N	A1	< 10	< 10	< 10	< 10	< 10	< 10	1,300	750	< 10	< 10
MW-OS-2A1	4/19/2017	N	A1	< 0.50	< 0.50	0.69	< 0.50	NA	< 0.50	170	280	0.61	4.8
MW-OS-2A1	8/23/2017	N	A1	< 0.50	< 0.50	< 0.50	0.30 j	< 10	< 0.50	3.4	64	0.74	47
MW-OS-2A1	10/12/2017	N	A1	< 2.0	< 2.0	< 1.0	< 5.0	NA	< 5.0	< 2.0	29	< 2.0	39
MW-OS-2A1	1/19/2018	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	0.20 j	< 0.50	< 0.50	1.9	2.1	8.6
MW-OS-2A1	3/2/2018	N	A1	< 2.5	< 2.5	< 2.5	< 10	120	< 2.5	< 2.5	< 2.5	< 2.5	2.7
MW-OS-2A1	3/2/2018	FD	A1	< 2.5	< 2.5	< 2.5	< 10	120	< 2.5	< 2.5	< 2.5	< 2.5	3.0
MW-OS-2A1	4/11/2018	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.50	< 0.50	0.59	0.83	7.7
MW-OS-2A1	10/2/2018	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.50	0.64	< 0.50	< 0.50	< 0.50
MW-OS-2A1	10/3/2018	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	51	< 0.50	0.47 J	0.45 J	0.45 J	0.31 J
MW-OS-2A1	3/18/2019	N	A1	< 2.5	< 2.5	< 2.5	< 2.5	100	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
MW-OS-2A1	4/8/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.50	< 0.50	1.4	< 0.50	< 0.50
MW-OS-2A1	5/8/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	19	< 0.50	0.93	2.1	0.27 j	< 0.50
MW-OS-2A1	5/8/2019	FD	A1	< 0.50	< 0.50	< 0.50	< 0.50	17	< 0.50	0.82	2.0	0.19 j	< 0.50
MW-OS-2A1	7/9/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	0.58	< 0.50	0.56	1.9	0.18 j	< 0.50
MW-OS-2A1	10/4/2019	N	A1	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	0.96 J-	< 0.50 UJ	0.35 J-	2.6 J-	0.20 J-	< 0.50 UJ
MW-OS-2A3	8/13/2014	N	A3	2.6	< 0.50	4.6	2.0	NA	< 0.50	84	3.3	< 0.50	< 0.50
MW-OS-2A3	10/7/2014	N	A3	2.8	< 0.50	3.4	3.1	NA	< 0.50	91	1.6	< 0.50	< 0.50
MW-OS-2A3	2/27/2015	N	A3	2.2	< 0.50	3.0	3.5	< 0.50	< 0.50	100	1.6	< 0.50	< 0.50
MW-OS-2A3	2/27/2015	FD	A3	2.0	< 0.50	2.6	2.9	< 0.50	< 0.50	98	2.5	< 0.50	< 0.50
MW-OS-2A3	4/13/2015	N	A3	2.3	< 0.50	3.2	4.0	NA	< 0.50	78	1.8	< 0.50	< 0.50
MW-OS-2A3	4/23/2015	N	A3	2.3	< 0.50	3.5	3.8	< 0.50	< 0.50	91	1.7	< 0.50	< 0.50
MW-OS-2A3	10/6/2015	N	A3	2.8	< 0.50	3.2	2.6	< 0.50	< 0.50	80	2.1	< 0.50	< 0.50
MW-OS-2A3	4/11/2016	N	A3	4.8	< 0.50	4.6	1.3	NA	< 0.50	85	15	< 0.50	< 0.50
MW-OS-2A3	10/12/2016	N	A3	5.0	< 0.50	8.7	2.3	NA	< 0.50	120	12	< 0.50	< 0.50
MW-OS-2A3	1/4/2017	N	A3	6.1	0.52	12	1.7	< 0.50	< 0.50	80	13	< 0.50	< 0.50
MW-OS-2A3	4/19/2017	N	A3	4.8	< 0.50	15	2.6	NA	< 0.50	130	14	< 0.50	< 0.50

Table C-3
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Location ID	Sample Date	Sample Type	Zone	1,1,1-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	Freon 113	Toluene	Tetra-chloro-ethene	Trichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl Chloride
		CALDPH MCL:		200	5.0	6.0	1,200	150	5.0	5.0	6.0	10	0.50
MW-OS-2A3	5/18/2017	N	A3	3.8	0.29 j	10	1.3 j	< 0.50	< 0.50	91	14	< 0.50	< 0.50
MW-OS-2A3	8/23/2017	N	A3	3.6	0.30 J	12	1.3	< 0.50	< 0.50	99	35	< 0.50	0.73
MW-OS-2A3	10/12/2017	N	A3	3.2 J	0.67 J	11	1.2	NA	< 0.50	67 J	68 J	0.25 J	210
MW-OS-2A3	10/12/2017	FD	A3	1.7 J	1.3 J	9.4	0.90	NA	< 0.50	13 J	190 J	0.67 J	230
MW-OS-2A3	1/19/2018	N	A3	0.92	1.2	3.7	< 0.50	< 0.50	< 0.50	40	31	0.71	79
MW-OS-2A3	3/1/2018	N	A3	2.7	< 0.50	7.6	0.60 j	< 0.50	< 0.50	62	8.5	< 0.50	< 0.50
MW-OS-2A3	10/2/2018	N	A3	0.55	0.82	< 0.50	0.66	NA	< 0.50	2.7	11	< 0.50	56
MW-OS-2A3	10/3/2018	N	A3	0.50	0.77	1.1	0.21 J	< 0.50	< 0.50	23	7.0	0.32 J	24
MW-OS-2A3	3/18/2019	N	A3	< 0.50 UJ	0.97 J-	1.2 J-	< 0.50 R	< 0.50 UJ	< 0.50 UJ	23 J-	12 J-	< 0.50 UJ	13 J-
MW-OS-2A3	5/8/2019	N	A3	< 0.50	1.1	1.2	< 0.50	< 0.50	< 0.50	25	12	0.28 j	12
MW-OS-2A3	7/9/2019	N	A3	< 0.50	0.80	0.84	< 0.50	< 0.50	< 0.50	17	9.9	0.16 j	12
MW-OS-2A3	10/4/2019	N	A3	< 0.50	0.97	1.2	< 0.50	< 0.50	< 0.50	33	11	0.36 j	20
MW-OS-3A1	10/7/2014	N	A1	4.7	< 0.50	4.2	< 2.0	NA	< 0.50	25	5.6	< 0.50	< 0.50
MW-OS-3A1	4/13/2015	N	A1	4.3	< 0.50	3.5	2.7	NA	< 0.50	9.6	4.2	< 0.50	< 0.50
MW-OS-3A1	10/7/2015	N	A1	2.8	< 0.50	2.7	0.95	NA	< 0.50	18	4.3	< 0.50	< 0.50
MW-OS-3A1	4/11/2016	N	A1	3.2	< 0.50	2.7	1.7	NA	< 0.50	13	3.2	< 0.50	< 0.50
MW-OS-3A1	10/12/2016	N	A1	2.4	< 0.50	2.6	1.9	NA	< 0.50	8.2	2.2	< 0.50	< 0.50
MW-OS-3A1	4/19/2017	N	A1	2.8	< 0.50	3.5	2.1	NA	< 0.50	11	3.4	< 0.50	< 0.50
MW-OS-3A1	10/11/2017	N	A1	2.9	< 0.20	3.6	2.3	NA	< 0.50	7.7	3.2	< 0.20	< 0.020
MW-OS-3A1	10/2/2018	N	A1	2.9	< 0.50	4.1	2.2	NA	< 0.50	18	3.6	< 0.50	< 0.50
MW-OS-3A1	3/18/2019	N	A1	2.1 J-	< 0.50 UJ	2.9 J-	0.86 J-	< 0.50 UJ	< 0.50 UJ	12 J-	4.2 J-	< 0.50 UJ	< 0.50 UJ
MW-OS-3A1	5/8/2019	N	A1	2.8	0.60	4.3	1.8	< 0.50	< 0.50	17	4.5	< 0.50	0.21 j
MW-OS-3A1	7/10/2019	N	A1	3.4	0.79	5.3	2.1	1.0	< 0.50	15	5.7	< 0.50	0.71
MW-OS-3A1	10/4/2019	N	A1	4.1	0.75	4.6	2.1	0.26 j	< 0.50	21	6.0	< 0.50	0.93
VM-3D	8/28/2014	N	A3	1.1	< 0.50	5.5	3.9	NA	< 0.50	87	290	3.7	< 0.50
VM-3D	8/28/2014	FD	A3	1.1	< 0.50	5.4	4.0	NA	< 0.50	90	320	4.8	< 0.50
VM-3D	11/25/2014	N	A3	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	21	180	< 2.5	7.6
VM-3D	1/29/2015	N	A3	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	2.6	23	< 2.5	210
VM-3D	4/23/2015	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.5	10	0.63	22
VM-3D	10/8/2015	N	A3	< 0.50	< 0.50	< 0.50	< 2.0	< 0.50	< 0.50	0.68	1.9	0.38 J	2.2
VM-3D	1/5/2017	N	A3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	2.3	8.8	< 5.0	3.8
VM-3D	10/13/2017	N	A3	< 0.50	1.2	1.6	0.29 j	< 0.50	< 0.50	18	34	0.36 j	12
VM-3D	1/19/2018	N	A3	< 0.50 R	2.4 J-	2.0 J-	< 0.50 R	< 0.50 R	< 0.50 R	14 J-	320 J-	1.6 J-	140 J-
VM-3D	3/2/2018	N	A3	< 0.50	1.8	2.1	< 2.0	< 0.50	< 0.50	18	360	1.1	90
VM-3D	10/3/2018	N	A3	< 0.50	0.66	1.8	0.31 J	< 0.50	< 0.50	29	25	< 0.50	5.1
VM-3D	10/3/2018	FD	A3	< 0.50	0.68	1.9	0.34 J	< 0.50	< 0.50	30	25	0.13 J	5.1
VM-3D	10/3/2019	N	A3	0.92	0.63	1.6	0.38 j	< 0.50	< 0.50	50	6.2	< 0.50	1.2
VM-3S	8/28/2014	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.50	26	69	0.81	180
VM-3S	11/25/2014	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	15	2.1	390
VM-3S	1/29/2015	N	A1	< 1.0	< 1.0	< 1.0	1.2	< 1.0	< 1.0	3.7	66	1.5	110
VM-3S	4/23/2015	N	A1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.9	1.5	11
VM-3S	10/8/2015	N	A1	< 0.50 R	< 0.50 R	< 0.50 R	< 2.0 R	< 0.50 R	< 0.50 R	0.97 J-	1.8 J-	0.60 J-	7.4 J-
VM-3S	10/13/2017	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	4.3 j	< 5.0	2.3 j
VM-3S	10/5/2018	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	590	< 0.50	< 0.50	0.86	< 5.0	< 0.50
VM-3S	10/3/2019	N	A1	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	1.7 J-	< 0.50 UJ	0.65 J-	2.9 J-	0.49 J-	< 0.50 UJ
VM-4D	8/28/2014	N	A3	5.6	< 0.50	6.9	1.8	NA	< 0.50	150	12	< 0.50	< 0.50
VM-4D	11/25/2014	N	A3	11	0.63	13	2.5	< 0.50	< 0.50	190	15	< 0.50	< 0.50
VM-4D	1/29/2015	N	A3	10	1.5	14	2.1	< 0.50	< 0.50	82	150	< 0.50	1.9
VM-4D	4/23/2015	N	A3	< 0.50	4.3	5.4	< 0.50	< 0.50	< 0.50	< 0.50	120	< 0.50	11
VM-4D	10/8/2015	N	A3	< 0.50	1.9	0.38 J	< 2.0	< 0.50	< 0.50	3.9	11	0.58	11
VM-4D	1/5/2017	N	A3	2.5	3.0	0.36	< 0.50	< 0.50	< 0.50	0.32	9.1	0.6	16
VM-4D	5/18/2017	N	A3	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	2.1 j	4.4	< 2.5	1.9 j
VM-4D	8/23/2017	N	A3	< 0.50	0.11 J	0.32 j	< 0.50	< 0.50	< 0.50	0.43 j	0.85	0.28 j	< 0.50
VM-4D	10/13/2017	N	A3	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	0.80 J-	< 5.0 UJ	< 5.0 UJ
VM-4D	3/2/2018	N	A3	< 0.50	0.77	< 0.50	< 2.0	< 0.50	< 0.50	0.45 j	0.68	0.38 j	< 0.50
VM-4D	10/2/2018	N	A3	< 0.50	1.1	< 0.50	< 0.50	< 0.50	< 0.50	2.6	1.3	0.45 J	2.0
VM-4D	10/4/2019	N	A3	< 0.50	1.5	0.55	< 0.50	< 0.50	< 0.50	9.0	30	0.49 j	25
VM-4S	8/28/2014	N	A1	1.3	1.3	8.1	46	NA	< 0.50	230	2,700	7.6	< 0.50
VM-4S	11/25/2014	N	A1	< 25	< 25	< 25	59	< 25	< 25	370	2,900	< 25	< 25
VM-4S	1/29/2015	N	A1	< 25	< 25	< 25	84	< 25	< 25	74	1,800	< 25	26
VM-4S	4/23/2015	N	A1	< 5.0	< 5.0	< 5.0	13	< 5.0	< 5.0	7.2	380	< 5.0	110
VM-4S	10/8/2015	N	A1	< 0.50	< 0.50	0.47 J	< 2.0	< 0.50	< 0.50	2.0	130	4.8	23
VM-4S	1/5/2017	N	A1	< 10	< 10	< 10	84	< 10	< 10	17	760	4.1	150
VM-4S	5/18/2017	N	A1	< 10	< 10	< 10	< 40	< 10	< 10	< 10	100	< 10	18
VM-4S	8/23/2017	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	0.17 j	< 0.50	0.67	5.6	3.2	6.1
VM-4S	10/13/2017	N	A1	< 0.50	0.27 j	< 0.50	< 0.50	< 0.50	< 0.50	0.91	2.4	2.1	1.4
VM-4S	3/2/2018	N	A1	< 0.50	< 0.50	< 0.50	< 2.0	< 0.50	< 0.50	0.41 j	1.3	1.4	1.3
VM-4S	10/2/2018	N	A1	< 0.50	0.30 J	< 0.50	< 0.50	< 0.50	< 0.50	3.1	19	2.2	34
VM-4S	10/2/2018	FD	A1	< 0.50	0.30 J	< 0.50	< 0.50	< 0.50	< 0.50	3.2	21	2.1	36
VM-4S	10/4/2019	N	A1	< 0.50	0.16 j	< 0.50	< 0.50	0.54	< 0.50	0.37 j	1.1	0.55	0.35 j
VM-5D	8/28/2014	N	A3	4.7	< 0.50	5.8	2.0	NA	0.5	160	3.3	< 0.50	< 0.50
VM-5D	1/29/2015	N	A3	5.6	< 0.50	7.7	2.3	< 0.50	0.54	180	9.4	< 0.50	< 0.50
VM-5D	2/27/2015	N	A3	7.2	< 0.50	8.7	2.4	< 0.50	0.56	180	17	< 0.50	< 0.50
VM-5D	4/23/2015	N	A3	9.8	0.63	12	2.2	< 0.50	0.59	190	42	< 0.50	< 0.50
VM-5D	4/23/2015	FD	A3	9.4	0.59	11	2.1	< 0.50	0.54	190	41	0.57	< 0.50
VM-5D	10/7/2015	N	A3	7.8	< 1.0	9.9	4.1	< 1.0	0.58 J	170	29	< 1.0	< 1.0
VM-5D	1/5/2017	N	A3	11	0.87	15	2.5	< 1.0	0.22	140	67	< 1.0	< 1.0
VM-5D	5/17/2017	N	A3	2.3 J-	5.1 J-	9.0 J-	< 4.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	210 J-	0.74 J-	37 J-

Table C-3
Summary of Volatile Organic Compounds in Groundwater
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	Sample Type	Zone	1,1,1-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	Freon 113	Toluene	Tetra-chloro-ethene	Trichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl Chloride
		CALDPH MCL:		200	5.0	6.0	1,200	150	5.0	5.0	6.0	10	0.50
VM-5D	8/24/2017	N	A3	< 0.50	0.97	< 0.50	< 0.50	0.63	< 0.50	0.54	9.6	0.51	4.2
VM-5D	10/13/2017	N	A3	< 0.50 UJ	0.30 J-	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	0.13 J-	0.49 J-	2.4 J-
VM-5D	3/1/2018	N	A3	< 0.50	1.2	0.27 j	< 2.0	< 0.50	< 0.50	3.6	15	< 0.50	4.0
VM-5D	10/2/2018	N	A3	< 0.50	1.8	0.49 J	< 0.50	< 0.50	< 0.50	3.9	11	0.28 J	5.7
VM-5D	3/19/2019	N	A3	< 0.50	1.7	1.2	< 0.50	< 0.50	< 0.50	20	13	< 0.50	7.5
VM-5D	5/7/2019	N	A3	< 0.50	1.0	< 0.50	< 0.50	< 0.50	< 0.50	1.6	9.9	0.25 j	7.5
VM-5D	7/10/2019	N	A3	< 0.50	1.7	1.1	< 0.50	< 0.50	< 0.50	15	12	0.31 j	7.7
VM-5D	10/4/2019	N	A3	< 0.50	1.5	1.4	< 0.50	< 0.50	< 0.50	30	13	0.34 j	10
VM-5D	10/4/2019	FD	A3	< 0.50	2.0	1.5	< 0.50	< 0.50	< 0.50	31	17	0.30 j	12
VM-5S	8/28/2014	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.50	53	78	< 0.50	4.5
VM-5S	10/9/2014	N	A1	< 0.50	< 0.50	< 0.50	0.72	NA	< 0.50	99	180	0.67	11
VM-5S	10/9/2014	FD	A1	< 0.50	< 0.50	< 0.50	0.74	NA	< 0.50	99	180	0.73	9.5
VM-5S	1/29/2015	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	26	110	0.73	130
VM-5S	2/27/2015	N	A1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	96	230	< 1.0	20
VM-5S	4/23/2015	N	A1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	14	52	< 1.0	14
VM-5S	7/29/2015	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	37	120	< 0.50	34
VM-5S	10/7/2015	N	A1	< 0.50	< 0.50	< 0.50	< 2.0	< 0.50	< 0.50	32	110	0.38 J	20
VM-5S	5/17/2017	N	A1	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 4.0 UJ	< 1.0 UJ	< 1.0 UJ	0.57 J-	43 J-	1.4 J-	7.8 J-
VM-5S	8/24/2017	N	A1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.69 j	16	1.3	9.6
VM-5S	10/13/2017	N	A1	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	6.0 J-	0.49 J-	4.5 J-
VM-5S	3/1/2018	N	A1	< 0.50	< 0.50	< 0.50	< 2.0	< 0.50	< 0.50	0.68	7.6	0.63	5.0
VM-5S	3/7/2018	N	A1	< 0.50	< 0.50	< 0.50	0.21 J	< 0.50	< 0.50	9.8	89	0.99	28.0
VM-5S	10/2/2018	N	A1	< 0.50	0.19 J	< 0.50	< 0.50	< 0.50	< 0.50	0.75	100	0.58	71.0
VM-5S	3/19/2019	N	A1	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	15	110	< 2.5	58
VM-5S	5/7/2019	N	A1	< 0.50	0.19 j	1.1	9.0	< 0.50	< 0.50	19	1,000	3.0	120
VM-5S	7/9/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.25 j	60	1.5	47
VM-5S	10/3/2019	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	0.36 j	< 0.50	< 0.50	0.66 J+	0.80	1.8
VM-6D	8/28/2014	N	A3	0.75	< 0.50	< 0.50	2.3	NA	< 0.50	120	8.6	< 0.50	< 0.50
VM-6D	11/25/2014	N	A3	0.81	< 0.50	0.64	2.5	< 0.50	< 0.50	120	12	< 0.50	< 0.50
VM-6D	1/29/2015	N	A3	0.51	< 0.50	< 0.50	1.4	< 0.50	< 0.50	85	11	< 0.50	< 0.50
VM-6D	4/23/2015	N	A3	1.7	< 0.50	1.1	4.4	< 0.50	< 0.50	87	14	< 0.50	< 0.50
VM-6D	10/7/2015	N	A3	0.25 J	< 0.50	< 0.50	3.9	< 0.50	< 0.50	46	23	< 0.50	< 0.50
VM-6D	1/5/2017	N	A3	2.5	< 1.0	3.9	4.9	< 1.0	< 1.0	140	26	< 1.0	< 1.0
VM-6D	5/17/2017	N	A3	0.49 j	< 0.50	0.72	4.0	< 0.50	< 0.50	59	43	< 0.50	< 0.50
VM-6D	8/23/2017	N	A3	< 1.0	0.23 J	< 1.0	2.6	< 1.0	< 1.0	28	23	< 1.0	47
VM-6D	10/13/2017	N	A3	< 1.0	< 1.0	0.57 j	4.2	< 1.0	< 1.0	43	37	< 1.0	1.5
VM-6D	1/19/2018	N	A3	< 0.50	0.57	0.46 j	1.9	< 0.50	< 0.50	21	16	0.38 j	9.2
VM-6D	3/1/2018	N	A3	< 0.50	< 0.50	0.38 j	2.8	< 0.50	< 0.50	41	37	< 0.50	1.2
VM-6D	10/2/2018	N	A3	< 0.50	0.53	< 0.50	0.24 J	< 0.50	< 0.50	4.1	12	0.26 J	13
VM-6D	3/18/2019	N	A3	< 0.50 UJ	< 0.50 R	< 0.50 UJ	< 0.50 R	< 0.50 UJ	< 0.50 UJ	6.2 J-	36 J-	0.55 J-	13 J-
VM-6D	5/7/2019	N	A3	< 0.50	< 0.50	0.22 j	0.25 j	< 0.50	< 0.50	10	29	0.24 j	8.0
VM-6D	7/9/2019	N	A3	< 0.50	0.28 j	0.21 j	< 0.50	< 0.50	< 0.50	6.1	38	0.43 j	10
VM-6D	10/3/2019	N	A3	0.35 j	< 0.50	0.63	0.36 j	< 0.50	< 0.50	15	49	0.98	13
VM-6S	8/28/2014	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	NA	< 5.0	760	520	< 5.0	< 5.0
VM-6S	10/9/2014	N	A1	< 5.0	< 5.0	< 5.0	8.5	NA	< 5.0	830	590	9.0	< 5.0
VM-6S	11/25/2014	N	A1	< 5.0	< 5.0	< 5.0	5.2	< 5.0	< 5.0	600	580	< 5.0	< 5.0
VM-6S	1/29/2015	N	A1	< 5.0	< 5.0	< 5.0	11	< 5.0	< 5.0	1,000	550	< 5.0	< 5.0
VM-6S	4/23/2015	N	A1	< 5.0	< 5.0	< 5.0	6.2	< 5.0	< 5.0	740	460	< 5.0	< 5.0
VM-6S	10/7/2015	N	A1	< 2.5	< 2.5	< 2.5	3.6 J	< 2.5	< 2.5	360	520	2.4 J	< 2.5
VM-6S	5/17/2017	N	A1	< 5.0	< 5.0	< 5.0	5.2 j	< 5.0	< 5.0	28	1,100	< 5.0	39
VM-6S	8/23/2017	N	A1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	4.5 j	590	2.4 j	130
VM-6S	10/13/2017	N	A1	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	89 J-	2.3 J-	98 J-
VM-6S	1/19/2018	N	A1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	26	1.4	33
VM-6S	3/1/2018	N	A1	< 0.50	< 0.50	< 0.50	< 2.0	80	< 0.50	0.8	12	< 0.50	10
VM-6S	8/9/2018	N	A1	< 0.50	0.43 J	< 0.50	< 0.50	10	< 0.50	0.48 J	9.2	0.44 J	12
VM-6S	10/2/2018	N	A1	< 0.50	0.52	< 0.50	< 0.50	2.4	< 0.50	2.2	130	1.1	110
VM-6S	3/18/2019	N	A1	< 10	< 10	< 10	< 10	< 10	< 10	320	530	< 10	25
VM-6S	7/10/2019	N	A1	< 0.50	0.65	0.49 j	1.0	< 0.50	< 0.50	3.1	170	1.6	83
VM-6S	10/3/2019	N	A1	< 0.50	0.70	0.98	0.13 j	< 0.50	< 0.50	14	210	1.6	45
VM-7D	8/28/2014	N	A3	0.63	< 0.50	0.69	0.92	NA	< 0.50	100	< 0.50	< 0.50	< 0.50
VM-7D	11/25/2014	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	11	< 0.50	< 0.50	< 0.50
VM-7D	1/29/2015	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.79	< 0.50	< 0.50	< 0.50
VM-7D	4/23/2015	N	A3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50
VM-7D	10/8/2015	N	A3	< 0.50	< 0.50	< 0.50	< 2.0	< 0.50	< 0.50	8.3	< 0.50	< 0.50	< 0.50
VM-7D	1/5/2017	N	A3	1.8	< 0.50	1.1	1.1	< 0.50	< 0.50	77	0.33	< 0.50	< 0.50
VM-7D	5/17/2017	N	A3	< 10	< 10	< 10	< 40	< 10	< 10	5.1 j	< 10	< 10	< 10
VM-7D	8/24/2017	N	A3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	6.9	6.2	< 5.0	< 5.0
VM-7D	3/2/2018	N	A3	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0	6.7	11	< 1.0	1.5
VM-7D	10/5/2018	N	A3	< 0.50	0.17 J	< 0.50	< 0.50	1.2	< 0.50	5.1	5.8	< 0.50	8.4
VM-7D	10/4/2019	N	A3	< 1.0	1.3	< 1.0	< 1.0	0.44 j	< 1.0	2.8	12	0.55 j	13
VM-7S	8/28/2014	N	A1	7.4	3.6	13	13	NA	< 0.50	51	290	2.0	< 0.50
VM-7S	11/25/2014	N	A1	7.5	2.5	9.3	6.7	< 2.5	< 2.5	34	130	< 2.5	< 2.5
VM-7S	1/29/2015	N	A1	7.5	4.9	19	23	< 2.5	< 2.5	73	310	< 2.5	6.5
VM-7S	4/23/2015	N	A1	13	5.6	23	23	< 0.50	< 0.50	89	340	1.1	2.8
VM-7S	10/8/2015	N	A1	12	6.7	21	16	< 0.50	< 0.50	78	270	1.2	49

Table C-3
Summary of Volatile Organic Compounds in Groundwater
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	Sample Type	Zone	1,1,1-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	Freon 113	Toluene	Tetra-chloro-ethene	Trichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl Chloride
		CALDPH MCL:		200	5.0	6.0	1,200	150	5.0	5.0	6.0	10	0.50
VM-7S	1/5/2017	N	A1	**10**	**3.0**	**8.6**	*< 5.0*	*< 5.0*	*< 5.0*	**26**	**25**	*< 5.0*	**27**
VM-7S	5/17/2017	N	A1	**5.4**	**8.7**	**3.5 j**	*< 20*	*< 5.0*	*< 5.0*	**6.6**	**70**	*< 5.0*	**11**
VM-7S	8/24/2017	N	A1	*< 0.50 R*	**0.76 J-**	**1.0 J-**	*< 0.50 R*	*< 0.50 R*	*< 0.50 R*	**1.1 J-**	**7.9 J-**	**0.44 J-**	**5.7 J-**
VM-7S	10/17/2017	N	A1	**0.20 j**	**0.63**	**0.72**	*< 0.50*	*< 0.50*	*< 0.50*	**1.1**	**4.2**	**0.47 j**	**0.74**
VM-7S	3/2/2018	N	A1	**2.8**	**0.57**	**2.9**	*< 2.0*	*< 0.50*	*< 0.50*	**4.4**	**3.9**	*< 0.50*	**12**
VM-7S	8/9/2018	N	A1	*< 1.0*	**0.90 J**	*< 1.0*	*< 1.0*	**0.45 J**	*< 1.0*	*< 1.0*	**4.9**	*< 1.0*	**5.3**
VM-7S	10/3/2018	N	A1	**0.82**	**3.2**	**0.43 J**	*< 0.50*	**0.47 J**	*< 0.50*	**0.80**	**4.1**	**0.28 J**	**2.6**
VM-7S	3/18/2019	N	A1	**1.1**	**2.6**	**1.2**	*< 0.50*	*< 0.50*	*< 0.50*	**0.72**	**19**	*< 0.50*	**0.94**
VM-7S	5/7/2019	N	A1	**4.5**	**8.0**	**7.5**	*< 0.50*	*< 0.50*	*< 0.50*	**0.55**	**71**	**0.28 j**	**7.5**
VM-7S	7/9/2019	N	A1	**1.8**	**8.1**	**0.30 j**	*< 0.50*	**0.69**	*< 0.50*	**0.27 j**	**6.1**	**0.39 j**	**8.7**
VM-7S	10/3/2019	N	A1	**0.51**	**9.8**	**0.27 j**	*< 0.50*	**3.5**	*< 0.50*	**0.51**	**1.9**	**0.58**	**2.7**
VM-8D	8/28/2014	N	A3	**0.74**	*< 0.50*	**0.84**	**1.3**	NA	*< 0.50*	**110**	*< 0.50*	*< 0.50*	*< 0.50*
VM-8D	10/8/2014	N	A3	**0.90**	*< 0.50*	**1.6**	**1.6**	NA	*< 0.50*	**130**	*< 0.50*	*< 0.50*	*< 0.50*
VM-8D	10/8/2014	FD	A3	**0.91**	*< 0.50*	**0.90**	**1.2**	NA	*< 0.50*	**97**	*< 0.50*	*< 0.50*	*< 0.50*
VM-8D	1/29/2015	N	A3	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**4.6**	*< 0.50*	*< 0.50*	*< 0.50*
VM-8D	10/8/2015	N	A3	**0.26 J**	*< 0.50*	**0.66**	*< 2.0*	*< 0.50*	*< 0.50*	**45**	**0.49 J**	*< 0.50*	*< 0.50*
VM-8D	10/12/2016	N	A3	*< 0.50*	**0.19 j**	**1.8**	*< 0.50*	*< 0.50*	*< 0.50*	**7.9**	**0.26 j**	**0.21 j**	*< 0.50*
VM-8D	10/12/2016	FD	A3	*< 0.50*	**0.16 j**	**1.7**	*< 0.50*	*< 0.50*	*< 0.50*	**6.8**	**0.26 j**	*< 0.50*	*< 0.50*
VM-8D	1/5/2017	N	A3	**2.9**	*< 1.0*	**1.1**	**1.5**	*< 1.0*	*< 1.0*	**94**	*< 1.0*	*< 1.0*	*< 1.0*
VM-8D	1/5/2017	FD	A3	**2.8**	*< 1.0*	**1.0**	**1.5**	*< 1.0*	*< 1.0*	**92**	*< 1.0*	*< 1.0*	*< 1.0*
VM-8D	5/16/2017	N	A3	**2.0**	*< 1.0*	**1.6**	**2.2 j**	*< 1.0*	*< 1.0*	**130**	**12**	*< 1.0*	*< 1.0*
VM-8D	8/24/2017	N	A3	**0.61 j**	*< 1.0*	**2.9**	**0.89 j**	*< 1.0*	*< 1.0*	**52**	**7.0**	*< 1.0*	*< 1.0*
VM-8D	10/18/2017	N	A3	**0.60 j**	*< 1.0*	**4.3**	**1.1**	*< 1.0*	*< 1.0*	**66**	**5.2**	*< 1.0*	*< 1.0*
VM-8D	3/2/2018	N	A3	**1.3**	*< 1.0*	**1.6**	**1.8 j**	*< 1.0*	*< 1.0*	**110**	**9.9**	*< 1.0*	*< 1.0*
VM-8D	3/2/2018	FD	A3	**1.2**	*< 0.50*	**1.4**	**1.8 j**	*< 0.50*	*< 0.50*	**110**	**9.5**	*< 0.50*	*< 0.50*
VM-8D	10/3/2018	N	A3	**0.91 J**	*< 1.0*	**0.91 J**	**0.80 J**	*< 1.0*	*< 1.0*	**67**	**1.2**	*< 1.0*	*< 1.0*
VM-8D	10/4/2019	N	A3	**0.70 j**	*< 1.0*	**1.1**	**1.2**	*< 1.0*	*< 1.0*	**150**	**0.48 j**	*< 1.0*	*< 1.0*
VM-8S	8/28/2014	N	A1	**15**	**7.5**	**33**	*< 2.5*	NA	*< 2.5*	**270**	**240**	**5.1**	*< 2.5*
VM-8S	8/28/2014	FD	A1	**15**	**7.9**	**35**	*< 2.5*	NA	*< 2.5*	**270**	**260**	**5.0**	*< 2.5*
VM-8S	10/8/2014	N	A1	**22**	**7.4**	**40**	**1.3**	NA	**1.5**	**240**	**210**	**3.4**	*< 0.50*
VM-8S	1/29/2015	N	A1	**13**	**5.4**	**22**	*< 2.5*	*< 2.5*	*< 2.5*	**120**	**210**	*< 2.5*	*< 2.5*
VM-8S	1/29/2015	FD	A1	**13**	**5.6**	**23**	*< 2.5*	*< 2.5*	*< 2.5*	**120**	**220**	*< 2.5*	*< 2.5*
VM-8S	10/8/2015	N	A1	**17**	**9.9**	**32**	*< 2.0*	*< 0.50*	**1.4**	**240**	**230**	**0.25 J**	*< 0.50*
VM-8S	10/12/2016	N	A1	**22**	**5.0**	**20**	*< 2.5*	*< 2.5*	*< 2.5*	**210**	**180**	*< 2.5*	*< 2.5*
VM-8S	1/5/2017	N	A1	**22**	**6.1**	**21**	*< 2.5*	*< 2.5*	**0.68**	**180**	**190**	*< 2.5*	*< 2.5*
VM-8S	5/16/2017	N	A1	*< 2.5 UJ*	**10 J-**	**91 J-**	*< 10 UJ*	*< 2.5 UJ*	*< 2.5 UJ*	**7.9 J-**	**320 J-**	*< 2.5 UJ*	**7.3 J-**
VM-8S	8/24/2017	N	A1	*< 0.50 R*	**1.7 J-**	*< 0.50 R*	*< 0.50 R*	**0.17 J-**	*< 0.50 R*	**0.25 J-**	**0.98 J-**	**0.28 J-**	**1.8 J-**
VM-8S	10/18/2017	N	A1	**1.1**	**4.0**	*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	**0.75**	**2.7**	**0.43 j**	**2.6**
VM-8S	3/2/2018	N	A1	**0.77**	**2.0**	*< 0.50*	*< 2.0*	*< 0.50*	*< 0.50*	**1.6**	**6.3**	**0.32 j**	**7.4**
VM-8S	8/9/2018	N	A1	**0.64**	**0.79**	**0.40 J**	*< 0.50*	**0.90**	*< 0.50*	**0.94**	**8.2**	**0.39 J**	**3.1**
VM-8S	10/3/2018	N	A1	**1.1**	**1.8**	**0.52**	*< 0.50*	**9.2**	*< 0.50*	**1.5**	**8.5**	**0.39 J**	**3.9**
VM-8S	3/19/2019	N	A1	*< 0.50*	**4.6**	*< 0.50*	*< 0.50*	**14**	*< 0.50*	**1.6**	**6.3**	**0.59**	**5.9**
VM-8S	5/7/2019	N	A1	*< 0.50*	**3.8**	*< 0.50*	*< 0.50*	**4.1**	*< 0.50*	**0.79**	**5.1**	**0.26 j**	**4.2**
VM-8S	7/10/2019	N	A1	**0.22 j**	**6.8**	*< 0.50*	*< 0.50*	**0.74**	*< 0.50*	**3.2**	**7.8**	**0.47 j**	**10**
VM-8S	10/3/2019	N	A1	*< 0.50*	**6.7**	*< 0.50*	*< 0.50*	**0.52**	*< 0.50*	**4.7**	**7.9**	**0.53**	**10**

Notes and Key:
Concentrations reported in micrograms per liter (µg/L).
Bolded values indicate concentrations above the Reportable Detection Limit
Shaded values indicate concentrations above the standard
CALDPH MCL = California Department of Public Health Maximum Contaminant Level
FD = Field Duplicate Sample
N = Normal Environmental Sample
NA = Not analyzed
< = Compound not detected. Reportable detection limit shown

Laboratory Qualifiers
j = Result is less than the reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value

Data Validation Qualifiers
J = Detected sample result is qualified as estimated.
J- = Detected sample result is qualified as estimated and biased low.
J+ = Detected sample result is qualified as estimated and biased high.
R = Rejected
U = Compound not detected based on quality assurance review
UJ = Nondetected sample result qualified as estimated.

Table C-4
Select Environmental Molecular Testing Parameters in Groundwater
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	BAV1 Vinyl Chloride Reductase	Dehalococcoides spp.	tceA Reductase	Vinyl Chloride Reductase
2EP	2/27/2015	NA	**2,000,000**	NA	**30,000**
2EP	4/23/2015	NA	**10,000,000**	NA	**30,000,000**
2EP	7/29/2015	NA	**2,000,000**	NA	**7,000,000**
2EP	10/7/2015	NA	**1,000,000**	NA	**2,000,000**
2EP	5/16/2017	*< 2,580*	**7,000,000**	**700,000**	**4,000,000**
2EP	8/23/2017	*< 2,580*	**200,000**	**10,000**	**80,000**
2EP	3/1/2018	**20,000,000 J**	**400,000,000**	**7,000,000 J**	**200,000,000 J**
2EPa (62-67 ft)	2/27/2015	NA	*< 30,000*	NA	NA
2EPa (72-87 ft)	2/27/2015	NA	*< 30,000*	NA	NA
2EPa	4/23/2015	NA	**2,000,000**	NA	**5,000,000**
2EPa	7/29/2015	NA	*< 30,000*	NA	*< 30,000*
2EPa	10/7/2015	NA	**600,000**	NA	**300,000**
2EPa	1/5/2017	NA	*< 21,500*	NA	NA
2EPa	5/16/2017	*< 2,580*	**2,000,000**	**400,000**	**300,000**
2EPa	8/23/2017	*< 6,450*	**5,000,000**	**600,000**	**2,000,000**
2EPa	3/1/2018	*< 10,000 UJ*	**30,000**	**8,000 J**	**30,000 J**
4BP	1/5/2017	*< 2,580*	**3,000**	*< 2,580*	*< 2,580*
4BP	5/16/2017	*< 129,000*	**6,000**	*< 129,000*	**3,000**
4BP	8/24/2017	NA	*< 129,000*	NA	NA
4BP	3/1/2018	**30,000 J**	**400,000,000**	**10,000,000 J**	**200,000,000 J**
HMSA-1S	1/5/2017	NA	*< 2,580*	NA	NA
MW-01A1	8/28/2014	NA	*< 20,000*	NA	NA
MW-01A1	11/25/2014	NA	*< 25,800*	NA	NA
MW-01A1	4/23/2015	NA	**8,000 J**	NA	**90,000**
MW-01A1	10/7/2015	NA	**1,000**	NA	**2,000**
MW-01A1	5/16/2017	*< 12,900*	**100,000,000**	**10,000,000**	**50,000,000**
MW-01A1	8/23/2017	*< 64,500*	**300,000,000**	**30,000,000**	**100,000,000**
MW-01A1	3/2/2018	**10,000,000 J**	**1,000,000,000**	**100,000,000 J**	**500,000,000 J**
MW-01A3	8/28/2014	NA	*< 20,000*	NA	NA
MW-01A3	11/25/2014	NA	*< 25,800*	NA	NA
MW-01A3	4/23/2015	NA	*< 30,000*	NA	NA
MW-01A3	10/7/2015	NA	**30,000,000**	NA	**70,000,000**
MW-01A3	5/16/2017	*< 2,580*	**60,000,000**	**10,000,000**	**20,000,000**
MW-01A3	8/23/2017	*< 6,450*	**1,000,000**	**100,000**	**600,000**
MW-01A3	3/2/2018	*< 10,000 UJ*	**10,000,000**	**1,000,000 J**	**4,000,000 J**
MW-02A1	4/23/2015	NA	*< 30,000*	NA	NA
MW-02A1	5/17/2017	*< 25,800*	**200,000**	**20,000,000**	**50,000,000**
MW-02A1	8/24/2017	**10,000**	**200,000,000**	**20,000,000**	**90,000,000**
MW-02A1	3/2/2018	**40,000,000 J**	**700,000,000**	**100,000,000 J**	**300,000,000 J**
MW-04A3	8/23/2017	*< 2,580*	**3,000,000**	**500,000**	**200,000**
MW-04A3	3/2/2018	*< 4,000 UJ*	**20,000**	*< 4,000 UJ*	**3,000 J**
MW-09A3	5/16/2017	*< 21,500*	**2,000,000**	**300,000**	**40,000**
MW-09A3	8/24/2017	**100,000**	**50,000,000**	**400,000**	**50,000,000**
MW-09A3	3/1/2018	**8,000 J**	**1,000,000**	**200,000 J**	**500,000 J**
MW-OS-2A1	3/2/2018	**60,000,000 J**	**900,000,000**	**30,000,000 J**	**300,000,000 J**
MW-OS-2A1	3/2/2018	**100,000,000 J**	**900,000,000**	**30,000,000 J**	**400,000,000 J**
VM-3D	8/28/2014	NA	**1,000 J**	NA	*< 20,000*
VM-3D	11/25/2014	NA	**50,000**	NA	**80,000**
VM-3D	4/23/2015	NA	**10,000,000**	NA	**3,000,000**
VM-3D	10/8/2015	NA	**10,000,000**	NA	**10,000,000**
VM-3D	1/5/2017	*< 8,600*	**1,000,000**	**90,000**	**400,000**
VM-3D	3/2/2018	**3,000 J**	**3,000,000**	**400,000 J**	**1,000,000 J**
VM-3S	8/28/2014	NA	**20,000,000**	NA	*< 20,000*
VM-3S	11/25/2014	NA	**200,000,000**	NA	**100,000**
VM-3S	4/23/2015	NA	**40,000,000**	NA	**60,000,000**
VM-3S	10/8/2015	NA	**100,000,000**	NA	**100,000,000**
VM-4D	8/28/2014	NA	*< 20,000*	NA	NA
VM-4D	11/25/2014	NA	**2,000 J**	NA	*< 25,800*
VM-4D	4/23/2015	NA	**1,000,000**	NA	**2,000,000**
VM-4D	10/8/2015	NA	**700,000**	NA	**800,000**
VM-4D	1/5/2017	*< 86,000*	**40,000,000**	**4,000,000**	**6,000,000**
VM-4D	5/18/2017	*< 25,800*	**3,000,000**	**1,000,000**	**2,000,000**
VM-4D	8/23/2017	**20,000**	**100,000,000**	**400,000**	**50,000,000**
VM-4D	3/2/2018	*< 6,000 UJ*	**90,000**	**20,000 J**	**50,000 J**
VM-4S	8/28/2014	NA	*< 20,000*	NA	NA
VM-4S	11/25/2014	NA	**3,000,000**	NA	**30,000**
VM-4S	4/23/2015	NA	**200,000,000**	NA	**200,000,000**

Table C-4
Select Environmental Molecular Testing Parameters in Groundwater
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	BAV1 Vinyl Chloride Reductase	Dehalococcoides spp.	tceA Reductase	Vinyl Chloride Reductase
VM-4S	10/8/2015	NA	**30,000,000**	NA	**80,000,000**
VM-4S	1/5/2017	*< 4,300*	**30,000,000**	**1,000,000**	**7,000,000**
VM-4S	5/18/2017	*< 23,455*	**200,000,000**	**300,000**	**2,000,000**
VM-4S	8/23/2017	*< 12,900*	**20,000,000**	**1,000,000**	**8,000,000**
VM-4S	3/2/2018	*< 100,000 UJ*	**40,000,000**	**4,000,000 J**	**7,000,000 J**
VM-5D	2/27/2015	NA	*< 30,000*	NA	NA
VM-5D	1/5/2017	NA	*< 2,580*	NA	NA
VM-5D	5/17/2017	*< 6,973*	**30,000,000**	**9,000,000**	**60,000**
VM-5D	8/24/2017	*< 4,300*	**200,000,000**	**30,000,000**	**70,000,000**
VM-5D	3/1/2018	*< 6,000 UJ*	**10,000,000**	**1,000,000 J**	**3,000,000 J**
VM-5S	8/28/2014	NA	**400,000**	NA	*< 20,000*
VM-5S	2/27/2015	NA	**700,000**	NA	**20,000**
VM-5S	4/23/2015	NA	**7,000,000**	NA	**70,000,000**
VM-5S	7/29/2015	NA	**40,000,000**	NA	**70,000,000**
VM-5S	10/7/2015	NA	**100,000,000**	NA	**200,000,000**
VM-5S	5/17/2017	*< 2,580*	**2,000,000,000**	**40,000,000**	**800,000,000**
VM-5S	8/24/2017	*< 4,300*	**300,000,000**	**10,000,000**	**100,000,000**
VM-5S	3/1/2018	**60,000 J**	**6,000,000**	**200,000 J**	**3,000,000 J**
VM-6D	5/17/2017	*< 2,580*	**2,000,000**	**2,000**	**2,000**
VM-6D	8/23/2017	*< 2,580*	**30,000,000**	**6,000,000**	**6,000,000**
VM-6D	3/1/2018	*< 4,000 UJ*	**1,000,000**	**100,000 J**	**400,000 J**
VM-6S	8/28/2014	NA	**30,000**	NA	*< 20,000*
VM-6S	4/23/2015	NA	*< 30,000*	NA	NA
VM-6S	10/7/2015	NA	*< 30,000*	NA	NA
VM-6S	5/17/2017	*< 25,800*	**2,000**	**300,000**	**800,000**
VM-6S	8/23/2017	**5,000**	**40,000,000**	**3,000,000**	**20,000,000**
VM-6S	3/1/2018	**30,000,000 J**	**400,000,000**	**3,000,000 J**	**200,000,000 J**
VM-7D	1/5/2017	NA	*< 2,580*	NA	NA
VM-7D	5/17/2017	*< 258,000*	**30,000**	*< 258,000*	**10,000**
VM-7D	8/24/2017	**1,000,000**	**200,000,000**	**5,000**	**200,000,000**
VM-7D	3/2/2018	**20,000 J**	**2,000,000**	**100,000 J**	**1,000,000 J**
VM-7S	1/5/2017	*< 4,300*	**3,000,000**	**400,000**	**300,000**
VM-7S	5/17/2017	NA	*< 6,450*	NA	NA
VM-7S	8/24/2017	**5,000**	**10,000,000**	**600,000**	**5,000,000**
VM-7S	3/2/2018	**10,000 J**	**1,000,000**	**90,000 J**	**500,000 J**
VM-8D	5/16/2017	NA	*< 4,300*	NA	NA
VM-8D	3/2/2018	*< 10,000 UJ*	**4,000**	**1,000 J**	**4,000 J**
VM-8D	3/2/2018	*< 6,000 UJ*	**10,000**	**2,000 J**	**6,000 J**
VM-8S	5/16/2017	*< 9,214*	**3,000,000**	**90,000**	**1,000,000**
VM-8S	8/24/2017	**100,000**	**600,000,000**	**10,000,000**	**300,000,000**
VM-8S	3/2/2018	**6,000 J**	**60,000,000**	**40,000,000 J**	**20,000,000 J**

Notes and Key:
Concentrations reported in Gene Copies per liter (gene copies/L).
Bolded values indicate concentrations above the Reportable Detection Limit.
Shaded values indicate concentrations greater than 10^7 considered as indicative of strong potential for complete reductive dechlorination.
NA = Not analyzed
< = Compound not detected. Reportable detection limit shown.

Qualifiers:
J = The analyte was positively identified; associated numerical value is the
U = Compound not detected based on quality assurance review.

Table C-5
Volatile Organic Compounds and Field Measurements in Soil Gas
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	Sample Type	Carbon Dioxide (%)	Methane (%)	Oxygen (%)	1,1,1-Trichloroethane (µg/m³)	Freon 113 (µg/m³)	1,1-Dichloroethene (µg/m³)	Chloroform (µg/m³)	cis-1,2-Dichloroethene (µg/m³)	Tetrachloroethene (µg/m³)	Toluene (µg/m³)	trans-1,2-Dichloroethene (µg/m³)	Trichloroethene (µg/m³)	Vinyl Chloride (µg/m³)
SVP-1	8/28/2014	N	**7.4**	**0**	**15.3**	**560**	**100**	< 43	< 53	< 43	**100**	< 41	< 43	**230**	< 28
SVP-1	11/26/2014	N	**0.5**	**0**	**21.3**	**140**	< 86	< 44	< 55	< 44	< 76	< 42	< 44	**95**	< 29
SVP-1	12/31/2014	N	**4.3**	**0**	**15.3**	**420**	**110**	< 43	< 53	< 43	< 73	< 41	< 43	**120**	< 28
SVP-1	1/29/2015	N	**4.7**	**0**	**15.8**	**410**	**100**	< 44	< 54	< 44	< 75	< 41	< 44	**98**	< 28
SVP-1	2/27/2015	N	**4.2**	**0**	**16.4**	**410**	**120**	< 45	< 56	< 45	**82**	< 43	< 45	**100**	< 29
SVP-1	4/23/2015	N	**13.6**	**0**	**7**	**390**	**120**	< 44	< 55	< 44	< 76	< 42	< 44	**83**	< 29
SVP-1	10/5/2015	N	**1.7**	**0**	**19.8**	**130**	< 86	< 44	< 55	< 44	< 76	< 42	< 44	**100**	< 29
SVP-1	2/1/2017	N	**0**	**0**	**21.1**	**200**	**110**	< 2.0	< 2.4	< 2.0	**32**	**4.0**	< 2.0	**88**	< 1.3
SVP-1	4/19/2017	N	**0**	**0**	**21.1**	**260**	**160**	< 2.0	**10**	< 2.0	**42**	**4.3**	< 2.0	**120**	< 1.3
SVP-2	8/28/2014	N	**2.7**	**0**	**19.1**	**120**	< 83	< 43	< 53	< 43	< 73	< 41	< 43	< 58	< 28
SVP-2	11/26/2014	N	**2.8**	**0**	**18.9**	**610**	**120**	**46**	< 56	< 45	**89**	< 43	< 45	**290**	< 29
SVP-2	12/31/2014	N	**1.9**	**0**	**19**	**100**	< 82	< 42	< 52	< 42	< 72	< 40	< 42	< 57	< 27
SVP-2	1/29/2015	N	**1.4**	**0**	**17.9**	**83**	< 75	< 39	< 48	< 39	< 67	< 37	< 39	< 53	< 25
SVP-2	2/27/2015	N	**1**	**0**	**20**	**84**	< 86	< 44	< 55	< 44	< 76	< 42	< 44	< 60	< 29
SVP-2	4/23/2015	N	**3.7**	**0**	**14.8**	**74**	< 89	< 46	< 57	< 46	< 79	< 44	< 46	< 63	< 30
SVP-2	10/5/2015	N	**0.9**	**0**	**19.8**	< 65	< 91	< 47	< 58	< 47	< 81	< 45	< 47	< 64	< 30
SVP-3	8/28/2014	N	**0.6**	**0**	**20.5**	< 60	< 84	< 44	< 54	< 44	< 75	< 41	< 44	**1,700**	< 28
SVP-3	11/26/2014	N	**0.01**	**0**	**21.7**	< 59	< 83	< 43	< 53	< 43	< 73	< 41	< 43	**1,600**	< 28
SVP-3	12/31/2014	N	**1.7**	**0**	**14.9**	< 59	< 83	< 43	< 53	< 43	< 73	< 41	< 43	**600**	< 28
SVP-3	1/29/2015	N	**0.2**	**0**	**18.7**	< 61	< 86	< 44	< 55	< 44	< 76	< 42	< 44	**550**	< 29
SVP-3	2/27/2015	N	**1**	**0**	**21.2**	< 56	< 78	< 41	< 50	< 41	< 70	< 39	< 41	**320**	< 26
SVP-3	4/23/2015	N	**1.5**	**0**	**19.5**	< 65	< 91	< 47	< 58	< 47	< 81	< 45	< 47	**320**	< 30
SVP-3	10/5/2015	N	**0.7**	**0**	**20.3**	< 65	< 91	< 47	< 58	< 47	< 81	< 45	< 47	**270**	< 30
SVP-4	2/1/2017	N	**0**	**0**	**21.4**	< 2.7	**460**	< 2.0	**7.8**	< 2.0	**6.0**	< 1.9	< 2.0	**38**	< 1.3
SVP-4	4/19/2017	N	**0**	**0**	**21.1**	**8.4**	**120**	< 2.0	**31**	< 2.0	**26**	**2.6**	< 2.0	**36**	< 1.3
SVP-4	8/23/2017	N	**0.9**	**0**	**21.1**	< 2.7	< 11	< 2.0	**19**	< 2.0	**18**	**5.8**	< 2.0	**22**	< 1.3
SVP-4	2/28/2018	N	**3.6**	**0**	**17.3**	< 2.7	< 11	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-4	4/11/2019	N	NA	NA	NA	< 6.5	**160**	< 4.7	**24**	< 4.7	< 8.1	< 4.5	< 4.7	**14**	< 3.0
SVP-4	4/11/2019	FD	NA	NA	NA	< 6.5	**180**	< 4.7	**25**	< 4.7	< 8.1	< 4.5	< 4.7	**14**	< 3.0
SVP-4	5/29/2019	N	NA	NA	NA	< 6.6	**34**	< 4.8	**21**	< 4.8	< 8.2	< 4.5	< 4.8	**12**	< 3.1
SVP-4	6/27/2019	N	NA	NA	NA	< 6.9	< 9.7	< 5.0	**18**	< 5.0	< 8.6	< 4.8	< 5.0	**11**	< 3.2
SVP-5	2/1/2017	N	**0**	**0**	**21.6**	**8.7 J**	**53 J**	< 2.0 UJ	< 2.4 UJ	< 2.0 UJ	< 3.4 UJ	< 1.9 UJ	< 2.0 UJ	**4.7 J**	< 1.3 UJ
SVP-5	4/19/2017	N	**0**	**0**	**21.1**	**5.1**	**22**	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-5	8/23/2017	N	**5**	**0**	**16.7**	< 2.7	< 11	< 2.0	< 2.4	< 2.0	< 3.4	**3.4**	< 2.0	< 2.7	< 1.3
SVP-5	2/28/2018	N	**6.6**	**0**	**13.9**	**3.9**	< 11	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-5	4/11/2019	N	NA	NA	NA	< 6.9	**17**	< 5.0	< 6.2	< 5.0	< 8.5	< 4.7	< 5.0	< 6.8	< 3.2
SVP-5	5/29/2019	N	NA	NA	NA	< 6.0	< 8.4	< 4.3	< 5.3	< 4.3	< 7.4	< 4.1	< 4.3	< 5.9	< 2.8
SVP-5	6/27/2019	N	NA	NA	NA	< 6.2	< 8.7	< 4.5	< 5.5	< 4.5	< 7.7	< 4.3	< 4.5	< 6.1	< 2.9
SVP-5	12/15/2019	N	**0**	**0**	**21.2**	< 6.1	< 8.5	< 4.4	< 5.4	< 4.4	< 7.6	< 4.2	< 4.4	< 6.0	< 2.8
SVP-6	2/15/2017	N	**0**	**0**	**20.4**	**180**	**130**	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-6	4/19/2017	N	**0**	**0**	**20.6**	**280**	**200**	**31**	< 2.4	**8.3**	**320**	< 1.9	**6.0**	**170**	< 1.3
SVP-6	8/23/2017	N	**0.1**	**0**	**20.9**	**330**	**270**	< 2.0	< 2.4	< 2.0	< 3.4	**7.5**	< 2.0	< 2.7	< 1.3
SVP-6	2/28/2018	N	**3.8**	**0**	**17.9**	**120**	**37**	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-6	2/28/2018	FD	**3.8**	**0**	**17.9**	**130**	**42**	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-6	8/14/2018	N	**10.1**	**0**	**6.1**	**330**	**270**	< 4.3	< 5.3	< 4.3	< 7.4	< 4.1	< 4.3	< 5.9	< 2.8
SVP-6	10/19/2018	N	**1.9**	**0**	**19.0**	**170**	**140**	< 2.0	< 2.4	< 2.0	< 3.4	**9.4**	< 2.0	< 2.7	< 1.3
SVP-6	4/11/2019	N	NA	NA	NA	**120**	**68**	< 4.6	< 5.7	< 4.6	< 8.0	< 4.4	< 4.6	< 6.3	< 3.0
SVP-6	5/29/2019	N	NA	NA	**10.0**	**83**	**40**	< 4.6	< 5.7	< 4.6	< 8.0	< 4.4	< 4.6	< 6.3	< 3.0
SVP-6	6/27/2019	N	NA	NA	NA	**120**	**68**	< 4.8	< 5.8	< 4.8	< 8.1	< 4.5	< 4.8	< 6.4	< 3.1
SVP-6	7/31/2019	N	NA	NA	NA	**130**	**110**	< 4.6	< 5.7	< 4.6	< 7.9	< 4.4	< 4.6	< 6.3	< 3.0
SVP-7	2/15/2017	N	**0**	**0**	**20.3**	**260**	**630**	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-7	4/19/2017	N	**0**	**0**	**19.7**	**340**	**880**	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-7	8/23/2017	N	**2.1**	**0**	**19.6**	**520**	**1,700**	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-7	8/23/2017	FD	**2.1**	**0**	**19.6**	**490**	**960**	< 2.0	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	< 1.3
SVP-7	2/28/2018	N	**6.3**	**7.9**	**6.1**	**3,400**	**2,200**	**1,400**	< 2.4	< 2.0	< 3.4	< 1.9	< 2.0	< 2.7	**1,000**
SVP-7	6/15/2018	N	**0.1**	**7.9**	**6.1**	**3,500**	**1,600**	**2,100**	< 2.4	< 2.0	< 3.4	**11**	< 2.0	**3.5**	**2,600**
SVP-7	8/14/2018	N	**19.4**	**24.9**	**0**	**6,800**	**1,700**	**3,200**	< 42	< 34	< 59	< 32	< 34	< 46	**3,700**
SVP-7	8/29/2018	N	NA	NA	NA	**7,300**	**1,600**	**5,100**	< 33	< 26	< 45	< 25	< 26	< 36	**6,800**
SVP-7	10/19/2018	N	**1.8**	**1.6**	**19.4**	**4,200**	**1,100**	**3,300**	**4.8**	< 2.0	**5.2**	< 1.9	< 2.0	**56**	**4,600**
SVP-7	4/11/2019	N	NA	NA	NA	**1,700**	**73**	**76**	< 6.1	< 5.0	< 8.5	< 4.7	< 5.0	**8.7**	< 3.2

Table C-5
Volatile Organic Compounds and Field Measurements in Soil Gas
Phase III ERD Pilot Study Status Report
Former Siemens Site
Cupertino, California

Location ID	Sample Date	Sample Type	Carbon Dioxide (%)	Methane (%)	Oxygen (%)	1,1,1-Trichloroethane (µg/m^3)	Freon 113 (µg/m^3)	1,1-Dichloroethene (µg/m^3)	Chloroform (µg/m^3)	cis-1,2-Dichloroethene (µg/m^3)	Tetrachloroethene (µg/m^3)	Toluene (µg/m^3)	trans-1,2-Dichloroethene (µg/m^3)	Trichloroethene (µg/m^3)	Vinyl Chloride (µg/m^3)
SVP-7	4/15/2019	N	NA	NA	NA	**1,500**	**66**	**73**	*< 4.9*	**61**	*< 6.8*	**46**	*< 4.0*	**150**	**2.7**
SVP-7	4/15/2019	N	NA	NA	NA	**1,200**	**39**	**71**	*< 4.1*	**170**	**7.6**	**55**	*< 3.3*	**340**	**13**
SVP-7	4/17/2019	N	NA	NA	NA	**400**	**22**	**51**	**3.6**	**130**	**12**	**25**	*< 2.0*	**400**	**10**
SVP-7	4/17/2019	N	NA	NA	NA	**240**	**4.3**	**8.3**	*< 2.4*	**7.5**	**4.2**	**47**	*< 2.0*	**70**	*< 1.3*
SVP-7	4/18/2019	N	NA	NA	NA	**180**	*< 3.8*	**4.4**	*< 2.4*	**2.6**	**6.0**	**29**	*< 2.0*	**30**	*< 1.3*
SVP-7	4/19/2019	N	NA	NA	NA	**180**	*< 3.8*	**5.7**	*< 2.4*	**4.0**	*< 3.4*	**47**	*< 2.0*	**31**	*< 1.3*
SVP-7	5/29/2019	N	NA	NA	NA	**1,000**	**620**	**200**	*< 5.8*	*< 4.7*	*< 8.1*	*< 4.5*	*< 4.7*	**8.8**	**15**
SVP-7	6/27/2019	N	NA	NA	NA	**1,400**	**650**	**470**	*< 5.9*	*< 4.8*	*< 8.2*	*< 4.6*	*< 4.8*	**14**	**130**
SVP-7	7/31/2019	N	NA	NA	NA	**1,900**	**650**	**840**	*< 5.9*	*< 4.8*	*< 8.2*	*< 4.6*	*< 4.8*	**19**	**200**
SVP-7	7/31/2019	FD	NA	NA	NA	**1,900**	**640**	**840**	*< 6.0*	*< 4.9*	*< 8.4*	*< 4.6*	*< 4.9*	**19**	**200**
SVP-7	12/15/2019	N	**0**	**0**	**21.1**	**1,900**	**1,400**	**980**	*< 7.4*	*< 6.0*	*< 10*	*< 5.7*	*< 6.0*	**22**	**660**

Notes and Key:
Bolded values indicate concentrations above the Reportable Detection Limit.
µg/m^3 = Micrograms per cubic meter
% = Percent
FD = Field duplicate sample
N = Normal Environmental Sample
NA = Not analyzed
NS = No Standard
< = Compound not detected. Reportable detection limit shown.

Data Validation Qualifiers
J = Detected sample result is qualified as estimated.
UJ = Nondetected sample result qualified as estimated.

Appendix F

Resumes

LUCAS GOLDSTEIN, PE, PG, PENG

Principal Engineer

EDUCATION

MSc, Engineering, McGill University, Canada, 2004

MA, BA, Geology, University of California-Berkeley, 1994,1996

YEARS OF EXPERIENCE

Total – 23 years

With Arcadis – 21 years

PROFESSIONAL REGISTRATIONS

Geologist – California, USA

Engineer – Nevada and California, USA; British Columbia, Canada

Mr. Goldstein has successfully directed and implemented projects in Canada, USA, Mexico, Nicaragua, Colombia, Venezuela, Ecuador, Chile, Brazil, and Argentina. He has broad experience in regulatory agency interaction, construction supervision, environmental and health and safety compliance, hazardous waste investigations, soil and groundwater characterization and remediation, and environmental permitting. He has prepared feasibility studies, cleanup plans, engineering design plans and specifications, and waste and stormwater management plans; supervised construction and operations and maintenance activities; and assisted clients in meeting permit requirements and securing liability/risk management insurance products. He has designed and implemented numerous remediation and environmental construction projects in support of the redevelopment of industrial facilities and military installations affected by solvents, petroleum hydrocarbons, polychlorinated biphenyls, and metals. In addition to his technical experience, he is a proven project manager for the on-time and on-budget delivery of complex projects involving multi-disciplinary teams in various countries and languages.

Project Experience

Environmental Due Diligence Assessments

Project manager and principal engineer for Environmental Site Assessments (ESAs) to meet ASTM criteria. Conducting all phases of ESAs including site reconnaissance, interviews with site personnel, record searches, evaluation of database search results, and interpretation of aerial photographs, regulatory agency file reviews, and report preparation. Performed numerous ESA at industrial sites located in USA, Mexico, Colombia, Ecuador, Brazil, and Argentina.

On-Site Environmental Compliance Assistance

Project manager and principal engineer for onsite environmental compliance assistance for industrial facilities and construction projects. Responsible for overseeing air permit compliance (completion of all permit requirements including recordkeeping, reporting, and operation documentation), completion of stormwater inspections, assisted with waste disposal (new facilities approved, profiled new waste streams, and collected waste data for minimization ideas), updated the spill response and stormwater plans, supported Asset Team in general environmental issues (corporate support, air, water, waste, and incident reporting), responsible for understanding various environmental regulations and

Project Experience Continued

corporate programs, implement internal compliance procedures, responsible for preparing (or in some cases oversight of) environmental permit applications, negotiating with agencies on permit conditions, monitoring compliance, preparing routine reports and emergency notifications, and assist corporate with environmental training.

Multi-Site Environmental Compliance Audit Programs

Program Manager and technical reviewer for international environmental compliance/management systems auditing programs for a manufacturer of automobile parts, biotechnology company, and mining companies. The corporate program components addressed compliance, company requirements, management systems, and good management practices. Perform audits in South America and USA.

Litigation Support

Project geologist/engineer for litigation support projects. Review and interpret site characterization data, including hydrogeologic information, fate and transport models, and chemical testing results to support legal counsel. Prepare depositions and cost-to-closure estimates in support of litigation and mediation.

Environmental Construction

Construction manager for environmental construction projects. Responsible for design and implementation of various at-risk and agency environmental construction projects. Projects include construction of groundwater extraction and treatment systems, relocation of utilities, closure of above- and below-ground storage tanks, and demolition and closure of industrial facilities. Assist with negotiation of contracts with clients, subconsultants, and legal counsel. Support construction projects at sites located in USA, Canada, Mexico, and Colombia.

Permitting and Environmental Compliance

Project engineer for permitting and environmental compliance projects. Responsible for interfacing and obtaining work plan approvals and/or permits to operate from various federal, state, and municipal regulatory agencies. Obtain permits to operate and discharge from various publicly owned treatment works (POTW). Assist clients in meeting United States National Pollutant Discharge Elimination System (NPDES) and stormwater pollution prevention plan (SWPPP) requirements.

General Environmental Consulting

Project manager/engineer for environmental consulting support for the redevelopment of brownfields and former military installations. Prepare and interpret risk/soil management plans. Prepare design drawings and specifications for environmental construction projects; prepare waste soil and groundwater handling sections for civil infrastructure projects. Coordinate environmental activities with ongoing construction and future site development. Prepare remediation cost estimates ranging up to $70 million in support of real estate negotiations and environmental insurance procurement.

ARCADIS Design & Consultancy for natural and built assets

DIVYA MEHTA

STAFF SCIENTIST

EDUCATION

BS, Biological Sciences, University of California, Irvine 2011

MPH with Concentration in Environmental Health, Boston University 2015

YEARS OF EXPERIENCE

Total - 5

With ARCADIS - 5

PROFESSIONAL REGISTRATIONS

OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) since 2015

First Aid CPR AED Trained since 2016

Ms. Mehta is an environmental scientist with more than five years of experience in environmental due diligence, compliance assessments, product stewardship, and toxicology. She has coordinated and performed numerous Phase I Environmental Site Assessments (Phase I ESAs) in support of asset and real estate transactions. Ms. Mehta has conducted Phase I ESA's for a range of facilities including pharmaceutical manufacturing, medical device manufacturing, biotechnology manufacturing, small- and large-scale manufacturing, commercial retail, and banking properties. She has performed several Limited Compliance Assessments to evaluate facility compliance with both local and national regulations including hazardous waste storage, materials storage, air emissions, and stormwater permitting. She has provided product stewardship support to evaluate compliance of laboratory reagents and biological products with chemical and biological regulations in several countries including, among others, New Zealand and Thailand. Ms. Mehta has also provided toxicological support to large capitalization pharmaceutical clients to develop aquatic exposure guidelines for wastewater discharge.

Project Experience

Environmental Assessments

Phase I Environmental Site Assessments

Pharmaceutical Production Facilities

Ms. Mehta was responsible for report writing and site visits for pharmaceutical production facilities in California, Massachusetts, New Hampshire, and Pennsylvania. Tasks for the assessment included a walk-through of the facilities and a review of materials storage, hazardous waste generation, wastewater generation, and air emissions. Ms. Mehta reviewed historical documents (i.e. aerial photography) as well as state and federal databases to assess environmental impacts from on and off-site operations. The findings from the assessment were utilized to evaluate environmental risk and potential liability for historical on and off-site activities.

Phase I Environmental Site Assessments

Medical Device Manufacturing Facilities

Ms. Mehta was responsible for report writing and site visits for medical device manufacturing facilities in California, Massachusetts, and New Hampshire. Tasks for the assessment included a walk-through of the facilities and a review of materials storage, hazardous waste generation, wastewater generation, and air emissions. Ms. Mehta reviewed historical documents (i.e. aerial photography) as well as state and federal databases

Project Experience Continued

to assess environmental impacts from on and off-site operations. The findings from the assessment were utilized to evaluate environmental risk and potential liability for historical on and off-site activities.

Phase I Environmental Site Assessments
Biotechnology Manufacturing Facilities

Ms. Mehta was responsible for report writing and site visits for medical device manufacturing facilities in California and New Hampshire. Tasks for the assessment included a walk-through of the facilities and a review of materials storage, hazardous waste generation, wastewater generation, and air emissions. Ms. Mehta reviewed historical documents (i.e. aerial photography) as well as state and federal databases to assess environmental impacts from on and off-site operations. The findings from the assessment were utilized to evaluate environmental risk and potential liability for historical on and off-site activities.

Phase I Environmental Site Assessments
Manufacturing Facilities

Ms. Mehta was responsible for report writing and site visits for both small- and large-scale manufacturing facilities in Arkansas, California, Kansas, Kentucky, Louisiana, Massachusetts, Michigan, Missouri, Nevada, and New Hampshire. Tasks for the assessment included a walk-through of the facilities and a review of materials storage, hazardous waste generation, wastewater generation, and air emissions. Ms. Mehta reviewed historical documents (i.e. aerial photography) as well as state and federal databases to assess environmental impacts from on and off-site operations. The findings from the assessment were utilized to evaluate environmental risk and potential liability for historical on and off-site activities.

Phase I Environmental Site Assessments
Bank and Retail Properties

Ms. Mehta was responsible for report writing and site visits for both bank and commercial retail properties in California, Colorado, Kansas, Michigan, Minnesota, Missouri, New Hampshire, North Carolina, Ohio, Pennsylvania, and Washington. Tasks for the assessment included a walk-through of the facilities and a review of materials storage, hazardous waste generation, wastewater generation, and air emissions. Ms. Mehta reviewed historical documents (i.e. aerial photography) as well as state and federal databases to assess environmental impacts from on and off-site operations. The findings from the assessment were utilized to evaluate environmental risk and potential liability for historical on and off-site activities.

Compliance Reviews

Limited Compliance Assessments
Manufacturing Facilities

Ms. Mehta was responsible for limited compliance reviews for manufacturing facilities in Arkansas, California, Colorado, Canada, Michigan, and the UK. The assessment was conducted to evaluate the facility's compliance with local and national regulations pertaining to materials storage, hazardous waste storage, air emissions, and stormwater permitting. These assessments were primarily conducted for buy-side transactions to evaluate current and future environmental liability.

Project Experience Continued

Limited Compliance Assessments
Transport Vehicle Maintenance Facilities

Ms. Mehta was responsible for two limited compliance reviews for transport vehicle maintenance facilities in Arkansas and Louisiana. The assessment was conducted to evaluate the facility's compliance with local and national regulations pertaining to materials storage, hazardous waste storage, air emissions, and stormwater permitting. These assessments were primarily conducted for buy-side transactions to evaluate current and future environmental liability.

Product Stewardship Support

Regulatory Analysis Summaries
Confidential Client, Global

Ms. Mehta generated regulatory analysis summaries for an international client to assess compliance with national chemical and biological regulations. Products evaluated included analytical chemical laboratory reagents and biological products. She conducted these assessments for products in several countries including, among others, New Zealand and Thailand.

Toxicology Support

Development of Predicted No-Affect Concentrations Exposure Guidelines for Active Pharmaceutical Ingredients Used in Human Healthcare Products
Confidential Client, Global

Ms. Mehta developed predicted no-affect concentrations (PNECs) for 25 human health active pharmaceutical ingredients (APIs). The PNECs were generated for human health, environmental, and anti-microbial resistance. The PNEC values were derived primarily based on published values (i.e. AMR Industry Alliance) as well as acute and chronic toxicology data.

Development of Aquatic Exposure Guidelines for Active Pharmaceutical Ingredients Used in Animal Healthcare Products
Confidential Client, Global

Ms. Mehta developed aquatic exposure guidelines (AEGs) for 35 veterinary APIs using risk-based approaches. This work was performed to support the client's product stewardship and risk-management objectives. AEGs were determined using regulatory approaches applicable to waters of the United States and Europe. Data collection relied on toxicological, microbiological, and physical-chemical property information provided directly by the client as well as *de novo* literature searches.

ARCADIS Design & Consultancy for natural and built assets

STEPHEN R. DALY, CHMM

PROJECT ENVIRONMENTAL SCIENTIST

EDUCATION

BS Resource Development, Soil & Water Resources, University of Rhode Island 1996

Graduate Certificate, Occupational Safety & Health, University of Connecticut 2019

YEARS OF EXPERIENCE

Total – 24 years

PROFESSIONAL REGISTRATIONS

Certified Hazardous Materials Manager (CHMM)

PROFESSIONAL ASSOCIATIONS

OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) Training

OSHA 30-hour Construction Awareness Training

Resource Conservation Recovery Act (RCRA) and U.S. Department of Transportation (DOT) training

Mr. Daly's environmental experience encompasses a variety of due diligence, compliance and environmental services at industrial, commercial, residential, and municipal sites throughout the United States. His responsibilities have included, Phase I environmental site assessments, limited environmental compliance reviews, health and safety plans, spill prevention control & countermeasure (SPCC) plans, and stormwater pollution prevention plan (SWPPP) preparation.

Stephen has also served in planning and oversight roles for the remediation of several sites throughout the northeast United States. He has completed various large scale remediation projects, including task management, procurement, subcontractor oversight, waste characterization, final reporting, and client and government relations.

Project Experience

Phase I Environmental Site Assessments

Various Sites – United States

Stephen has completed in excess of 200 Phase I ESAs throughout the United States as per the requirements of ASTM E1527-13 and E2247-16. The Sites have consisted of commercial and industrial properties, including car dealerships, medical office buildings, assisted living facilities, manufacturing facilities, municipal sites, and vacant land. The assessments would also include additional client requirements, such as a Limited Environmental Compliance Review, a Health and Safety Audit, a Phase II ESA, or a determination of the applicability of state requirements pertaining to property transfers.

SPCC and SWPPP Plans

Various Sites – United States

Stephen served as the author of SPCC and SWPPP Plans. Examples of past projects include:

- SPCC Plans for electrical substation properties for the United Illuminating Company throughout southwestern Connecticut.
- SPCC and SWPPP Plans for the Nucor Steel site in Wallingford, Connecticut
- SPCC Plan for an assisted living facility in New Jersey

Project Experience Continued

Project Manager
Global Foundries, East Fishkill, New York

Served as the consultant for a construction company completing a building expansion project in an area with soil contamination. Stephen's activities included the development of a project-specific health and safety plan, monitoring equipment procurement, coordinating staffing needs for on-site air monitoring, ensuring compliance with owner's training requirements, and maintaining client relations.

Project Manager
Dunn Paper, East Hartford, Connecticut

Served as the project manger for the assessment and remediation of a paper products manufacturing facility. Project tasks included a Phase I ESA, a Phase III ESA, the development of a Remedial Action Plan, the design, coordination, and reporting of corrective action at the Site, and the development of documents to be provided to the Connecticut Department of Energy and Environmental Protection as part of the requirement of the Connecticut Property Transfer Act.

Field Scientist
Hooker-Ruco Superfund Site, Hicksville, New York

Served as the field scientist for the remediation of a groundwater plume consisting of chlorinated solvents in Long Island, New York. The remedial design included the installation of a biosparge groundwater treatment system. Stephen served as the owner's representative to oversee the installation of deep injection wells, the subsurface utilities, and the construction of a control building. The operation of the treatment system has resulted in a significant reduction of the chlorinated solvent concentrations at the site.

Project Coordinator
Confidential Client, Needham, Massachusetts

Served as the project coordinator for remediation of a plume of groundwater impacted with chlorinated solvents in Needham, Massachusetts for a confidential client. Activities included the remedial design, subcontractor procurement, scheduling, client relations, public notifications, and reporting. The investigation included the installation of monitoring wells, completion of a pilot study, soil mixing at the source area, a soil vapor study in area buildings, and the injection of in-situ chemicals for the remediation of the downgradient groundwater plume. At the conclusion of the project, a Temporary Solution per the Massachusetts Contingency Plan was achieved.

Project Coordinator – Manufactured Gas Plant Site
Southern Connecticut Gas Company, Bridgeport, Connecticut

Served as the project coordinator for the remediation of a former manufactured gas plant site that was under a Consent Order from the Connecticut Department of Energy and Environmental Protection. Activities included the construction of a groundwater treatment system, and the construction of an engineered cover system. Stephen coordinated treatment system upgrades, including new pumps, control equipment, and treatment equipment and served as the alternate treatment plant operator. Stephen also completed monthly reporting requirement, including status reports, discharge monitoring report, and aquatic toxicity reports. To address the soil impacts at the site, Stephen was the on-site representative during the construction of the engineered cover system, which included characterization and

Project Experience Continued

disposal of impacted soil, installation of utilities, site grading, and the installation of a layer of clean fill and asphalt pavement on the entire site. Stephen was also the coordinator for the recording of an Environmental Land Use Restriction to complete the requirements of the Consent Order.

Field Scientist – Former Copper Refinery

Confidential Client, Maspeth, Queens, New York

Served as a field scientist for the remediation of a former copper refinery in New York City. Activities included the characterization and disposal of soils impacted with PCBs, metals, and petroleum hydrocarbons. Additional tasks included the removal of an underground storage tank, the execution of a community air monitoring program, subcontractor management, government regulator relations and reporting, groundwater monitoring, stormwater monitoring, and assistance with the construction and operation of a groundwater treatment system.

Appendix G

User Questionnaire

ASTM E1527-13
User Questionnaire

Site Name and Address: Patrick Henry Site 1095 Dunford Way, Sunnyvale, CA 94807

1. **Environmental liens that are filed or recorded against the property (40 CFR 312.25)**
   Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?

   ☐ Yes ☐ No If yes, provide explanation: _____

2. **Activity and use limitations that are in place on the property or that have been filed or recorded against the property (40 CFR 312.2(a)(1)(v) and (vi))**
   Did a search of recorded land title records (or judicial records where appropriate) identify any activity and use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?

   ☐ Yes ☐ No If yes, provide explanation: _____

3. **Specialized knowledge or experience of the person seeking to qualify for the landowner liability protections (40 CFR 312.28)**
   Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

   ☐ Yes ☐ No If yes, provide explanation: _____

4. **Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29)**
   Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

   ☐ Yes ☐ No If no, provide explanation: District has owned the property for many years

5. **Commonly known or reasonably ascertainable information about the property (40 CFR 312.30)**
   Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,

   a. Do you know the past uses of the property?
      ☐ Yes ☐ No If yes, provide explanation: orchard, middle school, leased to other schools, chiropractic school

   b. Do you know of specific chemicals that are present or once were present at the property?
      ☐ Yes ☐ No If yes, provide explanation: _____

   c. Do you know of spills or other chemical releases that have taken place at the property?
      ☐ Yes ☐ No If yes, provide explanation: _____

   d. Do you know of any environmental cleanups that have taken place at the property?
      ☐ Yes ☐ No If yes, provide explanation: _____

6. **The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)**
   Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   ☐ Yes ☐ No If yes, provide explanation: None, other than identified above (orchard/school)

Name: Michal Healy Title: Director, Facility Development and Planning

Company: Santa Clara Unified School District Date: May 15, 2022

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APPENDIX 3.9-2

Draft PEA Work Plan Report

ARCADIS

Santa Clara Unified School District

DRAFT PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT WORK PLAN

Patrick Henry School Campus, Santa Clara Unified School District Farm, and Peterson Middle School Campus

1095 & 1055 Dunford Way, 1380 Rosalia Avenue

Sunnyvale, California

Date Prepared: June 20, 2022

DRAFT Preliminary Environmental Assessment Report Work Plan

Patrick Henry School Campus, Santa Clara Unified School District Farm, Peterson Middle School Campus: 1095 & 1055 Dunford Way and 1380 Rosalia Avenue, Sunnyvale, California

June 20, 2022

Prepared By:
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Prepared For:
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Our Ref:
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DRAFT

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DRAFT

Lucas Goldstein, P.E., P.G.
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(PG-CA #7035; PE-CA #C72455)

DRAFT

Julie Munn
Project Manager

DRAFT

Divya Mehta
Staff Scientist

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APPENDICES

1 Introduction

This Preliminary Environmental Assessment (PEA) work plan ("the PEA work plan") has been prepared by Arcadis, U.S., Inc., (Arcadis) on behalf of the Santa Clara Unified School District (SCUSD) for a portion of the Santa Clara County Assessor's Parcel Number (APN) 31310004, excluding the Peterson Middle School structures (subject property, **Figure 1**). The subject property includes a portion of the Peterson Middle School (specifically, a current parking lot), the Patrick Henry School Campus (including recreational fields), and the SCUSD Farm located at 1380 Rosalia Avenue, 1095 Dunford Way, and 1055 Dunford Way, respectively, in Sunnyvale, California. APN 31310004 has a total area of 71 acres, which encompasses the subject property. The subject property includes an area of approximately 54-acres.

The PEA work plan presents a background due diligence assessment of the subject property (2022 Phase I ESA; Appendix A) and a scope of work to evaluate potential areas of concern (PAOC) found during the background due diligence.

Arcadis understands that the SCUSD plans to redevelop the subject property as a new school. Following redevelopment, the subject property will be served by public utilities for drinking water, irrigation water and sewage disposal. The existing on-site structures on the Patrick Henry Campus will be demolished as part of redevelopment. The subject property location is shown on **Figure 1**, a subject property plan is shown on **Figure 2**, the subject property vicinity is shown on **Figure 3**, and a proposed sampling map is shown on **Figure 4**.

1.1 Purpose and Qualifications

The SCUSD requested that Arcadis conduct a background due diligence assessment of the subject property and prepare a scope of work to evaluate potential areas of concern found during the background due diligence. The Phase I Environmental Site Assessment (ESA) conducted as part of the background due diligence assessment was performed in general accordance with the ASTM International (ASTM) Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21), including the limitations outlined in the standard. The purpose of the background due diligence is to identify recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), and historical recognized environmental conditions (HRECs) associated with the subject property. A REC is defined in ASTM E1527-21 as "the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment"; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A CREC is defined in ASTM E1527-21 as "recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations)." An HREC is defined in ASTM E1527-21 as "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable

regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations)."

This PEA Work Plan has been prepared in accordance with the 2009 California Education Code and DTSC's requirements for the environmental assessment of the subject property, so that the subject property may be approved for the construction of the new proposed school buildings and recreational areas.

A scope of work to evaluate potential areas of concern at the subject property found during the background due diligence is also presented in this PEA work plan. This PEA work plan was prepared and will be implemented in general accordance with the guidelines of the DTSC, as detailed in the PEA Guidance Manual ("the DTSC PEA Guidance Manual"; DTSC 2015). Prior to implementation of this PEA work plan, Arcadis will prepare a site-specific Health and Safety Plan (HASP) which will be kept on-site during the proposed field activities at the Site. Site findings will be presented in a PEA report following implementation of this PEA work plan.

1.2 Scope of Work

The scope of work for this assessment included the following:

- Conducting a reconnaissance-level survey of the subject property and a review of site history to obtain evidence of past releases of hazardous materials, if any, and to assess the potential for on-site releases of hazardous materials
- Evaluating land use in the vicinity of the subject property including the presence of underground storage tanks (USTs), above ground storage tanks (ASTs), hazardous air emitters, and electrical transmission lines within the radii specified by California and ASTM regulations
- Evaluating historical information regarding the past use, storage, disposal, or release of hazardous wastes/substances at the subject property
- Preparing a scope of work in a work plan for further assessment of on-site areas of potential concern during the PEA
- Completing a checklist of hazards as described in California Code of Regulations, Title 5 (Section 14001) used by the California Department of Education (CDE) School Facilities Planning Division staff for site-review purposes

1.3 Significant Assumptions

Arcadis assumes that the information provided by the SCUSD, regulatory database provider, and regulatory agencies is true and reliable.

1.4 Limitations and Exceptions

Site-specific activities performed by Arcadis and the information collected during these activities are summarized in the following sections.

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by Arcadis and the original party for whom this report was prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. To the extent that Arcadis relied upon any information prepared by other parties not under contract to Arcadis, Arcadis makes no representation as to the accuracy or completeness of such information.

Only the party for whom this report was originally prepared, and other specifically named parties, may make use of and rely upon the information in this report, in its entirety, for a period not to exceed 180 days in accordance with ASTM E1527-21. After 180 days and prior to using the information contained herein, the report should be updated in accordance with ASTM Standards and Federal regulations.

The findings presented in this report apply solely to site conditions existing at the time when Arcadis's assessment was performed. It must be recognized, however, that a Phase I ESA is intended for the purpose of evaluating the potential for contamination through limited research and investigative activities and in no way represents a conclusive or complete site characterization. Conditions in other parts of the project site may vary from those at the locations where data were collected. Arcadis's ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. As such, 100 percent confidence in the Phase I ESA conclusions cannot reasonably be achieved.

Arcadis, therefore, does not provide any guarantees, certifications, or warranties (express or implied) that a property is free from environmental contamination. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and all applicable laws, codes, regulations, or standards.

1.5 User Reliance

This report is for the exclusive use of the SCUSD, its agents, and assignees. Use of this report by any other party shall be at such party's sole risk.

1.6 Data Gaps

The following data gaps were identified during this assessment:

- Arcadis was unable to inspect the interiors of all Conex boxes and storage sheds present at the subject property. The containers are completely enclosed and Arcadis observed a representative sample of the containers during the subject property reconnaissance.

- One former well is identified in the EDR Radius Map Report and the California Department of Water Resources (DWR) Website in the former recreational soccer field north of the Patrick Henry School Campus. No records were available from the DWR or Santa Clara Valley Water District (SCVWD) regarding this well. A second well was mapped on the SCVWD website along the eastern boundary of the subject property; however, records from the SCVWD indicate that this historical well was located approximately 25 feet east of Teal Drive and east-adjacent to the subject property. Arcadis requested a copy of the abandonment report for the well in the former recreational soccer field to assess the abandonment methods and procedures; however, no records are available. This does not represent a REC but is considered a data gap until the abandonment can be confirmed. The well was not observed on the subject property during the due diligence site walk.

2 Subject Property Setting

2.1 Subject Property Location

The approximate 54-acre subject property is located northwest of the intersection of Dunford Way and Teal Drive in Sunnyvale, Santa Clara County, California (**Figure 1**). The subject property comprises a portion of one parcel identified by the Santa Clara County Assessor's Office as APN 31310004. The SCUSD currently owns the subject property. A subject property plan depicting the configuration of the buildings and exterior features of the subject property is included as **Figure 2**. The subject property and surrounding vicinity are shown on the surrounding property map (**Figure 3**).

The approximate geographic coordinates of the Site are 37° 20' 49.38" north latitude and minus 122° 0' 20.01" west longitude, according to information obtained from Environmental Data Resources, Inc. (EDR) of Milford, Connecticut.

According to information obtained from the U.S. Geological Survey (USGS) 7.5 Minute Series Topographic Map of the Cupertino and San Jose West, California quadrangles dated 2018, the subject property is at an approximate elevation of 124 feet above mean sea level and is generally flat with a slight slope to the northeast. The topography of the surrounding area is also flat with a general topographic gradient to the northeast.

2.2 Geology and Hydrogeology

2.2.1 Regional and Local Geology

No previous environmental investigation reports were available for the subject property; therefore, property-specific geology information was not available. Geologic information in the EDR Report, included in the 2022 Phase I ESA (Appendix A; EDR Report), specifies that the sediments beneath the subject property have been identified as part of the Quaternary Series of the Quaternary System of the Cenozoic Era. According to the United States Department of Agriculture (USDA) Soil Conservation Service, the subject property is underlain by the Botella soil component, which has a surface soil texture of clay loam and exhibits moderate infiltration rates.

According to a well completion report provided by the California Department of Water Resources (DWR) for a nearby public supply well, shallow soils in the subject property area consist of gravel, sand, and clay from approximately 0 to 23 feet below ground surface (bgs). Deeper soils are a mix of gravel and coarse sands, hard clay, and sandy clays.

According to a 2007 Geologic Map of the Cupertino and San Jose West quadrangles, Santa Clara, and Santa Cruz Counties, California presented in the United States Geological Survey MapView Database ("the database"), the subject property is underlain by alluvial sand, fine-grained, silt, and gravel. Where differentiated, these surficial sediments represent alluvial fan deposits at the base of slopes and the outer edge of fan areas. According to the database, the subject property is located approximately 7 miles northeast of the nearest serpentine rock deposits. Given that the outcrops of the serpentine rock deposits are within the 10-mile radius established by the Interim Guidance for Naturally Occurring Asbestos (NOA) at School Sites (DTSC 2004), the potential presence of NOA is a PAOC for the subject property.

2.2.2 Regional and Local Surface and Groundwater Hydrology

According to the EDR Report and the DWR Website, a former well was located in the current soccer field in the northern portion of the subject property. The well was historically used as a water supply well and was last sampled in May and September 1949. No evidence of the well was visible during site reconnaissance. Arcadis submitted a records request to the DWR and no records were available. According to the SCVWD mapping database, a second well is mapped along the eastern boundary of the subject property. According to records provided by the SCVWD, the well was historically located 25 feet east of Teal Drive and is located at the east-adjoining residential neighborhood. No information was available from the SCVWD regarding the well reported in the EDR Report and the DWR Website. Based on the absence of this information, the well is a noteworthy condition for the subject property. It is unclear if the well was properly abandoned because Arcadis could not review a well abandonment report, which is considered a data gap. The data gap is not considered a REC.

Arcadis reviewed documents associated with the former Panasonic, Intersil, and Siemens facilities that are located approximately 3,000 feet south (hydraulically upgradient) of the subject property. Several groundwater monitoring wells have been installed associated with these offsite facilities to evaluate the extent of chlorinated solvents in groundwater. According to a 1990 Phase II Investigation conducted by Beak Consultants Limited (Beak) and the most recent 5-Year Report conducted in September 2020 for the Intersil Inc. and Siemens Facility, regional groundwater underlying the area south of the subject property consists of the shallow water-bearing zones and the deep aquifer. The shallow water bearing unit has been divided into three main zones: A-zone, B-zone, and C-zone groundwater. According to the most recent 5-Year Report, the A-zone was found to extend from the top of the groundwater table at approximately 40 feet bgs to 115 to 125 bgs, B-zone groundwater was found from 130 to 150 feet bgs, and C-zone groundwater was found from 180 to 210 feet bgs. The deep aquifer was separated from the C-zone groundwater by a thick aquitard and extends from approximately 300 to 500 feet bgs. Groundwater flow for the shallow water-bearing zones flows to the north and northeast. The four closest groundwater monitoring wells to the south of the subject property are PG-1B, S-3B, S-4C, LH-1C (**Figure 3**).These wells were most recently sampled in 2019 and trichloroethylene (TCE) and other chlorinated solvents were either not detected or were not detected above the 2019 groundwater vapor intrusion Regional Water Quality Control Board Environmental Screening Levels (RWQCB ESLs) for

either the residential or commercial/industrial scenario. This investigation is discussed further in Section 5.1.2.

2.3 Subject Property Vicinity

At the time of the site reconnaissance, the subject property was bordered to the north by Bryant Way, beyond which are residences; to the east by Teal Drive, beyond which are residences; to the south by electrical transmission lines, beyond which are Dunford Way and residences; and to the west by residences, beyond which is Norman Way. In general, the subject property adjacent vicinity consisted of residential, school, and church properties.

2.4 Designated SCUSD Contact Person and Mailing Address

Ms. Melissa Kersh
Project Manager for Facility Development and Planning
Santa Clara Unified School District
1889 Lawrence Road
Santa Clara, California, 95050
Telephone Number: 408.423.2148
Email address: mkersh@scusd.net

3 Subject Property History

The following items regarding the subject property were provided by the SCUSD or obtained by Arcadis on behalf of the SCUSD. Arcadis provided Ms. Michal Healy, the Director of Facility Development and Planning for the SCUSD, with a questionnaire on the environmental status of the property. Ms. Healy completed the questionnaire on May 15, 2022. A copy of the questionnaire is included in **Appendix A** and is summarized below.

3.1 Title Record

Arcadis reviewed a title record prepared for the subject property and adjoining portions of the Peterson Middle School on February 12, 2016. A summary of information presented in the title record report is provided in **Appendix A**.

3.2 Environmental Liens or Activity and Use Limitations

Arcadis did not provide a questionnaire to past subject property owners; however, we submitted a questionnaire to the SCUSD requesting information pertaining to specialized knowledge they may have of the subject property. The following questions and responses were obtained from the questionnaire completed by the SCUSD:

- ***Question:*** Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the property under federal, tribal, state, or local law?
  Response: No.

- ***Question:*** Did a search of recorded land title records (or judicial records where appropriate) identify any activity or land use limitations, such as engineering controls, land use restrictions, or institutional controls, that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
  Response: No.

Arcadis obtained an Environmental Lien Search Report from EDR (EDR Project Number 6951305.7S, dated April 25, 2022) for the subject property. No environmental liens associated with the subject property APN was found during their review of public information according to information provided by EDR. A copy of EDR's Environmental Liens Search Report is provided in Appendix C.

3.3 Specialized Knowledge

The following responses to Arcadis's questions were obtained from the SCUSD as part of the assessment:

- ***Question:*** Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former

occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
Response: No.

- ***Question:*** Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?
Response: No.

3.4 Commonly Known or Reasonably Ascertainable Information

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:

- ***Question:*** Do you know the past uses of the property?
Response: Yes. Ms. Healy noted that the subject property has been used as an orchard, middle school, leased to other schools, and a chiropractic school.

- ***Question:*** Do you know of specific chemicals that are present or once were present at the property?
Response: No.

- ***Question:*** Do you know of spills or other chemical releases that have taken place at the property?
Response: No.

- ***Question:*** Do you know of any environmental cleanups that have taken place at the property?
Response: No.

- ***Question:*** Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?
Response: None, other than identified above (orchard/school).

3.5 Owner, Property Manager, and Occupant Information

According to the Santa Clara County Assessor's office, the subject property is owned by the Santa Clara Unified School District. No further information was available regarding historical ownership of the subject property.

4 Subject Property and Surrounding Area Reconnaissance

4.1 Subject Property Reconnaissance

On April 16th and April 25th, Ms. Divya Mehta of Arcadis conducted a site walk at the subject property to photograph general site conditions. Ms. Mehta was met at the subject property by Ms. Michal Healy and Ms. Angeline Ruiz of the SCUSD. Ms. Healy conducted a site walk of the asphalt-paved parking lot in the northern portion of the subject property on May 24, 2022. At the time of the assessment, the subject property comprised an approximately 54-acre area that was improved with the following permanent buildings within the Patrick Henry School campus that are summarized on **Table 1**. Structures in the remaining portions of the subject property included small sheds, Conex boxes, and temporary portable classrooms and trailer buildings that will be removed prior to construction.

Table 1. On-property Buildings

Current Building Name (Historical Building Name)	Building Size (square feet)	Purpose
Building E/Building 800 (Building A)	13,328	Former Classroom Building and Conference Room
Building 600 (Building B)	4,223	Former Classroom Building and Storage Area
Building B/Building 500 (Building C)	16,685	Appleseed Montessori and SCUSD Classrooms
Building C (Building D)	12,054	Silicon Valley Academy
Building D (Building E)	12,758	New Concept Chinese School and SCUSD Administrative Offices
Building 300 (Building F)	9,395	Auditorium and Storage Area
Building G	5,170	SCUSD Print Shop/Music Instrument Storage

The buildings listed above are wooden-frame buildings with a plaster exterior that are present in the eastern portion of the subject property. Other than current administrative operations in Building D and the SCUSD Print Shop in Building G, the remaining portions of the Patrick Henry School Campus buildings consist of vacant classrooms, an auditorium used for storage, and utility rooms. A pad-mounted transformer was observed on a concrete pad north of Building G with several large cables emanating from subgrade areas beneath the transformer pad. A pole-mounted transformer is also located south of the Patrick Henry School campus along the southern boundary of the subject property on Dunford Way. No labeling was visible regarding the polychlorinated biphenyl (PCB) content of oil within the unit and no staining or evidence of corrosion was noted on or around the units. The western portion of the Patrick Henry Campus consists of a gravel-paved storage area for Conex boxes, vehicle

storage, and miscellaneous machinery and equipment storage. The Conex boxes are used for furniture storage and miscellaneous storage for the SCUSD maintenance staff. Arcadis observed five polyethylene tanks in the northeastern portion of the storage yard that were used off-site at a nearby high school for pool cleaning products. According to Mr. Maes, a Maintenance Lead for SCUSD, the tanks were emptied prior to storage at the subject property. Arcadis noted that the tanks appeared to be partially filled with accumulated stormwater. De minimis amounts of staining were observed on the gravel in the storage yard that was attributed to minor leaks and spills from automobile parking. The stains were observed underneath and around cars that were stored in the yard. The remaining portions of the Patrick Henry School Campus consisted of play areas, asphalt-paved parking lots north and south-adjacent to the school buildings, and landscaped and grassy areas east of the school.

The northeastern portion of the subject property along Teal Drive consists of a former soccer field, and small storage sheds that were most recently rented by a recreational soccer league. According to information reported in the EDR Radius Map Report and the SCVWD, there are two former agricultural wells that have been abandoned at the subject property in the soccer field area and along the eastern boundary with Teal Drive.

The far northern portion of the subject property consists of an asphalt-paved parking lot for the Peterson Middle School, a temporary construction office building, recreational courts, and storage area for the SCUSD. According to Ms. Healy, the office is not currently in use and will be removed. De minimis amounts of hydrocarbon staining was observed on the asphalt-paved parking lot that was attributed to minor leaks and spills from automobiles.

The central portion of the subject property consists of a large grassy football field, track, and bleacher area with a corrugated metal storage building for concession and sports equipment. No areas of concern or staining were observed in this portion of the subject property.

The southwestern portion of the subject property encompasses the SCUSD Farm. The farm consists of mulch and compost storage areas in the eastern portion of the farm, small storage buildings, sheds, and orchard land in the northern portion of the farm, row crops and a storage barn in the central and southern portions of the farm, and a covered patio area and storage building in the western portion of the farm.

4.2 Subject Property Vicinity Reconnaissance

At the time of Arcadis's site reconnaissance, surrounding area properties consisted primarily of residential properties located along Dunford Way (south of the subject property), Teal Drive (east of the subject property), Norman Drive (west of the subject property), Bryant Way (north of the subject property), and Roadrunner Terrace (northeast of the subject property). Raynor Park Christian Church and the Raynor/Stratford School were located south-adjacent to the subject property across Dunford Way.

A Pacific Gas & Electric (PG&E) distribution line is located in an easement along the southern boundary of the subject property on Dunford Way. According to the PG&E online mapping database, this distribution line is listed as Feeder Name WOLFE 1106 (Feeder Number 083671106) with a nominal circuit voltage of 12 kilovolts (kV). The distribution line is not reported as a high voltage power line by PG&E.

A municipal water well is located approximately 100 feet south of the subject property at the Raynor/Stratford School that was installed on March 17, 1982. A diesel aboveground storage tank (AST) was also observed approximately 100 feet south of the subject property at the Raynor/Stratford School property that appeared to be located within a secondary containment structure and fuels an emergency generator unit. The volume of the diesel AST is unknown. The AST appeared to be in good condition with no indications of leaks or spills.

According to the Bay Area Air Quality Management District, there are five properties within a quarter mile of the subject property that are registered with air permits. These air permits are associated with commercial properties including the City of Sunnyvale Environmental Services (emergency generator), Saigon Cleaners (drycleaning operations), Sunnyvale Volkswagen (spray booth), Belmond Village Sunnyvale Tenant LLC (building construction), and Carl's Junior (restaurant operations).

5 Public Record Review

5.1 Environmental

An environmental database report prepared by EDR was reviewed for local, state, and federal listings for properties within the site area. Included in EDR's report are regulatory database lists, which were reviewed by EDR for cases pertaining to leaking USTs and ASTs, hazardous waste sites, and abandoned sites within ASTM-specified radii (**Table 2**). EDR also reviewed selected database lists generated by the United States Environmental Protection Agency (U.S. EPA). Explanations of the regulatory agency database lists reviewed and acronyms used by EDR are presented in EDR's report included in **Appendix A**.

Table 2. Regulatory Agency Databases/Lists Reviewed

Search Radius	Agency	Database	Type of Records in Database
1 mile	U.S. EPA	NPL	Sites designated for Superfund cleanup by the U.S. EPA
	U.S. EPA	CORRACTS	Resource Conservation and Recovery Act facilities undergoing "corrective actions"
	DTSC	AWP (SPL)	Sites prioritized by the state for cleanup
	IWMB	SWIS	Sites included in the Solid Waste Information System database
0.5 mile	U.S. EPA	CERCLIS	Sites under review by the U.S. EPA
	U.S. EPA	TSD	Facilities that treat, store, and/or dispose of hazardous waste
	DTSC and RWQCB	SLIC/Toxics	Sites with solvents/toxics contamination
	RWQCB	LUST	Sites with leaking USTs (LUSTs)
	IWMB	SWLF/SWAT	Sites permitted as solid waste landfills, incinerators, or transfer stations
	OEP, OHM	CORTESE	Sites on state index of properties with spills
Site/Adjoining Properties Only	U.S. EPA	RCRA Generator	Sites that generate large or small quantities of hazardous waste
	DTSC	Cal-Sites (SCL)	Sites under review by the state

Search Radius	Agency	Database	Type of Records in Database
Site/Adjoining Properties Only	OES, Fire Department	ERNS	Sites with reported accidental releases of oil and hazardous substances
	SWRCB	UST/AST	Sites with registered USTs or ASTs
	U.S. EPA	CERCLIS – NFRAP	CERCLIS sites with no further remedial actions planned at time of report
	U.S. EPA	FINDS	Sites included on the facility inventory database

Notes:
DTSC=Department of Toxic Substances Control NPL=National Priority List
RCRA=Resource Conservation and Recovery Act OES = Office of Emergency Services
FINDS=Facility Inventory Database System SWRCB=State Water Resources Control Board
RWQCB=Regional Water Quality Control Board SWIS=Solid Waste Information System
IWMB=Integrated Waste Management Board SWLF=Solid Waste Landfills
LUST=Leaking Underground Storage Tank
OEP, OHM = Office of Emergency Planning, Oil and Hazardous Material
CERCLIS = Comprehensive Environmental Response, Compensation and Liability Information System

5.1.1 Subject Property Listings

The subject property is listed in the DTSC Haznet and Hazardous Waste Tracking (HWTS) databases for hazardous waste generation. According to listings in the Haznet and HWTS databases, the subject property is listed in the databases in 2001 for the disposal of asbestos-containing building materials (ACBMs). The Palmer College Chiro/West facility is also listed in the Haznet and HWTS databases for the generation of laboratory waste chemicals (California Waste Code 551), and metal sludge (California Waste Code 171) in 1993. No violations were noted.

The Peterson Middle School Campus at 1380 Rosalia Avenue is also listed in the EDR database as a Resource Conservation and Recovery Act Non-Generator/No Longer Report (RCRA NonGen/NLR) in 2018 and 2019 as a universal waste generator. No further information was available regarding hazardous waste codes and no violations or evaluations were noted. This listing likely pertains to storage areas at the main campus located west of the northern portion of the subject property.

5.1.2 Off-site Properties

According to the EDR database, there are two adjoining residential properties (Gerald Cummings [1054 Castleton Way], Katie Bessette [1486 Teal Drive]) that are listed in the RCRA NonGen/NLR database in 2021. No further information was available regarding hazardous waste generation at the facilities and no violations or evaluations were noted.

There are numerous off-site properties that are listed in the EDR Radius Map Report. Based on the distance to the subject property and the presumed groundwater flow to the north-northeast, two

properties were evaluated to determine if they are likely to represent a concern of environmental impairment to the subject property.

Panasonic, Intersil, and Siemens at 10900 North Tantau Avenue, Cupertino, California

Panasonic, Intersil, and Siemens operated at a facility that is located approximately 3,000 feet south and hydraulically upgradient to the subject property. The facility is listed in several databases that are summarized below. Database listings that pertain to compliance and are not independently indicative of an environmental concern (e.g., stormwater permitting) are not discussed further.

Intersil Inc. is listed in the RCRA Small Quantity Generator (RCRA-SQG) database in September 1996. The facility was historically listed as a RCRA Large Quantity Generator (RCRA-LQG) in 1980 and 1992 and historically operated as a semiconductor. No further information was available regarding hazardous waste codes and no violations were noted. Panasonic is listed in the Haznet database for generation of laboratory waste chemicals (California Waste Code 551), halogenated solvents (California Waste Code 211), asbestos containing waste (California Waste Code 151), other inorganic solid waste (California Waste Code 181), other empty containers 30 gallons or more (California Waste Code 512) liquids with hexavalent chromium greater than or equal to 500 miligram per liter (mg/L; California Waste Code 723), other organic solids (California Waste Code 352), unspecified solvent mixture and (California Waste Code 214) from 1988 to 1994. Intersil is listed in the HWTS database for hazardous waste generation between 1982 and 1994. No violations were noted.

Intersil Inc./Siemens Components are listed in the National Priority List (NPL), Superfund Enterprise Management System (SEMS), US Engineering Controls, Envirostor, Cleanup Program Sites – Spills, Leaks, Investigations, and Cleanups (CPS-SLIC), Historical Cal-Sites, Record of Decision (ROD), Potentially Responsible Party (PRP), Enforcement (ENF), and the California Environmental Reporting System (CERS) databases for an investigation that began at the facility in 1983. Soil and groundwater sampling was conducted that identified chlorinated solvents in soil and groundwater primarily in the northern and central portions of the facility. Groundwater extraction systems were implemented in 1987 that have been addressing chlorinated solvent concentrations in groundwater. Prior investigations have been conducted that indicated that groundwater flow in the area is to the north-northeast (from the facility towards the subject property). Groundwater sampling has been conducted through the present to evaluate off-site impacts to groundwater. There are four groundwater monitoring wells (PG-1B, S-3B, S-4C, LH-1C) that have been advanced approximately 1,000 feet south and southeast of the subject property. According to the most recent 2019 Groundwater Monitoring Report and 2020 Five-Year Report (Appendix E), trichloroethylene (TCE) was detected at 0.25 microgram per liter (µg/L) at well PG-1B and 0.5 µg/L at well S-4C in October 2019. These concentrations do not exceed the current 2019 RWQCB Environmental Screening Level (ESL) for groundwater vapor intrusion (1.2 µg/L for residential scenarios, 7.5 µg/L for commercial/industrial facilities). TCE was not detected at well S-3B and LH-1C was not sampled. No other volatile organic compounds (VOCs) were detected in the most recent groundwater sampling event in these aforementioned wells. According to the 2019 Groundwater Monitoring Event and 2020 Five-Year Report, the northernmost shallow groundwater monitoring well in the A-zone (A1; well MW-OS-3A1) is located approximately 2,500 feet south of the subject property. The well was installed in 2014 and had a concentration of 21 µg/L that exceeds both the residential and commercial/industrial groundwater vapor intrusion ESLs for TCE. No further wells have been delineated through the present downgradient of the well and according to the 2020 Five-Year Report, the groundwater plume in Zone A only extends 800 feet north (approximately 2,200 feet south of the

subject property) and the groundwater plume in the B-zone extends 1,400 feet north (approximately 1,600 feet south of the subject property) of the source areas. Groundwater monitoring wells upgradient of the well have generally indicated decreasing trends and concentrations in A-zone wells. In addition, TCE has not been detected in sampling events between 2015 and 2021 at the Raynor/Stratford well located south-adjacent to the subject property. Given the decreasing trends in groundwater at the facilities and off-site areas, the distance from the subject property, the depth to groundwater, the extent of the plume as reported in the most recent 2020 Five Year Report; the off-site groundwater VOC plume emanating from the facility is not a REC for the subject property.

EMCON Associates and American Microsystems Inc. at 3800 Homestead Road

American Microsystems Inc. (AMI) is located approximately 2,900 feet south of the subject property. The facility is listed in the Response, Envirostor, Leaking Underground Storage Tank (LUST), CPS-SLIC, Deed, Cortese, ENF, Historical Cortese, and CERS databases for an investigation that began in 1987. The facility is located east-adjacent to the former Siemens and Intersil properties and prior investigations have identified elevated concentrations of chlorinated solvents in soil and groundwater at the facility. According to the most recent 2021 Groundwater Monitoring Report for the facility, groundwater monitoring wells have been advanced northeast of the facility and east of groundwater monitoring wells for the Siemens/Intersil Facility. TCE is the primary constituent of concern in groundwater and was measured at low concentrations at groundwater monitoring wells located downgradient of the former AMI facility. The closest groundwater monitoring wells are E-28A and A-27A, which are approximately 1,300 and 1,800 feet southeast of the subject property, respectively. TCE was not detected at the two wells during 2017 and they were not re-sampled during the most recent sampling events. TCE concentrations at wells located upgradient to the two wells were also found to have low concentrations of TCE that ranged from 0.9 to 2.5 µg/L. The highest concentration at the wells was found to exceed the residential groundwater vapor intrusion ESL, but not the commercial scenario ESL. Given the low concentrations of TCE in groundwater and the distance from the subject property, the investigation is not a REC for the subject property.

5.2 Historical

Arcadis obtained historical information for the subject property and subject property vicinity that are summarized in **Table 3** below.

Table 3. Historical Information Sources

Type of Record	Dates of Information	Source
Aerial photographs and satellite imagery	1939, 1948, 1950, 1956, 1963, 1968, 1974, 1982, 1991, 1993, 1998, 2006, 2009, 2012, 2016	The EDR Aerial Photo Decade Package
Aerial photographs and satellite imagery	1948, 1985, 1991, 1993, 2000, 2000 through 2020	Google Earth Pro

Type of Record	Dates of Information	Source
Aerial photographs and satellite imagery	1948, 1953, 1956, 1960, 1968, 1980, 1982, 1987, 1991, 1993, 1998, 1999, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2018	Nationwide Environmental Title Research, LLC (NETR) Online
Fire insurance maps	No maps available	Certified Sanborn® Map Report
Property tax files	August 5, 1964	Property record card (Santa Clara County Property Search)
Recorded land title records	August 5, 1964	Property record card (Santa Clara County Property Search)
USGS topographic maps	1889, 1897, 1899, 1902, 1943, 1947, 1948, 1953, 1961, 1968, 1973, 1980, 1995, 2012, 2015, 2018	EDR Historical Topo Map Report with Quadmatch™
Local street directories	1963, 1964, 1968, 1975, 1982, 1985, 1986, 1991, 2001	EDR-City Directory Image Report
Building department records	1996 to 2007	EDR Building Permit Report
Zoning/land use records	2022	Sunnyvale Zoning Map (Sunnyvale Planning and Zoning Department)
Other	April 13, 2022	Interview with Ms. Healy and Ms. Ruiz
Other	May 15, 2022	User Questionnaire

5.2.1 Subject Property

The subject property appeared in topographic maps as developed with four structures in the central portion of the subject property from as early as 1897 through at least 1902. By 1939, these structures had been demolished and the subject property had been redeveloped as part of a larger tract of orchard land. No significant changes were evident until 1960, when the eastern portion of the subject property was cleared and appeared to be under construction. Buildings A through E were constructed in 1960 and Buildings F and G were constructed in 1962. By 1963, the Patrick Henry Campus buildings, an asphalt-paved parking lot in the southeastern portion of the campus, garden and orchard areas in the central and northern portions of the school campus, and recreational court areas north of the building were visible in aerial photography. The area surrounding Building G in the western portion of the campus appeared to be under construction with areas of concrete or building materials. The area north of the school campus was cleared and the western portion of the subject property remained developed with orchards.

By 1968, a small structure was constructed north of Building G in the footprint of the current transformer pad in the western portion of the school campus and the orchard areas in the remaining portions of the subject property had been cleared. The central portion of the subject property was redeveloped with the

current football field and track and the western portion was developed with two baseball fields. The far northern portion of the subject property was cleared and appeared to be used for automobile parking. By 1974, bleachers had been constructed along the western portion of the football field and track and several small, cleared areas were visible in the field north of the school campus. The far northern portion of the subject property was further developed with the current asphalt-paved parking lot for the adjoining Peterson Middle School. No significant changes were evident until 1982, when the current corrugated metal shed building was visible north of the bleachers in the central portion of the subject property and a large, cleared area was visible in the footprint of the former baseball field in the southern portion of the subject property. No changes were visible until 1991, when multiple small buildings were visible south of Building G and north of the football field and a rectangular building or Conex box was visible in the far northern portion of the subject property. No changes were evident until 1998, when a new practice field for the San Jose Saber Cats (arena football)was constructed north of Building G. By 2000, the large rectangular structure north of the building was visible as an enclosed recreational court and by 2002, a new structure had been constructed west of Building G. No changes were evident until 2005, when the area northwest of Building G was used for parking and additional Conex boxes and storage equipment were visible in this area beginning in 2007. By 2008, the southwestern portion of the subject property had been developed with the Full Circle Farm run by the Sustainable Community Gardens and associated buildings and the area northwest of the farm had been cleared and appeared to be used for Conex box or portable classroom storage. By 2013, the current solar panels were constructed in the western portion of the subject property. No changes were evident until 2016, when the practice field for the San Jose Saber Catsand two structures west and northwest of Building G were removed. These areas were further developed as storage areas with portable classroom buildings in the northwestern portion of the subject property and Conex boxes and vehicle storage in the northwestern portion of the Patrick Henry Campus through the present.

Prior owners of the subject property include the Pacific Manufacturing Company who sold the land to A.H. Buehren on March 3, 1899 as well as Ignasio Rosalia Castello; Dokenic, Lena, Salvtaore, and Rosie Cirrincione; and Frank L., Pearl, Salvatore, and Pauline Teresi who sold portions of the subject property to the Jefferson Union High School District of Santa Clara County, a former operating name for the SCUSD, between 1955 and 1962. The Patrick Henry School Campus was historically referred to as Patrick Henry Junior High School as of August 1960. The campus was operated as a middle school in the 1960s and 1970s. In 1979, the Patrick Henry School was closed and the school campus was used for administrative office space. Portions of the campus were also rented out to other private schools including the Palmer College of Chiropractic West, who used Building G for cadaver storage for their anatomy and physiology labs. Other tenants at the school have included AppleSeed Academy, Christian Church Scholars, River of Life, Silicon Valley School, New Concept Chinese School, Mount Bell Academy, and Dynasty Academy. With the exception of the SCUSD administrative office space in Building D and a District print shop and music instrument storage area in Building G, the school is currently vacant. The remaining portions of the subject property have been historically developed with orchards, recreational fields (soccer, baseball), and the SCUSD Farm.

5.2.2 Subject Property Vicinity

The subject property area appeared as developed with multiple small structures and roads nearby from as early as 1889. Calabazas and Campbell Creek were depicted east and southeast of the subject

property by 1897 with the Southern Pacific Railroad tracks depicted far north. No changes were evident until 1939, when the subject property area had been developed with orchards, agricultural row crop areas, and associated residential and commercial buildings. No significant changes were evident until 1956, when the area west-adjacent to the subject property had been redeveloped with a large residential neighborhood and the Raynor School south of the subject property was under construction. The area north-adjacent to the subject property was also developed with row crop land and associated smaller buildings. By 1963, the Raynor School south of the subject property had been constructed and multiple residences had been constructed south and east-adjacent to the subject property. By 1968, the remaining areas of orchard land west and north had been redeveloped with the current Peterson Middle School and residential neighborhoods. The surrounding area continued to be further developed with courts and buildings within the Peterson Middle School campus and residential homes north and east of the subject property. By 2008, the adjoining and surrounding properties appeared to be in a configuration generally consistent with the current property uses.

5.2.3 Subject Property Vicinity

Regulatory agency files and records requested and/or reviewed for the subject property and surrounding properties are summarized in the following table:

Table 4. Regulatory Agency File and Records Requests

Agency	Method of Request	Date of Request	Response
USEPA	Online request; Online database review (Envirofacts, ECHO)	April 22, 2022	No records available
Regional Water Quality Control Board	Email request; Online database review (Geotracker)	April 22, 2022	No records available for the subject property. See Section 5.1.2 for records reviewed for surrounding area properties.
Department of Toxic Substances Control	Email request; Online database review (Envirostor)	April 22, 2022	No records available
National Pipeline Mapping System (NPMS)	Online database review (NPMS Viewer)	April 22, 2022	No records available
California Department of Water Resources	Email request; Online database review	May 5, 2022	Records available (see Section 2.4.2 and 2.4.4)
Santa Clara County Department of Environmental Health	Online request	April 22, 2022	No records available

Agency	Method of Request	Date of Request	Response
Santa Clara County Department of Agriculture	Online and telephone request	May 5, 2022	No records available for the subject property.
Santa Clara Valley Water District (SCVWD)	Online request; Online database review	May 5, 2022	Records available (see Section 2); however, a copy of the supply well abandonment reports have not yet been received (data gap).
Bay Area Air Quality Management District	Online Request	May 5, 2022	No records available
City of Sunnyvale	Online Request	April 22, 2022	No records available
Pacific Gas & Electric	Telephone Request Online database and mapping system review	May 5, 2022	No response provided

5.2.4 Previous Site Investigations

Arcadis reviewed the following environmental reports for the subject property:

***Six-Month Surveillance Asbestos Hazard Emergency Response Act (AHERA) Report*, prepared by Hazmat Doc (Hazmat), dated June 12, 2020.**

Hazmat conducted an asbestos survey at the Patrick Henry School Campus in June 2020. This survey was an update to prior surveys conducted between May 2015 and November 2019 in accordance with federal AHERA requirements. Prior surveys identified numerous suspect ACBMs at the school including vinyl floor and associated mastic, floor tiles and associated mastic, caulking, ceiling tiles and associated mastic, plaster wall surfacing, fire door core insulation, and carpet mastic. The survey identified the following conditions:

- Numerous suspect ACBMs have been identified at the building through surveys conducted between 2015 and 2020; however, it does not appear that these materials have been sampled.
- Multiple tile, adhesive, and mastic samples were observed in fair condition; however, no abatement was done. Hazmat recommended that these materials be a managed in place; however, Arcadis noted that recommendations later in the report stated that damaged materials should be replaced.

Additional details regarding the specific locations and conditions of ACBMs identified at the Patrick Henry Campus are summarized in the survey report. The subject property address is listed in the DTSC Haznet database and Hazardous Waste Tracking System (HWTS) databases in 2001 for the removal of asbestos containing waste (California Waste Code 151). No further information was available from SCUSD regarding the materials removed during this abatement work. The historical use of ACBMs in

buildings within the Patrick Henry School Campus are a noteworthy condition under ASTM 1527-21 for the subject property. It is Arcadis' understanding that the onsite buildings will be properly surveyed and abated for hazardous materials, including ACBMs, prior to demolition.

***Soil Report*, prepared by Soil Control Lab, dated April 16, 2022.**

SCUSD provided a copy of soil analysis that was conducted for the SCUSD Farm. Soil samples were collected and analyzed for multiple metals and soil health parameters (e.g., ammonia, nitrate, available nitrogen) to support agricultural purposes and not for environmental purposes. Arcadis noted that the metals reported in the report were not detected above the applicable 2019 RWQCB ESLs or the 2022 DTSC screening levels. No screening levels were available for soil health parameter constituents.

6 Additional Research Data

Arcadis conducted additional research in accordance with DTSC Guidance (DTSC 2001), California Code of Regulations Title 22 Section 69104, and the State of California General Education Code Provisions, Division 1, Part 10.5, Chapter 1, Article 1.

6.1 Agricultural Use

The subject property was developed as part of a larger agricultural tract of land from at least 1939 through 1960, when the Patrick Henry School campus was constructed. The southern portion of the subject property was more recently redeveloped within the SCUSD Farm from 2008 through the present.

Based on the use of the subject property as cultivated farmland and orchard land, agricultural chemicals such as pesticides, herbicides, and fertilizers may have been used at the subject property. Provided that the chemicals have been applied in accordance with manufacturer recommendations, residuals remaining in subject property soils and/or groundwater are expected to be similar to other area properties. There were no Division of Agriculture historical pesticide use permits for the subject property that are available for review. According to representatives of the office, records are only available for the past two years and no records have been reported for current agricultural use. Based on the historical orchards observed on the subject property, the application of agricultural chemicals is a potential REC for the subject property in accordance with the June 2006 DTSC Interim Guidance.

6.2 Mines

Arcadis has found no evidence during the course of this assessment to suggest that the subject property was formerly or is currently located in the vicinity of abandoned/inactive mines, mine wastes, and/or unusual environmental conditions resulting from past mining, milling, and/or smelting operations.

6.3 Governmental Use or Ownership

Arcadis has found no evidence during the course of this assessment to suggest that the subject property is or was formerly owned or used by the following U.S. Governmental agencies: Departments of the Army, Air Force, Navy, Defense or Energy, or Formerly Used Defense Sites. In addition, the Site is not built upon a property which has the potential for the presence of unexploded ordnance.

6.4 Illegal Drug Manufacturing

Arcadis has found no evidence during the course of this assessment to suggest that the Site was a location of previous law enforcement or DTSC cleanup activities for illegal drug laboratories.

6.5 Debris, Stockpiles, or Fill Material

Arcadis did not observe evidence during the course of this assessment of debris, stockpiles, or fill material present at the subject property. Arcadis observed small piles of compost and mulch that are stored in the eastern portion of the SCUSD Farm that are used on-site, as needed.

6.6 Polychlorinated Biphenyls

PCBs are a group of organic chemicals that were used historically in a variety of industrial and chemical applications, including transformers, ballasts, other electrical equipment, and hydraulic oils, among many other products. PCBs were manufactured in the United States from 1929 until 1979, when PCB manufacturing was banned due to the toxicity of PCBs. Arcadis observed one pad-mounted electrical transformer north of Building G within a larger concrete pad and one pole-mounted transformer along the southern portion of the subject property on Dunford Way. No labels were present to indicate the PCB content of the transformer and no information was available regarding historical transformers in use at the property. Given the age of the buildings, it is possible that the transformers contain PCBs. The potential presence of PCBs at the subject property is a REC in accordance with the June 2006 DTSC Interim Guidance.

6.7 Lead-Based Paint

Lead-based paint was commonly used for a variety of purposes, until 1978 when federal regulations banned consumer uses of lead-containing paint, though exceptions applied for certain commercial and other paints. Federal regulations require certain disclosures regarding lead-based paint for housing constructed prior to 1978. The buildings at the subject property were constructed in 1960 and 1962, which pre-dates the ban on consumer uses of lead-containing paint. Painted surfaces were observed throughout the Patrick Henry Campus and several buildings had chipped, peeling, and deteriorating paint areas along the sides of the structures. No information was available regarding lead sampling conducted at the school site. It is Arcadis' understanding that the onsite buildings will be properly abated prior to demolition.

Based on the construction dates of the building and the condition of the paint at the school, the historical use of lead-based paint on site structures and peeling off the structure and contacting surficial soil is a potential REC for soil for the subject property in accordance with the June 2006 DTSC Interim Guidance.

6.8 Asbestos-Containing Materials

ACMs have historically been used in a variety of building materials and other products. Between 1973 and 1978, under the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP), the USEPA banned spray-applied surfacing ACM. In 1989, the USEPA issued a final rule under Section 6 of the Toxic Substances Control Act (TSCA) banning most asbestos-containing products; however, in 1991, the rule was vacated and remanded by the Fifth Circuit Court of Appeals. Only the bans on corrugated paper, rollboard, commercial paper, specialty paper, flooring felt, and any new uses of asbestos remain banned under the 1989 rule. In addition, the Occupational Safety and Health Act

defines presumed ACM (PACM) as thermal system insulation (TSI) and surfacing material found in buildings constructed no later than 1980.

The buildings at the Patrick Henry Campus were constructed in 1960 and 1962. Based on the construction dates and prior surveys that have been conducted at the Patrick Henry Campus between 2015 and 2020, ACMs are present at the subject property and represent a noteworthy condition. It is Arcadis' understanding that the onsite buildings will be properly abated prior to demolition.

6.9 Naturally Occurring Hazardous Materials

6.9.1 Radon

Radon is a radioactive gas and a product of the natural decay of uranium. Radon can migrate from soil gas into buildings, accumulate in confined spaces, and become a health hazard.

According to the USEPA, the subject property is located in Radon Zone 2, which comprises counties with predicted average indoor radon screening levels from 2 to 4 picocuries per Liter (pCi/L) of air. Federal Area Radon Information from USGS summarizes radon test results at 2 locations in ZIP Code 94087, which average 2.45 pCi/L in first floor living areas. The California Radon database summarizes radon test results for 64 locations in ZIP Code 94087 in Santa Clara with 8 locations that had radon levels greater than 4 pCi/L.

No property-specific radon test data were available.

6.9.2 Naturally Occurring Asbestos (NOA)

Asbestos deposits, which are located in many parts of California, are commonly associated with serpentine and can be either asbestiform (fibrous) or non-asbestiform (platy). Chrysotile, crocidolite, amosite, tremolite, actinolite, and anthophyllite are the principal forms of asbestos. Chrysotile breaks into curly fibers, while the remaining types tend to have a thin needle-like appearance.

Serpentinite is rock composed almost entirely of serpentine and is the most common host rock for chrysotile. Generally, chrysotile and amphibole asbestos varieties occur in areas where the original rock has metamorphosed under elevated temperatures and pressures. Serpentinite and its parent material, ultramafic rock, are present in California's Sierra Nevada Foothills. Typically, the asbestos content of these rocks ranges from less than 1 percent to about 25 percent, with higher concentrations sometimes found.

Disturbance of asbestos-containing rock and soil can result in a release of asbestos fibers to the air. This disturbance can be caused by driving over roads or driveways surfaced with these materials, construction activities (ripping of outcrops and bedrock), and/or weathering and erosion processes. Once released into the air, asbestos fibers are relatively stable and can remain airborne for long periods of time.

Asbestos fibers that have become airborne can be inhaled deep into the lungs where they can remain for extended periods of time or be translocated to other parts of the body. Once inhaled, asbestos fibers can result in health problems. The potential for developing health problems from asbestos exposure

depends on the length and intensity of the exposure. Asbestos is classified as a known human carcinogen by state and federal agencies. Diseases related to asbestos exposure include asbestosis, lung cancer, and mesothelioma.

According to a 2007 Geologic Map of the Cupertino and San Jose West quadrangles, Santa Clara, and Santa Cruz Counties, California presented in the United States Geological Survey MapView Database, the subject property is located approximately 7 miles northeast of the nearest serpentine rock deposits. Given that the outcrops of the serpentine rock deposits are within the 10-mile radius established by the Interim Guidance for NOA at School Sites (DTSC 2004), the potential presence of NOA is a PAOC for the subject property and was identified as a noteworthy condition for the Phase I ESA **(Appendix A).**

6.10 Petroleum Deposits

Arcadis found no evidence through this assessment of petroleum deposits currently or historically present at the subject property. No soil or gas wells were identified in the EDR Radius Map Report or during a review of the California Department of Conservation Division of Oil, Gas, & Geothermal Online Mapping System databases. In addition, no pipelines were identified at the subject property on the National Pipeline Management System (NPMS) Viewer. The closest pipeline is a natural gas pipeline operated by PG&E that is located approximately 1,800 feet east of the subject property along Lawrence Expressway.

6.11 Railroad Use or Easements

Arcadis has found no evidence through the course of this assessment to suggest that the subject property is located within 1,500 feet of an active railroad.

6.12 Utility Easements

According to a title record report for the subject property, utility easements have been granted to the City of Sunnyvale for municipal utility access at the subject property. An easement was also granted to PG&E since 1933 for electric lines along the southern boundary of the subject property.

6.13 Residential Use

Arcadis found no evidence through the course of this assessment to suggest historical residential use at the subject property.

6.14 Surface Drainage Pathways

Stormwater runoff sheet flows to grated inlets located in the paved parking areas at the subject property. The drains are routed to the municipal stormwater system. A stormwater sump pump is also present in the Building D boiler room that pumps accumulated stormwater to the sanitary sewer system.

6.15 Termiticide Application

Organochlorine pesticides (OCPs) were historically used as insecticides for termite controls around wooden structures. Chlordane was used in the United States from 1948 until 1988, when it was banned by the USEPA. The buildings at the Patrick Henry School Campus were constructed in 1960 and 1962 and are wood-framed buildings with plaster exteriors. Based on the construction dates, it is possible that termiticides may have been used at the subject property, which is considered a PAOC for the subject property and was identified as a noteworthy condition for the Phase I ESA **(Appendix A)**.

6.16 Regulated Hazardous Waste or Release Site

As noted in Section 5.1.1, the subject property is listed in the DTSC Haznet and HWTS databases for historical hazardous waste generation of ACBMs. The Patrick Henry School or former tenants are not currently listed as active hazardous waste generators.

Arcadis found no evidence during the course of this assessment to suggest that the subject property was formerly or is currently built upon a hazardous substance release site.

6.17 Hazardous Air Emissions

As noted in Section 4.2, there are five facilities located within a 0.25-mile radius of the subject property that are registered with the BAAQMD with an air permit. These facilities are commercial properties and not anticipated to emit hazardous air emissions or to handle hazardous or acutely hazardous materials, substances, or waste.

Arcadis found no evidence during the course of this assessment to suggest that the subject property is located within 500 feet of a busy freeway or traffic corridor.

6.18 Proximity to Active Runways

Arcadis found no evidence through the course of this assessment to suggest that the subject property is located within a 2-mile radius of an active runway. The closest active runway is the Norman Y. Mineta San Jose International Airport that is located approximately 3.7 miles northeast of the subject property.

7 Findings

The following sections present the conclusions and recommendations of the background due diligence noted above and in the 2022 Phase I ESA **(Appendix A)** to provide the rational to evaluate PAOCs at the subject property.

7.1 Findings and Opinion

Arcadis performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM Practice E1527-21 for Phase I ESAs. This assessment revealed the following RECs, CRECs, HRECs, de minimis conditions, and noteworthy conditions. A copy of the complete 2022 Phase I ESA is included in **Appendix A**.

7.1.1 Recognized Environmental Conditions

The following RECs were identified in connection with the subject property:

Agricultural Land and Orchard Use: The subject property was developed as part of a larger agricultural tract of land from at least 1939 through 1960, when the Patrick Henry School Campus was constructed. The southern portion of the subject property was more recently redeveloped as the SCUSD Farm from 2008 through the present.

Based on the use of the subject property as historical orchard, the application of agricultural chemicals is a potential REC for the subject property in accordance with the August 2008 DTSC Interim Guidance.

Lead-based Paint: Lead-based paint was commonly used for a variety of purposes, until 1978 when federal regulations banned consumer uses of lead-containing paint, though exceptions applied to certain commercial and other paints. Federal regulations require certain disclosures regarding lead-based paint for housing constructed prior to 1978. The buildings at the subject property were constructed in 1960 and 1962, which pre-dates the ban on consumer uses of lead-containing paint. Painted surfaces were observed throughout the Patrick Henry Campus and several buildings had chipped, peeling, and deteriorating paint areas along the sides of the structures. No information was available regarding lead sampling conducted at the school site. It is Arcadis' understanding that the onsite buildings will be properly abated prior to demolition and a sampling plan is not included.

Based on the construction dates of the building and the condition of the paint at the school, the potential historical use of lead-based paint on site structures and peeling off the structure and contacting surficial soil is a potential REC in soil for the subject property in accordance with the June 2006 DTSC Interim Guidance.

Polychlorinated Biphenyls: PCBs are a group of organic chemicals that were used historically in a variety of industrial and chemical applications, including cooling oil in transformers prior to 1979. PCBs were manufactured in the United States from 1929 until 1979, when PCB manufacturing was banned due to the toxicity of PCBs.

One pad-mounted electrical transformer was observed north of Building G within a larger concrete pad. No labels were present to indicate the PCB content of the transformer and no information was available

regarding historical transformers in use at the property. In addition, a pole-mounted transformer is located along the southern boundary of the subject property on Dunford Way. Given the age of the buildings, it is possible that the transformers contain PCBs. The potential presence of PCBs in soil adjacent to the transformers at the subject property is a potential REC in accordance with the June 2006 DTSC Interim Guidance.

Termiticide Application: OCPs were historically used as insecticides for termite controls around wooden structures. The buildings at the Patrick Henry School campus were constructed in 1960 and 1962 and are wood-framed buildings with plaster exteriors. Based on the construction dates, the potential presence of termiticides in soil adjacent to the structures at the subject property is a potential REC in accordance with the June 2006 DTSC Interim Guidance.

7.1.2 Controlled Recognized Environmental Conditions

No CRECs were identified in connection with the subject property.

7.1.3 Historical Recognized Environmental Conditions

No HRECs were identified in connection with the subject property.

7.1.4 De Minimis Conditions

The following de minimis condition was identified in connection with the subject property:

Staining: Arcadis observed multiple areas of de minimis amounts of staining on concrete floors within utility rooms at the Patrick Henry Campus that was attributed to poor housekeeping. De minimis staining was also observed on ceiling tiles and portions of concrete that were attributed to minor leaks from the ceiling. De minimis amounts of staining was also observed near floor drains within the restrooms that was attributed to poor housekeeping. The flooring materials in these areas were in fair condition with no indications of leaks or spills.De minimis staining was also observed on the asphalt-paved parking lot that was attributed to minor leaks and spills from automobiles. As a result, this staining is a de minimis condition.

7.1.5 Noteworthy Conditions

The following noteworthy conditions were identified in connection with the subject property:

Asbestos Containing Building Materials: The buildings at the Patrick Henry Campus were constructed in 1960 and 1962. Based on the construction dates and prior surveys that have been conducted at the school, ACBMs are likely present at the subject property and represent a noteworthy condition. It is Arcadis' understanding that the onsite buildings will be properly abated prior to demolition and an ACBM sampling plan is not included.

Naturally Occurring Asbestos: According to a 2007 Geologic Map of the Cupertino and San Jose West quadrangles, Santa Clara, and Santa Cruz Counties, California, the subject property is located approximately 7 miles northeast of the nearest serpentine rock deposits. Given that the outcrops of the serpentine rock deposits are within the 10-mile radius established by the Interim Guidance for NOA at

School Sites, the potential presence of NOA is a noteworthy condition for the subject property. It is important to note that NOA is not identified as a REC in the Phase I ESA as naturally-occurring rock deposits do not constituent a REC under CERCLA and therefore are not a REC under ASTM. A NOA sampling plan is included in this assessment.

Historical Vehicle Storage Operations: The area west of Building G has been used for automobile and equipment storage since at least 2007. During site reconnaissance, Arcadis observed multiple vehicles stored in this area including damaged vehicles. Small amounts of staining were observed on the gravel near or under cars within this area that was attributed to minor leaks and spills. As such, the vehicle storage in this area is a noteworthy condition for the subject property. Additional sampling is proposed in the PEA.

Historical Water Supply Well(s): According to the EDR Radius Map Report database and the DWR database, one former agricultural well was located in the current soccer field in the northern portion of the subject property (**Figure 4**). The well was historically used as a water supply well and was last sampled in May and September 1949. According to the SCVWD, a second agricultural well is currently located in the eastern portion of the subject property. However, according to records provided by the SCVWD, this well is located approximately 25 feet east of Teal Drive and off-site.

Arcadis requested a copy of the abandonment reports to assess the location and abandonment methods and procedures; however, no further information was provided by the DWR or SCVWD. This does not represent a REC but is considered a data gap until the abandonment methods and procedures can be confirmed. Surveys and potential destruction of the wells are proposed in the PEA.

7.1.6 Data Gaps

The following data gaps were identified during the background due diligence:

- Arcadis was unable to inspect the interiors of all Conex boxes and storage sheds present at the subject property. The containers are completely enclosed and this data gap does not appear to be significant as a representative number of containers were observed, the containers are used for furniture storage, and the exterior of the containers and buildings appeared to be in good condition with no indications of staining or corrosion indicating a release from the contents of the buildings.

- One former well is identified in the EDR Radius Map Report and the California Department of Water Resources (DWR) Website in the former recreational soccer field north of the Patrick Henry School Campus. No records were available from the DWR or SCVWD regarding this well. A second well was mapped on the SCVWD website along the eastern boundary of the subject property; however, records from the SCVWD indicate that this historical well was located approximately 25 feet east of Teal Drive and east-adjacent to the subject property. Arcadis requested a copy of the abandonment report for the well in the former recreational soccer field to assess the abandonment methods and procedures; however, no records are available. This does not represent a REC but is considered a data gap until the abandonment can be confirmed. The well was not observed on the subject property during the due diligence site walk.

No significant data gaps were identified during this assessment.

7.1.7 Conclusions and Recommendations

Based on the results of Arcadis's subject property history research and site reconnaissance, a sampling and analysis program is recommended to be performed during the PEA to evaluate the following:

- The potential presence of metals (e.g. lead and arsenic) and OCPs in shallow soil associated with historical agricultural and orchard use throughout the subject property.
- The possible presence of lead in shallow soil associated with historical use of lead-based paint on the buildings (excluding recent portable buildings and Conex boxes) at the subject property.
- The possible presence of termiticides in soil associated with the historical use with wood-framed buildings.
- The possible presence of PCBs in shallow soil near a pad-mounted transformer north of Building G and a pole-mounted transformer along the southern boundary of the subject property on Dunford Way (**Figure 2**).
- The potential presence of metals, petroleum hydrocarbons, and volatile organic compounds (VOCs) in shallow soil within the gravel-paved storage yard in the western portion of the Patrick Henry School campus (**Figure 2**).
- The potential presence of NOA in shallow soils throughout the subject property.
- If the historical water supply wells reportedly "abandoned" wells were properly abandoned per Well Standards or if they were improperly abandoned (e.g. covered up or paved over).

8 PEA Scope and Objectives

The California Department of Education (CDE) has adopted an environmental policy requiring that, if applicable, ambient air, subsurface soils, and shallow groundwater at school sites will be evaluated. A "No Further Action" and/or "partial site approval" designation from the DTSC must be obtained before the CDE can approve a school district for the acquisition and/or construction of a new school site.

The acreage of the school campus for which the SCUSD is seeking approval is approximately 54 acres.

The PEA is intended to identify whether a release or threatened release of hazardous substances exists at the subject property and to evaluate the potential risk to human health or the environment before the DTSC issues a "No Further Action" designation.

The overall objectives of the PEA include the following:

- evaluate historical information regarding the past use, storage, disposal, or release of hazardous wastes/substances at the subject property
- conduct a field sampling and analysis program to characterize the nature, concentration, and extent of hazardous wastes/substances present in soil
- estimate the potential threat to public health and/or the environment posed by known hazardous constituents at the Site using a residential land use scenario

Using information developed during the PEA and the conservative human and ecological risk evaluation to be conducted using the DTSC PEA Guidance Manual, the DTSC will make an informed decision regarding potential risks, if any, posed by the subject property.

Possible outcomes of the PEA decision include the following:

- The requirement for further assessment through the remedial investigation/feasibility study process if the Site is found to be significantly affected by hazardous substances
- The need to perform a removal action for areas where localized impacts by hazardous substances release(s) are found
- Issuance of a "No Further Action" finding if the Site is found not to be affected or if risks to human health and the environment are found to be within acceptable levels based on the conservative screening-level risk assessment

8.1 Conceptual Site Model (CSM)

A CSM presents potential sources of contamination, transport mechanisms, and exposure pathways for potential human receptors that is presented on **Figure 5**. The purpose of the CSM is to evaluate the potential risks to public health and the environment and to help develop the PEA sampling plan.

8.2 Constituents of Potential Concern

Suspect constituents of potential concern (COPCs) identified for the subject property during the background due diligence includes California Assessment Manual (CAM)-17 and CCR Title 22 metals, PCBs, OCPs, total petroleum hydrocarbons (TPH), and volatile organic compounds (VOCs).

8.3 Data Quality Objectives (DQO)

The DQOs are measures of the data quality control and are criteria established to assess data gathering, sampling, and analysis.

Sensitivity is defined by detection limits for all analytes or COPCs for all analyses and are expressed in terms of method detection limits (MDLs) or reporting limits (RLs). The MDLs and RLs are acceptable for use in the PEA and do not exceed applicable reporting limits. A summary of the MDLs and RLs are presented in **Table 5**.

8.4 Sampling Strategy

The following subsections outline the proposed sampling plan to address each REC or PAOC identified in the Phase I ESA. Proposed sampling locations are shown on **Figure 4**, and the quantification limits and sampling and analysis summary are presented in **Tables 5 and 6**, respectively.

8.4.1 Patrick Henry School Campus

There are currently seven buildings at the Patrick Henry School campus that were constructed between 1960 and 1962. Based on the construction dates, soils collected near the buildings will be analyzed for metals and OCPs to evaluate potential historical use of lead-based paint and termiticide use.

8.4.1.1 Pre-Demolition Sampling for CAM-17 Metals and OCPs

In accordance with DTSC guidance (DTSC 2006), a minimum of four discrete surface soil samples will be collected from each side of Buildings B, C, D, and E, at depth intervals of 0-0.5 ft bgs and 2-2.5 ft bgs. A minimum of two samples will be collected at smaller buildings within the campus (Building 300, Building 600, and Building G). Discrete surface soil samples will be analyzed for lead and other CAM-17 metals by USEPA Method 6010B.

Where possible, soil samples will be collected from the nearest unpaved area where associated runoff may collect. If no nearby unpaved soil sampling area is available, a discrete soil sample will be collected from below the concrete or asphalt pavement along the side of the building.

Four surface (0-0.5 foot [ft] bgs) and subsurface (2-2.5 ft bgs) samples will be collected for OCP analysis by USEPA Method 8081A. Up to four adjacent discrete surface and subsurface samples will be composited for analysis of OCPs (e.g. two composite samples per building). Subsurface samples will be placed on hold pending analysis of the surface sample.

8.4.1.2 Post-Demolition Sampling for CAM-17 Metals and OCPs

In accordance with DTSC Guidance (DTSC 2006), a minimum of two sets of six perimeter locations will be collected if the foundation is still present prior to demolition at Buildings B, C, D, and E at depth intervals of 0-0.5 ft bgs and 2-2.5 ft bgs. The first set of samples will be collected within two feet of the of the foundation and a second set at the extent of soil disturbed by debris removal. If soil is exposed within the footprint of the former structure, four interior samples will be collected within the footprint of the former structure. Discrete surface soil samples will be analyzed for lead and other CAM-17 metals by USEPA Method 6010B. Surface and subsurface samples will also be analyzed for OCP analysis by USEPA Method 8081A. Up to three samples from the same depth and sample set will be composited for analysis of OCPs (e.g. four composite samples per building). Subsurface samples will be placed on hold pending analysis of the surface sample.

If sampling is conducted following the demolition of the buildings and foundations and grading work, a minimum of six samples (0-0.5 ft bgs) will be collected surrounding and within the footprint of the former building. Up to four samples from the same depth and sample set will be composited for analysis of OCPs (e.g. four composite samples per building). Subsurface samples will be placed on hold pending analysis of the surface sample.

8.4.1.3 Sampling for PCBs

In accordance with DTSC Guidance (DTSC 2006), a minimum of two discrete surface (0-0.5 ft bgs) and subsurface (2-2.5 ft bgs) samples will be collected near the pad-mounted transformer and one discrete surface and subsurface sample will be taken at the base of the pole-mounted transformer. Surface and subsurface samples will be analyzed for PCB analysis by USEPA Method 8082A. Subsurface samples will be placed on hold pending analysis of the surface sample.

8.4.1.4 Sampling for TPH and VOCs

During the Phase I site reconnaissance, Arcadis observed limited areas of surface staining in the storage yard area that was attributed to minor leaks and spills from vehicle and equipment storage. SCUSD representatives noted that existing vehicles would be removed prior to demolition or construction activities at the subject property. Four surface soil (0-0.5 ft bgs) and subsurface soil (2-2.5 ft bgs) samples will be collected from the yard near areas of staining. Soil samples will be analyzed for TPH as gasoline, TPH as diesel, and TPH as motor oil using USEPA Method 8015M with silica gel cleanup. Subsurface samples will be placed on hold pending analysis of the surface sample.

8.4.1.5 Sampling for NOA

In accordance with DTSC Guidance (DTSC 2004), a minimum of one soil boring will be advanced for every 2 acres. Two samples should be collected at the surface (0-0.5 ft bgs) and at 1 foot below the deepest point of any potential excavation. If the proposed school is anticipated to remain within the footprint of the current Patrick Henry School Campus (12 acres), 6 soil borings will be advanced and a total of 12 surface and subsurface samples will be collected and analyzed for Asbestos by USEPA Method Polarized Light Microscopy (PLM) 600/R-93/116 within the Patrick Henry School Campus.

8.4.2 Recreational Fields

There are currently three recreational field areas at the subject property with baseball fields in the western portion, a football field and track in the central portion, and a former soccer field in the northeastern portion that total approximately 25 acres. These areas have been continuously developed as recreational fields since the 1960s following historical use as orchard land.

8.4.2.1 Sampling for OCPs and Metals

In accordance with DTSC Guidance (DTSC 2008), a minimum of 35 borings should be advanced in these three areas. A minimum of 9 surface soil samples (0-0.5 ft bgs) should be collected from these borings and analyzed for arsenic and other CAM-17 Metals by USEPA Method 6010B/7471A. A minimum of 9 surface soil samples (0-0.5 ft bgs) should be collected and composited for OCP analysis by USEPA Method 8081A.

A total of 36 borings will be advanced in these three areas. A total of 9 discrete surface soil samples will be collected and analyzed for arsenic and other CAM-17 Metals. A total of 9 composite surface soil samples will be analyzed for OCPs from the 36 boring locations (4 discrete samples for one composite sample).

8.4.2.2 Sampling for NOA

In accordance with DTSC Guidance (DTSC 2004), a minimum of one soil boring should be advanced for every 2 acres. Two samples should be collected at the surface (0-0.5 ft bgs) and at 1 foot below the deepest point of any potential excavation. A total of 12 soil borings will be advanced and a total of 24 surface and subsurface samples will be collected and analyzed for Asbestos by PLM 600/R-93/116.

8.4.3 SCUSD Farm

According to a review of historical records, the southwestern portion of the subject property was developed with orchard land until the 1960s, when it was redeveloped with a baseball field. In 2008, this area was redeveloped and run by Full Circle Farms until 2018. The farm has been managed by SCUSD since 2018. encompasses an approximately 12-acre portion of the subject property.

8.4.3.1 Sampling for OCPs and Metals

In accordance with DTSC Guidance (DTSC 2008), a minimum of 22 borings should be advanced at the SCUSD Farm. A minimum of 6 surface soil samples (0-0.5 ft bgs) should be collected from these borings and analyzed for arsenic and other CAM-17 Metals by USEPA Method 6010B/7471A. A minimum of 6 surface soil samples (0-0.5 ft bgs) should be collected and composited for OCP analysis by USEPA Method 8081A. Samples will also be collected near the storage buildings in the northeastern portion of the SCUSD Farm as well as near the barn storage building in the southern portion of the farm.

A total of 22 borings will be advanced at the SCUSD Farm. A total of 6 discrete surface soil samples will be collected and analyzed for arsenic and other CAM-17 Metals. A total of 6 composite surface soil samples will be analyzed for OCPs from the 22 boring locations.

8.4.3.2 Sampling for NOA

In accordance with DTSC Guidance (DTSC 2004), a minimum of one soil boring should be advanced for every 2 acres. Two samples should be collected at the surface (0-0.5 ft bgs) and at 1 foot below the deepest point of any potential excavation. Six soil borings will be advanced and a total of 12 surface and subsurface samples will be collected and analyzed for Asbestos by USEPA Method Polarized Light Microscopy (PLM) 600/R-93/116 within the SCUSD Farm.

8.4.4 Peterson Middle School Parking Lot

The northern portion of the subject property consists of an approximately 3-acre asphalt-paved parking lot that is used for parking, recreational courts, and a portable office building for the adjacent Peterson Middle School Campus buildings.

8.4.4.1 Sampling for OCPs and Metals

In accordance with DTSC Guidance (DTSC 2008), a minimum of 2 surface soil (0-0.5 ft bgs) and 2 subsurface samples (2.0-2.5 ft bgs) will be collected at the parking lot and analyzed for CAM-17 Metals. The surface and subsurface samples will be collected and composited for OCP analysis by USEPA Method 8081A.

8.4.4.2 Sampling for NOA

In accordance with DTSC Guidance (DTSC 2004), a minimum of one soil boring should be advanced for every 2 acres. Two samples should be collected at the surface (0-0.5 ft bgs) and at 1 foot below the deepest point of any potential excavation. One soil boring be advanced and a total of 4 surface and subsurface samples will be collected and analyzed for Asbestos by USEPA Method Polarized Light Microscopy (PLM) 600/R-93/116.

8.5 Sample Analysis Summary

Table 6 presents a summary of the proposed samples, sample depths, and analysis methods by sample location areas for the PEA Work Plan. Samples will be collected in laboratory-supplied containers and submitted to Enthalpy Analytical, a California Department of Health Services-certified laboratory under appropriate chain-of-custody protocols (or similar California certified laboratory). **Table 5** presents a summary of the laboratory-provided MDLS and RLs.

8.6 Pre-Field Activities

Prior to implementation of this PEA work plan, Arcadis will prepare a site-specific Health and Safety plan (HASP) which will be kept on-site during the proposed field activities at the subject property. The HASP documents the potential hazards to worker health and safety at the subject property during the proposed field activities and specifies the appropriate means to mitigate or control these hazards. The HASP will address the potential for exposure to hazardous constituents and describes general safety procedures. Fieldwork will be monitored to ensure that appropriate health and safety procedures are followed.

Before fieldwork begins, Arcadis will coordinate clearance of proposed sampling locations for underground utilities with Underground Service Alert (USA). A private utility-locating subcontractor may also be used. USA will be notified at least 48 hours in advance of sampling activities.

A notice describing the proposed work and schedule will be distributed by the SCUSD to occupants of properties within line-of-sight of the subject property at least 72 hours prior to commencement of fieldwork

8.7 Field Activities

Arcadis's sampling strategy was prepared in accordance with the following:

- DTSC – *Interim Guidance for Naturally Occurring Asbestos (NOA) at School Sites*, dated September 24, 2004.
- DTSC – *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers*, dated June 9, 2006. Revised September 12, 2006.
- DTSC – *Interim Guidance for Sampling Agricultural Properties (Third Revision),* dated August 7, 2008.
- DTSC – *Preliminary Environmental Assessment Guidance Manual*, dated January 1994. Revised October 2015.
- DTSC – *Advisory: Active Soil Gas Investigations*, dated July 2015.

As required by the DTSC, a dedicated field notebook or field sampling information forms will be maintained by Arcadis's representative for the Site.

9 Field Operations

9.1 Sampling Methods

Arcadis will collect soil samples using a direct-push sampling rig or hand-sampling (hand auger) equipment. If a direct-push sampling rig is used, 1.5-inch-diameter acetate sample tubes will be advanced beneath the subsurface inside a stainless-steel sample probe. Upon recovery from the sample probe, retrieved soil samples will be cut to a desired length (6 to 8 inches). Samples will be collected in 1.5- to 2.5-inch-diameter, 6-inch-long brass or stainless-steel tubes if hand-sampling equipment is used at the Site.

After recovery of the acetate, brass, or stainless--steel tubes, the tubes will be capped on both ends with Teflon® and plastic caps, and labeled properly. After labeling, the soil samples will be sealed in plastic bags and placed in an ice-chilled cooler for transportation to the laboratory under proper chain-of-custody protocols. Analytical methods, types of containers, preservation methods, and holding times are summarized in **Table 7**.

9.2 Decontamination

Equipment will be decontaminated in a pre-designated area over plastic sheeting. Cleaned bulky equipment will be stored on plastic sheeting in uncontaminated areas. Cleaned small equipment will be stored in plastic bags. Materials to be stored more than a few hours will also be covered.

Re-usable equipment that comes into contact with potentially contaminated soil or groundwater will be decontaminated and rinsed with distilled water before use at each sampling location to ensure the integrity of samples collected. Disposable equipment intended for one-time use will be packaged for appropriate disposal and will not be reused. Drilling and sampling devices used will be decontaminated using high-pressure hot water (steam cleaned) or by the following procedures:

- Laboratory-grade detergent and tap water or deionized water wash, in a 5-gallon plastic bucket, using a brush
- Initial tap water, distilled water, or deionized water rinse, in a 5-gallon plastic bucket
- Final distilled water or deionized water rinse, in a 5-gallon plastic bucket

9.3 Waste Management

Soil and/or wastewater generated from sampling activities will be stored in U.S. Department of Transportation (DOT) approved 55-gallon steel drums. The containers will be labeled and identified with the generator's name and the date the waste was generated. The containers will be secured on site pending characterization and disposal.

Waste Soil. Analytical data generated from the soil investigations will be used to classify the waste soil at the disposal facility for the soil containers, and that additional profiling of the waste soils will not be necessary.

Wastewater. If wastewater is generated during implementation of this work plan, one drum characterization water sample will be collected from the aqueous storage containers. If multiple wastewater containers are used, a drum composite sample of the multiple drums will be collected. The sample will be submitted to a California-certified laboratory for appropriate analysis.

If the waste is classified as hazardous, SCUSD will secure a U.S. EPA identification number from the DTSC for proper management of the hazardous waste. The transportation contractor and disposal facility will comply with the DTSC and DOT requirements of hazardous waste transportation and disposal. The hazardous waste will be transported by a registered hazardous waste hauler under a uniform hazardous waste manifest.

The SCUSD shall make the final determination for such disposal and shall direct Arcadis to make such disposal accordingly

9.4 Sample Handling

9.4.1 Sample Containers, Volumes, and Preservation Requirements

Samples collected will be collected in laboratory-supplied containers and submitted to Enthalpy under appropriate chain-of-custody protocols. A summary of the volumes and preservation requirements are summarized in **Table 7**.

9.4.2 Sample Identification

Samples will be numbered using the sample location followed by the sample depth interval. A summary of the proposed sample identification information is presented on **Table 6.**

9.4.3 Field Quality Control

Quality assurance/quality control (QA/QC) samples will be analyzed as noted in **Table 6**. QA/QC procedures will be employed in both the field and the laboratory. QA/QC samples include equipment rinsate samples, field blank samples, and field duplicate samples.

The following field QA/QC procedures will be performed at the Site:

- Chain-of-custody forms will be used when submitting samples to the laboratory.
- Daily information regarding soil sample collection will be recorded in a field logbook or on field sampling information forms. Sample types, soil descriptions, sample identification numbers, and sample times will be collected and recorded on field sampling information forms and/or in field logbooks. Pages will be numbered, dated, and signed by the person recording the field data.

Field QA/QC samples will be collected and submitted for analysis along with the discrete soil samples, using the following sampling frequency:

- Field duplicate samples: one for every 10 discrete samples per sample media
- Equipment rinsate blanks: one per field day that includes collection of samples by non-disposable (reusable) sampling equipment
- Field blanks: one per field day that includes collection of samples by reusable sampling equipment (when an equipment rinsate blank sample is collected

9.4.3.1 Ambient Blank

Ambient blank samples consist of a sample of the distilled water or deionized water used to wash sampling equipment during equipment cleaning activities. The purpose of the ambient blank sample is to evaluate the distilled water or deionized water for the presence of chemicals for which environmental samples are being analyzed. An ambient blank sample will be collected by pouring distilled water or deionized water into the appropriate sample container.

Arcadis will collect an ambient blank sample for each work week at the subject property. The ambient blank(s) will be analyzed for the sample analyte using the same analytical methods as for the sample collected using the reusable equipment and analytical methods used for samples collected during the field day.

9.4.3.2 Equipment Blank

An equipment rinsate blank will be collected from the final water rinsed over equipment after cleaning activities have been performed. The equipment rinsate blank will be collected from non-disposable (reusable) sampling equipment such as soil sampling tools and sampling equipment. To collect an equipment rinsate blank sample, distilled water will be poured over or through the recently cleaned equipment, and carefully collected directly into an appropriate sample container held over a bucket. Equipment rinsate blank samples will be stored and processed in the same manner as the other samples.

Arcadis will collect an equipment blank sample for each work day at the subject property. The equipment rinsate blank(s) will be analyzed for the sample analyte using the same analytical methods as for the samples collected using the reusable equipment and analytical methods used for samples collected during the field day.

9.4.3.3 Field Duplicates

Duplicate samples will be collected to evaluate the analytical procedures and methods employed by the laboratory. The duplicate soil sample will be collected immediately below the depth interval where the original soil sample is collected from the boring. One field duplicate sample will be collected for every 10 soil samples collected. Proposed duplicate samples are summarized on **Table 6**.

9.4.4 Sample Custody

Chain-of-custody records are used to document sample collection and shipment to a laboratory for analysis. A chain-of-custody record will accompany the sample shipments for analyses. Forms will be completed and sent with the samples for each laboratory and each shipment. If multiple coolers are sent to a single laboratory on a single day, individual chain-of-custody forms will be completed and sent with the samples in each cooler.

Generally, a sample is considered to be in someone's custody if it is either in someone's physical possession, in someone's view, locked up, or kept in a secured area that is restricted to authorized personnel. Until receipt by the laboratory, the custody of the samples will be the responsibility of the sample collector.

9.5 Record Keeping and Surveying

Logging will be performed using continuous core samples for proposed borings (not including the surface soil sample locations). The boring log will contain the following information:

- borehole number and location

- sample depth(s)
- sediment color
- sediment grain size
- descriptive comments
- estimated moisture content
- depth at which groundwater was encountered, if applicable
- permit number, if applicable
- drilling method
- sampling method
- photoionization detector (PID) measurements, if applicable
- depth where groundwater stabilized, if applicable
- blow counts, if applicable
- field geologist/engineer's name

An Arcadis Professional Geologist will review and sign the final lithologic logs. Copies of the field logs will be included in the PEA report. Arcadis will approximate each boring location using a handheld global positioning system unit, survey flags, and/or marking paint and shown on a figure in the PEA report.

9.6 Laboratory QA/QC Procedures

Laboratory QA/QC procedures include the following:

- Laboratory analyses will be performed within the required holding time for samples submitted for initial analysis and samples being held for analysis based on the results of the initial analyses.
- Appropriate minimum reporting limits will be used for each analysis. The reporting limits will be lower than the corresponding screening levels presented in the DTSC Human Health and Ecological Risk Office (DTSC HERO) Note 3 or the USEPA Regional Screening Levels (RSLs) for residential use.
- The laboratory will report the following information for each sample delivery group as follows:
  - a discussion of how the QA/QC criteria were met by the laboratory
  - a discussion of hold times
  - matrix spike/matrix spike duplicate results
  - relative percent difference
  - method blank data
  - surrogate recovery, instrument tuning, and calibration data

- exceptions
- signed laboratory reports, including the sample designation, date of sample collection, date of sample analysis, laboratory analytical method employed, sample volume, and the minimum reporting limit (any discrepancies will be detailed in a letter provided by the laboratory)

Arcadis will use a California-certified environmental testing laboratory for the sample analyses. Proposed laboratory reporting limits are summarized in **Table 5** and analytical methods, container types, and preservatives are summarized in **Table 7**.

10 Data Evaluation

10.1 Human Health Screening Evaluation

A human health screening evaluation will be performed in accordance with the protocols detailed in the DTSC PEA Guidance Manual. The human health screening evaluation will include a Human Health Risk Assessment (HHRA). The purpose of the HHRA is to estimate adverse human health effects by qualitatively and quantitatively addressing possible routes of exposure associated with the subject property. The scope of work will include the specific tasks listed below.

10.1.1 Data Evaluation and Selection of COPCs

The datasets to be evaluated include soil and soil gas sample results from the proposed sampling for the PEA. Past known land use and current site operations indicate that detectable concentrations of COPCs are suspected to exist adjacent and in close proximity to the subject property. The suspect COPCs include:

- PCBs
- OCPs
- VOCs
- Petroleum Hydrocarbons
- CAM 17 Metals/CCR Title 22 Metals

For the purposes of the HHRA, detected chemicals from samples collected during the PEA will be selected as COPCs for evaluation in the HHRA.

10.1.2 Exposure Assessment

The exposure assessment (including fate and transport modeling) will follow U.S. EPA and DTSC risk assessment guidelines and use the reasonable maximum exposure methods recommended by the U.S. EPA. The objective of the exposure assessment is to identify potential exposure pathways to individuals who may come in contact with the COPCs originating at the subject property, to characterize potentially exposed populations, and to estimate the extent of exposure.

The proposed future land use for the subject is a school campus, education support facilities, and recreational areas. The anticipated populations to be evaluated would include hypothetical students, full-time school workers, and maintenance/utility workers. However, for purposes of this HHRA, the land use of the subject property will be assumed to be residential in accordance with the DTSC PEA Guidance Manual.

The exposure pathways assumed applicable under the residential land use include:

- incidental ingestion of soil
- direct dermal contact with soil
- inhalation of particulates
- inhalation of vapors in indoor air

Potential direct soil contact (i.e., incidental soil ingestion, inhalation of particulates, dermal contact with soil) and indirect soil and groundwater contact (i.e., inhalation of airborne dust) will be evaluated using maximum detected concentrations of identified COPCs in soil and groundwater as exposure point concentrations for estimating potential chronic health hazards associated with COPCs at the subject property. The potential exposure pathways are presented on **Figure 5**.

10.1.3 Toxicity Assessment

The toxicity assessment section will provide a list of available toxicity values and the potential adverse health effects attributable to each of the COPCs included in the HHRA. The toxicity assessment considers the types of adverse health or environmental effects associated with individual and multiple chemical exposures; the relationship between magnitude of exposures and adverse effects; and related uncertainties such as the weight of evidence for a COPC's potential carcinogenicity and other deleterious health effects on humans.

The HHRA will use constituent-specific toxicity values to evaluate potential non-carcinogenic and carcinogenic effects presented in the DTSC Human and Ecological Risk Office (HERO) Note 10. In the absence of California-specific toxicity values, sources of toxicological information and toxicity values, in order of preference consistent with USEPA (2003) guidance, include:

- Tier 1 - Integrated Risk Information System (IRIS) (USEPA 2022a). IRIS is an internet database containing current information on human health effects that may result from exposure to chemicals in the environment and has received internal and external scientific review.
- Tier 2 - Provisional Peer-Reviewed Toxicity Values (PPRTV) (USEPA 2022b). PPRTVs were developed by the USEPA Office of Research and Development/National Center for Environmental Assessment/Superfund Health Risk Technical Support Center and are available as chemical-specific issue papers.
- Tier 3 - Additional USEPA and non-USEPA sources of toxicity information, including but not limited to the California Environmental Protection Agency (CalEPA) Office of Environmental Health Hazard Assessment's chronic reference exposure levels and cancer potency values (CalEPA 2019), the Agency for Toxic Substances and Disease Registry (ATSDR) minimal risk levels (ATSDR 2022),

and toxicity values published in the USEPA Health Effects Summary Tables (HEAST) (USEPA 1997).

10.1.4 Risk Characterization

Quantitative estimates of the noncarcinogenic and carcinogenic risk to identified human receptor populations will be presented for the COPCs at the Site. Estimates of risk are obtained by integrating information developed during the exposure and toxicity assessments to characterize potential or actual risks. Noncarcinogenic and carcinogenic risk estimates for individual chemicals will be assumed across all pathways and separately for each exposure scenario to obtain total estimated noncarcinogenic hazard index and carcinogenic risk.

The total estimated noncarcinogenic hazard index will be compared to the U.S. EPA and DTSC acceptable hazard index of 1. The total estimated carcinogenic risk will be compared to the Cal-EPA acceptable incremental lifetime cancer risk level of 1×10^{-6}.

10.2 Ecological Screening Evaluation

A detailed ecological screening evaluation will not be performed during this PEA since the Site is located within a developed area. For this project, the ecological screening evaluation will be limited to one or two paragraphs, describing the site area and the presence or absence of suitable habitat for ecological receptors of concern.

11 Community Involvement

The DTSC and SCUSD will prepare and implement a plan to establish the procedures and protocols for informing the community surrounding the subject property of the PEA evaluation according to the requirements of the California Education Code.

12 PEA Report Preparation and Schedule

12.1 PEA Report

A PEA Report presenting the results of the overall investigation will be prepared and submitted to the DTSC. The PEA report will be prepared in accordance with the DTSC PEA Guidance Manual (DTSC 2015). The report will include site background and environmental setting information, field procedures, presentation of field observations including boring logs, and analytical results including laboratory report sheets and a table summarizing the analytes, detection limits, minimum concentrations, maximum concentrations, 95 percent upper concentration limits (if appropriate), and exposure point concentrations.

The PEA report will also include a summary of the public participation activities implemented and the human health and ecological screening evaluation. Electronic files with the field data, laboratory data,

and at least one geo-referenced figure will be submitted to the DTSC at the time of submission of the PEA report.

Based on the human health and ecological screening evaluation, the summary and conclusions section of the PEA report will address four main questions:

- Have current or past practices resulted in a release or threat of a release at the subject property?
- If a release has occurred or a threatened release exists, does it pose a significant threat to public health or the environment and, if not, why not?
- Does a release pose an immediate potential hazard to health or the environment so as to necessitate an emergency removal action and, if so, why?
- What further specific information and/or removal/remediation actions are necessary to better assess or mitigate health/environmental threats posed by the subject property?

Recommendations will be made regarding the need for additional action to further assess conditions at the subject property, or for limited removal action(s), if appropriate, based on site investigative findings and the screening risk evaluation. If further action is recommended, the PEA report will identify additional investigations and/or remediation needs and strategies. The PEA report will also include recommendations for expedited response actions necessary to mitigate immediate potential hazards to public health or the environment, if needed. No Further Action recommendations will be made if levels of detected contamination are assessed to be below risk-based screening levels.

Arcadis recommends coordinating the DTSC's review of the draft PEA report with the 30-day public comment period for the PEA.

12.2 PEA Report Schedule

Upon approval of this PEA work plan, Arcadis estimates that four to six weeks will be required to schedule the proposed fieldwork, pending potential permitting or weather delays. A draft PEA report is planned to be submitted to the DTSC approximately 60-days after Arcadis' receipt and review of the validated analytical data from the laboratory. This anticipated schedule precludes conditions beyond the control of Arcadis that would affect the schedule (e.g., barriers to site access, permitting, and/or subcontractor/laboratory availability).

13 References

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———. 2006. Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers. June 9. Revised September 12.

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Tables

Table 5
Sample Quantitation Limit
Patrick Henry School Campus, SCUSD Organic Farm, and Portion of Peterson Middle School Campus
1095 1055 Dunford Way and 1380 Rosalia Avenue
Sunnyvale, California

Analyte	Reporting Limit[1]	Method Detection Limit	DTSC Note 3 SL[2]	USEPA RSL[3]
USEPA Method 5010B				
Antimony	3	1.6	--	31
Arsenic[4]	1	0.67	12	12
Barium	1	0.2	--	15000
Beryllium	0.5	0.11	16	160
Cadmium	0.5	0.1	--	7.1
Chromium	1	0.21	0.3	0.3
Cobalt	0.5	0.1	--	23
Copper	1	0.6	--	3100
Lead	1	0.84	80	400
Molybdenum	1	0.59	--	390
Nickel	1	0.3	820	1500
Selenium	3	0.6	--	390
Silver	0.5	0.33	--	390
Thallium	3	0.73	--	0.78
Thallium	1	0.13	--	--
Vanadium	1	0.43	--	390
Zinc	5	1	--	23000
USEPA Method 7471A				
Mercury	0.14	0.039	1	11
USEPA Method 8015B[4]				
TPH-GRO C8-C10	10	2.4	--	--
TPH-DRO C10-C28	10	2.4	--	--
TPH-ORO C28-C44	20	2.4	--	--
USEPA Method 8082				
Aroclor-1016	0.05	0.011	4	4.1
Aroclor-1221	0.05	0.032	0.2	0.2
Aroclor-1232	0.05	0.0083	0.17	0.17
Aroclor-1242	0.05	0.033	0.23	0.23
Aroclor-1248	0.05	0.037	0.23	0.23
Aroclor-1254	0.05	0.022	0.24	0.24
Aroclor-1260	0.05	0.013	0.24	0.24
Aroclor-1262	0.05	0.0069	--	--
Aroclor-1268	0.05	0.018	--	--
USEPA Method 8081A				
alpha-BHC	0.005	0.0016	0.086	0.086
beta-BHC	0.005	0.0015	0.3	0.3
gamma-BHC	0.005	0.002	0.57	0.57
delta-BHC	0.005	0.0013	--	--
Heptachlor	0.005	0.0013	0.13	0.13
Aldrin	0.005	0.0015	0.039	0.039
Heptachlor epoxide	0.005	0.0023	0.07	0.07
Endosulfan I	0.005	0.0012	450	470
Dieldrin	0.005	0.0021	0.034	0.034
4,4'-DDE	0.005	0.002	2	2
Endrin	0.005	0.0027	19	19
Endosulfan II	0.005	0.0028	450	470
Endosulfan sulfate	0.005	0.0034	380	380
4,4'-DDD	0.005	0.0021	1.9	1.9

Table 5
Sample Quantitation Limit
Patrick Henry School Campus, SCUSD Organic Farm, and Portion of Peterson Middle School Campus
1095 1055 Dunford Way and 1380 Rosalia Avenue
Sunnyvale, California

Analyte	Reporting Limit[1]	Method Detection Limit	DTSC Note 3 SL[2]	USEPA RSL[3]
Endrin aldehyde	0.005	0.0021	19	19
Endrin ketone	0.005	0.0041	19	19
4,4'-DDT	0.005	0.002	1.9	1.9
Methoxychlor	0.01	0.0092	320	320
Toxaphene	0.1	0.054	0.45	0.49
Chlordane (Technical)	0.05	0.035	1.7	1.7
USEPA Method 8260B				
3-Chloropropene	0.005	0.00084	--	0.72
Freon 12	0.005	0.00072	--	87
Chloromethane	0.005	0.00058	--	110
Vinyl Chloride	0.005	0.00074	0.0082	0.059
Bromomethane	0.005	0.00088	--	6.8
Chloroethane	0.005	0.0014	--	5400
Trichlorofluoromethane	0.005	0.00088	1200	23000
Acetone	0.1	0.014	--	70000
Freon 113	0.005	0.00074	--	--
1,1-Dichloroethene	0.005	0.0004	83	230
Methylene Chloride	0.005	0.0018	2.2	57
MTBE	0.005	0.00086	--	47
trans-1,2-Dichloroethene	0.005	0.0005	130	70
1,1-Dichloroethane	0.005	0.00048	3.6	3.6
2-Butanone	0.1	0.0032	--	27000
cis-1,2-Dichloroethene	0.005	0.00052	18	160
2,2-Dichloropropane	0.005	0.00096	--	--
Chloroform	0.005	0.00034	--	0.32
Bromochloromethane	0.005	0.00036	--	150
1,1,1-Trichloroethane	0.005	0.00044	1700	8100
1,1-Dichloropropene	0.005	0.00044	--	--
Carbon Tetrachloride	0.005	0.0006	0.65	0.65
1,2-Dichloroethane	0.005	0.00048	--	0.46
Benzene	0.005	0.00042	0.33	1.2
Trichloroethene	0.005	0.00064	--	0.94
1,2-Dichloropropane	0.005	0.00056	--	2.5
Bromodichloromethane	0.005	0.0005	0.29	0.29
Dibromomethane	0.005	0.00056	--	24
4-Methyl-2-Pentanone	0.005	0.0019	--	33000
cis-1,3-Dichloropropene	0.005	0.0006	--	1.8
Toluene	0.005	0.00052	1100	4900
trans-1,3-Dichloropropene	0.005	0.00076	--	1.8
1,1,2-Trichloroethane	0.005	0.00056	--	1.1
1,3-Dichloropropane	0.005	0.00052	410	1600
Tetrachloroethene	0.005	0.00068	0.59	24
Dibromochloromethane	0.005	0.0006	0.94	8.3
1,2-Dibromoethane	0.005	0.00052	0.036	0.036
Chlorobenzene	0.005	0.00052	--	280
1,1,1,2-Tetrachloroethane	0.005	0.0006	2	2
Ethylbenzene	0.005	0.00054	--	5.8
m,p-Xylenes	0.01	0.0012	--	550
o-Xylene	0.005	0.0006	--	640

Table 5
Sample Quantitation Limit
Patrick Henry School Campus, SCUSD Organic Farm, and Portion of Peterson Middle School Campus
1095 1055 Dunford Way and 1380 Rosalia Avenue
Sunnyvale, California

Analyte	Reporting Limit[1]	Method Detection Limit	DTSC Note 3 SL[2]	USEPA RSL[3]
Styrene	0.005	0.00056	5600	6000
Bromoform	0.005	0.0007	19	19
Isopropylbenzene	0.005	0.00072	--	1900
1,1,2,2-Tetrachloroethane	0.005	0.00052	0.6	0.6
1,2,3-Trichloropropane	0.005	0.00074	0.0015	0.0051
Propylbenzene	0.005	0.00072	--	3800
Bromobenzene	0.005	0.00078	--	290
1,3,5-Trimethylbenzene	0.005	0.00096	--	270
2-Chlorotoluene	0.005	0.0008	470	1600
4-Chlorotoluene	0.005	0.00092	440	1600
tert-Butylbenzene	0.005	0.00084	2200	7800
1,2,4-Trimethylbenzene	0.005	0.0009	--	300
sec-Butylbenzene	0.005	0.00084	2200	7800
para-Isopropyl Toluene	0.005	0.0011	--	--
1,3-Dichlorobenzene	0.005	0.00086	--	--
1,4-Dichlorobenzene	0.005	0.001	--	2.6
n-Butylbenzene	0.005	0.0011	2400	3900
1,2-Dichlorobenzene	0.005	0.00088	--	1800
1,2-Dibromo-3-Chloropropane	0.005	0.0012	0.0043	0.0053
1,2,4-Trichlorobenzene	0.005	0.0011	7.8	24
Hexachlorobutadiene	0.005	0.0012	1.2	1.2
Naphthalene	0.005	0.00086	2	2
1,2,3-Trichlorobenzene	0.005	0.001	40	63
Xylene (total)	0.005		--	580
cis-1,4-Dichloro-2-butene	0.005	0.0014	--	--
trans-1,4-Dichloro-2-butene	0.005	0.0011	--	--

Abbreviations and Acronyms:
DTSC = Department of Toxic Substances Control
MDL = method detection limit
mg/kg = milligram per kilogram
RL = reporting limit
RSL = Regional Screening Level
USEPA = United States Environmental Protection Agency

Notes:
1. All values reported in mmg/kg.
2. These values are the minimum of the residential cancer and non-cancer screening levels presented in DTSC HERO Note 3 (June 2022).
3. These values are the residential screening levels presented in the May 2022 USEPA RSL Generic Tables (Target Risk=1x10^{-6}, Target Hazard Quotient=1).
4. The MDL and RL for arsenic are screened against the regional background concentration of 12 mg/kg for properties within the San Francisco Bay area.

References:
DTSC. 2022. Human Health Risk Assessment Note 3 Tables. June.
USEPA. 2022. Regional Screening Level Tables. May.

Table 6
Sampling and Analysis Summary
Patrick Henry School Campus, SCUSD Organic Farm, and Portion of Peterson Middle School Campus
1095 1055 Dunford Way and 1380 Rosalia Avenue
Sunnyvale, California

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On-Site Location	Sample ID	Sample Depth (feet bgs)	Matrix	CAM 17 Metals[1]	OCPs[2]	NOA[3]	PCBs[4]	TPH[5]	VOCs[6]	HOLD
Patrick Henry School Campus - Building B	PH-B-SS-1-0.5	0.0 - 0.5	Soil	X	--	X	--	--	--	--
	PH-B-SS-2-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-B-SS-3-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-B-SS-4-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-B-SS-1-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-B-SS-2-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-B-SS-3-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-B-SS-4-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-B-SS-COMP-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	PH-B-SS-COMP-2.5	2.0 - 2.5	Soil	--	X	--	--	--	--	X
Patrick Henry School Campus - Building C	PH-C-SS-1-0.5	0.0 - 0.5	Soil	X	--	X	--	--	--	--
	PH-C-SS-2-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-C-SS-3-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-C-SS-4-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-C-SS-1-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-C-SS-2-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-C-SS-3-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-C-SS-4-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-C-SS-COMP-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	PH-C-SS-COMP-2.5	2.0 - 2.5	Soil	--	X	--	--	--	--	X
Patrick Henry School Campus - Building D	PH-D-SS-1-0.5	0.0 - 0.5	Soil	X	--	X	--	--	--	--
	PH-D-SS-2-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-D-SS-3-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-D-SS-4-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-D-SS-1-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-D-SS-2-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-D-SS-3-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-D-SS-4-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-D-SS-COMP-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	PH-D-SS-COMP-2.5	2.0 - 2.5	Soil	--	X	--	--	--	--	X

Table 6
Sampling and Analysis Summary
Patrick Henry School Campus, SCUSD Organic Farm, and Portion of Peterson Middle School Campus
1095 1055 Dunford Way and 1380 Rosalia Avenue
Sunnyvale, California

DRAFT

ARCADIS

On-Site Location	Sample ID	Sample Depth (feet bgs)	Matrix	CAM 17 Metals[1]	OCPs[2]	NOA[3]	PCBs[4]	TPH[5]	VOCs[6]	HOLD
Patrick Henry School Campus - Building E	PH-E-SS-1-0.5	0.0 - 0.5	Soil	X	--	X	--	--	--	--
	PH-E-SS-2-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-E-SS-3-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-E-SS-4-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
Patrick Henry School Campus - Building E	PH-E-SS-1-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-E-SS-2-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-E-SS-3-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-E-SS-4-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	X
	PH-E-SS-COMP-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	PH-E-SS-COMP-2.5	2.0 - 2.5	Soil	--	X	--	--	--	--	X
Patrick Henry School Campus - Building 300	PH-300-SS-1-0.5	0.0 - 0.5	Soil	X	--	X	--	--	--	--
	PH-300-SS-2-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-300-SS-1-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	--
	PH-300-SS-2-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	--
	PH-300-SS-COMP-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	PH-300-SS-COMP-2.5	2.0 - 2.5	Soil	--	X	--	--	--	--	X
Patrick Henry School Campus - Building 600	PH-600-SS-1-0.5	0.0 - 0.5	Soil	X	--	X	--	--	--	--
	PH-600-SS-2-0.5	0.0 - 0.5	Soil	X	--	--	--	--	--	--
	PH-600-SS-1-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	--
	PH-600-SS-2-2.5	2.0 - 2.5	Soil	X	--	--	--	--	--	--
	PH-600-SS-COMP-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	PH-600-SS-COMP-2.5	2.0 - 2.5	Soil	--	X	--	--	--	--	X
Patrick Henry School Campus - Pad mounted Transformer	PH-PM-SS-1-0.5	0.0 - 0.5	Soil	--	--	--	X	--	--	--
	PH-PM-SS-1-2.5	2.0 - 2.5	Soil	--	--	--	X	--	--	X
	PH-PM-SS-2-0.5	0.0 - 0.5	Soil	--	--	--	X	--	--	--
	PH-PM-SS-2-2.5	2.0 - 2.5	Soil	--	--	--	X	--	--	X
Patrick Henry School Campus - Pole mounted Transformer	PH-PM-SS-3-0.5	0.0 - 0.5	Soil	--	--	--	X	--	--	--
	PH-PM-SS-3-2.5	2.0 - 2.5	Soil	--	--	--	X	--	--	X
Patrick Henry School Campus - Storage Yard	PH-SY-SS-1-0.5	0.0 - 0.5	Soil	X	--	--	--	X	X	--
	PH-SY-SS-1-2.5	2.0 - 2.5	Soil	X	--	--	--	X	X	X
	PH-SY-SS-2-0.5	0.0 - 0.5	Soil	X	--	--	--	X	X	--
	PH-SY-SS-2-2.5	2.0 - 2.5	Soil	X	--	--	--	X	X	X

Table 6
Sampling and Analysis Summary
Patrick Henry School Campus, SCUSD Organic Farm, and Portion of Peterson Middle School Campus
1095 1055 Dunford Way and 1380 Rosalia Avenue
Sunnyvale, California

DRAFT

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On-Site Location	Sample ID	Sample Depth (feet bgs)	Matrix	CAM 17 Metals[1]	OCPs[2]	NOA[3]	PCBs[4]	TPH[5]	VOCs[6]	HOLD
Patrick Henry School Campus - Storage Yard	PH-SY-SS-3-0.5	0.0 - 0.5	Soil	X	--	--	--	X	X	--
	PH-SY-SS-3-2.5	2.0 - 2.5	Soil	X	--	--	--	X	X	X
	PH-SY-SS-4-0.5	0.0 - 0.5	Soil	X	--	--	--	X	X	--
	PH-SY-SS-4-2.5	2.0 - 2.5	Soil	X	--	--	--	X	X	X
Recreational Fields	RF-SS-1-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	RF-SS-2-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	RF-SS-3-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	RF-SS-4-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	RF-SS-5-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	RF-SS-6-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	RF-SS-7-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	RF-SS-8-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	RF-SS-9-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
	RF-SS-10-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
Recreational Fields	RF-SS-11-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	RF-SS-12-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	RF-SS-13-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	RF-SS-14-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	RF-SS-15-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
SCUSD Farm	SF-SS-1-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	SF-SS-2-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	SF-SS-3-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	SF-SS-4-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	SF-SS-5-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	SF-SS-6-0.5	0.0 - 0.5	Soil	--	X	X	--	--	--	--
	SF-SS-7-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	SF-SS-8-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	SF-SS-9-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	SF-SS-10-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	SF-SS-11-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
	SF-SS-12-2.5	2.0 - 2.5	Soil	--	--	X	--	--	--	X
Total Samples to be Collected				**58**	**27**	**30**	**6**	**8**	**8**	**--**

Table 6
Sampling and Analysis Summary
Patrick Henry School Campus, SCUSD Organic Farm, and Portion of Peterson Middle School Campus
1095 1055 Dunford Way and 1380 Rosalia Avenue
Sunnyvale, California

On-Site Location	Sample ID	Sample Depth (feet bgs)	Matrix	CAM 17 Metals[1]	OCPs[2]	NOA[3]	PCBs[4]	TPH[5]	VOCs[6]	HOLD
Duplicate Samples										
DUP-1	PH-B-SS-1-0.5	0.0 - 0.5	Soil	--	--	X	--	--	--	--
DUP-2	PH-C-SS-4-0.5	0.0 - 0.5	Soil	--	--	--	--	--	--	--
DUP-3	PH-D-SS-COMP-0.5	0.0 - 0.5	Soil	--	X	--	--	--	--	--
DUP-4	PH-E-SS-1-0.5	0.0 - 0.5	Soil	--	--	X	--	--	--	--
DUP-5	PH-PM-SS-1-0.5	0.0 - 0.5	Soil	--	--	--	X	--	--	--
DUP-6	PH-SY-SS-1-0.5	0.0 - 0.5	Soil	--	--	--	--	X	X	--
DUP-7	RF-SS-4-0.5	0.0 - 0.5	Soil	X	X	X	--	--	--	--
DUP-8	SF-SS-1-0.5	0.0 - 0.5	Soil	X	X	X	--	--	--	--
DUP-9	SF-SS-6-0.5	0.0 - 0.5	Soil	X	X	X	--	--	--	--
Sample Blanks[7]										
Field Blank	ED-FB	--	Water	--	--	--	--	--	--	--
Equipment Blank	ED-EB	--	Water	--	--	--	--	--	--	--

Acronyms and Abbreviations
CAM= California Assessment Manual
ID = Identification
NOA = Naturally Occuring Asbestos
PCB = Polychlorinated Biphenyls
SCUSD = Santa Clara Unified School District
TPH = Total Petroleum Hydrocarbons
VOC = Volatile Organic Compounds

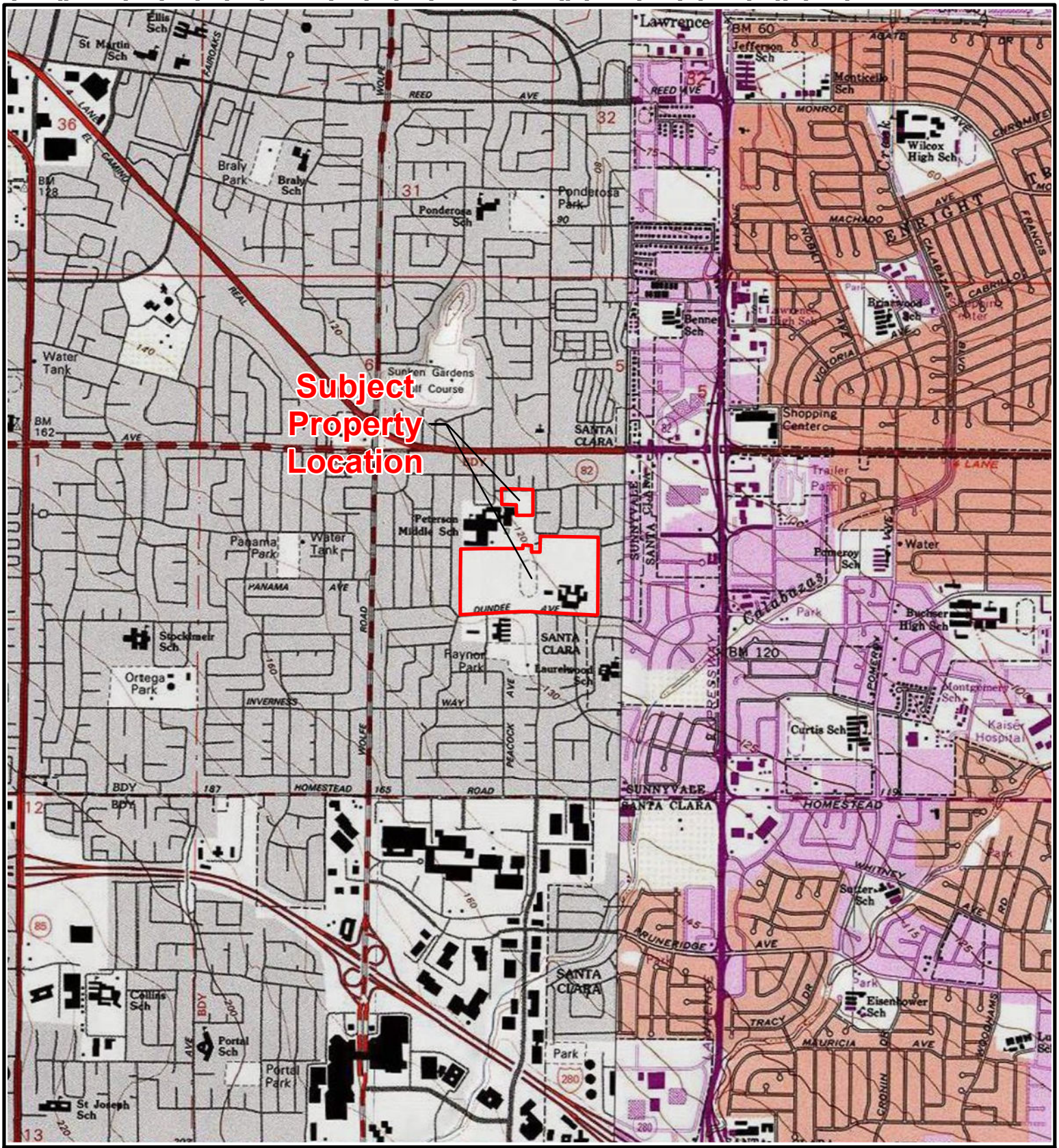
Notes
1. CAM 17 Metals will be analyzed using USEPA Method 6010B.
2. OCPs will be analyzed using USEPA Method 8081A.
3. Asbestos will be analyzed using USEPA Method Polarized Light Microscopy (PLM) 600/R-93/116.
4. PCBs will be analyzed using USEPA Method 8082A.
5. TPH will be analyzed using USEPA Method 8015M.
6. VOCs will be analyzed using USEPA Method 8260B.
7. One field and equipment blank will be used each day of work assuming reusable equipment is used.

Table 7
Analytical Methods, Container Types, and Preservatives
Patrick Henry School Campus, SCUSD Organic Farm
and Portion of Peterson Middle School Campus
1055 1095 Dunford Way, 1380 Rosalia Avenue
Sunnyvale, California

Analysis	Matrix	Analytical Method	Holding Time	Minimum Volume	Container
CAM 17 Metals	Soil	USEPA Method 8010B	28 days	10 grams	16 ounce jar
Mercury	Soil	USEPA Method 7471A	28 days	10 grams	16 ounce jar
Total Petroleum Hydrocarbons	Soil	USEPA Method 8015B	14 days	30 grams	16 ounce jar
Polychlorinated Biphenyls	Soils	USEPA Method 8082	14 days	30 grams	16 ounce jar
Organochlorine Pesticides	Soils	USEPA Method 8081A	14 days	30 grams	16 ounce jar
Volatile Organic Compounds	Soils	USEPA Method 8260B	14 days	20 grams	16 ounce jar

Figures

T:_ENV\PHASE_I_ESAS\PROJECT_FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\GIS\ARCMAP_MXD\PHASE_I_ESA_REPORT\1095_DUNFORD_WAY_SUNNYVALE_CA\FIG_1_SITE_LOCATION_MAP.MXD DATE: 6/1/2022 9:19:51 AM



LEGEND:

Subject Property

0 2,000 4,000

SCALE IN FEET

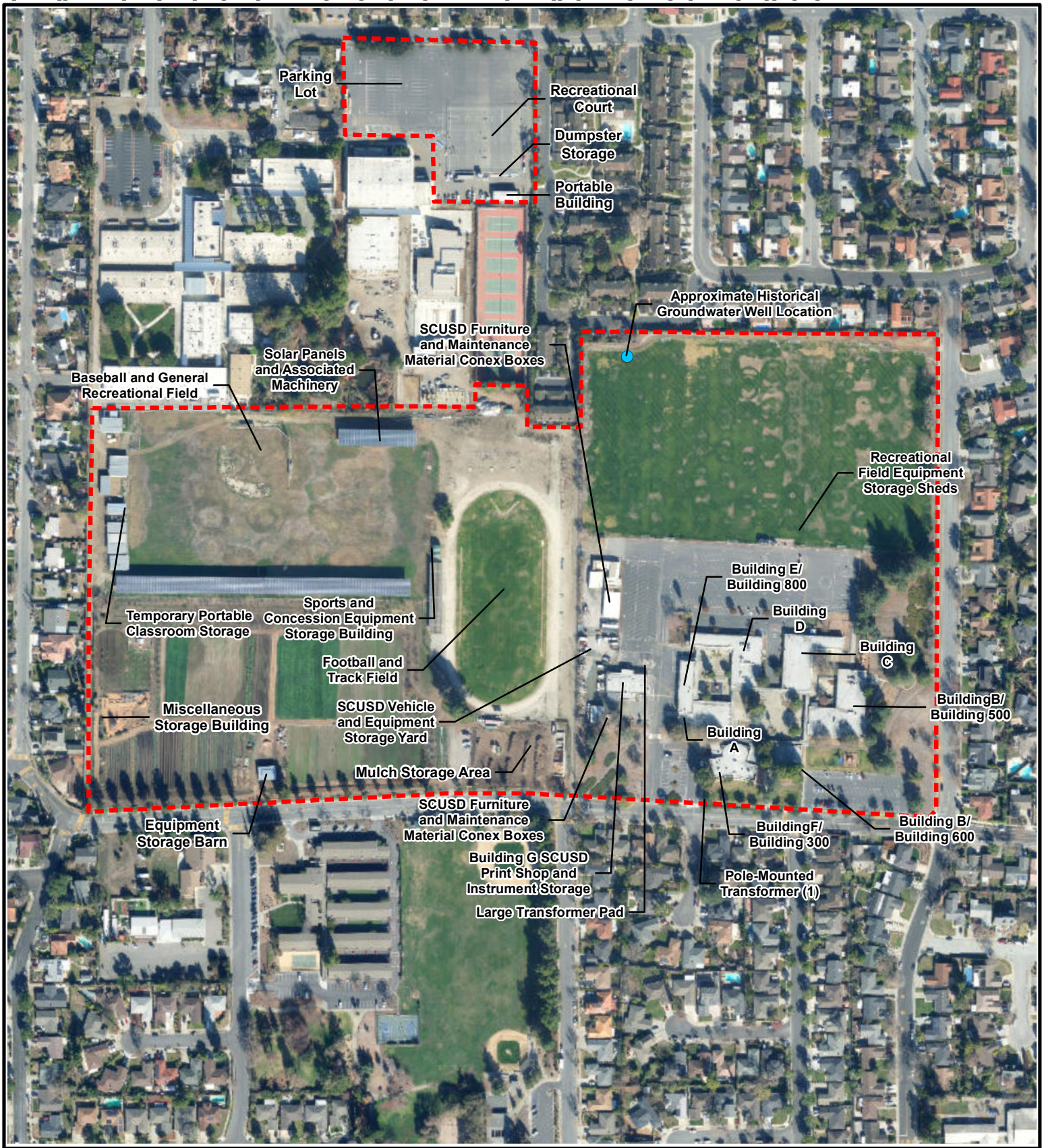
FORMER PATRICK HENRY SCHOOL CAMPUS, PORTION OF THE PETERSON MIDDLE SCHOOL CAMPUS & SCUSD ORGANIC FARM
1095 & 1055 DUNFORD WAY AND 1380 ROSALIA AVENUE
SUNNYVALE, CA

SITE LOCATION MAP

ARCADIS

FIGURE 1

T:_ENV\PHASE_I_ESAS\PROJECT_FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\GIS\ARCMAP_MXD\PHASE_I_ESA_REPORT\1095_DUNFORD_WAY_SUNNYVALE_CA\FIG_2_SITE_PLAN_MAP.MXD DATE: 6/1/2022 9:17:28 AM



LEGEND:

- Approximate Historical Groundwater Well Location
- Site Boundary

0 320 640

SCALE IN FEET

FORMER PATRICK HENRY SCHOOL CAMPUS, PORTION OF THE PETERSON MIDDLE SCHOOL CAMPUS & SCUSD ORGANIC FARM
1095 & 1055 DUNFORD WAY AND 1380 ROSALIA AVENUE
SUNNYVALE, CA

SITE PLAN MAP

ARCADIS

FIGURE 2

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

T:_ENV\PHASE_I_ESAS\PROJECT_FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\FORMER_PATRICK_HENRY_SCHOOL_CAMPUS\GIS\ARCMAP_MXD\PHASE_I_ESA_REPORT\1095_DUNFORD_WAY_SUNNYVALE_CA\FIG_3_SURROUNDING_PROPERTY_MAP.MXD DATE: 6/1/2022 9:21:51 AM

LEGEND:

- Monitoring Well Location
- Subject Property

0 500 1,000

SCALE IN FEET

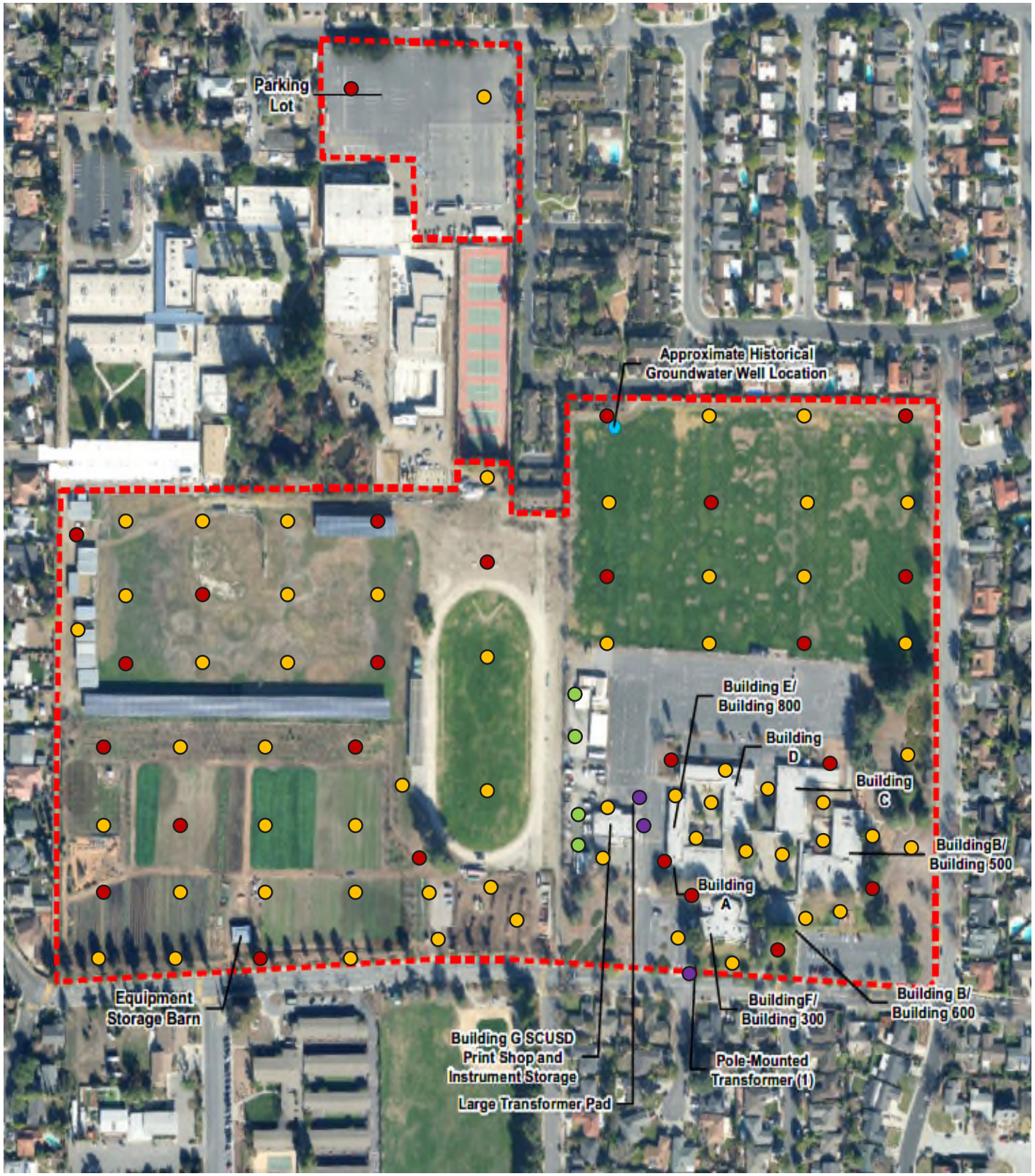
FORMER PATRICK HENRY SCHOOL CAMPUS, PORTION OF THE PETERSON MIDDLE SCHOOL CAMPUS & SCUSD ORGANIC FARM
1095 & 1055 DUNFORD WAY AND 1380 ROSALIA AVENUE
SUNNYVALE, CA

SURROUNDING PROPERTY MAP

ARCADIS

FIGURE 3

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors



- Proposed Surface and Subsurface CAM-17 Metal and OCP Sample Locations
- Proposed Surface and Subsurface OCP, CAM-17/Title 22 Metal Samples, and NOA Sample Locations
- Proposed Surface and Subsurface TPH and VOC Sample Locations
- Proposed Surface and Subsurface PCB Sample Locations

PATRICK HENRY SCHOOL CAMPUS, SCUSD ORGANIC FARM, PORTION OF PETERSON MIDDLE SCHOOL CAMPUS
1095 &1055 DUNFORD WAY, 1380 ROSALIA AVENUE, SUNNYVALE, CALIFORNIA

PROPOSED SAMPLE LOCATIONS

ARCADIS

FIGURE 4

6/17/2022 3:19:26 PM

Primary Source	Release Mechanisms	Secondary Source	Release/Transport Mechanisms	Exposure Medium	Exposure Route	Human Receptors		
						Students	Staff	Construction/ Utility Workers
Former Agricultural Use	Historical Application to Surface Soil			Soil	Ingestion	X	X	X
					Dermal Contact	X	X	X
Historical Termiticide Application	Direct Application to On-site Buildings		Airborne Particulate Matter	Wind/Outdoor Air	Inhalation (dust)	X	X	X
Historical Use of Lead-Based Paint	Breakdown of Paint Products (corrosion, peeling)							
Potential Historical PCB-Containing Oils in Transformers	Spills or Leaks to Surface Soil							
Regional Geologic Serpentine Formations	Surface Runoff							

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Conceptual Site Model
Preliminary Environmental Assessment Work Plan
Patrick Henry School Campus, Parking Lot Portion of Peterson School Campus, and SCUSD Organic Farm

Figure 5

Appendix A

2022 Phase I Environmental Site Assessment

Arcadis U.S., Inc.
101 Creekside Ridge Court, Suite 200
Roseville
California 95678
Phone: 916 786 0320
Fax: 916 786 0366
www.arcadis.com

APPENDIX 3.13-1

Noise and Vibration Technical Data

NOISE MONITORING FIELD REPORT

Site Map

Project Name: Peterson Laurelwood Master Plan

Monitoring Location: Norman Dr./ Elizabeth Way

Date: 07/26/2022 Site Number: 1

Measured By: Raul Castillo

Measurement Start Time: 10:20 a.m.

Measurement End Time: 10:35 p.m.

Total Measurement Time: 15 min.

Noise Meter Model: Larson Davis Soundtrack LxT Calibration: 94.0 (dBA)

Meter Setting: A-Weighted Sound Level (SLOW)

Session File Name: LxT_Data.154

Primary Noise Sources: Traffic, Minor Roadway Construction

Data Summary

Noise Scale	Noise Level (dBA)
L_{eq}	53.4
L_{max}	77.7
L_{min}	40.8

Other Noise Sources During Monitoring

1. _____ Time: _____
2. _____ Time: _____
3. _____ Time: _____
4. _____ Time: _____
5. _____ Time: _____

Additional Notes:

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IMPACT SCIENCES

Measurement Report

Report Summary

Meter's File Name	LxT_Data.154.s	Computer's File Name	LxT_0005667-20220726 102045-LxT_Data.154.ldbin
Meter	LxT1 0005667		
Firmware	2.302		
User		Location	
Job Description			
Note			
Start Time	2022-07-26 10:20:45	Duration	0:15:00.0
End Time	2022-07-26 10:35:45	Run Time	0:15:00.0
		Pause Time	0:00:00.0

Results

Overall Metrics

LA_{eq}	53.4 dB		
LAE	83.0 dB	SEA	--- dB
EA	22.1 µPa²h		
EA8	708.2 µPa²h		
EA40	3.5 mPa²h		
LA_{peak}	109.3 dB	2022-07-26 10:30:09	
LAS_{max}	77.7 dB	2022-07-26 10:30:09	
LAS_{min}	40.8 dB	2022-07-26 10:34:17	
LA_{eq}	53.4 dB		
LC_{eq}	61.5 dB	LC_{eq} - LA_{eq}	8.0 dB
LAI_{eq}	65.2 dB	LAI_{eq} - LA_{eq}	11.7 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	53.4 dB		61.5 dB		--- dB	
$Ls_{(max)}$	77.7 dB	2022-07-26 10:30:09	--- dB		--- dB	
$LS_{(min)}$	40.8 dB	2022-07-26 10:34:17	--- dB		--- dB	
$L_{Peak(max)}$	109.3 dB	2022-07-26 10:30:09	--- dB		--- dB	

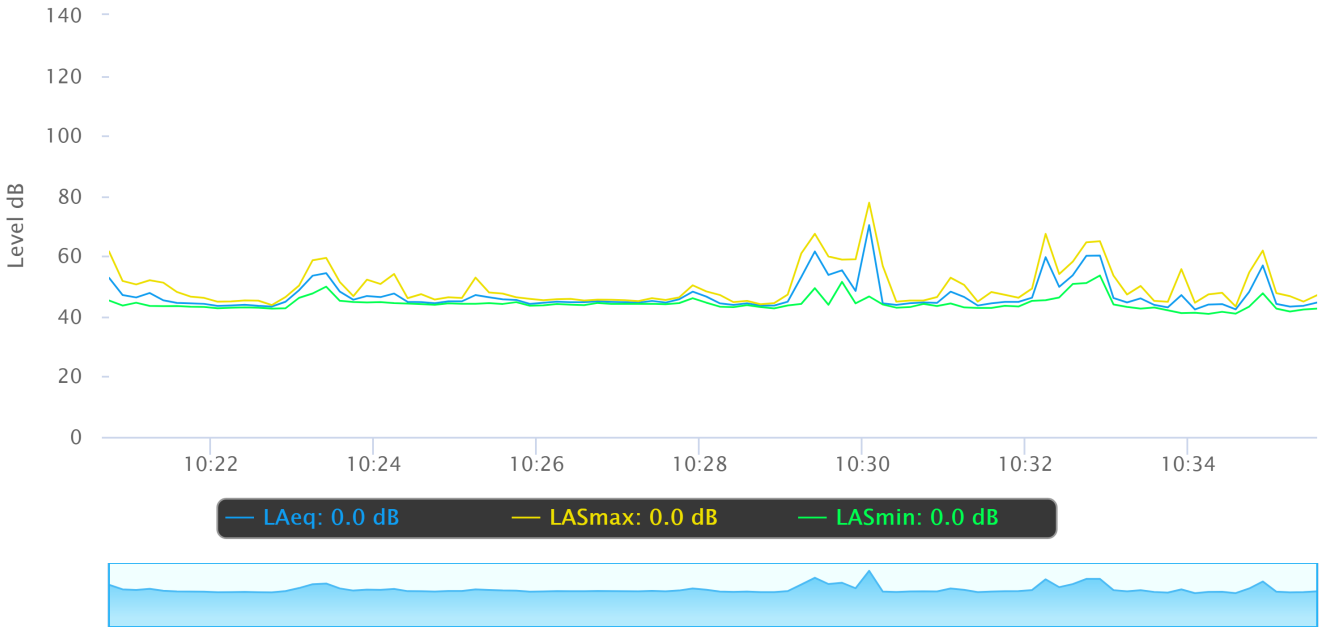
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

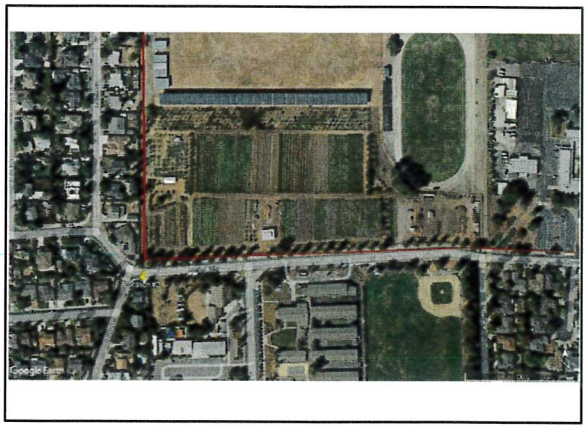
LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	52.1 dB
LAS 33.3	45.7 dB
LAS 66.7	44.3 dB
LAS 90.0	43.2 dB

Time History



NOISE MONITORING FIELD REPORT

Site Map



Project Name: Peterson Laurelwood Master Plan

Monitoring Location: Dunford Way/Oriole Ave

Date: 07/26/2022 Site Number: 2

Measured By: Raul Castillo

Measurement Start Time: 10:37 a.m.

Measurement End Time: 10:52 a.m.

Total Measurement Time: 15 min.

Noise Meter Model: Larson Davis Soundtrack LxT Calibration: 94.0 (dBA)

Meter Setting: A-Weighted Sound Level (SLOW)

Session File Name: LxT_Data.155

Primary Noise Sources: Traffic, Neighborhood activity

Data Summary

Noise Scale	Noise Level (dBA)
L_{eq}	58.2
L_{max}	82.6
L_{min}	39.5

Other Noise Sources During Monitoring

1. _____ Time: _____
2. _____ Time: _____
3. _____ Time: _____
4. _____ Time: _____
5. _____ Time: _____

Additional Notes:

_____

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IMPACT SCIENCES

Measurement Report

Report Summary

Meter's File Name	LxT_Data.155.s	Computer's File Name	LxT_0005667-20220726 103725-LxT_Data.155.ldbin
Meter	LxT1 0005667		
Firmware	2.302		
User		Location	
Job Description			
Note			
Start Time	2022-07-26 10:37:25	Duration	0:15:00.0
End Time	2022-07-26 10:52:25	Run Time	0:15:00.0
		Pause Time	0:00:00.0

Results

Overall Metrics

LA_{eq}	58.2 dB		
LAE	87.8 dB	SEA	--- dB
EA	66.8 µPa²h		
EA8	2.1 mPa²h		
EA40	10.7 mPa²h		
LA_{peak}	94.7 dB	2022-07-26 10:46:08	
LAS_{max}	82.6 dB	2022-07-26 10:46:09	
LAS_{min}	39.5 dB	2022-07-26 10:49:28	
LA_{eq}	58.2 dB		
LC_{eq}	72.6 dB	LC_{eq} - LA_{eq}	14.4 dB
LAI_{eq}	62.3 dB	LAI_{eq} - LA_{eq}	4.0 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	58.2 dB		72.6 dB		--- dB	
$Ls_{(max)}$	82.6 dB	2022-07-26 10:46:09	--- dB		--- dB	
$LS_{(min)}$	39.5 dB	2022-07-26 10:49:28	--- dB		--- dB	
$L_{Peak(max)}$	94.7 dB	2022-07-26 10:46:08	--- dB		--- dB	

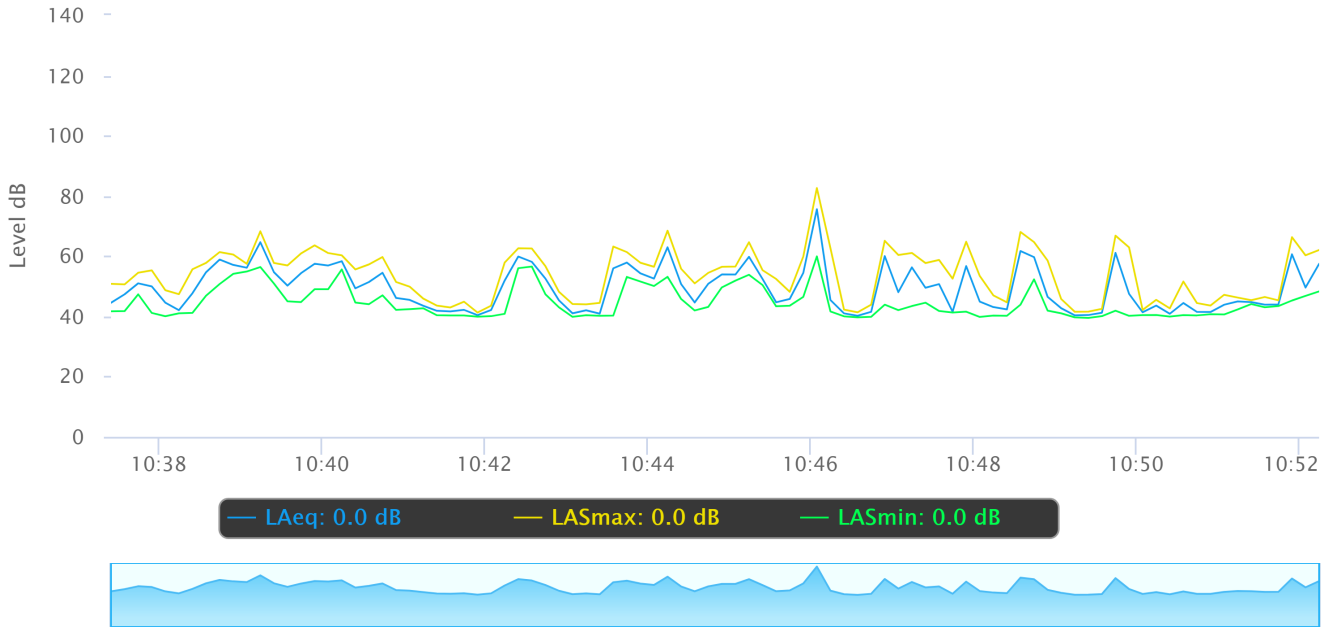
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	58.8 dB
LAS 33.3	51.2 dB
LAS 66.7	43.4 dB
LAS 90.0	40.8 dB

Time History



NOISE MONITORING FIELD REPORT

Site Map

Project Name: Peterson Laurelwood Master Plan

Monitoring Location: Dunford Way/Lochinvar

Date: 07/26/2022 Site Number: 3

Measured By: Raul Castillo

Measurement Start Time: 10:58 a.m.

Measurement End Time: 11:13 a.m.

Total Measurement Time: 15 min.

Noise Meter Model: Larson Davis Soundtrack LxT Calibration: 94.0 (dBA)

Meter Setting: A-Weighted Sound Level (SLOW)

Session File Name: LxT_Data.156

Primary Noise Sources: Traffic, Neighborhood Activity

Data Summary

Noise Scale	Noise Level (dBA)
L_{eq}	58.6
L_{max}	72.8
L_{min}	39.5

Other Noise Sources During Monitoring

1. _____ Time: _____
2. _____ Time: _____
3. _____ Time: _____
4. _____ Time: _____
5. _____ Time: _____

Additional Notes:

_____

_____

_____

_____

_____

IMPACT SCIENCES

Measurement Report

Report Summary

Meter's File Name	LxT_Data.156.s	Computer's File Name	LxT_0005667-20220726 105842-LxT_Data.156.ldbin
Meter	LxT1 0005667		
Firmware	2.302		
User		Location	
Job Description			
Note			
Start Time	2022-07-26 10:58:42	Duration	0:15:00.0
End Time	2022-07-26 11:13:42	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	58.6 dB		
LAE	88.1 dB	SEA	--- dB
EA	71.7 µPa²h		
EA8	2.3 mPa²h		
EA40	11.5 mPa²h		
LA_{peak}	100.8 dB	2022-07-26 11:00:07	
LAS_{max}	72.8 dB	2022-07-26 11:13:10	
LAS_{min}	39.5 dB	2022-07-26 10:59:28	
LA_{eq}	58.6 dB		
LC_{eq}	67.5 dB	LC_{eq} - LA_{eq}	9.0 dB
LAI_{eq}	62.3 dB	LAI_{eq} - LA_{eq}	3.7 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	58.6 dB		67.5 dB		--- dB	
$Ls_{(max)}$	72.8 dB	2022-07-26 11:13:10	--- dB		--- dB	
$LS_{(min)}$	39.5 dB	2022-07-26 10:59:28	--- dB		--- dB	
$L_{Peak(max)}$	100.8 dB	2022-07-26 11:00:07	--- dB		--- dB	

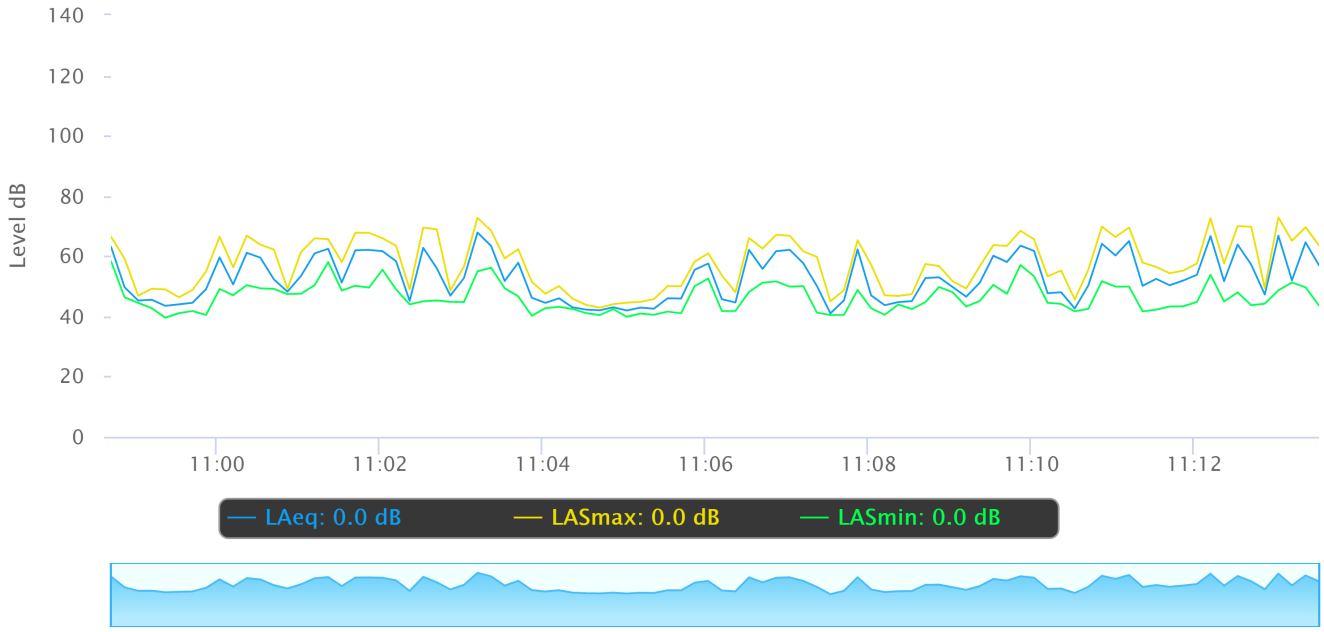
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	63.0 dB
LAS 33.3	53.6 dB
LAS 66.7	46.3 dB
LAS 90.0	42.5 dB

Time History



NOISE MONITORING FIELD REPORT

Project Name: Peterson Laurelwood Master Plan

Monitoring Location: Teal Dr. N/o Dunford

Date: 07/26/2022 Site Number: 4

Measured By: Raul Castillo

Measurement Start Time: 11:26 a.m.

Measurement End Time: 11:41 a.m.

Total Measurement Time: 15 min.

Noise Meter Model: Larson Davis Soundtrack LxT

Calibration: 94.0 (dBA)

Meter Setting: A-Weighted Sound Level (SLOW)

Session File Name: LxT_Data.157

Primary Noise Sources: Traffic, neighborhood activity

Site Map

Data Summary

Noise Scale	Noise Level (dBA)
L_{eq}	58.1
L_{max}	75.8
L_{min}	37.1

Other Noise Sources During Monitoring

1. _____ Time: _____
2. _____ Time: _____
3. _____ Time: _____
4. _____ Time: _____
5. _____ Time: _____

Additional Notes:

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IMPACT SCIENCES

Measurement Report

Report Summary

Meter's File Name	LxT_Data.157.s	Computer's File Name	LxT_0005667-20220726 112658-LxT_Data.157.ldbin
Meter	LxT1 0005667		
Firmware	2.302		
User		Location	
Job Description			
Note			
Start Time	2022-07-26 11:26:58	Duration	0:15:00.0
End Time	2022-07-26 11:41:58	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	58.1 dB		
LAE	87.7 dB	SEA	--- dB
EA	64.8 µPa²h		
EA8	2.1 mPa²h		
EA40	10.4 mPa²h		
LA_{peak}	94.6 dB	2022-07-26 11:34:05	
LAS_{max}	75.8 dB	2022-07-26 11:34:28	
LAS_{min}	37.1 dB	2022-07-26 11:38:38	
LA_{eq}	58.1 dB		
LC_{eq}	67.8 dB	LC_{eq} - LA_{eq}	9.7 dB
LAI_{eq}	60.9 dB	LAI_{eq} - LA_{eq}	2.8 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	58.1 dB		67.8 dB		--- dB	
$Ls_{(max)}$	75.8 dB	2022-07-26 11:34:28	--- dB		--- dB	
$LS_{(min)}$	37.1 dB	2022-07-26 11:38:38	--- dB		--- dB	
$L_{Peak(max)}$	94.6 dB	2022-07-26 11:34:05	--- dB		--- dB	

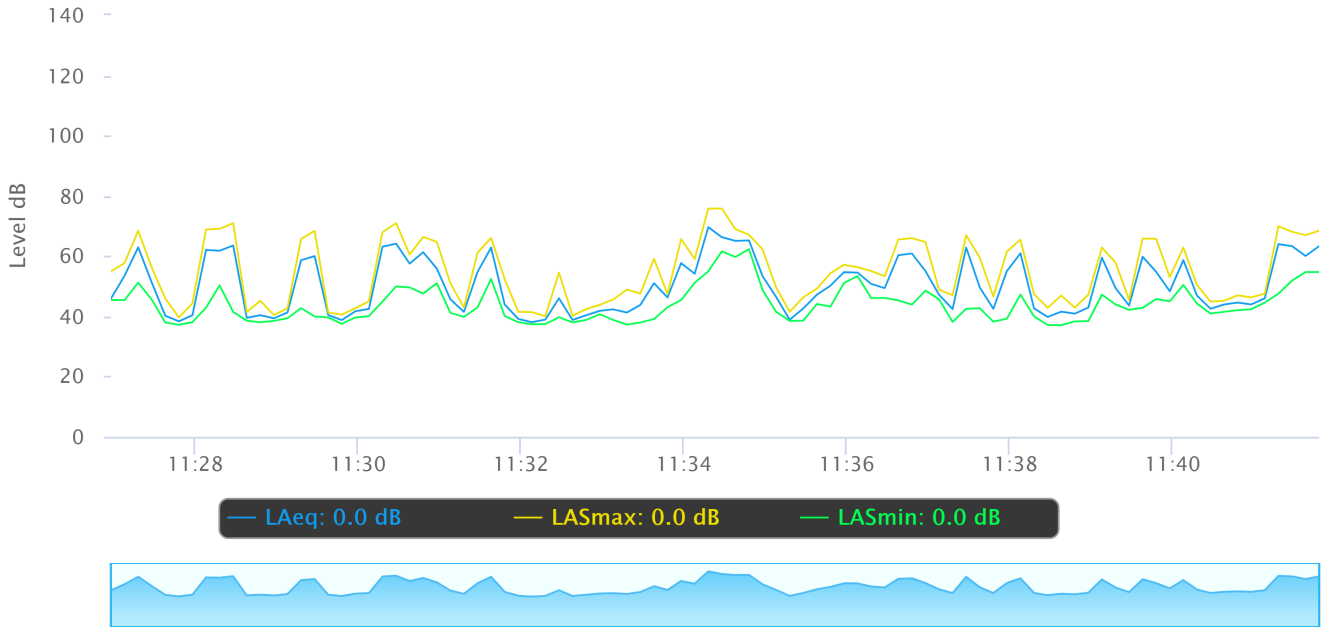
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	62.8 dB
LAS 33.3	51.3 dB
LAS 66.7	42.8 dB
LAS 90.0	39.0 dB

Time History



NOISE MONITORING FIELD REPORT

Site Map

Project Name: Peterson Laurelwood Master Plan

Monitoring Location: Castleton Terrace

Date: 07/26/2022 Site Number: 5

Measured By: Raul Castillo

Measurement Start Time: 11:49 a.m.

Measurement End Time: ~~11:~~ 12:04 p.m.

Total Measurement Time: 15 min.

Noise Meter Model: Larson Davis Soundtrack LxT Calibration: 94.0 (dBA)

Meter Setting: A-Weighted Sound Level (SLOW)

Session File Name: LxT_Data,158

Primary Noise Sources: Traffic, neighborhood activity

Data Summary

Noise Scale	Noise Level (dBA)
L_{eq}	48.8
L_{max}	66.4
L_{min}	39.3

Other Noise Sources During Monitoring

1. _____ Time: _____
2. _____ Time: _____
3. _____ Time: _____
4. _____ Time: _____
5. _____ Time: _____

Additional Notes:

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IMPACT SCIENCES

Measurement Report

Report Summary

Meter's File Name	LxT_Data.158.s	Computer's File Name	LxT_0005667-20220726 114907-LxT_Data.158.ldbin
Meter	LxT1 0005667		
Firmware	2.302		
User		Location	
Job Description			
Note			
Start Time	2022-07-26 11:49:07	Duration	0:15:00.0
End Time	2022-07-26 12:04:07	Run Time	0:15:00.0
		Pause Time	0:00:00.0

Results

Overall Metrics

LA_{eq}	48.8 dB		
LAE	78.4 dB	SEA	--- dB
EA	7.6 µPa²h		
EA8	243.9 µPa²h		
EA40	1.2 mPa²h		
LA_{peak}	92.1 dB	2022-07-26 11:49:28	
LAS_{max}	66.4 dB	2022-07-26 11:57:50	
LAS_{min}	39.3 dB	2022-07-26 11:54:09	
LA_{eq}	48.8 dB		
LC_{eq}	60.7 dB	LC_{eq} - LA_{eq}	11.9 dB
LAI_{eq}	53.0 dB	LAI_{eq} - LA_{eq}	4.2 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	48.8 dB		60.7 dB		--- dB	
$Ls_{(max)}$	66.4 dB	2022-07-26 11:57:50	--- dB		--- dB	
$LS_{(min)}$	39.3 dB	2022-07-26 11:54:09	--- dB		--- dB	
$L_{Peak(max)}$	92.1 dB	2022-07-26 11:49:28	--- dB		--- dB	

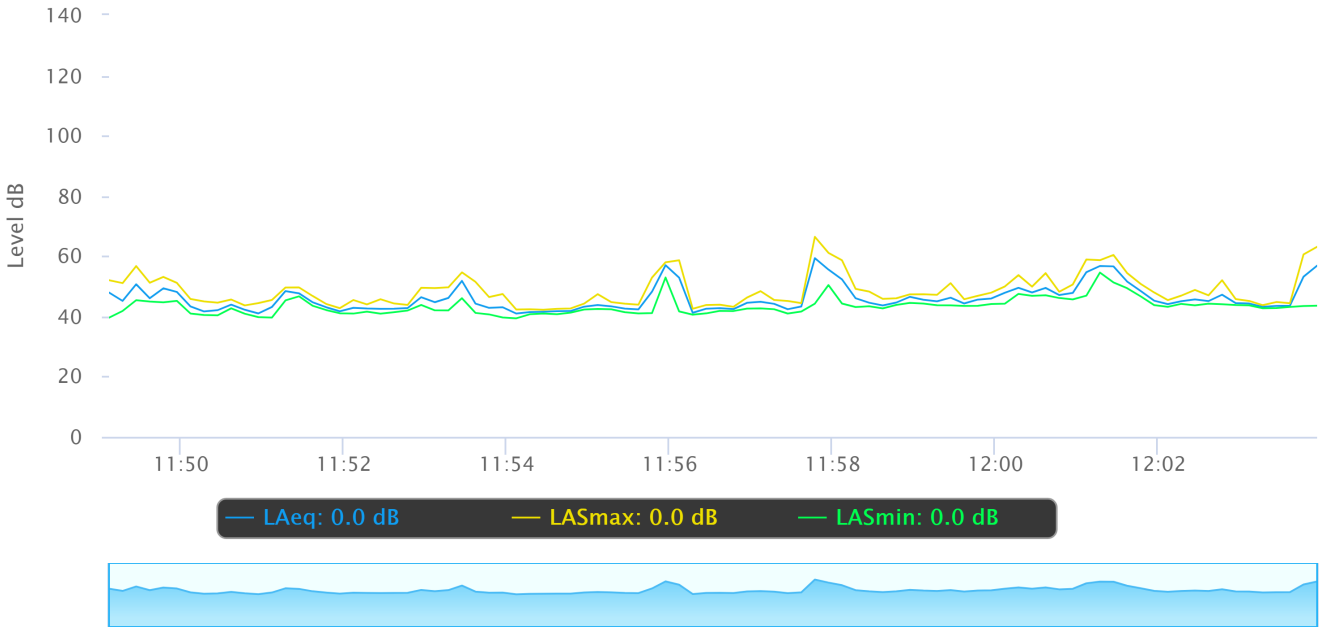
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	51.1 dB
LAS 33.3	45.9 dB
LAS 66.7	43.2 dB
LAS 90.0	41.5 dB

Time History



NOISE MONITORING FIELD REPORT

Project Name: Peterson Laurelwood Master Plan

Monitoring Location: Rosalia Ave/ Poplar Ave

Date: 07/26/2022 Site Number: 6

Measured By: Raul Castillo

Measurement Start Time: 12:08 p.m.

Measurement End Time: 12:23 p.m.

Total Measurement Time: 15 min.

Noise Meter Model: Larson Davis Soundtrack LxT

Calibration: 94.0 (dBA)

Meter Setting: A-Weighted Sound Level (SLOW)

Session File Name: LxT_Data.159

Primary Noise Sources: Traffic, neighborhood activity

Site Map

Data Summary

Noise Scale	Noise Level (dBA)
L_{eq}	55.2
L_{max}	72.8
L_{min}	51.4

Other Noise Sources During Monitoring

1. _____ Time: _____
2. _____ Time: _____
3. _____ Time: _____
4. _____ Time: _____
5. _____ Time: _____

Additional Notes:

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IMPACT SCIENCES

Measurement Report

Report Summary

Meter's File Name	LxT_Data.159.s	Computer's File Name	LxT_0005667-20220726 120807-LxT_Data.159.ldbin
Meter	LxT1 0005667		
Firmware	2.302		
User		Location	
Job Description			
Note			
Start Time	2022-07-26 12:08:07	Duration	0:15:00.0
End Time	2022-07-26 12:23:07	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	55.2 dB		
LAE	84.8 dB	SEA	--- dB
EA	33.3 µPa²h		
EA8	1.1 mPa²h		
EA40	5.3 mPa²h		
LA_{peak}	93.8 dB	2022-07-26 12:12:01	
LAS_{max}	72.8 dB	2022-07-26 12:12:02	
LAS_{min}	51.4 dB	2022-07-26 12:21:03	
LA_{eq}	55.2 dB		
LC_{eq}	66.6 dB	LC_{eq} - LA_{eq}	11.4 dB
LAI_{eq}	57.0 dB	LAI_{eq} - LA_{eq}	1.8 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	55.2 dB		66.6 dB		--- dB	
$Ls_{(max)}$	72.8 dB	2022-07-26 12:12:02	--- dB		--- dB	
$LS_{(min)}$	51.4 dB	2022-07-26 12:21:03	--- dB		--- dB	
$L_{Peak(max)}$	93.8 dB	2022-07-26 12:12:01	--- dB		--- dB	

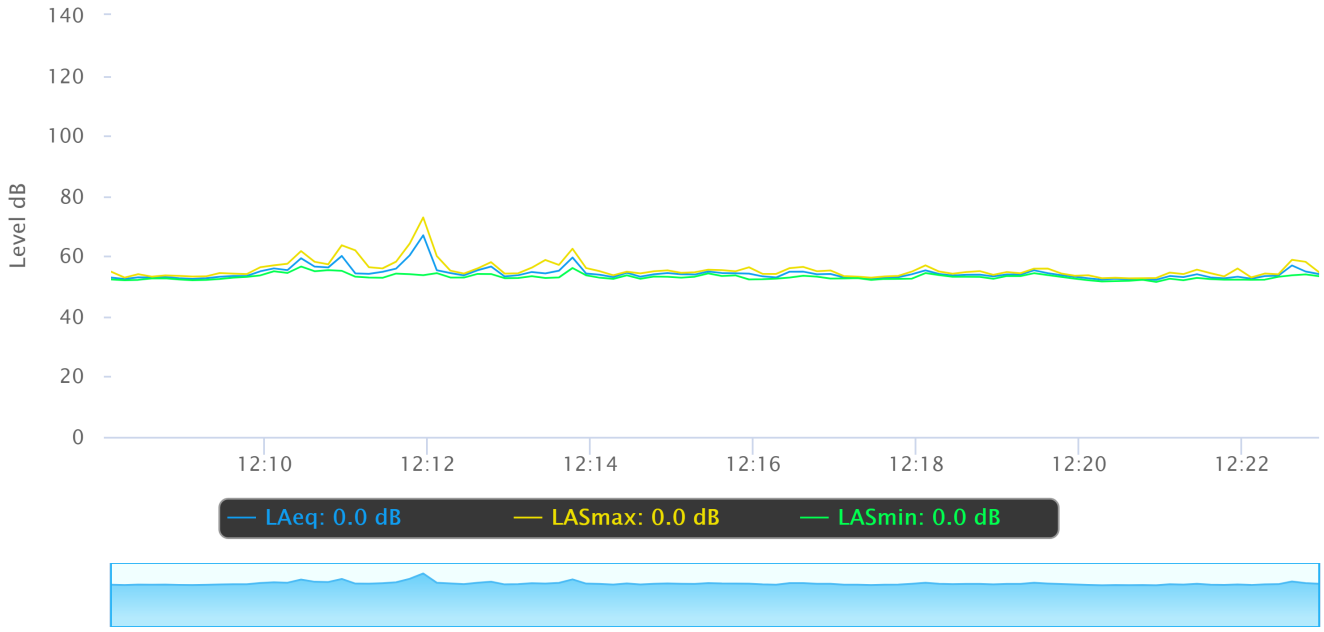
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	56.0 dB
LAS 33.3	54.3 dB
LAS 66.7	53.1 dB
LAS 90.0	52.5 dB

Time History



Phase I
Model Run Date: 08/09/2022

Receptor #1 – Residences to west along Norman Dr.

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	3	80.7	40	850
Dozer	2	81.7	40	850
Concrete Saw	1	89.6	20	850

1-Hour Leq: 61.8

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	81.7	40	850
Excavator	1	84.0	40	850
Tractor	1	79.1	40	850
Front End Loader	1	77.6	40	850
Backhoe	1	85.0	40	850
Dozer	1	80.7	40	850

1-Hour Leq: 61.3

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	850
Generator	1	80.6	50	850
Crane	1	80.6	16	850
Welder/Torch	1	74.0	40	850
Tractor	1	84.0	40	850
Front End Loader	1	79.1	40	850
Compressor (air)	1	77.7	40	850

1-Hour Leq: 60.6

Receptor #2 – Raynor Park Church/BASIS School

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	3	80.7	40	265
Dozer	2	81.7	40	265
Concrete Saw	1	89.6	20	265

1-Hour Leq: 72.0

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	81.7	40	265
Excavator	1	84.0	40	265
Tractor	1	79.1	40	265
Front End Loader	1	77.6	40	265
Backhoe	1	85.0	40	265
Dozer	1	80.7	40	265

1-Hour Leq: 71.4

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	265
Generator	1	80.6	50	265
Crane	1	80.6	16	265
Welder/Torch	1	74.0	40	265
Tractor	1	84.0	40	265
Front End Loader	1	79.1	40	265
Compressor (air)	1	77.7	40	265

1-Hour Leq: 70.7

Receptor #3 – Residences to south along Dunford Way

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	3	80.7	40	65
Dozer	2	81.7	40	65
Concrete Saw	1	89.6	20	65

1-Hour Leq: 84.2

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	81.7	40	65
Excavator	1	84.0	40	65
Tractor	1	79.1	40	65
Front End Loader	1	77.6	40	65
Backhoe	1	85.0	40	65
Dozer	1	80.7	40	65

1-Hour Leq: 83.6

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	65
Generator	1	80.6	50	65
Crane	1	80.6	16	65
Welder/Torch	1	74.0	40	65
Tractor	1	84.0	40	65
Front End Loader	1	79.1	40	65
Compressor (air)	1	77.7	40	65

1-Hour Leq: 83.0

Receptor #4 – Residences to east along Teal Dr.

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	3	80.7	40	70
Dozer	2	81.7	40	70
Concrete Saw	1	89.6	20	70

1-Hour Leq: 83.5

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	81.7	40	70
Excavator	1	84.0	40	70
Tractor	1	79.1	40	70
Front End Loader	1	77.6	40	70
Backhoe	1	85.0	40	70
Dozer	1	80.7	40	70

1-Hour Leq: 83.0

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	70
Generator	1	80.6	50	70
Crane	1	80.6	16	70
Welder/Torch	1	74.0	40	70
Tractor	1	84.0	40	70
Front End Loader	1	79.1	40	70
Compressor (air)	1	77.7	40	70

1-Hour Leq: 82.3

Receptor #5 – Residences to northeast along Castleton Terrace

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	3	80.7	40	275
Dozer	2	81.7	40	275
Concrete Saw	1	89.6	20	275

1-Hour Leq: 71.6

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	81.7	40	25
Excavator	1	84.0	40	25
Tractor	1	79.1	40	25
Front End Loader	1	77.6	40	25
Backhoe	1	85.0	40	25
Dozer	1	80.7	40	25

1-Hour Leq: 91.9

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	25
Generator	1	80.6	50	25
Crane	1	80.6	16	25
Welder/Torch	1	74.0	40	25
Tractor	1	84.0	40	25
Front End Loader	1	79.1	40	25
Compressor (air)	1	77.7	40	25

1-Hour Leq: 91.3

Receptor #6 – Residences to north along Rosalia Ave./Bryant Way

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	3	80.7	40	800
Dozer	2	81.7	40	800
Concrete Saw	1	89.6	20	800

1-Hour Leq: 62.4

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	81.7	40	800
Excavator	1	84.0	40	800
Tractor	1	79.1	40	800
Front End Loader	1	77.6	40	800
Backhoe	1	85.0	40	800
Dozer	1	80.7	40	800

1-Hour Leq: 61.8

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	800
Generator	1	80.6	50	800
Crane	1	80.6	16	800
Welder/Torch	1	74.0	40	800
Tractor	1	84.0	40	800
Front End Loader	1	79.1	40	800
Compressor (air)	1	77.7	40	800

1-Hour Leq: 61.2

Receptor #7 – Reference for residences to the south – measured from center of Phase 1

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	3	80.7	40	250
Dozer	2	81.7	40	250
Concrete Saw	1	89.6	20	250

1-Hour Leq: 72.5

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	81.7	40	250
Excavator	1	84.0	40	250
Tractor	1	79.1	40	250
Front End Loader	1	77.6	40	250
Backhoe	1	85.0	40	250
Dozer	1	80.7	40	250

1-Hour Leq: 71.9

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	250
Generator	1	80.6	50	250
Crane	1	80.6	16	250
Welder/Torch	1	74.0	40	250
Tractor	1	84.0	40	250
Front End Loader	1	79.1	40	250
Compressor (air)	1	77.7	40	250

1-Hour Leq: 71.3

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson - Laurelwood Phase 1 Demolition

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	850	0
Excavator	No	40		80.7	850	0
Excavator	No	40		80.7	850	0
Dozer	No	40		81.7	850	0
Dozer	No	40		81.7	850	0
Concrete Saw	No	20		89.6	850	0

Results

	Calculated (dBA)	
Equipment	*Lmax	Leq
Excavator	56.1	52.1
Excavator	56.1	52.1
Excavator	56.1	52.1
Dozer	57.1	53.1
Dozer	57.1	53.1
Concrete Saw	65	58
Total	65	61.8

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	265	0
Excavator	No	40		80.7	265	0
Excavator	No	40		80.7	265	0
Dozer	No	40		81.7	265	0

Dozer	No	40	81.7	265	0
Concrete Saw	No	20	89.6	265	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Excavator	66.2	62.2
Excavator	66.2	62.2
Excavator	66.2	62.2
Dozer	67.2	63.2
Dozer	67.2	63.2
Concrete Saw	75.1	68.1
Total	75.1	72

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description

Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	65	0
Excavator	No	40		80.7	65	0
Excavator	No	40		80.7	65	0
Dozer	No	40		81.7	65	0
Dozer	No	40		81.7	65	0
Concrete Saw	No	20		89.6	65	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Excavator	78.4	74.5
Excavator	78.4	74.5
Excavator	78.4	74.5
Dozer	79.4	75.4
Dozer	79.4	75.4
Concrete Saw	87.3	80.3
Total	87.3	84.2

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	70	0
Excavator	No	40		80.7	70	0
Excavator	No	40		80.7	70	0
Dozer	No	40		81.7	70	0
Dozer	No	40		81.7	70	0
Concrete Saw	No	20		89.6	70	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Excavator	77.8	73.8
Excavator	77.8	73.8
Excavator	77.8	73.8
Dozer	78.7	74.8
Dozer	78.7	74.8
Concrete Saw	86.7	79.7
Total	86.7	83.5

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	275	0
Excavator	No	40		80.7	275	0
Excavator	No	40		80.7	275	0
Dozer	No	40		81.7	275	0
Dozer	No	40		81.7	275	0
Concrete Saw	No	20		89.6	275	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq

Excavator		65.9	61.9
Excavator		65.9	61.9
Excavator		65.9	61.9
Dozer		66.9	62.9
Dozer		66.9	62.9
Concrete Saw		74.8	67.8
	Total	74.8	71.6

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalian Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	800	0
Excavator	No	40		80.7	800	0
Excavator	No	40		80.7	800	0
Dozer	No	40		81.7	800	0
Dozer	No	40		81.7	800	0
Concrete Saw	No	20		89.6	800	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Excavator		56.6	52.6
Excavator		56.6	52.6
Excavator		56.6	52.6
Dozer		57.6	53.6
Dozer		57.6	53.6
Concrete Saw		65.5	58.5
	Total	65.5	62.4

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description
Residences to south - measured from center of Phase 1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Excavator	No	40	80.7	250	0
Excavator	No	40	80.7	250	0
Excavator	No	40	80.7	250	0
Dozer	No	40	81.7	250	0
Dozer	No	40	81.7	250	0
Concrete Saw	No	20	89.6	250	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Excavator	66.7	62.8
Excavator	66.7	62.8
Excavator	66.7	62.8
Dozer	67.7	63.7
Dozer	67.7	63.7
Concrete Saw	75.6	68.6
Total	75.6	72.5

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson - Laurelwood Phase 1 Grading

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		850	0
Excavator	No	40		80.7	850	0
Tractor	No	40	84		850	0
Front End Loader	No	40		79.1	850	0
Backhoe	No	40		77.6	850	0
Dozer	No	40		81.7	850	0

Results

Equipment		Calculated (dBA) *Lmax	Leq
Grader		60.4	56.4
Excavator		56.1	52.1
Tractor		59.4	55.4
Front End Loader		54.5	50.5
Backhoe		53	49
Dozer		57.1	53.1
	Total	60.4	61.3

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		265	0
Excavator	No	40		80.7	265	0
Tractor	No	40	84		265	0
Front End Loader	No	40		79.1	265	0

Backhoe	No	40	77.6	265	0
Dozer	No	40	81.7	265	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Grader		70.5	66.5
Excavator		66.2	62.2
Tractor		69.5	65.5
Front End Loader		64.6	60.6
Backhoe		63.1	59.1
Dozer		67.2	63.2
	Total	70.5	71.4

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description

Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		65	0
Excavator	No	40		80.7	65	0
Tractor	No	40	84		65	0
Front End Loader	No	40		79.1	65	0
Backhoe	No	40		77.6	65	0
Dozer	No	40		81.7	65	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Grader		82.7	78.7
Excavator		78.4	74.5
Tractor		81.7	77.7
Front End Loader		76.8	72.9
Backhoe		75.3	71.3
Dozer		79.4	75.4
	Total	82.7	83.6

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		70	0
Excavator	No	40		80.7	70	0
Tractor	No	40	84		70	0
Front End Loader	No	40		79.1	70	0
Backhoe	No	40		77.6	70	0
Dozer	No	40		81.7	70	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	82.1	78.1
Excavator	77.8	73.8
Tractor	81.1	77.1
Front End Loader	76.2	72.2
Backhoe	74.6	70.7
Dozer	78.7	74.8
Total	82.1	83

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		25	0
Excavator	No	40		80.7	25	0
Tractor	No	40	84		25	0
Front End Loader	No	40		79.1	25	0
Backhoe	No	40		77.6	25	0
Dozer	No	40		81.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq

Grader		91	87
Excavator		86.7	82.8
Tractor		90	86
Front End Loader		85.1	81.2
Backhoe		83.6	79.6
Dozer		87.7	83.7
	Total	91	91.9

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalian Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		800	0
Excavator	No	40		80.7	800	0
Tractor	No	40	84		800	0
Front End Loader	No	40		79.1	800	0
Backhoe	No	40		77.6	800	0
Dozer	No	40		81.7	800	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Grader		60.9	56.9
Excavator		56.6	52.6
Tractor		59.9	55.9
Front End Loader		55	51
Backhoe		53.5	49.5
Dozer		57.6	53.6
	Total	60.9	61.8

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description
Residences to south - measured from center of Phase 1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Grader	No	40	85		250	0
Excavator	No	40		80.7	250	0
Tractor	No	40	84		250	0
Front End Loader	No	40		79.1	250	0
Backhoe	No	40		77.6	250	0
Dozer	No	40		81.7	250	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Grader		71	67
Excavator		66.7	62.8
Tractor		70	66
Front End Loader		65.1	61.2
Backhoe		63.6	59.6
Dozer		67.7	63.7
	Total	71	71.9

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson - Laurelwood Phase 1 Building Construction & Architectural Coating

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	850	0
Backhoe	No	40		77.6	850	0
Backhoe	No	40		77.6	850	0
Generator	No	50		80.6	850	0
Crane	No	16		80.6	850	0
Welder / Torch	No	40		74	850	0
Tractor	No	40	84		850	0
Front End Loader	No	40		79.1	850	0
Backhoe	No	40		77.6	850	0
Compressor (air)	No	40		77.7	850	0

Results

	Calculated (dBA)	
Equipment	*Lmax	Leq
Backhoe	53	49
Backhoe	53	49
Backhoe	53	49
Generator	56	53
Crane	55.9	48
Welder / Torch	49.4	45.4
Tractor	59.4	55.4
Front End Loader	54.5	50.5
Backhoe	53	49
Compressor (air)	53.1	49.1
Total	59.4	60.6

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	265	0
Backhoe	No	40		77.6	265	0
Backhoe	No	40		77.6	265	0
Generator	No	50		80.6	265	0
Crane	No	16		80.6	265	0
Welder / Torch	No	40		74	265	0
Tractor	No	40	84		265	0
Front End Loader	No	40		79.1	265	0
Backhoe	No	40		77.6	265	0
Compressor (air)	No	40		77.7	265	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	63.1	59.1
Backhoe	63.1	59.1
Backhoe	63.1	59.1
Generator	66.1	63.1
Crane	66.1	58.1
Welder / Torch	59.5	55.5
Tractor	69.5	65.5
Front End Loader	64.6	60.6
Backhoe	63.1	59.1
Compressor (air)	63.2	59.2
Total	69.5	70.7

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description

Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Generator	No	50		80.6	65	0
Crane	No	16		80.6	65	0
Welder / Torch	No	40		74	65	0

Tractor	No	40	84		65	0
Front End Loader	No	40		79.1	65	0
Backhoe	No	40		77.6	65	0
Compressor (air)	No	40		77.7	65	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	75.3	71.3
Backhoe	75.3	71.3
Backhoe	75.3	71.3
Generator	78.4	75.3
Crane	78.3	70.3
Welder / Torch	71.7	67.7
Tractor	81.7	77.7
Front End Loader	76.8	72.9
Backhoe	75.3	71.3
Compressor (air)	75.4	71.4
Total	81.7	83

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description

Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	70	0
Backhoe	No	40		77.6	70	0
Backhoe	No	40		77.6	70	0
Generator	No	50		80.6	70	0
Crane	No	16		80.6	70	0
Welder / Torch	No	40		74	70	0
Tractor	No	40	84		70	0
Front End Loader	No	40		79.1	70	0
Backhoe	No	40		77.6	70	0
Compressor (air)	No	40		77.7	70	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	74.6	70.7

Backhoe	74.6	70.7
Backhoe	74.6	70.7
Generator	77.7	74.7
Crane	77.6	69.7
Welder / Torch	71.1	67.1
Tractor	81.1	77.1
Front End Loader	76.2	72.2
Backhoe	74.6	70.7
Compressor (air)	74.7	70.8
Total	81.1	82.3

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	25	0
Backhoe	No	40		77.6	25	0
Backhoe	No	40		77.6	25	0
Generator	No	50		80.6	25	0
Crane	No	16		80.6	25	0
Welder / Torch	No	40		74	25	0
Tractor	No	40	84		25	0
Front End Loader	No	40		79.1	25	0
Backhoe	No	40		77.6	25	0
Compressor (air)	No	40		77.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	83.6	79.6
Backhoe	83.6	79.6
Backhoe	83.6	79.6
Generator	86.7	83.6
Crane	86.6	78.6
Welder / Torch	80	76
Tractor	90	86
Front End Loader	85.1	81.2
Backhoe	83.6	79.6
Compressor (air)	83.7	79.7
Total	90	91.3

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalian Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	800	0
Backhoe	No	40		77.6	800	0
Backhoe	No	40		77.6	800	0
Generator	No	50		80.6	800	0
Crane	No	16		80.6	800	0
Welder / Torch	No	40		74	800	0
Tractor	No	40	84		800	0
Front End Loader	No	40		79.1	800	0
Backhoe	No	40		77.6	800	0
Compressor (air)	No	40		77.7	800	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	53.5	49.5
Backhoe	53.5	49.5
Backhoe	53.5	49.5
Generator	56.5	53.5
Crane	56.5	48.5
Welder / Torch	49.9	45.9
Tractor	59.9	55.9
Front End Loader	55	51
Backhoe	53.5	49.5
Compressor (air)	53.6	49.6
Total	59.9	61.2

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description
Residences to south - measured from center of Phase 1

	Impact	Equipment Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Backhoe	No	40		77.6	250		0
Backhoe	No	40		77.6	250		0
Backhoe	No	40		77.6	250		0
Generator	No	50		80.6	250		0
Crane	No	16		80.6	250		0
Welder / Torch	No	40		74	250		0
Tractor	No	40	84		250		0
Front End Loader	No	40		79.1	250		0
Backhoe	No	40		77.6	250		0
Compressor (air)	No	40		77.7	250		0

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	63.6	59.6
Backhoe	63.6	59.6
Backhoe	63.6	59.6
Generator	66.7	63.6
Crane	66.6	58.6
Welder / Torch	60	56
Tractor	70	66
Front End Loader	65.1	61.2
Backhoe	63.6	59.6
Compressor (air)	63.7	59.7
Total	70	71.3

*Calculated Lmax is the Loudest value.

Phase II
Model Run Date: 08/09/2022

Receptor #1 – Residences to west along Norman Dr.

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	1	80.7	40	25
Dozer	1	81.7	40	25
Concrete Saw	1	89.6	20	25

1-Hour Leq: 90.6

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	25
Excavator	1	80.7	40	25
Tractor	1	84.0	40	25
Scraper	1	83.6	40	25
Dozer	1	81.7	40	25

1-Hour Leq: 92.3

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	25
Generator	1	80.6	50	25
Crane	1	80.6	16	25
Welder/Torch	1	74.0	40	25
Tractor	1	84.0	40	25
Compressor (air)	1	77.7	40	25

1-Hour Leq: 89.7

Receptor #2 – Raynor Park Church/BASIS School

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	1	80.7	40	470
Dozer	1	81.7	40	470
Concrete Saw	1	89.6	20	470

1-Hour Leq: 65.1

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	470
Excavator	1	80.7	40	470
Tractor	1	84.0	40	470
Scraper	1	83.6	40	470
Dozer	1	81.7	40	470

1-Hour Leq: 66.8

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	470
Generator	1	80.6	50	470
Crane	1	80.6	16	470
Welder/Torch	1	74.0	40	470
Tractor	1	84.0	40	470
Compressor (air)	1	77.7	40	470

1-Hour Leq: 64.2

Receptor #3 – Residences to south along Dunford Way

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	1	80.7	40	700
Dozer	1	81.7	40	700
Concrete Saw	1	89.6	20	700

1-Hour Leq: 61.7

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	700
Excavator	1	80.7	40	700
Tractor	1	84.0	40	700
Scraper	1	83.6	40	700
Dozer	1	81.7	40	700

1-Hour Leq: 63.4

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	700
Generator	1	80.6	50	700
Crane	1	80.6	16	700
Welder/Torch	1	74.0	40	700
Tractor	1	84.0	40	700
Compressor (air)	1	77.7	40	700

1-Hour Leq: 60.7

Receptor #4 – Residences to east across Teal Dr.

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	1	80.7	40	70
Dozer	1	81.7	40	70
Concrete Saw	1	89.6	20	70

1-Hour Leq: 81.7

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	70
Excavator	1	80.7	40	70
Tractor	1	84.0	40	70
Scraper	1	83.6	40	70
Dozer	1	81.7	40	70

1-Hour Leq: 83.4

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	70
Generator	1	80.6	50	70
Crane	1	80.6	16	70
Welder/Torch	1	74.0	40	70
Tractor	1	84.0	40	70
Compressor (air)	1	77.7	40	70

1-Hour Leq: 80.7

Receptor #5 – Residences to northeast along Castleton Terrace

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	1	80.7	40	25
Dozer	1	81.7	40	25
Concrete Saw	1	89.6	20	25

1-Hour Leq: 90.6

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	25
Excavator	1	80.7	40	25
Tractor	1	84.0	40	25
Scraper	1	83.6	40	25
Dozer	1	81.7	40	25

1-Hour Leq: 92.3

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	25
Generator	1	80.6	50	25
Crane	1	80.6	16	25
Welder/Torch	1	74.0	40	25
Tractor	1	84.0	40	25
Compressor (air)	1	77.7	40	25

1-Hour Leq: 89.7

Receptor #6 – Residences to north along Rosalia Ave./Bryant Way

Construction Phase: Demolition

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Excavator	1	80.7	40	25
Dozer	1	81.7	40	25
Concrete Saw	1	89.6	20	25

1-Hour Leq: 90.6

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	25
Excavator	1	80.7	40	25
Tractor	1	84.0	40	25
Scraper	1	83.6	40	25
Dozer	1	81.7	40	25

1-Hour Leq: 92.3

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	25
Generator	1	80.6	50	25
Crane	1	80.6	16	25
Welder/Torch	1	74.0	40	25
Tractor	1	84.0	40	25
Compressor (air)	1	77.7	40	25

1-Hour Leq: 89.7

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson Laurelwood Phase 2 Demolition

---- Receptor #1 ----

Baselines (dBA)

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	25	0
Excavator	No	40		80.7	25	0
Concrete Saw	No	20		89.6	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	87.7	83.7
Excavator	86.7	82.8
Concrete Saw	95.6	88.6
Total	95.6	90.6

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	470	0
Excavator	No	40		80.7	470	0
Concrete Saw	No	20		89.6	470	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	62.2	58.2
Excavator	61.2	57.3

Concrete Saw		70.1	63.1
	Total	70.1	65.1

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description
Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	700	0
Excavator	No	40		80.7	700	0
Concrete Saw	No	20		89.6	700	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	58.7	54.8
Excavator	57.8	53.8
Concrete Saw	66.7	59.7
Total	66.7	61.7

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	70	0
Excavator	No	40		80.7	70	0
Concrete Saw	No	20		89.6	70	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	78.7	74.8
Excavator	77.8	73.8
Concrete Saw	86.7	79.7

Total	86.7	81.7

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	25	0
Excavator	No	40		80.7	25	0
Concrete Saw	No	20		89.6	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	87.7	83.7
Excavator	86.7	82.8
Concrete Saw	95.6	88.6
Total	95.6	90.6

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalia Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	25	0
Excavator	No	40		80.7	25	0
Concrete Saw	No	20		89.6	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	87.7	83.7
Excavator	86.7	82.8
Concrete Saw	95.6	88.6
Total	95.6	90.6

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson Laurelwood Phase 2 Grading

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		25	0
Excavator	No	40		80.7	25	0
Tractor	No	40	84		25	0
Scraper	No	40		83.6	25	0
Dozer	No	40		81.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	91	87
Excavator	86.7	82.8
Tractor	90	86
Scraper	89.6	85.6
Dozer	87.7	83.7
Total	91	92.3

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		470	0
Excavator	No	40		80.7	470	0
Tractor	No	40	84		470	0
Scraper	No	40		83.6	470	0
Dozer	No	40		81.7	470	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	65.5	61.6
Excavator	61.2	57.3
Tractor	64.5	60.6
Scraper	64.1	60.1
Dozer	62.2	58.2
Total	65.5	66.8

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description

Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		700	0
Excavator	No	40		80.7	700	0
Tractor	No	40	84		700	0
Scraper	No	40		83.6	700	0
Dozer	No	40		81.7	700	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	62.1	58.1
Excavator	57.8	53.8
Tractor	61.1	57.1
Scraper	60.7	56.7
Dozer	58.7	54.8
Total	62.1	63.4

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description

Residences to east along Teal Dr.

	Impact	Equipment Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding

Description	Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		70	0
Excavator	No	40		80.7	70	0
Tractor	No	40	84		70	0
Scraper	No	40		83.6	70	0
Dozer	No	40		81.7	70	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	82.1	78.1
Excavator	77.8	73.8
Tractor	81.1	77.1
Scraper	80.7	76.7
Dozer	78.7	74.8
Total	82.1	83.4

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description

Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		25	0
Excavator	No	40		80.7	25	0
Tractor	No	40	84		25	0
Scraper	No	40		83.6	25	0
Dozer	No	40		81.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	91	87
Excavator	86.7	82.8
Tractor	90	86
Scraper	89.6	85.6
Dozer	87.7	83.7
Total	91	92.3

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalia Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		25	0
Excavator	No	40		80.7	25	0
Tractor	No	40	84		25	0
Scraper	No	40		83.6	25	0
Dozer	No	40		81.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	91	87
Excavator	86.7	82.8
Tractor	90	86
Scraper	89.6	85.6
Dozer	87.7	83.7
Total	91	92.3

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 8/9/2022
Case Descr Peterson - Laurelwood Phase 2 Building Construction & Architectural Coating

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	25	0
Generator	No	50		80.6	25	0
Crane	No	16		80.6	25	0
Welder / Torch	No	40		74	25	0
Tractor	No	40	84		25	0
Compressor (air)	No	40		77.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	83.6	79.6
Generator	86.7	83.6
Crane	86.6	78.6
Welder / Torch	80	76
Tractor	90	86
Compressor (air)	83.7	79.7
Total	90	89.7

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	470	0
Generator	No	50		80.6	470	0
Crane	No	16		80.6	470	0
Welder / Torch	No	40		74	470	0

Tractor	No	40	84		470	0
Compressor (air)	No	40		77.7	470	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	58.1	54.1
Generator	61.2	58.2
Crane	61.1	53.1
Welder / Torch	54.5	50.6
Tractor	64.5	60.6
Compressor (air)	58.2	54.2
Total	64.5	64.2

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description

Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	700	0
Generator	No	50		80.6	700	0
Crane	No	16		80.6	700	0
Welder / Torch	No	40		74	700	0
Tractor	No	40	84		700	0
Compressor (air)	No	40		77.7	700	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	54.6	50.7
Generator	57.7	54.7
Crane	57.6	49.7
Welder / Torch	51.1	47.1
Tractor	61.1	57.1
Compressor (air)	54.7	50.8
Total	61.1	60.7

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	70	0
Generator	No	50		80.6	70	0
Crane	No	16		80.6	70	0
Welder / Torch	No	40		74	70	0
Tractor	No	40	84		70	0
Compressor (air)	No	40		77.7	70	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	74.6	70.7
Generator	77.7	74.7
Crane	77.6	69.7
Welder / Torch	71.1	67.1
Tractor	81.1	77.1
Compressor (air)	74.7	70.8
Total	81.1	80.7

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	25	0
Generator	No	50		80.6	25	0
Crane	No	16		80.6	25	0
Welder / Torch	No	40		74	25	0
Tractor	No	40	84		25	0
Compressor (air)	No	40		77.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq

Backhoe	83.6	79.6
Generator	86.7	83.6
Crane	86.6	78.6
Welder / Torch	80	76
Tractor	90	86
Compressor (air)	83.7	79.7
Total	90	89.7

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalian Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	25	0
Generator	No	50		80.6	25	0
Crane	No	16		80.6	25	0
Welder / Torch	No	40		74	25	0
Tractor	No	40	84		25	0
Compressor (air)	No	40		77.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	83.6	79.6
Generator	86.7	83.6
Crane	86.6	78.6
Welder / Torch	80	76
Tractor	90	86
Compressor (air)	83.7	79.7
Total	90	89.7

*Calculated Lmax is the Loudest value.

Phase III
Model Run Date: 08/09/2022

Receptor #1 – Residences to west along Norman Dr.

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	235
Tractor	1	84.0	40	235
Dozer	1	81.7	40	235

1-Hour Leq: 71.1

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	235
Crane	1	80.6	16	235
Tractor	1	84.0	40	235
Compressor (air)	1	77.7	40	235

1-Hour Leq: 71.1

Receptor #2 – Raynor Park Church/BASIS School

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	1000
Tractor	1	84.0	40	1000
Dozer	1	81.7	40	1000

1-Hour Leq: 58.5

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	1000
Crane	1	80.6	16	1000
Tractor	1	84.0	40	1000
Compressor (air)	1	77.7	40	1000

1-Hour Leq: 58.5

Receptor #3 – Residences to south along Dunford Way

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	1330
Tractor	1	84.0	40	1330
Dozer	1	81.7	40	1330

1-Hour Leq: 56.1

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	1330
Crane	1	80.6	16	1330
Tractor	1	84.0	40	1330
Compressor (air)	1	77.7	40	1330

1-Hour Leq: 56.1

Receptor #4 – Residences to east across Teal Dr.

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	1745
Tractor	1	84.0	40	1745
Dozer	1	81.7	40	1745

1-Hour Leq: 53.7

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	1745
Crane	1	80.6	16	1745
Tractor	1	84.0	40	1745
Compressor (air)	1	77.7	40	1745

1-Hour Leq: 51.3

Receptor #5 – Residences to northeast along Castleton Terrace

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	680
Tractor	1	84.0	40	680
Dozer	1	81.7	40	680

1-Hour Leq: 61.9

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	680
Crane	1	80.6	16	680
Tractor	1	84.0	40	680
Compressor (air)	1	77.7	40	680

1-Hour Leq: 61.9

Receptor #6 – Residences to north along Rosalia Ave./Bryant Way

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	110
Tractor	1	84.0	40	110
Dozer	1	81.7	40	110

1-Hour Leq: 77.7

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	110
Crane	1	80.6	16	110
Tractor	1	84.0	40	110
Compressor (air)	1	77.7	40	110

1-Hour Leq: 77.7

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson Laurelwood Phase 3 Grading

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		235	0
Tractor	No	40	84		235	0
Dozer	No	40		81.7	235	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	71.6	67.6
Tractor	70.6	66.6
Dozer	68.2	64.2
Total	71.6	71.1

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1000	0
Tractor	No	40	84		1000	0
Dozer	No	40		81.7	1000	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	59	55
Tractor	58	54

Dozer		55.6	51.7
	Total	59	58.5

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description
Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1330	0
Tractor	No	40	84		1330	0
Dozer	No	40		81.7	1330	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	56.5	52.5
Tractor	55.5	51.5
Dozer	53.2	49.2
Total	56.5	56.1

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1745	0
Tractor	No	40	84		1745	0
Dozer	No	40		81.7	1745	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	54.1	50.2
Tractor	53.1	49.2
Dozer	50.8	46.8

Total	54.1	53.7	

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		680	0
Tractor	No	40	84		680	0
Dozer	No	40		81.7	680	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	62.3	58.3
Tractor	61.3	57.3
Dozer	59	55
Total	62.3	61.9

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalia Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		110	0
Tractor	No	40	84		110	0
Dozer	No	40		81.7	110	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	78.2	74.2
Tractor	77.2	73.2
Dozer	74.8	70.8
Total	78.2	77.7

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson Laurelwood Phase 3 Building Construction & Architectural Coating

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	235	0
Backhoe	No	40		77.6	235	0
Tractor	No	40	84		235	0
Compressor (air)	No	40		77.7	235	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Crane		71.6	67.6
Backhoe		67.3	63.3
Tractor		70.6	66.6
Compressor (air)		70.1	66.2
	Total	71.6	71.1

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	1000	0
Backhoe	No	40		77.6	1000	0
Tractor	No	40	84		1000	0
Compressor (air)	No	40		77.7	1000	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	59	55
Backhoe	54.7	50.7
Tractor	58	54
Compressor (air)	57.6	53.6
Total	59	58.5

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description
Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	1330	0
Backhoe	No	40		77.6	1330	0
Tractor	No	40	84		1330	0
Compressor (air)	No	40		77.7	1330	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	56.5	52.5
Backhoe	52.2	48.2
Tractor	55.5	51.5
Compressor (air)	55.1	51.1
Total	56.5	56.1

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	1745	0
Backhoe	No	40		77.6	1745	0
Tractor	No	40	84		1745	0
Compressor (air)	No	40		77.7	1745	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	49.7	41.7
Backhoe	46.7	42.7
Tractor	53.1	49.2
Compressor (air)	46.8	42.8
Total	53.1	51.3

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description

Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	680	0
Backhoe	No	40		77.6	680	0
Tractor	No	40	84		680	0
Compressor (air)	No	40		77.7	680	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	62.3	58.3
Backhoe	58	54.1
Tractor	61.3	57.3
Compressor (air)	60.9	56.9
Total	62.3	61.9

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description

Residences to north along Rosalia Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	110	0
Backhoe	No	40		77.6	110	0

Tractor	No	40	84		110	0
Compressor (air)	No	40		77.7	110	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	78.2	74.2
Backhoe	73.9	69.9
Tractor	77.2	73.2
Compressor (air)	76.7	72.8
Total	78.2	77.7

*Calculated Lmax is the Loudest value.

Phase IV
Model Run Date: 08/09/2022

Receptor #1 – Residences to west along Norman Dr.

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	290
Tractor	1	84.0	40	290
Dozer	1	81.7	40	290

1-Hour Leq: 69.3

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	290
Crane	1	80.6	16	290
Tractor	1	84.0	40	290
Compressor (air)	1	77.7	40	290

1-Hour Leq: 66.9

Receptor #2 – Raynor Park Church/BASIS School

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	65
Tractor	1	84.0	40	65
Dozer	1	81.7	40	65

1-Hour Leq: 82.3

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	65
Crane	1	80.6	16	65
Tractor	1	84.0	40	65
Compressor (air)	1	77.7	40	65

1-Hour Leq: 79.9

Receptor #3 – Residences to south along Dunford Way

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	275
Tractor	1	84.0	40	275
Dozer	1	81.7	40	275

1-Hour Leq: 69.8

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	275
Crane	1	80.6	16	275
Tractor	1	84.0	40	275
Compressor (air)	1	77.7	40	275

1-Hour Leq: 67.4

Receptor #4 – Residences to east across Teal Dr.

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	1280
Tractor	1	84.0	40	1280
Dozer	1	81.7	40	1280

1-Hour Leq: 56.4

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	1280
Crane	1	80.6	16	1280
Tractor	1	84.0	40	1280
Compressor (air)	1	77.7	40	1280

1-Hour Leq: 54.0

Receptor #5 – Residences to northeast along Castleton Terrace

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	230
Tractor	1	84.0	40	230
Dozer	1	81.7	40	230

1-Hour Leq: 71.3

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	230
Crane	1	80.6	16	230
Tractor	1	84.0	40	230
Compressor (air)	1	77.7	40	230

1-Hour Leq: 68.9

Receptor #6 – Residences to north along Rosalia Ave./Bryant Way

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	735
Tractor	1	84.0	40	735
Dozer	1	81.7	40	735

1-Hour Leq: 61.2

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	1	77.6	40	735
Crane	1	80.6	16	735
Tractor	1	84.0	40	735
Compressor (air)	1	77.7	40	735

1-Hour Leq: 58.8

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson Laurelwood Phase 4 Building Construction & Architectural Coating

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		290	0
Dozer	No	40		81.7	290	0
Tractor	No	40	84		290	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	69.7	65.8
Dozer	66.4	62.4
Tractor	68.7	64.8
Total	69.7	69.3

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		65	0
Dozer	No	40		81.7	65	0
Tractor	No	40	84		65	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	82.7	78.7
Dozer	79.4	75.4

Tractor		81.7	77.7
	Total	82.7	82.3

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description
Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		275	0
Dozer	No	40		81.7	275	0
Tractor	No	40	84		275	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	70.2	66.2
Dozer	66.9	62.9
Tractor	69.2	65.2
Total	70.2	69.8

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1280	0
Dozer	No	40		81.7	1280	0
Tractor	No	40	84		1280	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	56.8	52.9
Dozer	53.5	49.5
Tractor	55.8	51.9

Total	56.8	56.4

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		230	0
Dozer	No	40		81.7	230	0
Tractor	No	40	84		230	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	71.7	67.8
Dozer	68.4	64.4
Tractor	70.7	66.8
Total	71.7	71.3

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalia Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		735	0
Dozer	No	40		81.7	735	0
Tractor	No	40	84		735	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	61.7	57.7
Dozer	58.3	54.3
Tractor	60.7	56.7
Total	61.7	61.2

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson - Laurelwood Phase 4 Building Construction & Architectural Coating

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	290	0
Backhoe	No	40		77.6	290	0
Tractor	No	40	84		290	0
Compressor (air)	No	40		77.7	290	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	65.3	57.3
Backhoe	62.3	58.3
Tractor	68.7	64.8
Compressor (air)	62.4	58.4
Total	68.7	66.9

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	65	0
Backhoe	No	40		77.6	65	0
Tractor	No	40	84		65	0
Compressor (air)	No	40		77.7	65	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	78.3	70.3
Backhoe	75.3	71.3
Tractor	81.7	77.7
Compressor (air)	75.4	71.4
Total	81.7	79.9

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description
Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	275	0
Backhoe	No	40		77.6	275	0
Tractor	No	40	84		275	0
Compressor (air)	No	40		77.7	275	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	65.7	57.8
Backhoe	62.8	58.8
Tractor	69.2	65.2
Compressor (air)	62.9	58.9
Total	69.2	67.4

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	1280	0
Backhoe	No	40		77.6	1280	0
Tractor	No	40	84		1280	0
Compressor (air)	No	40		77.7	1280	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	52.4	44.4
Backhoe	49.4	45.4
Tractor	55.8	51.9
Compressor (air)	49.5	45.5
Total	55.8	54

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description

Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	230	0
Backhoe	No	40		77.6	230	0
Tractor	No	40	84		230	0
Compressor (air)	No	40		77.7	230	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	67.3	59.3
Backhoe	64.3	60.3
Tractor	70.7	66.8
Compressor (air)	64.4	60.4
Total	70.7	68.9

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description

Residences to north along Rosalian Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	735	0
Backhoe	No	40		77.6	735	0

Tractor	No	40	84		735	0
Compressor (air)	No	40		77.7	735	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	57.2	49.2
Backhoe	54.2	50.2
Tractor	60.7	56.7
Compressor (air)	54.3	50.3
Total	60.7	58.8

*Calculated Lmax is the Loudest value.

Phase V
Model Run Date: 08/09/2022

Receptor #1 – Residences to west along Norman Dr.

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	1200
Excavator	1	80.7	40	1200
Tractor	1	84.0	40	1200
Front End Loader	1	79.1	40	1200
Backhoe	1	77.6	40	1200
Dozer	1	81.7	40	1200

1-Hour Leq: 58.3

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	1200
Generator	1	80.6	50	1200
Crane	1	80.6	16	1200
Welder	1	74.0	40	1200
Tractor	1	84.0	40	1200
Front End Loader	1	79.1	40	1200
Compressor (air)	1	77.7	40	1200

1-Hour Leq: 57.6

Receptor #2 – Raynor Park Church/BASIS School

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	860
Excavator	1	80.7	40	860
Tractor	1	84.0	40	860
Front End Loader	1	79.1	40	860
Backhoe	1	77.6	40	860
Dozer	1	81.7	40	860

1-Hour Leq: 61.2

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	860
Generator	1	80.6	50	860
Crane	1	80.6	16	860
Welder	1	74.0	40	860
Tractor	1	84.0	40	860
Front End Loader	1	79.1	40	860
Compressor (air)	1	77.7	40	860

1-Hour Leq: 60.5

Receptor #3 – Residences to south along Dunford Way

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	730
Excavator	1	80.7	40	730
Tractor	1	84.0	40	730
Front End Loader	1	79.1	40	730
Backhoe	1	77.6	40	730
Dozer	1	81.7	40	730

1-Hour Leq: 62.6

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	730
Generator	1	80.6	50	730
Crane	1	80.6	16	730
Welder	1	74.0	40	730
Tractor	1	84.0	40	730
Front End Loader	1	79.1	40	730
Compressor (air)	1	77.7	40	730

1-Hour Leq: 61.9

Receptor #4 – Residences to east across Teal Dr.

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	65
Excavator	1	80.7	40	65
Tractor	1	84.0	40	65
Front End Loader	1	79.1	40	65
Backhoe	1	77.6	40	65
Dozer	1	81.7	40	65

1-Hour Leq: 83.6

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	65
Generator	1	80.6	50	65
Crane	1	80.6	16	65
Welder	1	74.0	40	65
Tractor	1	84.0	40	65
Front End Loader	1	79.1	40	65
Compressor (air)	1	77.7	40	65

1-Hour Leq: 83.0

Receptor #5 – Residences to northeast along Castleton Terrace

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	25
Excavator	1	80.7	40	25
Tractor	1	84.0	40	25
Front End Loader	1	79.1	40	25
Backhoe	1	77.6	40	25
Dozer	1	81.7	40	25

1-Hour Leq: 91.9

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	25
Generator	1	80.6	50	25
Crane	1	80.6	16	25
Welder	1	74.0	40	25
Tractor	1	84.0	40	25
Front End Loader	1	79.1	40	25
Compressor (air)	1	77.7	40	25

1-Hour Leq: 91.3

Receptor #6 – Residences to north along Rosalia Ave./Bryant Way

Construction Phase: Grading

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Grader	1	85.0	40	900
Excavator	1	80.7	40	900
Tractor	1	84.0	40	900
Front End Loader	1	79.1	40	900
Backhoe	1	77.6	40	900
Dozer	1	81.7	40	900

1-Hour Leq: 60.8

Construction Phase: Building Construction / Architectural Coating

Equipment	Quantity	*Noise Level at 50 Feet (dBA L_{max})*	*Estimated Usage Factor (%)*	Distance to Receptor (ft)
Backhoe	4	77.6	40	900
Generator	1	80.6	50	900
Crane	1	80.6	16	900
Welder	1	74.0	40	900
Tractor	1	84.0	40	900
Front End Loader	1	79.1	40	900
Compressor (air)	1	77.7	40	900

1-Hour Leq: 60.1

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson Laurelwood Phase 5 Grading

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1200	0
Excavator	No	40		80.7	1200	0
Tractor	No	40	84		1200	0
Front End Loader	No	40		79.1	1200	0
Backhoe	No	40		77.6	1200	0
Dozer	No	40		81.7	1200	0

Results

	Calculated (dBA)	
Equipment	*Lmax	Leq
Grader	57.4	53.4
Excavator	53.1	49.1
Tractor	56.4	52.4
Front End Loader	51.5	47.5
Backhoe	50	46
Dozer	54.1	50.1
Total	57.4	58.3

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		860	0
Excavator	No	40		80.7	860	0
Tractor	No	40	84		860	0
Front End Loader	No	40		79.1	860	0

Backhoe	No	40		77.6	860	0
Dozer	No	40		81.7	860	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	60.3	56.3
Excavator	56	52
Tractor	59.3	55.3
Front End Loader	54.4	50.4
Backhoe	52.8	48.9
Dozer	57	53
Total	60.3	61.2

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description

Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		730	0
Excavator	No	40		80.7	730	0
Tractor	No	40	84		730	0
Front End Loader	No	40		79.1	730	0
Backhoe	No	40		77.6	730	0
Dozer	No	40		81.7	730	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	61.7	57.7
Excavator	57.4	53.4
Tractor	60.7	56.7
Front End Loader	55.8	51.8
Backhoe	54.3	50.3
Dozer	58.4	54.4
Total	61.7	62.6

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description
Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		65	0
Excavator	No	40		80.7	65	0
Tractor	No	40	84		65	0
Front End Loader	No	40		79.1	65	0
Backhoe	No	40		77.6	65	0
Dozer	No	40		81.7	65	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	82.7	78.7
Excavator	78.4	74.5
Tractor	81.7	77.7
Front End Loader	76.8	72.9
Backhoe	75.3	71.3
Dozer	79.4	75.4
Total	82.7	83.6

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		25	0
Excavator	No	40		80.7	25	0
Tractor	No	40	84		25	0
Front End Loader	No	40		79.1	25	0
Backhoe	No	40		77.6	25	0
Dozer	No	40		81.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq

Grader		91	87
Excavator		86.7	82.8
Tractor		90	86
Front End Loader		85.1	81.2
Backhoe		83.6	79.6
Dozer		87.7	83.7
	Total	91	91.9

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalia Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		900	0
Excavator	No	40		80.7	900	0
Tractor	No	40	84		900	0
Front End Loader	No	40		79.1	900	0
Backhoe	No	40		77.6	900	0
Dozer	No	40		81.7	900	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Grader		59.9	55.9
Excavator		55.6	51.6
Tractor		58.9	54.9
Front End Loader		54	50
Backhoe		52.5	48.5
Dozer		56.6	52.6
	Total	59.9	60.8

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/9/2022
Case Description: Peterson - Laurelwood Phase 5 Building Construction & Architectural Coating

---- Receptor #1 ----

Description
Residences to west along Norman Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	1200	0
Backhoe	No	40		77.6	1200	0
Backhoe	No	40		77.6	1200	0
Generator	No	50		80.6	1200	0
Crane	No	16		80.6	1200	0
Welder / Torch	No	40		74	1200	0
Tractor	No	40	84		1200	0
Front End Loader	No	40		79.1	1200	0
Backhoe	No	40		77.6	1200	0
Compressor (air)	No	40		77.7	1200	0

Results

	Calculated (dBA)	
Equipment	*Lmax	Leq
Backhoe	50	46
Backhoe	50	46
Backhoe	50	46
Generator	53	50
Crane	52.9	45
Welder / Torch	46.4	42.4
Tractor	56.4	52.4
Front End Loader	51.5	47.5
Backhoe	50	46
Compressor (air)	50.1	46.1
Total	56.4	57.6

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description
Raynor Park Church/BASIS School

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	860	0
Backhoe	No	40		77.6	860	0
Backhoe	No	40		77.6	860	0
Generator	No	50		80.6	860	0
Crane	No	16		80.6	860	0
Welder / Torch	No	40		74	860	0
Tractor	No	40	84		860	0
Front End Loader	No	40		79.1	860	0
Backhoe	No	40		77.6	860	0
Compressor (air)	No	40		77.7	860	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	52.8	48.9
Backhoe	52.8	48.9
Backhoe	52.8	48.9
Generator	55.9	52.9
Crane	55.8	47.9
Welder / Torch	49.3	45.3
Tractor	59.3	55.3
Front End Loader	54.4	50.4
Backhoe	52.8	48.9
Compressor (air)	53	49
Total	59.3	60.5

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description

Residences to south along Dunford Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	730	0
Backhoe	No	40		77.6	730	0
Backhoe	No	40		77.6	730	0
Generator	No	50		80.6	730	0
Crane	No	16		80.6	730	0
Welder / Torch	No	40		74	730	0

Tractor	No	40	84		730	0
Front End Loader	No	40		79.1	730	0
Backhoe	No	40		77.6	730	0
Compressor (air)	No	40		77.7	730	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	54.3	50.3
Backhoe	54.3	50.3
Backhoe	54.3	50.3
Generator	57.3	54.3
Crane	57.3	49.3
Welder / Torch	50.7	46.7
Tractor	60.7	56.7
Front End Loader	55.8	51.8
Backhoe	54.3	50.3
Compressor (air)	54.4	50.4
Total	60.7	61.9

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description

Residences to east along Teal Dr.

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Generator	No	50		80.6	65	0
Crane	No	16		80.6	65	0
Welder / Torch	No	40		74	65	0
Tractor	No	40	84		65	0
Front End Loader	No	40		79.1	65	0
Backhoe	No	40		77.6	65	0
Compressor (air)	No	40		77.7	65	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	75.3	71.3

Backhoe	75.3	71.3
Backhoe	75.3	71.3
Generator	78.4	75.3
Crane	78.3	70.3
Welder / Torch	71.7	67.7
Tractor	81.7	77.7
Front End Loader	76.8	72.9
Backhoe	75.3	71.3
Compressor (air)	75.4	71.4
Total	81.7	83

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description
Residences to northeast along Castleton Terrace

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	25	0
Backhoe	No	40		77.6	25	0
Backhoe	No	40		77.6	25	0
Generator	No	50		80.6	25	0
Crane	No	16		80.6	25	0
Welder / Torch	No	40		74	25	0
Tractor	No	40	84		25	0
Front End Loader	No	40		79.1	25	0
Backhoe	No	40		77.6	25	0
Compressor (air)	No	40		77.7	25	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	83.6	79.6
Backhoe	83.6	79.6
Backhoe	83.6	79.6
Generator	86.7	83.6
Crane	86.6	78.6
Welder / Torch	80	76
Tractor	90	86
Front End Loader	85.1	81.2
Backhoe	83.6	79.6
Compressor (air)	83.7	79.7
Total	90	91.3

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description
Residences to north along Rosalian Ave./Bryant Way

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	900	0
Backhoe	No	40		77.6	900	0
Backhoe	No	40		77.6	900	0
Generator	No	50		80.6	900	0
Crane	No	16		80.6	900	0
Welder / Torch	No	40		74	900	0
Tractor	No	40	84		900	0
Front End Loader	No	40		79.1	900	0
Backhoe	No	40		77.6	900	0
Compressor (air)	No	40		77.7	900	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Backhoe	52.5	48.5
Backhoe	52.5	48.5
Backhoe	52.5	48.5
Generator	55.5	52.5
Crane	55.4	47.5
Welder / Torch	48.9	44.9
Tractor	58.9	54.9
Front End Loader	54	50
Backhoe	52.5	48.5
Compressor (air)	52.6	48.6
Total	58.9	60.1

*Calculated Lmax is the Loudest value.

Phase 1			Norman Ave. Residences
Ref=	Reference vibration level (PPV)		
RefD=	Reference distance for Reference vibration level (Feet)		
	Vibration PPV		
	Ref=	0.089	Based on type of equipment
	RefD=	25	
	D=	850	Distance from equipment to sensitive receptor
	Equip=	0.000	
	Annoyance VdB		
	Ref=	87	Based on type of equipment
	RefD=	25	
	D=	850	Distance from equipment to sensitive receptor
	Equip=	41	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 1 Raynor Park Church/BASIS School

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	265	Distance from equipment to sensitive receptor
Equip=	0.003	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	265	Distance from equipment to sensitive receptor
Equip=	56	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 1 Dunford Way Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	65	Distance from equipment to sensitive receptor
Equip=	0.021	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	65	Distance from equipment to sensitive receptor
Equip=	75	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 1 Teal Dr. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	70	Distance from equipment to sensitive receptor
Equip=	0.019	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	70	Distance from equipment to sensitive receptor
Equip=	74	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 1 Castleton Terrace Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	275	Distance from equipment to sensitive receptor
Equip=	0.002	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	275	Distance from equipment to sensitive receptor
Equip=	56	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 1 Rosalia Ave. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	800	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	800	Distance from equipment to sensitive receptor
Equip=	42	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 2			Norman Ave. Residences
Ref=	Reference vibration level (PPV)		
RefD=	Reference distance for Reference vibration level (Feet)		
	Vibration PPV		
	Ref=	0.089	Based on type of equipment
	RefD=	25	
	D=	25	Distance from equipment to sensitive receptor
	Equip=	0.089	
	Annoyance VdB		
	Ref=	87	Based on type of equipment
	RefD=	25	
	D=	25	Distance from equipment to sensitive receptor
	Equip=	87	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 2 Raynor Park Church/BASIS School

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	470	Distance from equipment to sensitive receptor
Equip=	0.001	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	470	Distance from equipment to sensitive receptor
Equip=	49	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 2 Dunford Way Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	700	Distance from equipment to sensitive receptor
Equip=	0.001	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	700	Distance from equipment to sensitive receptor
Equip=	44	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 2 Teal Dr. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	70	Distance from equipment to sensitive receptor
Equip=	0.019	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	70	Distance from equipment to sensitive receptor
Equip=	74	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 2 Castleton Terrace Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	25	Distance from equipment to sensitive receptor
Equip=	0.089	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	25	Distance from equipment to sensitive receptor
Equip=	87	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 2 Rosalia Ave. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	25	Distance from equipment to sensitive receptor
Equip=	0.089	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	25	Distance from equipment to sensitive receptor
Equip=	87	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 3			Norman Ave. Residences
Ref=	Reference vibration level (PPV)		
RefD=	Reference distance for Reference vibration level (Feet)		
	Vibration PPV		
	Ref=	0.089	Based on type of equipment
	RefD=	25	
	D=	235	Distance from equipment to sensitive receptor
	Equip=	0.003	
	Annoyance VdB		
	Ref=	87	Based on type of equipment
	RefD=	25	
	D=	235	Distance from equipment to sensitive receptor
	Equip=	58	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 3 Raynor Park Church/BASIS School

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	1000	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	1000	Distance from equipment to sensitive receptor
Equip=	39	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 3 Dunford Way Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	1330	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	1330	Distance from equipment to sensitive receptor
Equip=	35	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 3 Teal Dr. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	1745	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	1745	Distance from equipment to sensitive receptor
Equip=	32	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 3 Castleton Terrace Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	680	Distance from equipment to sensitive receptor
Equip=	0.001	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	680	Distance from equipment to sensitive receptor
Equip=	44	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 3 Rosalia Ave. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	110	Distance from equipment to sensitive receptor
Equip=	0.010	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	110	Distance from equipment to sensitive receptor
Equip=	68	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 4			Norman Ave. Residences
Ref=	Reference vibration level (PPV)		
RefD=	Reference distance for Reference vibration level (Feet)		
	Vibration PPV		
	Ref=	0.089	Based on type of equipment
	RefD=	25	
	D=	290	Distance from equipment to sensitive receptor
	Equip=	0.002	
	Annoyance VdB		
	Ref=	87	Based on type of equipment
	RefD=	25	
	D=	290	Distance from equipment to sensitive receptor
	Equip=	55	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 4 Raynor Park Church/BASIS School

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	65	Distance from equipment to sensitive receptor
Equip=	0.021	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	65	Distance from equipment to sensitive receptor
Equip=	75	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 4 Dunford Way Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	275	Distance from equipment to sensitive receptor
Equip=	0.002	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	275	Distance from equipment to sensitive receptor
Equip=	56	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 4 Teal Dr. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	1280	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	1280	Distance from equipment to sensitive receptor
Equip=	36	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 4 Castleton Terrace Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	230	Distance from equipment to sensitive receptor
Equip=	0.003	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	230	Distance from equipment to sensitive receptor
Equip=	58	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 4 Rosalia Ave. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	735	Distance from equipment to sensitive receptor
Equip=	0.001	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	735	Distance from equipment to sensitive receptor
Equip=	43	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 5			Norman Ave. Residences
Ref=	Reference vibration level (PPV)		
RefD=	Reference distance for Reference vibration level (Feet)		
	Vibration PPV		
	Ref=	0.089	Based on type of equipment
	RefD=	25	
	D=	1200	Distance from equipment to sensitive receptor
	Equip=	0.000	
	Annoyance VdB		
	Ref=	87	Based on type of equipment
	RefD=	25	
	D=	1200	Distance from equipment to sensitive receptor
	Equip=	37	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 5 Raynor Park Church/BASIS School

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	860	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	860	Distance from equipment to sensitive receptor
Equip=	41	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 5 Dunford Way Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	730	Distance from equipment to sensitive receptor
Equip=	0.001	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	730	Distance from equipment to sensitive receptor
Equip=	43	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 5 Teal Dr. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	65	Distance from equipment to sensitive receptor
Equip=	0.021	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	65	Distance from equipment to sensitive receptor
Equip=	75	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 5 Castleton Terrace Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	25	Distance from equipment to sensitive receptor
Equip=	0.089	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	25	Distance from equipment to sensitive receptor
Equip=	87	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Phase 5 Rosalia Ave. Residences

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	900	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	900	Distance from equipment to sensitive receptor
Equip=	40	

Peak demolition vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

APPENDIX 3.16-1

Focused VMT Analysis

Hexagon Transportation Consultants, Inc.

Memorandum

Date:	July 14th, 2022
To:	Santa Clara Unified School District
From:	Brett Walinski, T.E
Subject:	Focused VMT Analysis for the Peterson Middle School, Laurelwood Elementary School, and District Farm Master Plan

Hexagon Transportation Consultants, Inc. has completed this focused vehicle-miles traveled (VMT) analysis for the proposed Peterson Middle School, Laurelwood Elementary School, and District Farm Master Plan. The proposed Master Plan would include various improvements to Peterson Middle School (such as new sports fields) as well as the relocation of Laurelwood Elementary School to the nearby Peterson Middle School site (to be located at the southeast portion of the site adjacent to Teal Drive and Dunford Way). The project would not expand the enrollment capacity of either school. This memorandum also provides trip generation data for the full occupancy of Laurelwood Elementary school and daily traffic count information on Dunford Way to assist the project environmental team with noise and air quality analyses.

VMT Analysis

Senate Bill (SB) 743 has changed the primary metric for identifying transportation impacts under the California Environmental Quality Act (CEQA). Whereas the metric had been vehicle level of service (LOS), it's now daily vehicle-miles travelled (VMT). Because the project is public school-specific, the Santa Clara Unified School District (SCUSD), as the lead agency for this CEQA document, is responsible for approving its own analysis. However, the District has not adopted VMT guidelines. Accordingly, the State Office of Planning and Research (OPR) VMT guidelines were used for this analysis, with supporting evidence provided from the City of Sunnyvale VMT guidelines. This analysis includes VMT screening analyses for two sites associated with the proposed Master Plan – Peterson Middle School and the relocation of Laurelwood Elementary School to Dunford Way and Teal Drive (adjacent to Peterson Middle School).

Peterson Middle School

The proposed Master Plan does not propose an increase in enrollment for the Peterson Middle School site. The proposed uses at this location are supportive of the existing student population, including new loading and parking improvements, track and field improvements, classroom modernization, new baseball and softball fields, new tennis courts, and a new nature center. The proposed changes would not materially change the vehicular trip generation or VMT from the site, and therefore, would not result in any adverse significant impacts to VMT.

Relocation of Laurelwood Elementary School to Dunford Way and Teal Drive

As part of the project, Laurelwood Elementary School, which is currently located east of Teal Drive near Inverness Way, would be relocated approximately 700 feet to the north to a parcel that is bounded by Dunford Way to the south and Teal Drive to the east. In the past, the relocation site (at Teal Drive/Dunford Way) has been occupied by SCUSD offices, Sunnyvale

Soccer Complex, DRC Montessori School, and Patrick Henry Intermediate School. With the relocation of Laurelwood Elementary School, its enrollment capacity would not change and remain 800 students.

State guidelines allow for screening of projects that are local serving. According to OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*, for local-serving retail projects "…lead agencies generally may presume such development creates a less-than-significant transportation impact." This finding is based on the observation that, "By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT." OPR guidelines also recognize the right of lead agencies to define local-serving uses:

> "Because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local-serving."

The new Laurelwood Elementary School would be located within the City of Sunnyvale. The *City of Sunnyvale Transportation Analysis Guidelines for Vehicle Miles Traveled and Local Transportation Analysis* recognize the benefits of local serving uses. It states:

> "… when evaluating a potential development that is neither residential nor office (employment), land uses such as retail generate vehicular trips to support residential neighborhoods and/or office developments. Therefore, if a project does not specifically fall into the residential, office or retail category, assessing the land use for its ability to reduce VMT by convenient location will help define the appropriate classification for VMT analysis. In other words, if a land use can be classified as an errand or daily activity, it may be classified as retail for the purpose of VMT analysis."

The proposed Laurelwood Elementary School would be local serving, supportive of residential uses, and a daily activity. In addition, City of Sunnyvale guidelines state that schools that are "…shown to primarily serve the immediate community can be considered local serving uses, and therefore can be potentially screened out from further VMT analysis." The guidelines also specifically reference that "Schools not regulated by a Public School District" may not qualify for a VMT exemption if they are expected to attract from a broader area, implying that schools regulated by the District are exempt. Laurelwood Elementary School, upon relocation, would continue to serve the students from the surrounding neighborhoods, and would not attract students from a broader area.

Aside from public schools being a local-serving use, the proposed relocation would be in the same neighborhood as the existing school. The distance between the existing site and proposed site is approximately 700 feet. Both locations would share access to Teal Drive. Most of the existing trips headed to and from the existing Laurelwood Elementary School would therefore use the same neighborhood streets to access the relocated school. At the existing Laurelwood Elementary School, upon exit from the existing student loading area on Teal Drive, most loading traffic is currently routed northbound on Teal Drive towards the proposed relocation site. Thus, the proposed relocation project would not significantly alter travel patterns outside of the immediate vicinity of the school sites.

Last, there are existing uses on the relocation site (at Dunford Way/Teal Drive), which would be replaced by the relocated Laurelwood Elementary School. The existing site was originally occupied by Patrick Henry Intermediate School and then subsequently occupied by other institutional and school uses (such as the DCR Montessori School). Thus, even if the District did not choose to relocate Laurelwood Elementary School to this site, the District would retain the right to re-occupy the Dunford Way/Teal Drive site with other school or institutional-related uses.

Reoccupation of the Dunford Way/Teal Drive site could generate substantial traffic on the surrounding streets, potentially without requiring CEQA clearance.

When all of these factors are considered, it can be concluded that the proposed relocation of Laurelwood Elementary School would not result in adverse impacts to VMT. This conclusion is based on evidence that (1) OPR guidelines allow for VMT exemptions for local-serving uses and acknowledge that lead agencies have the authority to define which uses are local-serving, (2) City of Sunnyvale VMT guidelines imply that public schools are local-serving, (3) the proposed school relocation would continue to serve the surrounding neighborhoods and would not draw student traffic from a broader area, (4) the relocated school would be only 700 feet away from the existing school and would not significantly alter travel patterns outside of the immediate school vicinity, and (5) the existing Dunford Way/Teal Drive buildings could potentially be reoccupied by school and institutional uses without additional CEQA clearance.

Laurelwood Elementary School Trip Generation

The trip generation estimates for the proposed 800-student Laurelwood Elementary School were based on rates obtained from the Institute of Transportation Engineers' (ITE) publication *Trip Generation*, 11th Edition. Because ITE data for public elementary schools include surveys from sites which have student bussing, the trip generation rates used for this analysis were based on ITE data presented for private schools (which mostly do not offer bussing).[1] Based on prior studies conducted by Hexagon in the Bay Area, private school rates are more representative of actual traffic generation for Bay Area public elementary schools.

It was estimated that Laurelwood Elementary School would generate 3,288 trips per day, with 808 trips occurring during the AM commute hour (7:00 AM to 9:00 AM), 480 trips occurring during the school PM peak hour (2:00 PM to 4:00 PM), and 208 trips occurring during the PM commute hour (4:00 PM and 6:00 PM). These trip generation estimates are shown in Table 1. The "peak hour" and "commute hour" represent the highest 60-minute interval of traffic for a given time period (for example, the highest 60-minute period between 4:00 PM and 6:00 PM).

Table 1
Trip Generation Estimates

	ITE			Daily		AM Commute Hour				School PM Peak Hour				PM Commute Hour			
Land Use	Code	Size		Rate[1]	Trips	Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
Elementary School	530	800	students	4.11	3,288	1.01	808	452	356	0.60	480	226	254	0.26	208	96	112

[1]based on rates from Institute of Transportation Engineers (ITE), *Trip Generation*, 11th Edition

It should be noted that most, if not all, of the trips described above are already on the roadway network during the school year. So while these trips may be "new" from the relocated Laurelwood Elementary School at the Dunford Way/Teal Drive site loading areas, a significant portion of them occur now on Dunford Way, Teal Drive and other neighborhood streets from the existing Laurelwood Elementary School

[1] Note that use of private school rates were for trip generation purposes only and intended to represent a conservative estimate of public school driveway traffic. These rates would apply to the existing Laurelwood Elementary School site as well. Once relocated, the distribution and assignment of Laurelwood Elementary School traffic would remain consistent with that of a public school.

Dunford Way Traffic Counts

Daily traffic counts were conducted on Dunford Way to establish baseline street traffic levels without any school activity. The traffic counts were conducted on Tuesday, June 28th through Thursday, June 30th. The counts showed that, on average, Dunford Way, adjacent to the Dunford Way/Teal Drive school site, currently averages 2,480 daily trips. The counts are included in the attached Appendix.

Conclusions

The VMT impacts of the proposed project were evaluated in accordance with State of California OPR guidelines published in its *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Based on this analysis, it was determined that the project would result in a less than significant impact to vehicle-miles traveled. In addition, it was estimated that the relocated Laurelwood Elementary School would generate 3,288 trips per day. However, most, if not all, of these trips are already on the roadway network during the school year. So while these trips may be "new" from the relocated Laurelwood Elementary School at the Dunford Way/Teal Drive site loading areas, a significant portion of them occur now on Dunford Way, Teal Drive and other neighborhood streets from the existing Laurelwood Elementary School.

Appendix

All Traffic Data Services, LLC

www.alltrafficdata.net

Site Code: 1
Dunford Way W.O Teal Dr

Start Time	28-Jun-22 Tue	EB	WB							Total
12:00 AM		4	3							7
01:00		6	1							7
02:00		1	0							1
03:00		0	0							0
04:00		0	0							0
05:00		6	5							11
06:00		14	24							38
07:00		38	52							90
08:00		65	**125**							**190**
09:00		**76**	105							181
10:00		53	78							131
11:00		67	72							139
12:00 PM		77	95							172
01:00		59	71							130
02:00		78	98							176
03:00		93	93							186
04:00		90	69							159
05:00		**131**	**135**							**266**
06:00		93	89							182
07:00		90	79							169
08:00		58	61							119
09:00		42	29							71
10:00		19	13							32
11:00		4	10							14
Total		1164	1307							2471
Percent		47.1%	52.9%							
AM Peak	-	09:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	76	125	-	-	-	-	-	-	190
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	131	135	-	-	-	-	-	-	266

All Traffic Data Services, LLC

www.alltrafficdata.net

Site Code: 1
Dunford Way W.O Teal Dr

Start Time	29-Jun-22 Wed	EB	WB							Total
12:00 AM		3	4							7
01:00		4	3							7
02:00		2	1							3
03:00		1	0							1
04:00		1	0							1
05:00		4	2							6
06:00		19	18							37
07:00		32	48							80
08:00		73	**136**							**209**
09:00		**74**	80							154
10:00		62	77							139
11:00		68	77							145
12:00 PM		82	101							183
01:00		65	88							153
02:00		70	84							154
03:00		91	86							177
04:00		87	105							192
05:00		97	**132**							**229**
06:00		82	118							200
07:00		**109**	96							205
08:00		67	69							136
09:00		27	28							55
10:00		11	8							19
11:00		8	12							20
Total		1139	1373							2512
Percent		45.3%	54.7%							
AM Peak	-	09:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	74	136	-	-	-	-	-	-	209
PM Peak	-	19:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	109	132	-	-	-	-	-	-	229

All Traffic Data Services, LLC

www.alltrafficdata.net

Site Code: 1
Dunford Way W.O Teal Dr

Start Time	30-Jun-22 Thu	EB	WB							Total
12:00 AM		6	4							10
01:00		0	3							3
02:00		2	0							2
03:00		2	1							3
04:00		1	0							1
05:00		4	8							12
06:00		20	20							40
07:00		35	48							83
08:00		79	**117**							**196**
09:00		**90**	85							175
10:00		53	70							123
11:00		77	83							160
12:00 PM		78	108							186
01:00		82	86							168
02:00		73	83							156
03:00		84	87							171
04:00		86	88							174
05:00		**98**	**120**							**218**
06:00		87	98							185
07:00		83	78							161
08:00		71	55							126
09:00		30	33							63
10:00		11	19							30
11:00		10	6							16
Total		1162	1300							2462
Percent		47.2%	52.8%							
AM Peak	-	09:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	90	117	-	-	-	-	-	-	196
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	98	120	-	-	-	-	-	-	218
Grand Total		3465	3980							7445
Percent		46.5%	53.5%							
ADT		ADT 2,482		AADT 2,482						