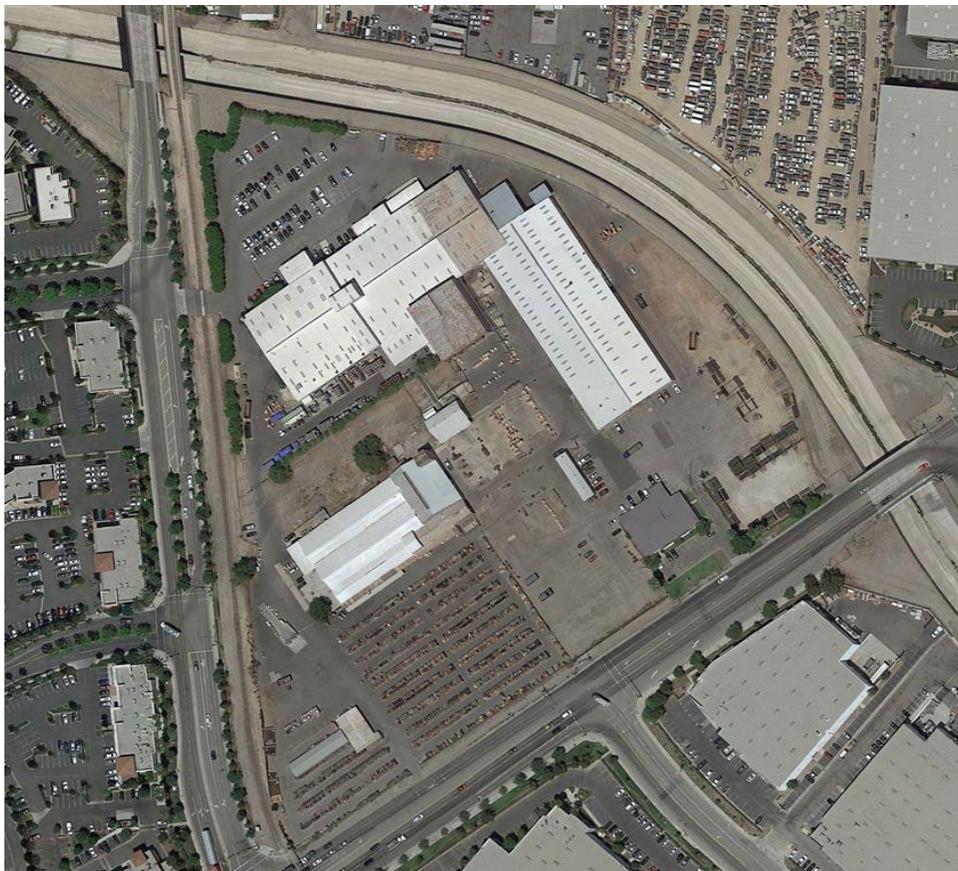


CLOW VALVE COMPANY

**RISK-BASED APPROVAL MODIFICATION
APPLICATION 40 CFR 761.61 (c)(1)
1375 MAGNOLIA AVENUE, CORONA, CA**





**RISK-BASED APPROVAL
MODIFICATION
APPLICATION 40 CFR
761.61 (c)(1)**

1375 MAGNOLIA AVENUE, CORONA, CA
CLOW VALVE COMPANY

U.S. EPA ID: CATSCA102301

VERSION 1

PROJECT NO.: ECA04.20150013 TASK 3
DATE: APRIL 2022

WSP

WSP.COM

SIGNATURES

PREPARED BY

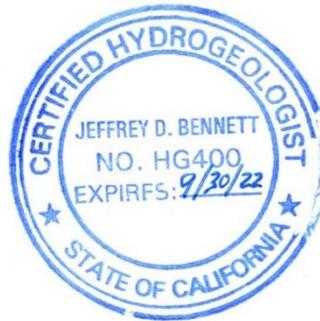


Rebecca Sundilson
Lead Consultant, Environmental Scientist

REVIEWED BY



Jeffrey Bennett, PG, CHG, CEM
Sr. Lead Consultant, Geologist



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F	OPERATIONS & MAINTENANCE PLAN

1 EXECUTIVE SUMMARY, INTRODUCTION, AND CERTIFICATION

WSP USA (WSP), formerly EarthCon Consultants CA, Inc (EarthCon), has prepared this *Risk-Based Approval Application 40 CFR 761.61 (c)(1)* (Application) for the Clow Valve Company (Clow), a McWane, Inc company, property located at 1375 Magnolia Avenue, Corona, CA (Site) (see Figures 1 and 2). This application was previously submitted by EarthCon on April 9, 2019 and subsequently conditionally approved by the United States Environmental Protection Agency (U.S. EPA) in a letter dated April 23, 2019. However, additional contamination was discovered requiring a modification of the approved remedy. Also, the Site is scheduled for redevelopment and was recently purchased by B9 Magnolia Owner, LLC. Therefore, the previous Application required revisions as provided in the following sections.

1.1 EXECUTIVE SUMMARY

U.S. EPA Site ID: CATSCA102301

Site Address: 1375 Magnolia Avenue in Corona, California (Site)

Owner Name and Contact Information:

- Project Facilitator & Previous Owner: Clow Valve Company (Clow), a Division of McWane. Larry Bowers, Corporate Environmental Compliance Director (256-388-0001)
- Current Owner: B9 Magnolia Owner, LLC., Britton T. Winterer, Vice President (Signatory)/Gary Edwards, Principal of Western Realco (949-720-3788) (Point of Contact)

Consultant Name and Contact Information: WSP – Jeff Bennett, Sr. Lead Consultant, Geologist (714-743-0482).

1.2 INTRODUCTION

Brief Summary of PCB Impacts: Concrete (maximum 1.1 mg/kg – See Figure 4) and soil (maximum 2,220 mg/kg – See Figure 5). Site-wide evidence of PCB impacted material is illustrated in Figure 8.

Description of Proposed Clean-up Option: A combined remedial approach that includes engineering control (capping system), isolated hot spot excavations at former sample locations AOC7-B1 and S-60, and institutional controls (land use covenant (LUC), soil management plan (SMP), and Operations and Maintenance Plan (O&M Plan)) for potential future re-development and/or soil disturbing activities. The highest concentrations of PCBs to be left on-Site outside the capping system and underneath the capping system are 3 mg/kg and 290 mg/kg, respectively.

Proposed Schedule: Implementation of the capping system and isolated hot spot excavation will not commence until approval of the application has been received. Based on the proposed redevelopment schedule, activities at the Site are estimated to

begin Summer of 2023, with the understanding that the hot spots at AOC7-B1 and S-60 (see Section 5.2) will be removed earlier.

Brief Description of Agency Interest in Project: Initially, Clow prepared a Corrective Measures Study (CMS) to be implemented at the Site under the supervision of the Department of Toxic Substances Control (DTSC). However, due to the presence of polychlorinated biphenyls (PCBs) at AOC3, AOC6, and AOC7, additional Site assessment activities were conducted in July 2018, October 2018, and January 2019 under the oversight of the U.S. EPA (see Section 5). The results were initially summarized in the initial Application (EarthCon, 2019). Upon receipt of the approval letter from the U.S. EPA, the DTSC approved the CMS in a letter dated May 16, 2019. Therefore, the *Corrective Measures Implementation Workplan* (Workplan) identifying the installation of a capping system at AOC1/AOC5 and institutional controls was implemented in the Summer of 2021. During implementation of the Workplan, additional PCB impacts were identified, requiring additional soil investigation activities under the oversight of the U.S. EPA. Based on the results from the additional investigations (See Section 5) and the proposed future redevelopment activities, a revision to the previous Application was required.

1.3 CERTIFICATION

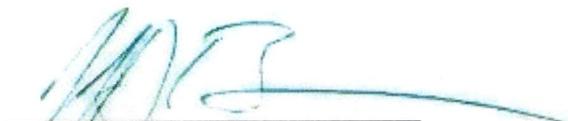
"We certify that sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the clean-up site, are on file electronically with McWane, Inc. and WSP and will be available for U.S EPA inspection upon completion of Site redevelopment activities."



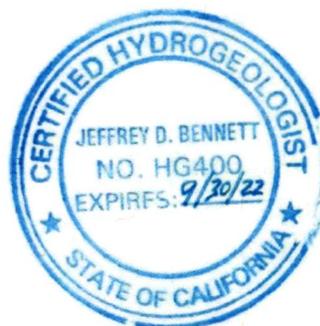
Mark Willett, Vice President/General Manager (Clow)

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Britt Winterer
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Britton T. Winterer, Vice President (B9 Magnolia Owner, LLC.)



Jeff Bennett, Sr. Lead Consultant, Geologist (WSP)



"Under civil and criminal penalties of law for making or submission of false or fraudulent statements or representations (18 U.S.C.1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete."



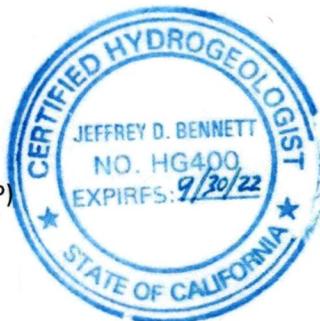
Mark Willett, Vice President/General Manager (Clow)

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Britton T. Winterer, Vice President (B9 Magnolia Owner, LLC.)



Jeff Bennett, Sr. Lead Consultant, Geologist (WSP)

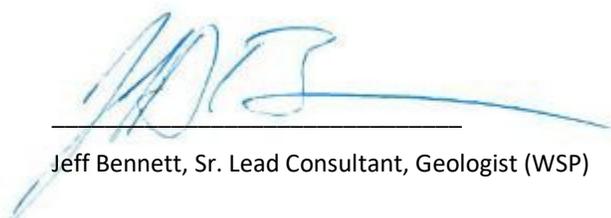


1.3 CERTIFICATION

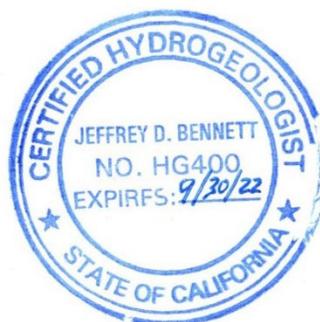
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Mark Willett, Vice President/General Manager (Clow)

Britton T. Winterer, Vice President (B9 Magnolia Owner, LLC.)



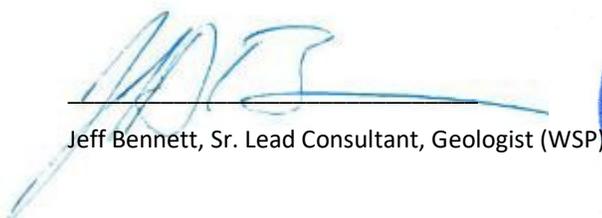
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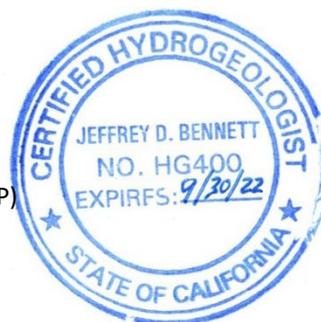
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Mark Willett, Vice President/General Manager (Clow)

Britton T. Winterer, Vice President (B9 Magnolia Owner, LLC.)



Jeff Bennett, Sr. Lead Consultant, Geologist (WSP)



2 SITE DESCRIPTION

2.1 SURROUNDING LAND USES

The Site is located in an area zoned as mixed use, commercial, and industrial (City of Corona Zoning and Specific Plans, August 2014).

2.2 CURRENT LAND USES/ON-SITE BUILDINGS

The Site is located to the northeast of the intersection of Magnolia Avenue and El Camino Avenue, at 1375 Magnolia Avenue in Corona, California. The Site is identified as Riverside County Assessor Parcel Number 107-030-022-3 and covers approximately 16 acres. Approximately 60% of the property is designed to be used for machining, product finishing and testing, and product storage. The remaining 40% includes asphalt-paved parking areas and unpaved areas. Unused foundry buildings, small offices and open areas were formerly leased to other tenants (two other McWane Divisions, McWane Ductile-Utah and Tyler Union). As of the writing of this report, only the Anaco Division of McWane has current operations at the Site.

The Site was originally developed for the production of iron pipes and connections by American Foundry in approximately 1950 (AESI, 2002). In 1960, Rich Manufacturing of Los Angeles acquired the property and moved their iron pipe manufacturing business to the Corona location, adding additional structures in 1967 for the machine shop and brass foundry (AESI, 2002). Clow Valve, a jobber of wrought iron pipe and other foundry products as early as 1878, acquired Rich Manufacturing Company of Corona in 1972. This acquisition added the wet barrel fire hydrant to Clow Valve's product line of waterworks products. In 1985, McWane, Inc. purchased all of Clow Corporation's stock and Clow became a wholly owned subsidiary and eventually operating division of McWane¹.

2.3 PROPOSED FUTURE LAND USES

Once the Site has been officially vacated and the appropriate permits have been obtained by B9 Magnolia Owner, LLC., demolition of the current on-Site buildings/structures will occur. The Site will be developed, in accordance with City of Corona approved plans, with the majority of the Site capped with concrete (6-inches thick or greater) and/or with concrete tilt-up buildings that also have a concrete footprint (6-inches thick or greater) and perimeter landscaping. Any landscaping within the proposed cap area will be underlaid by a 10-inches of compacted soil. The intended use of the property is for warehouse and distribution.

2.4 HYDROLOGY & DEPTH TO GROUNDWATER

The hydrogeology was identified in the report titled *Addendum to Preliminary Endangerment Assessment and Facility Investigation* (Environmental Support Technologies, July 24, 2003) and excerpts are provided below:

Groundwater depths in the vicinity of the Site have been reported to range from 23-28 ft bgs and from 42-47 ft bgs (AESI, 2002), presumably as perched layers related to clay layers. The regional aquifer is reported to start at 124 ft bgs. Recovery

¹ <http://www.clowvalve.com/about-us/company-history>

depths of groundwater in Corona municipal wells in the early 2000's were approximately 190-193 ft bgs. In addition, a westerly gradient was observed following the overall direction of discharge from the Temescal River to the Santa Ana River. Groundwater was also estimated to be approximately 45 ft bgs traveling into the gravely Temescal Wash downgradient of the Site. Groundwater beneath the Site was encountered at approximately 47 ft bgs in coarse granular material composed of sand and gravel.

In addition, the groundwater beneath the Site is identified as Temescal Hydrologic Sub Area within the Middle Santa Ana River Basin with beneficial use designations including municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PROC)².

2.5 PROXIMITY TO SURFACE WATER & STORMWATER RUNOFF

The active channel for the Temescal Wash bounds the northeast portion of the Site and flows to the west as a cemented Riverside County Flood Control channel. The Site stormwater runoff generally flows to the west and north boundaries of the Site. Stormwater discharging from the Site is managed in accordance with the *Storm Water Pollution Prevention Plan*.

2.6 TYPICAL WEATHER PATTERNS & CLIMATE

The City of Corona typically has a warm climate with mild winters and hot summers.

2.7 SITE GEOLOGY

2.7.1 REGIONAL GEOLOGY

The Site is located in Riverside County within the Corona-Elsinore Trough, a graben-like-valley that extends from Corona to Elsinore. The Corona-Elsinore Trough is located within the Peninsular Ranges geomorphic province. The Santa Ana Mountains and the Elsinore Fault Zone bound the Corona-Elsinore Trough on the southwest. The Gavilan Hills, part of the Perris Block, bounds the Corona-Elsinore Trough on the northeast. The Site is situated on the northeast edge of the alluvial fan surface that slopes gently from the Santa Ana Mountains, extending northeasterly through Corona toward Temescal Wash. Temescal Wash bounds the northeast portion of the Site.

2.7.2 LOCAL AND SITE GEOLOGY

Surficial materials in the vicinity of the Site are comprised of Holocene Older and Younger alluvium and bedrock. The younger alluvium consists of unconsolidated sand, gravel, and silt associated with the intermittent Temescal Wash. The active channel for the Temescal wash bounds the northeast portion of the Site and flows to the west in a cemented flood channel. The older alluvium consists of semi-consolidated buff to dark brown, sand, gravel, and silt associated with the alluvial deposits upgradient (south) of the Site. The bedrock consists of siltstone units possibly associated with the Miocene-Puente formation

² http://waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2016/Chapter_3_Feb_2016.pdf

and weathered, hydrothermally altered volcanic and intrusive rocks associated with the Santiago Peak Volcanics. The siltstone is exposed in the hills located immediately south of the Site at 880 feet above mean sea level (msl). Crystalline bedrock mapped as the monzogranite of Cajalco pluton crops out in the foothills approximately 2 miles southeast of the Site.

Previous consultants investigating surrounding properties identified layers of gravelly sand (1-5 feet below ground surface [ft bgs]), sand and silty clay (20-30 ft bgs), gravelly sand (25-40 ft bgs) and clay 55-60 ft bgs). Drilling refusal has occurred several times at approximately 20 ft bgs indicating the presence of dense consolidated silty clay and gravelly material at that depth. Multiple dense, laterally discontinuous clay lenses have been reported to occur between 40-50 ft bgs, 62-81 ft bgs, and 90-103 ft bgs (AESI, 2002). Investigations conducted on-Site encountered sand and gravel mixtures with refusal on cobbles occurring commonly (EST, 2006; Fero, 2006b).

2.8 SOURCES OF PCBS & HISTORIC OPERATIONS

Sources of PCBs were identified from a slight transformer oil leak observed in 1994, which resulted in repair of the transformer and a portion of the concrete pad (approximately 8 ft by 2 ft) being removed. Subsequently two drums of soil were excavated and disposed of off-Site. In 1997, the transformers were replaced with new transformers to accommodate the upgraded high voltage distribution system. Oil containing PCBs was removed from the transformer casings and incinerated off-Site, the steel casings were landfilled. This area was identified as AOC7.

Subsequent Site investigations under U.S. EPA oversight identified PCB contamination at AOC6 related to the operations associated with the former asphalt dip tank. In addition, PCB soil contamination was also identified throughout a majority of the northern portion of the Site and is assumed to be associated with historic fill operations of waste foundry sand and other foundry related materials contaminated with oil containing PCBs.

See Figures 3 through 8 and Section 5 for further details.

2.9 OTHER CONTAMINANTS ON-SITE

In addition to PCBs, other contaminants identified in the shallow subsurface on-Site mainly include metals with some isolated areas reporting TPH.

See Figures 3 through 8 and Section 5 for further information on Site characterization.

2.10 OTHER SITE CONDITIONS

Due to responses on the Community Survey from local Tribal groups, the DTSC required that a records search be conducted through the California Historical Resources Information System (CHRIS). After submitting the request on October 11, 2017, the CHRIS Information Officer stated that two cultural resource properties have been recorded within the boundaries of the project area in a letter dated October 17, 2017. Given the ambiguity of many cultural resource records, Clow had opted to have ground disturbing activities conducted during implementation of the CMS monitored by a cultural resources professional in lieu of conducting a constraints analysis prior to those activities. However, as part of the redevelopment permitting process, the new owner was required to do a cultural resources evaluation of the Site. This review identified the records in question to be historical structures associated with a railroad. A cultural resources review in 2011 verified that the structures were no longer in existence so no further action is required. See Appendix A.

2.11 SENSITIVE ENVIRONMENTS & RECEPTORS

The closest residential land use consists of a mobile home park located beyond Temescal Wash approximately 0.1 miles north of the project area on-Site.

2.12 BRIEF SUMMARY OF SITE CONCEPTUAL MODEL

The historic transformer leak and historic Site fill operations (presence of waste foundry sand and other foundry related materials contaminated with PCB oil) were identified as the sources of the PCB impacted materials. Migration pathways evaluated included soil and wind erosion with potential exposure pathways including inhalation, dermal, and/or ingestion.

3 DESCRIPTION OF PCB “CLEAN-UP SITE”

Under oversight of the U.S. EPA, additional field investigation conducted in 2018, 2019, and 2021 determined the PCB “Clean-up Site” as the following:

- AOC3 – Water Pressure Test Area
- AOC6 – Former Asphalt Dip Tank
- AOC7 – Transformer Area 1
- AOC9 –Former Test-Pond (filled)
- Northern portion of the Site

Further details on the Site characterization and determination of the AOCs and northern portion of the Site associated with the PCB “Clean-up Site” are provided in Section 5. These locations and the associated PCB results are illustrated on Figures 3 through 8.

In addition to the above onsite efforts, U.S. EPA directed McWane to investigate potential off-site PCB migration onto property to the east and west of the Site owned by Riverside County and BSNF Railroad, respectively. Initial sampling under U.S. EPA’s direction has indicated PCB contamination at low levels on the Riverside County Flood control property. Work on this property is currently paused to allow all parties to focus on the on-site work. As discussed with its U.S. EPA Project Manager, McWane will schedule a conference call with U.S. EPA to develop a path forward on the Riverside County property within 30 days of approval of this application and McWane will work expeditiously to bring this issue to closure. Given the involvement of the Riverside County Flood Control as the property owner, an exact timeline for resolution of this issue is not possible.

On the BNSF Railroad property, U.S. EPA has approved a sampling plan and McWane is working through BNSF Railroad’s access agreement process to allow sampling on their property. Upon gaining access approval from BNSF Railroad, McWane will complete the sampling and report the results to U.S. EPA within 45 days.

Given the involvement of the Riverside County Flood Control and BNSF Railroad, establishing a defined timeline for resolution of the off-site issues is problematic but, barring protracted legal issues, McWane expects to be able to bring these issues to resolution within one year.

4 PROPOSED RISK-BASED PCB CLEAN-UP LEVELS

As noted in the U.S. EPA conditional approval of the previous Application in 2019, the clean-up level for the 1375 Magnolia [on-property] areas of the Site is 15 mg/kg. This applies to the PCBs left in place, which will not be covered by the proposed TSCA cap. As discussed in a conference call with the U.S. EPA and subsequent email dated January 7, 2021, the revision to the original Application and associated clean-up efforts were identified as a modification to the design plans to increase the area of the TSCA cap and hot spot removals for two isolated exceedances at AOC7-B1 (inside the footprint of the cap) and S-60 (outside the footprint of the cap) (minimum of 10 ft x10 ft x 1 ft deep) outside of the proposed TSCA cap footprint. See Section 5 for further detail of the hot spot exceedances.

5 SITE CHARACTERIZATION

In July 2018, the initial soil and concrete sampling investigation was conducted to assess the potential presence of PCB impacted materials at various areas of concern throughout the Site including AOC3, AOC5, AOC6, AOC7, AOC8, and AOC9. Results from the initial investigation were summarized in the report titled *PCB Investigation* (EarthCon, August 24, 2018). AOC5, AOC-8, and AOC9 did not report PCB concentrations above the associated laboratory reporting limits, with the exception of on sample at AOC-8 with total PCB concentrations reported at 0.161 mg/kg. Therefore, upon review of this data the U.S. EPA determined that further investigation was only necessary at AOC3 and AOC6 within the shallow subsurface. In addition, the U.S. EPA required further investigation at AOC7 to assess potential PCB impacted soil at a greater depth. Therefore, additional soil and concrete investigations were conducted in October 2018, January 2019, and February 2019. As noted previously, during the implementation of the Workplan, PCB concentrations were reported in the shallow subsurface in the northern portion of the Site. In support of future Site redevelopment, further soil investigation activities were conducted under the oversight of the U.S. EPA in October 2021 and December 2021. Further details are provided in the following sections.

5.1 SAMPLING & ANALYSIS RATIONALE

The scope of work associated with the October 2018 soil sampling investigation was approved in an email from the U.S. EPA on October 10, 2018 and is summarized below:

- AOC3 – Three (3) additional soil samples (AOC3-B4, AOC3-B5, and AOC3-B6) were collected around the previous AOC3-B1 sample at 0.5 feet below ground surface (ft bgs).
- AOC6 - Three (3) additional soil samples (AOC6-B2, AOC6-B3, and AOC6-B4) were located near the former asphalt dip tank perimeter at 0.5 ft bgs.
- AOC7 – Former soil sample location AOC7-B1 reported elevated levels of PCBs and the samples were only collected to 5 ft bgs due to reported accessibility issues and subsurface utilities. EarthCon collected a sample 6.5 ft bgs. Due to refusal a sample could not be collected at the proposed total depth of 15 ft bgs.

Results were discussed with the U.S. EPA during a conference call on December 3, 2018

Based on the analytical results, it was determined that further investigation was necessary at AOC6. A 10 ft grid was proposed around the initial 4 sample locations surrounding the former asphalt dip tank, with the first step out samples analyzed for PCBs and the subsequent row of samples archived pending analytical results. This scope was approved by U.S. EPA in an email dated December 6, 2018 stating that the archived soil samples should be analyzed if the first row of grid samples reported PCB concentrations at or above 2 ppm.

Soil sample locations required concrete coring in order to obtain access to the subsurface soil. A hand auger was advanced to the proposed depths to collect each soil sample.

The grid sampling investigation at AOC6 was conducted on January 8 and 9, 2019. A total of 16 soil samples (AOC6-B5 through AOC6-B20) were collected. On February 19, 2019, concrete samples were subsequently collected from five of the grid sample locations.

Concrete samples were collected in accordance with the U.S. EPA Region 1 guidance document titled *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls* (2011). Both soil and concrete samples were analyzed for the following:

- Moisture content in accordance with ASTM D-2216 (M)
- PCBs in accordance with U.S. EPA Method 8082A/3540C (soxhlet extraction)

Supplemental soil sampling investigations in October and December 2021 included an additional sixty (60) soil sample locations (S-1 through S-60) across the Site. Hand-augers were used to initially advance the borings to a maximum depth of 3ft or 5ft. Instances where further delineation of the foundry sand and/or reported PCB concentrations was needed, an air knife and/or direct push rig was utilized to collect samples at further depths. Initial results from the October 2021 investigation (Samples S-1 through S-36) were provided to the U.S. EPA in a document titled *PCB Investigation Report* (EarthCon, 2021). Based on the future Site redevelopment and the proposed extension of the capped area, additional samples (S-37 through S-60) were advanced along the southern and southeastern portions of the Site.

Samples were collected under a strict chain of custody protocol and were submitted to a California-State Certified Laboratory, on a normal turn-around time.

Sampling equipment was decontaminated in accordance with the guidance using a 2 rinse system followed by a hexane wipe. The rinseate was subsequently stored in a 55-gallon steel drum on-Site pending off-Site disposal.

5.2 ANALYTICAL RESULTS

October 2018 Sampling Investigation

Soil samples detected concentrations of Aroclor 1260 in samples from AOC3 and Aroclors 1248 and 1260 in samples from AOC6 and AOC7. The remaining Aroclors were not detected at concentrations above the associated laboratory reporting limits. Detected total PCB concentrations ranged as follows: 0.092 mg/kg to 1.3 mg/kg in AOC3, 8.0 mg/kg to 48 mg/kg in AOC6, and 16 mg/kg in AOC7. The majority of the samples from AOC6 were below 10 mg/kg with 48 mg/kg as an outlier. For risk purposes, the U.S. EPA had previously discussed that concentrations at or above 15 ppm would be a concern. AOC3 reported concentrations were significantly below this criterion. In addition, due to the fact that the depth to water is approximately 40 ft bgs at the Site and co-solvents were not present, the 16 mg/kg concentration reported in AOC7 at 6.5 ft bgs shows that significant vertical migration is not present. Upon review of the analytical results, the U.S. EPA agreed that further evaluation at AOC3 and AOC7 was not warranted; however, further evaluation in AOC6 was required.

January 2019 Sampling Investigation

The first row of grid soil samples surrounding the former asphalt dip tank at AOC6 reported total PCB concentrations ranging from 3.3 mg/kg to 16 mg/kg. At the direction of U.S. EPA the second row of grid samples were analyzed since concentrations were above 2 ppm. The second row of grid samples reported total PCB concentrations ranging from 1.3 mg/kg to 9.0 mg/kg. As illustrated on Figure 3, the highest total PCB concentrations were reported in sample locations extending northeast from the original elevated concentration of 48 mg/kg in AOC6-B3. In a northeast trajectory, total PCB concentrations decrease to 16 mg/kg in AOC6-B10 and further decrease to 9.0 mg/kg in AOC6-B17. Once the U.S. EPA had returned from furlough, this data was provided in a summary email on February 5, 2019. A total of 5 locations were also identified for potential concrete sampling pending discussion of results. On February 13, 2019, the U.S. EPA responded via email stating that the soil results were evaluated using ProUCL and the 95% UCL of the mean was approximately 13 ppm. This value is below the U.S. EPA's threshold for industrial workers (15 ppm) and is covered by concrete. The U.S. EPA agreed that the concrete results would help determine whether or not the concrete could be left in place as a cap in conjunction with a future deed restriction.

February 2019 Sampling Investigation

A total of 5 concrete samples (AOC6-B3, AOC6-B5, AOC6-B10, AOC6-B13, and AOC6-B20) were collected. The majority of samples reported concentrations of Aroclor 1248, Aroclor 1254, and Aroclor 1260. Total PCB concentrations ranged from 0.25 mg/kg to 1.1 mg/kg.

October 2021 and December 2021

Generally, the aroclors reported include Aroclor-1248, Aroclor-1254, Aroclor-1260 with a few occurrences of Aroclor-1016. The highest total PCB concentrations were reported in the 1 ft bgs samples with the maximum concentration reported at 290 mg/kg. A total of 10 locations exceeded the Site clean-up criteria of 15 mg/kg; however, the majority of those exceedances are located beneath the area identified to be capped during the redevelopment, with the exception of one isolated concentration reported at the southeast corner of the property at 37 mg/kg (S-60). Details of the December 2021 event were discussed in and subsequently provided to the U.S.EPA via email on January 7, 2021. The U.S. EPA then recommended an update to the Application to include the 2021 analytical results and an update of the project scope to include expansion of the capped area and a limited excavation at the isolated hot spot excavation in the vicinity of S-60.

The analytical results are summarized in Table 1, Table 2, and Figures 3 through 8. Laboratory reports for the 2021 sampling investigations are provided in Appendix B.

5.3 VERTICAL & HORIZONTAL EXTENT OF CONTAMINATION

The majority of the PCB impacted materials are located in the northern portion of the Site with an isolated location reported along the southern property boundary. The highest concentrations are typically at surface-1 ft bgs, with concentrations decreasing with depth. PCB concentrations are generally consistent with the presence of foundry sand, particularly within the northern portion of the Site extending as deep as 7 ft bgs.

See Figures 4 through 8.

5.4 DATA GAPS

As mentioned previously, Clow worked with the U.S. EPA to address concerns regarding potential data gaps. Therefore, Clow implemented additional Site investigations to further delineate the potential presence of PCBs at the Site. As noted in Section 5.1, these subsequent investigations were conducted in July 2018, October 2018, January 2019, February 2019, October 2021, and December 2021.

6 APPLICATION & CLEAN-UP PLAN

Section 1.2 discusses the combined remedial approach that includes engineering control (capping system), isolated hot spot excavations at former sample locations AOC7-B1 and S-60, and institutional controls (LUC, SMP, and O&M Plan) for potential future re-development and/or soil disturbing activities.

6.1 CAPPING SYSTEM

As noted previously, future redevelopment activities will result in a majority of the Site being covered by concrete pavement (minimum 6-inches) and/or building footprint which will also have a minimum of 6-inches of concrete and perimeter landscaping with a minimum of 10-inches of compacted soil within the designated cap area. This will serve as a TSCA cap covering PCB concentrations ranging up to 290 mg/kg (S-31) after the removal of the 2,200 mg/kg hot spot (AOC7-B1) and will protect industrial workers at the Site from exposure to PCB concentrations in the underlying soil. The TSCA cap is identified as the concrete and/or building footprints within dashed line as illustrated in the design plans provided in Appendix C.

The installation of the TSCA cap and associated redevelopment will require Site wide grading. To ensure that PCB contaminated soils are not graded or otherwise placed outside the proposed cap area, the grading plans will clearly indicate the boundaries of the cap and note that soil within this area will only be graded or otherwise managed within in the proposed cap area. The grading plans will also note that any temporary stockpile of soil from the cap area will remain within the cap area and will only be maintained for the duration necessary to allow for efficient grading. The applicants will take appropriate measures, during planning and construction, to ensure that these conditions are adhered to. Such measures will include preconstruction briefings with all contractors involved in grading and regularly scheduled inspections by the design engineer or owner's representative during grading activities. Following completion of the Site wide grading program, any soil that is removed from within the perimeter of the designated TSCA cap during future Site activities will be managed and disposed under the assumption that it contains PCBs at a concentration at or above 50 ppm, in accordance with the associated requirements discussed in Section 8.

6.2 HOT-SPOT EXCAVATIONS

Historical soil sampling investigations identified PCB concentrations at approximately 2,200 mg/kg at sample location AOC7-B1 within the area of the proposed capping system. However, through conversations with the U.S. EPA, it was determined that during future construction related activities it would be impractical to isolate and leave this material in-place. Therefore, material from this area will be removed prior to implementation of grading activities. Additionally, a second hot-spot excavation will be conducted from an isolated area outside of the cap identified as sample location S-60. Therefore, the associated scope of work is described in the following subsections.

6.2.1 PRE-FIELD ACTIVITIES

The General Contractor will coordinate with the utility company, vendors, and the tenant to facilitate the disconnection of the Site electrical supply source. In addition, a geophysical survey will be conducted to ensure that the underground utilities in the work areas have been identified and proper clearances have been completed. The locations proposed for subsurface work will be identified using white paint, and Underground Service Alert (USA) will be subsequently notified at least 72-hours prior to initiation of field activities.

In accordance with the Site SMP, the DTSC is required to be notified a minimum of 30 days prior to any soil disturbing activities. WSP will also notify the U.S. EPA a minimum of 30 days before excavation of PCB impacted soil.

Excavation activities will be conducted in accordance with the Site Health and Safety Plan (HASP). The scope of work and elements of the HASP will be discussed daily during the tail-gate safety meetings.

6.2.2 FIELD ACTIVITIES

The hot-spot excavation areas will be marked in the field and identified by a 10 ft by 10 ft grid centered on the original sample location. Based on the initial sample results, the approximate total depth of the excavations will be advanced to 6.5 ft bgs and 1.5 ft bgs at AOC7-B1 and S-60, respectively. The excavated material from each excavation will then be placed in separate containers (eg. covered roll-off bins) awaiting transport off-Site (see Section 8).

Once the material has been removed from the hot-spot excavation, subsequent confirmation samples will be collected every 10 linear feet along the sidewall and one floor sample at the center of the 10 ft by 10 ft grid. Additionally, the sidewall samples will be collected vertically, one per every 5 ft bgs. Therefore, the number of confirmation samples to be collected are as follows:

Hot Spot Excavation	Total Depth (bgs)	Sidewall Samples	Floor Samples	Total Samples
AOC7-B1	6.5	8	1	9
S-60	2	4	1	5

Confirmation soil samples will be analyzed for the following:

- PCBs in accordance with U.S. EPA Method 8082A/3540C (soxhlet extraction)
- Moisture content in accordance with ASTM D-2216(M)

Should initial results report PCB concentrations of 15 mg/kg or greater, additional soil will be excavated, and subsequent confirmation samples will be collected.

Sampling equipment will be decontaminated in between each sample collection in accordance with the U.S. EPA Guidance using a 2 rinse system followed by a hexane wipe. The rinseate will be stored in a 55-gallon steel drum on-Site pending disposal.

Each container of excavated soil and drums of decon rinseate will each be sampled with the appropriate number of samples per each container volume using U.S. EPA SW-846 Chapter Nine. Each sample will be analyzed as follows:

- PCBs in accordance with U.S. EPA Method 8082A/3540C (soxhlet extraction)
- Moisture content in accordance with ASTM D-2216(M), as applicable
- Title 22 CAM 17 Metals in accordance with U.S. EPA Methods 6010B/7471A
- Total Petroleum Hydrocarbons in accordance with U.S. EPA Method 8015B
- Volatile Organic Compounds (VOCs) in accordance with U.S. EPA Method 8260/5035

- Semi-VOCs in accordance with U.S. EPA Method 8270C

Each sample container will be labeled with the following information, as appropriate, at the time of sampling:

- Sample Number
- Sample Date
- Container Designation
- Sample Location
- Time of Sampling
- Preservatives, if any
- Sample Type
- Handling Precautions
- Requested Analyses
- Laboratory Name
- Initials of Sampling Personnel

Samples will be managed under a strict chain of custody protocol and will be submitted to a California-State Certified laboratory.

6.2.3 WASTE MANAGEMENT

The disposal of PCBs at concentrations of 50 ppm or greater, if encountered, will be conducted in accordance with 40 CFR 761 subpart D. Depending on the characterization of PCB-impacted materials, subsequent transportation will likely be to a RCRA hazardous waste landfill with U.S. EPA TSCA approval disposal facility (or to a TSCA landfill), as discussed below in Section 8.

6.2.4 BACKFILL

After confirmation samples have determined that the hot-spot material has been removed, the excavations will be backfilled in accordance with the DTSC document entitled Information Advisory Clean Imported Fill Material (DTSC, 2001). Soil removal activities within the cap area will require 30-day notification to the DTSC. Therefore, an approval letter from the U.S. EPA for the revised Application will be provided to the DTSC at that time. Additionally, the soil removal activities associated with the hot-spot excavation will be conducted in accordance with the Site's current SMP.

6.3 INSTITUTIONAL CONTROLS

In addition to the cap, current and future receptors at the Site will be protected in accordance with the future land use restrictions as discussed further in Section 10.0.

7 DECONTAMINATION OF TOOLS, EQUIPMENT, & MOVABLE EQUIPMENT

Best management practices associated with erosion and sediment control will be implemented in accordance with the City of Corona approved grading plans for the Site. This will include, but will not be limited to, vehicle cleaning and/or stabilized entrance/exits. In addition, soil disturbing activities will also be in accordance with the SMP.

8 WASTE DISPOSAL

It is the goal of the applicant to maximize on-Site re-use of soil for grading purposes. However, in the event deleterious materials that are unsuitable for use in redevelopment activities are encountered, such materials will be managed appropriately.

Should future redevelopment activities require disposal of the PCB impacted soil or other materials, the materials will be managed in accordance with the SMP and 40 CFR 761.61. Excavated PCB-impacted materials will be loaded directly into labeled containers and securely covered pending transportation. Should stockpiles be warranted, they will be stored on-site (while covered) for the minimum time frame required to facilitate the appropriate off-Site disposal. Materials characterized with PCB concentrations at or above 50 ppm will be transported off-Site for disposal at a RCRA hazardous waste landfill with U.S. EPA TSCA approval (or to a TSCA landfill). Materials characterized with PCB concentrations below 50 ppm will be managed and transported to either the Soil Safe facility in Adelanto, CA, the Waste Management facility in Kettleman Hills, CA, or another appropriate facility in accordance with 40 CFR 761.50(a)(6) and applicable federal, state, and local laws.

9 CLEAN-UP REPORT

The previously submitted CMI Report was also submitted to the U.S. EPA to satisfy the requirement of the PCB Clean-up Report associated with the PCBs remaining under the cap in AOC6 and AOC7. However, the U.S. EPA has requested that the results from the soil sampling investigations conducted in 2021 be combined with the implementation of the revised Application. Therefore, the 2021 soil investigation results, the hot-spot excavations, and activities associated with the extension of the TSCA cap will be provided in a subsequent *PCB Clean-up Report* upon completion of activities. The *PCB Clean-up Report* may include, but is not limited to, the following:

- Introduction
- Site Background
- Summary of Previous Investigations
- Nature and Extent of Contamination
- Clean-up Level Determination
- Summary of grading and capping activities
- Land use restrictions (Land Use Covenant, Soil Management Plan, and Operations and Maintenance Plan)
- Conclusion
- References

10 LAND USE RESTRICTIONS

The current LUC was recorded to restrict the future use of the entire Site to commercial/industrial uses appropriate for the human health risk hazard and to prohibit Site development for residential and sensitive receptor uses. The current LUC was recorded on November 18, 2021, and was based on the initial application; however, upon completion of redevelopment activities the LUC will be amended to incorporate the details associated with the new TSCA cap and any other requirements imposed by the USEPA.

As identified in the CMIWP, the SMP (EarthCon, 2021) will provide guidance for management of soils in the event excavation or soil disturbance is required during future on-Site activities such as building construction, utility installation, etc. The SMP will facilitate effective future project implementation and compliance with applicable laws. The SMP includes procedures for health and safety; engineering controls; stockpile management; and characterization and disposal of excess soil, if necessary. Once redevelopment activities have been completed, the SMP will be updated to summarize the redevelopment activities, reflect the current Site layout with the concrete cap and buildings, and identify the new property owners and contact information. In addition, post-redevelopment soil disturbance within the footprint of the cap will be handled as greater than 50 ppm PCB in accordance with TSCA requirements.

The O&M Plan (EarthCon, 2021) was prepared to establish a set of procedures for LUC-required inspection of the Site and an annual inspection and maintenance of the asphalt cover (cap). Additionally, the O&M Plan was prepared in order to maintain compliance with the LUC and applicable State and Federal Hazardous Waste Control laws and regulations. The goal of the O&M Plan is to prevent contact with contaminated soil, reduce water infiltration, erosion, and dispersion of soil contaminated with constituents of concern. In addition, the O&M Plan will be utilized to protect on-Site personnel, contractors, personnel conducting O&M activities, and/or visitors. Similar to the LUC, the O&M Plan was prepared in accordance with requirements of the CMI Workplan and associated implementation activities. However, upon completion of redevelopment activities, the O&M Plan will be amended to similar to the SMP summarizing the redevelopment activities, identifying the current Site layout with the concrete cap and buildings, identifying the new property owners and contact information. In addition, the routine inspections will be revised to incorporate the details associated with operations and maintenance requirements associated with the concrete cap as opposed to the existing asphalt cap.

The current LUC, SMP, and O&M Plan are provided in Appendix D, Appendix E, and Appendix F, accordingly.

11 REFERENCES

- Advanced Environmental Services, Inc. (AESI). 2002. Clow Valve Company Preliminary Endangerment Assessment and Facility Workplan 1375 Magnolia Avenue, Corona, California 91719. March 28, 2002.
- Department of Toxic Substances Control (DTSC). 2001. Information Advisory Clean Imported Fill Material.
- DTSC. 2002. Corrective Action Consent Agreement. Docket HWCA: SRPD 00/01 SCC-4208. March 6, 2002.
- DTSC. 2005. Public Involvement Fact Sheet. Clow Valve Company, Corona. April 2005.
- EarthCon Consultants CA, Inc. (EarthCon). 2021. PCB Soil Investigation Report. October 29, 2021.
- EarthCon. 2019. Supplemental PCB Investigations. Clow Valve Company, 1375 Magnolia Avenue, Corona, CA. March 6, 2019.
- EarthCon. 2019. Risk-Based Application Approval 761.61 (c)(1). Clow Valve Company, 1375 Magnolia Avenue, Corona, CA. April 9, 2019
- EarthCon. 2021. Soil Management Plan. June 21, 2021.
- EarthCon. 2021. Operations and Maintenance Plan. June 18, 2021.
- Environmental Support Technologies, Inc (EST). 2003. Addendum to Preliminary Endangerment Assessment and Facility Investigation Workplan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. July 24, 2003.
- EST. 2004. Preliminary Endangerment Assessment and Facility Investigation Workplan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. June 21, 2004.
- EST. 2005. Interim Measures Work Plan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. January 12, 2005.
- EST. 2005. Preliminary Summary of Site Assessment Results and Proposed Further Assessment. Clow Valve Company, 1375 magnolia Avenue, Corona, California. November 29, 2005.
- The Fehling Group. 2017. Health Risk Assessment. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. October 26, 2017.
- Fero Environmental Engineering, Inc (Fero). 2006. Further Investigation Workplan. Clow Valve Company. 1375 magnolia Avenue, Corona, California 93446. July 27, 2006.
- Fero. 2006. Report of Findings. Clow Valve Company, 1375 Magnolia Avenue, Corona, California 93446. December 18, 2006.
- Fero. 2007. Letter Response from Meeting of February 2, 2007. Clow Valve Company. 1375 Magnolia Avenue, Corona, California 93446. EPA ID Number CAD063115133. February 8, 2007.
- Fero. 2009. Corrective Measures Workplan. Report of Findings. Clow Valve Company, 1375 Magnolia Avenue, Corona, California 93446. EPA ID Number CAD063115133. March 2009.
- U.S. EPA. SW-846 Chapter Nine. <https://www.epa.gov/hw-sw846/chapter-nine-sw-846-compendium-sampling-plans#:~:text=This%20chapter%20addresses%20the%20development,custody%20for%20such%20a%20plan.>

TABLE 1
SOIL AND CONCRETE ANALYTICAL RESULTS - 2018 2019
CLOW VALVE

SAMPLE ID	DATE	MOISTURE	AROCLOR-1016	AROCLOR-1221	AROCLOR-1232	AROCLOR-1242	AROCLOR-1248	AROCLOR-1254	AROCLOR-1260	AROCLOR-1262	AROCLOR-1268	TOTAL PCB AROCLORS
		%	mg/kg									
SOIL												
AOC3-B1-.5	7/10/2018	17	ND	ND	ND	ND	ND	0.35	5.2	ND	ND	5.55
AOC3-B1-1	7/10/2018	19	ND	ND	ND	ND	0.047 J	ND	0.46	ND	ND	0.507
AOC3-B1-2	7/10/2018	21	ND	ND	ND	ND	0.13	ND	1.1	ND	ND	1.23
AOC3-B4-.5	10/19/2018	13	ND	ND	ND	ND	ND	ND	0.092	ND	ND	0.092
AOC3-B5-.5	10/19/2018	6.5	ND	ND	ND	ND	ND	ND	1.3	ND	ND	1.3
AOC3-B6-.5	10/19/2018	7.7	ND	ND	ND	ND	ND	ND	1	ND	ND	1
AOC5-B1-1	7/18/2018	6.2	ND	ND	ND	ND	0.076	ND	0.28	ND	ND	0.356
AOC5-B1-3	7/18/2018	3.4	ND	ND	ND	ND	0.033 J	ND	ND	ND	ND	0.033 J
AOC6-B1-.5	7/10/2018	20	ND	ND	ND	ND	3.0	ND	2.1	ND	ND	5.1
AOC6-B1-3	7/18/2018	8.6	ND	ND	ND	ND	0.11	ND	0.29	ND	ND	0.40
AOC6-B1-5	7/18/2018	5.5	ND	ND	ND	ND	0.14	0.14	0.15	ND	ND	0.43
AOC6-B2-.5	10/19/2018	8.9	ND	ND	ND	ND	4.6	ND	3.4	ND	ND	8.0
AOC6-B2-6	10/19/2018	7.6	ND	ND	ND	ND	5.2	ND	4.4	ND	ND	9.5
AOC6-B3-.5	10/19/2018	1.6	ND	ND	ND	ND	46	ND	1.8	ND	ND	48
AOC6-B4-.5	10/19/2018	6.5	ND	ND	ND	ND	3.7	ND	4.2	ND	ND	7.9
AOC6-B5-.5	1/9/2019	7.2	ND	ND	ND	ND	2.8	ND	4.5	ND	ND	7.3
AOC6-B6-.5	1/9/2019	6.4	ND	ND	ND	ND	2.1	ND	1.3	ND	ND	3.3
AOC6-B7-.5	1/9/2019	6.5	ND	ND	ND	ND	3.5	ND	3.3	ND	ND	6.7
AOC6-B8-.5	1/9/2019	6.3	ND	ND	ND	ND	0.74	ND	1.7	ND	ND	2.4
AOC6-B9-.5	1/8/2019	8.0	ND	ND	ND	ND	6.1	ND	5.5	ND	ND	12
AOC6-B10-.5	1/8/2019	7.3	ND	ND	ND	ND	8.7	ND	7.1	ND	ND	16
AOC6-B11-.5	1/8/2019	8.8	ND	ND	ND	ND	3.6	ND	4.2	ND	ND	7.8
AOC6-B12-.5	1/8/2019	7.1	ND	ND	ND	ND	1.5	ND	3.1	ND	ND	4.6
AOC6-B13-.5	1/9/2019	7.0	ND	ND	ND	ND	4.3	ND	4.1	ND	ND	8.4
AOC6-B14-.5	1/9/2019	5.9	ND	ND	ND	ND	3.8	ND	2.3	ND	ND	6.1
AOC6-B15-.5	1/8/2019	6.8	ND	ND	ND	ND	3.2	ND	3.7	ND	ND	6.8
AOC6-B16-.5	1/8/2019	7.0	ND	ND	ND	ND	3.0	ND	3.0	ND	ND	6.0
AOC6-B17-.5	1/8/2019	7.4	ND	ND	ND	ND	5.7	ND	3.3	ND	ND	9.0
AOC6-B18-.5	1/8/2019	9.0	ND	ND	ND	ND	0.98	ND	1.2	ND	ND	2.2
AOC6-B19-.5	1/8/2019	4.4	ND	ND	ND	ND	0.58	ND	0.68	ND	ND	1.3
AOC6-B20-.5	1/8/2019	6.8	ND	ND	ND	ND	4.3	ND	2.8	ND	ND	7.1
AOC7-B1-6.5	10/19/2018	13	ND	ND	ND	ND	14	ND	2.6	ND	ND	16
AOC9-B3-3	7/10/2018	20	ND									
AOC9-B3-10	7/18/2018	3.7	ND									
CONCRETE												
AOC5-B3	7/18/2018	0.6	ND	ND	ND	ND	0.12	ND	0.31	ND	ND	0.43
AOC6-B3-C	2/19/2019	1.1	ND	ND	ND	ND	0.11	0.059	0.079	ND	ND	0.25
AOC6-B5-C	2/19/2019	1.4	ND	ND	ND	ND	0.065	0.042 J	ND	ND	ND	0.11
AOC6-B10-C	2/19/2019	1.8	ND	ND	ND	ND	0.25	ND	ND	ND	ND	0.25
AOC6-B13-C	2/19/2019	2.7	ND	ND	ND	ND	0.079	0.086	0.069	ND	ND	0.23
AOC6-B20-C	2/19/2019	1.1	ND	ND	ND	ND	0.32	0.41	0.36	ND	ND	1.1
AOC7-B1	7/18/2018	0.4	ND	ND	ND	ND	0.035 J	ND	ND	ND	ND	0.035 J
AOC7-B2	7/18/2018	0.6	ND	ND	ND	ND	0.046 J	ND	0.087	ND	ND	0.133
AOC7-B7	7/18/2018	0.5	ND									
AOC8-B4	7/18/2018	0.5	ND	ND	ND	ND	0.041 J	ND	0.12	ND	ND	0.161
AOC8-B5	7/18/2018	0.3	ND									
FCB-B1	7/18/2018	1.1	ND	ND	ND	ND	0.64	ND	0.16	ND	ND	0.80
FCB-B2	7/18/2018	1.7	ND	ND	ND	ND	1.6	ND	0.63	ND	ND	2.23
FCB-B3	7/18/2018	2.1	ND	ND	ND	ND	3.5	ND	1.2	ND	ND	4.7
FCB-B4	7/18/2018	1.7	ND	ND	ND	ND	1.1	ND	0.29	ND	ND	1.39

mg/kg - milligram per kilogram
Moisture - ASTM DD-2216 (M)
PCBs - 8082A Soxhlet Extraction (3540C)

Updated by: RS 2/26/19
Reviewed by: FH 2/26/19

Table 2- Soil Analytical Results - PCBs
Supplemental Soil Investigation - 2021
Clow Valve

Sample ID	Depth	Date	Unit	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268
P-1-0	0	12/13/2021	ug/kg	<1000	<500	<500	<500	<500	8300	13000	<500	<500
P-1-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	240	<50	<50
P-1-3	3	12/13/2021	ug/kg	<1000	<500	<500	<500	<500	<500	640	<500	<500
P-2-0	0	12/13/2021	ug/kg	<1000	<500	<500	<500	15000	<500	2400	<500	<500
P-2-1	1	12/13/2021	ug/kg	<1000	<500	<500	<500	30000	<500	2900	<500	<500
P-2-3	3	12/13/2021	ug/kg	<99	<50	<50	<50	880	<50	150	<50	<50
P-3-0	0	12/13/2021	ug/kg	<1000	<500	<500	<500	5500	2900	<500	<500	<500
P-3-1	1	12/13/2021	ug/kg	<1000	<500	<500	<500	<500	6600	1800	<500	<500
P-3-3	3	12/13/2021	ug/kg	<1000	<500	<500	<500	15000	<500	1900	<500	<500
P-4-0	0	12/13/2021	ug/kg	<99	<50	<50	<50	1100	420	<50	<50	<50
P-4-1	1	12/13/2021	ug/kg	<1000	<500	<500	<500	1400	<500	<500	<500	<500
P-4-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	430	300	<50	<50	<50
P-5-0	0	12/13/2021	ug/kg	<990	<500	<500	<500	6000	3400	670	<500	<500
P-5-1	1	12/13/2021	ug/kg	<990	<500	<500	<500	2500	2100	<500	<500	<500
P-5-3	3	12/13/2021	ug/kg	<990	<500	<500	<500	3200	1700	<500	<500	<500
S-1-1	1	10/4/2020	ug/kg	<2500	<1200	<1200	<1200	36000	18000	<1200	<1200	<1200
S-1-3	3	10/4/2020	ug/kg	<500	<250	<250	<250	1800	1500	2400	<250	<250
S-1-5	5	10/4/2020	ug/kg	<5000	<2500	<2500	<2500	<2500	<2500	<2500	<2500	<2500
S-2-1	1	10/4/2020	ug/kg	<4900	<2500	<2500	<2500	21000	14000	6100	<2500	<2500
S-2-3	3	10/4/2020	ug/kg	<5000	<2500	<2500	<2500	20000	<2500	3600	<2500	<2500
S-2-5	5	10/4/2020	ug/kg	<5000	<2500	<2500	<2500	19000	<2500	3800	<2500	<2500
S-2-5.5	5.5	10/14/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-3-1	1	10/4/2020	ug/kg	<5000	<2500	<2500	<2500	<2500	<2500	<2500	<2500	<2500
S-3-3	3	10/4/2020	ug/kg	<5000	<2500	<2500	<2500	<2500	<2500	<2500	<2500	<2500
S-3-5	5	10/4/2020	ug/kg	<98	<49	<49	<49	<49	<49	<49	<49	<49
S-4-1	1	10/4/2020	ug/kg	<200	<98	<98	<98	<98	<98	150	<98	<98
S-4-3	3	10/4/2020	ug/kg	<98	<49	<49	<49	<49	<49	<49	<49	<49
S-4-5	5	10/4/2020	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-5-1	1	10/4/2020	ug/kg	<98	<49	<49	<49	<49	<49	<49	<49	<49
S-6-1	1	10/4/2020	ug/kg	<100	<51	<51	<51	<51	<51	<51	<51	<51
S-6-3	3	10/4/2020	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-6-5	5	10/4/2020	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-7-1		10/5/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-8-1	1	10/5/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-8-3	3	10/5/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-8-5	5	10/5/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-9-1	1	10/5/2021	ug/kg	<5000	<2500	<2500	<2500	26000	<2500	23000	<2500	<2500
S-9-3	3	10/5/2021	ug/kg	<100	<50	<50	<50	310	<50	370	<50	<50
S-9-5	5	10/5/2021	ug/kg	<100	<50	<50	<50	83	<50	71	<50	<50
S-10-1	1	10/5/2021	ug/kg	<10000	<5000	<5000	<5000	49000	<5000	16000	<5000	<5000
S-10-3	3	10/8/2021	ug/kg	<100	<50	<50	<50	1300	<50	1500	<50	<50
S-10-5	5	10/8/2021	ug/kg	<200	<100	<100	<100	590	<100	530	<100	<100
S-10-8	8	10/19/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-11-1	1	10/5/2021	ug/kg	<20000	<10000	<10000	<10000	110000	<10000	32000	<10000	<10000
S-11-3	3	10/5/2021	ug/kg	<100	<50	<50	<50	70	<50	<50	<50	<50
S-11-5	5	10/5/2021	ug/kg	<100	<50	<50	<50	230	<50	110	<50	<50
S-12-1	1	10/5/2021	ug/kg	<200	<100	<100	<100	300	<100	<100	<100	<100
S-12-3	3	10/5/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-12-5	5	10/5/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-13-1	1	10/6/2021	ug/kg	<500	<250	<250	<250	<250	<250	<250	<250	<250
S-14-1	1	10/6/2021	ug/kg	<200	<100	<100	<100	<100	<100	<100	<100	<100
S-15-1	1	10/6/2021	ug/kg	<200	<100	<100	<100	<100	<100	<100	<100	<100
S-15-3	3	10/6/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-16-1	1	10/6/2021	ug/kg	<500	<250	<250	<250	<250	<250	<250	<250	<250
S-16-3	3	10/6/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-17-1	1	10/7/2021	ug/kg	<200	<100	<100	<100	<100	<100	<100	<100	<100
S-17-3	3	10/7/2021	ug/kg	<100	<50	<50	<50	69	<50	52	<50	<50
S-18-1	1	10/7/2021	ug/kg	<100	<50	<50	<50	180	<50	<50	<50	<50
S-18-3	3	10/7/2021	ug/kg	<100	<50	<50	<50	61	<50	<50	<50	<50

Table 2 - Soil Analytical Results - PCBs
Supplemental Soil Investigation - 2021
Clow Valve

Sample ID	Depth	Date	Unit	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268
S-39-1	1	12/13/2021	ug/kg	<1000	<510	<510	<510	1700	1600	<510	<510	<510
S-39-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-40-1	1	12/14/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-40-3	3	12/14/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-41-1	1	12/14/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-41-3	3	12/14/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-42-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-42-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-43-1	1	12/13/2021	ug/kg	<1000	<500	<500	<500	650	<500	1000	<500	<500
S-43-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-44-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	2900	<50	<50	<50	<50
S-44-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	500	<50	<50	<50	<50
S-45-1	1	12/13/2021	ug/kg	<99	<50	<50	<50	<50	<50	<50	<50	<50
S-45-3	3	12/13/2021	ug/kg	<99	<50	<50	<50	<50	<50	<50	<50	<50
S-46-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-46-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-47-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-47-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-48-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-48-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-49-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-49-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-50-1	1	12/13/2021	ug/kg	<99	<50	<50	<50	<50	<50	<50	<50	<50
S-50-3	3	12/13/2021	ug/kg	<99	<50	<50	<50	<50	<50	<50	<50	<50
S-51-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-51-3	3	12/13/2021	ug/kg	<99	<50	<50	<50	<50	<50	<50	<50	<50
S-52-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-52-3	3	12/13/2021	ug/kg	<98	<49	<49	<49	<49	<49	<49	<49	<49
S-53-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-53-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-54-1	1	12/14/2021	ug/kg	<200	<100	<100	<100	<100	<100	<100	<100	<100
S-54-3	3	12/14/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-55-1	1	12/13/2021	ug/kg	<99	<50	<50	<50	<50	<50	<50	<50	<50
S-55-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-56-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-56-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-57-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-57-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-58-1	1	12/14/2021	ug/kg	<500	<250	<250	<250	<250	<250	<250	<250	<250
S-58-3	3	12/14/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-59-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	120	110	<50	<50	<50
S-59-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	<50	<50	<50	<50	<50
S-60-1	1	12/13/2021	ug/kg	<100	<50	<50	<50	21000	16000	<50	<50	<50
S-60-3	3	12/13/2021	ug/kg	<100	<50	<50	<50	330	160	<50	<50	<50

depth - ft

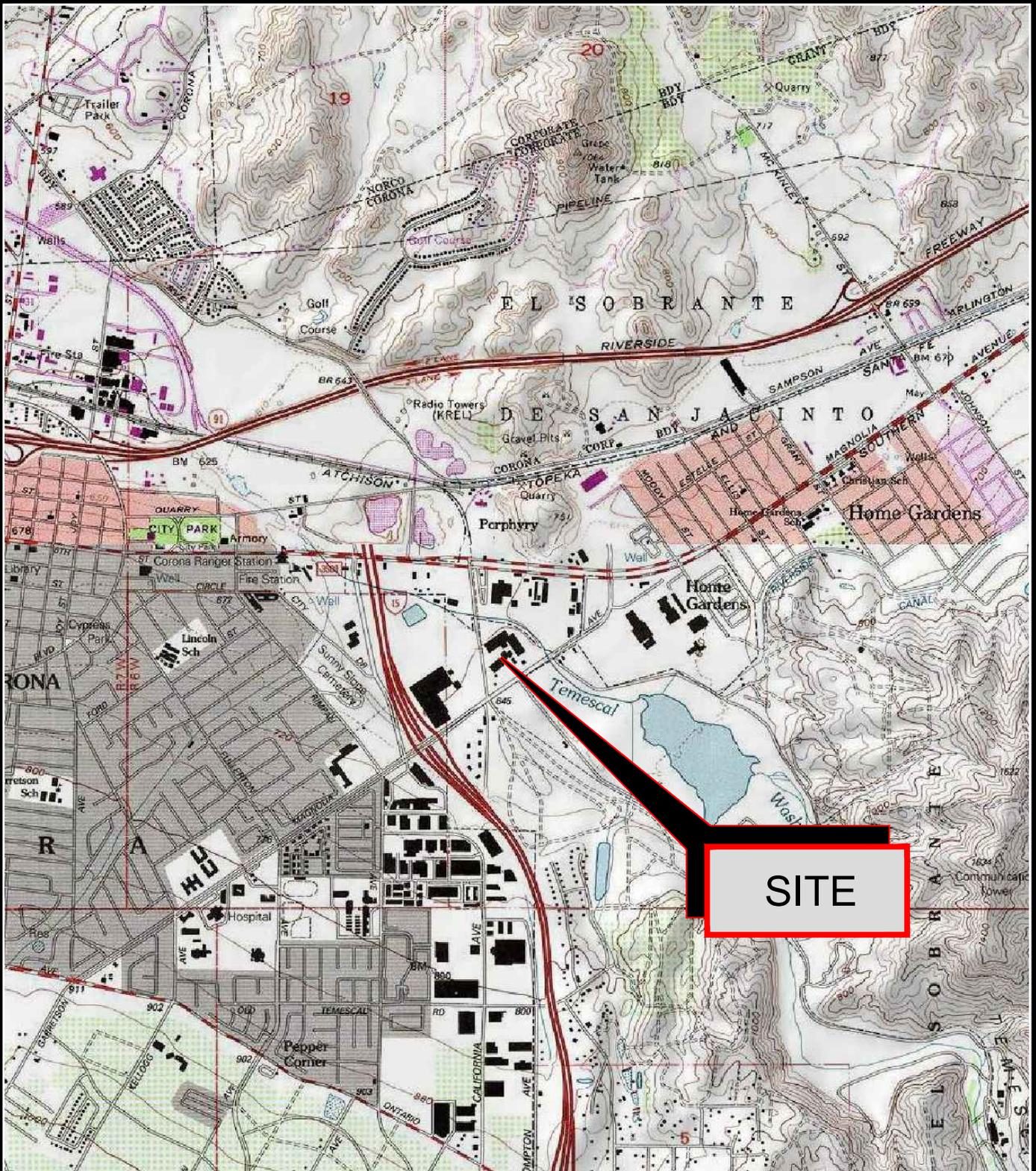
ug/kg - micrograms per kilogram

< - less than the reporting limit

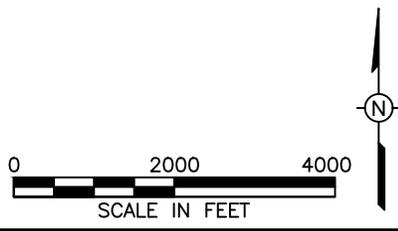
Updated by: BS 01/03/22

Revised by: FH 01/03/22

DWC Name: Fig 1 - Vicinity Map
 Checked: BS 01/25/2022
 Approved: JB 01/25/2022
 Drawn By: KB 01/19/2022
A



S:\Common\Orange\CAD\Projects\04_20150013.00-Clow Valve\CAD2022\Figure 1 - Vicinity Map.dwg 2/7/2022 12:37 PM Kbarfield



DRAFT

SOURCE: U.S. GEOLOGICAL SURVEY, 1997
 QUADRANGLE: CORONA SOUTH
 COUNTY: RIVERSIDE
 SERIES: 7.5-MINUTE QUAD

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 NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

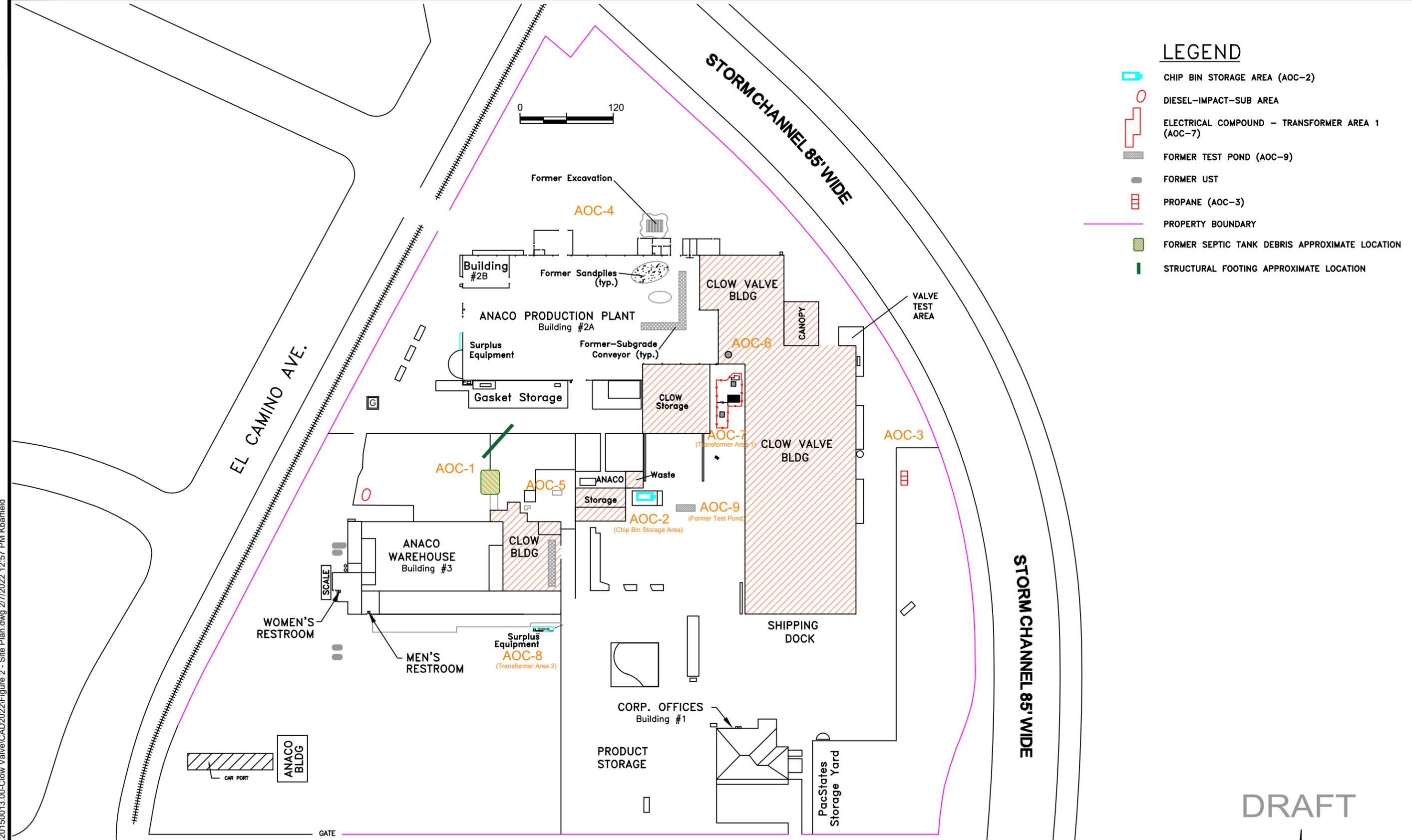
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 SUITE 200
 ORANGE, CA 92868

Figure 1
 VICINITY MAP

CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879

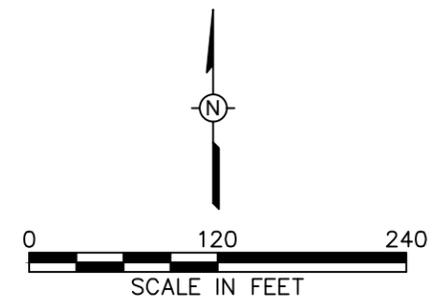
S:\Common\Orange\CAD\Projects\04_20150013_00-Clow Valve\CAD\2022\Figure 2 - Site Plan.dwg 2/7/2022 12:57 PM Kbarfield

B



LEGEND

- CHIP BIN STORAGE AREA (AOC-2)
- DIESEL-IMPACT-SUB AREA
- ELECTRICAL COMPOUND - TRANSFORMER AREA 1 (AOC-7)
- FORMER TEST POND (AOC-9)
- FORMER UST
- PROPANE (AOC-3)
- PROPERTY BOUNDARY
- FORMER SEPTIC TANK DEBRIS APPROXIMATE LOCATION
- STRUCTURAL FOOTING APPROXIMATE LOCATION



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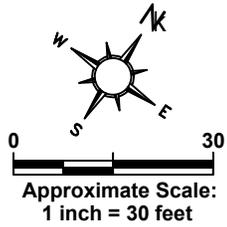
Drawn By:	KB	02/07/2022
Checked:	BS	02/07/2022
Approved:	JB	02/07/2022
DWG Name: Figure 2 - Site Plan		

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

Figure 2
SITE LAYOUT

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1100 TOWN & COUNTRY RD
SUITE 200
ORANGE, CA 92668

DRAFT

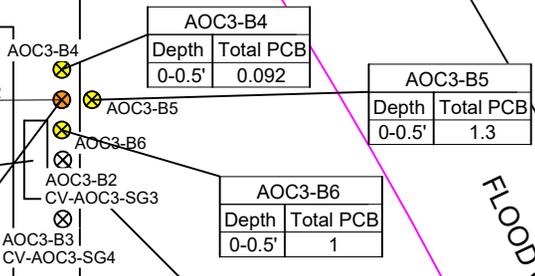


AOC3-B1 (2018)	
Depth	Oil
0-0.5'	46
1'	1,400
3'	ND<5
5'	ND<5

AOC3-B1 (2018)				
Depth	AROCLOR-1248	AROCLOR-1254	AROCLOR-1260	TOTAL PCBs
0.5'	ND	0.35	5.2	5.55
1'	0.047 J	ND	0.46	0.507
2'	0.13	ND	1.1	1.23

Bay Door

Hydraulic Pump
with Fluid Reservoir



AOC3-B4	
Depth	Total PCB
0-0.5'	0.092

AOC3-B5	
Depth	Total PCB
0-0.5'	1.3

AOC3-B6	
Depth	Total PCB
0-0.5'	1

AOC3-B2	
Depth	Oil
0-0.5'	33
1'	210
3'	890
5'	ND<5

FLOOD CONTROL CHANNEL ACCESS ROAD

Asphalt Paved

Canopy Covered Storage

Water Cylinder

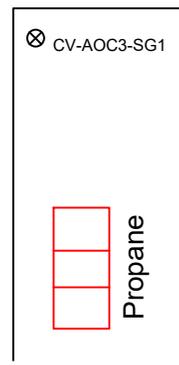
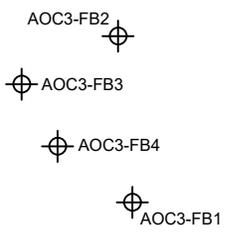
LEGEND

- AOC3-B1 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- AOC3-FB4 ⊕ SOIL BORING LOCATION BY FERO (SEPTEMBER 2006)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)
- SOIL BORING LOCATION BY EARTHCON (OCTOBER 2018)

	LUFT
TPH-oil	100

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- = meet/exceeds the LUFT criteria

Notes: All sample results reported in milligrams per kilogram (mg/kg).
Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

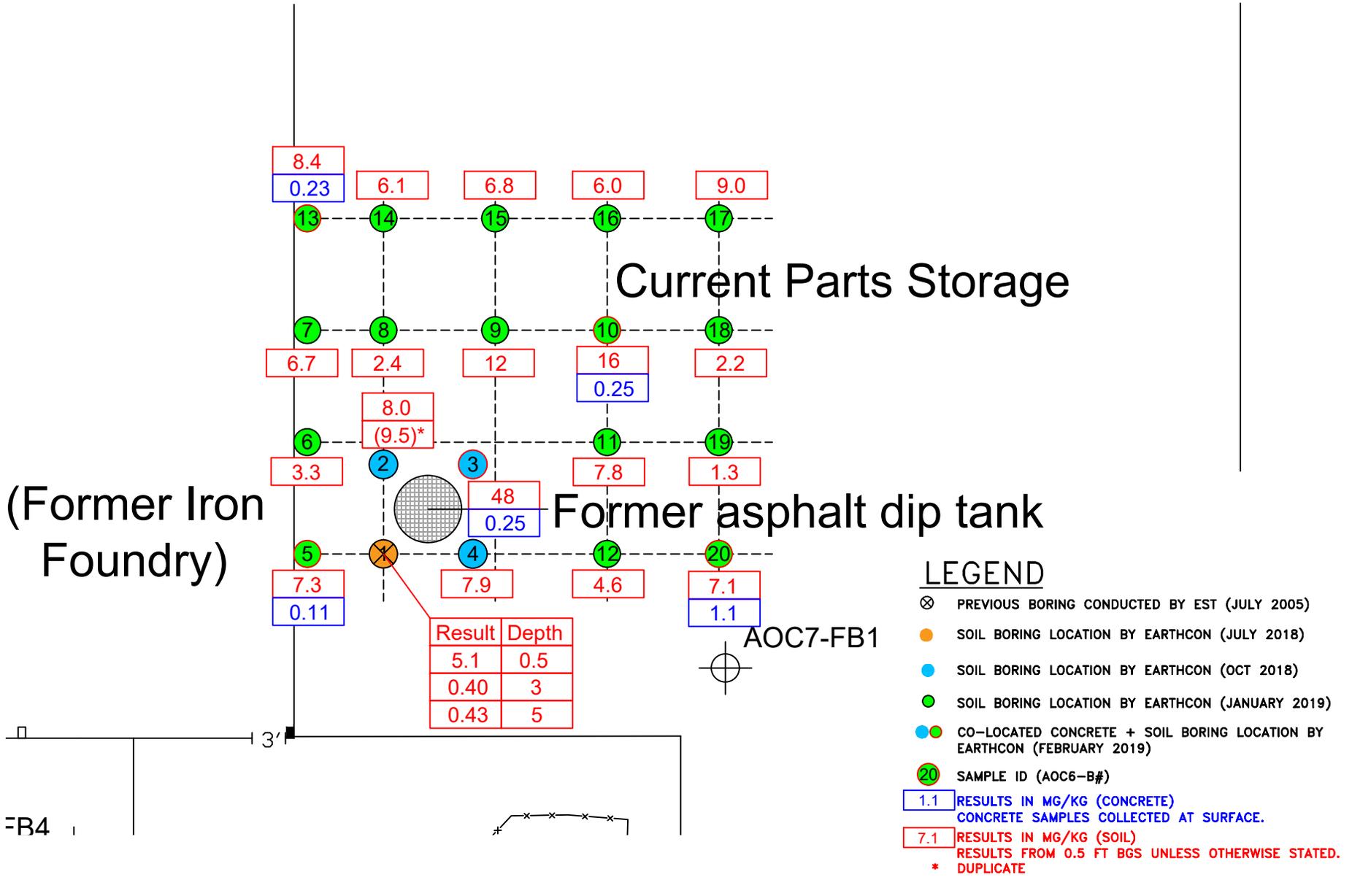


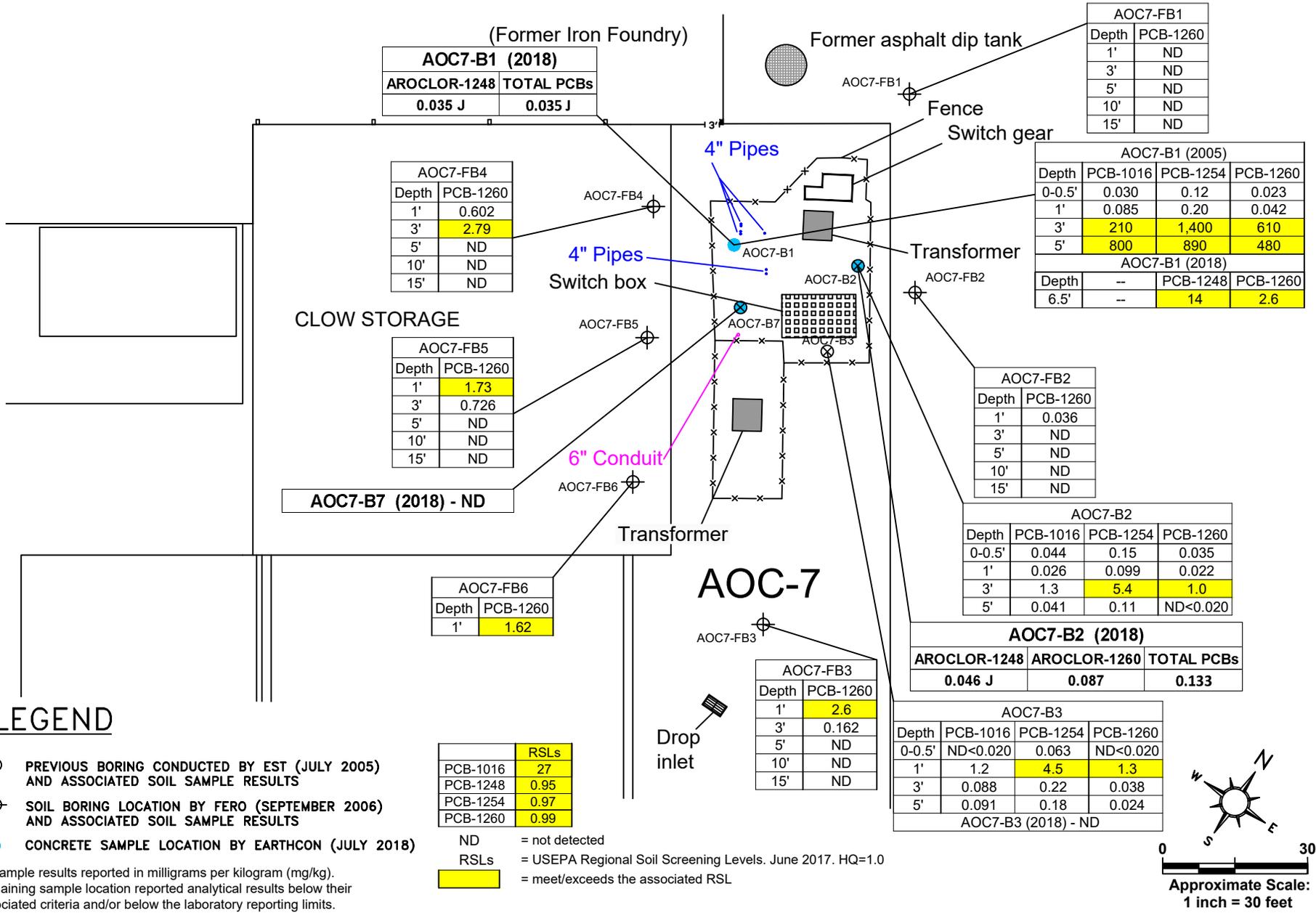
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Figure 3 AOC 3
AOC 3 – WATER PRESSURE TEST AREA
TOTAL PCB SAMPLE LOCATIONS

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

Drawn By: KB 02/07/2022
Checked: BS 02/07/2022
Approved: JB 02/07/2022
DWG Name: Fig 3-AOC 3





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Figure 5
 AOC 7 – TRANSFORMER AREA 1
 PCB ANALYTICAL RESULTS

CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879

Drawn By: KB 02/07/2022
 Checked: BS 02/07/2022
 Approved: JB
 DWG Name: Fig 5-AOC 7

ANACO WAREHOUSE

Former Sandpile

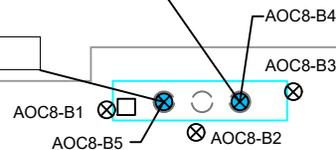
Former Conveyor

Asphalt

Raised Concrete Open Storage Area

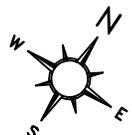
AOC8-B4 (2018)		
AROCOLOR-1248	AROCOLOR-1260	TOTAL PCBs
0.041 J	0.12	0.161

AOC8-B5 (2018) - ND



Surplus Equipment

EMPTY PART BASKET STORAGE



0 30

Approximate Scale:
1 inch = 30 feet

LEGEND

- ⊗ AOC8-B3 PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- CONCRETE SAMPLE LOCATION BY EARTHCON (JULY 2018)

Note: No exceedance of detected PCBs

Remaining sample location reported PCB analytical results below their associated criteria and/or below the laboratory reporting limits.



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Figure 6

AOC 8 – TRANSFORMER AREA 2
PCB SAMPLE LOCATIONS

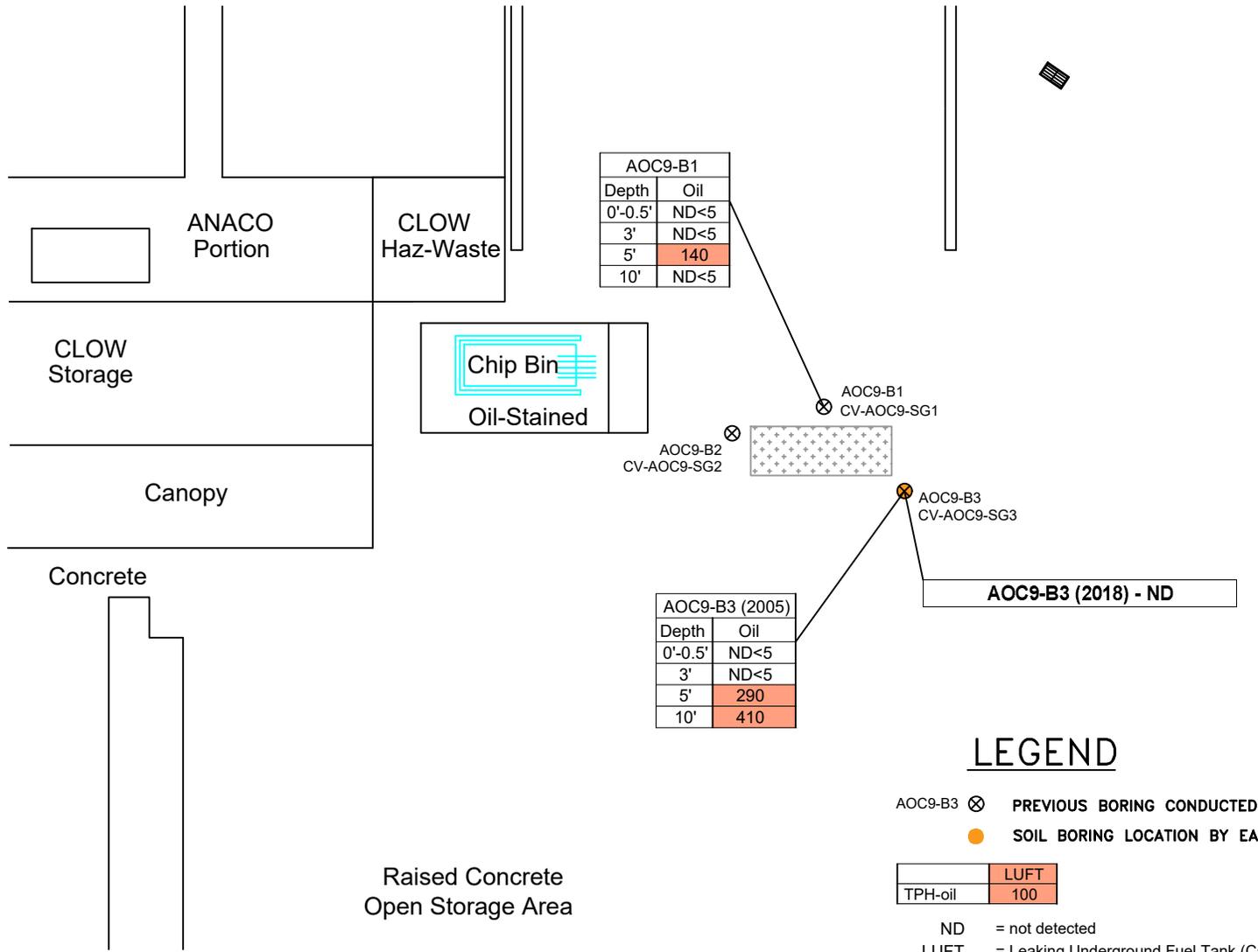
CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

Drawn By: KB 02/07/2022

Checked: BS

Approved: JB

DWG Name: Fig 6-AOC 8

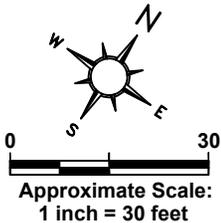


LEGEND

- AOC9-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- [Red Box] = meet/exceeds the LUFT criteria

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported PCB analytical results below their associated criteria and/or below the laboratory reporting limits.




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Figure 7

AOC 9 – FORMER TEST POND
PCB SAMPLE LOCATIONS

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

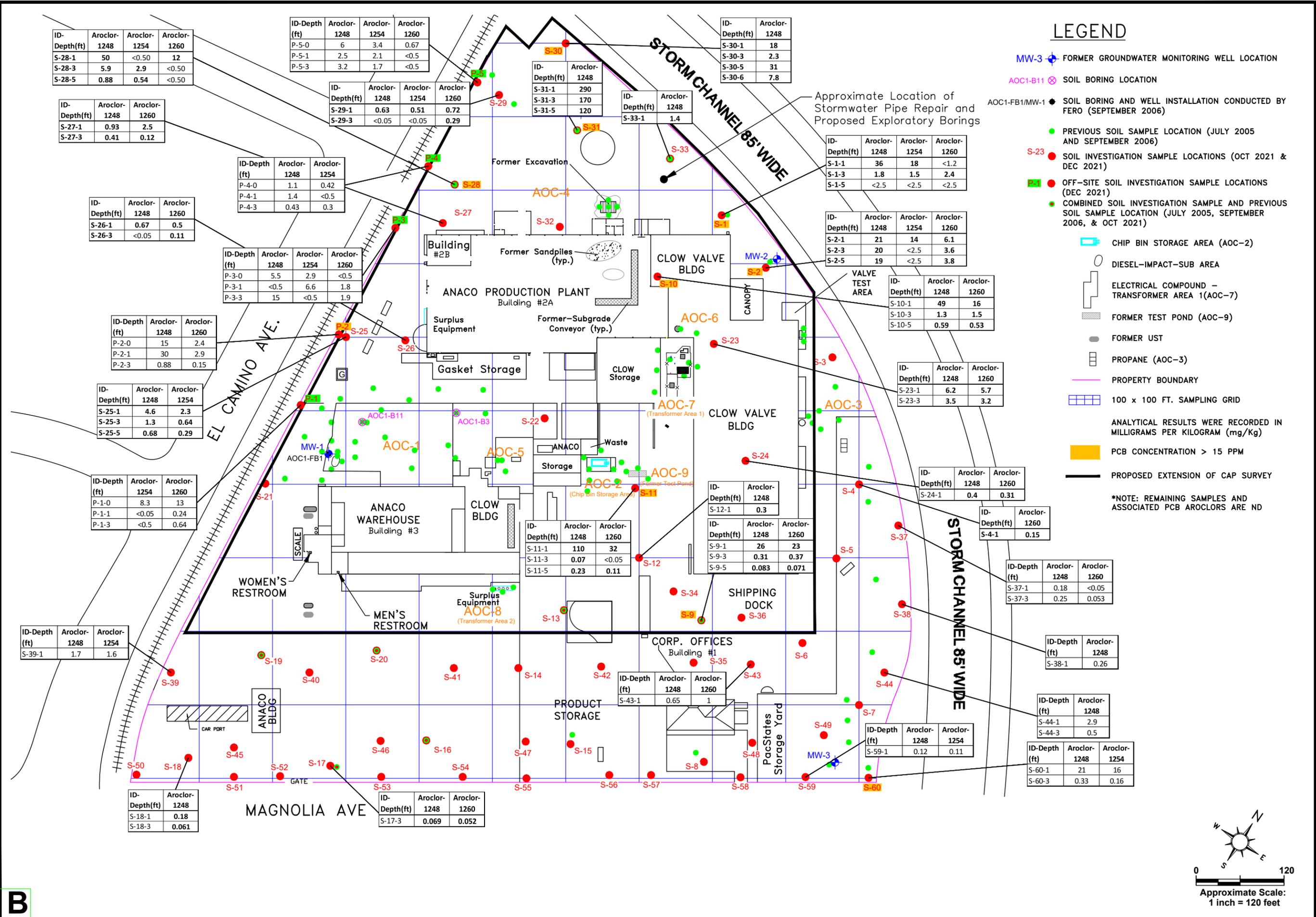
Drawn By: KB *01/31/2022*

Checked: BS

Approved: JB

DWG Name: Fig 7-AOC 9

S:\Common\OrangeCAD\Projects\04.20150013\00-Clow Valve Investigation.dwg (F4 PCBs Conc w Proposed) 04/01/22 12:56 - hphan



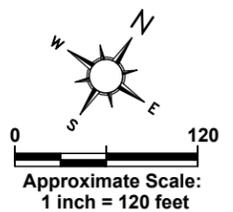
LEGEND

Drawn By: KB 02/07/2022
 Checked: BS
 Approved: JB
 DWG Name: Fig 8-2021 PCB

CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879

Figure 8
 SITE PLAN WITH REPORTED PCB
 CONCENTRATION - 2021 INVESTIGATION

WSP USA Inc.
 1100 TOWN & COUNTRY RD
 SUITE 200
 ORANGE, CA 92668



B

APPENDIX

A CULTURAL RESOURCES RECORDS SEARCH





February 11, 2022

Kimberly Thienes
T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, California 92602

RE: Cultural Resources Records Search Results for the Corona Magnolia Project, Corona, California

Dear Ms. Theines:

An archaeological records search has been completed for the Corona Magnolia Project located northeast of the intersection of Magnolia and El Camino avenues (Assessor's Parcel Number [APN] 107-030-022), within the city of Corona, Riverside County, California. As part of the environmental review process, Brian F. Smith and Associates, Inc. (BFSa) reviewed the results of the records search compiled from data acquired from the Eastern Information Center (EIC) located at the University of California Riverside (UCR). The records search, which was completed on February 10, 2022, encompassed an area of one-half mile surrounding the subject property.

Based upon the records search results, 13 previous cultural resources studies conducted within one-half-mile of the Corona Magnolia Project are on-file with the EIC; however, none include the subject property. Further, the search data identified 10 resources, all associated with the historic built environment, recorded within one-half mile of the project. One of the previously recorded resources (Site P-33-020202) includes the entirety of the subject property, APN 107-030-022. Site P-33-020202 is characterized as a circa 1955 to circa 1960 six-building industrial-commercial complex which includes the addresses 1375 Magnolia Avenue and 1001 East El Camino Avenue. The resource was recorded, along with the majority of resources identified in the search radius, in 2011 by Tim Yates of ICF International as part of a proposed electrical substation and transmission line corridor identified as the "Circle City Substation Project."¹ Although the study associated with the Circle City Substation Project did not appear within the EIC holdings, based on the site record, Site P-33-020202 was recorded at the reconnaissance level and was not evaluated for inclusion within the California Register of Historic Resources. A search of the resource addresses failed to identify the property listed on the National Register of Historic

¹ Tim Yates, Site Record Form for P-33-020202, on file at the Eastern Information Center at the University of California at Riverside, Riverside, California, 2011.

Places Index, the California Register of Historic Resources, or the Office of Historic Places, Built Environment Resources Directory. BFSA also reviewed the Final Environmental Impact Report (FEIR) for the “Circle City 66 kV Subtransmission Line Project,” available online from the City of Corona, for additional information about the resource.² Although the FEIR does not discuss Site P-33-020202 in detail, it does state that “[a]n additional 106 architectural resources were documented in the Architectural Study Area; however, they were not evaluated for California Register-eligibility because the resources themselves, as opposed to the parcels on which they are located, are all outside the Project Area and would not be directly impacted by the Project.”³

The full results of the completed records search are attached to this letter report (Attachment A). Please contact us should you have any questions or require additional study for this project.

Regards,



Brian F. Smith

BFS:ag

Attachment:

Attachment A – EIC Archeological Records Search Results

² Environmental Science Associates, Southern California Edison Circle City Substation and Mira Loma–Jefferson 66kV Subtransmission Line Project, Final Environmental Impact Report, prepared for the California Public Utilities Commission, on file at the City of Corona, https://ia.cpuc.ca.gov/environment/info/esa/Circle_City/PDF/SCE_CircleCity_FEIR.pdf, 2018.

³ Environmental Science Associates, Southern California Edison Circle City Substation and Mira Loma–Jefferson 66kV Subtransmission Line Project, Final Environmental Impact Report (Appendices), prepared for the California Public Utilities Commission, on file at the City of Corona, https://ia.cpuc.ca.gov/environment/info/esa/Circle_City/PDF/SCE_CircleCity_FEIR_Appendices.pdf, 2018.

ATTACHMENT A

EIC Archaeological Records Search Results

BRIAN F. SMITH and ASSOCIATES

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEMS RECORDS SEARCH

Company: Brian F. Smith and Associates
Processed By: Andrew Garrison
Date Processed: February 10, 2022
Project Identification: Corona Magnolia (22-028)
Information Center: Eastern Information Center
Search Radius: 0.5 Mile

Historical Resources:

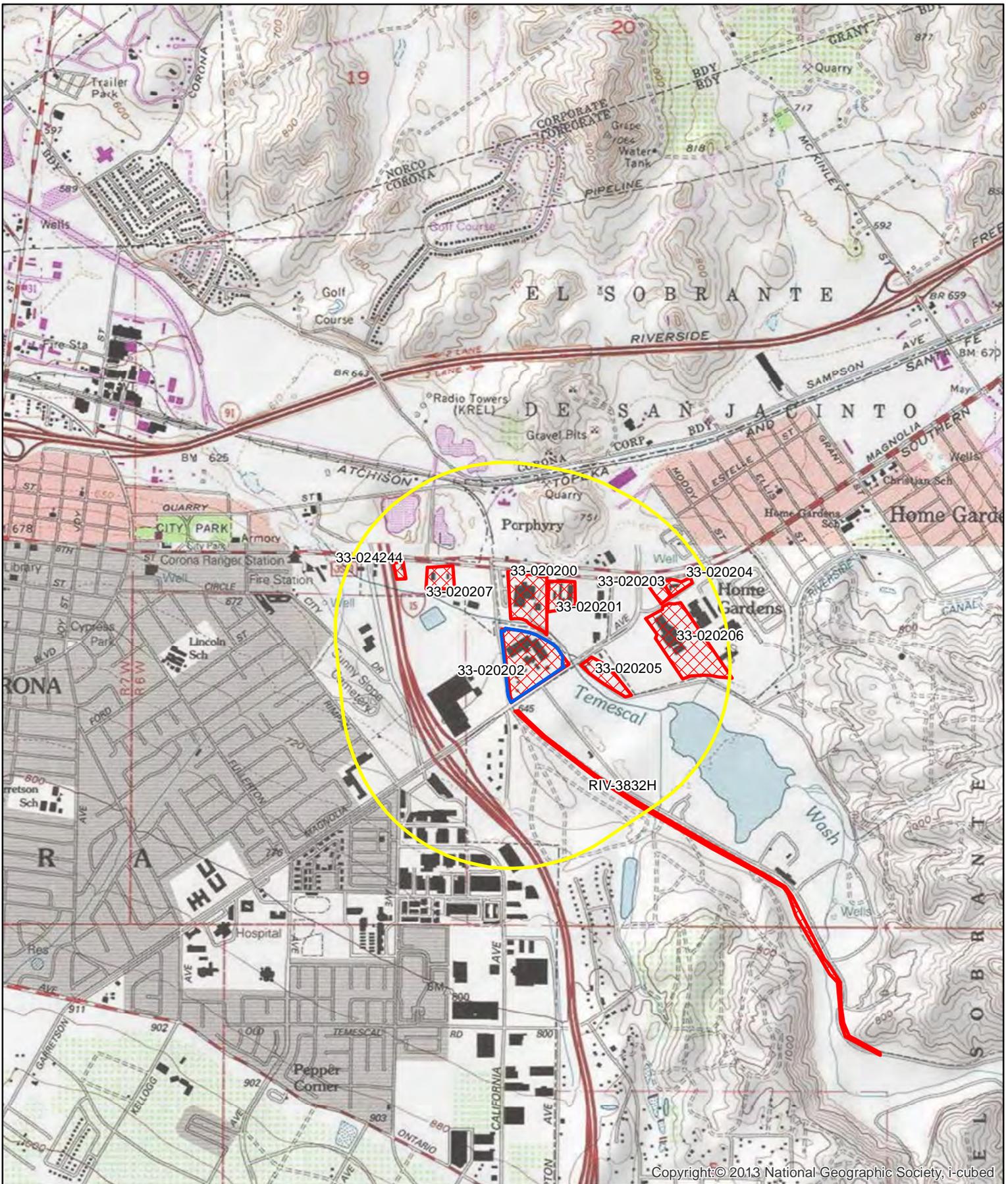
Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been reviewed. Copies of the site record forms have been reviewed for all recorded sites.

There are 10 resources recorded within one-half mile of the current project area, one of which (P-33-020202) is located within the subject property.

Previous Survey Report Boundaries:

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been reviewed.

There are 13 reports within one-half mile of the current project, none of which include the subject property.



- Project
- Half Mile Radius
- Resources

Corona Magnolia (22-028)
 Resources Map
 USGS Corona North and Corona South
 Quadrangles
 (7.5-minute series)



1:24,000
 AJG BFSa: 2/10/2022

Resources

PrimaryString	TrinomialString	OtherIDs	Age	Attribs	RecordingEvents	Reports
P-33-003832	CARIV-003832	National Register - 6Y; Other - 202-5; Other - 202-4; Other - The Santa Fe Railroad grade through the Temescal Valley; Other - Santa Fe Railway; Other - Atchison, Topeka, and Santa Fe RR; Other - UCR ARU # 1039 and # 1111	Historic	AH07; HP19	1990 (Daniel F. McCarthy, Archaeological Research Unit, UC Riverside, CA); 1990 (K. Swope and D. Peirce, Archaeological Research Unit, UC Riverside, CA); 1995 (Bruce Love, CRM TECH, Riverside, CA); 1996 (CRM TECH, CRM TECH); 2001 (Riordan Goodwin, n/a); 2005 (Kristie R. Blevins/ Anna M. Hoover, L & L Environmental, Inc.); 2006 (John Goodman, Nick Reseburg, and Windy Jones, Statistical Research, Inc.); 2006 (J. D. Goodman, Statistical Research, Inc.); 2011 (Robin D. Hoffman, n/a); 2014 (Daniel Leonard, n/a)	RI-02743, RI-03155, RI-03175, RI-03882, RI-04144, RI-04665, RI-04706, RI-04765, RI-05056, RI-06624, RI-08092, RI-08103, RI-08228, RI-09285, RI-10186
P-33-020200		Other - Riverside County APN 107-020-012	Historic	HP08	2011 (Tim Yates, IFC International)	
P-33-020201		Other - AE-2418-1H; Other - Riverside County APN 107-030-003; Other - 14282 E. 6th Street	Historic	HP06; HP39	2011 (Tim Yates, IFC International); 2012 (Josh Smallwood, Applied Earthworks, Inc.)	RI-08902
P-33-020202		Other - Riverside County APN 107-030-022; Other - 1375 Magnolia Avenue & 1001 E. El Camino Avenue	Historic	HP06; HP08	2011 (TIM YATES, IFC INTERNATIONAL)	
P-33-020203		Other - RIVERSIDE COUNTY APN 107-040-005; Other - 1640 E. 6th Street	Historic	HP06	2011 (TIM YATES, IFC INTERNATIONAL)	
P-33-020204		Other - RIVERSIDE COUNTY APN 107-040-006; Other - 1650 E. 6th Street	Historic	HP06	2011 (TIM YATES, IFC INTERNATIONAL)	
P-33-020205		Other - RIVERSIDE COUNTY APN 107-060-003; Other - 1480 Magnolia Avenue	Historic	HP06; HP08	2011 (TIM YATES, IFC INTERNATIONAL)	
P-33-020206		Other - RIVERSIDE COUNTY APNs 107-060-008 & 107-060-009; Other - San Valle Tile Kilns, Inc.; Other - 1620 Magnolia Avenue	Historic	HP08	2011 (Tim Yates, IFC International); 2012 (Tim Yates, IFC International)	
P-33-020207		Other - RIVERSIDE COUNTY APN 115-090-003; Other - 1340-1350 E. 6th Street	Historic	HP06	2011 (Tim Yates, ICF International)	
P-33-024244		Other - Riverside County APN 115-080-025; Other - 1302 E. 6th Street	Historic	HP06	2012 (Tm Yates, ICF International)	

*Recorded by: Daniel Leonard

*Date: May 1, 2014 Continuation Update

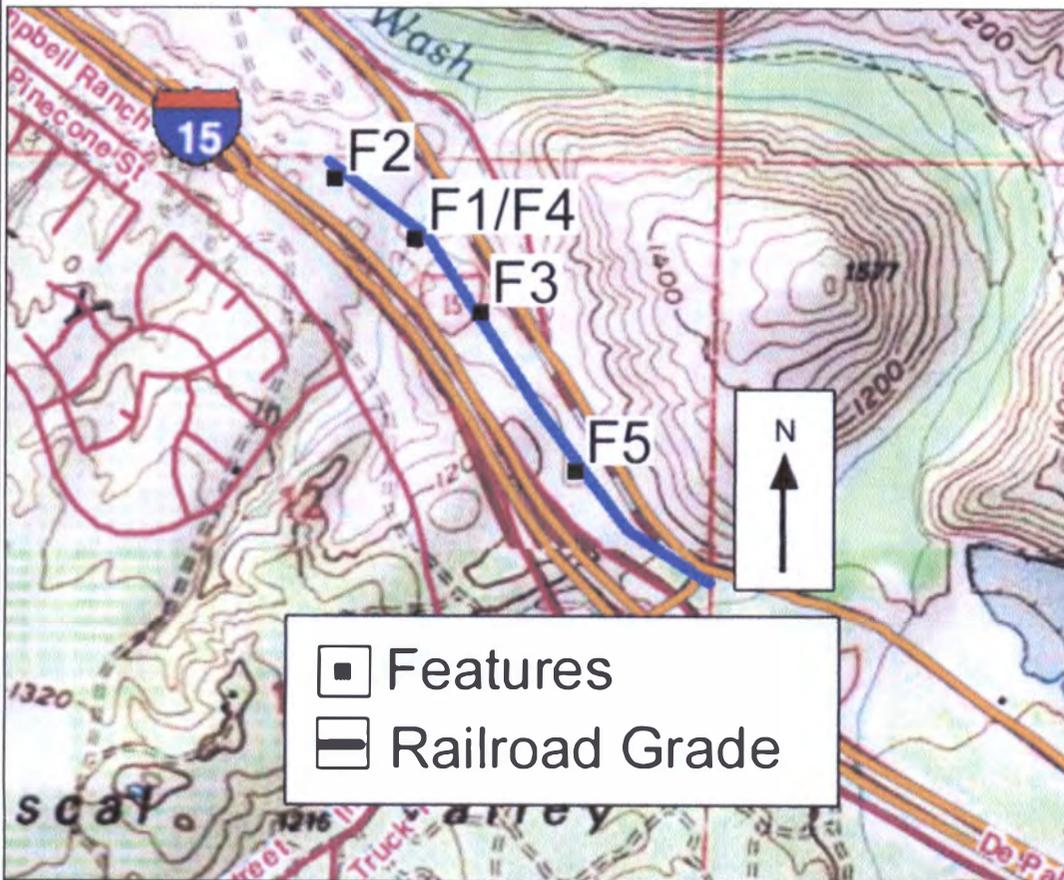
This resource has been recorded numerous times (Goodman et al. 2006, Love and Tang 1996, Goodwin 2001, Swope 1991, McCarthy 1990) as an abandoned historic-period railroad grade. Love and Tang's 1996 study represents a comprehensive identification and evaluation of the entire alignment, and the others assessed smaller segments. Although these recordings indicate that the grade remained visible in places, and some features are sporadically recognizable, all studies have conferred the resource with poor condition and a lack of integrity due to its 1970s dismantling. BCR Consulting visited the portion of the railroad grade that crosses the NE ¼ of Section 12, Township 5 South, Range 6 West (SBBM) on May 1, 2014. Current field observations were basically consistent with Love and Tang's 1996 study. Field crew noted an intermittently-visible and highly disturbed railroad grade accompanied by the following features (plotted within the study area below):

- Feature 1: a 33-foot section of displaced track (NAD 83 UTM 457697mE/3435081mN)
- Feature 2: a concrete culvert stamped "1926" (NAD 83 UTM 457515mE/3735210mN, at SW)
- Feature 3: a second concrete culvert stamped "1926" (NAD 83 UTM 457817mE/3734976mN)
- Feature 4: a partial culvert similar to F2 and F3 but lacking date stamp (NAD 83 UTM 457693mE/3735108mN)
- Feature 5: a second partial culvert pipe, no date stamp (NAD 83 UTM 457998mE/3734688)

Significant disturbances related to mechanical dismantling of the system during the 1970s (see Additional Research above) have conferred a poor condition, and diminished integrity.

References:

- Goodman, John, Nick Reseburb, Windy Jones. 2006. Site Record for CA-RIV-3832H. On File, Eastern Information Center, UCR.
- Goodwin, Riordan. 2001. Site Record for CA-RIV-3832H. On File, Eastern Information Center, UCR.
- McCarthy, Daniel. 1990. Site Record for CA-RIV-3832H. On File, Eastern Information Center, UCR.
- Swope, Karen. 1991. Site Record for CA-RIV-3832H. On File, Eastern Information Center, UCR.
- Tang, Bai "Tom" and Bruce Love. 1996. Site Record for CA-RIV-3832H. On File, Eastern Information Center, UCR.



Location Map: USGS 7.5-Min. Lake Matthews, Calif. (1997) Topographic Quadrangle

*Recorded by: Daniel Leonard

*Date: May 1, 2014 Continuation Update

Photos



Photo 1: Feature 2 (N)



Photo 2: Feature 4 (S)



Photo 3: Feature 1 (W)



Photo 4: Feature 3 (NE)



Photo 5: Railroad grade (NW)



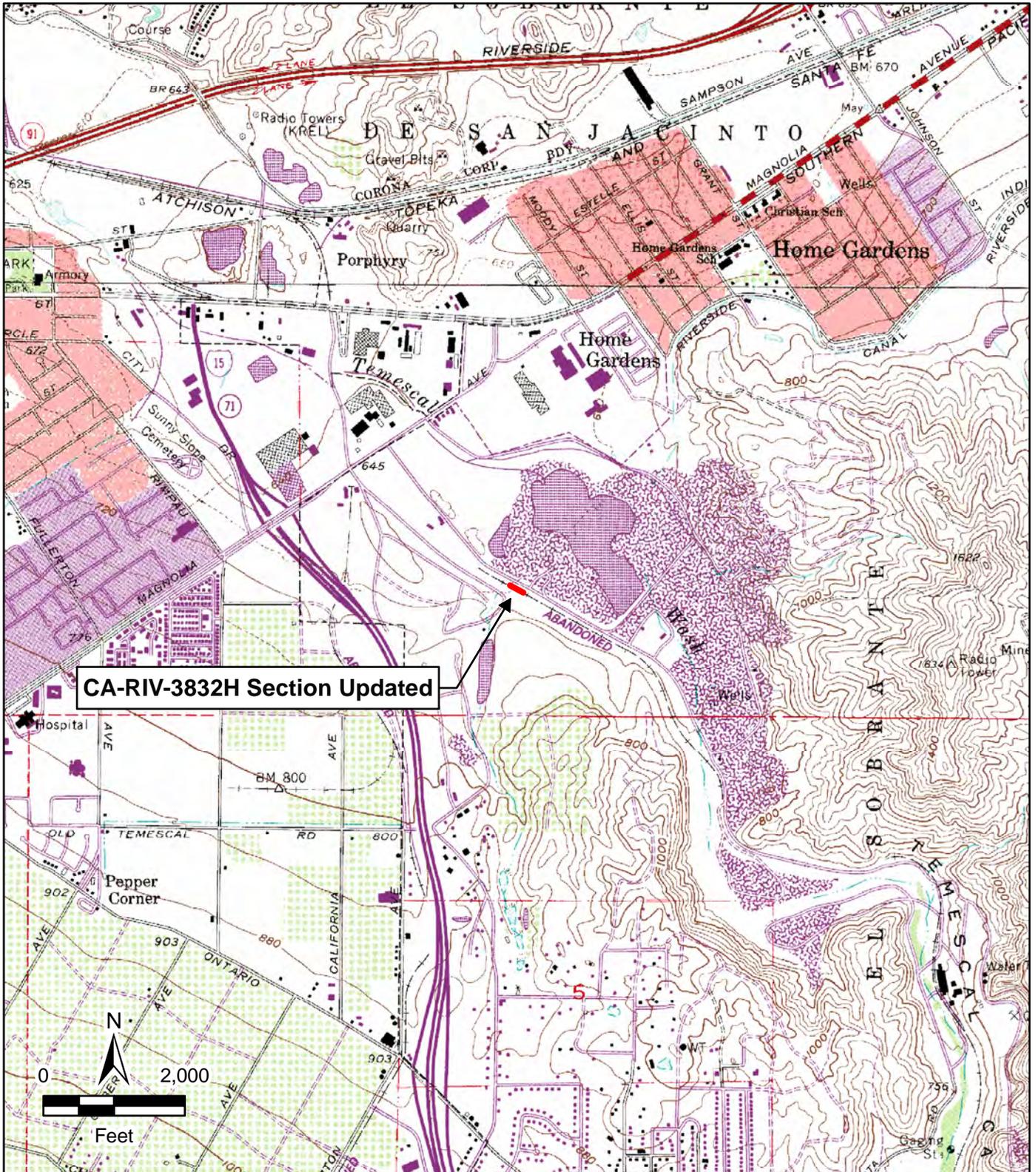
Photo 6: Feature 5 (N)

CONTINUATION SHEET

*Recorded by: Robin D. Hoffman

*Date: 14 Sept. 2011 Continuation Update

The portion of CA-RIV-3832H indicated by the the 1996 site record to be within the Project area and still identifiable consists of a small segment on the W side of Sherborn Street, S of Magnolia Avenue, in the city of Corona. Upon inspection during the survey, however, no evidence of this portion of the alignment was observed. It appears that the modern railroad and adjacent construction activities have destroyed this portion of the alignment, leaving no identifiable features.



*Recorded by: J. D. Goodman

Date: May 26, 2006

The Site CA-RIV)-3832H is the At & SF Railroad branch that went through Temescal Valley (see old site form for dates). In the western end of the study area we came across a burnt railroad bridge/trellis and railroad grade (recorded as SRI 134 at the time), and later realized that these features are all components/features of RIV-3832H. Only burnt upright posts remain of this bridge and some long rod bolts, nuts, and cast-iron washers with embossed dates of 1902. Also, on either sides of the bridge and drainage are concrete retaining walls to support the sides of the upper bank. Continuing on both sides of the burnt bridge and retaining walls are the east and west remnants of the raised railroad grade.

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SEP 28 2006
EIC

Other Listings
Review Code

Date

Reviewer

*Resource Name or #: CA-RIV-3832H UPDATE

Page 1 of 5

P1. Other Identifier: S CA-RIV-3852H

*P2. Location: Not for Publication Unrestricted

*a. County: Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Lake Mathews, CA Date: 1967 (Photorevised 1988)
T. 5S; R. 6W NE 1/4 of SW 1/4 of Sec. 2; S.B.B.M.

c. Address: City: Zip:

d. UTM: (Give more than one for large and/or linear resources) Zone 11; 468249 mE / 3728306mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate). A burned historical railroad truss/bridge associated with the previously recorded Atchison Topica and Santa Fe Railroad (CA-RIV-3852H) was found in the portion of rail line that passes through a tributary of northwestern Temescal Wash in the Temescal Valley. The bridge is approximately 20m southwest of I- 15.

*P3a. Description: (Describe resource and its majorelements. Include design, materials, condition, alterations, size, setting, and boundaries). This truss/bridge was constructed of large upright support posts, and both sides of the bank of the wash for the bridge were secured with large formed-and-poured concrete retaining " pads." The raised railroad grade on both sides of the burnt bridge has a height of approximately 10', and the grade cuts through several small hills in this area.

*P3b. Resource Attributes: (List attributes and codes.) HP19 (Bridge)

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo (View, date, accession #): Photo # DSC00458: west-facing view of bridge.



*P6. Date Constructed/ /Age and

Prehistoric Both

Sources: Historic

*P7. Owner and Address:

*P8. Recorded by:

John Goodman, Nick Reseburg,
and Windy Jones
Statistical Research, Inc.
P.O. Box 390
Redlands, CA 92373

*P9. Date Recorded:

April 21, 2006

*P10. Survey Type: (Describe):

Class III archaeological survey to
evaluate areas of transmission line
upgrade and installation of new
line.

*P11. Report Citation: M. Lerch

and M. Gray, editors; 2006; *Cultural Resources Assessment of the Valley-Ivyglen Transmission Line Project, Riverside County, California*. SRI Technical report 06-63. Statistical Research, Redlands, California. Submitted to Our Client, SCE, Rosemead, California.

*Attachments:

NONE

Continuation Sheet

District Record

Rock Art Record

Location
Map

Building, Structure, and Object Record

Linear Feature Record

Artifact Record

Sketch Map

Archaeological
Record

Milling Station
Record

Photograph Record

1. Dimensions: a. Length: 100 feet E/W b. Width: 90 feet N/S

Method of Measurement: Paced Taped

Visual estimate Other: GPS

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SEP 28 2006

DPR 523C (1/95)

EIC

*Required information

Page 2 of 5

Resource Name or #: CA-RIV-3832H

Method of Determination: (check any that apply) Artifacts Features Soil Vegetation
 Topography Cut bank Animal burrow Excavation Property boundary Other (Explain):
Reliability of Determination: High Medium Low

Limitations (check any that apply): Restricted access Paved/built over Site limits incompletely defined

Disturbances A2. Vegetation Other (Explain):

Depth: None Unknown

*A3. **Human Remains:** Present Absent Possible Unknown (Explain):

*A4. **Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map): Constructed within a drainage that has a width of approximately 43', the remains of the bridge consists of a series of six large (burnt) support posts or beams aligned in an east-west direction, and each of the post series/rows has six posts; a total of 36 posts were used for the support posts. Some of the bottoms of the burnt post are covered in (flooding) soil. The post are similar to, or the same as, treated Douglass Fir telephone posts. The average spacing between the post rows is 14', and the individual posts are spaced at an average distance of about 4'. Many of the posts have a diameter of from 12" to 14". The row of outer posts (on both sides) lean inward towards the other vertically set posts at an angle of approximately 60 degrees. Some bent sheet-metal brackets to secure the posts and associated lumber have a length of 38", a width of 3", and a thickness of 1/4". Attached to some of the posts are 40"-long rod bolts with a diameter of 1", many have square nuts that measure 1' on a side, and on some of these rod bolts are large cast-iron washers with a diameter of 4" and they are embossed with "LEABLE / 33/4 x 4-1/2 / PAT / May / 10 / 04" (1904). These washers have a raised central area and raised radiating "spokes" as a design element. Some of the posts also have large wood screws with a length of 4" and a proximal diameter of 1". The larger concrete pad on the west bank of the wash was constructed on the first river terrace, and this pad has a length of 70' and a width of 15'. The smaller pad on the eastern bank, constructed on the second river terrace, has a length of 50' and a width of 10'. The walls of the pads facing the wash and bridge slant downward towards the wash at an angle of about 30 degrees. No rails, ties, spikes, or fishplates to secure the rails occur on the raised grade. In this area on both sides of the burnt bridge the rail bed has a width of 8', and the raised grade of imported gravel (rhyolitic gravel?) Have a length of 12' and a height of 10'. A modern concrete pad that is cracked and broken from soil washout during flooding is directly north of the bridge. The modern pad was constructed to help shore the road that is directly north of the bridge. An alignment of east-west burnt fence posts are to the south of the bridge.

*A6. **Were Specimens Collected?** No Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. **Site Condition:** Good Fair Poor (Describe disturbances.):

*A8. **Nearest Water** (Type, distance and direction): The bridge is a tributary of Temescal Wash, which is approximately 300 m to the northeast. .

*A9. **Elevation:** 1,120 feet AMSL

A10. **Environmental Setting** (Describe culturally relevant variables such as vegetation, fauna, soils, geology, land form, slope, aspect, exposure, etc.): As mentioned above, the bridge was constructed over a tributary of Temescal Wash. A riparian corridor of Cottonwood, Sycamore, and Willow trees flanks the wash. Modern I-10 is close by to the north, and a modern "bone yard" with pipes and other building supplies is directly to the northeast. In this area the general northwest-southeast-trending railroad grade curves to the north.

A11. **Historical Information:** This section of the AT & SF Railroad, constructed between Lake Elsinore and Corona, was initially constructed in 1896 to serve the coal and clay mines of the area. The washers on the rod bolts attached to some of the posts have a manufacture date of 1902, therefore this bridge may date to around this period, or perhaps the older bridge was secured with washers and bolts in about 1902 or shortly after.

*A12. **Age:** Prehistoric Protohistoric 1542-1769 1769-1848 1848-1880 1880-1914 1914-1945
 Post-1945 Undetermined (Describe position in regional prehistoric chronology or factual historic dates if known):

A13. **Interpretations:** (Discuss data potential, function(s), ethnic affiliation, and other interpretations): The remains of the bridge are fairly primitive, and the use of posts rather than square beams suggests that relatively minimal energy and expenditure was implemented on this rustic bridge.

A14. **Remarks:** The bridge appears to have burned in a fire that at some time swept across the entire area.

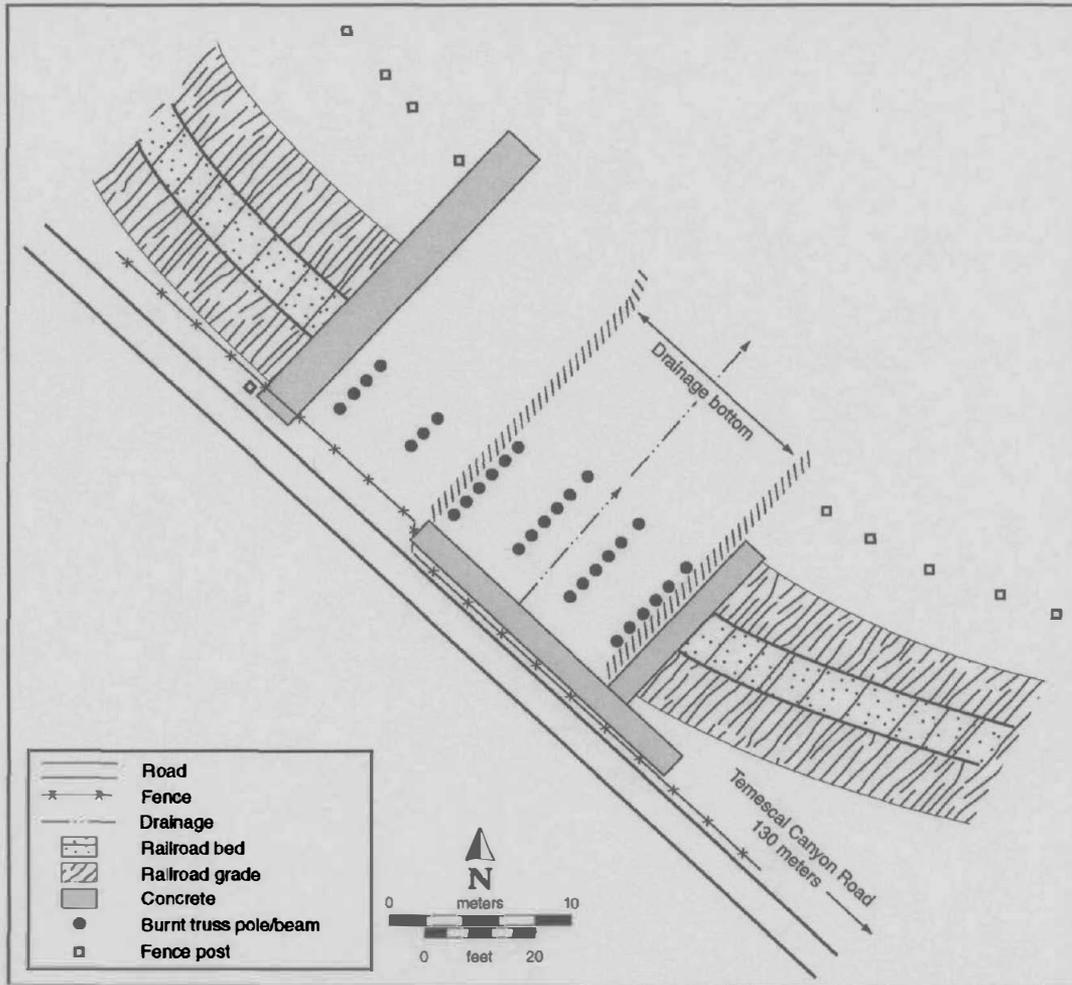
A15. **References:** (Documents, informants, maps, and other references):

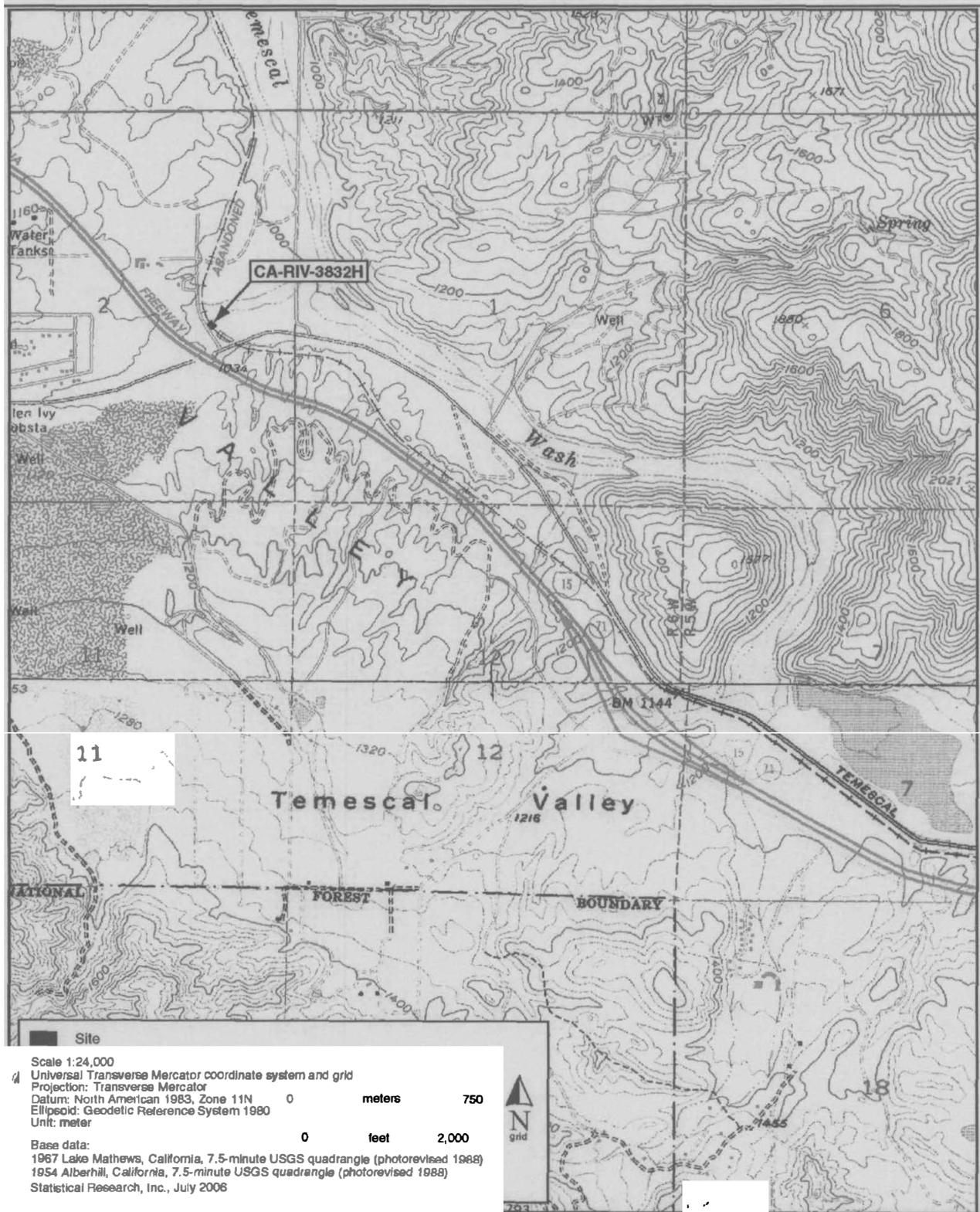
Page 3 of 5

Resource Name or #: CA-RIV-3832H

A16. Photographs: (List subjects, direction of view, and accession numbers or attach a Photograph Record.): Photo # DSC00458 on the Primary Record is a west-facing view of bridge. Many additional photographs were taken of the bridge and the associated hardware and railroad grade.

A17. Form Prepared by: John D. Goodman II **Date:** June 7, 2006
Affiliation and Address: Statistical Research, Inc., P. O. Box 390, Redlands, California 92373-0123





State of California -The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-33-003832 (Update)
HRI#
Trinomial CA-RIV-3832H

Page 1 of 3 *

Resource Name or #: (Assigned by Recorder):

Other Identifier: The Santa Fe Railroad grade through the Temescal Valley

*Recorded by Kristie R. Blevins/Anna M. Hoover

*Date 05-01-05 [] Continuation [X] Update

There was no indication of change on the portion of the Santa Fe Rail observed during the current project. The portion is located to the immediate south of Temescal Canyon Road where it crosses under Interstate 15 and extends to the south, directly southwest of El Hermano Road. Portions of the wooden rail ties were noted as well as broken aqua-colored transformer glass.

The rail line was previously deemed non-significant and is slated for destruction.

See reference for additional information: Hoover, Gillean and Wagner (2005). *A Phase I Archaeological and Paleontological Survey Report for APNs 290-060-007, -017 & -019 and 290-080-012, -014 & -015, a +32 Acre Property, County of Riverside, California*. On file with L&L Environmental, Inc and the Eastern Information Center, UC-Riverside.

RECEIVED D, H, M
JUL 25 2005
EIC

PHOTOGRAPHS

L & L Environmental, Inc.
1269 Pomona Rd. Suite #102
Corona, CA. 92882

Primary #: 33-003832 (Update)
HR#: _____ **Trinomial:**
CA-RV-3832H

Page 2 of 3

Resource Name or #: Santa Fe railroad grade through Temescal Valley



Photo 1: Railroad berm, facing SE, 05-01-05



Photo 2: Aqua-colored transformer glass, lying on ground surface, 05-01-05

PHOTOGRAPHS

L & L Environmental, Inc.
1269 Pomona Rd. Suite #102
Corona, CA. 92882

Primary #: 33-003832 (Update)
HRI#: _____ Trinomial: _____
CA-RIV-3832H

Page 3 of 3

Resource Name or #: Santa Fe railroad grade through Temescal Valley

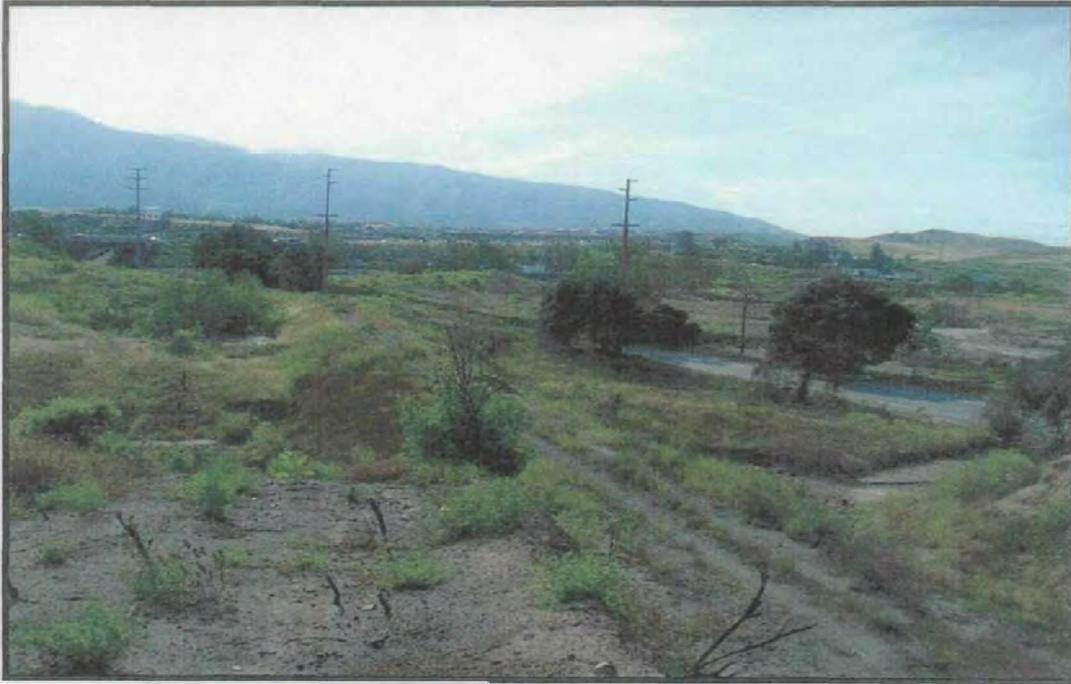


Photo 3: Railroad berm running N/S, facing NW, 05-01-05



Photo 4: Remnants of a Rail tie, 05-01-05

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____ **UPDATE**
Trinomial CA-RIV-3832H
NRHP Status Code 6Y

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 4 *Resource Name or #: (Assigned by recorder) _____

P1. Other Identifier: The Santa Fe Railroad grade through the Temescal Valley

*P2. Location: Not for Publication Unrestricted *a. County Riverside
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Alberhill, CA Date 1953, PR 1988 T 4W; R 5S; SE & SW $\frac{1}{4}$ s of Sec 7; SB B.M.

c. Address Temescal Canyon Road City Alberhill Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 11; East end: 459780 mE / 3733560 mN, West end: 458750 mE / 3734100 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

Take the Indian Truck Trail exit from Interstate 15 and turn right; turn left on Temescal Canyon Road.

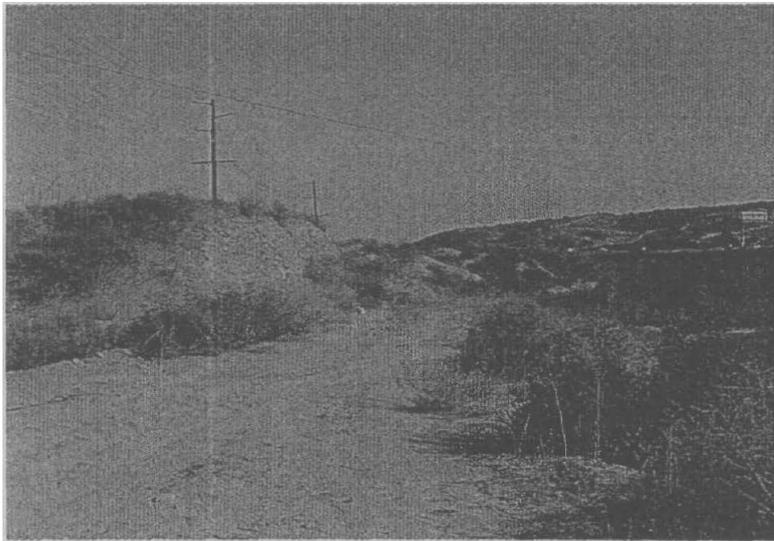
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This site consists of the remains of the Atchison, Topeka, and Santa Fe railroad between Lake Elsinore and Corona. Initial sections were built in 1896 to serve coal and clay mines. Only the segment within the project area was surveyed. All the railroad features have been removed (i.e., the tracks, ties, signal system) and the roadbed has been severely disturbed in the eastern portion and obliterated in the western portion of the project area by earth moving activities and erosion.

*P3b. Resource Attributes: (List attributes and codes) (AH7) Railroad Grade

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

5a. Photograph or Drawing: (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, data, accession #)
CA-RIV-3832H ph. View east

of old A, T & SF road cut

*P6. Date Constructed/Age and Sources: Historic
 Prehistoric Both

Love, Bruce and Tom Tang

1998 Temescal Canyon

*P7. Owner and Address:
Sukut Construction

Sukut Construction

*P8. Recorded by: (Name, affiliation, and address):
Riordan Goodwin

1650 Spruce Street, 5th Floor

Riverside, CA 92507

*P9. Date recorded: 10/2/01

*P10. Survey Type: (Describe) Intensive

* P11. Report citation: (Cite survey report and other sources or enter "none.") Cultural Resources Assessment, Temescal Canyon Parcel, Riverside 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) _____

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DPR 523A (1/95)

SEP 25 2002

*Required Information

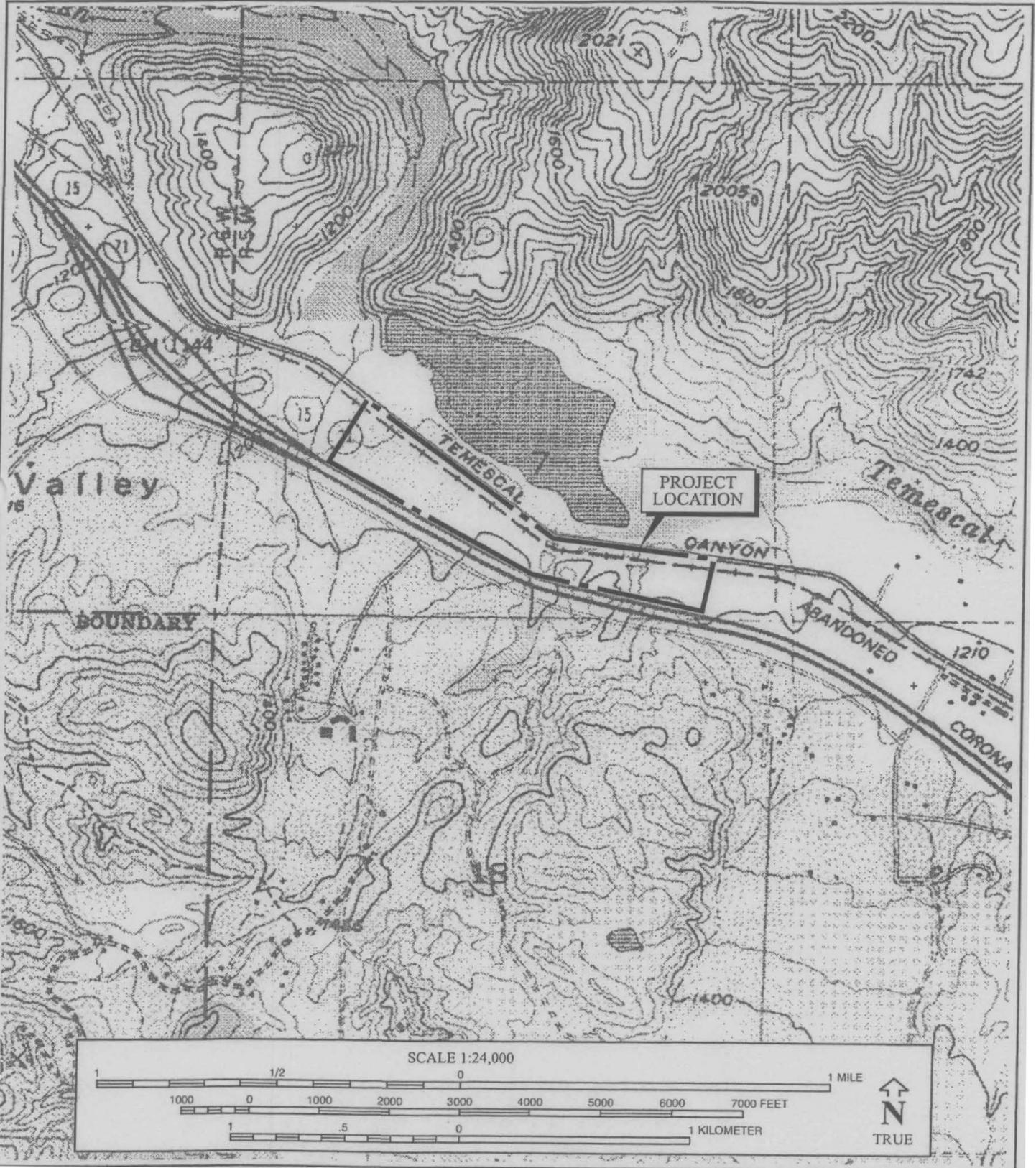
State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # _____
HRI # _____
Trinomial CA-RIV-3832H

Page 2 of 4

*Resource Name or # (Assigned by recorder) CA-RIV-3832H Temescal Valley South Railroad

*Map Name: USGS 7.5' Quads; Alberhill/Lake Mathews *Scale: 1:24,000 *Date of Map: 1954 PR 1988/1967 PR 1988



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-RIV-3832H

Page 3 of 4

*Resource Name or #: (Assigned by recorder) _____

- *A1. Dimensions:** a. Length 7miles (E-W) x b. Width 30' (N-S)
Method of Measurement: Paced Taped Visual estimate Other: _____
Method of Determination (Check any that apply): Artifacts Features Soil Vegetation Topography
 Cut bank Animal burrow Excavation Property boundary Other (Explain): _____
- Reliability of determination:** High Medium Low Explain: _____
- Limitations** (Check any that apply) Restricted access Paved/built over Site limits incompletely defined
 Disturbances Vegetation Other: (Explain): _____
- A2. Depth:** _____ None Unknown **Method of Determination:** _____
- *A3. Human Remains:** Present Absent Possible Unknown (Explain): _____
- *A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map):
This segment of the old Corona to Elsinore Santa Fe line within the project area measures approximately 7/10 of a mile and contains few features and artifacts.
- *A5. Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features):
A few railroad spikes and track fittings.
- *A6. Were Specimens Collected?** No Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)
- *A7. Site Condition:** Good Fair Poor (Describe disturbances): _____
- *A8. Nearest Water:** (Type, distance, and direction) Artificial lake approximately 250' north
- *A9. Elevation:** 1160' AMSL
- A10. Environmental Setting:** (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.): _____
- A11. Historical Information:**
This section of the railroad line was added by Santa Fe to Temescal Canyon in 1927 to link Temecula and Riverside. Service was discontinued and the tracks were removed in the mid-1930s.
- *A12. Age:** Prehistoric Protohistoric 1542-1769 1769-1848 1848-1880 1880-1914 1914-1945
 Post 1945 Undetermined Describe position in regional prehistoric chronology or factual historic dates if known: _____
- A13. Interpretations** (Discuss data potential, function(s), ethnic affiliation, and other interpretations) _____
- A14. Remarks:** _____
- A15. References** (Documents, informants, maps, and other references):
Love, Bruce and Bai Tom Tang (1996) Identification and Evaluation of Historic Properties: Temescal Valley Interceptor Project, Elsinore Valley Munciple Water District, Riverside County, California. Unpublished report on file at UCR, Eastern Information Center, Riverside, CA 92501
- A16. Photographs** (List subjects, direction of view, and accession numbers or attach a Photograph Record):
Temescal Canyon project, Disc 2 Fr. 3
Original Media/Negatives Kept at: LSA Associates, 1650 Spruce Street, 5th Floor, Riverside, CA 92507
- *A17. Form Prepared By:** Riordan Goodwin **Date:** 10/3/01
Affiliation and Address: LSA Associates, 1650 Spruce Street, 5th Floor, Riverside, CA 92507

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # _____
HRI # _____
Trinomial CA-RIV-3832H

Page 4 of 4 *Resource Name or #: (Assigned by recorder) _____

L1. Historic and/or Common Name: Old Santa Fe railroad grade through Temescal Valley

L2a. Portion Described: Entire Resource Segment Point Observation Designation: _____

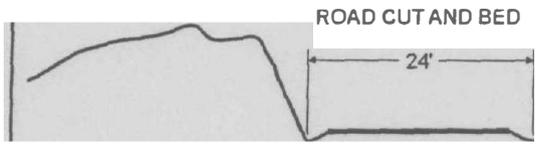
b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

East end: 459780 mE / 3733560 mN, West end: 458750 mE / 3734100 mN

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)
Portion of segment of railroad bed between Horsethief Canyon Road and Indian Truck Trail Road just north of Interstate 15.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)
a. Top Width 30'
b. Bottom Width N/A
c. Height or Depth N/A
d. Length of Segment ~7/10 of a mile

L4e. Sketch of Cross Section (include scale) Facing: _____

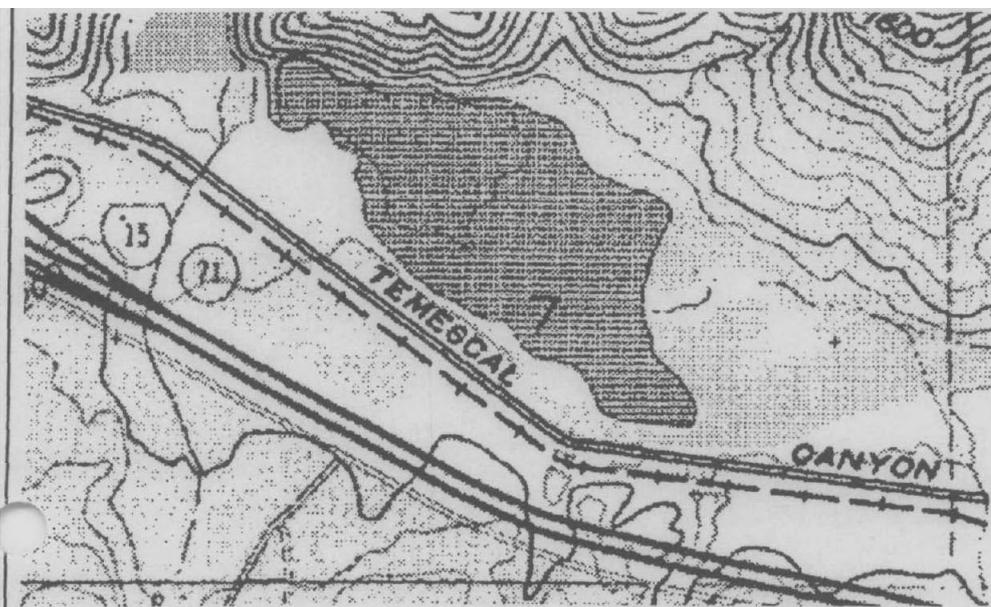


L5. Associated Resources:

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)
Former course of Corona to Lake Elsinore Santa Fe railroad line is very slight grade from east to west.

L7. Integrity Considerations: Integrity is poor; the roadbed has been severely disturbed by earth moving activities and erosion.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing (view, scale, etc.)
Scale 1:12,000

L9. Remarks:

L10. Form Prepared by:
Riordan Goodwin
1650 Spruce Street
5th Floor
Riverside, CA 92507

L11. Date: 10/7/01

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-RIV-3832H (update)
NRHP Status Code 6Y

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 11

*Resource Name or #: (Assigned by recorder) _____

P1. Other Identifier: The old Santa Fe Railroad grade through the Temescal Valley
*P2. Location: Not for Publication Unrestricted *a. County Riverside
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Quad Corona N., Corona S., Lake Mathews, Alberhill, Lake Elsinore
Date 1988 (photorevision); T 3S R 6W, T 4S R 6W, T 5S R 6W, T 5S R 5W, T 5S R 4W, T 6S R 4W;
1/4 of 1/4 of Sec (various); San Bernardino B.M.

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 11; 450100 mE/ 3748500 mN
452720 mE/ 3745720 mN
452940 mE/ 3742940 mN
456170 mE/ 3737920 mN
456380 mE/ 3735860 mN
463520 mE/ 3731780 mN
465520 mE/ 3729130 mN
466570 mE/ 3729480 mN
467250 mE/ 3728900 mN

e. Other Locational Data (e.g., parcel #, directions to resource, elevation, etc., as appropriate):

*P3a. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): This site consists of the remains of the Atchison, Topeka and Santa Fe Railroad line between Corona and Lake Elsinore. The tracks, ties, signal system, and all other features of railroad operations have been removed, and at various places recent earth-moving activities have disturbed into the railroad bed itself. At several spots, for example, the railroad bed has been destroyed during road constructions. However, the old railroad grade as a whole still remains identifiable. The entire course of the abandoned railroad is depicted in the USGS quad sheets cited above.

*P3b. Resource Attributes: (List attributes and codes) AH7--Railroad Grade

*P4. Resources Present: Building Structure Object Site District Element of District
 Other (isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession #)

*P6. Date Constructed/Age and Sources: Historic Prehistoric Both

*P7. Owner and Address: Various

*P8. Recorded by (Name, affiliation, and address): CRM TECH, 126 Barret Road, Riverside, CA 92507

*P9. Date Recorded: February 28, 1996

*P10. Survey Type: (Describe) Reconnaissance

*P11. Report Citation (Cite survey report and other sources, or enter "none."): Bruce Love and Bai Tom Tang: Identification and Evaluation of Historic Properties: Temescal Valley Intertie Project, Elsinore Valley Municipal Water District, Riverside County, California. 1995. On file, Eastern Information Center, University of California, Riverside

*Attachments: NONE Location Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Resource Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

DPR 523A (1/95)

RECEIVED IN *Required information

MAR 04 1996

EIC

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-RIV-3832H (update)

Page 2 of 11

*Resource Name or # (Assigned by recorder) _____

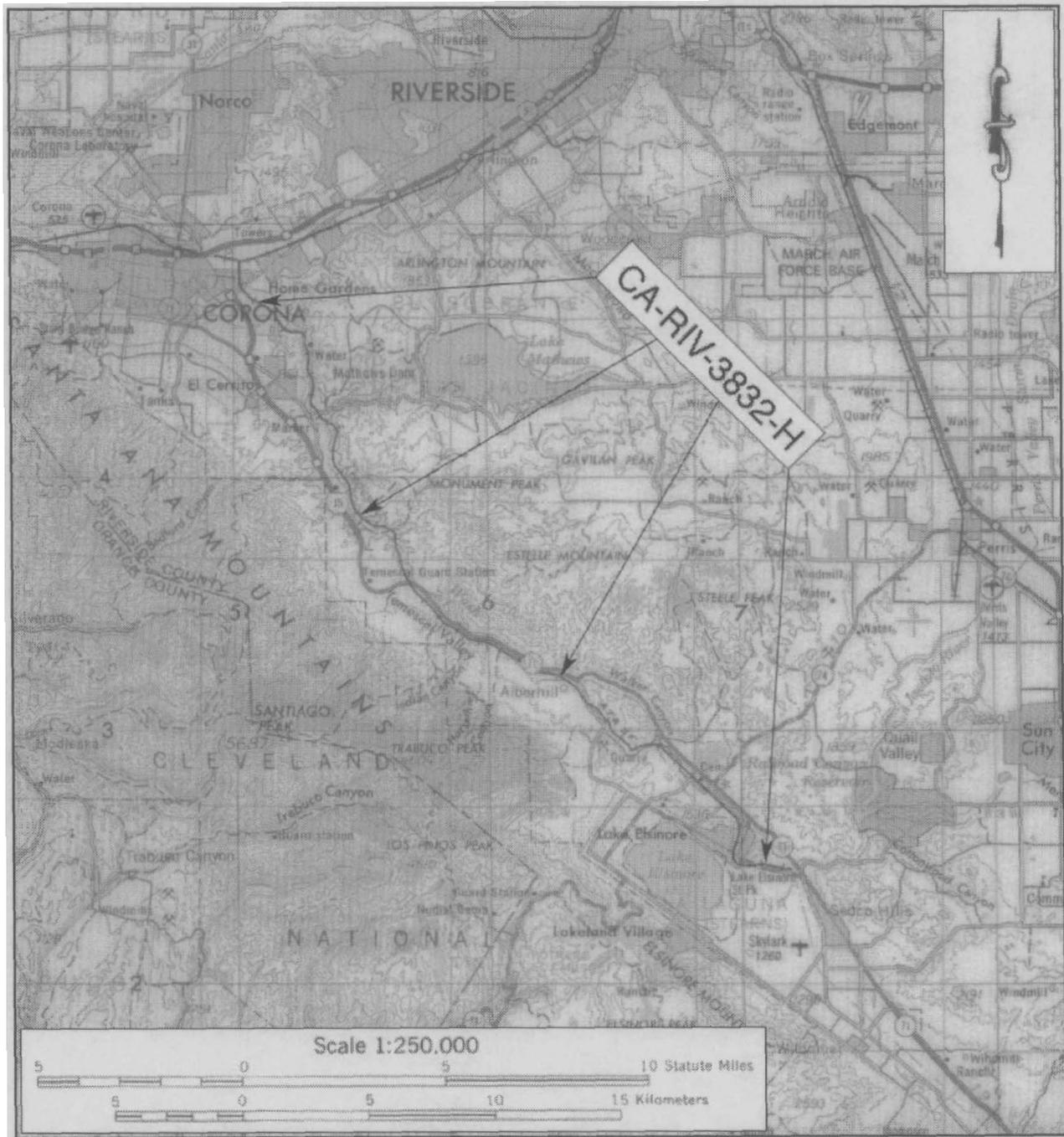
- A1. **Dimensions:** a. Length 22 (miles) b. Width 30 (ft)
Method of Measurement: ___ Paced ___ Taped Visual estimate Other: Map measurement
Method of Determination (Check any that apply.): ___ Artifacts Features ___ Soil ___ Vegetation ___ Topography ___ Cut bank ___ Animal burrow ___ Excavation ___ Property boundary ___ Other (Explain): ___
Reliability of Determination: High ___ Low ___ Explain: _____
Limitations (Check any that apply): ___ Restricted access ___ Paved/built over ___ Site limits incompletely defined ___ Disturbances ___ Vegetation ___ Other (Explain): _____
- A2. Depth: _____ None Unknown **Method of Determination:** _____
- *A3. **Human Remains:** ___ Present Absent ___ Possible ___ Unknown (Explain): _____
- *A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.) This 22-mile-long site contains numerous historic features associated with railroad construction, most of which have not been surveyed and/or recorded.
- *A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.) Numerous kinds, e.g., railroad bed gravel, pieces of old ties, etc.
- *A6. **Were Specimens Collected?** No ___ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)
- *A7. **Site Condition:** ___ Good Fair ___ Poor (Describe disturbances.): Construction activities; public road works; vandalism; other earth-moving activities along the route; erosion
- *A8. **Nearest Water** (Type, distance, and direction.): Temescal Wash along the route at various distances
- *A9. **Elevation:** Ca. 650-1,400 ft at various points
- A10. **Environmental Setting:** (Describe vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.): The railroad follows the Temescal Valley which is a fault-produced valley with multiple sag ponds, springs, and wetlands. The native vegetation is chaparral and some riparian, disturbed in many places by modern constructions of residential and transportation features. Climate is Mediterranean with hot dry summers and cool wet winters. Soils are sandy loams, clays, and decomposed granites.
- A11. **Historical Information:** The southern end of the railroad line, between Lake Elsinore and Alberhill, was built in 1896 by the California Southern Railroad, a Santa Fe subsidiary, initially as a spur line to serve the coal and clay enterprises around Alberhill (Gunther 1984:541; USGS 1901). In 1927, when the Santa Fe Railroad removed its tracks through the troublesome Railroad Canyon, where the Temescal Water Company was preparing to build a dam, this spur line was extended through the Temescal Valley to reconstruct the Santa Fe's connection between Temecula and Riverside (Hudson 1978:68-69; Brown 1985:90). The Temescal Valley route served in this capacity for only a few years, however. In 1935, the Santa Fe Railroad permanently discontinued its service between Elsinore and Temecula and removed its tracks there (Hudson 1978:85). Nevertheless, the railroad between Corona and Lake Elsinore remained in the Santa Fe system until the mid or late 1970s, when it, too, was abandoned (USGS 1953; 1954; 1973; 1982).
- *A12. **Age:** ___ Prehistoric ___ Protohistoric ___ 1542-1769 ___ 1769-1848 ___ 1848-1880 1880-1914 ___ 1914-1945 ___ Post 1945 ___ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if knows:** See Item A11, above, for detailed discussion of factual historic dates.

- A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations.) The site has been determined not to be eligible for listing in the National Register of Historic Places due to the loss of historical integrity through removal of tracks, ties, signal system, and other features of railroad operations (Love and Tang 1995).
- A14. Remarks: A portion of the site between Alberhill and Lake Elsinore received intensive survey during the Temescal Valley Intertie Pipeline Project in 1995 (Love and Tang 1995).
- A15. References: (Documents, informants, maps, and other references.): Brown, James T. (1985): *Harvest of the Sun: An Illustrated History of Riverside County*; Windsor Publications, Northridge. Gunther, Jane Davies (1984): *Riverside County, California, Place Names: Their Origins and Their Stories*; Rubidoux Printing Company, Riverside. Hudson, Tom (1978): *Lake Elsinore Valley: Its Story, 1776-1977*; Lake Elsinore Downtown Business Association and City of Lake Elsinore Centennial, Lake Elsinore. Love, Bruce, and Bai Tom Tang (1995): *Identification and Evaluation of Historic Properties: Temescal Valley Intertie Project, Elsinore Valley Municipal Water District, Riverside County, California*; on file, Eastern Information Center, University of California, Riverside. USGS (United States Geological Survey), 1901: Map: Elsinore, California (30', 1:125,000); 1953: Map: Lake Elsinore, California (7.5', 1:24,000); 1954: Map: Alberhill, California (7.5', 1:24,000); 1973: Map: Alberhill, California (7.5', 1:24,000); 1982: Map: Alberhill, California (7.5', 1:24,000); on file, Map Collection, Tomás Rivera Library, University of California, Riverside.
- A16. Photographs: (List subjects, direction of view, and accession numbers or attach a Photograph Record.): _____
Original Media/Negatives Kept at: CRM TECH, 126 Barret Road, Riverside, CA 92507
- *A17. Form Prepared by: Bruce Love and Bai Tom Tang Date: February 28, 1996
Affiliation and Address: CRM TECH, 126 Barret Road, Riverside, CA 92507

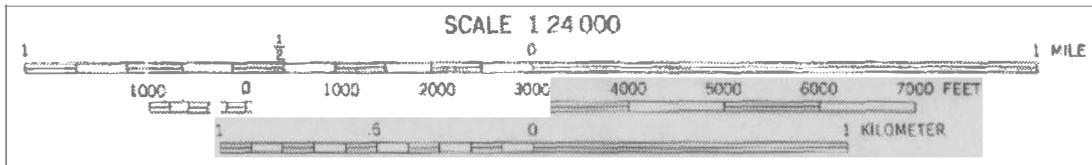
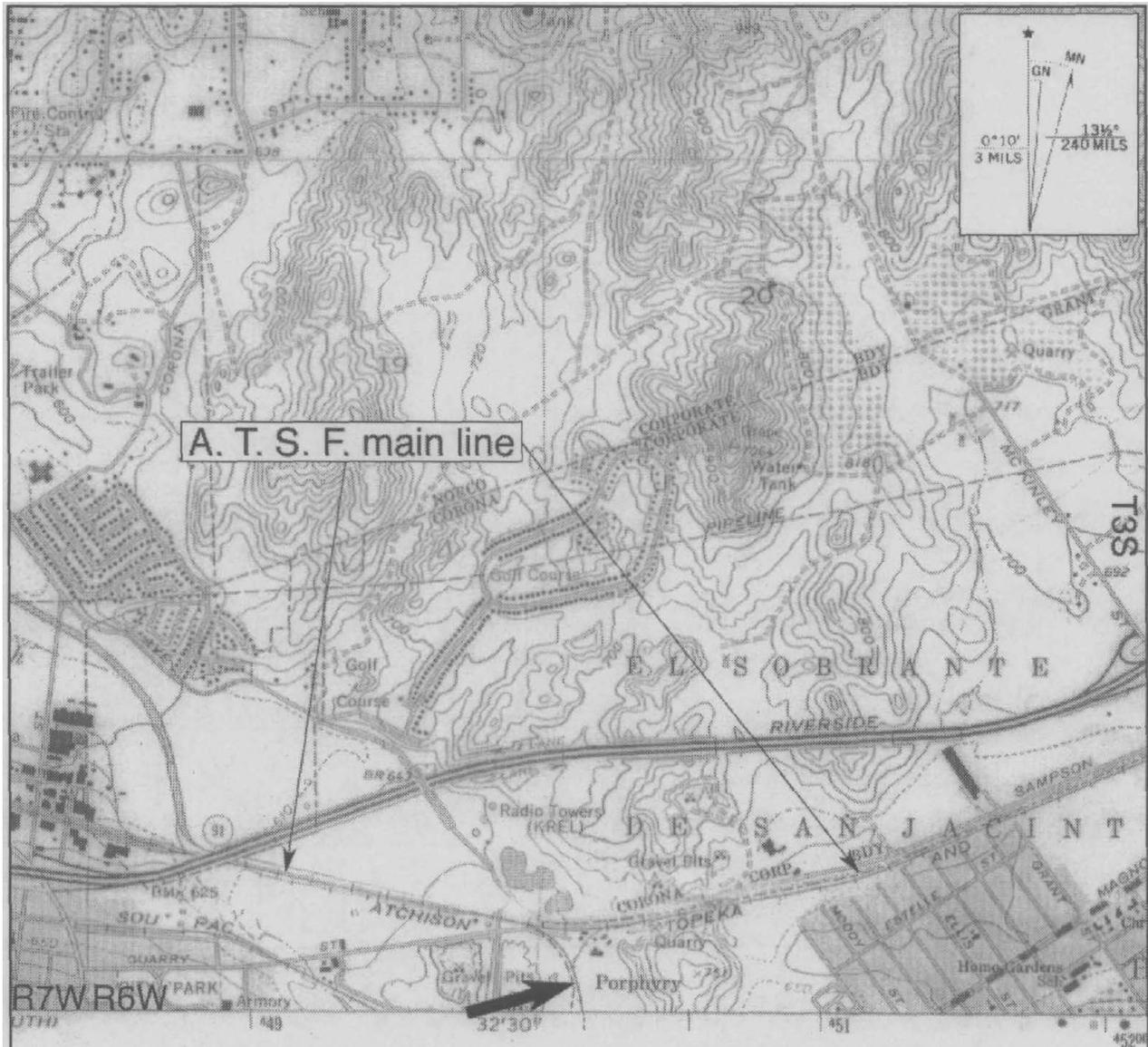
*Map Name: Santa Ana

*Scale: 1:250,000

*Date of Map: 1959 (revised in 1979)

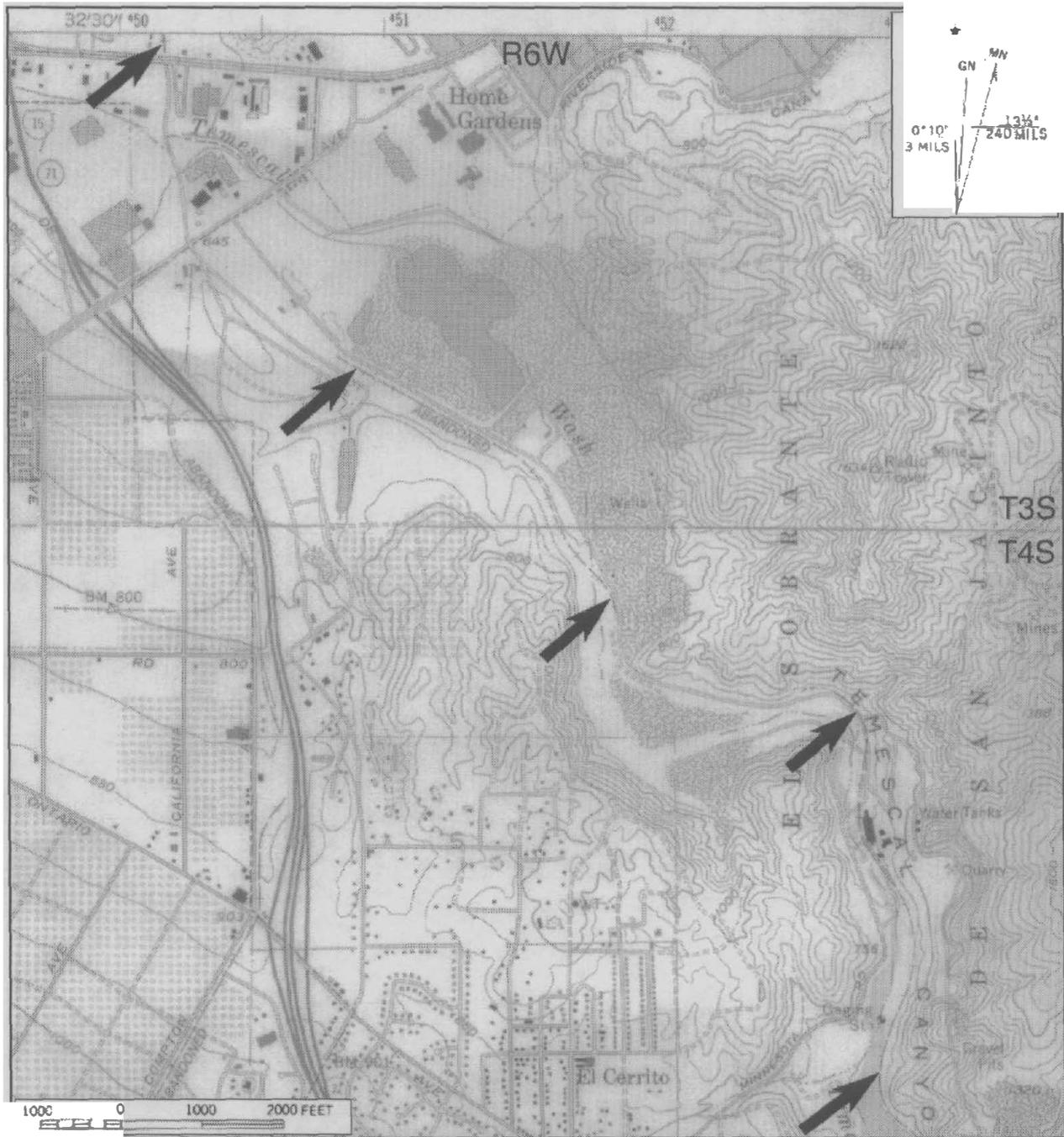


*Map Name: Corona North *Scale: 1:24,000 *Date of Map: 1967 (photorevised in 1988)



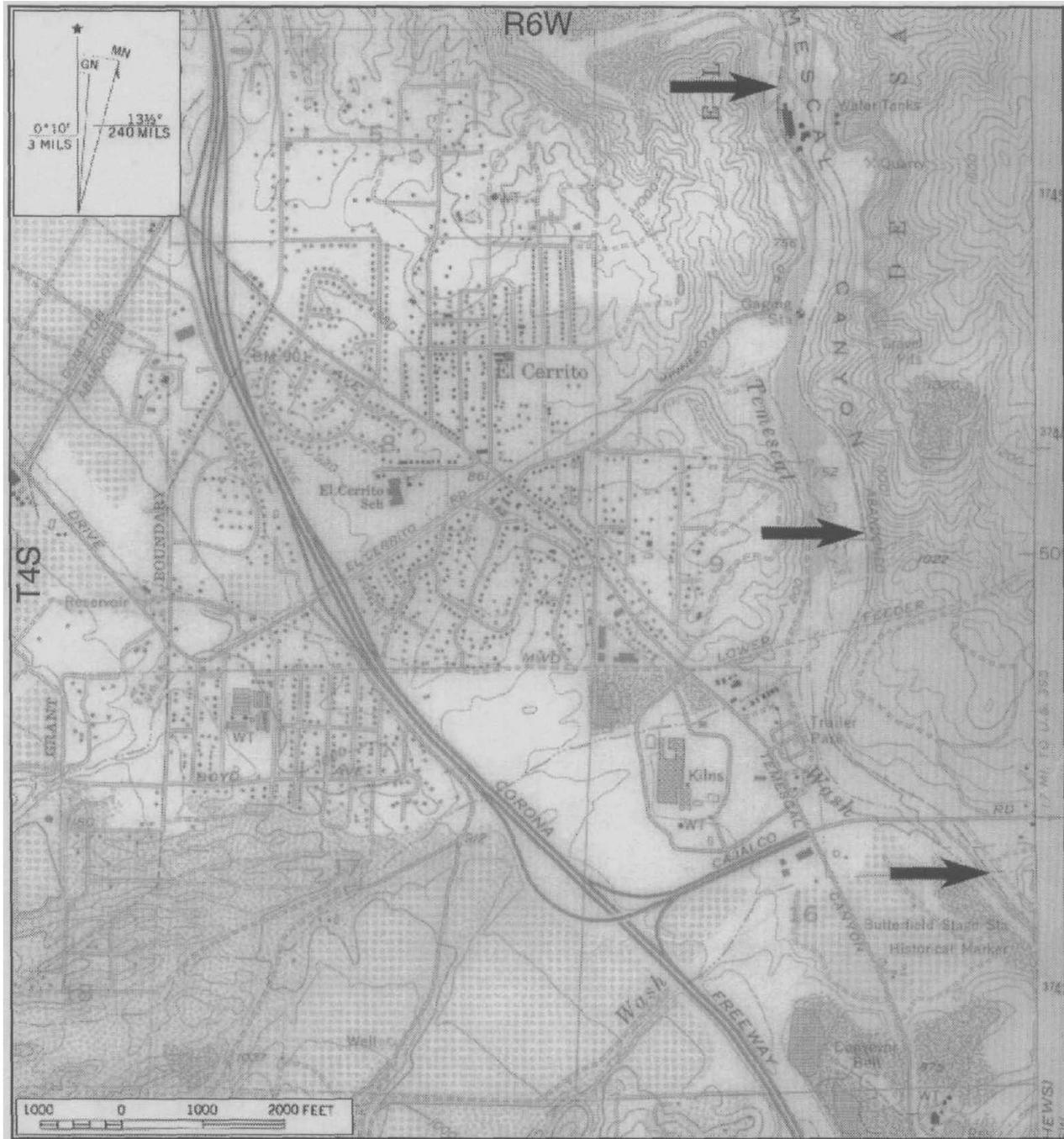
Heavy arrow(s) indicates identifiable sections of the site

*Map Name: Corona South *Scale: 1:24,000 *Date of Map: 1967 (photorevised in 1988)



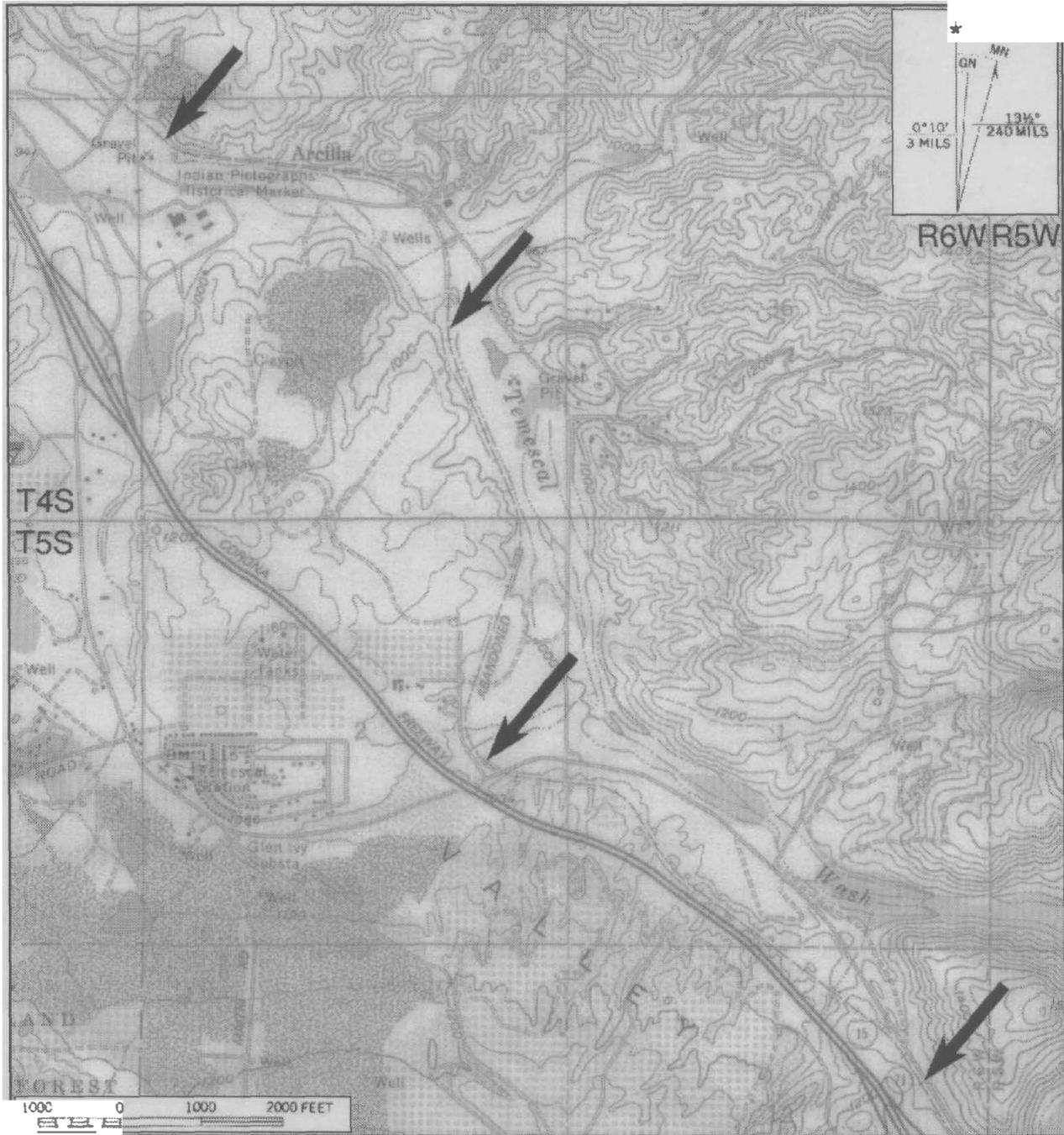
Heavy arrow(s) indicates identifiable sections of the site

*Map Name: Corona South *Scale: 1:24,000 *Date of Map: 1967 (photorevised in 1988)

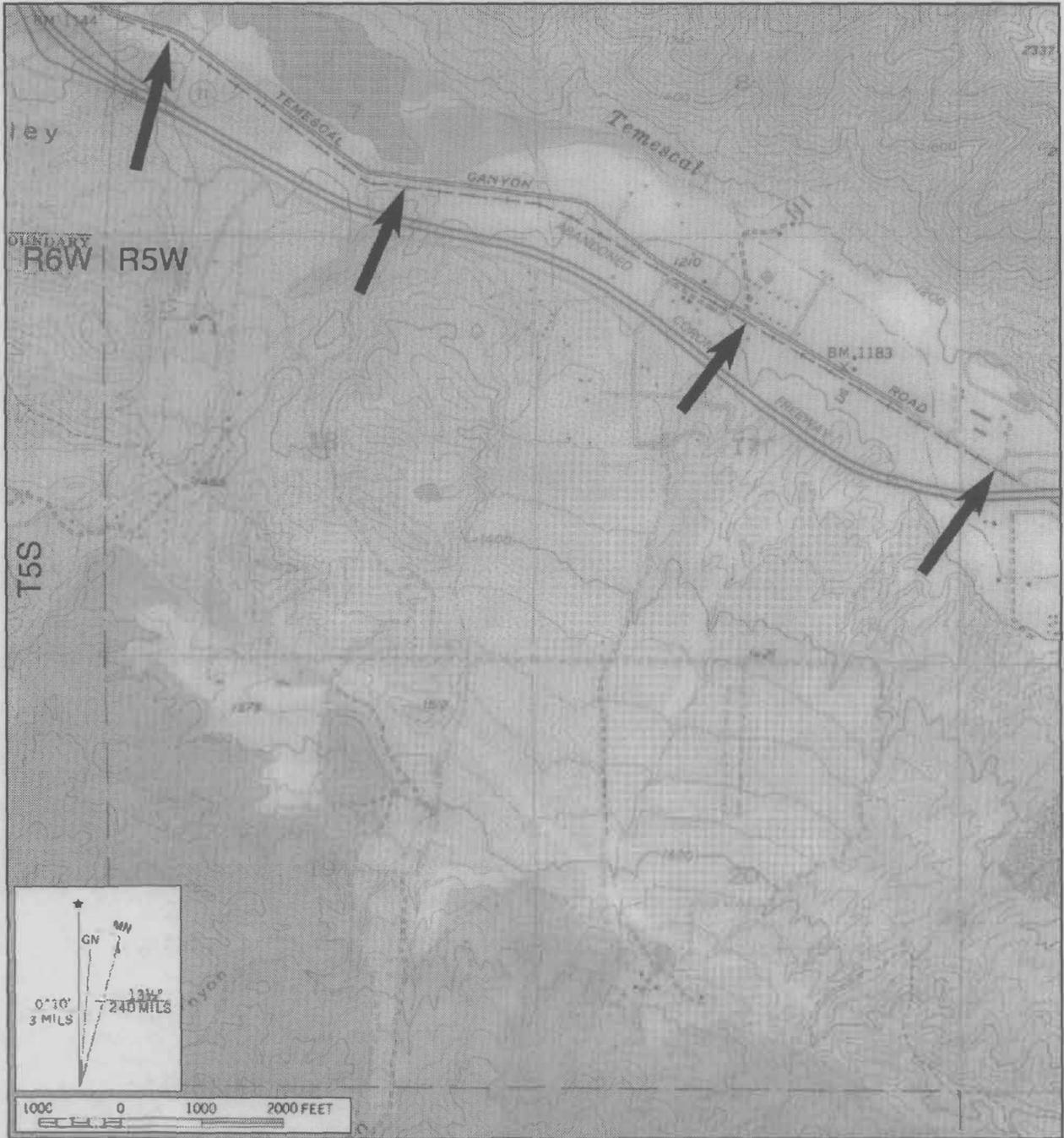


Heavy arrow(s) indicates identifiable sections of the site

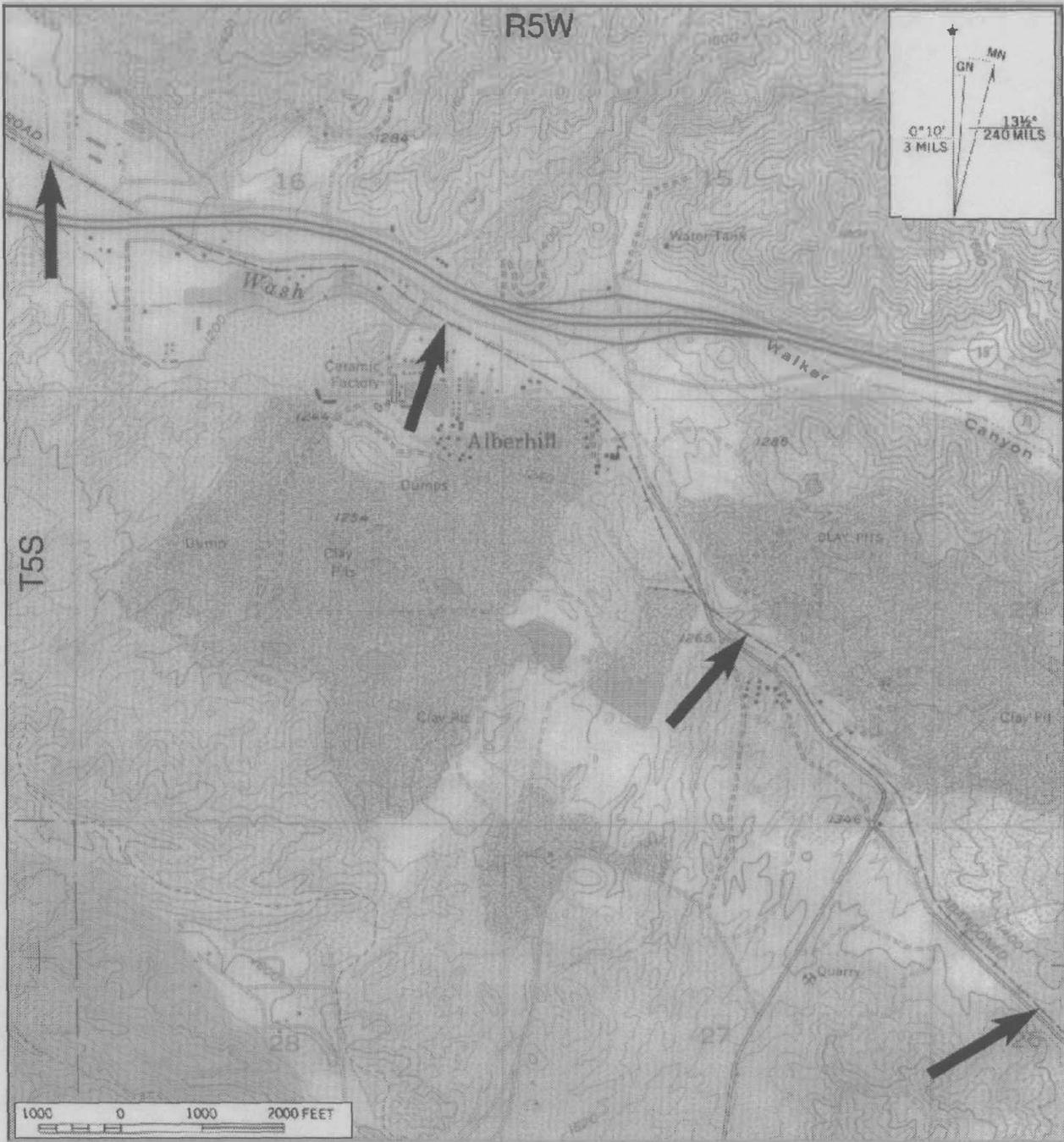
*Map Name: Lake Mathews *Scale: 1:24,000 *Date of Map: 1967 (photorevised in 1988)



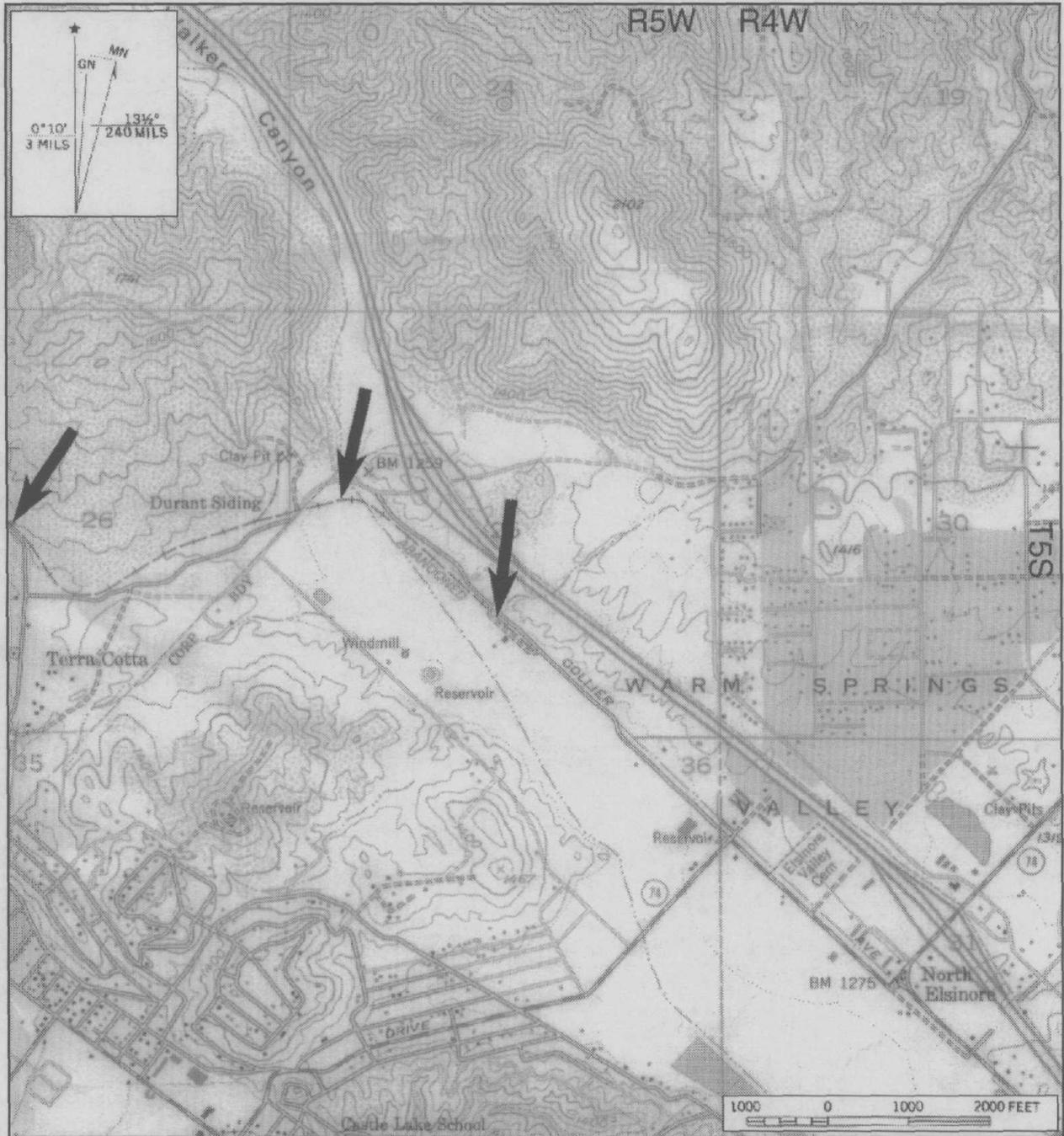
Heavy arrow(s) indicates identifiable sections of the site



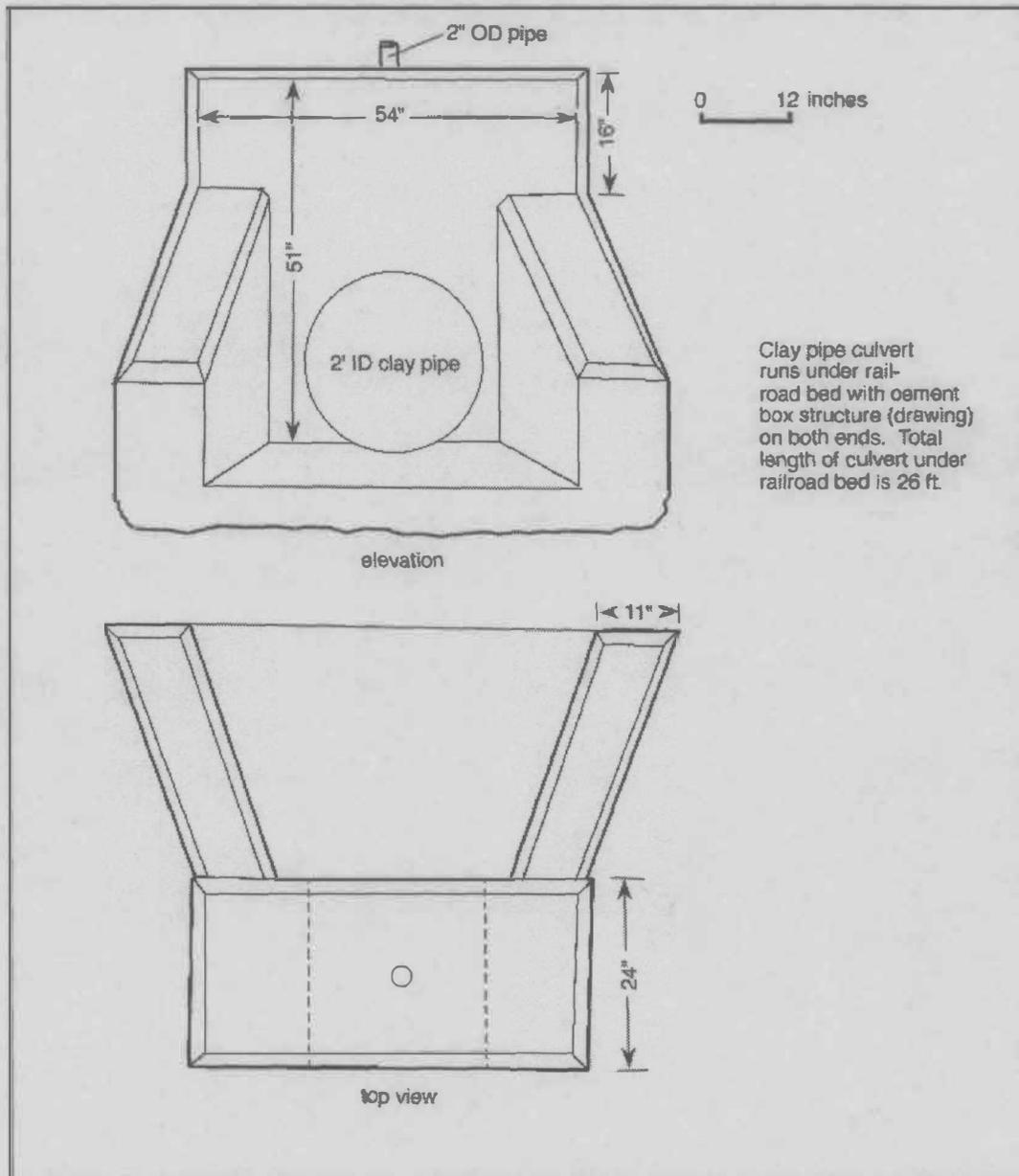
Heavy arrow(s) indicates identifiable sections of the site



Heavy arrow(s) indicates identifiable sections of the site



Heavy arrow(s) indicates identifiable sections of the site



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State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

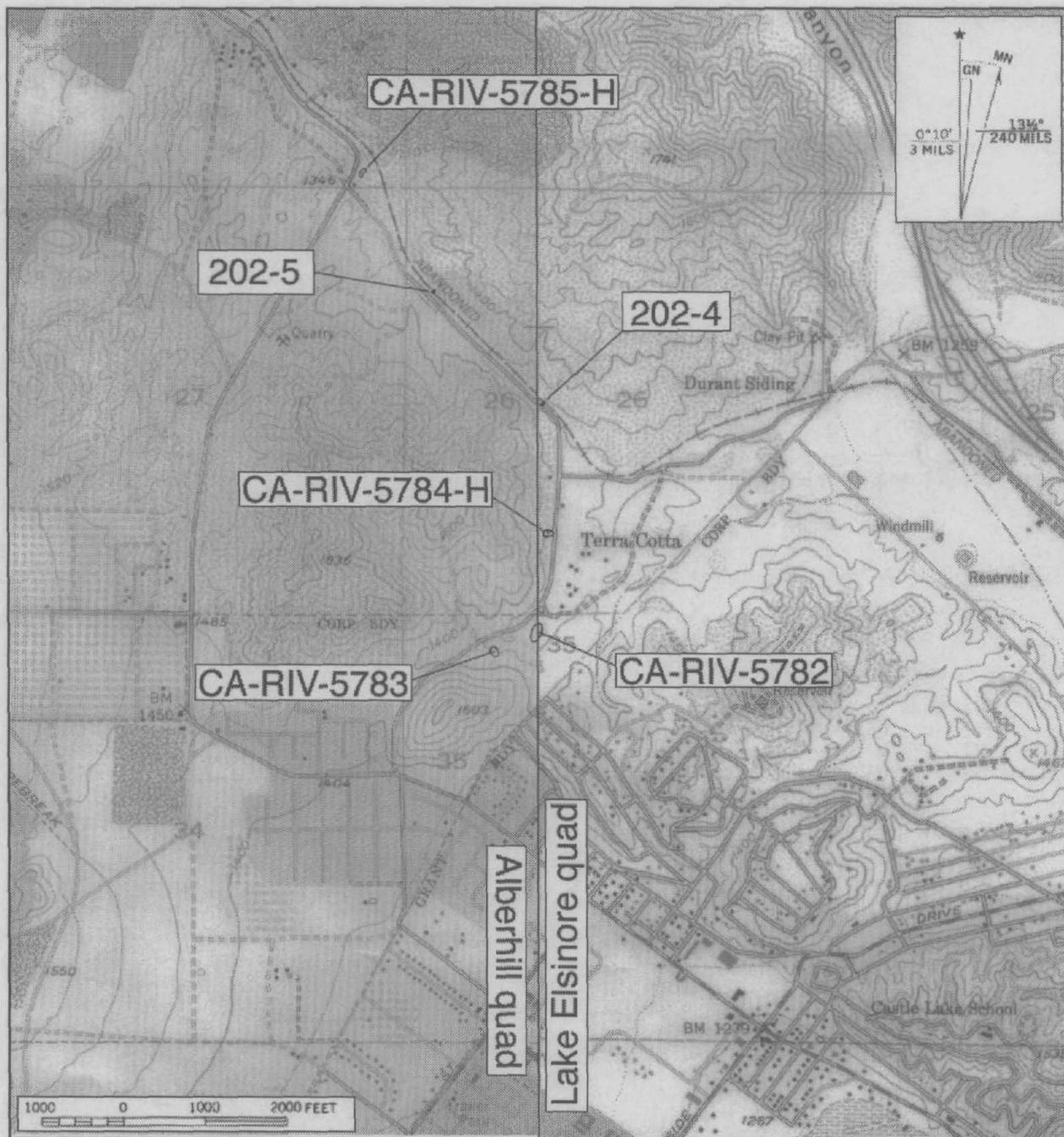
Primary #
HRI #

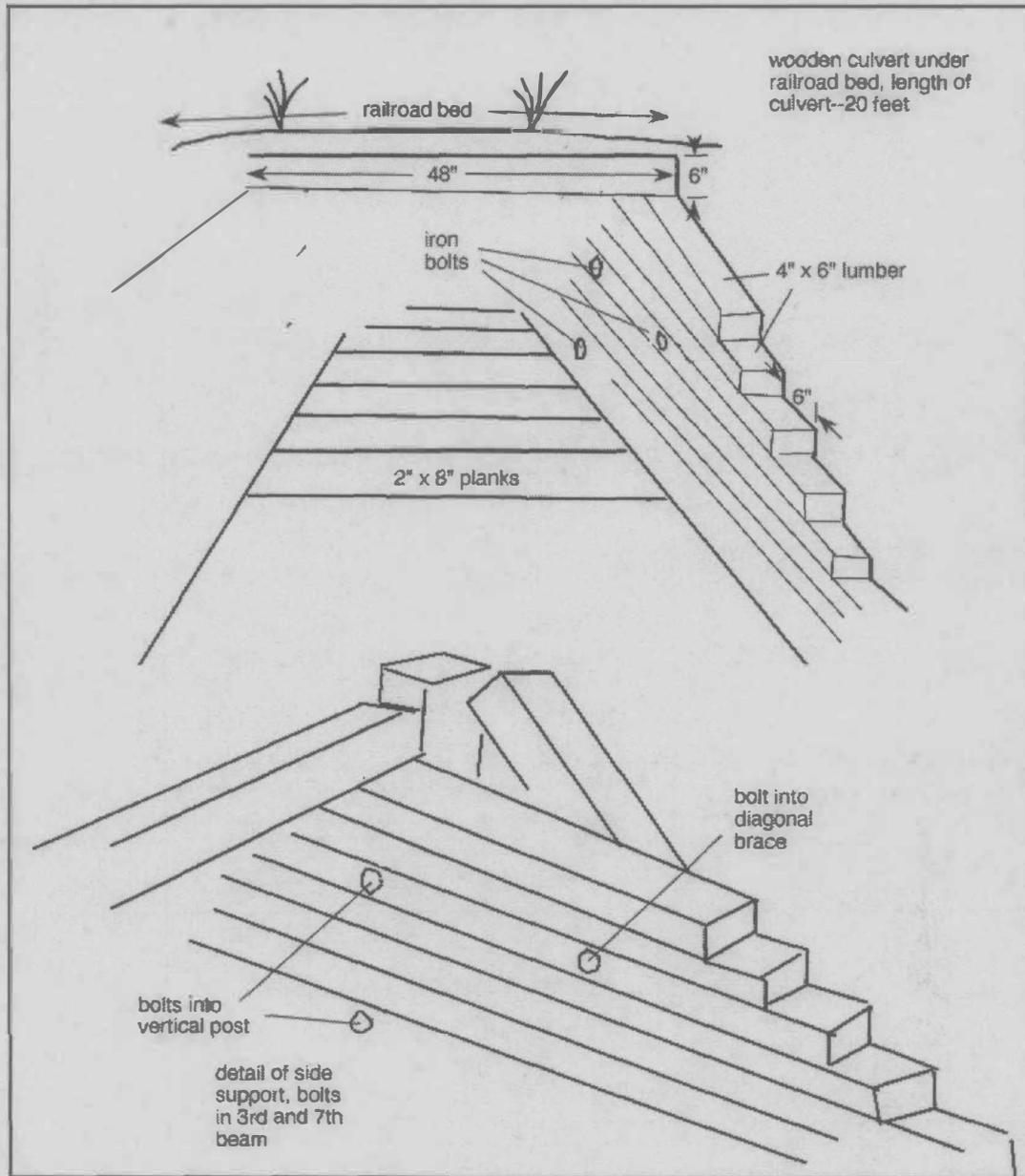
Trinomial CA-RIV-3832-H

Page 2 of 2

*Resource Name or # (Assigned by recorder) 202-4

*Map Name: Alberhill, Lake Elsinore *Scale: 1:24,000 *Date of Map: 1954, 1953
both photorevised 1988





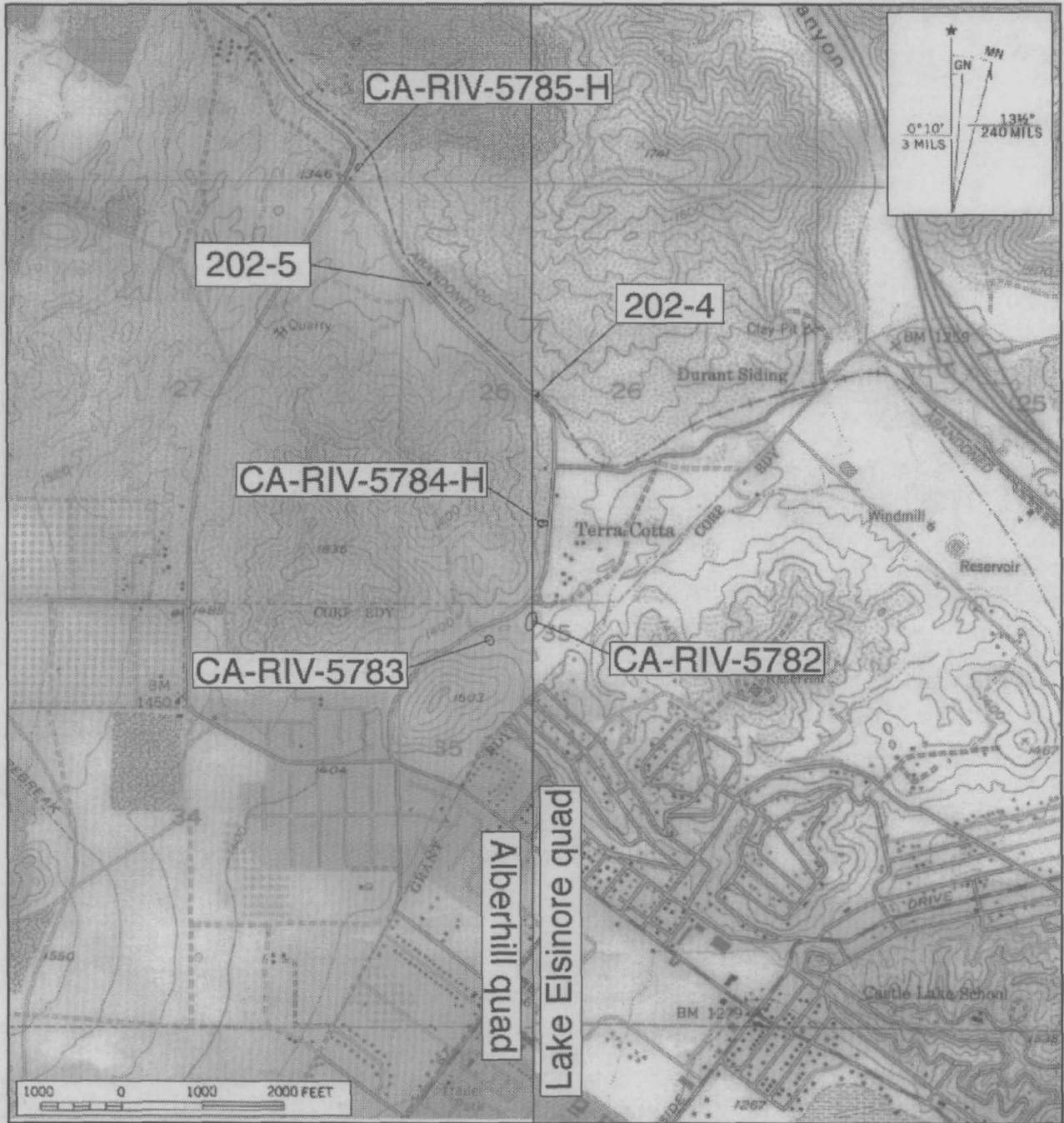
State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI #
Trinomial CA-RIV-3832-H

Page 2 of 2

*Resource Name or # (Assigned by recorder) 202-5

*Map Name: Alberhill, Lake Elsinore *Scale: 1:24,000 *Date of Map: 1954, 1953
both photorevised 1988



Page 1 of 5

1. County: Riverside
2. USGS Quadrangle: Lake Mathews dated 1967, photorevised 1988
3. UTM Coordinates: Zone 11: 457050 mE 3735620 mN
(UTMs applies only to newly recorded feature)
4. Twp. 5 S Rng. 6 W; SBBM, N 1/2; SE 1/4; NW 1/4; SW 1/4 of Section 1
(locational information applies only to newly recorded feature)
5. Map Coordinates: 522 mmS 138 mmE 6. Elevation: 1040 ft. (317 m.)
7. Location: Railroad construction road sweeps up hillside from just south of Temescal Canyon Road southwest to subroad bed. Above subroad bed is a dead grove of trees on a flat-topped hill.
8. Temporal Period: Constructed 1927, dismantled during mid 1980s.
9. Site Activity: Town Camp Homestead Road Trail Mines
 Railroad Grave Yard Trash Dump Military Other
Explain: The Santa Fe Railway built this branch line through Temescal Valley from Corona to Alberhill, connecting with the line at Elsinore.
10. Area: ca. 100 m NE/SW x 3 m NW/SE (328 x 10 ft.)
Method of Determination: estimation
11. Depth: none; Method of Determination: estimation
12. Features: Structure Dugout Fire Hearth Cairn Rock Alignment
Trash Dump Irrigation Trail Road Corral
Burial Well Spring R&R Grade (berm) Tram (road/way)
Tailings Other Explain: Newly recorded feature of the site is a truck/wagon road used in railroad construction.
13. Artifacts: Wood (size/type) Glass Metal Bone Ceramic (color)
Adobe (condition) Nails (size/type) Cans (size/type)
Ordnance Other Explain: Aqua glass insulator on flat-topped hill just above railroad subroad bed. Insulator has a beaded edge, interior threads, and is embossed "HEMINGRAY-42/MADE IN U.S.A./7", railroad spike.
14. Disturbance: Animal Burning Vandalism ORV Other
Explain: Erosion in wheel ruts.
15. Date Recorded: 11 December 1990
16. Recorders: K. Swope, D. Peirce
17. Affiliation and Address: Archaeological Research Unit, U C Riverside
18. Present Condition: Good Fair Poor Explain: Some erosion has altered the appearance of the road. The subroad bed of the railroad alignment has been cut or graded in places. Wooded trestles remain intact.
19. Name and Type of Investigation: Cultural Resources Assessment; UCRARU #1111
20. Nearest Water: Temescal Wash ca. 100 m. (328 ft.) north.
21. Vegetation Community (site vicinity): Coastal Sage Scrub

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JAN 25 1991

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HISTORIC SITE RECORD FORM, cont'd.
Archaeological Research Unit
University of California
Riverside, CA 92521

PERMANENT TRINOMIAL: CA-Riv-3832-H
SITE NAME: Santa Fe Railway
Temporary Designation:

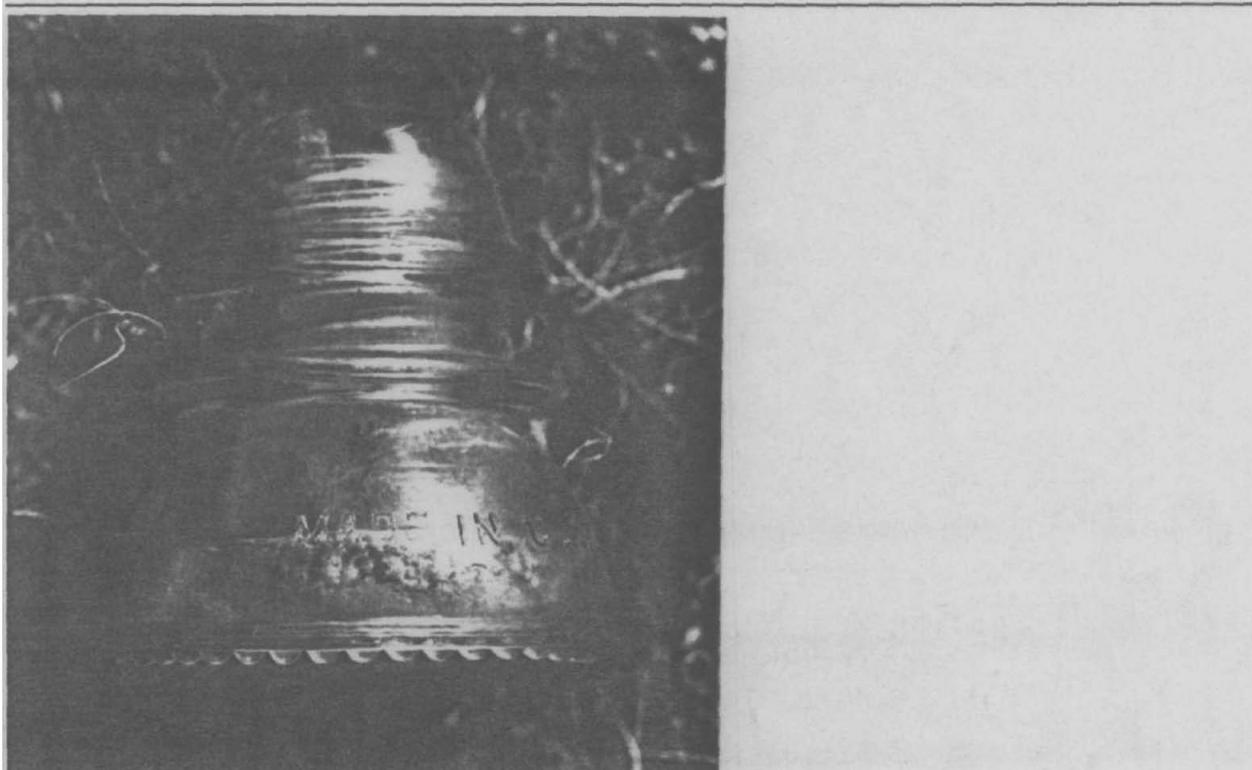
Page 2 of 5

-
22. Vegetation (on site): California Buckwheat (Eriogonum fasciculatum), oak tree nearby, grasses.
23. Soil: decomposed granite 24. Surrounding Soil: decomposed granite
25. Geology: valley 26. Landform: slopes above wash
27. Slope: ca. 5% 28. Exposure: open
29. Landowner and Address: private
30. Remarks: The railroad alignment was fenced with railroad ties and barbed wire on both sides. The grove of trees is living on southwest side of I-15. In addition to this newly recorded feature of the site, a railroad spur was found from the main Santa Fe line to the Owens-Illinois Glass Plant, site (CA-Riv-4112-H). This spur is discussed in that site record.
32. References: none
33. Site Accession Number: n/a Curated at: n/a
34. Photos: B/W, attached Taken by: K. Swope
35. Photo Accession #: UCRARU #1111 On File at: UCRARU

HISTORIC SITE PHOTOGRAPHS

Permanent Trinomial: CA-Riv-3832-H
Temporary Designation:
USGS Map: Lake Mathews 7.5'
Recorders: K. Swope, D. Peirce

Page 3 of 5



glass insulator

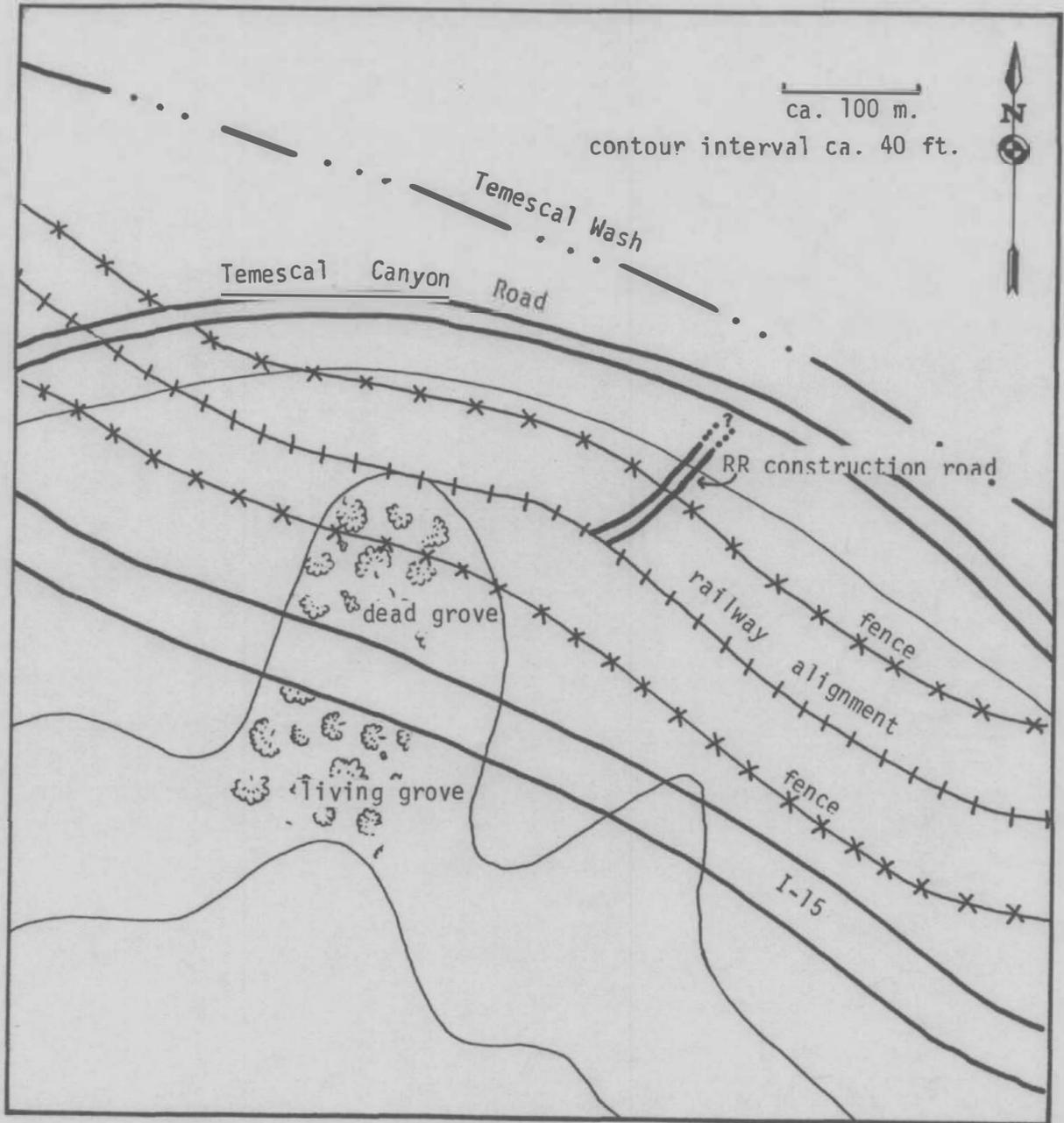


Truck/wagon road used in construction of Santa Fe Railway.
View west, toward I-15. Note dead grove in background.

HISTORIC SITE SKETCH MAP

Permanent Trinomial: CA-Riv-3832-H
Temporary Designation:
USGS Map: Lake Mathews 7.5'
Recorders: K. Swope, D. Peirce

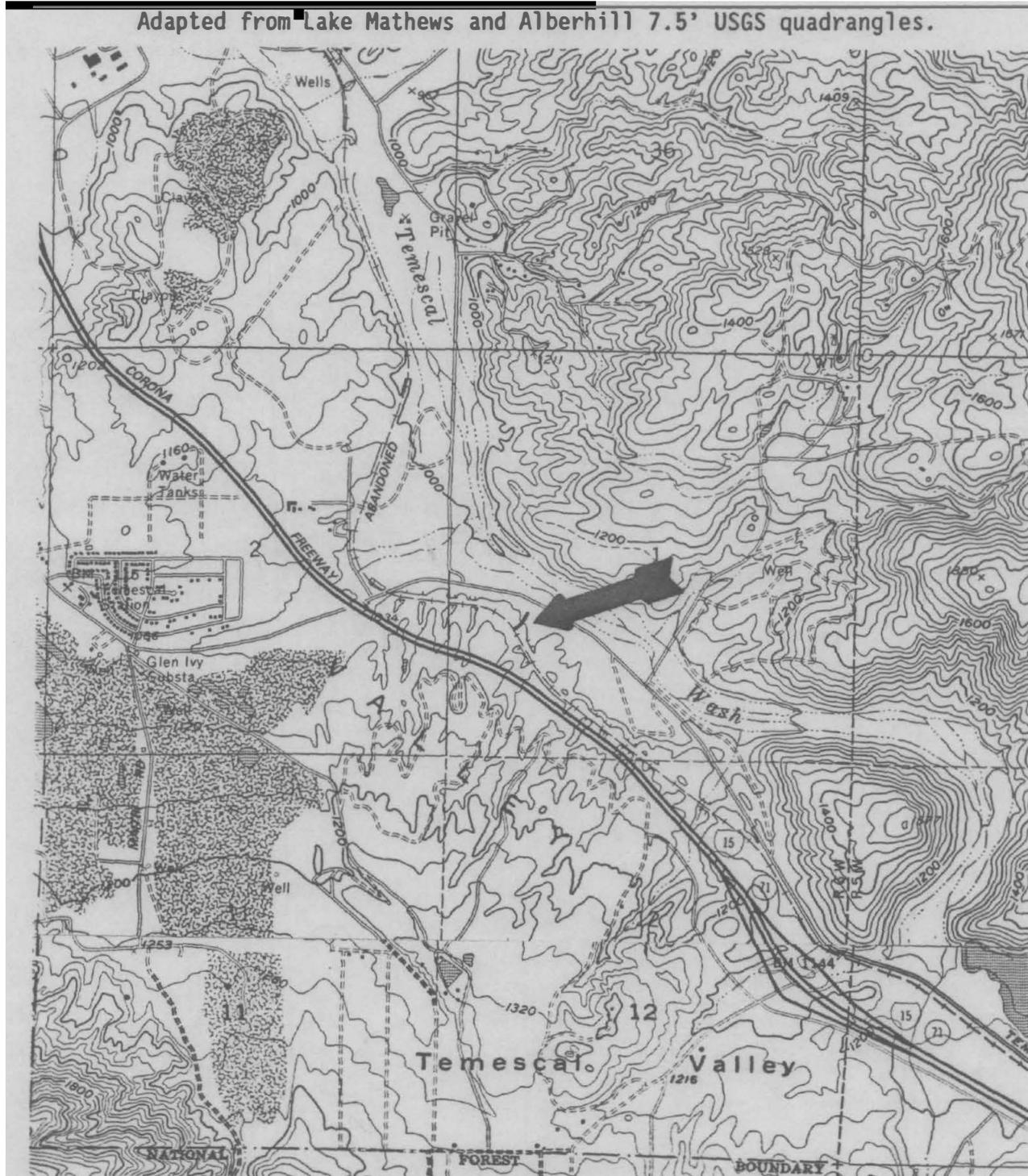
Page 4 of 5



HISTORIC SITE LOCATION MAP

Permanent Trinomial: CA-Riv-3832-H
Temporary Designation:
USGS Map: Lake Mathews 7.5'
Recorders: K. Swope, D. Peirce

Page 5 of 5



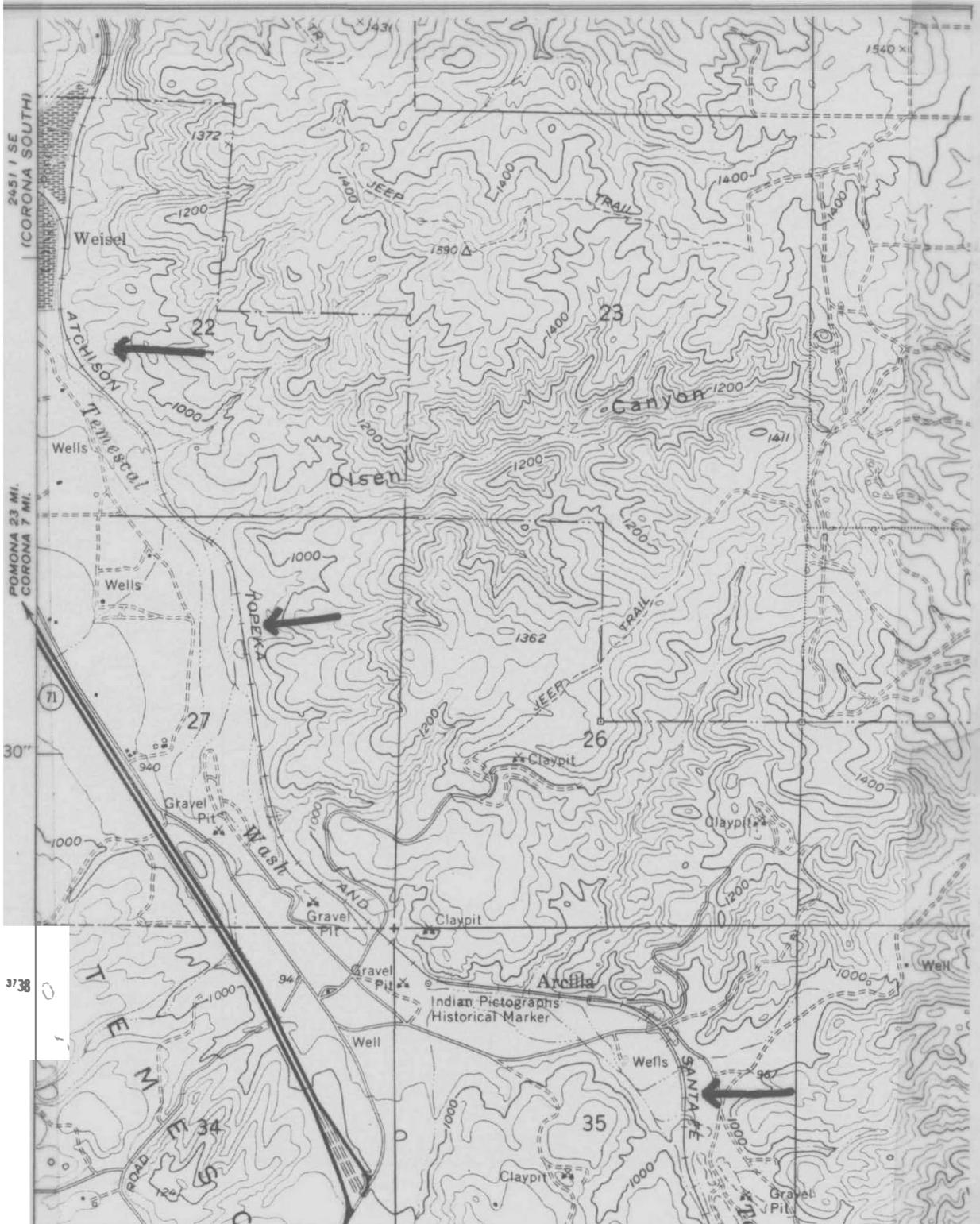
1. County: Riverside
2. USGS Quad.: Lake Mathews, Calif. 7.5' (1973)
3. UTM Coordinates: Zone 11: mE mN
4. Twp. 4S, Rng. 6W: NW 1/4; SW 1/4; NW 1/4; NW 1/4; NE 1/4 of Sec. 27
5. Map Coordinates: -- mmS -- mmE 6. Elevation: 900'
7. Location: Temescal Valley, at the mouth of Olsen Canyon. See below.
8. Temporal Period: Construction: 1927; abandonment: 193?
9. Site Activity: Town ___ Camp ___ Homestead ___ Road ___ Trail
Mines ___ Railroad X Grave Yard ___ Trash Dump ___ Military ___
Other Explain:
10. Area: 60' x 22 miles; Method of Determination: Topographic maps
11. Depth: Surface; Method of Determination:
12. Features: Structure Dugout ___ Fire Hearth ___ Cairn ___ Rock
Alignment ___ Trash Dump ___ Irrigation ___ Trail ___ Road ___ Corral
Burial ___ Well ___ Spring ___ R&R Grade (berm) X Tram (road/way) ___
Tailings ___ Other X Explain: The remains (stumps) of a power pole
line run parallel to the railroad grade. At this location there is a
bridge (trestle) used for the railroad that is intact. This month it was
blocked off to prohibit vehicular traffic from going across it. Road was
graded around the trestle on the east side of the creek to permit flow of
traffic.
13. Artifacts: Wood (size/type) ___ Glass (color) X Metal (type) ___
Bone ___ Ceramic (color) ___ Adobe (condition) Nails (size/type) X
Cans (size/type) ___ Ordnance Other Explain: Railroad spikes
and glass insulators from the power pole line.
14. Disturbance: Animal ___ Burning ___ Vandalism ORV Other X
Explain: Berm is intact here, however, in other areas the railroad right-
of-way is being developed, removing evidence of the berm etc.
15. Date Recorded: 8 Feb 1990 16. Recorder(s): Daniel F. McCarthy
17. Affiliation and Address: Archaeological Research Unit, U C Riverside
18. Present Condition: Good Fair X Poor Explain: Tracks removed.
19. Nearest Water: Tracks run along Temescal Wash.
20. Vegetation Community (site vicinity): Riparian
21. Vegetation (on site): Sycamores, willows, black and white sage
22. Soil: Gravel bed 23. Surrounding Soil: Grus
24. Geology: Granitic 25. Landform: Valley
26. Slope: < 3% 27. Exposure: Open
28. Landowner and Address: Private
29. Remarks: Railroad spur line was built around 1927. It ran from Corona
through Temescal Canyon to Lake Elsinore, a distance of approximately 22
miles. The tracks were removed sometime prior to 1987 and the right-of-way
is shown on the following USGS topographic maps dated prior to 1973 (photo-
revised): Corona North, Corona South, Lake Mathews, Alberhill, and
Elsinore. The railroad tracks do not show on the Lake Mathews, California
7.5' dated 1988.
30. References:
31. Name of Project: UCRARU #1039, Cultural Resources Assessment of the Morger
Property Located in Temescal Canyon, Riverside County, California, D. F.
McCarthy.
32. Type of Investigation: Class III inventory
33. Site Accession Number: Curated at:
34. Photos: Taken by:
35. Photo Accession #: On File at:

ARCHAEOLOGICAL SITE LOCATION MAP

-H

Permanent Trinomial: CA-RIV-3832# / Feb 1990
mo. yr.

U.S.G.S. Map: Lake Mathews, Calif. 7.5'
Recorder: Daniel McCarthy



State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-20200
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 4

*Resource Name or # (Assigned by recorder) Riverside County APN 107-020-012

P1. Other Identifier: 1428 E. 6th Street

*P2. Location: Not for Publication Unrestricted

*a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Corona South Date 1967 (PR 1988) T 3S; R 6W; Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address 1428 E. 6th Street City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone 11N; 450286 mE/ 3748146 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property is located at 1428 E. 6th Street in east Corona, south of SR 91 and east of I-15. The area surrounding the 9.4-acre parcel is characterized by a mix of mid-twentieth-century and more recent office and commercial buildings, warehouses, and industrial buildings and lots. Blacktopped except for a small portion of grass and trees along E. 6th Street, and surrounded by steel fences and concrete-block walls, the property has four buildings, three of which are 45 years of age or older.

Set back approximately 125 feet from E. 6th Street, the main and largest building on the property consists of a utilitarian central mass with a flat-roofed, single-story office clad in stucco and concrete blocks. International-style elements on the office include the flat roof, clerestory windows, an aluminum-frame glass entryway door with fixed-pane sidelights and a transom, and concrete-block walls projecting perpendicularly from the façade. The central mass of the building consists of a composition- and corrugated-metal-sided wall and parapet at the north elevation, which fronts three (see continuation sheet)

*P3b. Resource Attributes: (List attributes and codes) HP8. Industrial building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1: Main building, north-facing façade, camera facing southwest

*P6. Date Constructed/Age and Sources:

Historic Prehistoric Both

ca. 1955 (HistoricAerials.com 1948, 1967)

*P7. Owner and Address:

Group, Inc.

1428 E. 6th Street

Corona, CA 92879

*P8. Recorded by: (Name, affiliation, address)

Tim Yates, ICF International

9775 Businesspark Avenue, Suite 200

San Diego, CA 92131

*P9. Date Recorded: September 13, 2011

*P10. Survey Type: (Describe)

Reconnaissance



*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resources Inventory Report for the Proposed Circle City Substation Project, Riverside and San Bernardino Counties, California. ICF International, 2011

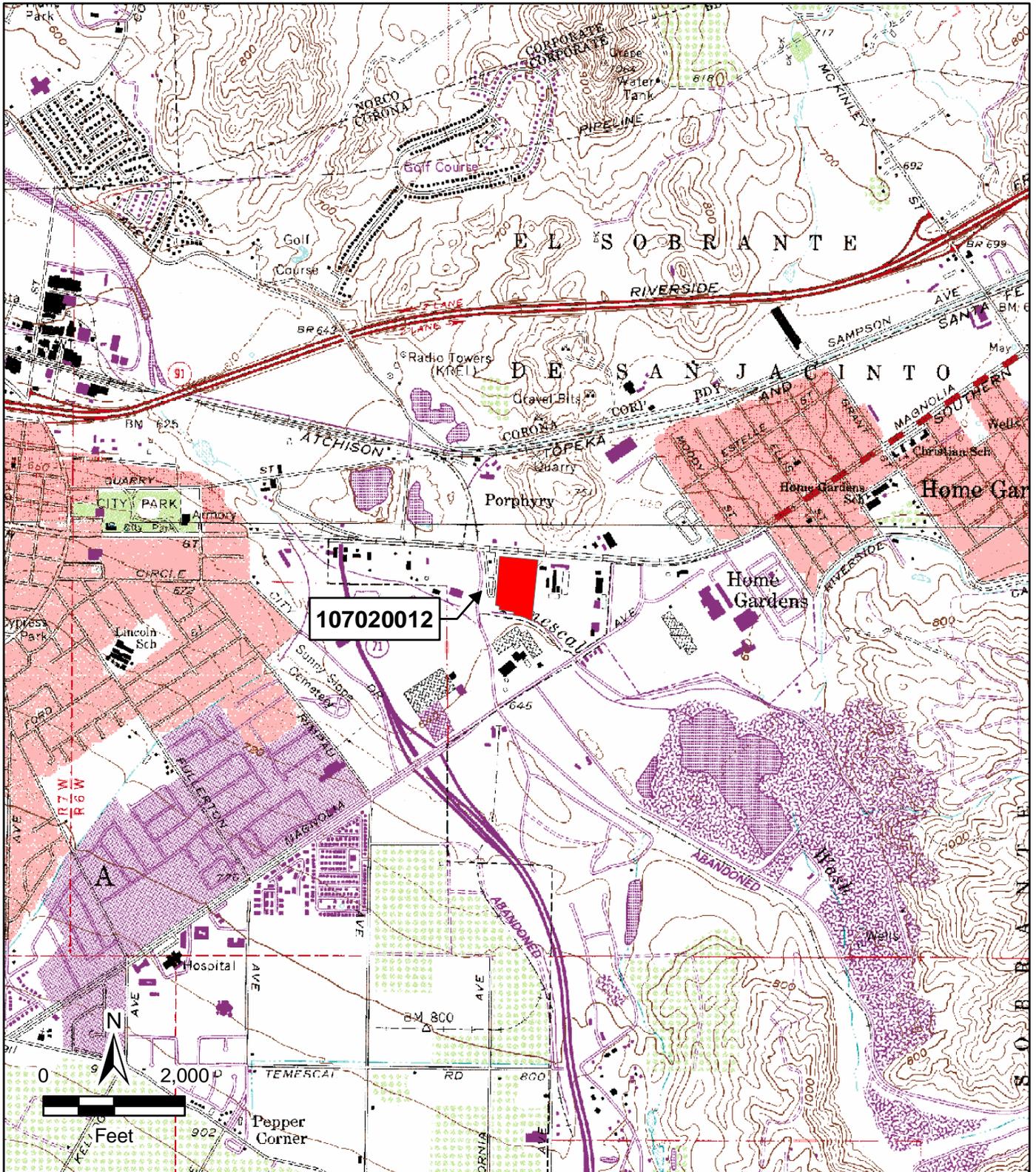
*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record

District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record

Other (list) _____

DPR 523A (1/95)

*Required Information



P3a. Description (continued):

parallel gable-roof masses, with the two westerly masses extending further to the south than the easterly mass. The three gable-roof masses are sided and roofed in corrugated metal, with large steel-frame multi-light windows on the north, west, east elevations, and large warehouse doors at the south side of the building.

Located along E. 6th Street at the northeast corner of the property is a rectangular-plan utilitarian building topped by a low-pitch side-gable roof. The roof is covered with corrugated metal and elevation walls are clad in stucco. Fenestration consists of pairs of large steel-frame six-over-three pane windows at the upper portion of the north elevation, several lower steel-frame awning windows, and both a wood entryway door and a roll-up warehouse door at the south elevation, which is sheltered by a series of shed-roof covers.

An additional utilitarian building is located immediately southeast of the property's main building. Sided and roofed with corrugated metal, this building is comprised of three parallel front-gabled masses, each with a commercial-grade entryway door and a warehouse door at the west elevation.



Photograph 2: South (rear) and east elevations of main building, camera facing northwest, September 13, 2011



Photograph 3: Utilitarian building at northeast corner of property, north and west elevations, camera facing southeast, September 13, 2011



Photograph 4: West-facing façade of utilitarian building southeast of main building, camera facing SSE, September 13, 2011

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-020201 (Update)
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings

Review Code	Reviewer	Date
Resource Name or # (Assigned by recorder) Æ-2418-1H		

Page 1 of 6

P1. Other Identifier: APN 107-030-003

P2. Location: Not for Publication Unrestricted a. County Riverside
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
b. USGS 7.5' Quad Corona South, Calif. Date 1979
T3S ; R6W; within a portion of the El Sobrante de San Jacinto land grant; S.B.B.M.
Elevation: Approximately 640 feet above mean sea level
c. Address 1436 E. 6th Street City Corona Zip 92879
d. UTM: (Give more than one for large and/or linear resources) Zone 11; 450,370 mE / 3,748,249 mN
UTM Derivation: USGS Quad GPS; Google Earth NAD 1983
e. Other Locational Data: (e.g., parcel #, directions to resource, etc., as appropriate) APN 107-030-003 is situated near the southwest corner of E. 6th Street and Magnolia Avenue near the eastern edge of the City of Corona, approximately 1.25 mile east of the historical downtown core of the city.

P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This property was first recorded and included into the California Historical Resources Inventory in 2011 by Tim Yates as part of a reconnaissance-level built-environment survey for a proposed electrical transmission line corridor project (Yates 2011). The commercial building, concrete foundations, and asphalt pavement found on this parcel appear much the same as they did when it was first recorded by Yates in September, 2011. The building is one-story, wood-framed, and rectangular in plan, with a false mansard roof covered with wood shingles. The exterior walls are covered with stucco and fenestration includes aluminum-frame glass storefront windows and glass panel aluminum doors. The concrete slab foundations and asphalt pavement found on the parcel also appear to be in the same condition as when previously recorded. No other resources were encountered in this area of the Project during the field survey. See attached sketch map (Figure 1) for the configuration of the parcel and the locations of the commercial building, concrete foundations, and asphalt pavement.

P3b. Resource Attributes: (List attributes and codes) HP6. 1–3 story commercial building; HP 39. Other– abandoned foundations and pavement

P4. Resources Present: Building Structure Object Site District Element of District Other:

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

See attached Continuation sheets for photographs

P5b. Description of Photo: (view, date, accession #) Photographs taken on July 30, 2012.

P6. Date Constructed/Age of Sources:
 Prehistoric Historic Both 1962–1966

P7. Owner and Address: Unknown

P8. Recorded by: (Name, affiliation, and address)
Josh Smallwood
Applied EarthWorks, Inc.
3292 E. Florida Avenue, Suite A,
Hemet, CA 92544

P9. Date Recorded: July 30, 2012

P10. Survey Type: Intensive-level

P11. Report Citation: (Cite survey report and other sources, or enter "none.") Josh Smallwood (2012) "Cultural Resources Report for the Proposed Magnolia Point Project, SW Corner 6th Street and Magnolia Avenue in Corona, Riverside County, California." Applied Earthworks, Inc., Hemet.

Attachments: None Location Map Site 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:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 6

NRHP Status Code 6Z

Resource Name or # (Assigned by recorder) APN 107-030-003

B1. Historic Name: None

B2. Common Name: None

B3. Original Use: Commercial

B4. Present Use: Vacant

B5. Architectural Style: vernacular wood-frame stucco commercial building

B6. Construction History: (Construction date, alterations, and date of alterations) The commercial building, concrete slab foundations, and asphalt pavement found at this location were constructed sometime between 1962 and 1966 (USDA 1961; USGS 1967). Their design and overall appearance are consistent with the design and construction of commercial buildings and foundations across the U.S. during that time. The last occupants in the building operated a custom furniture, art, and framing business called "Designed Furnishings."

B7. Moved? No Yes Unknown

Date:

Original Location:

B8. Related Features:

B9a. Architect: Unknown b. Builder: Unknown

B10. Significance: Theme Mid-twentieth century commercial development

Area Eastern Corona city limits

Period of Significance 1945–1970

Property Type Commercial building

Applicable Criteria None apply

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) This resource is not eligible for the CRHR and is not a historical resource under CEQA. The one-story wood-frame and stucco commercial building located on this parcel was constructed around 1962–1966. Its design was commonly employed for commercial buildings and strip-malls constructed across the U.S. during the post-WWII era. It is plain and modest in appearance and vernacular in design (Figure 2). It exhibits no distinctive characteristics or any particularly interesting architectural detailing that would stand it apart from the numerous other wood-frame and stucco commercial buildings constructed during the era.

The building dates to a relatively late period in the history of the town of Corona. Amidst the post-WWII era development boom, the city limits expanded in all directions from the central core of the town, and former agricultural lands were rezoned for construction and expansion of residential, commercial, and industrial development. While this building is loosely associated with an important trend of events in the history of the town—post-WWII expansion—it is merely the product of that time period, and it is not directly associated with any historically important aspects of that event.

This building does not date to the early settlement and development of the town, nor does it stand out as a distinctive building of the post-WWII era boom period in the town of Corona. Therefore, its association is not directly linked with any important historical events in the town's history (Criterion A/1). There is no indication that this building is directly associated with any prominent historical figures, or with any important architects or designers of the era (Criterion B/2).

In addition, being of standard design and construction for small wood-frame commercial buildings of the post-WWII era, this building does not exhibit any architectural merits that would suggest it is eligible for the NRHP under Criterion C, or the CRHR under Criterion 3. Under Criterion D of the NRHP, and Criterion 4 of the CRHR, this building is unlikely to provide any important information about post-WWII-era architecture, or the construction of commercial buildings at that time that are not already known, or that cannot be obtained through other avenues of research.

While the remnant concrete slab-type foundations and asphalt paving at 33-020201 are historic in age (i.e., 50 years old), or approaching historic age (i.e., 45 years of age), with no building on them and no important information value, features such as these have no architectural or archaeological value and have no potential for historical significance (Figure 3).

B11. Additional Resource Attributes: (List attributes and codes) None.

B12. References:

USDA (U.S. Department of Agriculture)

1961 USDA aerial photograph, AXM-5BB-90, dated 6-17-61. On file, Orbach Science Library, University of California, Riverside.

USGS (U.S. Geological Survey)

1967 Corona South, Calif. 7.5' 1:24,000 scale topographic quadrangle. On file, Orbach Science Library, University of California, Riverside.

Yates, Tim

2011 DPR 523 Primary Record, 33-020201. On file, Eastern Information Center, University of California, Riverside.

B13. Remarks: None

B14. Evaluator: Josh Smallwood

Date of Evaluation: August 7, 2012

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See attached sketch map (Figure 1) for the configuration of the parcel and the locations of the commercial building, concrete foundations, and asphalt pavement.



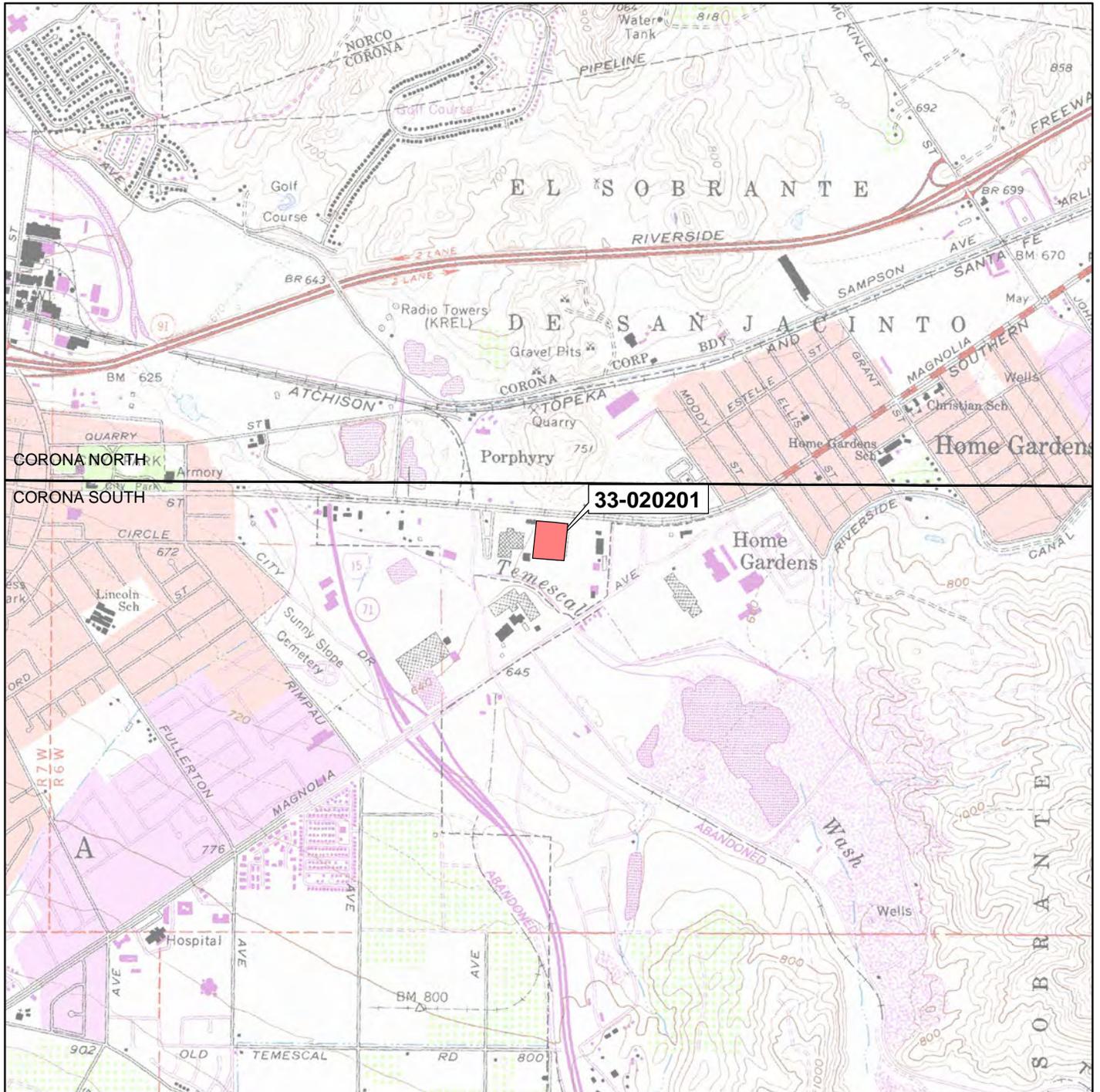
Figure 1. The locations of the commercial building, foundations, and pavement within APN 107-030-003. Note that several warehouse buildings were extant on this parcel when this aerial image was taken in November, 2009. These buildings have since been removed and all that remains are concrete slab foundations and asphalt pavement.



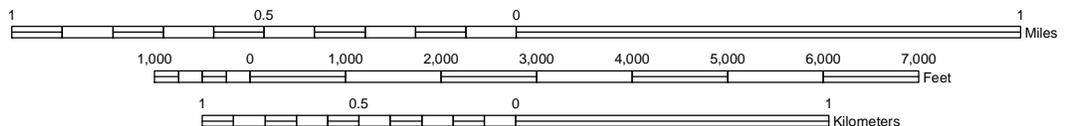
Figure 2. The wood-frame and stucco commercial building found on APN 107-030-003. Photograph taken on July 30, 2012; view to the southwest.



Figure 3 Concrete slabs and asphalt pavement found on APN 107-030-003. Photograph taken on July 30, 2012; view to the southeast.



SCALE 1:24,000



TRUE NORTH

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-20201
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 2

*Resource Name or # (Assigned by recorder) Riverside County APN 107-030-003

P1. Other Identifier: 14282 E. 6th Street

*P2. Location: Not for Publication Unrestricted

*a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Corona South Date 1967 (PR 1988) T 3S; R 6W; Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address 14282 E. 6th Street City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone 11N; 45041 mE/ 3748208 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property, 14282 E. 6th Street, consists of a commercial building sited on a 5.2-acre parcel situated south of SR 91 and east of I-15. The area surrounding the property is characterized by a mix of mid-twentieth-century and more recent office and commercial buildings, warehouses, and industrial buildings and lots. 14282 E. 6th Street is a single-story rectangular-plan building with a north-facing primary façade, stucco wall cladding, and a false mansard roof covered in wood shingles, which surrounds the building's predominantly flat roof. The false mansard projects slightly from the building's east elevation over a pattern of exposed beams and rectangular clerestory windows. Additional fenestration consists of fixed aluminum-frame storefront windows, sliding aluminum-frame windows and glass doors, and aluminum-frame single-leaf glass commercial doors. The building is setback from E. 6th Street behind a blacktopped parking lot. Several large concrete slabs cover portions of the parcel to the south.

*P3b. Resource Attributes: (List attributes and codes) HP6. 1-3 story commercial building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) North-facing facade and east elevation, camera facing southwest, September 13, 2011.

*P6. Date Constructed/Age and Sources:

Historic Prehistoric Both

ca. 1962 (HistoricAerials.com 1948, 1967)

*P7. Owner and Address:

"1451 Magnolia"
1 Town Square, # 1913
Southfield, MI 48076

*P8. Recorded by: (Name, affiliation, address)

Tim Yates, ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

*P9. Date Recorded: September 13, 2011

*P10. Survey Type: (Describe)

Reconnaissance



*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resources Inventory Report for the Proposed Circle City Substation Project, Riverside and San Bernardino Counties, California. ICF International, 2011

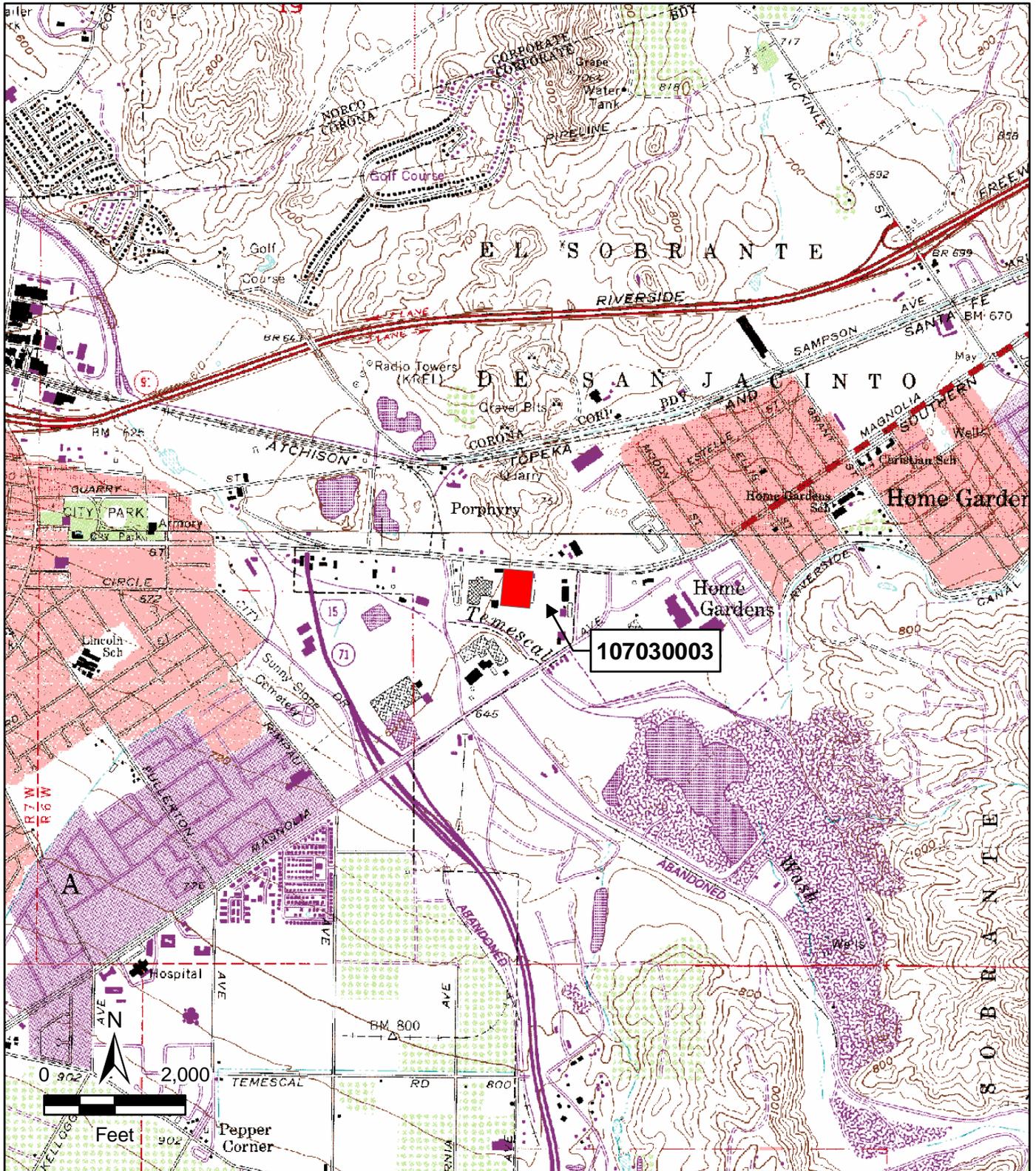
*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record

District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record

Other (list) _____

DPR 523A (1/95)

*Required Information



State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-20202
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6

*Resource Name or # (Assigned by recorder) Riverside County APN 107-030-022

P1. Other Identifier: 1375 Magnolia Avenue & 1001 E. El Camino Avenue

*P2. Location: Not for Publication Unrestricted *a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Corona South Date 1967 (PR 1988) T 3S; R 6W; Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address 1375 Magnolia Avenue & 1001 E. El Camino Avenue City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone 11N; 450274 mE/ 3747863 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject industrial-commercial complex includes the addresses 1375 Magnolia Avenue and 1001 E. El Camino Avenue, and is located on an approximately 17-acre parcel bordered by a concrete-lined portion of Temescal Creek to the north and northeast, El Camino Avenue to the west, and Magnolia Avenue to the southeast. The surrounding area is characterized by a mix of mid-twentieth-century and more recent office buildings, warehouses, and industrial buildings and lots. Entrances at El Camino Avenue and Magnolia Avenue provide access to the property. Multiple businesses operate on the property, sharing addresses and making use of the same buildings, all six of which are 45 years of age or older.

The largest is a roughly L-shaped industrial building occupying the northern half of the property. The main entrance is on the building's northwest side. Both of the building's main wings have gabled roofs of corrugated (see continuation sheet)

*P3b. Resource Attributes: (List attributes and codes) HP8. Industrial building; HP6.1-3 story commercial building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1: Overview of property, camera facing WSW, September 13, 2011

*P6. Date Constructed/Age and Sources:
 Historic Prehistoric Both
ca. 1955 – ca. 1960 (HistoricAerials.com 1948, 1967)

*P7. Owner and Address:
McWane Inc.
902 2nd Street
Oskaloosa, IA 52577

*P8. Recorded by: (Name, affiliation, address)
Tim Yates, ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

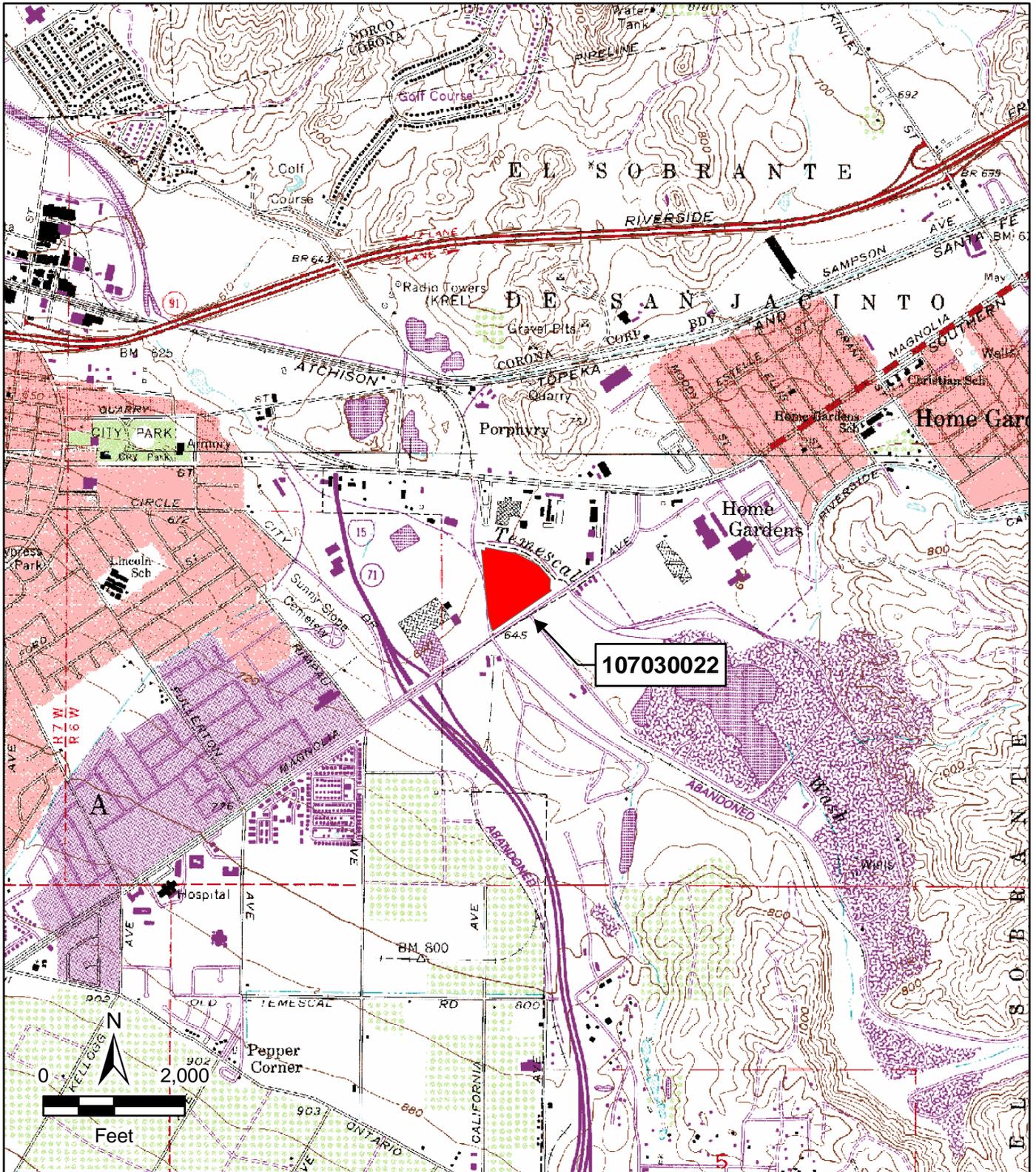
*P9. Date Recorded: September 13, 2011

*P10. Survey Type: (Describe)
Reconnaissance



*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resources Inventory Report for the Proposed Circle City Substation Project, Riverside and San Bernardino Counties, California. ICF International, 2011

*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) _____



P3a. Description (continued):

metal. The west wing has a section of roof that projects higher than the rest of the roof and is topped by a monitor-like mass lined with vents. Most walls consist of corrugated metal. Walls also display aluminum- and steel-frame multi-light windows, some with awnings, as well as large warehouse doors and numerous shed-roof projections, some with brick and stucco siding that contain office space, particularly at the northwest elevation. Projecting from the southeast elevation of the building's western wing is a prominent rectangular bay with a flat roof and an open-sided southeast elevation.

Immediately south of the L-shaped building's open-sided bay is a smaller utilitarian building that could not be photographed closely during the survey. Roofed and sided in corrugated metal, the building has a northeast-facing entrance and a front-gabled roof, with a shed extension of the roof sheltering loading areas at the southeast elevation. A bay projecting at the north side of the northeast elevation also forms a larger loading space.

South of the above two buildings near El Camino Avenue stands the second largest building on the property. This rectangular-plan utilitarian industrial building has a southwest-facing main entrance, corrugated metal and composite siding, and corrugated metal roof sections of varying shape. Most of the building is topped by a sawtooth roof with clerestory windows on the vertical surfaces below ridges, some of which are boarded over. The eastern portion of the building has a saltbox roof. The southwest side of the building has a gable roof and a largely open-sided southwest elevation. A square-shaped mass rises from the northeast corner of the building and a gable-roof mass rises from the southwestern shed roof. The shed roof projections on the southwest side of the building accommodate the entrance and what appear to be offices.

Smaller buildings occupy the southern portion of the property. Located southeast of the L-shaped building, at the property's southeast entrance along Magnolia Avenue, is a single-story, irregular-plan office building with a low-pitch hip roof clad in composition shingles and forming wide eave overhangs. The building's stucco-clad walls have sliding aluminum windows. Concrete-block walls and planters screen the southeast side of the building, presumably its façade entrance, from view at Magnolia Avenue.

A modest-sized utilitarian building with warehouse doors at its northeast-facing entrance is also located at the property's southwest corner, near the intersection of El Camino and Magnolia Avenues. Clad entirely in corrugated metal, the rectangular-plan building has a side-gable roof and a shed projection with a warehouse at the southeast corner (see continuation sheet).



Photograph 2: South wing of L-shaped building, camera facing northwest, September 13, 2011



Photograph 3: Northwest-facing entrance of L-shaped building, camera facing southwest, September 13, 2011



Photograph 4: Southeast and northeast elevations sawtooth- and saltbox-roofed industrial building, camera facing northwest, September 13, 2011



Photograph 5: Southern open-sided bay of L-shaped building at center rear, smaller utilitarian buildings at center and left, southwest elevation of office building at right, camera facing northwest, September 13, 2011



Photograph 6: Southeast-facing entrance of office building near Magnolia Avenue entrance to property, camera facing northwest, September 13, 2011



Photograph 7: Southeast and northeast elevations of utilitarian building at southwest corner of property, camera facing northwest, September 13, 2011

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-20203
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 2

*Resource Name or # (Assigned by recorder) Riverside County APN 107-040-005

P1. Other Identifier: 1640 E. 6th Street

*P2. Location: Not for Publication Unrestricted

*a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Corona South Date 1967 (PR 1988) T 3S; R 6W; Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address 1640 E. 6th Street City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone 11N; 450899 mE/ 3748194 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property is a utilitarian building surrounded by a parking lot with the address 1640 E. 6th Street. The building is sited on an approximately one-acre parcel situated south of SR 91 and east of I-15, in an area characterized by a mix of mid-twentieth-century and more recent office and commercial buildings, warehouses, and industrial buildings and lots. The rectangular-plan building has a north-facing façade, concrete-block walls, and a side-gable roof covered in composition shingles with minimal eave overhangs. The gable ends are sided in scalloped vertical boards. Façade fenestration consists of a centered entryway with a wood door and security screen, and two flanking windows fronted by security bars. All other window openings are boarded. The rear south elevation has a shed-roof addition with vertical-board siding and a secondary access door fronted by a security screen. The western half of the façade has a planter lined with shrubs.

*P3b. Resource Attributes: (List attributes and codes) HP6. 1-3 story commercial building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) North-facing facade and west elevation, camera facing southeast, September 13, 2011

*P6. Date Constructed/Age and Sources:

Historic Prehistoric Both

ca. 1940 (HistoricAerials.com 1948; USGS Corona Quad, 1942, surveyed 1933)

*P7. Owner and Address:

RAV Properties LLC

1650 E. 6th Street

Corona, CA 92879

*P8. Recorded by: (Name, affiliation, address)

Tim Yates, ICF International

9775 Businesspark Avenue, Suite 200

San Diego, CA 92131

*P9. Date Recorded: September 13, 2011

*P10. Survey Type: (Describe)

Reconnaissance



*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resources Inventory Report for the Proposed Circle City Substation Project, Riverside and San Bernardino Counties, California. ICF International, 2011

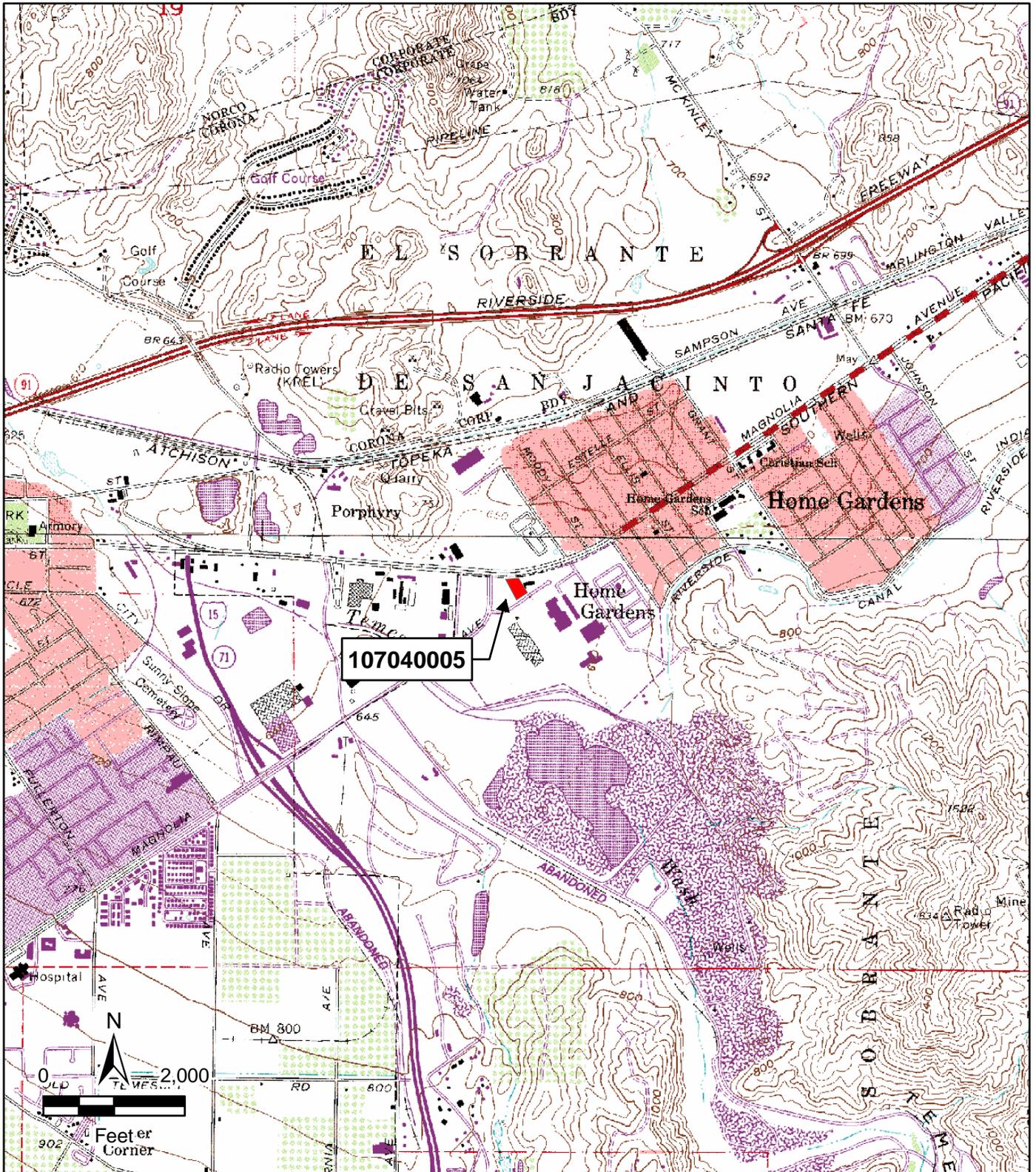
*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record

District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record

Other (list) _____

DPR 523A (1/95)

*Required Information



P1. Other Identifier: 1650 E. 6th Street

*P2. Location: Not for Publication Unrestricted *a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Corona South Date 1967 (PR 1988) T 3S; R 6W; Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address 1650 E. 6th Street City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone 11N; 451010 mE/ 3748234 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property, 1650 E. 6th Street, is a commercial building sited on a 1.6-acre parcel with a large parking lot and multiple palm trees. The property is located in eastern Corona south of SR 91 and east of I-15. The surrounding area consists of a mix of mid-twentieth-century and more recent office and commercial buildings, warehouses, and industrial buildings and lots. 1650 E. 6th Street is a rectangular-plan building with a north-facing façade and projections from the west side of the rear south elevation. The façade and the west and east elevations feature false mansard roofs covered in wood shingles; the majority of the building's main mass is flat-roofed. The façade also has three gables, with the northeast and northwest gables projecting outward to form entry shelters with supporting wood posts. The west elevation features a single gablet and a parapet, both sided with vertical boards. Wall surfaces include signage, board and batten at the east elevation, and concrete blocks at the north and west elevations (see continuation sheet).

*P3b. Resource Attributes: (List attributes and codes) HP6. 1-3 story commercial building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1: North-facing facade and west elevations, camera facing southeast, September 13, 2011

*P6. Date Constructed/Age and Sources:

Historic Prehistoric Both

ca. 1965 (HistoricAerials.com 1948, 1967)

*P7. Owner and Address:

RAV Properties LLC
1650 E. 6th Street
Corona, CA 92879

*P8. Recorded by: (Name, affiliation, address)

Tim Yates, ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

*P9. Date Recorded: September 13, 2011

*P10. Survey Type: (Describe)

Reconnaissance

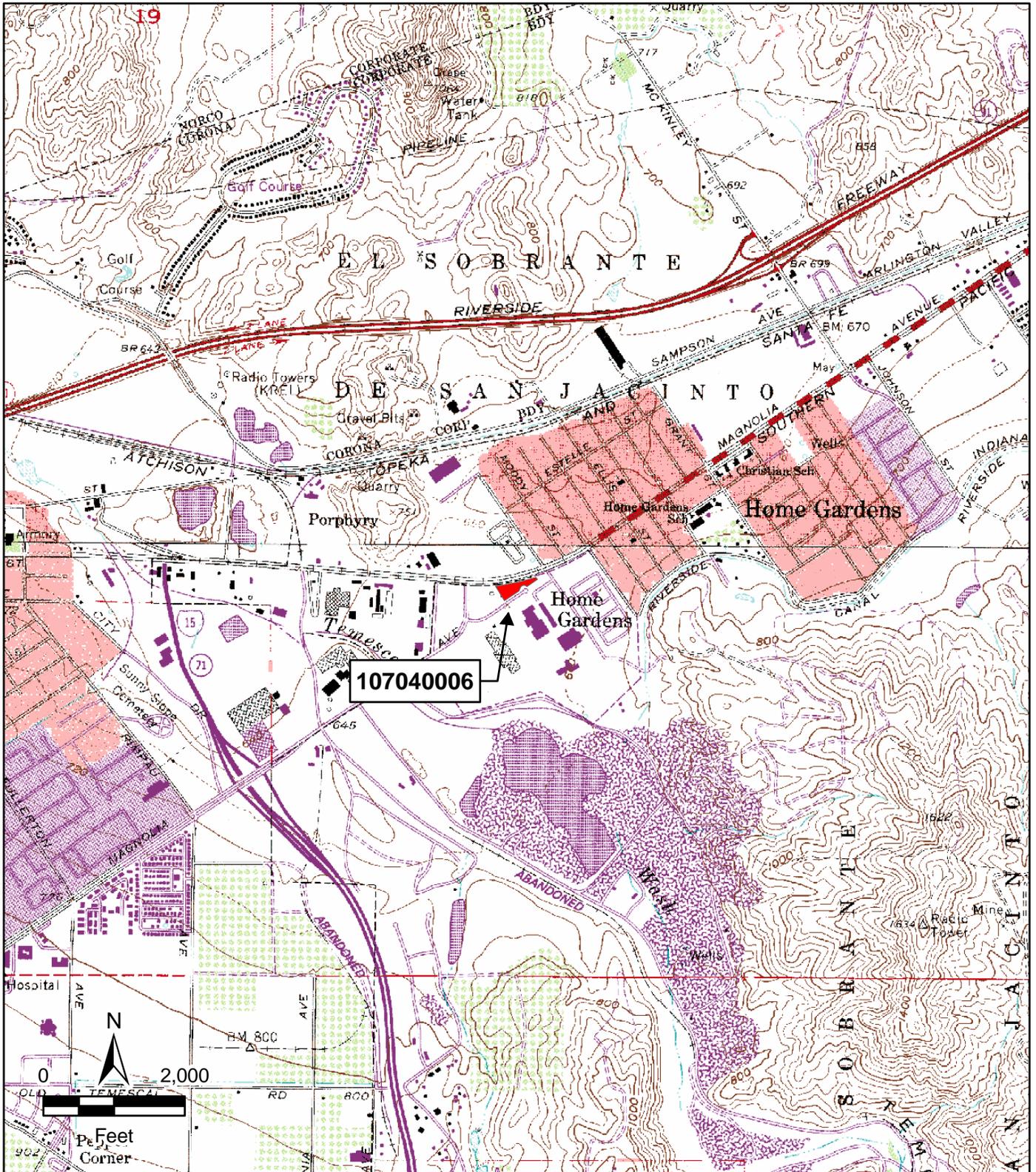


*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resources Inventory Report for the Proposed Circle City Substation Project, Riverside and San Bernardino Counties, California. ICF International, 2011

*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) _____



P3a. Description (continued):

The major stucco-sided projection from the south elevation has a gabled wood-shingle roof and fenestration consisting of two aluminum slider windows and a square louvered vent, all with wide wood surrounds. The remainder of the building's rear consists of stucco-sided shed projections and loading areas. Multiple satellite dishes and air-conditioning units are situated atop the building's roof.



Photograph 2: East and north elevations, camera facing southwest, September 13, 2011

P1. Other Identifier: 1480 Magnolia Avenue

*P2. Location: Not for Publication Unrestricted

*a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Corona South Date 1967 (PR 1988) T 3S; R 6W; Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address 1480 Magnolia Avenue City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone 11N; 450642 mE/ 3747812 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property, 1480 Magnolia Avenue, is located on a 2.8-acre parcel in eastern Corona south of SR 91 and east of I-15, an area characterized by a mix of mid-twentieth-century and more recent office buildings, warehouses, and industrial buildings and lots. 1480 Magnolia Avenue consists of two buildings at the northwest side of the parcel along Magnolia Avenue, and an extensive rectangular yard with concrete processing machinery and truck parking surrounded by concrete-block wall. At the property's northeast corner is a rectangular-plan, front-gabled building with a medium-pitch roof covered with corrugated metal. Clad in non-original rough-textured stucco, the building has a symmetrically arranged northwest-facing façade with an octagonal louvered vent at the gable and a centered entryway with a cantilevered shelter and a wood door flanked by two aluminum-slider windows with security bars (see continuation sheet).

*P3b. Resource Attributes: (List attributes and codes) HP6. 1-3 story commercial building; HP8. Industrial building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1: northeast building, northwest-facing façade and northeast elevation, camera facing southwest, September 13, 2011

*P6. Date Constructed/Age and Sources:

Historic Prehistoric Both

ca. 1960 (HistoricAerials.com 1948, 1967)

*P7. Owner and Address:

Nanci General Partnership
1320 E. 6th Street, #100
Corona, CA 92879

*P8. Recorded by: (Name, affiliation, address)

Tim Yates, ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

*P9. Date Recorded: September 13, 2011

*P10. Survey Type: (Describe)

Reconnaissance

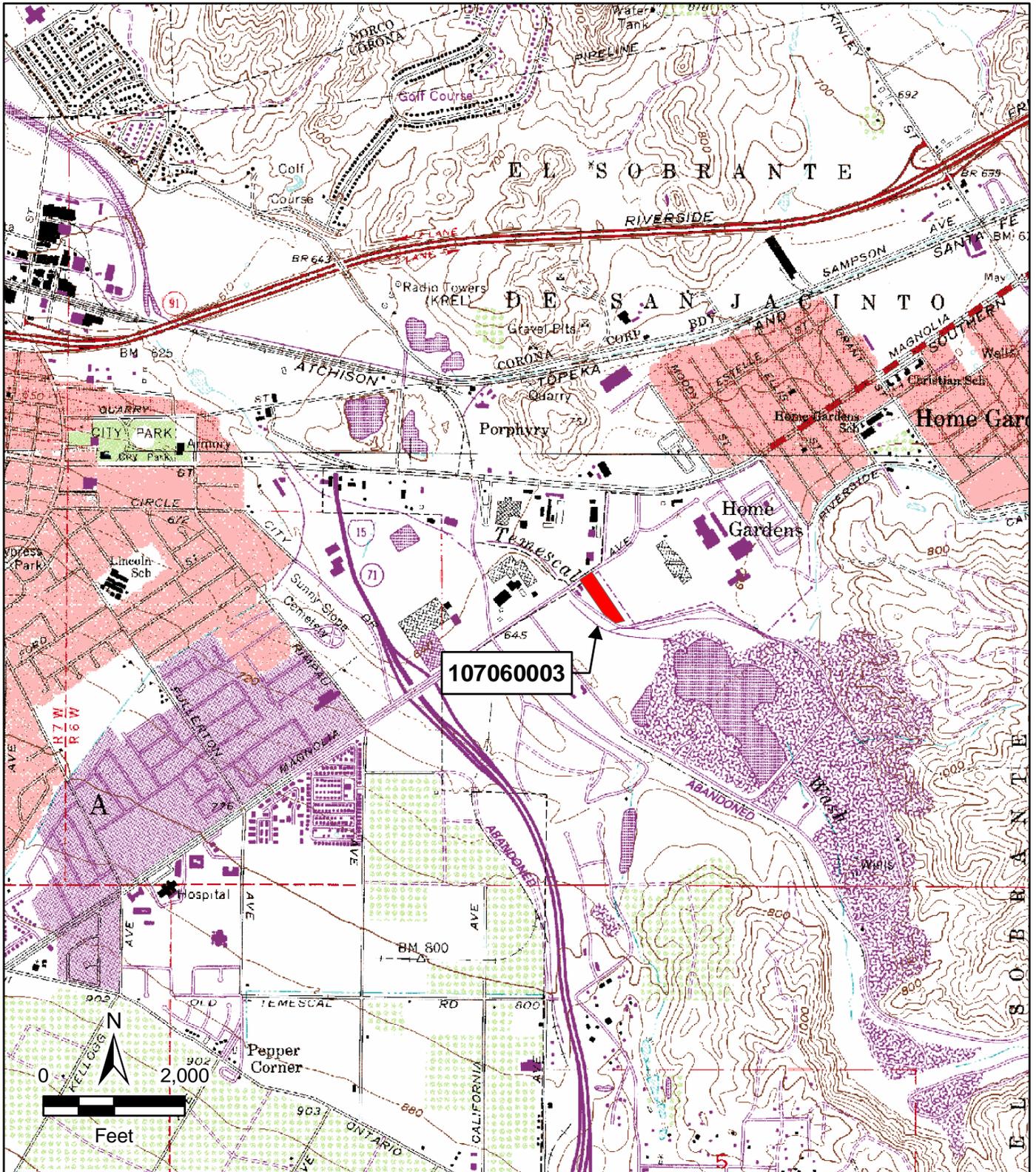


*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resources Inventory Report for the Proposed Circle City Substation Project, Riverside and San Bernardino Counties, California. ICF International, 2011

*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) _____



Page 3 of 3

*Resource Name or # (Assigned by recorder) Riverside County APN 107-060-003

*Recorded by Tim Yates, ICF International *Date September 13, 2011 ■ Continuation □ Update

P3a. Description (continued):

A lengthy steel gate separates the property's northeast building from the northwest utilitarian building, which is side-gabled and clad in entirely in corrugated metal and several sheets of ply wood.



Photograph 2: Northwest building, northeast and northwest elevations, camera facing southwest, September 13, 2011

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 6Z

Other Listings _____
Review Code _____ Reviewer _____ Date _____

RECEIVED IN
APR 29 2015

*Resource Name or # (Assigned by recorder) San Vallé Tile Kilns, Inc.

P1. Other Identifier: Riverside County APNs 107-060-008 & 107-060-009

***P2. Location:** Not for Publication Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County Riverside

EIC

***b. USGS 7.5' Quad** Corona South **Date** 1967 (PR 1988) **T** 3S; **R** 6W; **Unsectioned (El Sobrante de San Jacinto)** SB B.M.

c. Address 1620 Magnolia Avenue City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Originally developed as a ceramic tile manufacturer, the subject industrial property is located at 1620 Magnolia Avenue on two parcels, which encompasses approximately 20 acres in eastern Corona south of SR 91 and east of I-15. The area around the property consists of a mix of mid-twentieth-century and more recent office buildings, warehouses, and industrial buildings and empty lots. Two buildings stand on the property.

The smaller of the two buildings is situated at the front of the property along Magnolia Avenue and appears to have originally served as a gate house or security check point (photograph 2). The asymmetrically arranged, rectangular-plan building has an offset northwest-facing entry and a low-pitched side-gable roof. Covered in Spanish tile, the roof forms wide eave overhangs with prominently exposed ceiling beams and rafter tails. The projecting roof line forms a shelter running the length of the north elevation and a car port at the west side of the plan. Square brick-clad columns support the shelter and carport (see continuation sheet 4).

***P3b. Resource Attributes:** (List attributes and codes) HP8. Industrial Building

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1. Front of San Vallé Tile Kilns, Inc., view to south

***P6. Date Constructed/Age and Sources:**
 Historic Prehistoric Both
1965-66 (See attached DPR 523B form references)

***P7. Owner and Address:**
Princeland Property, Inc.
26039 Acera, #101
Mission Viejo, CA 92131

***P8. Recorded by:** (Name, affiliation, address)
Tim Yates
ICF International
9775 Business Park Avenue, Suite 200
San Diego, CA 92131

***P9. Date Recorded:** August 23, 2012

***P10. Survey Type:** (Describe) Intensive



***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") ICF International. 2012. Addendum 1. Proposed Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (ICF 00647.11), Riverside and San Bernardino Counties, California Prepared for Southern California Edison.

***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) _____

33-20206

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z

*Resource Name or # (Assigned by recorder) San Vallé Tile Kilns, Inc.

B1. Historic Name: San Vallé Tile Kilns, Inc.

B2. Common Name: Unknown

B3. Original Use: Tile manufacturing facility B4. Present Use: Unknown

*B5. Architectural Style: Utilitarian; mid-century modern

*B6. Construction History: (Construction date, alteration, and date of alterations) 1965-66

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

B9. Architect: Unknown b. Builder: Unknown

*B10. Significance: Theme Industrial development Area Corona

Period of Significance 1965-66 Property Type Industrial facility Applicable Criteria NA

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Historic Background

Riverside County

In 1776 and again in 1778, Spanish army Captain Juan Bautista de Anza led an overland expedition through the region on a 1200 mile route from Nogales, Arizona to San Francisco, California. He traversed Riverside County along the historic route now designated the Juan Bautista de Anza Historic Trail. During the late 18th century, the Spanish mission fathers of San Gabriel Arcángel, San Juan Capistrano, and San Luis Rey missions began colonizing the lands of the Native Americans, utilizing the interior valley of Western Riverside County for raising grain and cattle. San Gabriel Arcángel Mission claimed lands in present-day Jurupa, Riverside, San Jacinto, and the San Gorgonio Pass, while San Luis Rey mission claimed land around present day Lake Elsinore, Temecula, and Murrieta. These lands were used for grazing large herds of mission-owned cattle and sheep transported to market along mission trails. After the secularization of the missions, sixteen ranchos were granted in Riverside County; Juan Bandini received the first of these in 1838 (Brown and Boyd 1922: 15, 26, 91; Hoover et al. 2002: 292-93, 295.) (see continuation sheet 4).

(Sketch Map with north arrow required.)

See DPR Page 3 Sketch Map

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

See page 9 continuation sheet

B13. Remarks:

*B14. Evaluator: Tim Yates, Ph.D., ICF International

*Date of Evaluation: September 7, 2012

(This space reserved for official comments.)

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # _____
HRI # _____
Trinomial _____

Page 3 of 10
*Drawn By R. Hoffman

*Resource Name or # (Assigned by recorder) San Vallé Tile Kilns, Inc.
*Date of Map September 6, 2012



***P3a. Description (cont.):**

The building's walls are also clad in brick. Fenestration consists of horizontal aluminum-slider windows, an aluminum-frame single-leaf glass entry door, and two small jalousie windows at the southeast elevation.

Southeast of the smaller building is a sprawling, irregular-plan utilitarian building measuring approximately 700 feet in length. The northern front of the building resembles a modern pole barn and has a large northwest-facing opening, a low-pitch front-gabled metal roof, metal siding, and a large rectangular space cut out of the roof (photograph 3). To the southeast, the building varies in width and height and has low-pitched gable roofs with metal cladding. A monitor runs the length of the roof ridge at the central portion of the building. The building's walls are clad in metal south of the pole-barn-like front mass as well. Along the northeast elevation south of the pole-barn-like front mass, the building has horizontal aluminum-frame windows at what appear to be several office areas (photograph 4). This portion of the building includes a shed-roofed projection with numerous aluminum-frame windows, and is accessed by a wood entry door with a small cantilevered shelter, and a two-leaf aluminum-frame and glass entry door with a small gabled shelter. Aerial views indicate that a concrete ramp descends to a loading dock at the southwest elevation opposite the northeast elevation's projecting shed-roofed mass (the southwest side of the building could not be accessed during the survey). The building's metal-clad, south-central and southern portion has several warehouse entries, one of which retains dual doors that slide horizontally on a track, as well as multiple louvered vents, wood entry doors, several horizontal aluminum-slider windows, and several attached canopies with metal support poles (photographs 5 and 6). The south end of the building is comprised of an L-shaped metal-clad projection with gable roofs (photograph 6). This southern mass is largely open-sided and, like the building's front mass, resembles a modern pole barn.

The building is surrounded by asphalt paving and unpaved areas strewn with clay tile shards. A chain link and steel-pole fence surrounds the property, which is accessed through a chain-link and steel-pole gate at Leeson Lane along the northwest side of property.

***B10. Significance (cont.):**

Shortly after the founding of Riverside in 1870, a prosperous citrus industry began to take foot in the region. By the early 1870s, two simple canals had been constructed by diverting water from the Santa Ana River to Riverside agricultural land, thus making large-scale crop production possible for the first time. This basic irrigation served as a catalyst for crop experimentation in Riverside's arid climate. The citrus industry in Riverside is often said to have begun in 1873 when resident Eliza Tibbets planted two Brazilian naval orange trees on her property. The trees thrived and caught the attention of many local agricultural producers. Not only did the newly introduced navel oranges have superior taste, appearance, and size compared to other varieties of oranges of the day, they were also seedless. Following a tasting party in 1878 and the first formal Citrus Fair in Riverside in 1879, Riverside's navel oranges gained widespread notoriety. The success of the local citrus industry in the following decade spurred an expansion of the irrigation system with the construction of the Gage Canal in 1887. Named after its builder, Matthew Gage, the canal transported water from the eastern San Bernardino Valley and became the main channel of the irrigation system. This newer canal facilitated an even more aggressive expansion of the Riverside citrus industry and played a critical role in supporting the city's growing economic activity around the turn of the century. Riverside grew rapidly during the 1880s thanks to the economic engine of citrus cultivation. (Brown and Boyd 1922: 59, 409-416, 426-27.)

The city of Riverside was formally incorporated in 1883. The County of Riverside was created a decade later out of portions of San Bernardino and San Diego Counties, with the City of Riverside as the county seat. By then, Riverside citizens had amassed increasing wealth through citrus enterprise. The arrival of the California Southern (later the Santa Fe) and Southern Pacific Railroads, along with the development of the refrigerated railroad car, allowed local growers to ship fruit to East Coast markets. Local fruit growers joined together to pick and sell fruit under a single brand name and fruit-grading system. The plan expanded, and by 1893 growers had formed the Southern California Fruit Exchange to market their products. By then, the Citrus industry had also spread to South Riverside, a growing area that would soon become the city of Corona. (Brown and Boyd 1922: 55, 94-99, 444-447, 497-49, 541; Hoover et al. 2002: 296-97, 565.) (see continuation sheet 5)

State of California – The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____

HRI # _____

Trinomial _____

Page 5 of 10

*Resource Name or # (Assigned by recorder) San Vallé Tile Kilns, Inc.*Recorded by T. Yates, ICF International *Date August 23, 2012 ■ Continuation Update***B10. Significance (cont.):**Corona

In 1886, at the encouragement of developer Robert B. Taylor, considered the "Father of Corona," a partnership headed by Adolph Rimpau of Anaheim formed the South Riverside Land and Water Company and purchased approximately 12,000 acres of quality agricultural land for \$110,000 to establish South Riverside. The same year, civil engineer and surveyor Hiram Clay (H.C.) Kellogg, well-known in Southern California as the surveyor for wineries, laid out the city, including "Grand Boulevard," a broad circular street with a three-mile circumference at the city's center. In 1896, South Riverside's citizens moved to formally incorporate the town. The new city was renamed Corona in honor of its circular Grand Boulevard. During subsequent decades, residents made a practice of parading their fancy buggies on the circular boulevard enclosing the community's core, which encompassed schools, churches, residences and stores. In July 2011, Grand Boulevard roadway and its contributing streetscape features—trees, parkways, and streetlights—were listed on the National Register of Historic Places as a historic district (Brown and Boyd 1922: 553, 555, 558, Director of the National Park Service 2011; Mermilliod, 2011: 10-15).

Agriculture propelled Corona's growth and sustained its economy for almost a century after the community's establishment at the height of the Southern California citrus boom. The first lemon processing plant in the country was built in Corona in 1915. The surrounding area is known for its abundant natural resources, which include the Temescal Tin Mines, some of the best clay and mineral deposits in the United States, and ideal land and climate conditions for citrus production. The area north of the city's core also supported large ranches and dairy farms, which in turn helped support one of the largest cheese factories in the country. During the early twentieth century, the area's clay deposits supported a thriving new industry of brick and tile production that included companies such as Alberhill Coal and Clay Company, Pacific Clay Products Company, the Karl Martin Company, and Los Angeles Pressed Brick Company. Corona's status as a way station for travelers between Los Angeles and the outlying desert communities was dramatically altered in the mid-1910s when it became an internationally recognized road-racing draw. The popularity of racing in the city was based on Grand Boulevard, the one-mile diameter circular street that defined the city's central core. (Brown and Boyd 1922: 75, 165-67, 441-42, 459-463, 558-63; Mermilliod 2011: 12, 14.)

The growth of the Corona-area citrus industry propelled the development of the city's early industrial center along the railroad line that crosses the northern portion of Grand Boulevard. After the failure of the California Southern Railroad due to repeated floods in Temecula Canyon to the south, the Santa Fe took over the California Southern and rebuilt the regional line, which began serving Corona (then South Riverside) in 1887. Beginning in the late nineteenth century, citrus growers developed fruit and other food processing and shipping facilities (the Borden Milk Company facilities, for example) along the Santa Fe line that cuts through northern portion of the Grand Boulevard circle.

These facilities included the Corona Citrus Association packinghouse and the Corona Foothill Lemon Company (originally the Corona Lemon Company) complex. (Brown and Boyd 1922: 94-99; 556-57, Lancaster and Messecar 2006). Today, most of the citrus groves and mining operations have given way to housing, commercial, and light-industrial development, although the areas of Corona retain a rural feel.

Evaluation

Due to insufficient historic and architectural significance, the San Vallé Tile Kilns, Inc. facility at 1620 Magnolia Avenue does not appear to meet the criteria for listing on the California Register of Historical Resources (CRHR). The period of potential significance is 1965-66, the years during which the building was constructed.

Documents on file at the Building Department of the City of Corona indicate that the buildings on the subject property were constructed in 1965-66 at 13950 Magnolia Avenue for the San Vallé Tile Kilns, Inc., headed by Sam Greenbaum. The address of the property was later changed to 1620 Magnolia Avenue. (City of Corona Building Department 1965, 1966; City of Corona 1968.) (see continuation sheet 6)

33-20206

***B10. Significance (cont.):**

Additional Building Department documentation and historic aerial images indicate that the southeast half of the larger building's southern L-shaped mass was added in the late 1970s (Donovan 1973; HistoricAerials.com 1948, 1967, 1980.) The property remained in the Greenbaum family into the 1980s. In 1988, Princland Development Company acquired the property from Sam, Katherine, and Steven E. Greenbaum. (Riverside County Assessor 1988: Doc. No. 1988-181802.)

The San Vallé Tile Kilns, Inc. property is associated with clay extraction and tile and brick fabrication, which are important themes in the economic history of the Riverside County and the Corona area. However, the San Vallé Tile Kilns, Inc. facility at 1620 Magnolia Avenue was developed decades after these industries were established in the region, and over a half century after tile became an important feature in twentieth-century southern California architecture with the rise of the Spanish Colonial Revival style. (Brown and Boyd 1922: 459-463; Gebhard 1967.) The property does not appear to be associated with important events in the history of Corona, Riverside County, the State of California, or the United States. It does not, therefore, appear to meet Criterion 1 for listing in the CRHR. Research revealed no evidence that Sam Greenbaum, members of his family, or any other individuals affiliated with San Vallé Tile Kilns, Inc. are important to local, state, or national history. The subject property does not, therefore, appear to meet Criterion 2 for listing in the CRHR.

The property's smaller brick-clad building and its larger metal-clad industrial building do not appear to have architectural significance. Research revealed no associations between these buildings and master architects or builders. Neither of the property's buildings embodies the distinctive characteristics of a type, period, or method of construction. Although the smaller building's exposed beams and rafters are representative of mid-century modern architecture, this building is a commonplace example of such architecture. The larger utilitarian industrial building is also a commonplace example of a large mid-to-late-twentieth-century industrial building. Neither of the property's buildings have high artistic value. The property as a whole does not, therefore, appear to be eligible for the CRHR under Criterion 3.

The buildings on this property do not appear to be significant as sources of important information regarding history. They do not appear to have any likelihood of yielding important information about historic construction materials or technologies. Therefore this property does not appear to be eligible for the CRHR under Criterion 4.

In summary, the former San Vallé Tile Kilns, Inc. property does not appear to meet the Criteria for listing on the CRHR. The property was evaluated in accordance with Section 15064.5(a) (2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the Public Resources Code, and determined not to be a historical resource for the purposes of CEQA (see continuation sheet 7)

33-20206

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

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*Resource Name or # (Assigned by recorder) San Vallé Tile Kilns, Inc.

*Recorded by T. Yates, ICF International *Date August 23, 2012 ■ Continuation □ Update

Photographs (cont.):



Photograph 2. Smaller brick-clad building, northwest and northeast elevations, view to south



Photograph 3. Front of larger utilitarian building, smaller brick-clad building at rear left

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State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

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*Resource Name or # (Assigned by recorder) San Vallé Tile Kilns, Inc.

*Recorded by T. Yates, ICF International *Date August 23, 2012 ■ Continuation □ Update



Photograph 4. Larger utilitarian building, north office area on northeast side, view to south



Photograph 5. Larger utilitarian building, southern portion of northeast side, view to south



Photograph 6. South end of larger utilitarian building, view to northwest

***B12. References (cont.):**

City of Corona

1968 Notification of Change of Address for San Vallé Tile Kilns, Inc. Dated November 1968. On file at the City of Corona Building Department. Corona, California.

City of Corona Building Department

1965 Permit for Sewer Connection, 13950 Magnolia Avenue. December 10, 1965. On file at the City of Corona Building Department. Corona, California.

1966 Inspection approvals [13950 Magnolia Avenue]. Various Dates, Spring 1966. On file at the City of Corona Building Department. Corona, California.

Brown, John, Jr., and James Boyd

1922 *History of San Bernardino and Riverside Counties, Vol. 1.* The Lewis Publishing Company, Chicago, Illinois.

Donovan, D. E.

1973 Letter to San Vallé Tile Kilns, Inc., Regarding Proposed 2,880 Square Foot Building Addition. September 10, 1973. On file at the City of Corona Building Department. Corona, California.

Director of the National Park Service

2011 Announcements and Actions on Properties for the National Register of Historic Places, July 22, 2011. Accessed 20 September 2011. <http://www.nps.gov/hr/listings/20110722.htm>

Gebhard, David

1967 "The Spanish Colonial Revival in Southern California (1895-1930)." *Journal of the Society of Architectural Historians*. 26 (May, 1967): 131-147.

Page 10 of 10

*Resource Name or # (Assigned by recorder) San Vallé Tile Kilns, Inc.

*Recorded by T. Yates, ICF International *Date August 23, 2012 ■ Continuation □ Update

HistoricAerials.com

1948 View of 1620 Magnolia Avenue, Corona. HistoricAerials.com by NETR Online. Accessed August, 2012.
<http://www.historicaerials.com/>

1967 View of 1620 Magnolia Avenue, Corona. HistoricAerials.com by NETR Online. Accessed August, 2012.
<http://www.historicaerials.com/>

1980 View of 1620 Magnolia Avenue, Corona. HistoricAerials.com by NETR Online. Accessed August, 2012.
<http://www.historicaerials.com/>

Hoover, Mildred Brooke, Hero Eugene Rensch, Ethel Grace Rensch, and William Abelow

2002 *Historic Spots in California*. Originally Published 1932. 5th Edition Revised by Douglas E. Kyle. Stanford University Press, Stanford, California.

Mermilliod, Jennifer

2011 National Register of Historic Places Nomination Form (#11000432) for Grand Boulevard Historic District, Corona, Riverside County, California, Prepared by Jennifer Mermilliod of JM Research & Consulting (JMRC), Riverside, California.

Riverside County Assessor-Recorder

1988 Grant Deed. Katherine Greenbaum, Steven E. Greenbaum, and Sam Greenbaum to Princland Development Company. June 13, 1988. Document No. 1988-181802. On file at the Riverside County Assessor-Recorder's office. Riverside, California.

P1. Other Identifier: 1620 Magnolia Avenue

*P2. Location: Not for Publication Unrestricted

*a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Corona South Date 1967 (PR 1988) T 3S; R 6W; Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address 1620 Magnolia Avenue City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone 11N; 450274 mE/ 3747863 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property is located at 1620 Magnolia Avenue, on two parcels totaling approximately 20 acres in eastern Corona south of SR 91 and east of I-15. The area around the property consists of a mix of mid-twentieth-century and more recent office buildings, warehouses, and industrial buildings and lots. Two buildings stand on the property.

The smaller of the two buildings is situated at the front of the property along Magnolia Avenue and appears to have originally served as a gate house or security check point. The asymmetrically arranged, rectangular-plan building has an offset, recessed entry and a side-gable roof. Covered in Spanish tile, the roof forms wide eave overhangs with exposed beams and rafters. The roof line projects outward to form a shelter running the length of the north elevation and a car port at the west elevation. Four-sided brick-clad columns support the shelter and carport. The building's walls are also clad in brick. Fenestration consists of aluminum slider windows and an aluminum frame single-leaf glass entry door (see continuation sheet).

*P3b. Resource Attributes: (List attributes and codes) HP8. Industrial building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) **Photograph 1: Northwest and northeast elevations, camera facing south, September 13, 2011**

*P6. Date Constructed/Age and Sources:

Historic Prehistoric Both
ca. 1960 (HistoricAerials.com 1948, 1967)

*P7. Owner and Address:

Princeland Property, Inc.
26039 Acero, #101
Mission Viejo, CA 92691

*P8. Recorded by: (Name, affiliation, address)

Tim Yates, ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

*P9. Date Recorded: September 13, 2011

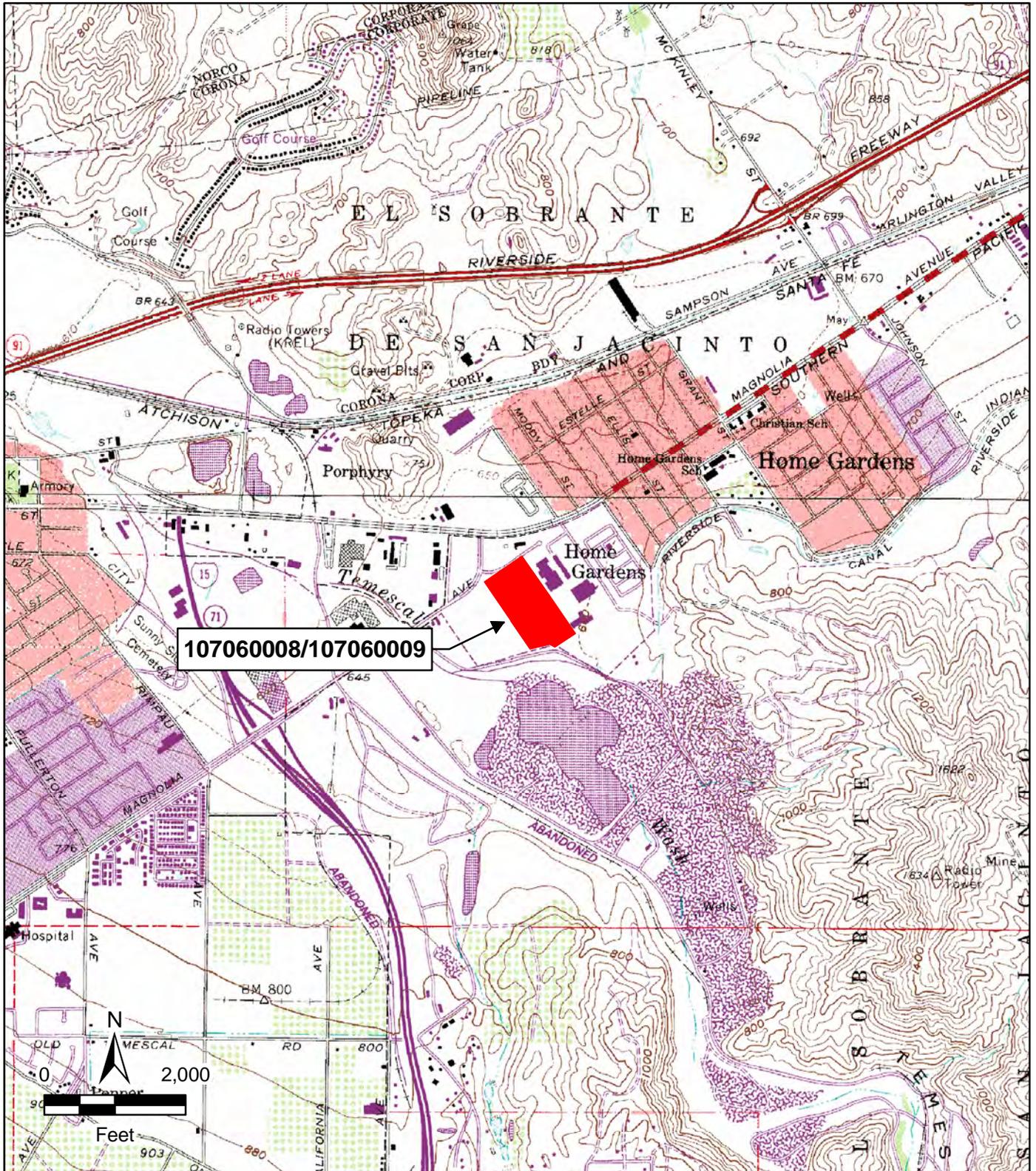
*P10. Survey Type: (Describe)

Reconnaissance



*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resources Inventory Report for the Proposed Circle City Substation Project, Riverside and San Bernardino Counties, California. ICF International, 2011

*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) _____



P3a. Description (continued):

Occupying the length of the property southeast of the smaller building is a sprawling, irregular-plan utilitarian building measuring approximately 700 feet in length. The northern front of the building resembles a pole barn and has a low-pitch front-gable metal roof, metal siding, and a large rectangular space cut out of the roof. To the southeast, the building varies in width and has gabled corrugated metal roofs of varying height. A monitor runs the length of the roof ridge at the central portion of the building. Most of the building's walls appear to be sided in corrugated metal. A shed-roof mass with aluminum-frame windows projects from the northeast side of the building. A descending loading ramp is situated near the southwest side of the building opposite the shed roof mass. A narrow projection from the eastern rear of the building connects to a rectangular, gabled, and largely open-sided southerly wing with a corrugated metal roof.



Photograph 2: Northeast sides of the property's two buildings, camera facing southwest, September 13, 2011

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-20207
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 4

*Resource Name or # (Assigned by recorder) Riverside County APN 115-090-003

P1. Other Identifier: 1340-1350 E. 6th Street

*P2. Location: Not for Publication Unrestricted

*a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Corona South Date 1967 (PR 1988) T 3S; R 6W; Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address 1340-1350 E. 6th Street City Corona Zip 92879

d. UTM: (give more than one for large and/or linear resources) Zone 11N; 449850 mE/ 3748269 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property, which encompasses the addresses 1340-1350 E. 6th Street, is a three-acre parcel in eastern Corona, south of SR 91 and east of I-15. The area surrounding the property consists of a mix of mid-twentieth-century and more recent office and commercial buildings, warehouses, and industrial buildings and lots. Five buildings 45 years old or older stand on the property. One of these, a building located at the southeast corner of the parcel and associated with 1350 E. 6th Street, an equipment lot occupying the eastern portion of the property, could not be photographed. Four of the five buildings are located on the west side of the parcel amid blacktopped parking areas.

Located at the northwest corner of the property, 1340 E. 6th Street is a rectangular-plan, flat-roofed restaurant with brick-sided and concrete-block walls. The building's fenestration consists of fixed aluminum-frame windows and commercial-grade glass doors. A long patio cover projecting from the roof of the east-facing primary façade extends south of the building supported by metal posts. Steel railing outlines the patio area. A shed addition from the building's south elevation contains bathrooms (see continuation sheet).

*P3b. Resource Attributes: (List attributes and codes) HP6. 1-3 story commercial building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) **Photograph 1: restaurant, north-facing façade and east elevation, camera facing WSW, September 13, 2011**

*P6. Date Constructed/Age and Sources:
 Historic Prehistoric Both
ca. 1950 - 1960 (HistoricAerials.com 1948, 1967)

*P7. Owner and Address:
Roland Dopez
2867 W. Polk Avenue
Anaheim, CA 92801

*P8. Recorded by: (Name, affiliation, address)
Tim Yates, ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

*P9. Date Recorded: September 13, 2011

*P10. Survey Type: (Describe)
Reconnaissance

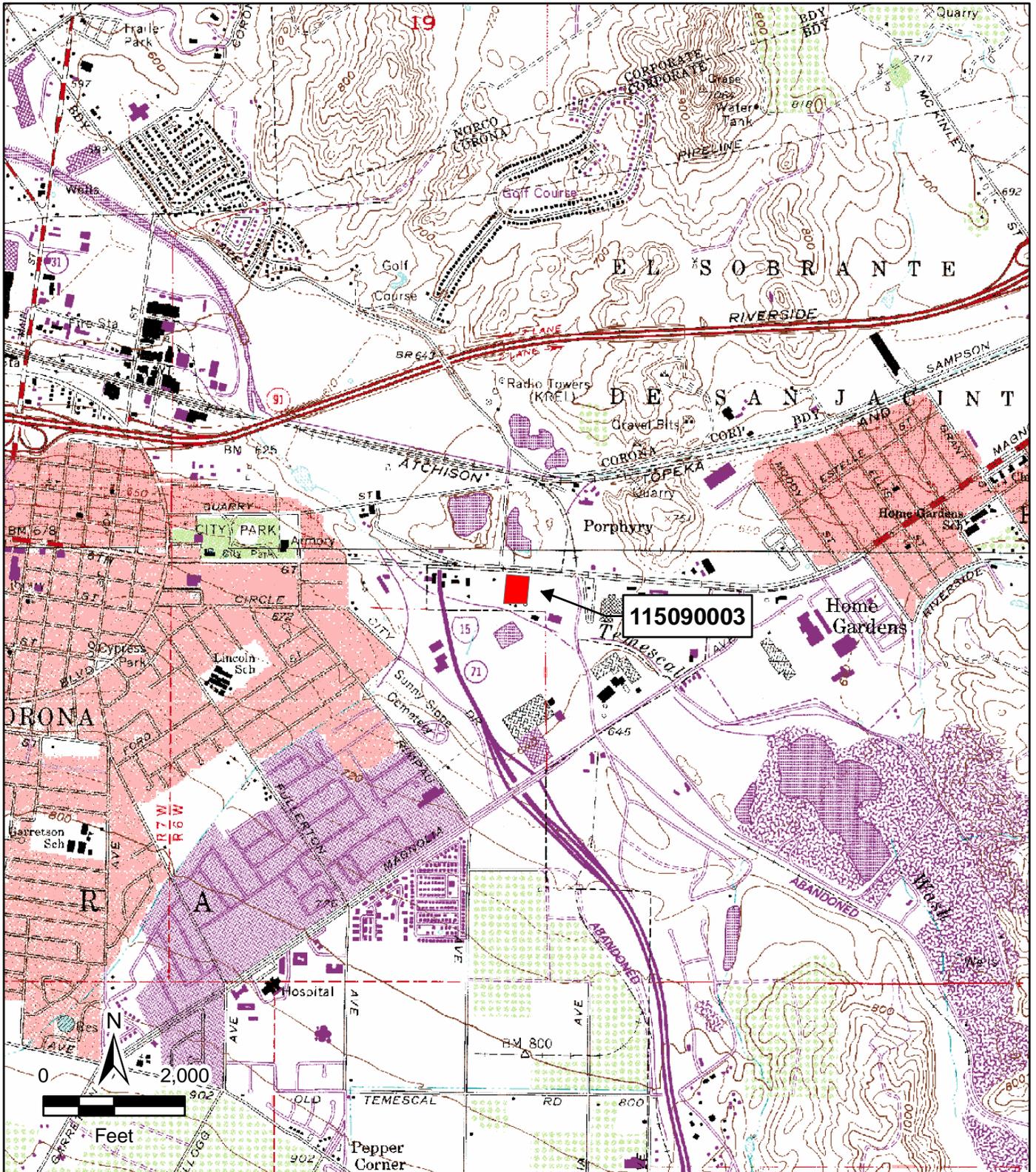


*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resources Inventory Report for the Proposed Circle City Substation Project, Riverside and San Bernardino Counties, California. ICF International, 2011

*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) _____

DPR 523A (1/95)

*Required Information



P3a. Description (continued):

The three buildings south of the restaurant appear to share the address 1342 E. 6th Street. Situated immediately south of the restaurant is a single-story rectangular-plan office. The building's horizontality, asymmetrically arranged east-facing façade, and variegated siding reflect the influence of the Ranch style. The building is topped by a low-pitch cross-gable roof with composition shingles and wide eave overhangs. The gable end features exposed beams over clerestory windows and full-length façade windows. Decorative concrete-block walls screen portions of the façade and north elevation. Siding includes brick, fieldstone, and stucco. A carport projects to the east from the south end of the façade.

Two more buildings are located at the property's southwest corner. The westernmost of these is a square-plan utilitarian repair garage with concrete-block elevation walls, a side-gable roof, and a north-facing facade. The roof is covered in composition shingles. A shed addition projects from the west elevation. A steel-pole and corrugated-metal-roofed car port separates this building from another building to the east that appears to be an office or residence. The eastern of the two buildings has an extremely low-pitch (nearly flat) side-gable roof with minimal eave overhangs, and walls formed of concrete-blocks. Fenestration consists of aluminum- and wood-frame windows, and a centrally positioned wood entryway door. A shed addition extends from the west elevation.

Aerial views indicate that the building that could not be accessed is a shed-roofed utilitarian building with a large warehouse door at the north elevation and projecting shelter at the west elevation.



Photograph 2: Office building immediately south of restaurant, east-facing façade, camera facing west, September 13, 2011



Photograph 3: Repair garage, north-facing façade and east elevation, camera facing southwest, September 13, 2011



Photograph 4: Building 4, north-facing façade and west elevation, camera facing southeast, September 13, 2011

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

Page 1 of 4

*Resource Name or #: Riverside County APN 115-080-025

P1. Other Identifier: 1302 E. 6th Street

***P2. Location:** Not for Publication Unrestricted

*a. County: Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. **USGS 7.5' Quad:** Corona North **Date:** 1967 (PR 1981) **T3S;R6W;Sec** Unsectioned (El Sobrante de San Jacinto); SB B.M.

c. Address: 1302 E. 6th Street

City: Corona, CA

Zip: 92879

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (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)
Located on the north side of the lot at E. 6th Street, the complex's animal hospital is a square-plan modern vernacular commercial building with concrete-block walls, a flat roof, and variegated finish on the north-facing façade (photograph 1). The east end of the main façade is formed of concrete-blocks and features a pattern of projecting and recessed blocks. To the west, under a flat shelter supported by deeply projecting roof beams, the façade finish incorporates stucco and spaced narrow vertical boards. Fenestration includes two fixed aluminum-frame windows fronted by spaced horizontal boards and a large four-pane fixed aluminum frame window at the west end, adjacent to what appears to be a solid veneered entry door under a matching veneered panel. A concrete-block wall topped with ironwork and featuring several steel lights with globe lamps separates the façade from the property's asphalt drive. A secondary entry with a solid veneered door and security screen is sheltered by a vinyl awning and flanked by small concrete-block walls at the center of the west elevation. The rear (south) elevation has several small windows covered by security bars and a centrally positioned commercial-grade entry door (see continuation sheet).

***P3b. Resource Attributes:** HP6. 1-3 story commercial building

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1. Vernacular modern commercial building at front of property, north-facing façade and west elevation, view to southeast

***P6. Date Constructed/Age and Sources:**
 Historic Prehistoric Both
ca. 1963 (HistoricAerials.com)

***P7. Owner and Address:**
Bruce & Doyun Choi
1302 E. 6th Street
Corona, CA 92879

***P8. Recorded by:**
Tim Yates, ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

***P9. Date Recorded:** July 24, 2012

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:** Addendum 1.

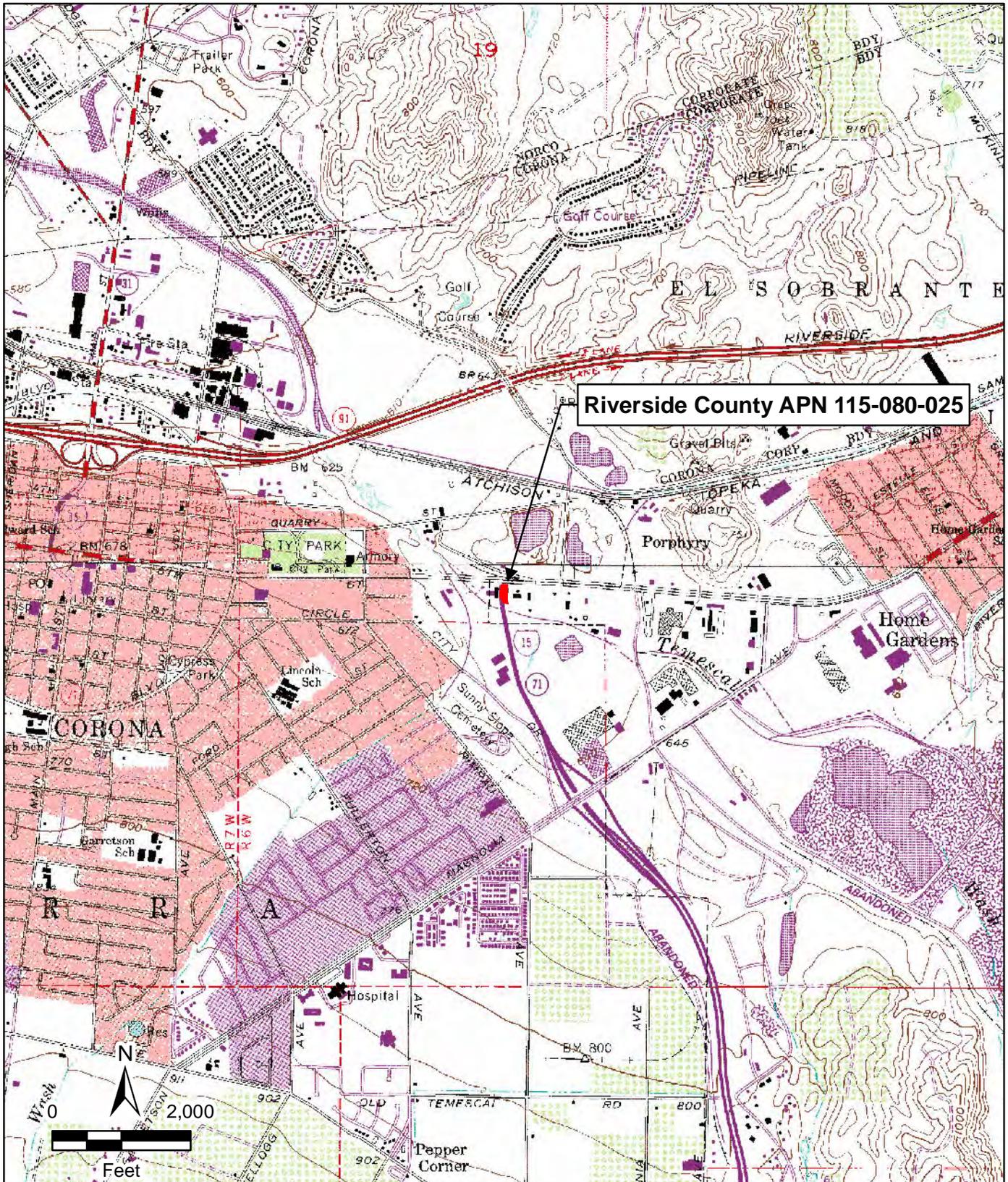
Proposed Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (ICF 00647.11), Riverside and San Bernardino Counties, California. Prepared for Southern California Edison. ICF International, 2012

***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):

DPR 523A (1/95)

*Required information





***P3a. Description (cont.):**

Southwest of the main building is a rectangular-plan Ranch style building with a north-facing façade and Storybook style elements such as overlapping vertical-board wall cladding, wood-frame windows with diamond-shaped grids, and a cross-gable roof covered in wood shingles and forming broadly overhanging eaves with exposed rafter tails (photograph 2). More Storybook features include scalloped bargeboard and scalloped horizontal cornice boards on the enclosed east-facing gable and the small window pediment gables projecting from the main façade, as well as scalloped window-sill decoration and faux two-leaf doors with louvers on each side of the building's centered commercial-grade solid entry door. The property's southernmost building, a pet motel, has a cross-shaped plan, a cross-gabled roof covered in composition material, and stucco wall cladding (photograph 3). The west-facing entrance consists of a solid door fronted by a security screen and flanked by aluminum-frame windows with faux shutters and security bars. Two waist-high stucco-clad walls project outward from each side of the entry. Stucco-clad perimeter walls surround the building. Slightly angled, corrugated-metal covers extend from the west and east perimeter walls toward the building to shelter rows of kennels.

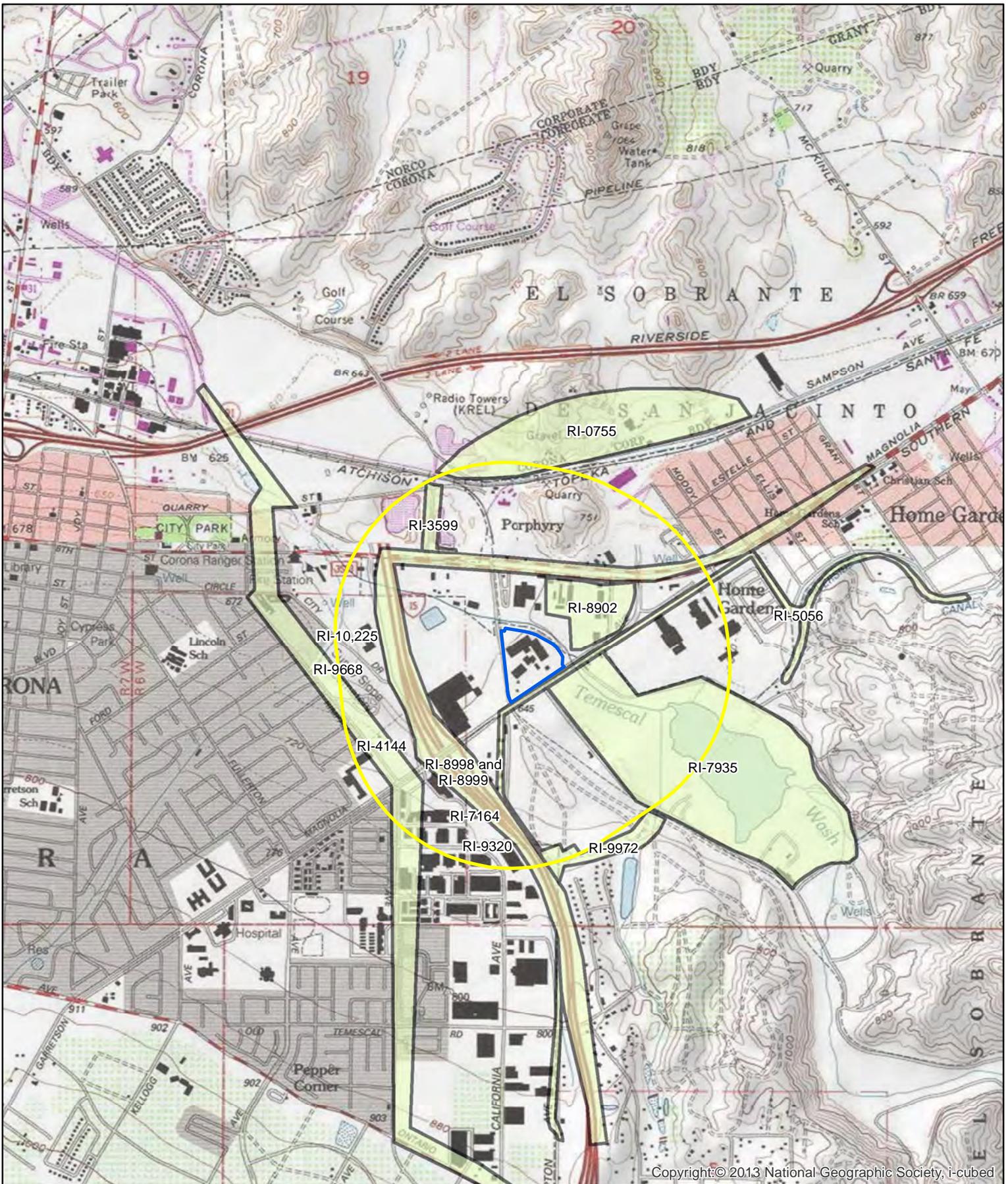
Photographs (cont.):



Photograph 2. Ranch and Storybook style building, north and east elevations, view south



Photograph 3. Southern building (pet motel), north and west elevations, view to south-southeast



- Project
- Half Mile Radius
- Reports

Corona Magnolia (22-028)
Reports Map
USGS Corona North and Corona South
Quadrangles
(7.5-minute series)


1:24,000
 AJG BFSa: 2/10/2022

Reports

ReportNum	OtherIDs	Authors	CitYear	CitTitle	CitPublisher	Resources
RI-00755	NADB-R - 1080805; Voiced - MF-0675	Marie Cottrel	1980	Archaeological Resources Conducted for the Corona Assessment District Environmental Impact Report	Archaeological Resource Management Corporation, Garden Grove, CA	33-000808, 33-001437, 33-001438, 33-001439, 33-001440, 33-001653, 33-001654
RI-03599	NADB-R - 1084317; Submitter - 93-7; Voiced - MF-3872	SEYMOUR, GREGORY R.	1993	AN ARCHAEOLOGICAL SURVEY FOR THE HOME GARDENS SANITARY DISTRICT INITIAL STUDY IN CORONA, RIVERSIDE COUNTY, CALIFORNIA.	SWCA ENVIRONMENTAL CONSULTANTS	
RI-04144	NADB-R - 1085336; Submitter - 324; Voiced - MF-4620	LOVE, BRUCE and BAI "TOM" TANG	1998	CULTURAL RESOURCES REPORT: TEMESCAL VALLEY REGIONAL INTERCEPTOR, SANTA ANA WATERSHED PROJECT AUTHORITY, RIVERSIDE COUNTY, CALIFORNIA	CRM TECH	33-000100, 33-000630, 33-001099, 33-003832, 33-004112
RI-05056	NADB-R - 1086418; Submitter - 01-02-03-708	MCKENNA ET AL.	2003	A PHASE I CULTURAL RESOURCES INVESTIGATION FOR THE PROPOSED CORONA FEEDER MASTER PLAN PROJECT AREA, RIVERSIDE COUNTY, CALIFORNIA	MCKENNA ET AL	33-003832, 33-004768, 33-004791, 33-009774
RI-07164		Curt Duke	2002	Cultural Resource Assessment for Cingular Wireless Facility No. SB 210-02 in Riverside County, California	LSA Associates, Inc.	
RI-07935		Demcak, Carol R.	2008	Report of Phase I Archaeological Resources Assessment of 150-Acre Parcel in Corona, Riverside County, California	Archaeological Resource Management Corporation	33-017132, 33-017133
RI-08902		Josh Smallwood	2012	Cultural Resources Report for the Proposed Magnolia Point Project, SW Corner 6th Street and Magnolia Avenue in Corona, Riverside County, California. Assessor's Parcel Nos. 107-030-003, -014, -015, -018, -019, -020, -024, and -027	Applied EarthWorks, Inc.	33-020201
RI-08988	Caltrans - EA: 0F540, PM ORE-91- R14.43/R18.91; RIV- 91R0.00/R13.04; RIV-15-35.64/45.14	Susan L. Bupp	2013	Supplemental Archaeological Survey Report For SR-91 Corridor Improvement Project, City Of Corona, Riverside County, California, California Department Of Transportation, District 8	Parsons, California Department of Transportation, District 8	

Reports

ReportNum	OtherIDs	Authors	CitYear	CitTitle	CitPublisher	Resources
RI-08989	Caltrans - EA: 0F540 PM ORA- 91- R14.43/RI18.91 ; RIV-91- R0.00/R13.04	Carrie Chasteen	2013	Supplemental Finding Of No Adverse Effect Report For SR-91 Corridor Improvement Project, City Of Corona, Riverside County, California, California Department Of Transportation, District 8	Parsons	
RI-09320		Carrie D. Wils	2014	Cultural Resources Records Search and Site Visit Results for Verizon Wireless Candidate 'California', 1180 California Avenue, Corona, Riverside County, California.	First Carbon Solutions	
RI-09668	Other - Barth II Cultural Report	Sarah A. Williams	2016	Cultural Resource Records Search and Site Visits Results for Celco Partnership and their Controlled Affiliates doing business as Verizon Wireless Candidate 'Barth II', 1512 Circle Drive, Corona, Riverside County, California	Helix Environmental Planning Inc.	
RI-09972		Ryan Ross, Leslie Nay Irish, and Barbara Loren-Webb	2014	Biological & Cultural Investigations & Monitoring	L&L	
RI-10225		Phil Fulton and Casey Tibbet	2015	Cultural Resource Assessment Class I Inventory	LSA	

APPENDIX

B LABORATORY REPORTS





ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 451402
Report Level: II
Report Date: 10/11/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - Clow - 1375 Magnolia Ave

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson EarthCon Consultants CA, Inc. 1100 W. Town and Country Rd Suite 200 Orange, CA 92868	Lab Job #: 451402 Project No: CLOW Location: Clow - 1375 Magnolia Ave Date Received: 10/04/21
--	--

Sample ID	Lab ID	Collected	Matrix
S-1-1	451402-001	10/04/21 08:40	Soil
S-1-3	451402-002	10/04/21 09:09	Soil
S-1-5	451402-003	10/04/21 09:30	Soil
S-2-1	451402-004	10/04/21 10:10	Soil
S-2-3	451402-005	10/04/21 10:15	Soil
S-2-5	451402-006	10/04/21 10:30	Soil
S-3-1	451402-007	10/04/21 10:58	Soil
S-3-3	451402-008	10/04/21 11:08	Soil
S-3-5	451402-009	10/04/21 11:32	Soil
S-4-1	451402-010	10/04/21 12:04	Soil
S-4-3	451402-011	10/04/21 12:20	Soil
S-4-5	451402-012	10/04/21 12:36	Soil
S-5-1	451402-013	10/04/21 13:01	Soil
S-6-1	451402-014	10/04/21 13:56	Soil
S-6-3	451402-015	10/04/21 14:06	Soil
S-6-5	451402-016	10/04/21 14:18	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 451402
Project No: CLOW
Location: Clow - 1375 Magnolia Ave
Date Received: 10/04/21

This data package contains sample and QC results for sixteen soil samples, requested for the above referenced project on 10/04/21. The samples were received cold and intact.

PCBs (EPA 8082):

High surrogate recoveries were observed for decachlorobiphenyl (PCB surrogate) in many samples. S-3-1 (lab # 451402-007) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange
 931 W. Barkley Avenue, Orange, CA 92868
 Phone 714-771-6900

Chain of Custody Record
 Lab No: 451402 Page: 1 of 2
 Matrix: A = Air S = Soil/Solid W = Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other
 Standard: 5 Day: 3 Day: X
 1 Day: X Custom TAT: 30
 Sample Receipt Temp: 1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION				Analysis Request		Test Instructions / Comments			
Company:	Quote #:	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	48 hr TAT if possible otherwise 72 hr. See Dan or Patty				
Earthcon Consultants	EHROS1921	10/04/21	0840	S	1/40Z	-				X	808a-PCB5 - Soxhlet
Becky Sundilson	Proj. Name:	10/04/21	0909	S	1/40Z	-				X	
BSundilson@earthcon.com	City #:	10/04/21	0930	S	1/40Z	-				X	
1100 Town and Country Rd	P.O. #:	10/04/21	1010	S	1/40Z	-				X	
Suite 200 Orange CA	Address:	10/04/21	1015	S	1/40Z	-				X	
(714) 321-8626	Global ID:	10/04/21	1030	S	1/40Z	-				X	
	Sampled By: JML	10/04/21	1058	S	1/40Z	-				X	
		10/04/21	1108	S	1/40Z	-				X	
		10/04/21	1132	S	1/40Z	-				X	

Relinquished By: Lindsey Langer
Received By: [Signature]
Relinquished By:
Received By:
Relinquished By:
Received By:

Date / Time
 10/4/21 1545
 10/4/21 1545

Company / Title
 Earthcon Staff Scientist
 (S)

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange
 931 W. Barkley Avenue, Orange, CA 92868
 Phone 714-771-6900

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Earthcon Consultants	Quote #:	ENR0519a
Report To:	Becky Sundilson	Proj. Name:	Glow
Email:	BSundilson@earthcon.com	Proj. #:	
Address:	1100 Town and Country Rd	P.O. #:	
Phone:	Suite 200 Orange, CA	Address:	1375 Magnolia Ave.
Fax:	(714) 321-8222	Global ID:	
		Sampled By:	UML

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
S-4-1	10/04/21	1204	S	1/40z	-
S-4-3	10/04/21	1220	S	1/40z	-
S-4-5	10/04/21	1230	S	1/40z	-
S-5-1	10/04/21	1301	S	1/40z	-
S-6-1	10/04/21	1350	S	1/40z	-
S-6-3	10/04/21	1400	S	1/40z	-
S-6-5	10/04/21	1418	S	1/40z	-

Relinquished By:	<i>[Signature]</i>	Signature	Print Name	Earthcon Staff Scientist	Company / Title	Date / Time	10/4/21 1045
Received By:							10/4/21 1545
Relinquished By:							
Received By:							
Relinquished By:							
Received By:							

Chain of Custody Record
 Lab No: 451402
 Page: 2 of 2

Standard: 5 Day: 3 Day: X
 1 Day: X
 Custom TAT: X

Turn Around Time (rush by advanced notice only)

Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

Preservatives:
 1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other

W =
 1 = Sample Receipt Temp:
 (lab use only)

Analysis Request

Test Instructions / Comments
 48hr TAT if possible otherwise tanour see Dan or Patty



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: EARTHCON CONSULTANTS Project: CLOW
 Date Received: 10/4/21 Sampler's Name Present: Yes No

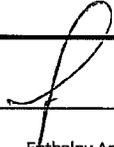
Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler): _____
 Sample Temp (°C), One from each cooler: #1: 5.7 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 1.9 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample IDs present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sampling dates & times present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a relinquished signature present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If custody seals are present, were they intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the containers labeled with the correct preservatives?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By:  Date: 10/4/21

Analysis Results for 451402

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 451402
 Project No: CLOW
 Location: Clow - 1375 Magnolia Ave
 Date Received: 10/04/21

Sample ID: S-1-1	Lab ID: 451402-001	Collected: 10/04/21 08:40
Matrix: Soil		

451402-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	2,500	25	275139	10/04/21	10/07/21	MTS
Aroclor-1221	ND		ug/Kg	1,200	25	275139	10/04/21	10/07/21	MTS
Aroclor-1232	ND		ug/Kg	1,200	25	275139	10/04/21	10/07/21	MTS
Aroclor-1242	ND		ug/Kg	1,200	25	275139	10/04/21	10/07/21	MTS
Aroclor-1248	36,000		ug/Kg	9,900	200	275139	10/04/21	10/11/21	TRN
Aroclor-1254	18,000		ug/Kg	9,900	200	275139	10/04/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	1,200	25	275139	10/04/21	10/07/21	MTS
Aroclor-1262	ND		ug/Kg	1,200	25	275139	10/04/21	10/07/21	MTS
Aroclor-1268	ND		ug/Kg	1,200	25	275139	10/04/21	10/07/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	171%	*	%REC	19-121	25	275139	10/04/21	10/07/21	MTS

Sample ID: S-1-3	Lab ID: 451402-002	Collected: 10/04/21 09:09
Matrix: Soil		

451402-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	500	5	275139	10/04/21	10/07/21	MTS
Aroclor-1221	ND		ug/Kg	250	5	275139	10/04/21	10/07/21	MTS
Aroclor-1232	ND		ug/Kg	250	5	275139	10/04/21	10/07/21	MTS
Aroclor-1242	ND		ug/Kg	250	5	275139	10/04/21	10/07/21	MTS
Aroclor-1248	1,800		ug/Kg	500	10	275139	10/04/21	10/11/21	TRN
Aroclor-1254	1,500		ug/Kg	500	10	275139	10/04/21	10/08/21	TRN
Aroclor-1260	2,400		ug/Kg	250	5	275139	10/04/21	10/07/21	MTS
Aroclor-1262	ND		ug/Kg	250	5	275139	10/04/21	10/07/21	MTS
Aroclor-1268	ND		ug/Kg	250	5	275139	10/04/21	10/07/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	107%		%REC	19-121	5	275139	10/04/21	10/07/21	MTS

Analysis Results for 451402

Sample ID: S-1-5	Lab ID: 451402-003	Collected: 10/04/21 09:30
	Matrix: Soil	

451402-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	5,000	50	275139	10/04/21	10/07/21	MTS
Aroclor-1221	ND		ug/Kg	2,500	50	275139	10/04/21	10/07/21	MTS
Aroclor-1232	ND		ug/Kg	2,500	50	275139	10/04/21	10/07/21	MTS
Aroclor-1242	ND		ug/Kg	2,500	50	275139	10/04/21	10/07/21	MTS
Aroclor-1248	ND		ug/Kg	2,500	50	275139	10/04/21	10/07/21	MTS
Aroclor-1254	ND		ug/Kg	2,500	50	275139	10/04/21	10/07/21	MTS
Aroclor-1260	ND		ug/Kg	2,500	50	275139	10/04/21	10/07/21	MTS
Aroclor-1262	ND		ug/Kg	2,500	50	275139	10/04/21	10/07/21	MTS
Aroclor-1268	ND		ug/Kg	2,500	50	275139	10/04/21	10/07/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	206%	*	%REC	19-121	50	275139	10/04/21	10/07/21	MTS

Sample ID: S-2-1	Lab ID: 451402-004	Collected: 10/04/21 10:10
	Matrix: Soil	

451402-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	4,900	49	275139	10/04/21	10/07/21	MTS
Aroclor-1221	ND		ug/Kg	2,500	49	275139	10/04/21	10/07/21	MTS
Aroclor-1232	ND		ug/Kg	2,500	49	275139	10/04/21	10/07/21	MTS
Aroclor-1242	ND		ug/Kg	2,500	49	275139	10/04/21	10/07/21	MTS
Aroclor-1248	21,000		ug/Kg	4,900	98	275139	10/04/21	10/11/21	TRN
Aroclor-1254	14,000		ug/Kg	4,900	98	275139	10/04/21	10/08/21	TRN
Aroclor-1260	6,100		ug/Kg	4,900	98	275139	10/04/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	2,500	49	275139	10/04/21	10/07/21	MTS
Aroclor-1268	ND		ug/Kg	2,500	49	275139	10/04/21	10/07/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	287%	*	%REC	19-121	49	275139	10/04/21	10/07/21	MTS

Analysis Results for 451402

Sample ID: S-2-3	Lab ID: 451402-005	Collected: 10/04/21 10:15
	Matrix: Soil	

451402-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	5,000	50	275139	10/04/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1248	20,000		ug/Kg	5,000	100	275139	10/04/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1260	3,600		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	123%	*	%REC	19-121	50	275139	10/04/21	10/08/21	TRN

Sample ID: S-2-5	Lab ID: 451402-006	Collected: 10/04/21 10:30
	Matrix: Soil	

451402-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	5,000	50	275139	10/04/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	2,500	50	275139	10/04/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	2,500	50	275139	10/04/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	2,500	50	275139	10/04/21	10/11/21	TRN
Aroclor-1248	19,000		ug/Kg	2,500	50	275139	10/04/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	2,500	50	275139	10/04/21	10/11/21	TRN
Aroclor-1260	3,800		ug/Kg	2,500	50	275139	10/04/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	2,500	50	275139	10/04/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	2,500	50	275139	10/04/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	94%		%REC	19-121	50	275139	10/04/21	10/11/21	TRN

Analysis Results for 451402

Sample ID: S-3-1	Lab ID: 451402-007	Collected: 10/04/21 10:58
	Matrix: Soil	

451402-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	5,000	50	275139	10/04/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Surrogates	Limits								
Decachlorobiphenyl (PCB)	133%	*	%REC	19-121	50	275139	10/04/21	10/08/21	TRN

Sample ID: S-3-3	Lab ID: 451402-008	Collected: 10/04/21 11:08
	Matrix: Soil	

451402-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	5,000	50	275139	10/04/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	2,500	50	275139	10/04/21	10/08/21	TRN
Surrogates	Limits								
Decachlorobiphenyl (PCB)	92%		%REC	19-121	50	275139	10/04/21	10/08/21	TRN

Analysis Results for 451402

Sample ID: S-3-5	Lab ID: 451402-009	Collected: 10/04/21 11:32
	Matrix: Soil	

451402-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	98	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	77%		%REC	19-121	0.98	275243	10/05/21	10/08/21	TRN

Sample ID: S-4-1	Lab ID: 451402-010	Collected: 10/04/21 12:04
	Matrix: Soil	

451402-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275243	10/05/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	98	2	275243	10/05/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	98	2	275243	10/05/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	98	2	275243	10/05/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	98	2	275243	10/05/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	98	2	275243	10/05/21	10/08/21	TRN
Aroclor-1260	150		ug/Kg	98	2	275243	10/05/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	98	2	275243	10/05/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	98	2	275243	10/05/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	98%		%REC	19-121	2	275243	10/05/21	10/08/21	TRN

Analysis Results for 451402

Sample ID: S-4-3	Lab ID: 451402-011	Collected: 10/04/21 12:20
	Matrix: Soil	

451402-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	98	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	70%		%REC	19-121	0.98	275243	10/05/21	10/08/21	TRN

Sample ID: S-4-5	Lab ID: 451402-012	Collected: 10/04/21 12:36
	Matrix: Soil	

451402-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275243	10/05/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	79%		%REC	19-121	1	275243	10/05/21	10/08/21	TRN

Analysis Results for 451402

Sample ID: S-5-1	Lab ID: 451402-013	Collected: 10/04/21 13:01
	Matrix: Soil	

451402-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	98	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	49	0.98	275243	10/05/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	77%		%REC	19-121	0.98	275243	10/05/21	10/08/21	TRN

Sample ID: S-6-1	Lab ID: 451402-014	Collected: 10/04/21 13:56
	Matrix: Soil	

451402-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275243	10/05/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	51	1	275243	10/05/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	51	1	275243	10/05/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	51	1	275243	10/05/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	51	1	275243	10/05/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	51	1	275243	10/05/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	51	1	275243	10/05/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	51	1	275243	10/05/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	51	1	275243	10/05/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	60%		%REC	19-121	1	275243	10/05/21	10/08/21	TRN

Analysis Results for 451402

Sample ID: S-6-3	Lab ID: 451402-015	Collected: 10/04/21 14:06
	Matrix: Soil	

451402-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275243	10/05/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	82%		%REC	19-121	1	275243	10/05/21	10/08/21	TRN

Sample ID: S-6-5	Lab ID: 451402-016	Collected: 10/04/21 14:18
	Matrix: Soil	

451402-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275243	10/05/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275243	10/05/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	78%		%REC	19-121	1	275243	10/05/21	10/08/21	TRN

* Value is outside QC limits
 ND Not Detected

Batch QC

Type: Blank	Lab ID: QC947255	Batch: 275139
Matrix: Miscell.	Method: EPA 8082	Prep Method: EPA 3541

QC947255 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	99	10/04/21	10/04/21
Aroclor-1221	ND		ug/Kg	50	10/04/21	10/04/21
Aroclor-1232	ND		ug/Kg	50	10/04/21	10/04/21
Aroclor-1242	ND		ug/Kg	50	10/04/21	10/04/21
Aroclor-1248	ND		ug/Kg	50	10/04/21	10/04/21
Aroclor-1254	ND		ug/Kg	50	10/04/21	10/04/21
Aroclor-1260	ND		ug/Kg	50	10/04/21	10/04/21
Aroclor-1262	ND		ug/Kg	50	10/04/21	10/04/21
Aroclor-1268	ND		ug/Kg	50	10/04/21	10/04/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	102%		%REC	19-121	10/04/21	10/04/21

Type: Lab Control Sample	Lab ID: QC947256	Batch: 275139
Matrix: Miscell.	Method: EPA 8082	Prep Method: EPA 3541

QC947256 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	441.8	505.1	ug/Kg	87%		14-150
Aroclor-1260	433.0	505.1	ug/Kg	86%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	49.91	50.51	ug/Kg	99%		19-121

Type: Lab Control Sample Duplicate	Lab ID: QC947257	Batch: 275139
Matrix: Miscell.	Method: EPA 8082	Prep Method: EPA 3541

QC947257 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim
Aroclor-1016	466.0	495.0	ug/Kg	94%		14-150	7	20
Aroclor-1260	455.3	495.0	ug/Kg	92%		10-150	7	20
Surrogates								
Decachlorobiphenyl (PCB)	51.28	49.50	ug/Kg	104%		19-121		

Batch QC

Type: Blank	Lab ID: QC947565	Batch: 275243
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC947565 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	99	10/05/21	10/08/21
Aroclor-1221	ND		ug/Kg	50	10/05/21	10/08/21
Aroclor-1232	ND		ug/Kg	50	10/05/21	10/08/21
Aroclor-1242	ND		ug/Kg	50	10/05/21	10/08/21
Aroclor-1248	ND		ug/Kg	50	10/05/21	10/08/21
Aroclor-1254	ND		ug/Kg	50	10/05/21	10/08/21
Aroclor-1260	ND		ug/Kg	50	10/05/21	10/08/21
Aroclor-1262	ND		ug/Kg	50	10/05/21	10/08/21
Aroclor-1268	ND		ug/Kg	50	10/05/21	10/08/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	76%		%REC	19-121	10/05/21	10/08/21

Type: Lab Control Sample	Lab ID: QC947566	Batch: 275243
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC947566 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	320.8	495.0	ug/Kg	65%		14-150
Aroclor-1260	330.2	495.0	ug/Kg	67%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	36.37	49.50	ug/Kg	73%		19-121

Type: Lab Control Sample Duplicate	Lab ID: QC947567	Batch: 275243
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC947567 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim
Aroclor-1016	319.7	495.0	ug/Kg	65%		14-150	0	20
Aroclor-1260	335.5	495.0	ug/Kg	68%		10-150	2	20
Surrogates								
Decachlorobiphenyl (PCB)	38.28	49.50	ug/Kg	77%		19-121		

ND Not Detected



ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 451564
Report Level: II
Report Date: 10/12/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - CLOW - EAR051921

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Lab Job #: 451564
Project No: CLOW
Location: CLOW - EAR051921
Date Received: 10/06/21

Sample ID	Lab ID	Collected	Matrix
S-7-1	451564-001	10/05/21 07:40	Soil
S-8-1	451564-002	10/05/21 08:12	Soil
S-8-3	451564-003	10/05/21 08:23	Soil
S-8-5	451564-004	10/05/21 09:25	Soil
S-9-1	451564-005	10/05/21 09:53	Soil
S-9-3	451564-006	10/05/21 10:16	Soil
S-9-5	451564-007	10/05/21 10:42	Soil
S-10-1	451564-008	10/05/21 11:28	Soil
S-11-1	451564-009	10/05/21 14:30	Soil
S-11-3	451564-010	10/05/21 14:30	Soil
S-11-5	451564-011	10/05/21 14:52	Soil
S-12-1	451564-012	10/05/21 15:20	Soil
S-12-3	451564-013	10/05/21 15:35	Soil
S-12-5	451564-014	10/05/21 16:12	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 451564
Project No: CLOW
Location: CLOW - EAR051921
Date Received: 10/06/21

This data package contains sample and QC results for fourteen soil samples, requested for the above referenced project on 10/06/21. The samples were received cold and intact.

PCBs (EPA 8082):

S-12-1 (lab # 451564-012) was diluted due to the color of the sample extract. No other analytical problems were encountered.



Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

Chain of Custody Record

Lab No: 451564
Page: 1 of 2

Matrix: A = Air S = Soil/Solid
Water DW = Drinking Water SD = Sediment
PP = Pure Product SEA = Sea Water
SW = Swab T = Tissue WP = Wipe O = Other

Standard: 5 Day: 3 Day: X
2 Day: 1 Day: Custom TAT:

Preservatives:
1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
4 = H₂SO₄ 5 = NaOH 6 = Other

Sample Receipt Temp:
(lab use only)

CUSTOMER INFORMATION				PROJECT INFORMATION				Analysis Request		Test Instructions / Comments	
Company:	Quote #:	Proj. Name:	Matrix	Sampling Date	Sampling Time	Container No. / Size	Pres.				
Earthcon Consultants	EA0519A	010W	S	10/05/21	0740	1/40Z	-	8082 PCBs - Soxhlet		48hr TAT if possible otherwise -TAMR. See pan or patty	
Becky Sundilson			S	10/05/21	0818	1/40Z	-				
BSundilson@earthcon.com			S	10/05/21	0823	1/40Z	-				
1100 Town and Country Rd			S	10/05/21	0925	1/40Z	-				
Suite 200 Orange, CA			S	10/05/21	0953	1/40Z	-				
(714) 321-8220			S	10/05/21	1010	1/40Z	-				
			S	10/05/21	1042	1/40Z	-				
			S	10/05/21	1128	1/40Z	-				
			S	10/05/21	1313	1/40Z	-				
			S	10/05/21	1430	1/40Z	-				
Signature				Print Name				Company / Title		Date / Time	
<i>Lindsay Langer</i>				Lindsay Langer				Earthcon Staff Scientist		10/06/21 1410	
<i>Brand Sylvester</i>				E.A.				E.A.		10/06/21 1416	
1 Relinquished By:											
1 Received By:											
2 Relinquished By:											
2 Received By:											
3 Relinquished By:											
3 Received By:											

5/1/2018



SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Earthcon Consultants Project: Clow
 Date Received: 10/06/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 5.0 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.8 #2: _____ #3: _____ #4: _____

	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample IDs present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sampling dates & times present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a relinquished signature present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If custody seals are present, were they intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the containers labeled with the correct preservatives?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5 Explanations/Comments
Water seen in Sample jars: 2,8,6,11,12. Time on the jar for sample 10 is 14:40.

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): PAM /10/6/21
 Project Manager's response: _____

Completed By: Date: 10/06/21

Analysis Results for 451564

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 451564
 Project No: CLOW
 Location: CLOW - EAR051921
 Date Received: 10/06/21

Sample ID: S-7-1 Lab ID: 451564-001 Collected: 10/05/21 07:40
Matrix: Soil

451564-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	62%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Sample ID: S-8-1 Lab ID: 451564-002 Collected: 10/05/21 08:12
Matrix: Soil

451564-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	67%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Analysis Results for 451564

Sample ID: S-8-3	Lab ID: 451564-003	Collected: 10/05/21 08:23
	Matrix: Soil	

451564-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	67%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Sample ID: S-8-5	Lab ID: 451564-004	Collected: 10/05/21 09:25
	Matrix: Soil	

451564-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	70%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Analysis Results for 451564

Sample ID: S-9-1	Lab ID: 451564-005	Collected: 10/05/21 09:53
	Matrix: Soil	

451564-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	5,000	50	275374	10/07/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	2,500	50	275374	10/07/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	2,500	50	275374	10/07/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	2,500	50	275374	10/07/21	10/11/21	TRN
Aroclor-1248	26,000		ug/Kg	2,500	50	275374	10/07/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	2,500	50	275374	10/07/21	10/11/21	TRN
Aroclor-1260	23,000		ug/Kg	2,500	50	275374	10/07/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	2,500	50	275374	10/07/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	2,500	50	275374	10/07/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	93%		%REC	19-121	50	275374	10/07/21	10/11/21	TRN

Sample ID: S-9-3	Lab ID: 451564-006	Collected: 10/05/21 10:16
	Matrix: Soil	

451564-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	310		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	370		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	34%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Analysis Results for 451564

Sample ID: S-9-5	Lab ID: 451564-007	Collected: 10/05/21 10:42
	Matrix: Soil	

451564-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	83		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	71		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	64%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Sample ID: S-10-1	Lab ID: 451564-008	Collected: 10/05/21 11:28
	Matrix: Soil	

451564-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	10,000	100	275374	10/07/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	5,000	100	275374	10/07/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	5,000	100	275374	10/07/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	5,000	100	275374	10/07/21	10/11/21	TRN
Aroclor-1248	49,000		ug/Kg	5,000	100	275374	10/07/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	5,000	100	275374	10/07/21	10/11/21	TRN
Aroclor-1260	16,000		ug/Kg	5,000	100	275374	10/07/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	5,000	100	275374	10/07/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	5,000	100	275374	10/07/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)		DO	%REC	19-121	100	275374	10/07/21	10/11/21	TRN

Analysis Results for 451564

Sample ID: S-11-1	Lab ID: 451564-009	Collected: 10/05/21 14:30
	Matrix: Soil	

451564-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	20,000	200	275374	10/07/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	10,000	200	275374	10/07/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	10,000	200	275374	10/07/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	10,000	200	275374	10/07/21	10/11/21	TRN
Aroclor-1248	110,000		ug/Kg	10,000	200	275374	10/07/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	10,000	200	275374	10/07/21	10/11/21	TRN
Aroclor-1260	32,000		ug/Kg	10,000	200	275374	10/07/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	10,000	200	275374	10/07/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	10,000	200	275374	10/07/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)		DO	%REC	19-121	200	275374	10/07/21	10/11/21	TRN

Sample ID: S-11-3	Lab ID: 451564-010	Collected: 10/05/21 14:30
	Matrix: Soil	

451564-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	70		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	66%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Analysis Results for 451564

Sample ID: S-11-5	Lab ID: 451564-011	Collected: 10/05/21 14:52
Matrix: Soil		

451564-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	230		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	110		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	58%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Sample ID: S-12-1	Lab ID: 451564-012	Collected: 10/05/21 15:20
Matrix: Soil		

451564-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275374	10/07/21	10/08/21	TRN
Aroclor-1221	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TRN
Aroclor-1232	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TRN
Aroclor-1242	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TRN
Aroclor-1248	300		ug/Kg	100	2	275374	10/07/21	10/08/21	TRN
Aroclor-1254	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TRN
Aroclor-1260	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TRN
Aroclor-1262	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TRN
Aroclor-1268	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	70%		%REC	19-121	2	275374	10/07/21	10/08/21	TRN

Analysis Results for 451564

Sample ID: S-12-3	Lab ID: 451564-013	Collected: 10/05/21 15:35
	Matrix: Soil	

451564-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	64%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Sample ID: S-12-5	Lab ID: 451564-014	Collected: 10/05/21 16:12
	Matrix: Soil	

451564-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	66%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

DO Diluted Out
 ND Not Detected

Batch QC

Type: Blank	Lab ID: QC947944	Batch: 275374
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC947944 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	10/07/21	10/08/21
Aroclor-1221	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1232	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1242	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1248	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1254	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1260	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1262	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1268	ND		ug/Kg	50	10/07/21	10/08/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	68%		%REC	19-121	10/07/21	10/08/21

Type: Matrix Spike	Lab ID: QC947945	Batch: 275374
Matrix (Source ID): Soil (451564-001)	Method: EPA 8082	Prep Method: EPA 3541

QC947945 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	312.4	ND	500.0	ug/Kg	62%		42-127	1
Aroclor-1260	338.7	ND	500.0	ug/Kg	68%		38-130	1
Surrogates								
Decachlorobiphenyl (PCB)	37.23		50.00	ug/Kg	74%		19-121	1

Type: Matrix Spike Duplicate	Lab ID: QC947946	Batch: 275374
Matrix (Source ID): Soil (451564-001)	Method: EPA 8082	Prep Method: EPA 3541

QC947946 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Aroclor-1016	324.3	ND	500.0	ug/Kg	65%		42-127	4	30	1
Aroclor-1260	313.9	ND	500.0	ug/Kg	63%		38-130	8	30	1
Surrogates										
Decachlorobiphenyl (PCB)	33.03		50.00	ug/Kg	66%		19-121			1

Batch QC

Type: Lab Control Sample	Lab ID: QC947947	Batch: 275374
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC947947 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	301.3	500.0	ug/Kg	60%		14-150
Aroclor-1260	300.4	500.0	ug/Kg	60%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	32.45	50.00	ug/Kg	65%		19-121

ND Not Detected



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Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 451567
Report Level: II
Report Date: 10/12/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - CLOW - EAR051921

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson	Lab Job #:	451567
EarthCon Consultants CA, Inc.	Project No:	CLOW
1100 W. Town and Country Rd	Location:	CLOW - EAR051921
Suite 200	Date Received:	10/06/21
Orange, CA 92868		

Sample ID	Lab ID	Collected	Matrix
S-13-1	451567-001	10/06/21 08:40	Soil
S-14-1	451567-002	10/06/21 09:41	Soil
S-15-1	451567-003	10/06/21 10:17	Soil
S-15-3	451567-004	10/06/21 10:37	Soil
S-16-1	451567-005	10/06/21 12:20	Soil
S-16-3	451567-006	10/06/21 13:03	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 451567
Project No: CLOW
Location: CLOW - EAR051921
Date Received: 10/06/21

This data package contains sample and QC results for six soil samples, requested for the above referenced project on 10/06/21. The samples were received cold and intact.

PCBs (EPA 8082):

A number of samples were diluted due to the dark color of the sample extracts. No other analytical problems were encountered.



SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Earthcon Consultants Project: CLDW
 Date Received: 10/6/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 NO (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 5.9 #2: _____ #3: _____ #4: _____
 (Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 3.4 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments
sample 004 had water in it.

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time: _____
 Email (email sent to/on): PAM / 10/6/21
 Project Manager's response: _____

Completed By: Deena Sylvestri Date: 10/6/21

Analysis Results for 451567

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 451567
 Project No: CLOW
 Location: CLOW - EAR051921
 Date Received: 10/06/21

Sample ID: S-13-1 Lab ID: 451567-001 Collected: 10/06/21 08:40
Matrix: Soil

451567-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	500	5	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	250	5	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	250	5	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	250	5	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	250	5	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	250	5	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	250	5	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	250	5	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	250	5	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	60%		%REC	19-121	5	275374	10/07/21	10/08/21	TJW

Sample ID: S-14-1 Lab ID: 451567-002 Collected: 10/06/21 09:41
Matrix: Soil

451567-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	57%		%REC	19-121	2	275374	10/07/21	10/08/21	TJW

Analysis Results for 451567

Sample ID: S-15-1	Lab ID: 451567-003	Collected: 10/06/21 10:17
	Matrix: Soil	

451567-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	100	2	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	69%		%REC	19-121	2	275374	10/07/21	10/08/21	TJW

Sample ID: S-15-3	Lab ID: 451567-004	Collected: 10/06/21 10:37
	Matrix: Soil	

451567-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	67%		%REC	19-121	1	275374	10/07/21	10/08/21	TJW

Analysis Results for 451567

Sample ID: S-16-1	Lab ID: 451567-005	Collected: 10/06/21 12:20
	Matrix: Soil	

451567-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	500	5	275374	10/07/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	250	5	275374	10/07/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	250	5	275374	10/07/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	250	5	275374	10/07/21	10/11/21	TRN
Aroclor-1248	ND		ug/Kg	250	5	275374	10/07/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	250	5	275374	10/07/21	10/11/21	TRN
Aroclor-1260	ND		ug/Kg	250	5	275374	10/07/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	250	5	275374	10/07/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	250	5	275374	10/07/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	91%		%REC	19-121	5	275374	10/07/21	10/11/21	TRN

Sample ID: S-16-3	Lab ID: 451567-006	Collected: 10/06/21 13:03
	Matrix: Soil	

451567-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275374	10/07/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275374	10/07/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275374	10/07/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275374	10/07/21	10/11/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	275374	10/07/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275374	10/07/21	10/11/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275374	10/07/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275374	10/07/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275374	10/07/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	48%		%REC	19-121	1	275374	10/07/21	10/11/21	TRN

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC947944	Batch: 275374
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC947944 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	10/07/21	10/08/21
Aroclor-1221	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1232	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1242	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1248	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1254	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1260	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1262	ND		ug/Kg	50	10/07/21	10/08/21
Aroclor-1268	ND		ug/Kg	50	10/07/21	10/08/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	68%		%REC	19-121	10/07/21	10/08/21

Type: Matrix Spike	Lab ID: QC947945	Batch: 275374
Matrix (Source ID): Soil (451564-001)	Method: EPA 8082	Prep Method: EPA 3541

QC947945 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	312.4	ND	500.0	ug/Kg	62%		42-127	1
Aroclor-1260	338.7	ND	500.0	ug/Kg	68%		38-130	1
Surrogates								
Decachlorobiphenyl (PCB)	37.23		50.00	ug/Kg	74%		19-121	1

Type: Matrix Spike Duplicate	Lab ID: QC947946	Batch: 275374
Matrix (Source ID): Soil (451564-001)	Method: EPA 8082	Prep Method: EPA 3541

QC947946 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Aroclor-1016	324.3	ND	500.0	ug/Kg	65%		42-127	4	30	1
Aroclor-1260	313.9	ND	500.0	ug/Kg	63%		38-130	8	30	1
Surrogates										
Decachlorobiphenyl (PCB)	33.03		50.00	ug/Kg	66%		19-121			1

Batch QC

Type: Lab Control Sample	Lab ID: QC947947	Batch: 275374
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC947947 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	301.3	500.0	ug/Kg	60%		14-150
Aroclor-1260	300.4	500.0	ug/Kg	60%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	32.45	50.00	ug/Kg	65%		19-121

ND Not Detected



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Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 451659
Report Level: II
Report Date: 10/12/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - Clow - 1375 Magnolia Ave

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

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CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson EarthCon Consultants CA, Inc. 1100 W. Town and Country Rd Suite 200 Orange, CA 92868	Lab Job #: 451659 Project No: CLOW Location: Clow - 1375 Magnolia Ave Date Received: 10/07/21
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Sample ID	Lab ID	Collected	Matrix
S-17-1	451659-001	10/07/21 07:55	Soil
S-17-3	451659-002	10/07/21 08:17	Soil
S-18-1	451659-003	10/07/21 08:52	Soil
S-18-3	451659-004	10/07/21 09:04	Soil
S-18-5	451659-005	10/07/21 09:10	Soil
S-19-1	451659-006	10/07/21 09:30	Soil
S-19-3	451659-007	10/07/21 09:42	Soil
S-20-1	451659-008	10/07/21 10:28	Soil
S-20-3	451659-009	10/07/21 10:38	Soil
S-21-1	451659-010	10/07/21 11:28	Soil
S-21-3	451659-011	10/07/21 11:47	Soil
S-22-1	451659-012	10/07/21 13:27	Soil
S-22-3	451659-013	10/07/21 13:57	Soil
S-22-5	451659-014	10/07/21 14:38	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 451659
Project No: CLOW
Location: Clow - 1375 Magnolia Ave
Date Received: 10/07/21

This data package contains sample and QC results for fourteen soil samples, requested for the above referenced project on 10/07/21. The samples were received cold and intact.

PCBs (EPA 8082):

Low internal standard responses were observed for 1-bromo-2-nitrobenzene (PCB) in S-19-1 (lab # 451659-006) and S-21-3 (lab # 451659-011); affected data was qualified with "b". High internal standard responses were observed for 1-bromo-2-nitrobenzene (1248) in S-20-3 (lab # 451659-009) and S-22-1 (lab # 451659-012); the affected analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". Response exceeding the instrument's linear range was observed for decachlorobiphenyl (PCB surrogate) in S-21-3 (lab # 451659-011); affected data was qualified with "E". High surrogate recoveries were observed for decachlorobiphenyl (PCB surrogate) in S-19-1 (lab # 451659-006) and S-21-3 (lab # 451659-011); no target analytes were detected in these samples. S-17-1 (lab # 451659-001) was diluted due to the dark color of the sample extract. No other analytical problems were encountered.

Chain of Custody Record
 Lab No: 451259 of 2 Page: 1
 Standard: X 5 Day: 3 Day: X
 2 Day: 1 Day: Custom TAT:

Matrix: A = Air S = Soil/Solid W =
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

Preservatives:
 1 =
 Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other

Sample Receipt Temp: 32/07
 (lab use only)

CUSTOMER INFORMATION
 Company: Earthcon Consultants
 Report To: Becky Sundilson
 Email: BSundilson@earthcon.com
 Address: 1100 Town and Country Rd
Suite 200 Orange, CA
 Phone: (714) 321-8600
 Fax:

PROJECT INFORMATION
 Quote #: E AROS19a
 Proj. Name: Olow
 Proj. #:
 P.O. #:
 Address: 1375 Magnolia Ave
 Global ID:
 Sampled By: UML

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Analysis Request	Test Instructions / Comments
S-17-1	10/07/21	0755	S	1/40Z	-	808a POPS - soxnet	48hr TAT if possible otherwise 7ahr. See Dan or Patty
S-17-3	10/07/21	0817	S	1/40Z	-		
S-18-1	10/07/21	0852	S	1/40Z	-		
S-18-3	10/07/21	0904	S	1/40Z	-		
S-18-5	10/07/21	0910	S	1/40Z	-		
S-19-1	10/07/21	0930	S	1/40Z	-		
S-19-3	10/07/21	0942	S	1/40Z	-		
S-20-1	10/07/21	1028	S	1/40Z	-		
S-20-3	10/07/21	1038	S	1/40Z	-		
S-21-1	10/07/21	1128	S	1/40Z	-		

Relinquished By: Lindsey Langer Signature: [Signature] Date: 10/12/21
Received By: GA / Tech Date: 10/12/21

Relinquished By: **Received By:**

Relinquished By: **Received By:**

Relinquished By: **Received By:**



Enthalpy Analytical - Orange
 931 W. Barkley Avenue, Orange, CA 92868
 Phone 714-771-6900

Chain of Custody Record
 Lab No: _____
 Page: 2 of 2

Turn Around Time (rush by advanced notice only)
 Standard: _____
 5 Day: _____
 3 Day: _____
 2 Day: X
 1 Day: _____
 Custom TAT: _____

Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other
 W = _____
 Preservatives: Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other
 1 = Sample Receipt Temp:
 (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION				Analysis Request		Test Instructions / Comments	
Company:	Quote #:	Matrix	Container No. / Size	Pres.					
Earthcon Consultants	EPAR0519121	S	1402	-	8082 PCBs - SOXNET				
Report To: Becky Sundilson	Proj. Name: GLOW	S	1402	-	48hr TAT if possible. otherwise 72 hr TAT.				
Email: BSundilson@earthcon.com	Address: 1375 Magnolia Ave	S	1402	-	SEE PAN OR PATTY				
Address: 1100 Town and Country	Global ID: _____	S	1402	-					
Phone: Suite 200 Orange, CA	Sampled By: UML	S	1402	-					
Fax: (714) 301-8020									
Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.				
S-01-3	10/07/21	1147	S	1402	-				
S-02-1	10/07/21	1327	S	1402	-				
S-02-3	10/07/21	1357	S	1402	-				
S-02-5	10/07/21	1438	S	1402	-				

Signature	Print Name	Company / Title	Date / Time
<i>[Signature]</i>	Vindsey Langer	Earthcon Staff Scientist	10/7/21 1550
<i>[Signature]</i>	G. Kim	SA / Tech	10/7/21 1550



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Earthcon Consultants Project: Clow
 Date Received: 10/07/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 3.2 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 0.7 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	✓		
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By:  Date: 10/7/21

Enthalpy Analytical, a subsidiary of Montrose Environmental Group, Inc.
 931 W. Barkley Ave, Orange, CA 92868 • T: (714) 771-6900 • F: (714) 538-1209
 www.enthalpy.com/socal

Sample Acceptance Checklist – Rev 4, 8/8/2017

Analysis Results for 451659

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 451659
 Project No: CLOW
 Location: Clow - 1375 Magnolia Ave
 Date Received: 10/07/21

Sample ID: S-17-1 Lab ID: 451659-001 Collected: 10/07/21 07:55
Matrix: Soil

451659-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275439	10/08/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	100	2	275439	10/08/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	100	2	275439	10/08/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	100	2	275439	10/08/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	100	2	275439	10/08/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	100	2	275439	10/08/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	100	2	275439	10/08/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	100	2	275439	10/08/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	100	2	275439	10/08/21	10/08/21	TJW
Surrogates	Limits								
Decachlorobiphenyl (PCB)	66%		%REC	19-121	2	275439	10/08/21	10/08/21	TJW

Sample ID: S-17-3 Lab ID: 451659-002 Collected: 10/07/21 08:17
Matrix: Soil

451659-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1248	69		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1260	52		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Surrogates	Limits								
Decachlorobiphenyl (PCB)	56%		%REC	19-121	1	275439	10/08/21	10/11/21	TRN

Analysis Results for 451659

Sample ID: S-18-1	Lab ID: 451659-003	Collected: 10/07/21 08:52
	Matrix: Soil	

451659-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1248	180		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	56%		%REC	19-121	1	275439	10/08/21	10/11/21	TRN

Sample ID: S-18-3	Lab ID: 451659-004	Collected: 10/07/21 09:04
	Matrix: Soil	

451659-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1248	61		ug/Kg	50	1	275439	10/08/21	10/12/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	61%		%REC	19-121	1	275439	10/08/21	10/08/21	TJW

Analysis Results for 451659

Sample ID: S-18-5	Lab ID: 451659-005	Collected: 10/07/21 09:10
	Matrix: Soil	

451659-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/08/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/08/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	59%		%REC	19-121	1	275439	10/08/21	10/08/21	TJW

Sample ID: S-19-1	Lab ID: 451659-006	Collected: 10/07/21 09:30
	Matrix: Soil	

451659-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND	b	ug/Kg	100	1	275439	10/08/21	10/11/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1260	ND	b	ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	124%	*,b	%REC	19-121	1	275439	10/08/21	10/11/21	TJW

Analysis Results for 451659

Sample ID: S-19-3	Lab ID: 451659-007	Collected: 10/07/21 09:42
	Matrix: Soil	

451659-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/11/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	34%		%REC	19-121	1	275439	10/08/21	10/11/21	TJW

Sample ID: S-20-1	Lab ID: 451659-008	Collected: 10/07/21 10:28
	Matrix: Soil	

451659-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/11/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	41%		%REC	19-121	1	275439	10/08/21	10/11/21	TJW

Analysis Results for 451659

Sample ID: S-20-3	Lab ID: 451659-009	Collected: 10/07/21 10:38
	Matrix: Soil	

451659-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/11/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1248	ND	b	ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	62%		%REC	19-121	1	275439	10/08/21	10/11/21	TJW

Sample ID: S-21-1	Lab ID: 451659-010	Collected: 10/07/21 11:28
	Matrix: Soil	

451659-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275439	10/08/21	10/11/21	TJW
Aroclor-1221	ND		ug/Kg	100	2	275439	10/08/21	10/11/21	TJW
Aroclor-1232	ND		ug/Kg	100	2	275439	10/08/21	10/11/21	TJW
Aroclor-1242	ND		ug/Kg	100	2	275439	10/08/21	10/11/21	TJW
Aroclor-1248	ND		ug/Kg	100	2	275439	10/08/21	10/11/21	TJW
Aroclor-1254	ND		ug/Kg	100	2	275439	10/08/21	10/11/21	TJW
Aroclor-1260	ND		ug/Kg	100	2	275439	10/08/21	10/11/21	TJW
Aroclor-1262	ND		ug/Kg	100	2	275439	10/08/21	10/11/21	TJW
Aroclor-1268	ND		ug/Kg	100	2	275439	10/08/21	10/11/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	56%		%REC	19-121	2	275439	10/08/21	10/11/21	TJW

Analysis Results for 451659

Sample ID: S-21-3	Lab ID: 451659-011	Collected: 10/07/21 11:47
	Matrix: Soil	

451659-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND	b	ug/Kg	100	1	275439	10/08/21	10/11/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1260	ND	b	ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	172%	*,E,b	%REC	19-121	1	275439	10/08/21	10/11/21	TJW

Sample ID: S-22-1	Lab ID: 451659-012	Collected: 10/07/21 13:27
	Matrix: Soil	

451659-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/11/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1248	ND	b	ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	69%		%REC	19-121	1	275439	10/08/21	10/11/21	TJW

Analysis Results for 451659

Sample ID: S-22-3	Lab ID: 451659-013	Collected: 10/07/21 13:57
	Matrix: Soil	

451659-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	67%		%REC	19-121	1	275439	10/08/21	10/11/21	TRN

Sample ID: S-22-5	Lab ID: 451659-014	Collected: 10/07/21 14:38
	Matrix: Soil	

451659-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275439	10/08/21	10/11/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275439	10/08/21	10/11/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	66%		%REC	19-121	1	275439	10/08/21	10/11/21	TRN

* Value is outside QC limits
 E Response exceeds instrument's linear range
 ND Not Detected
 b See narrative

Batch QC

Type: Blank	Lab ID: QC948150	Batch: 275439
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC948150 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	10/08/21	10/08/21
Aroclor-1221	ND		ug/Kg	50	10/08/21	10/08/21
Aroclor-1232	ND		ug/Kg	50	10/08/21	10/08/21
Aroclor-1242	ND		ug/Kg	50	10/08/21	10/08/21
Aroclor-1248	ND		ug/Kg	50	10/08/21	10/08/21
Aroclor-1254	ND		ug/Kg	50	10/08/21	10/08/21
Aroclor-1260	ND		ug/Kg	50	10/08/21	10/08/21
Aroclor-1262	ND		ug/Kg	50	10/08/21	10/08/21
Aroclor-1268	ND		ug/Kg	50	10/08/21	10/08/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	70%		%REC	19-121	10/08/21	10/08/21

Type: Lab Control Sample	Lab ID: QC948151	Batch: 275439
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC948151 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	282.2	500.0	ug/Kg	56%		14-150
Aroclor-1260	303.4	500.0	ug/Kg	61%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	30.29	50.00	ug/Kg	61%		19-121

Type: Matrix Spike	Lab ID: QC948152	Batch: 275439
Matrix (Source ID): Soil (451659-002)	Method: EPA 8082	Prep Method: EPA 3541

QC948152 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	438.2	ND	500.0	ug/Kg	88%		42-127	1
Aroclor-1260	523.3	52.39	500.0	ug/Kg	94%		38-130	1
Surrogates								
Decachlorobiphenyl (PCB)	31.50		50.00	ug/Kg	63%		19-121	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC948153	Batch: 275439
Matrix (Source ID): Soil (451659-002)	Method: EPA 8082	Prep Method: EPA 3541

QC948153 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	452.1	ND	500.0	ug/Kg	90%		42-127	3	30	1
Aroclor-1260	528.1	52.39	500.0	ug/Kg	95%		38-130	1	30	1
Surrogates										
Decachlorobiphenyl (PCB)	31.02		50.00	ug/Kg	62%		19-121			1

ND Not Detected



ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 451711
Report Level: II
Report Date: 10/13/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - CLOW

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Lab Job #: 451711
Project No: CLOW
Location: CLOW
Date Received: 10/08/21

Sample ID	Lab ID	Collected	Matrix
S-10-3	451711-001	10/08/21 08:25	Soil
S-23-1	451711-002	10/08/21 09:51	Soil
S-23-3	451711-003	10/08/21 10:05	Soil
S-24-1	451711-004	10/08/21 10:50	Soil
S-10-5	451711-005	10/08/21 11:11	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 451711
Project No: CLOW
Location: CLOW
Date Received: 10/08/21

This data package contains sample and QC results for five soil samples, requested for the above referenced project on 10/08/21. The samples were received cold and intact.

PCBs (EPA 8082):

Low recoveries were observed for Aroclor-1260 in the MS/MSD of S-10-3 (lab # 451711-001); the LCS was within limits. High RPD was observed for Aroclor-1016 and Aroclor-1260. S-23-1 (lab # 451711-002), S-23-3 (lab # 451711-003), and S-24-1 (lab # 451711-004) were diluted due to the color of the sample extracts. S-10-5 (lab # 451711-005) was diluted due to the dark color of the sample extract. No other analytical problems were encountered.



Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Chain of Custody Record

Lab No: **451711**

Page: **1** of **1**

Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

Turn Around Time (rush by advanced notice only)

Standard: 5 Day: 3 Day: X
 2 Day: X 1 Day: Custom TAT:

Preservatives: 1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other

Sample Receipt Temp: **5.6/5.0**
 (lab use only)

PROJECT INFORMATION

Quote #: **ETP0519A1**
 Proj. Name: **CLOW**
 Proj. #: **BSundlison@earthcon.com**
 P.O. #: **1100 Town and Country Rd**
 Address: **Suite 200 Orange, CA**
 Global ID: **(714) 321-8220**
 Sampled By: **UML**

Analysis Request

808a - PCBs Soxhlet

Test Instructions / Comments
48hr if possible otherwise 72hr TAT. See Dan or Patty

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
S-10-3	10/08/21	0825	S	1/40Z	-
S-23-1	10/08/21	0951	S	1/40Z	-
S-23-3	10/08/21	1005	S	1/40Z	-
S-24-1	10/08/21	1050	S	1/40Z	-
S-10-5	10/08/21	1111	S	1/40Z	-

Signature	Print Name	Company / Title	Date / Time
<i>Lindsey Langer</i>	Lindsey Langer	Earthcon / Staff Scientist	10/08/21 1302
<i>Elisabeth...</i>	Elisabeth...	EA	10/08/21 1302



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Earthcon Consultants Project: Clow
 Date Received: 10/8/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 5.6 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 5.0 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample IDs present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sampling dates & times present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a relinquished signature present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If custody seals are present, were they intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the containers labeled with the correct preservatives?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: Date: 10/8/21

Analysis Results for 451711

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 451711
 Project No: CLOW
 Location: CLOW
 Date Received: 10/08/21

Sample ID: S-10-3 Lab ID: 451711-001 Collected: 10/08/21 08:25
Matrix: Soil

451711-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275568	10/11/21	10/12/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275568	10/11/21	10/12/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275568	10/11/21	10/12/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275568	10/11/21	10/12/21	TJW
Aroclor-1248	1,300		ug/Kg	250	5	275568	10/11/21	10/12/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275568	10/11/21	10/12/21	TJW
Aroclor-1260	1,500		ug/Kg	250	5	275568	10/11/21	10/12/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275568	10/11/21	10/12/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275568	10/11/21	10/12/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	59%		%REC	19-121	1	275568	10/11/21	10/12/21	TJW

Sample ID: S-23-1 Lab ID: 451711-002 Collected: 10/08/21 09:51
Matrix: Soil

451711-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275568	10/11/21	10/12/21	TRN
Aroclor-1221	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1232	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1242	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1248	6,200		ug/Kg	1,000	20	275568	10/11/21	10/12/21	TRN
Aroclor-1254	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1260	5,700		ug/Kg	1,000	20	275568	10/11/21	10/12/21	TRN
Aroclor-1262	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1268	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	45%		%REC	19-121	2	275568	10/11/21	10/12/21	TRN

Analysis Results for 451711

Sample ID: S-23-3	Lab ID: 451711-003	Collected: 10/08/21 10:05
	Matrix: Soil	

451711-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275568	10/11/21	10/12/21	TRN
Aroclor-1221	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1232	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1242	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1248	3,500		ug/Kg	500	10	275568	10/11/21	10/12/21	TRN
Aroclor-1254	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1260	3,200		ug/Kg	500	10	275568	10/11/21	10/12/21	TRN
Aroclor-1262	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Aroclor-1268	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	70%		%REC	19-121	2	275568	10/11/21	10/12/21	TRN

Sample ID: S-24-1	Lab ID: 451711-004	Collected: 10/08/21 10:50
	Matrix: Soil	

451711-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275568	10/11/21	10/12/21	TJW
Aroclor-1221	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1232	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1242	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1248	400		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1254	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1260	310		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1262	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1268	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	53%		%REC	19-121	2	275568	10/11/21	10/12/21	TJW

Analysis Results for 451711

Sample ID: S-10-5	Lab ID: 451711-005	Collected: 10/08/21 11:11
Matrix: Soil		

451711-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	275568	10/11/21	10/12/21	TJW
Aroclor-1221	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1232	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1242	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1248	590		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1254	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1260	530		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1262	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Aroclor-1268	ND		ug/Kg	100	2	275568	10/11/21	10/12/21	TJW
Surrogates	Limits								
Decachlorobiphenyl (PCB)	73%		%REC	19-121	2	275568	10/11/21	10/12/21	TJW

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC948539	Batch: 275568
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC948539 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	10/11/21	10/11/21
Aroclor-1221	ND		ug/Kg	50	10/11/21	10/11/21
Aroclor-1232	ND		ug/Kg	50	10/11/21	10/11/21
Aroclor-1242	ND		ug/Kg	50	10/11/21	10/11/21
Aroclor-1248	ND		ug/Kg	50	10/11/21	10/11/21
Aroclor-1254	ND		ug/Kg	50	10/11/21	10/11/21
Aroclor-1260	ND		ug/Kg	50	10/11/21	10/11/21
Aroclor-1262	ND		ug/Kg	50	10/11/21	10/11/21
Aroclor-1268	ND		ug/Kg	50	10/11/21	10/11/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	39%		%REC	19-121	10/11/21	10/11/21

Type: Matrix Spike	Lab ID: QC948540	Batch: 275568
Matrix (Source ID): Soil (451711-001)	Method: EPA 8082	Prep Method: EPA 3541

QC948540 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	352.6	ND	500.0	ug/Kg	71%		42-127	1
Aroclor-1260	272.7	1545	500.0	ug/Kg	-254%	*	38-130	1
Surrogates								
Decachlorobiphenyl (PCB)	11.35		50.00	ug/Kg	23%		19-121	1

Type: Matrix Spike Duplicate	Lab ID: QC948541	Batch: 275568
Matrix (Source ID): Soil (451711-001)	Method: EPA 8082	Prep Method: EPA 3541

QC948541 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	536.2	ND	500.0	ug/Kg	107%		42-127	41*	30	1
Aroclor-1260	1,082	1545	500.0	ug/Kg	-93%	*	38-130	119*	30	1
Surrogates										
Decachlorobiphenyl (PCB)	10.60		50.00	ug/Kg	21%		19-121			1

Batch QC

Type: Lab Control Sample	Lab ID: QC948568	Batch: 275568
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC948568 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	359.8	500.0	ug/Kg	72%		14-150
Aroclor-1260	372.6	500.0	ug/Kg	75%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	30.48	50.00	ug/Kg	61%		19-121

* Value is outside QC limits
 ND Not Detected



ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 451879
Report Level: II
Report Date: 10/15/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - Corona - Clow

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson EarthCon Consultants CA, Inc. 1100 W. Town and Country Rd Suite 200 Orange, CA 92868	Lab Job #: 451879 Project No: CLOW Location: Corona - Clow Date Received: 10/12/21
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Sample ID	Lab ID	Collected	Matrix
S-25-1	451879-001	10/12/21 08:00	Soil
S-25-3	451879-002	10/12/21 08:08	Soil
S-25-5	451879-003	10/12/21 08:40	Soil
S-26-1	451879-004	10/12/21 09:39	Soil
S-26-3	451879-005	10/12/21 09:51	Soil
S-26-5	451879-006	10/12/21 09:59	Soil
S-27-1	451879-007	10/12/21 10:35	Soil
S-27-3	451879-008	10/12/21 10:50	Soil
S-27-5	451879-009	10/12/21 11:05	Soil
S-27-10	451879-010	10/12/21 12:24	Soil
S-28-1	451879-011	10/12/21 13:10	Soil
S-28-3	451879-012	10/12/21 13:22	Soil
S-28-5	451879-013	10/12/21 13:46	Soil
S-29-1	451879-014	10/12/21 14:26	Soil
S-29-3	451879-015	10/12/21 14:39	Soil
S-29-5	451879-016	10/12/21 15:08	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 451879
Project No: CLOW
Location: Corona - Clow
Date Received: 10/12/21

This data package contains sample and QC results for sixteen soil samples, requested for the above referenced project on 10/12/21. The samples were received cold and intact.

PCBs (EPA 8082):

High recoveries were observed for Aroclor-1016 and Aroclor-1260 in the MS/MSD of S-25-1 (lab # 451879-001); the LCS was within limits. High RPD was also observed for Aroclor-1016 and Aroclor-1260. No other analytical problems were encountered.

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Chain of Custody Record

Lab No: 451979

Page: 1 of 2

Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

Turn Around Time (rush by advanced notice only)

Standard: 5 Day: 3 Day: X
 2 Day: X 1 Day: Custom TAT: Sample Receipt Temp: 5.4 / 2.0
 1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other (lab use only)

PROJECT INFORMATION

Company: Earthcon Consultants Quote #: EAC0619A
 Report To: Becky Sandilson Proj. Name: Corona-Clow
 Email: BSandilson@earthcon.com Proj. #:
 Address: 1100 W. Town and Country Blvd. #:
 Suite 200 Orange, CA 1575 Magnolia Ave
 Phone: (714) 361-8020 Global ID:
 Sampled By: LML

Analysis Request

8082-PCBS-SOXMET
 48hr TAT if possible.
 IF NOT 72hr TAT
 see Dan or Patty.
 possible high levels

CUSTOMER INFORMATION

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
S-26-1	10/12/21	0800	S	1'40Z	-
S-26-3	10/12/21	0808	S	1'40Z	-
S-26-5	10/12/21	0840	S	1'40Z	-
S-26-1	10/12/21	0939	S	1'40Z	-
S-26-3	10/12/21	0951	S	1'40Z	-
S-26-6	10/12/21	0959	S	1'40Z	-
S-27-1	10/12/21	1035	S	1'40Z	-
S-27-3	10/12/21	1050	S	1'40Z	-
S-27-5	10/12/21	1100	S	1'40Z	-
S-27-10	10/12/21	1024	S	1'40Z	-

Test Instructions / Comments

48hr TAT if possible.
 IF NOT 72hr TAT
 see Dan or Patty.
 possible high levels

Signature	Print Name	Company / Title	Date / Time
<i>[Signature]</i>	Lindsay Langer	Earthcon / Staff Scientist	10/12/21 1021
<i>[Signature]</i>	Elizabeth Langer	EA	10/12/21 1021

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange
 931 W. Barkley Avenue, Orange, CA 92868
 Phone 714-771-6900

Chain of Custody Record

Lab No: 451979
 Page: 2 of 2

Turn Around Time (rush by advanced notice only)

Standard: 5 Day: 3 Day:
 2 Day: 1 Day: Custom TAT:

Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other
 W =
 Preservatives: 1 =
 Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other
 Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION

Company: Earthcon Consultants Quote #: EAR061921
 Report To: Becky Sundilson Proj. Name: CORONA-C100
 Email: BSundilson@earthcon.com Proj. #:
 Address: 1100 W. Town and Country Rd P.O. #:
Suite 200 Orange, CA Address: 1375 Magnolia Ave
 Phone: (714) 321-8020 Global ID:
 Sampled By: WML

PROJECT INFORMATION

808a-RCS Schief

Analysis Request

48hr TAT if possible if no + 72hr TAT see Dan or Patty *possible high levels*

Test Instructions / Comments

48hr TAT if possible if no + 72hr TAT see Dan or Patty *possible high levels*

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
S-28-1	10/12/21	1316	S	1140Z	-
S-28-3	10/12/21	1322	S	1140Z	-
S-28-5	10/12/21	1340	S	1140Z	-
S-29-1	10/12/21	1420	S	1140Z	-
S-29-3	10/12/21	1439	S	1140Z	-
S-29-5	10/12/21	1508	S	1140Z	-

Signature	Print Name	Company / Title	Date / Time
<u>Langer</u>	<u>Lindsey Langer</u>	<u>Earthcon / Staff Scientist</u>	<u>10/12/21 16:21</u>
<u>Stacy</u>	<u>Elizabeth</u>	<u>SA</u>	<u>10/12/21 16:21</u>



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Earthcon Consultants Project: Corona-CLOW
 Date Received: 10/12/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 5.4 #2: _____ #3: _____ #4: _____
(Acceptance range is < 5°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.0 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response: _____

Completed By: Date: 10/12/21

Analysis Results for 451879

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 451879
 Project No: CLOW
 Location: Corona - Clow
 Date Received: 10/12/21

Sample ID: S-25-1 Lab ID: 451879-001 Collected: 10/12/21 08:00
Matrix: Soil

451879-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	4,600		ug/Kg	1,000	20	275764	10/13/21	10/14/21	MTS
Aroclor-1254	2,300		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1260	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	64%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Sample ID: S-25-3 Lab ID: 451879-002 Collected: 10/12/21 08:08
Matrix: Soil

451879-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	1,300		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1254	640		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1260	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	56%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Analysis Results for 451879

Sample ID: S-25-5	Lab ID: 451879-003	Collected: 10/12/21 08:40
	Matrix: Soil	

451879-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	680		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1254	290		ug/Kg	250	5	275764	10/13/21	10/14/21	MTS
Aroclor-1260	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	61%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Sample ID: S-26-1	Lab ID: 451879-004	Collected: 10/12/21 09:39
	Matrix: Soil	

451879-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	670		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1254	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1260	5,000		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	96%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Analysis Results for 451879

Sample ID: S-26-3	Lab ID: 451879-005	Collected: 10/12/21 09:51
	Matrix: Soil	

451879-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275764	10/13/21	10/14/21	MTS
Aroclor-1221	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1232	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1242	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1248	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1254	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1260	110		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1262	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1268	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	81%		%REC	19-121	1	275764	10/13/21	10/14/21	MTS

Sample ID: S-26-5	Lab ID: 451879-006	Collected: 10/12/21 09:59
	Matrix: Soil	

451879-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275764	10/13/21	10/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	56%		%REC	19-121	1	275764	10/13/21	10/15/21	TRN

Analysis Results for 451879

Sample ID: S-27-1	Lab ID: 451879-007	Collected: 10/12/21 10:35
	Matrix: Soil	

451879-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	930		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1254	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1260	2,500		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates	Limits								
Decachlorobiphenyl (PCB)	44%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Sample ID: S-27-3	Lab ID: 451879-008	Collected: 10/12/21 10:50
	Matrix: Soil	

451879-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275764	10/13/21	10/14/21	MTS
Aroclor-1221	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1232	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1242	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1248	410		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1254	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1260	120		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1262	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1268	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Surrogates	Limits								
Decachlorobiphenyl (PCB)	47%		%REC	19-121	1	275764	10/13/21	10/14/21	MTS

Analysis Results for 451879

Sample ID: S-27-5	Lab ID: 451879-009	Collected: 10/12/21 11:05
	Matrix: Soil	

451879-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275764	10/13/21	10/14/21	MTS
Aroclor-1221	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1232	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1242	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1248	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1254	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1260	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1262	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1268	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	60%		%REC	19-121	1	275764	10/13/21	10/14/21	MTS

Sample ID: S-27-10	Lab ID: 451879-010	Collected: 10/12/21 12:24
	Matrix: Soil	

451879-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275764	10/13/21	10/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	275764	10/13/21	10/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	61%		%REC	19-121	1	275764	10/13/21	10/15/21	TRN

Analysis Results for 451879

Sample ID: S-28-1	Lab ID: 451879-011	Collected: 10/12/21 13:10
	Matrix: Soil	

451879-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	50,000		ug/Kg	10,000	200	275764	10/13/21	10/14/21	MTS
Aroclor-1254	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1260	12,000		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	61%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Sample ID: S-28-3	Lab ID: 451879-012	Collected: 10/12/21 13:22
	Matrix: Soil	

451879-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	5,900		ug/Kg	1,000	20	275764	10/13/21	10/15/21	TRN
Aroclor-1254	2,900		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1260	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	46%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Analysis Results for 451879

Sample ID: S-28-5	Lab ID: 451879-013	Collected: 10/12/21 13:46
	Matrix: Soil	

451879-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	880		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1254	540		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1260	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	63%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Sample ID: S-29-1	Lab ID: 451879-014	Collected: 10/12/21 14:26
	Matrix: Soil	

451879-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275764	10/13/21	10/13/21	MTS
Aroclor-1221	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1232	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1242	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1248	630		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1254	510		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1260	720		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1262	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Aroclor-1268	ND		ug/Kg	500	10	275764	10/13/21	10/13/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	56%		%REC	19-121	10	275764	10/13/21	10/13/21	MTS

Analysis Results for 451879

Sample ID: S-29-3	Lab ID: 451879-015	Collected: 10/12/21 14:39
	Matrix: Soil	

451879-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	120		ug/Kg	100	1	275764	10/13/21	10/14/21	MTS
Aroclor-1221	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1232	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1242	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1248	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1254	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1260	290		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1262	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1268	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	56%		%REC	19-121	1	275764	10/13/21	10/14/21	MTS

Sample ID: S-29-5	Lab ID: 451879-016	Collected: 10/12/21 15:08
	Matrix: Soil	

451879-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275764	10/13/21	10/14/21	MTS
Aroclor-1221	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1232	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1242	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1248	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1254	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1260	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1262	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Aroclor-1268	ND		ug/Kg	50	1	275764	10/13/21	10/14/21	MTS
Surrogates				Limits					
Decachlorobiphenyl (PCB)	69%		%REC	19-121	1	275764	10/13/21	10/14/21	MTS

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC949092	Batch: 275764
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC949092 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	10/13/21	10/13/21
Aroclor-1221	ND		ug/Kg	50	10/13/21	10/13/21
Aroclor-1232	ND		ug/Kg	50	10/13/21	10/13/21
Aroclor-1242	ND		ug/Kg	50	10/13/21	10/13/21
Aroclor-1248	ND		ug/Kg	50	10/13/21	10/13/21
Aroclor-1254	ND		ug/Kg	50	10/13/21	10/13/21
Aroclor-1260	ND		ug/Kg	50	10/13/21	10/13/21
Aroclor-1262	ND		ug/Kg	50	10/13/21	10/13/21
Aroclor-1268	ND		ug/Kg	50	10/13/21	10/13/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	53%		%REC	19-121	10/13/21	10/13/21

Type: Lab Control Sample	Lab ID: QC949093	Batch: 275764
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC949093 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	334.2	500.0	ug/Kg	67%		14-150
Aroclor-1260	376.3	500.0	ug/Kg	75%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	26.82	50.00	ug/Kg	54%		19-121

Type: Matrix Spike	Lab ID: QC949094	Batch: 275764
Matrix (Source ID): Soil (451879-001)	Method: EPA 8082	Prep Method: EPA 3541

QC949094 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	3,947	ND	500.0	ug/Kg	789%	*	42-127	10
Aroclor-1260	1,687	ND	500.0	ug/Kg	337%	*	38-130	10
Surrogates								
Decachlorobiphenyl (PCB)	45.24		50.00	ug/Kg	90%		19-121	10

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC949095	Batch: 275764
Matrix (Source ID): Soil (451879-001)	Method: EPA 8082	Prep Method: EPA 3541

QC949095 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	2,693	ND	500.0	ug/Kg	539%	*	42-127	38*	30	10
Aroclor-1260	1,150	ND	500.0	ug/Kg	230%	*	38-130	38*	30	10
Surrogates										
Decachlorobiphenyl (PCB)	40.72		50.00	ug/Kg	81%		19-121			10

* Value is outside QC limits
 ND Not Detected



ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 452005
Report Level: II
Report Date: 10/19/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - Corona CLOW

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Lab Job #: 452005
Project No: CLOW
Location: Corona CLOW
Date Received: 10/14/21

Sample ID	Lab ID	Collected	Matrix
S-30-1	452005-001	10/14/21 08:25	Soil
S-30-3	452005-002	10/14/21 09:10	Soil
S-30-5	452005-003	10/14/21 09:22	Soil
S-30-6	452005-004	10/14/21 09:41	Soil
S-31-1	452005-005	10/14/21 10:29	Soil
S-31-3	452005-006	10/14/21 10:42	Soil
S-31-5	452005-007	10/14/21 10:57	Soil
S-32-1	452005-008	10/14/21 14:15	Soil
S-32-3	452005-009	10/14/21 14:21	Soil
S-32-5	452005-010	10/14/21 14:40	Soil
S-32-7	452005-011	10/14/21 15:00	Soil
S-32-11.8	452005-012	10/14/21 15:22	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 452005
Project No: CLOW
Location: Corona CLOW
Date Received: 10/14/21

This data package contains sample and QC results for twelve soil samples, requested for the above referenced project on 10/14/21. The samples were received cold and intact.

PCBs (EPA 8082):

High recoveries were observed for Aroclor-1016 and Aroclor-1260 in the MS/MSD of S-30-6 (lab # 452005-004); the LCS was within limits. No other analytical problems were encountered.



Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Chain of Custody Record

Lab No: 452005

Page: 1 of 2

Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

Preservatives:
 Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other

1 = Sample Receipt Temp:

(lab use only)

Turn Around Time (rush by advanced notice only)

Standard: 5 Day: 3 Day: X
 2 Day: 1 Day: X Custom TAT:

PROJECT INFORMATION

Company: Earthcon Consultants Quote #: EAR-051901
 Report To: Becky Sundilson Proj. Name: Corona - Clow
 Email: BSundilson@earthcon.com Proj. #:
 Address: 1100 Town and Country Rd P.O. #:
Suite 200 Orange, CA Address: 1375 Magnolia Ave
 Phone: 714-381-8026 Global ID:
 Fax: Sampled By: LML

Analysis Request

8082 PCBs - SOXNET
 48hr TAT if possible
 IF NOT 72hr TAT.
 see Dan or Patty
 possible high levels

Test Instructions / Comments

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
S-30-1	10/14/21	0805	S	1/40z	-
S-30-3	10/14/21	0910	S	1/40z	-
S-30-5	10/14/21	0922	S	1/40z	-
S-30-6	10/14/21	0941	S	1/40z	-
S-31-1	10/14/21	1022	S	1/40z	-
S-31-3	10/14/21	1012	S	1/40z	-
S-31-5	10/14/21	1057	S	1/40z	-
S-32-1	10/14/21	1415	S	1/40z	-
S-32-3	10/14/21	1421	S	1/40z	-
S-32-5	10/14/21	1440	S	1/40z	-

Signature

Relinquished By: L. Langer Print Name: Earthcon / staff scientist Date / Time: 10/14/21 1646
 Received By: Becky Sundilson General Sundilson EA 10/14/21 1646

Relinquished By:
 Received By:
 Relinquished By:
 Received By:

7.9/2.2



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Earthcon Consultants Project: CLOW
 Date Received: 10/14/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 NO (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 7.8 #2: _____ #3: _____ #4: _____
 (Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.2 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: Grana Sylvester Date: 10/18/21

Analysis Results for 452005

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 452005
 Project No: CLOW
 Location: Corona CLOW
 Date Received: 10/14/21

Sample ID: S-30-1 Lab ID: 452005-001 Collected: 10/14/21 08:25
Matrix: Soil

452005-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	10,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1248	18,000		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)		DO	%REC	19-121	100	275916	10/15/21	10/18/21	TJW

Sample ID: S-30-3 Lab ID: 452005-002 Collected: 10/14/21 09:10
Matrix: Soil

452005-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	500	10	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	500	10	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	500	10	275916	10/15/21	10/18/21	TJW
Aroclor-1248	2,300		ug/Kg	500	10	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	500	10	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	500	10	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	500	10	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	500	10	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	62%		%REC	19-121	10	275916	10/15/21	10/18/21	TJW

Analysis Results for 452005

Sample ID: S-30-5	Lab ID: 452005-003	Collected: 10/14/21 09:22
	Matrix: Soil	

452005-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	10,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1248	31,000		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	5,000	100	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)		DO	%REC	19-121	100	275916	10/15/21	10/18/21	TJW

Sample ID: S-30-6	Lab ID: 452005-004	Collected: 10/14/21 09:41
	Matrix: Soil	

452005-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	2,500	25	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	1,300	25	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	1,300	25	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	1,300	25	275916	10/15/21	10/18/21	TJW
Aroclor-1248	7,800		ug/Kg	1,300	25	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	1,300	25	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	1,300	25	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	1,300	25	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	1,300	25	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	68%		%REC	19-121	25	275916	10/15/21	10/18/21	TJW

Analysis Results for 452005

Sample ID: S-31-1	Lab ID: 452005-005	Collected: 10/14/21 10:29
Matrix: Soil		

452005-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1248	290,000		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)		DO	%REC	19-121	1000	275916	10/15/21	10/18/21	TJW

Sample ID: S-31-3	Lab ID: 452005-006	Collected: 10/14/21 10:42
Matrix: Soil		

452005-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1248	170,000		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50,000	1000	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)		DO	%REC	19-121	1000	275916	10/15/21	10/18/21	TJW

Analysis Results for 452005

Sample ID: S-31-5	Lab ID: 452005-007	Collected: 10/14/21 10:57
	Matrix: Soil	

452005-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	25,000	250	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	13,000	250	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	13,000	250	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	13,000	250	275916	10/15/21	10/18/21	TJW
Aroclor-1248	120,000		ug/Kg	13,000	250	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	13,000	250	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	13,000	250	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	13,000	250	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	13,000	250	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)		DO	%REC	19-121	250	275916	10/15/21	10/18/21	TJW

Sample ID: S-32-1	Lab ID: 452005-008	Collected: 10/14/21 14:15
	Matrix: Soil	

452005-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1260	550		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	64%		%REC	19-121	1	275916	10/15/21	10/18/21	TJW

Analysis Results for 452005

Sample ID: S-32-3	Lab ID: 452005-009	Collected: 10/14/21 14:21
	Matrix: Soil	

452005-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	43%		%REC	19-121	1	275916	10/15/21	10/18/21	TJW

Sample ID: S-32-5	Lab ID: 452005-010	Collected: 10/14/21 14:40
	Matrix: Soil	

452005-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	66%		%REC	19-121	1	275916	10/15/21	10/18/21	TJW

Analysis Results for 452005

Sample ID: S-32-7	Lab ID: 452005-011	Collected: 10/14/21 15:00
	Matrix: Soil	

452005-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	41%		%REC	19-121	1	275916	10/15/21	10/18/21	TJW

Sample ID: S-32-11.8	Lab ID: 452005-012	Collected: 10/14/21 15:22
	Matrix: Soil	

452005-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	275916	10/15/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	275916	10/15/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	44%		%REC	19-121	1	275916	10/15/21	10/18/21	TJW

DO Diluted Out
 ND Not Detected

Batch QC

Type: Blank	Lab ID: QC949522	Batch: 275916
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC949522 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	10/15/21	10/18/21
Aroclor-1221	ND		ug/Kg	50	10/15/21	10/18/21
Aroclor-1232	ND		ug/Kg	50	10/15/21	10/18/21
Aroclor-1242	ND		ug/Kg	50	10/15/21	10/18/21
Aroclor-1248	ND		ug/Kg	50	10/15/21	10/18/21
Aroclor-1254	ND		ug/Kg	50	10/15/21	10/18/21
Aroclor-1260	ND		ug/Kg	50	10/15/21	10/18/21
Aroclor-1262	ND		ug/Kg	50	10/15/21	10/18/21
Aroclor-1268	ND		ug/Kg	50	10/15/21	10/18/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	52%		%REC	19-121	10/15/21	10/18/21

Type: Lab Control Sample	Lab ID: QC949523	Batch: 275916
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC949523 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	308.5	500.0	ug/Kg	62%		14-150
Aroclor-1260	295.7	500.0	ug/Kg	59%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	26.70	50.00	ug/Kg	53%		19-121

Type: Matrix Spike	Lab ID: QC949524	Batch: 275916
Matrix (Source ID): Soil (452005-004)	Method: EPA 8082	Prep Method: EPA 3541

QC949524 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	5,153	ND	500.0	ug/Kg	1031%	*	42-127	25
Aroclor-1260	2,230	ND	500.0	ug/Kg	446%	*	38-130	25
Surrogates								
Decachlorobiphenyl (PCB)	34.55		50.00	ug/Kg	69%		19-121	25

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC949525	Batch: 275916
Matrix (Source ID): Soil (452005-004)	Method: EPA 8082	Prep Method: EPA 3541

QC949525 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	3,119	ND	500.0	ug/Kg	624%	*	42-127	30	30	25
Aroclor-1260	1,644	ND	500.0	ug/Kg	329%	*	38-130	30	30	25
Surrogates										
Decachlorobiphenyl (PCB)	27.00		50.00	ug/Kg	54%		19-121			25

* Value is outside QC limits
 ND Not Detected



ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 452068
Report Level: II
Report Date: 10/19/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - Corona-Clow

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Lab Job #: 452068
Project No: CLOW
Location: Corona-Clow
Date Received: 10/15/21

Sample ID	Lab ID	Collected	Matrix
S-33-1	452068-001	10/15/21 08:42	Soil
S-33-3	452068-002	10/15/21 08:58	Soil
S-2-5.5	452068-003	10/15/21 11:00	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 452068
Project No: CLOW
Location: Corona-Clow
Date Received: 10/15/21

This data package contains sample and QC results for three soil samples, requested for the above referenced project on 10/15/21. The samples were received cold and intact.

PCBs (EPA 8082):

No analytical problems were encountered.

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Chain of Custody Record

Lab No: 450000

Page: 1 of 1

Turn Around Time (rush by advanced notice only)

Standard: 5 Day: 1 Day: 3 Day: Custom TAT: X

Matrix: A = Air S = Soil/Solid

Water DW = Drinking Water SD = Sediment

PP = Pure Product SEA = Sea Water

SW = Swab T = Tissue WP = Wipe O = Other

Preservatives: W =

Na₂S₂O₃ 2 = HCl 3 = HNO₃

4 = H₂SO₄ 5 = NaOH 6 = Other

1 = Sample Receipt Temp:

5.0 / 5.0

(lab use only)

PROJECT INFORMATION

Company: Earthcon Consultants
 Report To: Becky Sundison
 Email: BSundison@earthcon.com
 Address: 1100 Town and Country Rd Suite 200 Orange, CA (JH) 301-8700
 Phone: 301-8700
 Fax: UML
 Quote #: 220510101
 Proj. Name: Corona-Crow
 Proj. #: 1375 Magnolia Ave
 P.O. #: 8082 PCBs - Soxhlet
 Address: 1375 Magnolia Ave
 Global ID:
 Sampled By: UML

Analysis Request

Test Instructions / Comments

48hr TAT if possible if not 72hr TAT.
 See Dan or Patty.
 * possible high levels*

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
S-33-1	10/15/21	0840	S	1/40Z	-
S-33-3	10/15/21	0858	S	1/40Z	-
S-a-5.5	10/15/21	1100	S	1/40Z	-

Signature	Print Name	Company / Title	Date / Time
<i>Lindsay Langer</i>	Lindsay Langer	Earthcon / Staff Scientist	10/15/21 10:30
<i>Casey</i>	Casey		10/15/21 6:20



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Earthcon Consultants Project: Corona-Clow
 Date Received: 10/15/21 Sampler's Name Present: Yes No

Section 2

Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 5.0 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3

Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 5.0 #2: _____ #3: _____ #4: _____

Section 4

	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?		<input checked="" type="checkbox"/>	
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response: _____

Completed By:  Date: 10/15/21

Analysis Results for 452068

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 452068
 Project No: CLOW
 Location: Corona-Clow
 Date Received: 10/15/21

Sample ID: S-33-1 Lab ID: 452068-001 Collected: 10/15/21 08:42
Matrix: Soil

452068-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276020	10/18/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1248	1,400		ug/Kg	250	5	276020	10/18/21	10/19/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	45%		%REC	19-121	1	276020	10/18/21	10/18/21	TJW

Sample ID: S-33-3 Lab ID: 452068-002 Collected: 10/15/21 08:58
Matrix: Soil

452068-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276020	10/18/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	57%		%REC	19-121	1	276020	10/18/21	10/18/21	TJW

Analysis Results for 452068

Sample ID: S-2-5.5	Lab ID: 452068-003	Collected: 10/15/21 11:00
Matrix: Soil		

452068-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276020	10/18/21	10/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	276020	10/18/21	10/18/21	TJW
Surrogates	Limits								
Decachlorobiphenyl (PCB)	56%		%REC	19-121	1	276020	10/18/21	10/18/21	TJW

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC949849	Batch: 276020
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC949849 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	10/18/21	10/18/21
Aroclor-1221	ND		ug/Kg	50	10/18/21	10/18/21
Aroclor-1232	ND		ug/Kg	50	10/18/21	10/18/21
Aroclor-1242	ND		ug/Kg	50	10/18/21	10/18/21
Aroclor-1248	ND		ug/Kg	50	10/18/21	10/18/21
Aroclor-1254	ND		ug/Kg	50	10/18/21	10/18/21
Aroclor-1260	ND		ug/Kg	50	10/18/21	10/18/21
Aroclor-1262	ND		ug/Kg	50	10/18/21	10/18/21
Aroclor-1268	ND		ug/Kg	50	10/18/21	10/18/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	52%		%REC	19-121	10/18/21	10/18/21

Type: Lab Control Sample	Lab ID: QC949850	Batch: 276020
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC949850 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	336.8	500.0	ug/Kg	67%		14-150
Aroclor-1260	323.8	500.0	ug/Kg	65%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	28.20	50.00	ug/Kg	56%		19-121

Type: Matrix Spike	Lab ID: QC949851	Batch: 276020
Matrix (Source ID): Soil (452068-002)	Method: EPA 8082	Prep Method: EPA 3541

QC949851 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	319.5	ND	500.0	ug/Kg	64%		42-127	1
Aroclor-1260	244.5	ND	500.0	ug/Kg	49%		38-130	1
Surrogates								
Decachlorobiphenyl (PCB)	29.10		50.00	ug/Kg	58%		19-121	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC949852	Batch: 276020
Matrix (Source ID): Soil (452068-002)	Method: EPA 8082	Prep Method: EPA 3541

QC949852 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	264.9	ND	500.0	ug/Kg	53%		42-127	19	30	1
Aroclor-1260	209.1	ND	500.0	ug/Kg	42%		38-130	16	30	1
Surrogates										
Decachlorobiphenyl (PCB)	25.52		50.00	ug/Kg	51%		19-121			1

ND Not Detected



ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 452232
Report Level: II
Report Date: 10/21/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - Corona- CLOW

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE
Member

Sample Summary

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 452232
 Project No: CLOW
 Location: Corona- CLOW
 Date Received: 10/19/21

Sample ID	Lab ID	Collected	Matrix
S-28-7	452232-001	10/19/21 08:05	Soil
S-10-8	452232-002	10/19/21 09:31	Soil
S-23-5	452232-003	10/19/21 09:50	Soil
S-31-10.5	452232-004	10/19/21 08:36	Soil
S-23-7	452232-005	10/19/21 10:14	Soil
S-24-3	452232-006	10/19/21 10:30	Soil
S-24-5	452232-007	10/19/21 10:36	Soil
S-34-1	452232-008	10/19/21 11:05	Soil
S-34-3	452232-009	10/19/21 11:11	Soil
S-35-1	452232-010	10/19/21 11:20	Soil
S-35-3	452232-011	10/19/21 11:26	Soil
S-36-1	452232-012	10/19/21 11:39	Soil
S-36-3	452232-013	10/19/21 11:46	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 452232
Project No: CLOW
Location: Corona- CLOW
Date Received: 10/19/21

This data package contains sample and QC results for thirteen soil samples, requested for the above referenced project on 10/19/21. The samples were received cold and intact.

PCBs (EPA 8082):

No analytical problems were encountered.

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

Chain of Custody Record

Lab No: 452232

Page: 2 of 2

Matrix: A = Air S = Soil/Solid
Water DW = Drinking Water SD = Sediment
PP = Pure Product SEA = Sea Water
SW = Swab T = Tissue WP = Wipe O = Other

Turn Around Time (rush by advanced notice only)

Standard: 5 Day: 3 Day: X

2 Day: 1 Day: Custom TAT: X

Preservatives: 1 = Sample Receipt Temp:
Na₂O₃ 2 = HCl 3 = HNO₃
4 = H₂SO₄ 5 = NaOH 6 = Other

(lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION			Analysis Request		Test Instructions / Comments	
Company:	Earthcon Consultants	Quote #:	EAC051921					48hr TAT if possible. If not 72hr TAT. see van or Patty *possible high levels*
Report To:	BOBBY SUNDILSON	Proj. Name:	Corona - flow					
Email:	B.Sundilson@earthcon.com	Proj. #:						
Address:	1100 Town and Country Dr.							
	Suite 200 Orange, CA	Address:	1375 Magnolia Ave					
Phone:	(714) 321-8126	Global ID:						
Fax:		Sampled By:	LML					
Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.			
1	10/19/21	1120	S	1402	-			
2	10/19/21	1139	S	1402	-			
3	10/19/21	1140	S	1402	-			
4								
5								
6								
7								
8								
9								
10								

Signature	Print Name	Company / Title	Date / Time
<i>L. Langer</i>	Lindsay Langer	Earthcon Staff Scientist	10/19/21 13:19
<i>Beena Sivasubramanian</i>	Beena Sivasub	EA	10/19/21 13:19



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Earthcon Consultants Project: Corona - CLOW
 Date Received: 10/19/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 6.9 #2: _____ #3: _____ #4: _____
 (Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 9.3 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Are sample IDs present?	<input checked="" type="checkbox"/>		
Are sampling dates & times present?	<input checked="" type="checkbox"/>		
Is a relinquished signature present?	<input checked="" type="checkbox"/>		
Are the tests required clearly indicated on the COC?	<input checked="" type="checkbox"/>		
Are custody seals present?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
If custody seals are present, were they intact?			<input checked="" type="checkbox"/>
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate in Section 4 below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were the samples collected in the correct containers for the required tests?	<input checked="" type="checkbox"/>		
Are the containers labeled with the correct preservatives?			<input checked="" type="checkbox"/>
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			<input checked="" type="checkbox"/>
Was a sufficient amount of sample submitted for the requested tests?	<input checked="" type="checkbox"/>		

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response:

Completed By: Alex S. [Signature] Date: 10/19/21

Analysis Results for 452232

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 452232
 Project No: CLOW
 Location: Corona- CLOW
 Date Received: 10/19/21

Sample ID: S-28-7 Lab ID: 452232-001 Collected: 10/19/21 08:05
Matrix: Soil

452232-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/20/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	65%		%REC	19-121	1	276180	10/20/21	10/20/21	TRN

Sample ID: S-10-8 Lab ID: 452232-002 Collected: 10/19/21 09:31
Matrix: Soil

452232-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/20/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	66%		%REC	19-121	1	276180	10/20/21	10/20/21	TRN

Analysis Results for 452232

Sample ID: S-23-5	Lab ID: 452232-003	Collected: 10/19/21 09:50
	Matrix: Soil	

452232-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/20/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	64%		%REC	19-121	1	276180	10/20/21	10/20/21	TRN

Sample ID: S-31-10.5	Lab ID: 452232-004	Collected: 10/19/21 08:36
	Matrix: Soil	

452232-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/20/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	65%		%REC	19-121	1	276180	10/20/21	10/20/21	TRN

Analysis Results for 452232

Sample ID: S-23-7	Lab ID: 452232-005	Collected: 10/19/21 10:14
	Matrix: Soil	

452232-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/20/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	61%		%REC	19-121	1	276180	10/20/21	10/20/21	TRN

Sample ID: S-24-3	Lab ID: 452232-006	Collected: 10/19/21 10:30
	Matrix: Soil	

452232-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/20/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	72%		%REC	19-121	1	276180	10/20/21	10/20/21	TRN

Analysis Results for 452232

Sample ID: S-24-5	Lab ID: 452232-007	Collected: 10/19/21 10:36
	Matrix: Soil	

452232-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/20/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	71%		%REC	19-121	1	276180	10/20/21	10/20/21	TRN

Sample ID: S-34-1	Lab ID: 452232-008	Collected: 10/19/21 11:05
	Matrix: Soil	

452232-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/20/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/20/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	71%		%REC	19-121	1	276180	10/20/21	10/20/21	TRN

Analysis Results for 452232

Sample ID: S-34-3	Lab ID: 452232-009	Collected: 10/19/21 11:11
	Matrix: Soil	

452232-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/21/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	53%		%REC	19-121	1	276180	10/20/21	10/21/21	TRN

Sample ID: S-35-1	Lab ID: 452232-010	Collected: 10/19/21 11:20
	Matrix: Soil	

452232-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/21/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	49%		%REC	19-121	1	276180	10/20/21	10/21/21	TRN

Analysis Results for 452232

Sample ID: S-35-3	Lab ID: 452232-011	Collected: 10/19/21 11:26
	Matrix: Soil	

452232-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/21/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	37%		%REC	19-121	1	276180	10/20/21	10/21/21	TRN

Sample ID: S-36-1	Lab ID: 452232-012	Collected: 10/19/21 11:39
	Matrix: Soil	

452232-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/21/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	44%		%REC	19-121	1	276180	10/20/21	10/21/21	TRN

Analysis Results for 452232

Sample ID: S-36-3	Lab ID: 452232-013	Collected: 10/19/21 11:46
Matrix: Soil		

452232-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	276180	10/20/21	10/21/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	276180	10/20/21	10/21/21	TRN
Surrogates	Limits								
Decachlorobiphenyl (PCB)	55%		%REC	19-121	1	276180	10/20/21	10/21/21	TRN

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC950390	Batch: 276180
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC950390 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	10/20/21	10/20/21
Aroclor-1221	ND		ug/Kg	50	10/20/21	10/20/21
Aroclor-1232	ND		ug/Kg	50	10/20/21	10/20/21
Aroclor-1242	ND		ug/Kg	50	10/20/21	10/20/21
Aroclor-1248	ND		ug/Kg	50	10/20/21	10/20/21
Aroclor-1254	ND		ug/Kg	50	10/20/21	10/20/21
Aroclor-1260	ND		ug/Kg	50	10/20/21	10/20/21
Aroclor-1262	ND		ug/Kg	50	10/20/21	10/20/21
Aroclor-1268	ND		ug/Kg	50	10/20/21	10/20/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	61%		%REC	19-121	10/20/21	10/20/21

Type: Lab Control Sample	Lab ID: QC950391	Batch: 276180
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC950391 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	345.4	500.0	ug/Kg	69%		14-150
Aroclor-1260	345.2	500.0	ug/Kg	69%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	32.09	50.00	ug/Kg	64%		19-121

Type: Matrix Spike	Lab ID: QC950392	Batch: 276180
Matrix (Source ID): Soil (452232-001)	Method: EPA 8082	Prep Method: EPA 3541

QC950392 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	447.6	ND	500.0	ug/Kg	90%		42-127	10
Aroclor-1260	381.8	ND	500.0	ug/Kg	76%		38-130	10
Surrogates								
Decachlorobiphenyl (PCB)	32.74		50.00	ug/Kg	65%		19-121	10

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC950393	Batch: 276180
Matrix (Source ID): Soil (452232-001)	Method: EPA 8082	Prep Method: EPA 3541

QC950393 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	477.0	ND	500.0	ug/Kg	95%		42-127	6	30	10
Aroclor-1260	386.7	ND	500.0	ug/Kg	77%		38-130	1	30	10
Surrogates										
Decachlorobiphenyl (PCB)	34.51		50.00	ug/Kg	69%		19-121			10

ND Not Detected



ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 455032
Report Level: II
Report Date: 12/20/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - CLOW

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 455032
 Project No: CLOW
 Location: CLOW
 Date Received: 12/13/21

Sample ID	Lab ID	Collected	Matrix
P-6-0	455032-001	12/13/21 08:06	Soil
P-6-1	455032-002	12/13/21 08:28	Soil
P-7-0	455032-003	12/13/21 08:57	Soil
P-6-3	455032-004	12/13/21 09:01	Soil
P-8-0	455032-005	12/13/21 09:12	Soil
P-8-1	455032-006	12/13/21 09:20	Soil
P-7-1	455032-007	12/13/21 09:23	Soil
P-8-3	455032-008	12/13/21 09:30	Soil
P-7-3	455032-009	12/13/21 09:35	Soil
P-9-0	455032-010	12/13/21 09:41	Soil
P-10-0	455032-011	12/13/21 09:48	Soil
P-10-1	455032-012	12/13/21 10:00	Soil
P-9-1	455032-013	12/13/21 10:03	Soil
P-10-3	455032-014	12/13/21 10:29	Soil
P-9-3	455032-015	12/13/21 10:37	Soil
P-11-0	455032-016	12/13/21 10:48	Soil
P-11-1	455032-017	12/13/21 10:58	Soil
P-11-3	455032-018	12/13/21 11:21	Soil
S-37-1	455032-019	12/13/21 08:00	Soil
S-37-3	455032-020	12/13/21 08:51	Soil
S-38-1	455032-021	12/13/21 08:08	Soil
S-38-3	455032-022	12/13/21 08:58	Soil
PS44-1	455032-023	12/13/21 09:51	Soil
S-44-3	455032-024	12/13/21 10:25	Soil
S-60-1	455032-025	12/13/21 09:56	Soil
S-60-3	455032-026	12/13/21 10:20	Soil
S-49-1	455032-027	12/13/21 10:45	Soil
S-49-3	455032-028	12/13/21 10:58	Soil

Sample Summary

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 455032
 Project No: CLOW
 Location: CLOW
 Date Received: 12/13/21

Sample ID	Lab ID	Collected	Matrix
S-59-1	455032-029	12/13/21 11:02	Soil
S-48-1	455032-030	12/13/21 11:20	Soil
S-48-3	455032-031	12/13/21 11:35	Soil
S-59-3	455032-032	12/13/21 11:56	Soil
P-1-1	455032-033	12/13/21 12:47	Soil
P-2-1	455032-034	12/13/21 12:51	Soil
P-2-0	455032-035	12/13/21 12:55	Soil
P-1-0	455032-036	12/13/21 12:53	Soil
P-1-3	455032-037	12/13/21 13:06	Soil
P-3-0	455032-038	12/13/21 12:59	Soil
P-3-1	455032-039	12/13/21 13:01	Soil
P-3-3	455032-040	12/13/21 13:16	Soil
P-2-3	455032-041	12/13/21 13:24	Soil
P-4-0	455032-042	12/13/21 13:30	Soil
P-5-0	455032-043	12/13/21 13:38	Soil
P-4-1	455032-044	12/13/21 13:45	Soil
P-5-1	455032-045	12/13/21 13:50	Soil
P-4-3	455032-046	12/13/21 13:55	Soil
P-5-3	455032-047	12/13/21 14:02	Soil
S-50-1	455032-048	12/13/21 14:30	Soil
S-50-3	455032-049	12/13/21 14:37	Soil
S-39-1	455032-050	12/13/21 14:44	Soil
S-39-3	455032-051	12/13/21 14:50	Soil
S-51-1	455032-052	12/13/21 14:54	Soil
S-51-3	455032-053	12/13/21 14:58	Soil
S-45-1	455032-054	12/13/21 15:03	Soil
S-45-3	455032-055	12/13/21 15:12	Soil
S-52-1	455032-056	12/13/21 15:17	Soil

Sample Summary

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 455032
 Project No: CLOW
 Location: CLOW
 Date Received: 12/13/21

Sample ID	Lab ID	Collected	Matrix
S-52-3	455032-057	12/13/21 15:21	Soil
S-53-1	455032-058	12/13/21 15:42	Soil
S-55-1	455032-059	12/13/21 15:20	Soil
S-46-1	455032-060	12/13/21 15:47	Soil
S-43-1	455032-061	12/13/21 13:25	Soil
S-43-3	455032-062	12/13/21 13:40	Soil
S-42-1	455032-063	12/13/21 13:35	Soil
S-42-3	455032-064	12/13/21 14:05	Soil
S-57-1	455032-065	12/13/21 13:52	Soil
S-57-3	455032-066	12/13/21 14:15	Soil
S-56-1	455032-067	12/13/21 14:30	Soil
S-56-2	455032-068	12/13/21 14:55	Soil
S-47-1	455032-069	12/13/21 14:50	Soil
S-47-2	455032-070	12/13/21 15:15	Soil
S-55-3	455032-071	12/13/21 15:45	Soil
S-53-3	455032-072	12/13/21 16:00	Soil
S-46-3	455032-073	12/13/21 16:10	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 455032
Project No: CLOW
Location: CLOW
Date Received: 12/13/21

This data package contains sample and QC results for seventy three soil samples, requested for the above referenced project on 12/13/21. The samples were received cold and intact.

PCBs (EPA 8082):

High recoveries were observed for Aroclor-1016 in the MS/MSD of P-6-0 (lab # 455032-001); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. High recoveries were observed for Aroclor-1016 in the MS/MSD of P-2-3 (lab # 455032-041); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. High recoveries were observed for Aroclor-1016 and Aroclor-1260 in the MS/MSD of S-43-1 (lab # 455032-061); the LCS was within limits, and the associated RPDs were within limits. High surrogate recovery was observed for decachlorobiphenyl (PCB) in P-5-0 (lab # 455032-043). No other analytical problems were encountered.



Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

Chain of Custody Record

Lab No: **455032**

Page: **1** of **8**

Turn Around Time (rush by advanced notice only)

Standard: 2 Day: 1 Day:
3 Day: Custom TAT:

Matrix: A = Air S = Soil/Solid
Water DW = Drinking Water SD = Sediment
PP = Pure Product SEA = Sea Water
SW = Swab T = Tissue WP = Wipe O = Other

Preservatives:
Na₂S₂O₃ 2 = HCl 3 = HNO₃
4 = H₂SO₄ 5 = NaOH 6 = Other

1 = Sample Receipt Temp:
(lab use only)

PROJECT INFORMATION

Quote #: **Clow**
Proj. Name:
Proj. #:
P.O. #:
Address: **1375 Magnolia Ave**
Global ID:
Sampled By: **LMPASJDB/AA**

Test Instructions / Comments

*** See Dan or Patty possible high levels**

Analysis Request

8082 PCBs-SOXMET

CUSTOMER INFORMATION

Company: **Enthalpy Consultants**
Report To: **Becky Sundison**
Email: **BSundison@enthalpy.com**
Address: **1100 Town and Country Rd**
Suite 200 Orange, CA
(714) 321-8020

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
P-6-0	12/13/21	0800	S	1/40Z	-
P-6-1	12/13/21	0828	S	1/40Z	-
P-7-0	12/13/21	0857	S	1/40Z	-
P-6-3	12/13/21	0901	S	1/40Z	-
P-8-0	12/13/21	0912	S	1/40Z	-
P-8-1	12/13/21	0920	S	1/40Z	-
P-7-1	12/13/21	0923	S	1/40Z	-
P-8-3	12/13/21	0930	S	1/40Z	-
P-7-3	12/13/21	0935	S	1/40Z	-
P-9-0	12/13/21	0941	S	1/40Z	-

Signature	Print Name	Company / Title	Date / Time
<i>[Signature]</i>	Becky Sundison	Enthalpy	12/13/21 16:53
<i>[Signature]</i>	Nick	EA	12/13/21 16:57

5.7/110 5.6/1.4 5.1/0.8



Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Chain of Custody Record

Lab No: 455032

Page: 3 of 6

Turn Around Time (rush by advanced notice only)

Standard:

3 Day:

5 Day:

1 Day:

2 Day:

Custom TAT:

X

Sample Receipt Temp:

1 =

Na₂S₂O₃

2 = HCl

3 = HNO₃

4 = H₂SO₄

5 = NaOH

6 = Other

(lab use only)

Matrix: A = Air S = Soil/Solid
Water DW = Drinking Water SD = Sediment
PP = Pure Product SEA = Sea Water
SW = Swab T = Tissue WP = Wipe O = Other

W =

Preservatives:

Na₂S₂O₃

2 = HCl

3 = HNO₃

4 = H₂SO₄

5 = NaOH

6 = Other

CUSTOMER INFORMATION

Company: ~~ENVIRONMENTAL CONSULTANTS~~ ~~PROJECT #:~~

Report To: BECKY SUNDILSON Proj. Name: C10W

Email: BSUNDILSON@ENTHALPY.COM Proj. #:

Address: 1100 Town and Country Rd P.O. #:

Phone: (714) 321-8026 Address: 1375 Magnolia Ave

Fax: Global ID:

Sampled By: WLR/RS/JDB/AA

PROJECT INFORMATION

Matrix: A = Air S = Soil/Solid

Water DW = Drinking Water SD = Sediment

PP = Pure Product SEA = Sea Water

SW = Swab T = Tissue WP = Wipe O = Other

Analysis Request

8082 PCBs - Soxhlet

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Test Instructions / Comments

X see Dan or Patty

possible high

levels

Sample ID

1 S-38-1

2 S-38-3

3 S-44-1

4 S-44-3

5 S-60-1

6 S-60-3

7 S-49-1

8 S-49-3

9 S-59-1

10 S-48-1

12/13/21 0808

12/13/21 0858

12/13/21 0951

12/13/21 1025

12/13/21 0950

12/13/21 1020

12/13/21 1045

12/13/21 1058

12/13/21 1102

12/13/21 1120

S 1140Z

1

1

1

1

1

1

1

1

1

1

Signature

Print Name

Company / Title

Date / Time

1 Relinquished By:

1 Received By:

2 Relinquished By:

2 Received By:

3 Relinquished By:

3 Received By:

[Signature]
Becky Sundilson
Vicki b

EA
EA

12/13/21 16:53
12/13/21 16:53

Enthalpy Analytical - Orange
 931 W. Barkley Avenue, Orange, CA 92868
 Phone 714-771-6900

Chain of Custody Record
 Lab No: 455032 Page: 4 of 4
 Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

Turn Around Time (rush by advanced notice only)
 Standard: 5 Day: 1 Day: 3 Day: Custom TAT:
 2 Day: X 1 Day: Sample Receipt Temp: 1 =
 Preservatives: Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other
 (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION		Analysis Request		Test Instructions / Comments	
Company:	<u>FAIRVIEW CONTRACTORS</u>	Proj. Name:	<u>Crow</u>				
Report To:	<u>Bobby Sundison</u>	Proj. #:					
Email:	<u>BSundison@earthlink.net</u>	P.O. #:					
Address:	<u>1100 Town and Country Rd</u>	Address:	<u>1375 Magnolia Ave</u>				
Phone:	<u>Suite 200 Orange, CA</u>	Global ID:					
Fax:	<u>(714) 321-8026</u>	Sampled By:	<u>WML/DB/PAS/AA</u>				

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Company / Title	Date / Time
S-48-3	12/13/21	1135	S	140Z	-		
S-69-3	12/13/21	1150	S	140Z	-		
P-1-1	12/13/21	1247	S	240Z	-		
P-2-1	12/13/21	1251	S	240Z	-		
P-2-0	12/13/21	1255	S	240Z	-		
P-1-0	12/13/21	1253	S	240Z	-		
P-1-3	12/13/21	1300	S	240Z	-		
P-3-0	12/13/21	1259	S	240Z	-		
P-3-1	12/13/21	1301	S	240Z	-		
P-3-2	12/13/21	1310	S	240Z	-		

1 Relinquished By: [Signature] Print Name: Bobby Sundison Date: 12/13/21 16:53
 1 Received By: [Signature] Print Name: NICK Date: 12/13/21 16:53
 2 Relinquished By:
 2 Received By:
 3 Relinquished By:
 3 Received By:

X-see data on party possible high levels

ea ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Chain of Custody Record

Lab No: **455032**

Page: **5** of **8**

Turn Around Time (rush by advanced notice only)

Standard: 2 Day: 3 Day:
 1 Day: 5 Day: Custom TAT:

Sample Receipt Temp:

1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other

(lab use only)

Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other

PROJECT INFORMATION

Quote #: **C10W**
 Proj. Name: **C10W**
 Proj. #: **B5UNDILSON@earthtron.com**
 P.O. #: **1100 Town and Country Rd**
 Address: **Suite 200 Orange CA**
 Global ID: **(714) 321-8226**
 Sampled By: **MUWB/RA/SA**

Analysis Request

*** See Jan or party. possible high levels**

CUSTOMER INFORMATION

Company: **Earthtron Consultants**
 Report To: **Becky Sundison**
 Email: **B5UNDILSON@earthtron.com**
 Address: **1100 Town and Country Rd**
 Phone: **Suite 200 Orange CA**
 Fax: **(714) 321-8226**

Test Instructions / Comments

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
P-2-3	12/13/21	1324	S	2/40Z	-
P-4-0	12/13/21	1330	S	2/40Z	-
P-5-0	12/13/21	1328	S	2/40Z	-
P-4-1	12/13/21	1345	S	2/40Z	-
P-5-1	12/13/21	1350	S	2/40Z	-
P-4-3	12/13/21	1355	S	2/40Z	-
P-6-3	12/13/21	1402	S	2/40Z	-
S-50-1	12/13/21	1430	S	2/40Z	-
S-50-3	12/13/21	1437	S	2/40Z	-
S-39-1	12/13/21	1444	S	2/40Z	-

Analysis Request

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
P-2-3	12/13/21	1324	S	2/40Z	-
P-4-0	12/13/21	1330	S	2/40Z	-
P-5-0	12/13/21	1328	S	2/40Z	-
P-4-1	12/13/21	1345	S	2/40Z	-
P-5-1	12/13/21	1350	S	2/40Z	-
P-4-3	12/13/21	1355	S	2/40Z	-
P-6-3	12/13/21	1402	S	2/40Z	-
S-50-1	12/13/21	1430	S	2/40Z	-
S-50-3	12/13/21	1437	S	2/40Z	-
S-39-1	12/13/21	1444	S	2/40Z	-

CUSTOMER INFORMATION

Signature: **[Signature]**
 Print Name: **Becky Sundison**
 Company / Title: **EA**

Test Instructions / Comments

*** See Jan or party. possible high levels**

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Date / Time
1	12/13/21	1324	S	2/40Z	-	12/13/21 16:53
2	12/13/21	1330	S	2/40Z	-	12/13/21 16:53
3	12/13/21	1328	S	2/40Z	-	12/13/21 16:53
4	12/13/21	1345	S	2/40Z	-	12/13/21 16:53
5	12/13/21	1350	S	2/40Z	-	12/13/21 16:53
6	12/13/21	1355	S	2/40Z	-	12/13/21 16:53
7	12/13/21	1402	S	2/40Z	-	12/13/21 16:53
8	12/13/21	1430	S	2/40Z	-	12/13/21 16:53
9	12/13/21	1437	S	2/40Z	-	12/13/21 16:53
10	12/13/21	1444	S	2/40Z	-	12/13/21 16:53

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange
 931 W. Barkley Avenue, Orange, CA 92868
 Phone 714-771-6900

Chain of Custody Record
 Lab No: **455032**
 Page: **0** of **8**

Turn Around Time (rush by advanced notice only)
 Standard: 5 Day: 3 Day:
 2 Day: 1 Day: Custom TAT:
 X

Matrix: A = Air S = Soil/Solid W =
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other (lab use only)

Preservatives: 1 =
 Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other

Sample Receipt Temp:

CUSTOMER INFORMATION

Company: **ENTHALPY CONSULTANTS**
 Report To: **Becky Sundison**
 Email: **BSSundison@earthtroncorp.com**
 Address: **1100 Town and Country Rd Suite 200 Orange CA (714) 321-Recycle**
 Phone:
 Fax:

PROJECT INFORMATION

Project Name: **Clow**
 Address: **1375 Magnolia Ave**
 Global ID:
 Sampled By: **W4J0B/PAS/AA**

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Analysis Request	Test Instructions / Comments
S-39-3	12/13/21	1450	S	2/402	-	8082-PCBS - Schifft	*see DAN or Pally possible high levels
S-51-1	12/13/21	1454	S	2/402	-	8082-PCBS - Schifft	
S-51-3	12/13/21	1458	S	2/402	-	8082-PCBS - Schifft	
S-45-1	12/13/21	1503	S	2/402	-	8082-PCBS - Schifft	
S-45-3	12/13/21	1512	S	2/402	-	8082-PCBS - Schifft	
S-52-1	12/13/21	1517	S	2/402	-	8082-PCBS - Schifft	
S-52-3	12/13/21	1521	S	2/402	-	8082-PCBS - Schifft	
S-53-1	12/13/21	1542	S	2/402	-	8082-PCBS - Schifft	
S-55-1	12/13/21	1520	S	2/402	-	8082-PCBS - Schifft	
S-40-1	12/13/21	1547	S	2/402	-	8082-PCBS - Schifft	

Signature _____ **Print Name** _____ **Company / Title** _____ **Date / Time** _____

1 Relinquished By: **[Signature]** **Becky Sundison** **EA** **12/13/21 16:53**

1 Received By: **[Signature]** **Nick O** **EA** **12/13/21 21:16:57**

2 Relinquished By:

2 Received By:

3 Relinquished By:

3 Received By:



Enthalpy Analytical - Orange
 931 W. Barkley Avenue, Orange, CA 92868
 Phone 714-771-6900

Chain of Custody Record
 Lab No: 455032
 Page: 8 of 8

Turn Around Time (rush by advanced notice only)
 Standard: 5 Day: 3 Day:
 2 Day: 1 Day: Custom TAT:

Matrix: A = Air S = Soil/Solid
 Water DW = Drinking Water SD = Sediment
 PP = Pure Product SEA = Sea Water
 SW = Swab T = Tissue WP = Wipe O = Other
 W =
 Preservatives: Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other
 1 = Sample Receipt Temp:
 (lab use only)

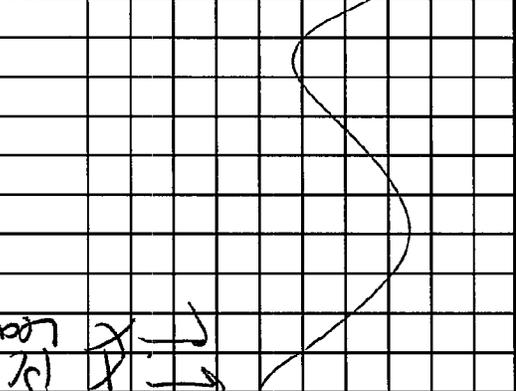
CUSTOMER INFORMATION

Quote #: _____
 Proj. Name: CRUI VENTURE
 Proj. #: _____
 P.O. #: _____
 Address: _____
 Global ID: _____
 Sampled By: _____

PROJECT INFORMATION

Analysis Request: _____
 Test Instructions / Comments: Sea party make possibly high levels

Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.
<u>S-55-3</u>	<u>12/13/21</u>	<u>1545</u>	<u>S</u>	<u>2/02</u>	<u>0</u>
<u>S-53-3</u>	<u>↓</u>	<u>1600</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>
<u>S-46-3</u>	<u>↓</u>	<u>1610</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>



Signature _____ **Print Name** Barkley, Steve
Signature _____ **Print Name** EA
 1 Relinquished By: _____ Date / Time 12/13/21 16:53
 1 Received By: _____ Date / Time 12/13/21 16:53
 2 Relinquished By: _____
 2 Received By: _____
 3 Relinquished By: _____
 3 Received By: _____



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: EarthCon Consultants CA, Inc. Project: CLOW
 Date Received: 12/13/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 3 No (skip section 2) Sample Temp (°C) (No Cooler) : _____
 Sample Temp (°C), One from each cooler: #1: 5.7 #2: 5.6 #3: 5.1 #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 1.0 #2: 1.4 #3: 1.8 #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)		✓	
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments
Sample 68,70, on Jars dont match COC

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response: _____

Completed By: Date: 12/13/21

Analysis Results for 455032

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 455032
 Project No: CLOW
 Location: CLOW
 Date Received: 12/13/21

Sample ID: P-6-0	Lab ID: 455032-001	Collected: 12/13/21 08:06
Matrix: Soil		

455032-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	180		mg/Kg	0.93	0.93	279869	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	1,600		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates	Limits								
Decachlorobiphenyl (PCB)	88%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Analysis Results for 455032

Sample ID: P-6-1	Lab ID: 455032-002	Collected: 12/13/21 08:28
Matrix: Soil		

455032-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	7.5		mg/Kg	1.0	1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279799	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1248	270		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	88%		%REC	19-121	1	279799	12/14/21	12/15/21	TRN

Sample ID: P-7-0	Lab ID: 455032-003	Collected: 12/13/21 08:57
Matrix: Soil		

455032-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	53		mg/Kg	1.0	1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	1,200		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	96%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Analysis Results for 455032

Sample ID: P-6-3	Lab ID: 455032-004	Collected: 12/13/21 09:01
	Matrix: Soil	

455032-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	22		mg/Kg	1.1	1.1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	1,700		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	74%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Sample ID: P-8-0	Lab ID: 455032-005	Collected: 12/13/21 09:12
	Matrix: Soil	

455032-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	38		mg/Kg	0.97	0.97	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	50,000	500	279799	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	25,000	500	279799	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	25,000	500	279799	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	25,000	500	279799	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	25,000	500	279799	12/14/21	12/15/21	TRN
Aroclor-1254	330,000		ug/Kg	25,000	500	279799	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	25,000	500	279799	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	25,000	500	279799	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	25,000	500	279799	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)		DO	%REC	19-121	500	279799	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: P-8-1	Lab ID: 455032-006	Collected: 12/13/21 09:20
	Matrix: Soil	

455032-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	89		mg/Kg	0.93	0.93	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	2,000		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	82%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Sample ID: P-7-1	Lab ID: 455032-007	Collected: 12/13/21 09:23
	Matrix: Soil	

455032-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	18		mg/Kg	1.1	1.1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	6,500		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	72%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Analysis Results for 455032

Sample ID: P-8-3	Lab ID: 455032-008	Collected: 12/13/21 09:30
	Matrix: Soil	

455032-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	250		mg/Kg	1.0	1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	10,000		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	6,800		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	84%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Sample ID: P-7-3	Lab ID: 455032-009	Collected: 12/13/21 09:35
	Matrix: Soil	

455032-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	240		mg/Kg	0.93	0.93	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	9,600		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	87%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Analysis Results for 455032

Sample ID: P-9-0	Lab ID: 455032-010	Collected: 12/13/21 09:41
	Matrix: Soil	

455032-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	13		mg/Kg	1.0	1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	810		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	98%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Sample ID: P-10-0	Lab ID: 455032-011	Collected: 12/13/21 09:48
	Matrix: Soil	

455032-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	9.7		mg/Kg	1.1	1.1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279799	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	90%		%REC	19-121	1	279799	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: P-10-1	Lab ID: 455032-012	Collected: 12/13/21 10:00
Matrix: Soil		

455032-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	14		mg/Kg	0.94	0.94	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	930		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	89%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Sample ID: P-9-1	Lab ID: 455032-013	Collected: 12/13/21 10:03
Matrix: Soil		

455032-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	9.5		mg/Kg	1.1	1.1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	1,200		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	94%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Analysis Results for 455032

Sample ID: P-10-3	Lab ID: 455032-014	Collected: 12/13/21 10:29
Matrix: Soil		

455032-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	170		mg/Kg	1.0	1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279799	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1248	590		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1254	330		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	62%		%REC	19-121	1	279799	12/14/21	12/15/21	TRN

Sample ID: P-9-3	Lab ID: 455032-015	Collected: 12/13/21 10:37
Matrix: Soil		

455032-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	44		mg/Kg	0.92	0.92	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	4,700		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	730		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	82%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Analysis Results for 455032

Sample ID: P-11-0	Lab ID: 455032-016	Collected: 12/13/21 10:48
	Matrix: Soil	

455032-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	19		mg/Kg	1.0	1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	710		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	78%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Sample ID: P-11-1	Lab ID: 455032-017	Collected: 12/13/21 10:58
	Matrix: Soil	

455032-017 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	130		mg/Kg	1.0	1	279869	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279799	12/14/21	12/14/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1248	860		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279799	12/14/21	12/14/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	95%		%REC	19-121	10	279799	12/14/21	12/14/21	TRN

Analysis Results for 455032

Sample ID: P-11-3	Lab ID: 455032-018	Collected: 12/13/21 11:21
Matrix: Soil		

455032-018 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	21		mg/Kg	0.95	0.95	279869	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279799	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1260	67		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	70%		%REC	19-121	1	279799	12/14/21	12/15/21	TRN

Sample ID: S-37-1	Lab ID: 455032-019	Collected: 12/13/21 08:00
Matrix: Soil		

455032-019 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	6.1		mg/Kg	0.93	0.93	279869	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279799	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1248	180		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	78%		%REC	19-121	1	279799	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: S-37-3	Lab ID: 455032-020	Collected: 12/13/21 08:51
Matrix: Soil		

455032-020 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	8.9		mg/Kg	0.94	0.94	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279799	12/14/21	12/15/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TJW
Aroclor-1248	250		ug/Kg	50	1	279799	12/14/21	12/15/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TJW
Aroclor-1260	53		ug/Kg	50	1	279799	12/14/21	12/15/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	279799	12/14/21	12/15/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	86%		%REC	19-121	1	279799	12/14/21	12/15/21	TJW

Sample ID: S-38-1	Lab ID: 455032-021	Collected: 12/13/21 08:08
Matrix: Soil		

455032-021 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	7.8		mg/Kg	1.1	1.1	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1248	260		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	67%		%REC	19-121	1	279844	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: S-38-3	Lab ID: 455032-022	Collected: 12/13/21 08:58
	Matrix: Soil	

455032-022 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	8.6		mg/Kg	1.0	1	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	85%		%REC	19-121	1	279844	12/14/21	12/15/21	TRN

Sample ID: PS44-1	Lab ID: 455032-023	Collected: 12/13/21 09:51
	Matrix: Soil	

455032-023 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	65		mg/Kg	1.0	1	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1248	2,900		ug/Kg	500	10	279844	12/14/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	75%		%REC	19-121	1	279844	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: S-44-3	Lab ID: 455032-024	Collected: 12/13/21 10:25
Matrix: Soil		

455032-024 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	18		mg/Kg	0.94	0.94	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1248	500		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	71%		%REC	19-121	1	279844	12/14/21	12/15/21	TRN

Sample ID: S-60-1	Lab ID: 455032-025	Collected: 12/13/21 09:56
Matrix: Soil		

455032-025 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	40		mg/Kg	1.0	1	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1248	21,000		ug/Kg	5,000	100	279844	12/14/21	12/16/21	TRN
Aroclor-1254	16,000		ug/Kg	5,000	100	279844	12/14/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	80%		%REC	19-121	1	279844	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: S-60-3	Lab ID: 455032-026	Collected: 12/13/21 10:20
Matrix: Soil		

455032-026 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	7.7		mg/Kg	0.93	0.93	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1248	330		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1254	160		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	73%		%REC	19-121	1	279844	12/14/21	12/15/21	TRN

Sample ID: S-49-1	Lab ID: 455032-027	Collected: 12/13/21 10:45
Matrix: Soil		

455032-027 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	12		mg/Kg	1.0	1	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	74%		%REC	19-121	1	279844	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: S-49-3	Lab ID: 455032-028	Collected: 12/13/21 10:58
Matrix: Soil		

455032-028 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	2.4		mg/Kg	0.99	0.99	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	83%		%REC	19-121	1	279844	12/14/21	12/15/21	TRN

Sample ID: S-59-1	Lab ID: 455032-029	Collected: 12/13/21 11:02
Matrix: Soil		

455032-029 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	14		mg/Kg	0.97	0.97	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1248	120		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1254	110		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	90%		%REC	19-121	1	279844	12/14/21	12/16/21	TRN

Analysis Results for 455032

Sample ID: S-48-1	Lab ID: 455032-030	Collected: 12/13/21 11:20
Matrix: Soil		

455032-030 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	7.3		mg/Kg	1.1	1.1	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	79%		%REC	19-121	1	279844	12/14/21	12/16/21	TRN

Sample ID: S-48-3	Lab ID: 455032-031	Collected: 12/13/21 11:35
Matrix: Soil		

455032-031 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	2.2		mg/Kg	0.99	0.99	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	79%		%REC	19-121	1	279844	12/14/21	12/16/21	TRN

Analysis Results for 455032

Sample ID: S-59-3	Lab ID: 455032-032	Collected: 12/13/21 11:56
Matrix: Soil		

455032-032 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	3.9		mg/Kg	0.93	0.93	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	79%		%REC	19-121	1	279844	12/14/21	12/16/21	TRN

Sample ID: P-1-1	Lab ID: 455032-033	Collected: 12/13/21 12:47
Matrix: Soil		

455032-033 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	44		mg/Kg	0.97	0.97	279870	12/14/21	12/15/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279844	12/14/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1260	240		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279844	12/14/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	79%		%REC	19-121	1	279844	12/14/21	12/16/21	TRN

Analysis Results for 455032

Sample ID: P-2-1	Lab ID: 455032-034	Collected: 12/13/21 12:51
Matrix: Soil		

455032-034 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	150		mg/Kg	0.98	0.98	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1248	30,000		ug/Kg	5,000	100	279844	12/14/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1260	2,900		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	103%		%REC	19-121	10	279844	12/14/21	12/15/21	TRN

Sample ID: P-2-0	Lab ID: 455032-035	Collected: 12/13/21 12:55
Matrix: Soil		

455032-035 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	160		mg/Kg	0.93	0.93	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1248	15,000		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1260	2,400		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	100%		%REC	19-121	10	279844	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: P-1-0	Lab ID: 455032-036	Collected: 12/13/21 12:53
Matrix: Soil		

455032-036 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	290		mg/Kg	0.88	0.88	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1254	8,300		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1260	13,000		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	104%		%REC	19-121	10	279844	12/14/21	12/15/21	TRN

Sample ID: P-1-3	Lab ID: 455032-037	Collected: 12/13/21 13:06
Matrix: Soil		

455032-037 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	54		mg/Kg	0.85	0.85	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1260	640		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	109%		%REC	19-121	10	279844	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: P-3-0	Lab ID: 455032-038	Collected: 12/13/21 12:59
	Matrix: Soil	

455032-038 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	210		mg/Kg	1.1	1.1	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1248	5,500		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1254	2,900		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	108%		%REC	19-121	10	279844	12/14/21	12/15/21	TRN

Sample ID: P-3-1	Lab ID: 455032-039	Collected: 12/13/21 13:01
	Matrix: Soil	

455032-039 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	180		mg/Kg	1.0	1	279870	12/14/21	12/15/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1254	6,600		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1260	1,800		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	102%		%REC	19-121	10	279844	12/14/21	12/15/21	TRN

Analysis Results for 455032

Sample ID: P-3-3	Lab ID: 455032-040	Collected: 12/13/21 13:16
	Matrix: Soil	

455032-040 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	220		mg/Kg	0.91	0.91	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279844	12/14/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1248	15,000		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1260	1,900		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279844	12/14/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	108%		%REC	19-121	10	279844	12/14/21	12/15/21	TRN

Sample ID: P-2-3	Lab ID: 455032-041	Collected: 12/13/21 13:24
	Matrix: Soil	

455032-041 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	53		mg/Kg	1.1	1.1	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	99	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1248	880		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1260	150		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	80%		%REC	19-121	0.99	279899	12/15/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: P-4-0	Lab ID: 455032-042	Collected: 12/13/21 13:30
	Matrix: Soil	

455032-042 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	180		mg/Kg	0.86	0.86	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	99	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1248	1,100		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1254	420		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	103%		%REC	19-121	0.99	279899	12/15/21	12/17/21	TRN

Sample ID: P-5-0	Lab ID: 455032-043	Collected: 12/13/21 13:38
	Matrix: Soil	

455032-043 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	630		mg/Kg	0.92	0.92	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	990	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1248	6,000		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1254	3,400		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1260	670		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	129%	*	%REC	19-121	9.9	279899	12/15/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: P-4-1	Lab ID: 455032-044	Collected: 12/13/21 13:45
	Matrix: Soil	

455032-044 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	100		mg/Kg	0.85	0.85	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	279899	12/15/21	12/17/21	TRN
Aroclor-1248	1,400		ug/Kg	500	10	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	500	10	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	119%		%REC	19-121	10	279899	12/15/21	12/17/21	TRN

Sample ID: P-5-1	Lab ID: 455032-045	Collected: 12/13/21 13:50
	Matrix: Soil	

455032-045 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	87		mg/Kg	1.0	1	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	990	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1248	2,500		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1254	2,100		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	119%		%REC	19-121	9.9	279899	12/15/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: P-4-3	Lab ID: 455032-046	Collected: 12/13/21 13:55
	Matrix: Soil	

455032-046 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	19		mg/Kg	0.90	0.9	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1248	430		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1254	300		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	93%		%REC	19-121	1	279899	12/15/21	12/17/21	TRN

Sample ID: P-5-3	Lab ID: 455032-047	Collected: 12/13/21 14:02
	Matrix: Soil	

455032-047 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	200		mg/Kg	1.0	1	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	990	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1248	3,200		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1254	1,700		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	500	9.9	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	118%		%REC	19-121	9.9	279899	12/15/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: S-50-1	Lab ID: 455032-048	Collected: 12/13/21 14:30
Matrix: Soil		

455032-048 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	45		mg/Kg	0.93	0.93	279889	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	99	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1248	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	101%		%REC	19-121	0.99	279899	12/15/21	12/17/21	TRN

Sample ID: S-50-3	Lab ID: 455032-049	Collected: 12/13/21 14:37
Matrix: Soil		

455032-049 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	9.3		mg/Kg	0.91	0.91	279889	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	99	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1248	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	110%		%REC	19-121	0.99	279899	12/15/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: S-39-1	Lab ID: 455032-050	Collected: 12/13/21 14:44
Matrix: Soil		

455032-050 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	8.4		mg/Kg	0.97	0.97	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	510	10	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	510	10	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	510	10	279899	12/15/21	12/17/21	TRN
Aroclor-1248	1,700		ug/Kg	510	10	279899	12/15/21	12/17/21	TRN
Aroclor-1254	1,600		ug/Kg	510	10	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	510	10	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	510	10	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	510	10	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	45%		%REC	19-121	10	279899	12/15/21	12/17/21	TRN

Sample ID: S-39-3	Lab ID: 455032-051	Collected: 12/13/21 14:50
Matrix: Soil		

455032-051 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	7.5		mg/Kg	1.0	1	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	91%		%REC	19-121	1	279899	12/15/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: S-51-1	Lab ID: 455032-052	Collected: 12/13/21 14:54
	Matrix: Soil	

455032-052 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	11		mg/Kg	1.0	1	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	80%		%REC	19-121	1	279899	12/15/21	12/17/21	TRN

Sample ID: S-51-3	Lab ID: 455032-053	Collected: 12/13/21 14:58
	Matrix: Soil	

455032-053 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	2.6		mg/Kg	1.1	1.1	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	99	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1248	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	101%		%REC	19-121	0.99	279899	12/15/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: S-45-1	Lab ID: 455032-054	Collected: 12/13/21 15:03
Matrix: Soil		

455032-054 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	9.8		mg/Kg	0.93	0.93	279889	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	99	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1248	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	103%		%REC	19-121	0.99	279899	12/15/21	12/17/21	TRN

Sample ID: S-45-3	Lab ID: 455032-055	Collected: 12/13/21 15:12
Matrix: Soil		

455032-055 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	5.2		mg/Kg	0.96	0.96	279889	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	99	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1248	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	0.99	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	94%		%REC	19-121	0.99	279899	12/15/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: S-52-1	Lab ID: 455032-056	Collected: 12/13/21 15:17
Matrix: Soil		

455032-056 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	3.5		mg/Kg	1.1	1.1	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279899	12/15/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279899	12/15/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	93%		%REC	19-121	1	279899	12/15/21	12/17/21	TRN

Sample ID: S-52-3	Lab ID: 455032-057	Collected: 12/13/21 15:21
Matrix: Soil		

455032-057 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	2.2		mg/Kg	0.99	0.99	279889	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	98	0.98	279899	12/15/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	49	0.98	279899	12/15/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	49	0.98	279899	12/15/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	49	0.98	279899	12/15/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	49	0.98	279899	12/15/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	49	0.98	279899	12/15/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	49	0.98	279899	12/15/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	49	0.98	279899	12/15/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	49	0.98	279899	12/15/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	54%		%REC	19-121	0.98	279899	12/15/21	12/18/21	TJW

Analysis Results for 455032

Sample ID: S-53-1	Lab ID: 455032-058	Collected: 12/13/21 15:42
Matrix: Soil		

455032-058 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	7.1		mg/Kg	0.90	0.9	279889	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279899	12/15/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	59%		%REC	19-121	1	279899	12/15/21	12/18/21	TJW

Sample ID: S-55-1	Lab ID: 455032-059	Collected: 12/13/21 15:20
Matrix: Soil		

455032-059 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	6.1		mg/Kg	0.99	0.99	279889	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	99	0.99	279899	12/15/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	0.99	279899	12/15/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	0.99	279899	12/15/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	0.99	279899	12/15/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	0.99	279899	12/15/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	0.99	279899	12/15/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	0.99	279899	12/15/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	0.99	279899	12/15/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	0.99	279899	12/15/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	59%		%REC	19-121	0.99	279899	12/15/21	12/18/21	TJW

Analysis Results for 455032

Sample ID: S-46-1	Lab ID: 455032-060	Collected: 12/13/21 15:47
Matrix: Soil		

455032-060 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	6.2		mg/Kg	1.0	1	279891	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279899	12/15/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	279899	12/15/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	60%		%REC	19-121	1	279899	12/15/21	12/18/21	TJW

Sample ID: S-43-1	Lab ID: 455032-061	Collected: 12/13/21 13:25
Matrix: Soil		

455032-061 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	9.7		mg/Kg	0.91	0.91	279891	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	1,000	10	280084	12/16/21	12/17/21	TRN
Aroclor-1221	ND		ug/Kg	500	10	280084	12/16/21	12/17/21	TRN
Aroclor-1232	ND		ug/Kg	500	10	280084	12/16/21	12/17/21	TRN
Aroclor-1242	ND		ug/Kg	500	10	280084	12/16/21	12/17/21	TRN
Aroclor-1248	650		ug/Kg	500	10	280084	12/16/21	12/17/21	TRN
Aroclor-1254	ND		ug/Kg	500	10	280084	12/16/21	12/17/21	TRN
Aroclor-1260	1,000		ug/Kg	500	10	280084	12/16/21	12/17/21	TRN
Aroclor-1262	ND		ug/Kg	500	10	280084	12/16/21	12/17/21	TRN
Aroclor-1268	ND		ug/Kg	500	10	280084	12/16/21	12/17/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	113%		%REC	19-121	10	280084	12/16/21	12/17/21	TRN

Analysis Results for 455032

Sample ID: S-43-3	Lab ID: 455032-062	Collected: 12/13/21 13:40
Matrix: Soil		

455032-062 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	8.0		mg/Kg	1.1	1.1	279891	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	59%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Sample ID: S-42-1	Lab ID: 455032-063	Collected: 12/13/21 13:35
Matrix: Soil		

455032-063 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	4.8		mg/Kg	1.0	1	279891	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	65%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Analysis Results for 455032

Sample ID: S-42-3	Lab ID: 455032-064	Collected: 12/13/21 14:05
Matrix: Soil		

455032-064 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	2.7		mg/Kg	0.90	0.9	279891	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	59%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Sample ID: S-57-1	Lab ID: 455032-065	Collected: 12/13/21 13:52
Matrix: Soil		

455032-065 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	4.2		mg/Kg	0.97	0.97	279891	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	61%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Analysis Results for 455032

Sample ID: S-57-3	Lab ID: 455032-066	Collected: 12/13/21 14:15
Matrix: Soil		

455032-066 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	6.1		mg/Kg	0.93	0.93	279891	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	60%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Sample ID: S-56-1	Lab ID: 455032-067	Collected: 12/13/21 14:30
Matrix: Soil		

455032-067 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	27		mg/Kg	0.94	0.94	279891	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	57%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Analysis Results for 455032

Sample ID: S-56-2	Lab ID: 455032-068	Collected: 12/13/21 14:55
Matrix: Soil		

455032-068 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	4.8		mg/Kg	1.1	1.1	279891	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	52%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Sample ID: S-47-1	Lab ID: 455032-069	Collected: 12/13/21 14:50
Matrix: Soil		

455032-069 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	5.7		mg/Kg	1.0	1	279891	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	50%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Analysis Results for 455032

Sample ID: S-47-2	Lab ID: 455032-070	Collected: 12/13/21 15:15
Matrix: Soil		

455032-070 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	2.5		mg/Kg	0.92	0.92	279891	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	52%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Sample ID: S-55-3	Lab ID: 455032-071	Collected: 12/13/21 15:45
Matrix: Soil		

455032-071 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	2.7		mg/Kg	0.89	0.89	279891	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	51%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Analysis Results for 455032

Sample ID: S-53-3	Lab ID: 455032-072	Collected: 12/13/21 16:00
Matrix: Soil		

455032-072 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	3.2		mg/Kg	0.93	0.93	279891	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	46%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

Sample ID: S-46-3	Lab ID: 455032-073	Collected: 12/13/21 16:10
Matrix: Soil		

455032-073 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	2.2		mg/Kg	0.98	0.98	279891	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	280084	12/16/21	12/18/21	TJW
Aroclor-1221	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1232	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1242	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1248	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1254	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1260	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1262	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Aroclor-1268	ND		ug/Kg	50	1	280084	12/16/21	12/18/21	TJW
Surrogates				Limits					
Decachlorobiphenyl (PCB)	50%		%REC	19-121	1	280084	12/16/21	12/18/21	TJW

* Value is outside QC limits
 DO Diluted Out
 ND Not Detected

Batch QC

Type: Blank	Lab ID: QC960707	Batch: 279799
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC960707 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	12/14/21	12/14/21
Aroclor-1221	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1232	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1242	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1248	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1254	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1260	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1262	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1268	ND		ug/Kg	50	12/14/21	12/14/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	70%		%REC	19-121	12/14/21	12/14/21

Type: Lab Control Sample	Lab ID: QC960708	Batch: 279799
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC960708 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	347.5	500.0	ug/Kg	69%		14-150
Aroclor-1260	347.7	500.0	ug/Kg	70%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	41.22	50.00	ug/Kg	82%		19-121

Type: Matrix Spike	Lab ID: QC960709	Batch: 279799
Matrix (Source ID): Soil (455032-001)	Method: EPA 8082	Prep Method: EPA 3541

QC960709 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	1,062	ND	500.0	ug/Kg	212%	*	42-127	10
Aroclor-1260	860.7	359.7	500.0	ug/Kg	100%		38-130	10
Surrogates								
Decachlorobiphenyl (PCB)	42.90		50.00	ug/Kg	86%		19-121	10

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC960710	Batch: 279799
Matrix (Source ID): Soil (455032-001)	Method: EPA 8082	Prep Method: EPA 3541

QC960710 Analyte	Result	Source Sample	Spiked	Units	Recovery	Qual	Limits	RPD		DF
		Result						RPD	Lim	
Aroclor-1016	1,000	ND	500.0	ug/Kg	200%	*	42-127	6	30	10
Aroclor-1260	894.0	359.7	500.0	ug/Kg	107%		38-130	4	30	10
Surrogates										
Decachlorobiphenyl (PCB)	45.10		50.00	ug/Kg	90%		19-121			10

Type: Blank	Lab ID: QC960802	Batch: 279844
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC960802 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	12/14/21	12/14/21
Aroclor-1221	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1232	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1242	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1248	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1254	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1260	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1262	ND		ug/Kg	50	12/14/21	12/14/21
Aroclor-1268	ND		ug/Kg	50	12/14/21	12/14/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	47%		%REC	19-121	12/14/21	12/14/21

Type: Lab Control Sample	Lab ID: QC960803	Batch: 279844
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC960803 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	247.3	500.0	ug/Kg	49%		14-150
Aroclor-1260	199.0	500.0	ug/Kg	40%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	17.80	50.00	ug/Kg	36%		19-121

Batch QC

Type: Matrix Spike	Lab ID: QC960807	Batch: 279844
Matrix (Source ID): Soil (455032-021)	Method: EPA 8082	Prep Method: EPA 3541

QC960807 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	318.4	ND	500.0	ug/Kg		DO	42-127	10
Aroclor-1260	234.3	ND	500.0	ug/Kg	47%		38-130	10
Surrogates								
Decachlorobiphenyl (PCB)	26.48		50.00	ug/Kg	53%		19-121	10

Type: Matrix Spike Duplicate	Lab ID: QC960808	Batch: 279844
Matrix (Source ID): Soil (455032-021)	Method: EPA 8082	Prep Method: EPA 3541

QC960808 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	402.4	ND	500.0	ug/Kg	80%		42-127		30	10
Aroclor-1260	289.7	ND	500.0	ug/Kg	58%		38-130	21	30	10
Surrogates										
Decachlorobiphenyl (PCB)	26.58		50.00	ug/Kg	53%		19-121			10

Type: Blank	Lab ID: QC960846	Batch: 279869
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960846 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Lead	ND		mg/Kg	1.0	12/14/21	12/15/21

Type: Lab Control Sample	Lab ID: QC960847	Batch: 279869
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960847 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Lead	106.9	100.0	mg/Kg	107%		80-120

Type: Matrix Spike	Lab ID: QC960848	Batch: 279869
Matrix (Source ID): Soil (455032-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960848 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Lead	274.1	175.7	101.0	mg/Kg	97%		75-125	1

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC960849	Batch: 279869
Matrix (Source ID): Soil (455032-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960849 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Lead	269.2	175.7	102.0	mg/Kg	92%		75-125	2	20	1

Type: Blank	Lab ID: QC960851	Batch: 279870
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960851 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Lead	ND		mg/Kg	1.0	12/14/21	12/15/21

Type: Lab Control Sample	Lab ID: QC960852	Batch: 279870
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960852 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Lead	106.1	100.0	mg/Kg	106%		80-120

Type: Matrix Spike	Lab ID: QC960853	Batch: 279870
Matrix (Source ID): Soil (455032-020)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960853 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Lead	122.5	8.887	109.9	mg/Kg	103%		75-125	1.1

Type: Matrix Spike Duplicate	Lab ID: QC960854	Batch: 279870
Matrix (Source ID): Soil (455032-020)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960854 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Lead	127.0	8.887	111.1	mg/Kg	106%		75-125	3	20	1.1

Type: Blank	Lab ID: QC960921	Batch: 279889
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960921 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Lead	ND		mg/Kg	1.0	12/15/21	12/16/21

Batch QC

Type: Lab Control Sample	Lab ID: QC960922	Batch: 279889
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960922 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Lead	109.3	100.0	mg/Kg	109%		80-120

Type: Matrix Spike	Lab ID: QC960923	Batch: 279889
Matrix (Source ID): Soil (455032-040)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960923 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Lead	307.2	215.6	100.0	mg/Kg	92%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC960924	Batch: 279889
Matrix (Source ID): Soil (455032-040)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960924 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Lead	309.6	215.6	94.34	mg/Kg	100%		75-125	3	20	0.94

Type: Blank	Lab ID: QC960932	Batch: 279891
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960932 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Lead	ND		mg/Kg	1.0	12/15/21	12/16/21

Type: Lab Control Sample	Lab ID: QC960933	Batch: 279891
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960933 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Lead	106.9	100.0	mg/Kg	107%		80-120

Type: Matrix Spike	Lab ID: QC960934	Batch: 279891
Matrix (Source ID): Soil (455032-060)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960934 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Lead	106.4	6.189	97.09	mg/Kg	103%		75-125	0.97

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC960935	Batch: 279891
Matrix (Source ID): Soil (455032-060)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960935 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Lead	97.98	6.189	88.50	mg/Kg	104%		75-125	0	20	0.88

Type: Blank	Lab ID: QC960963	Batch: 279899
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC960963 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	12/15/21	12/16/21
Aroclor-1221	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1232	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1242	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1248	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1254	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1260	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1262	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1268	ND		ug/Kg	50	12/15/21	12/16/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	76%		%REC	19-121	12/15/21	12/16/21

Type: Lab Control Sample	Lab ID: QC960964	Batch: 279899
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC960964 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	401.7	490.2	ug/Kg	82%		14-150
Aroclor-1260	379.1	490.2	ug/Kg	77%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	36.04	49.02	ug/Kg	74%		19-121

Type: Matrix Spike	Lab ID: QC960965	Batch: 279899
Matrix (Source ID): Soil (455032-041)	Method: EPA 8082	Prep Method: EPA 3541

QC960965 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	772.9	ND	505.1	ug/Kg	153%	*	42-127	10
Aroclor-1260	627.9	145.7	505.1	ug/Kg	95%		38-130	10
Surrogates								
Decachlorobiphenyl (PCB)	49.26		50.51	ug/Kg	98%		19-121	10

Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC960966	Batch: 279899
Matrix (Source ID): Soil (455032-041)	Method: EPA 8082	Prep Method: EPA 3541

QC960966 Analyte	Result	Source Sample	Spiked	Units	Recovery	Qual	Limits	RPD		DF
		Result						RPD	Lim	
Aroclor-1016	909.5	ND	495.0	ug/Kg	184%	*	42-127	18	30	9.9
Aroclor-1260	746.9	145.7	495.0	ug/Kg	121%		38-130	19	30	9.9
Surrogates										
Decachlorobiphenyl (PCB)	56.07		49.50	ug/Kg	113%		19-121			9.9

Type: Blank	Lab ID: QC961475	Batch: 280084
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC961475 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	12/16/21	12/17/21
Aroclor-1221	ND		ug/Kg	50	12/16/21	12/17/21
Aroclor-1232	ND		ug/Kg	50	12/16/21	12/17/21
Aroclor-1242	ND		ug/Kg	50	12/16/21	12/17/21
Aroclor-1248	ND		ug/Kg	50	12/16/21	12/17/21
Aroclor-1254	ND		ug/Kg	50	12/16/21	12/17/21
Aroclor-1260	ND		ug/Kg	50	12/16/21	12/17/21
Aroclor-1262	ND		ug/Kg	50	12/16/21	12/17/21
Aroclor-1268	ND		ug/Kg	50	12/16/21	12/17/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	87%		%REC	19-121	12/16/21	12/17/21

Type: Lab Control Sample	Lab ID: QC961476	Batch: 280084
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC961476 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	455.4	500.0	ug/Kg	91%		14-150
Aroclor-1260	475.6	500.0	ug/Kg	95%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	49.47	50.00	ug/Kg	99%		19-121

Batch QC

Type: Matrix Spike	Lab ID: QC961477	Batch: 280084
Matrix (Source ID): Soil (455032-061)	Method: EPA 8082	Prep Method: EPA 3541

QC961477 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	1,252	ND	500.0	ug/Kg	250%	*	42-127	10
Aroclor-1260	3,208	1017	500.0	ug/Kg	438%	*	38-130	10
Surrogates								
Decachlorobiphenyl (PCB)	60.44		50.00	ug/Kg	121%		19-121	10

Type: Matrix Spike Duplicate	Lab ID: QC961478	Batch: 280084
Matrix (Source ID): Soil (455032-061)	Method: EPA 8082	Prep Method: EPA 3541

QC961478 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	1,105	ND	500.0	ug/Kg	221%	*	42-127	12	30	10
Aroclor-1260	2,562	1017	500.0	ug/Kg	309%	*	38-130	22	30	10
Surrogates										
Decachlorobiphenyl (PCB)	54.67		50.00	ug/Kg	109%		19-121			10

* Value is outside QC limits
 DO Diluted Out
 ND Not Detected



ENTHALPY
ANALYTICAL

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 455090
Report Level: II
Report Date: 12/17/2021

Analytical Report *prepared for:*

Becky Sundilson
EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868

Project: CLOW - CLOW Valve, 04.20150013.19 task 8

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

Sample Summary

Becky Sundilson	Lab Job #:	455090
EarthCon Consultants CA, Inc.	Project No:	CLOW
1100 W. Town and Country Rd	Location:	CLOW Valve, 04.20150013.19 task 8
Suite 200	Date Received:	12/14/21
Orange, CA 92868		

Sample ID	Lab ID	Collected	Matrix
S-54-1	455090-001	12/14/21 07:30	Soil
S-54-3	455090-002	12/14/21 07:38	Soil
S-40-1	455090-003	12/14/21 08:00	Soil
S-40-3	455090-004	12/14/21 08:25	Soil
S-41-1	455090-005	12/14/21 07:40	Soil
S-41-3	455090-006	12/14/21 08:40	Soil
S-58-1	455090-007	12/14/21 08:54	Soil
S-58-3	455090-008	12/14/21 09:05	Soil

Case Narrative

EarthCon Consultants CA, Inc.
1100 W. Town and Country Rd
Suite 200
Orange, CA 92868
Becky Sundilson

Lab Job Number: 455090
Project No: CLOW
Location: CLOW Valve, 04.20150013.19 task 8
Date Received: 12/14/21

This data package contains sample and QC results for eight soil samples, requested for the above referenced project on 12/14/21. The samples were received cold and intact.

PCBs (EPA 8082):

S-54-1 (lab # 455090-001) was diluted due to the color of the sample extract. S-58-1 (lab # 455090-007) was diluted due to the dark color of the sample extract. No other analytical problems were encountered.

Metals (EPA 6010B):

No analytical problems were encountered.



Enthalpy Analytical - Orange
 931 W. Barkley Avenue, Orange, CA 92868
 Phone 714-771-6900

Chain of Custody Record
 Lab No: 45590 Lab use
 Page: 4 of 1

Turn Around Time (rush by advanced notice only)
 Standard: 5 Day: 1 Day:
 Custom TAT: X

Matrix: A = Air, W = Water, SeaW = Sea Water, DW = Drinking Water, WP = Wipe, S = Soil, O = Oil, M = Other matrices (solid), L = Other matrices (aqueous)
 Preservatives:
 1 = Na₂S₂O₃ 2 = HCl 3 = HNO₃
 4 = H₂SO₄ 5 = NaOH 6 = Other
 Sample Receipt Temp: 4.2/25 (lab use only)

CUSTOMER INFORMATION PROJECT INFORMATION Analysis Request Test Instructions / Comments

Company: Earthcon
 Report To: Becky Sundlister
 Email: bsundlister@earthcon.com
 Address: 714-321-9022
 Phone:
 Fax: LC/BS/AA

Quote #: CLAW Valve
 Proj. Name: 04-20150013 KS
 Proj. #: 04-20150013.19
 P.O. #: ~~4000~~
 Address:
 Global ID:
 Sampled By:

⊗ see party
 Material:
 possible with
 pencils

Sample ID	Sampling Date	Sampling Time	Matrix	Container No.	Pres.
1 S-54-1	12/14/12	0730	S	1802	0
2 S-54-3		0738			X
3 S-40-1		0800			
4 S-40-3		0825			
5 S-41-1		0740			
6 S-41-3		0840			
7 S-58-1		0854			
8 S-58-3		0905			
9					
10					

Signature: [Signature]
 Print Name: Andrew Langer
 Company / Title: Earthcon Staff Scientist
 Date / Time: 12/14/12 13:14

1 Relinquished By:
 1 Received By:
 2 Relinquished By:
 2 Received By:
 3 Relinquished By:
 3 Received By:



ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: EarthCon Project: CLOW Valve
 Date Received: 12/14/21 Sampler's Name Present: Yes No

Section 2
 Sample(s) received in a cooler? Yes, How many? 1 No (skip section 2) Sample Temp (°C) (No Cooler): _____
 Sample Temp (°C), One from each cooler: #1: 4.2 #2: _____ #3: _____ #4: _____
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)
 Shipping Information: _____

Section 3
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temp (°C): #1: 2.1 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Section 6
 For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____
 Email (email sent to/on): _____ / _____
 Project Manager's response: _____

Completed By: Aeena Sylvestri Date: 12/14/21

Analysis Results for 455090

Becky Sundilson
 EarthCon Consultants CA, Inc.
 1100 W. Town and Country Rd
 Suite 200
 Orange, CA 92868

Lab Job #: 455090
 Project No: CLOW
 Location: CLOW Valve, 04.20150013.19 task 8
 Date Received: 12/14/21

Sample ID: S-54-1 Lab ID: 455090-001 Collected: 12/14/21 07:30
Matrix: Soil

455090-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	5.0		mg/Kg	0.84	0.84	279897	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	200	2	279917	12/15/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	100	2	279917	12/15/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	100	2	279917	12/15/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	100	2	279917	12/15/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	100	2	279917	12/15/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	100	2	279917	12/15/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	100	2	279917	12/15/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	100	2	279917	12/15/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	100	2	279917	12/15/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	95%		%REC	19-121	2	279917	12/15/21	12/15/21	TRN

Analysis Results for 455090

Sample ID: S-54-3	Lab ID: 455090-002	Collected: 12/14/21 07:38
Matrix: Soil		

455090-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	1.6		mg/Kg	0.90	0.9	279897	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279917	12/15/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	77%		%REC	19-121	1	279917	12/15/21	12/15/21	TRN

Sample ID: S-40-1	Lab ID: 455090-003	Collected: 12/14/21 08:00
Matrix: Soil		

455090-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	7.3		mg/Kg	0.98	0.98	279897	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279917	12/15/21	12/15/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279917	12/15/21	12/15/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	78%		%REC	19-121	1	279917	12/15/21	12/15/21	TRN

Analysis Results for 455090

Sample ID: S-40-3	Lab ID: 455090-004	Collected: 12/14/21 08:25
	Matrix: Soil	

455090-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	1.3		mg/Kg	1.0	1	279897	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279917	12/15/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	55%		%REC	19-121	1	279917	12/15/21	12/16/21	TRN

Sample ID: S-41-1	Lab ID: 455090-005	Collected: 12/14/21 07:40
	Matrix: Soil	

455090-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	2.0		mg/Kg	1.0	1	279897	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279917	12/15/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	68%		%REC	19-121	1	279917	12/15/21	12/16/21	TRN

Analysis Results for 455090

Sample ID: S-41-3	Lab ID: 455090-006	Collected: 12/14/21 08:40
	Matrix: Soil	

455090-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	1.4		mg/Kg	1.1	1.1	279897	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279917	12/15/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	75%		%REC	19-121	1	279917	12/15/21	12/16/21	TRN

Sample ID: S-58-1	Lab ID: 455090-007	Collected: 12/14/21 08:54
	Matrix: Soil	

455090-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Lead	20		mg/Kg	1.1	1.1	279897	12/15/21	12/16/21	KLN
Method: EPA 8082 Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	500	5	279917	12/15/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	250	5	279917	12/15/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	250	5	279917	12/15/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	250	5	279917	12/15/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	250	5	279917	12/15/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	250	5	279917	12/15/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	250	5	279917	12/15/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	250	5	279917	12/15/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	250	5	279917	12/15/21	12/16/21	TRN
Surrogates				Limits					
Decachlorobiphenyl (PCB)	90%		%REC	19-121	5	279917	12/15/21	12/16/21	TRN

Analysis Results for 455090

Sample ID: S-58-3	Lab ID: 455090-008	Collected: 12/14/21 09:05
Matrix: Soil		

455090-008 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Lead	4.5		mg/Kg	0.97	0.97	279897	12/15/21	12/16/21	KLN
Method: EPA 8082									
Prep Method: EPA 3541									
Aroclor-1016	ND		ug/Kg	100	1	279917	12/15/21	12/16/21	TRN
Aroclor-1221	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1232	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1242	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1248	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1254	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1260	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1262	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Aroclor-1268	ND		ug/Kg	50	1	279917	12/15/21	12/16/21	TRN
Surrogates	Limits								
Decachlorobiphenyl (PCB)	75%		%REC	19-121	1	279917	12/15/21	12/16/21	TRN

ND Not Detected

Batch QC

Type: Blank	Lab ID: QC960957	Batch: 279897
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960957 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Lead	ND		mg/Kg	1.0	12/15/21	12/16/21

Type: Lab Control Sample	Lab ID: QC960958	Batch: 279897
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC960958 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Lead	109.9	100.0	mg/Kg	110%		80-120

Type: Matrix Spike	Lab ID: QC960959	Batch: 279897
Matrix (Source ID): Soil (455090-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960959 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Lead	93.77	5.006	84.75	mg/Kg	105%		75-125	0.85

Type: Matrix Spike Duplicate	Lab ID: QC960960	Batch: 279897
Matrix (Source ID): Soil (455090-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC960960 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Lead	93.82	5.006	86.21	mg/Kg	103%		75-125	2	20	0.86

Type: Blank	Lab ID: QC961044	Batch: 279917
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC961044 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Aroclor-1016	ND		ug/Kg	100	12/15/21	12/16/21
Aroclor-1221	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1232	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1242	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1248	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1254	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1260	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1262	ND		ug/Kg	50	12/15/21	12/16/21
Aroclor-1268	ND		ug/Kg	50	12/15/21	12/16/21
Surrogates				Limits		
Decachlorobiphenyl (PCB)	82%		%REC	19-121	12/15/21	12/16/21

Batch QC

Type: Lab Control Sample	Lab ID: QC961045	Batch: 279917
Matrix: Soil	Method: EPA 8082	Prep Method: EPA 3541

QC961045 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	390.8	500.0	ug/Kg	78%		14-150
Aroclor-1260	418.3	500.0	ug/Kg	84%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	42.17	50.00	ug/Kg	84%		19-121

Type: Matrix Spike	Lab ID: QC961046	Batch: 279917
Matrix (Source ID): Soil (455090-008)	Method: EPA 8082	Prep Method: EPA 3541

QC961046 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	421.1	ND	500.0	ug/Kg	84%		42-127	1
Aroclor-1260	435.2	ND	500.0	ug/Kg	87%		38-130	1
Surrogates								
Decachlorobiphenyl (PCB)	45.09		50.00	ug/Kg	90%		19-121	1

Type: Matrix Spike Duplicate	Lab ID: QC961047	Batch: 279917
Matrix (Source ID): Soil (455090-008)	Method: EPA 8082	Prep Method: EPA 3541

QC961047 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	394.7	ND	500.0	ug/Kg	79%		42-127	6	30	1
Aroclor-1260	427.8	ND	500.0	ug/Kg	86%		38-130	2	30	1
Surrogates										
Decachlorobiphenyl (PCB)	45.31		50.00	ug/Kg	91%		19-121			1

ND Not Detected

APPENDIX

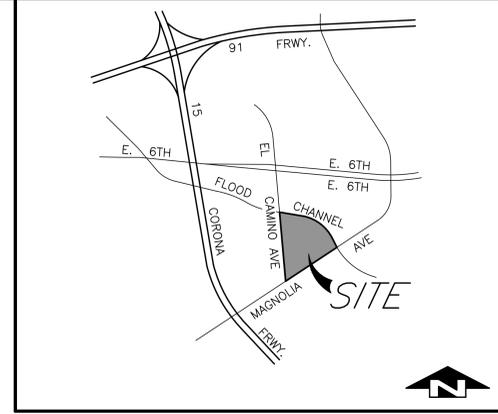
C

DESIGN PLAN



MAGNOLIA AVENUE BUSINESS CENTER TENTATIVE PARCEL MAP NO. XXXXX PRECISE PLAN

IN THE CITY OF CORONA, COUNTY OF RIVERSIDE
FEBRUARY 2022



VICINITY MAP
NOT TO SCALE

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CORONA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:
THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONALIZED LOT 13, SEPARATE DE SAU JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATING COMPANY, AS SHOWN BY MAP ON FILE IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, BOUNDED AS FOLLOWS: ON THE SOUTHWEST BY THE SOUTHWESTERLY EXTENSION OF THE NORTHWEST LINE OF MAGNOLIA AVENUE, AS SHOWN ON RECORD OF SURVEY ENTITLED "RECORD OF SURVEY OF A PORTION OF LOTS 11, 12, 13, 14, 15, IN BLOCK 63 OF RIVERSIDE LAND AND IRRIGATING COMPANY AND A PORTION OF SECTIONS 29 AND 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, SAN BERNARDINO COUNTY RECORDS, BOUNDED AS FOLLOWS: ON THE WEST BY THE EASTERLY LINE OF THE PROPERTY SPUR OF THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY, AND ON THE NORTHWEST BY THE SOUTHWESTERLY AND SOUTHWESTERLY LINE OF PARCELS 5 TO 11, INCLUSIVE, OF SAID RECORD OF SURVEY ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS.

EXCEPTING THEREFROM THAT PORTION GRANTED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER DISTRICT CONSERVATION DISTRICT BY DEED RECORDED OCTOBER 22, 1984 AS INSTRUMENT NO. 84-227367 AND RE-RECORDED FEBRUARY 11, 1985 AS INSTRUMENT NO. 85-026214 BOTH OF OFFICIAL RECORDS.

APN: 107-030-022-3

EASEMENTS:

ITEMS SHOWN HEREON WERE PLOTTED FROM RECORD DATA BASED ON DOCUMENTS FROM THE TCR TITLE REPORT ORDER NO. 00852012-021-DN1, DATED AUGUST 31, 2021.

PLOTTABLE EASEMENTS ARE INDICATED BY A "○", NON-PLOTTABLE EASEMENTS ARE INDICATED BY "□" ALL WITHIN THE "EXCEPTION" ITEMS OF THE TITLE REPORT.

- ① AN EASEMENT FOR PIPELINES, DITCHES AND FLUMES, AS RESERVED IN FAVOR OF JOHN FLETCHER MOUTON AND HERBERT BULKLEY PRAED, RECORDED APRIL 4, 1908 IN BOOK 216, PAGE 171, OF DEEDS. AFFECTS PARCEL. EASEMENT CANNOT BE LOCATED PER RECORD.
- ② AN EASEMENT FOR ROADS, PIPE LINES, WATER CONDUITS, POWER LINES, TELEPHONE AND TELEGRAPH LINES, AS RESERVED IN FAVOR OF JOHN FLETCHER MOUTON AND HERBERT BULKLEY PRAED, RECORDED FEBRUARY 7, 1911 IN BOOK 324, PAGE 389, OF DEEDS. AFFECTS PARCEL. EASEMENT CANNOT BE LOCATED PER RECORD.
- ③ AN EASEMENT FOR PIPELINE AND MAINTENANCE PURPOSES, IN FAVOR OF CYNTHIA I. MORGAN, PER DEED RESERVATION RECORDED JANUARY 16, 1947, IN BOOK 780, PAGE 380, OFFICIAL RECORDS. AFFECTS PARCEL. EASEMENT CANNOT BE LOCATED PER RECORD.
- ④ AN EASEMENT FOR POLE PURPOSES, IN FAVOR OF CALIFORNIA ELECTRIC POWER COMPANY, RECORDED OCTOBER 21, 1954 IN BOOK 1643, PAGE 576, OF OFFICIAL RECORDS. AFFECTS PARCEL. 0.2' OF EASEMENT PLOTTED HEREBY.
- ⑤ AN EASEMENT FOR POLE PURPOSES, IN FAVOR OF CALIFORNIA ELECTRIC POWER COMPANY, RECORDED APRIL 6, 1956 IN BOOK 1892, PAGE 498, OF OFFICIAL RECORDS. AFFECTS PARCEL. 0.2' OF EASEMENT PLOTTED HEREBY.
- ⑥ AN EASEMENT FOR POLE LINES AND CONDUITS PURPOSES, IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, RECORDED JUNE 27, 1966 AS INSTRUMENT NO. 66163, OF OFFICIAL RECORDS. AFFECTS PARCEL. PLOTTED HEREBY.
- ⑦ AN EASEMENT FOR UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS, IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, RECORDED OCTOBER 22, 2003 AS INSTRUMENT NO. 2003-83094, OF OFFICIAL RECORDS. AFFECTS PARCEL. PLOTTED HEREBY.

BASIS OF BEARINGS:

THE BASIS OF BEARINGS AND COORDINATES FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM NORTH AMERICAN DATUM 1983 (NAD 83), ZONE 6 (EPOCH 2010.00) BASED LOCALLY ON CONTROL STATIONS CNPP, LORS, AND NCCO AS SHOWN ON THE CONTROL GROUND FILE. ALL DISTANCES SHOWN ARE GROUND DISTANCES, UNLESS SPECIFIED OTHERWISE. GRID DISTANCES MAY BE OBTAINED BY MULTIPLYING THE GROUND DISTANCES BY AN AVERAGE COMBINATION FACTOR OF 0.999971525.

BENCHMARK:

BENCH MARK NO. C-114; ELEVATION: 645.350; VERTICAL DATUM: NVD 29. A 2-1/2" BRASS DISK STAMPED "C-114" SET IN THE TOP OF CURB, LOCATED 5' WEST OF THE B.C.R. OF THE SOUTHWESTERLY CURB RETURN OF THE INTERSECTION OF SIXTH STREET AND MAGNOLIA AVENUE.

ASSESSOR PARCEL NO.:

107-030-022-3

LEGEND:

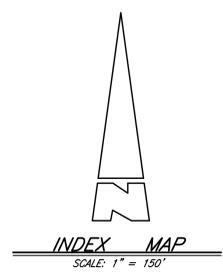
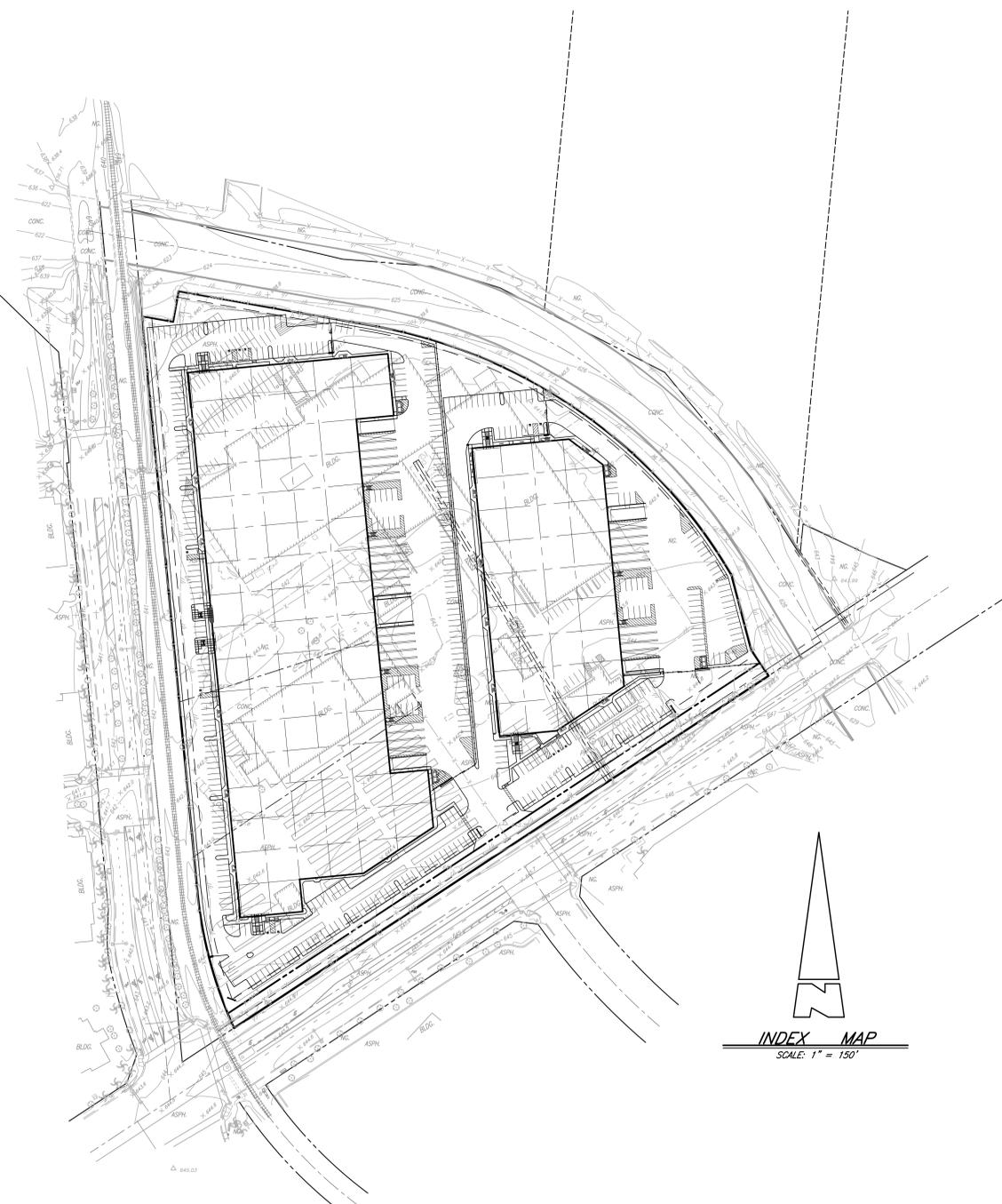
○* STREET LIGHT	ICV IRRIGATION CONTROL VALVE
* LIGHT	IRRC IRRIGATION
*TS TRAFFIC SIGNAL	N'LY NORTHERLY
○CB CATCH BASIN	PAV PAVEMENT
○DI DROP INLET	P.P. POWER POLE
○S SIGN	PT POINT
○F/H FIRE HYDRANT	RET RETAINING
○PP POWER POLE	SW SIDEWALK
○TPP TEMPORARY POWER POLE	SMH SEWER MANHOLE
○M METER	SD STORM DRAIN
○V VALVE	S'LY SOUTHERLY
○B.O. BLOW OFF	W'LY WESTERLY
○A/V AIR RELEASE VALVE	CLF CHAIN LINK FENCE
○MH MANHOLE	WIF WROUGHT IRON FENCE
○U/B UTILITY BODY	
○U/O UNDEFINED OBJECT ROUND	
○U/S UNDEFINED OBJECT SQUARE	
ASPH ASPHALT	
BLDG BUILDING	
C&G CURB & GUTTER	
CL CENTERLINE	
CONC CONCRETE	
COR CORNER	
DWY DRIVEWAY	
E'LY E'LY = EASTERLY	
EP EDGE OF PAVEMENT	
(OH) OVERHEAD UTILITY	

=====	RIGHT OF WAY/PARCEL LINE
-----	BOUNDARY
-----	BUILDING SETBACK
-----	CENTERLINE
-----	EASEMENT
-----	FENCE
-----	RETAINING WALL
-----	PROP. CURB AND GUTTER
-----	PROP. CURB
-----	PROP. V-GUTTER
-----	PROP. WATER
-----	PROP. SEWER
-----	PROP. STORM DRAIN
-----	PATH-OF-TRAVEL

PROJECT TOTALS		
TOTAL PROJECT AREA	678,490 SF	15.576 ACRES
TOTAL AREA DISTURBED	XX	XX
TOTAL AREA TO REMAIN NATURAL	XX	XX

TOTAL SITE ESTIMATED CUT/FILL VOLUMES		
CUT VOLUME (RAW)	XXX CY	
FILL VOLUME (RAW)	XXX CY	
NET TOTAL (UNDAUSTED)	XXXX CY (CUT)	

NOTES:
1) EARTHWORK VOLUMES ARE ESTIMATED BASED ON-SITE AND OFFSITE GRADING BOUNDARIES.
2) EARTHWORK VOLUMES BASED ON COMPARISON TO EXISTING TOPO DATED MAY, 2019



INDEX MAP
SCALE: 1" = 150'

TTM SHEET INDEX

- SHEET 1.....TITLE SHEET
- SHEET 2.....PRELIMINARY GRADING PLAN
- SHEET 3.....UTILITY PLAN
- SHEET 4.....SECTION DETAILS

GENERAL NOTES:

1. TOTAL PROJECT GROSS ACREAGE IS 16.576 ACRES
 2. PROPOSED NO. OF LOTS: 2 LOTS
 3. EXISTING GENERAL PLAN LAND USE: MIXED USE - INDUSTRIAL/COMMERCIAL (MU 2)
 4. PROPOSED GENERAL PLAN LAND USE: NO CHANGE
 5. EXISTING ZONING: MIXED USE (MU) WITH A CORONA MAGNOLIA SPECIFIC PLAN OVERLAY (SP-01-2 AS PLANNING AREA 5 - BUSINESS PARK)
 6. PROPOSED ZONING: NO CHANGE
 7. ADJACENT LAND USE:
- NORTH:
84' WIDE RECTANGULAR CHANNEL WITH 28' WIDE ACCESS ROAD BETWEEN PROPERTY LINE AND THE CHANNEL
- EAST:
84' WIDE RECTANGULAR CHANNEL WITH 28' WIDE ACCESS ROAD BETWEEN PROPERTY LINE AND THE CHANNEL
- SOUTH:
MAGNOLIA AVENUE (104' ROW)
- WEST:
ATCHISON, TOPEKA AND SANTA FE RAILWAY (50' ROW)
11. SOURCE OF TOPOGRAPHY IS AERIAL TOPOGRAPHY FLOWN ON DECEMBER 02, 2019 BY KWC ENGINEERS.
 12. ALL EXISTING EASEMENTS AND IRREVOCABLE OFFERS OF DEDICATION THAT AFFECT THE PROPERTY ARE SHOWN ON THIS PARCEL MAP.
 13. ALL EXISTING EASEMENTS ARE TO REMAIN IN THEIR DESIGNATED LOCATIONS UNLESS NOTED OTHERWISE.
 14. ALL CONC. GUTTERS AND SWALES SHALL HAVE A MINIMUM GRADE OF: 0.5%
 15. ALL A.C. PAVING SHALL HAVE A MINIMUM GRADE OF: 1.0%
 16. CONCRETE PAVEMENT SHALL BE PROVIDED FOR ALL ROADWAYS THAT HAVE STREET GRADES EXCEEDING 10% OR AS APPROVED BY THE CITY OF CORONA.
 17. ALL SLOPES ADJACENT TO STREET R.O.W. TO BE MAINTAINED BY P.O.A.
 18. ALL SLOPES SHOWN HEREON ARE 3:1 MAXIMUM UNLESS OTHERWISE NOTED.
 19. ALL MAJOR SLOPES OR COMMON AREAS, OPEN SPACE, PRIVATE DRAINAGE FACILITIES, FUEL MODIFICATION, ROAD ACCESS EASEMENTS, AND ANY OTHER COMMON AMENITIES SHALL BE MAINTAINED BY A PROPERTY OWNER ASSOCIATION OR ESTABLISHED SUBJECT TO CURRENT STATE LAWS AND BE SUBJECT TO THE APPROVAL OF THE CITY OF CORONA WHO SHALL REVIEW ALL CC&R'S AND RULES FOR THEIR CC&R'S, PROPERTY OWNER ASSOCIATION DOCUMENTS AND ALL DOCUMENTS TO CONVEY TITLE TO THE PROPERTY OWNER ASSOCIATION.
 20. FENCING SHALL BE INSTALLED ON SITE AS NECESSARY TO RESTRICT PUBLIC ACCESS TO PROPOSED OPEN SPACE AREAS. REFER TO WALL AND FENCE PLAN FOR LOCATIONS.
 21. THERE ARE NO KNOWN ACTIVE EARTHQUAKE FAULTS IMPACTING THE PROJECT SITE. REFER TO SOILS REPORT FOR ADDITIONAL INFORMATION.
 22. PROPOSED WATER TO HAVE TWO POINTS OF CONNECTION TO EXISTING WATER SYSTEM.
 23. DRAINAGE SYSTEM WILL BE DEVELOPED IN ACCORDANCE WITH THE CITY OF CORONA AND RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT STANDARDS AND SPECIFICATIONS. DRAINAGE ON THIS SITE WILL BE CONVEYED BY MEANS OF A STORM DRAIN SYSTEM CONSISTING OF VARYING SIZES OF STORM DRAIN PIPES. STORM FLOWS TRIBUTARY TO THE SITE SHALL BE INTERCEPTED AND CONVEYED AROUND THE SITE VIA THE STORM DRAIN SYSTEMS SHOWN HEREON. ALL STORM DRAIN SHOWN HEREON ARE PRELIMINARY.
 24. PROPOSED WATER QUALITY FACILITIES MAY BE MAINTAINED BY FUTURE POA FORMED SPECIFICALLY FOR DEVELOPMENT. THE MAINLINE STORM DRAIN, INLETS, AND OUTLET STRUCTURES SHALL BE PRIVATELY MAINTAINED.
 25. RECIPROCAL EASEMENTS FOR PRIVATE LOOPED WATER SYSTEM, SHARED FACILITIES, AND DRAINAGE SHALL BE GRANTED TO AND ADMINISTERED BY THE POA THROUGH THE CC&R'S.
 26. THE SUBJECT PROPERTY IS WITHIN A FLOOD ZONE X - 0.2 PERCENT ANNUAL CHANCE OF FLOOD HAZARD PER FIRM PANEL NO. 06085C1356G EFFECTIVE DATE OF AUGUST 28, 2008.
 27. THE SUBJECT PROPERTY IS WITHIN A SANTA ANA RIVER WATERSHED.

STATEMENT OF PREPARER

I HEREBY STATE THAT THIS MAP WAS PREPARED UNDER MY SUPERVISION AND THAT THE OWNER OF RECORD HAS KNOWLEDGE OF AND CONSENTS TO THE FILING OF THIS MAP.

BRANDON M. BARNETT, P.E. DATE _____



OWNER:

MCWANE, INC. A DELAWARE CORPORATION
2800 HIGHWAY 280, SUITE 300
BIRMINGHAM, AL 35223
(949) 720-0369
CONTACT: JEREMY MAPE

DEVELOPER:

WESTERN REALCO
500 NEWPORT CENTER DR #630
NEWPORT BEACH, CA 92660
(949) 720-0369
CONTACT: JEREMY MAPE

ENGINEER:

KWC ENGINEERS
1560 COMPTON AVENUE
CORONA, CA 92780-3370
(951) 734-2130
CONTACT: BRANDON M. BARNETT, P.E.

SOILS ENGINEER:

PETRA GEOSCIENCES, INC.
1351 E. FRANCIS
ONTARIO, CA 91761
(861) 425-8410
CONTACT: PAUL THERIAULT

ARCHITECT:

BASTIEN AND ASSOCIATES, INC.
15661 RED HILL AVENUE, STE 150
TUSTIN, CA 92780-7324
(714) 617-8600
CONTACT: STEVE MARTINEZ

UTILITY NOTES:

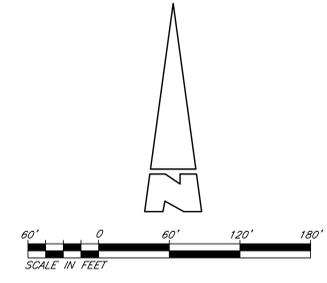
- WATER: CITY OF CORONA DEPARTMENT OF WATER AND POWER
815 W. 6TH STREET
CORONA, CA 91720
(909) 736-2321
- SEWER: CITY OF CORONA DEPARTMENT OF WATER AND POWER
815 W. 6TH STREET
CORONA, CA 91720
(909) 736-2321
- POWER: SOUTHERN CALIFORNIA EDISON CO.
1351 E. FRANCIS
ONTARIO, CA 91761
(800) 930-8891
- GAS: SOUTHERN CALIFORNIA GAS CO.
P.O. BOX 3003
REDLANDS, CA 92373
(800) 427-2200
- PHONE: AT&T
1265 N. VAN BUREN ST., #180
ANAHEIM, CA 92807
(714) 866-5423
- CABLE TV: TIME WARNER CABLE
1500 AUTO CENTER DRIVE
ONTARIO, CA 91761
(909) 875-3366

**PRECISE PLAN
MAGNOLIA AVENUE BUSINESS CENTER
CITY OF CORONA**

PREPARED FOR:
**WESTERN REALCO
500 NEWPORT CENTER DR #630
NEWPORT BEACH, CA 92660**

PREPARED BY:
KWC ENGINEERS
CIVIL ENGINEERS • PLANNERS • SURVEYORS
1880 COMPTON AVENUE, SUITE 100 CORONA, CA 92781-3370 951-734-2130

**SHEET
1 OF 4
SHEET**



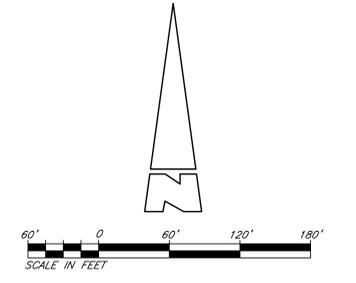
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<p>PREPARED FOR: WESTERN REALCO 500 NEWPORT CENTER DR #630 NEWPORT BEACH, CA 92660</p>	
<p>PREPARED BY:  KWC ENGINEERS <small>CIVIL ENGINEERS • PLANNERS • SURVEYORS 1880 COMPTON AVENUE, SUITE 100 CORONA, CA 92681-3370 951-734-2130</small></p>	<p>SHEET 2 OF 4 SHEET</p>

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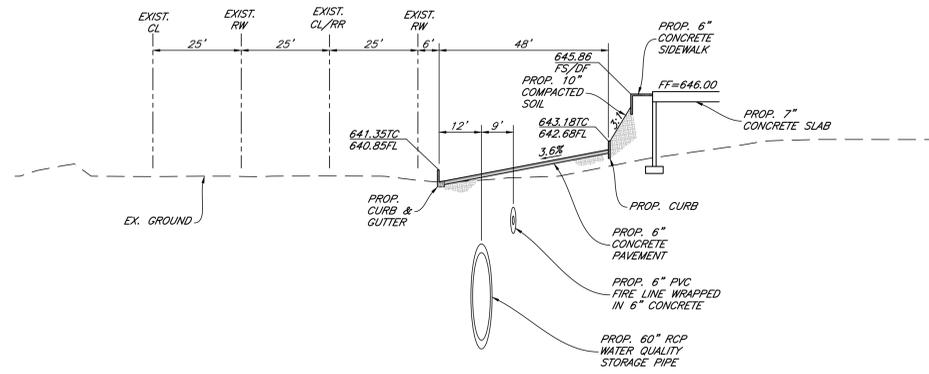
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FF = 650.06 - 647.74
PAD = 649.56 - 647.24



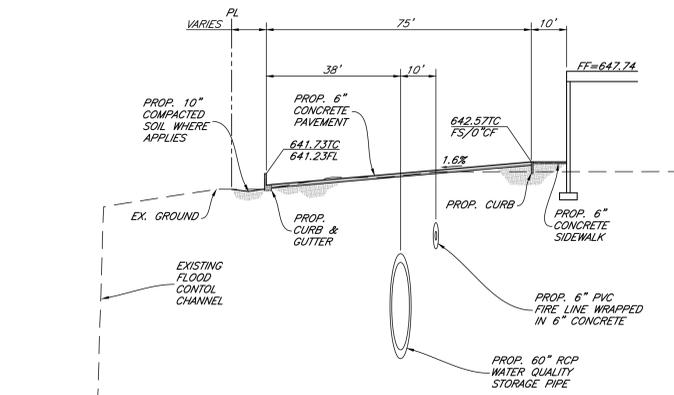
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<p>PREPARED FOR: WESTERN REALCO 500 NEWPORT CENTER DR #630 NEWPORT BEACH, CA 92660</p>	
<p>PREPARED BY:  <small>CIVIL ENGINEERS • PLANNERS • SURVEYORS 1880 COMPTON AVENUE, SUITE 100 CORONA, CA 92881-3370 951-734-2130</small></p>	<p>SHEET 3 OF 4 SHEET</p>

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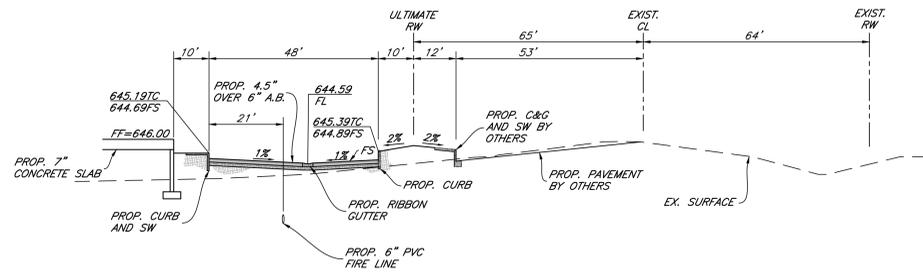
SECTION "A-A"

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SEE SHEET 2 FOR PLAN VIEW



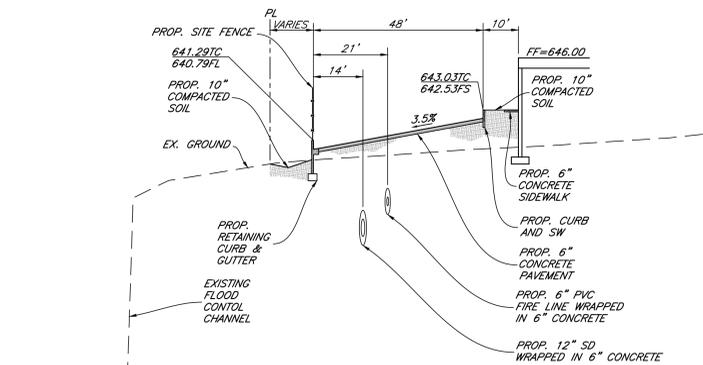
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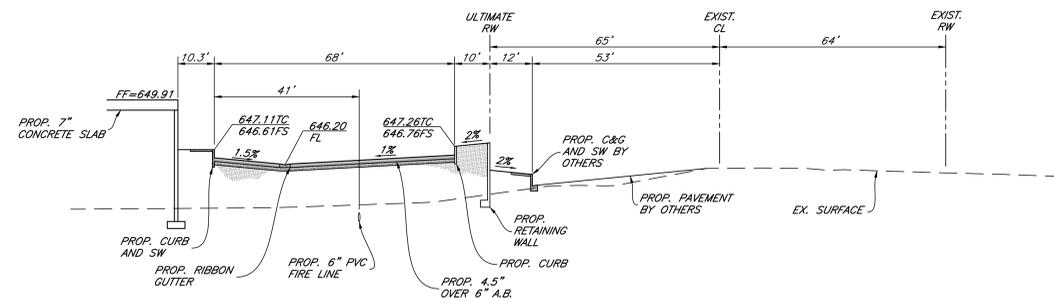
SECTION "B-B"

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SEE SHEET 2 FOR PLAN VIEW



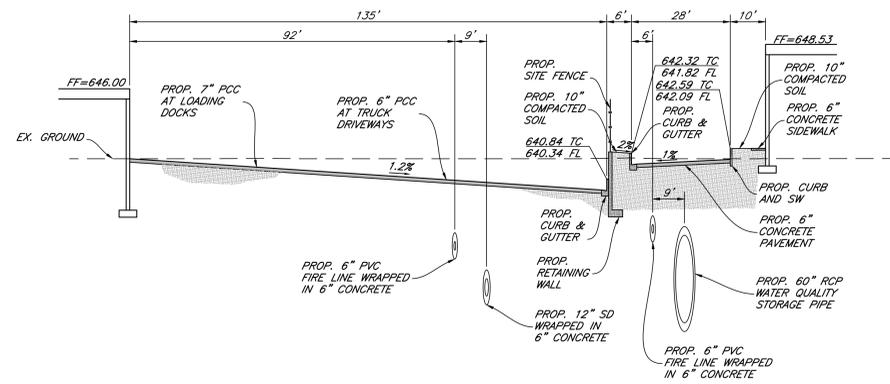
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N.T.S.
SEE SHEET 2 FOR PLAN VIEW



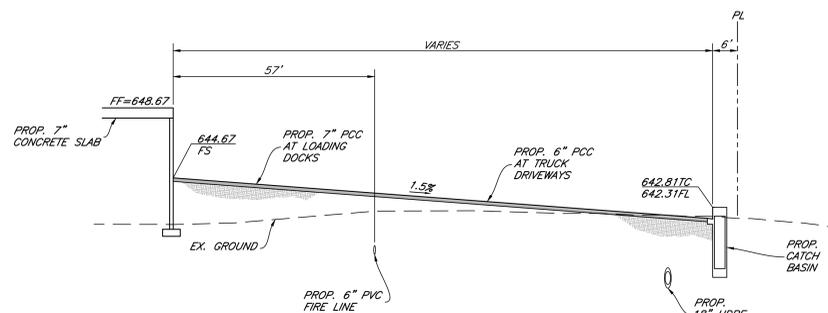
SECTION "C-C"

N.T.S.
SEE SHEET 2 FOR PLAN VIEW



SECTION "G-G"

N.T.S.
SEE SHEET 2 FOR PLAN VIEW



SECTION "D-D"

N.T.S.
SEE SHEET 2 FOR PLAN VIEW

PRECISE PLAN
MAGNOLIA AVENUE BUSINESS CENTER
CITY OF CORONA

PREPARED FOR:
WESTERN REALCO
500 NEWPORT CENTER DR #630
NEWPORT BEACH, CA 92660

PREPARED BY:
KWC ENGINEERS
CIVIL ENGINEERS • PLANNERS • SURVEYORS
1880 COMPTON AVENUE, SUITE 100 CORONA, CA 92881-3370 951-734-2130

SHEET
4 OF 4
SHEET

J:\19.1995.2 R:\19\1995\PRELIM\MAPS\PREC PLAN\1995 PRECISE PLAN 04.cwg 03/02/22 02:28pm

APPENDIX

D

LAND USE COVENANT

RECORDING REQUESTED BY:

Clow Valve Company
1375 Magnolia Avenue
Corona, California 91719

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630
Attention: A. Edward Morelan, Branch Chief
Site Mitigation and Restoration Program

And

U.S. Environmental Protection Agency
Region IX
Attention: PCB Coordinator (Land
Chemicals and Redevelopment
Division)
75 Hawthorne Street
San Francisco, CA 94105-3901

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

LAND USE COVENANT AND AGREEMENT
ENVIRONMENTAL RESTRICTIONS

County of Riverside, Assessor Parcel Number(s): 107-030-022-3
Clow Valve Company
(Department Site Code 600876-48)

This Land Use Covenant and Agreement ("Covenant") is made by and between Clow Valve Company (the "Covenantor"), the current owner of property located at 1375 Magnolia Avenue, Corona in the County of Riverside, State of California (the "Property"), and the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471, the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials as defined

in Health and Safety Code section 25260. The Covenantor and the Department hereby agree that, pursuant to Civil Code section 1471 and Health and Safety Code section 25202.5 the use of the Property be restricted as set forth in this Covenant and that the Covenant shall conform with the requirements of California Code of Regulations, title 22, section 67391.1. With respect to the Polychlorinated Biphenyls (PCBs) at the Property, the provisions of this Covenant shall be for the benefit of, and shall be enforceable by, the United States Environmental Protection Agency ("U.S. EPA"), as a third party beneficiary pursuant to general contract law, including but not limited to Civil Code section 1559.

ARTICLE I
STATEMENT OF FACTS

1.01. Property Location. The Property, located at 1375 Magnolia Avenue, Corona, County of Riverside, California, that is subject to this Covenant, totaling approximately 16 acres, is more particularly described in the attached Exhibit A, "Legal Description of the Property", and depicted in Exhibit B, "Plot Plan". The Property is located in the area generally bounded by Magnolia Avenue on the south, railroad tracks and El Camino Avenue on the west, and a storm water channel towards the north and east. The Property is also identified as County of Riverside, Assessor's Parcel Number 107-030-022-3.

a) A limited portion of the Property is more particularly described in Exhibit C, "Legal Description of the Capped Property", and illustrated in Exhibit D, "Sketch", referred to as the "Capped Property". The "Capped Property", totaling approximately 9.964 acres of soil impacted by hazardous substances, is located on the northern portion of the Property now generally bounded by railroad and El Camino Avenue on the west, storm channel on the north and east. Its southern border runs parallel to Magnolia Avenue, approximately 195 feet north of Magnolia Avenue.

b) A limited portion of the Property is more particularly illustrated in Exhibit D as "Area 1" a Former Asphalt Dip Tank and as "Area 2" a PCB Transformer area. Former Asphalt Dip Tank was previously located, approximately 620 feet north of Magnolia

Avenue, 510 feet east of El Camino Avenue, and 200 feet west of the storm channel western edge. The PCB Transformer area is located approximately 240 feet west of the storm channel western edge, 510 feet east of El Camino Avenue, and 600 feet north of Magnolia Avenue.

1.02. Hazardous Substances. Hazardous wastes, or constituents of hazardous waste, including Polychlorinated Biphenyl's (PCBs) (Total Aroclors up to a maximum of 2,220 milligrams per kilogram (mg/kg)), Total Petroleum Hydrocarbons (TPH) (up to a maximum of 9,300 mg/kg), arsenic (up to a maximum of 52.9 mg/kg), cadmium (up to a maximum of 43.9 mg/kg), hexavalent chromium (up to a maximum of 6.6 mg/kg), and lead (up to a maximum of 7,360 mg/kg) in soil, and volatile organic compounds, such as tetrachloroethylene (PCE) (up to a maximum of 3 microgram/liter (ug/l)), in the soil gas remain at the Property above levels acceptable for unrestricted land use.

As of February 25, 2021, PCB concentrations in the soil at the Former Asphalt Dip Tank Bottom and PCB Transformer exceed the level for unrestricted use and the USEPA's site-specific industrial risk-based threshold of 15 mg/kg. PCB concentrations present in soils of the PCB Transformer area exceed the California hazardous waste level of Total Threshold Limit Concentration (TTLC) of 50 mg/kg.

As of February 25, 2021, lead concentrations detected in the soil at the Capped Property exceeded 320 milligrams per kilogram, a level deemed safe by DTSC for the continued use of the Site for industrial use and the TTLC of 1,000 mg/kg. A Human Health Risk Assessment (HHRA) was performed to evaluate the potential health risks associated with direct exposure of workers at the Property to soil containing Chemicals of Potential Concern (COPCs). Based on the HHRA, potential health risk to a commercial or industrial worker is 1×10^{-5} and to a construction worker is 2×10^{-4} . The estimated Hazard Index (HI) for a commercial/industrial worker at the Property is 1.9, primarily due to the potential exposure to PCBs and cadmium. The estimated HI for a construction worker at the Property is 458. U.S. EPA recommends an HI of 1 or below and health risk below 1×10^{-6} . The calculated risks were primarily associated with direct exposure to impacted soil and associated soil ingestion or dermal exposure, both of which will be eliminated by installation and maintenance of the capping materials described herein.

1.03. Remediation of Property. This Property has been investigated and/or remediated under the Department's oversight. The Department approved a Corrective Measures Study, dated February 19, 2018, prepared by EarthCon Consultants CA, Inc., in accordance with Health and Safety Code, Division 20, Chapter 6.5. The remediation activities at the Property include:

- a) Construction of an approximately 5,000 square foot, 6-inch-thick concrete or 3-inch thick asphalt cap in two areas encompassing approximately one-half acre, identified as Areas of Concern (AOCs), AOC-1 and AOC-5 (see Exhibit B).
- b) Repair and maintenance of the existing asphalt and/or concrete surface cover of the Capped Property;
- c) Soil Management Plan and Operation and Maintenance Plan preapproval by the Department for all future construction work involving soil excavation at the Capped Property; and,
- d) Land use restriction recorded with the Riverside County Assessor's Office to prohibit sensitive uses.

1.04. PCB Remediation overseen by U.S. EPA. In addition to the corrective action measures for the Property under the Department's oversight, U.S. EPA approved with conditions the Risk-Based Approval Application submitted by EarthCon Consultants, CA, Inc. on behalf of Clow Valve Company, dated April 9, 2019, to remediate PCBs at the Property. PCBs are regulated by the U.S. EPA pursuant to the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2601 et seq., and the PCB regulations at 40 Code of Federal Regulations (CFR) Part 761. This U.S. EPA approval is available in EnviroStor, an online document repository at https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/1318022012/2019-04-23_EPA%20to%20Clow%20Valve_761.61%28c%29_SIGNED.pdf

1.05. Basis for Environmental Restrictions. As a result of the presence of Hazardous Wastes, PCBs, TPH, arsenic, cadmium, lead, and PCE, which are also hazardous materials as defined in Health and Safety Code section 25260, at the Property, the Department has concluded that it is reasonably necessary to restrict the

use of the Property in order to protect present or future human health or safety or the environment, and that this Covenant is required as part of the Department-approved remedy for the Property. The Department has also concluded that the Property, as remediated and when used in compliance with the Environmental Restrictions of this Covenant, does not present an unacceptable risk to present and future human health or safety or the environment.

1.06. Land Use Covenant. A land use covenant is necessary to preclude potential users' exposure to hazardous substances that remain at the Property and to complete the remedy selected in the Corrective Measures Study. U.S. EPA, with the concurrence of the Department, has concluded that the Property, remediated to the goals presented in the Corrective Measures Study, subject to the restrictions of this Covenant, and used in compliance with such restrictions, does not present an unacceptable threat to present or future human health or safety or the environment. Additional information about the Site, including the 2019 PCB risk analysis by U.S. EPA, is available at the EnviroStor, an online repository listed in paragraph 1.04, above.

ARTICLE II DEFINITIONS

2.01. Department. "Department" means the California Department of Toxic Substances Control and includes its successor agencies, if any.

2.02. Environmental Restrictions. "Environmental Restrictions" means all protective provisions, covenants, restrictions, requirements, prohibitions, and terms and conditions as set forth in this Covenant.

2.03. Improvements. "Improvements" includes, but is not limited to buildings, structures, roads, driveways, improved parking areas, wells, pipelines, or other utilities.

2.04. Lease. "Lease" means lease, rental agreement, or any other document that creates a right to use or occupy any portion of the Property.

2.05. Occupant. "Occupant" or "Occupants" means Owner and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.06. Owner. "Owner" or "Owners" means the Covenantor, and any successor in interest including any heir and assignee, who at any time holds title to all or any portion of the Property.

2.07. U.S. EPA. "U.S. EPA" means the United States Environmental Protection Agency, and includes its successor agencies, if any.

ARTICLE III GENERAL PROVISIONS

3.01. Runs with the Land. This Covenant sets forth Environmental Restrictions that apply to and encumber the Property and every portion thereof no matter how it is improved, held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. This Covenant: (a) runs with the land pursuant to Civil Code section 1471 and Health and Safety Code section 25202.5; (b) inures to the benefit of and passes with each and every portion of the Property; (c) is for the benefit of, and is enforceable by the Department; and (d) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02. Binding upon Owners/Occupants. This Covenant: (a) binds all Owners of the Property, their heirs, successors, and assignees; and (b) the agents, employees, and lessees of the Owners and the Owners' heirs, successors, and assignees. Pursuant to Civil Code section 1471, all successive Owners of the Property are expressly bound hereby for the benefit of the Department; this Covenant, however, is binding on all Owners and Occupants, and their respective successors and assignees, only during their respective periods of ownership or occupancy except that such Owners or Occupants shall continue to be liable for any violations of, or non-compliance with, the Environmental Restrictions of this Covenant or any acts or omissions during their ownership or occupancy.

3.03. Incorporation into Deeds and Leases. This Covenant shall be

incorporated by reference in each and every deed and Lease for any portion of the Property.

3.04. Conveyance of Property. The Owner and new Owner shall provide Notice to the Department and the U.S. EPA not later than 30 calendar days after any conveyance or receipt of any ownership interest in the Property (excluding Leases, and mortgages, liens, and other non-possessory encumbrances). The Notice shall include the name and mailing address of the new Owner of the Property and shall reference the site name and site code as listed on page one of this Covenant. The notice shall also include the Assessor's Parcel Number(s) noted on page one. If the new Owner's property has been assigned a different Assessor Parcel Number, each such Assessor Parcel Number that covers the Property must be provided. The Department shall not, by reason of this Covenant, have authority to approve, disapprove, or otherwise affect proposed conveyance, except as otherwise provided by law or by administrative order.

3.05. Costs of Administering the Covenant to Be Paid by Owner. The Department has already incurred and will in the future incur costs associated with this Covenant. Therefore, the Covenantor hereby covenants for the Covenantor and for all subsequent Owners that, pursuant to California Code of Regulations, title 22, section 67391.1(h), the Owner agrees to pay the Department's costs in administering, implementing, and enforcing this Covenant.

ARTICLE IV RESTRICTIONS AND REQUIREMENTS

4.01. Prohibited Uses. The Property shall not be used for any of the following purposes without prior written approval by the Department pursuant to Health and Safety Code section 25227 and prior written notice to U.S. EPA :

- a) A residence, including single or multifamily housing, mobile homes, or factory-built housing constructed or installed for use as residential human habitation.
- b) A hospital for humans.
- c) A public or private school for persons under 18 years of age.
- d) A day care center or a playground for children.

4.02. Soil Management. Soil management activities at the Capped Property are subject to the following requirements in addition to any other applicable Environmental Restrictions:

- a) No activities that will disturb the soil at or below grade or below concrete (e.g., excavation, grading, removal, trenching, filling, earth movement, mining, or drilling) shall be allowed at the Property without a Soil Management Plan pre-approved by the Department and U.S. EPA in writing.
- b) Any soil brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

4.03. Prohibited Activities. The following activities shall not be conducted at the Property:

- a) Drilling for any water, oil, or gas without prior written approval by the Department.
- b) Extraction or removal of groundwater without a Groundwater Management Plan pre-approved by the Department in writing.
- c) Activity that may alter, interfere with, or otherwise affect the integrity or effectiveness of, or the access to, monitoring, operation, or maintenance of the concrete cover at the Capped Property without prior written approval of the Department and U.S. EPA.

4.04. Written Notice of Covenant and the Presence of Hazardous Substances. Prior to the sale, lease, assignment, or other transfer of the Property, or any portion thereof, the Owner, lessor, or sublessor shall give the buyer, lessee, or sublessee written notice of the existence of this Covenant and its Environmental Restrictions. Prior to recordation of any easement on any portion of the Property, the Owner shall provide a copy of this Covenant to the easement holder to ensure that the easement holder is on notice of the restrictions and requirements of this Covenant. Covenantor shall also provide a copy of this Covenant to all existing Occupants and easement holders of record within 30 days of recording this Covenant.

4.05. Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, investigation, remediation, monitoring, and other activities as deemed necessary by the Department in order to protect human health or safety or the environment. Nothing in this instrument shall limit or otherwise affect the Department's right of entry and access, or authority to take response actions, under any applicable State Law.

4.06. Access for U.S EPA. The U.S. EPA shall have reasonable right of entry and access to the Property for inspection, investigation, remediation, monitoring, and other activities as deemed necessary by the U.S. EPA in order to protect human health or safety or the environment. Nothing in this instrument shall limit or otherwise affect U.S. EPA's right of entry and access, or U.S. EPA's authority to take actions, under any applicable law.

4.07. Access for Implementing Operation and Maintenance. The entity or person responsible for implementing the operation and maintenance activities, if any, shall have reasonable right of entry and access to the Property for the purpose of implementing such operation and maintenance activities until the Department determines that no further operation and maintenance activity is required.

4.08. Inspection and Reporting Requirements. The Owner shall conduct an annual inspection of the Property verifying compliance with this Covenant; shall submit an annual inspection report to the Department for its approval by January 15th of each year; and also send a copy to U.S. EPA. Attached as Exhibit E is a sample format for an annual inspection report. The annual inspection report must include the dates, times, and names of those who conducted the inspection and reviewed the annual inspection report. It also shall describe how the observations that were the basis for the statements and conclusions in the annual inspection report were performed (e.g., drive by, fly over, walk in, etc.). If any violation is noted, the annual inspection report must detail the steps taken to correct the violation and return to compliance. If the Owner identifies any violations of this Covenant during the annual inspection or at any other

time, the Owner must within 10 calendar days of identifying the violation: (a) determine the identity of the party in violation; (b) send a letter advising the party of the violation of the Covenant; and (c) demand that the violation cease immediately. Additionally, a copy of any correspondence related to the violation of this Covenant shall be sent to the Department and U.S. EPA within 10 calendar days of its original transmission.

4.09. Five-Year Review. In addition to the annual reviews noted above, after a period of five (5) years from January 15, 2021 and every five (5) years thereafter, Owner shall submit a Five-Year Review report documenting its review of the remedy implemented and its evaluation to determine if human health and the environment are being adequately protected by the remedy as implemented. The Owner shall submit this report to DTSC, and submit a copy to U.S. EPA. The report shall describe the results of all inspections, sampling analyses, tests and other data generated or received by Owner and evaluate the adequacy of the implemented remedy in protecting human health and the environment. As a result of any review work performed, Department may require Owner to perform additional review work or modify the review work previously performed by Owner.

4.10. Changes to Use or Condition of Property. Any changes to land use, movement of PCB contaminated soils, or discovery of new contamination requires notification to, and may require additional approval from, the U.S. EPA by the Owner and/or Occupant.

4.11. Access for Five-Year Reviews. The entity, person, or persons responsible for Five-Year Reviews shall have reasonable right of entry and access to the Property for the purpose of implementing these activities. Such right of entry and access shall continue until such time as the U.S. EPA and DTSC both determine that no further Five-Year Review activities are required.

ARTICLE V ENFORCEMENT

5.01. Enforcement. Failure of the Owner or Occupant to comply with this Covenant shall be grounds for the Department to require modification or removal of any Improvements constructed or placed upon any portion of the Property in violation of this

Covenant. Violation of this Covenant, such as failure to submit (including submission of any false statement) record or report to the Department, shall be grounds for the Department to pursue administrative, civil, or criminal actions, as provided by law.

5.02. Enforcement Rights of U.S. EPA as Third-Party Beneficiary. U.S. EPA, as a third-party beneficiary, has the right to enforce the Environmental Restrictions contained herein.

ARTICLE VI VARIANCE, REMOVAL AND TERM

6.01. Variance from Environmental Restrictions. Any person may apply to the Department for a written variance from or other modification of any of the Environmental Restrictions imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25223. A copy of the application shall be submitted to the U.S. EPA simultaneously with the application submitted to the Department. No variance or modification may be granted under this paragraph without prior notice and opportunity to comment by U.S. EPA.

6.02. Removal of Environmental Restrictions. Any person may apply to the Department to terminate or otherwise remove any or all of the Environmental Restrictions imposed by this Covenant or terminate the Covenant in its entirety. Such application shall be made in accordance with Health and Safety Code section 25224 and a copy of the application shall be submitted to U.S. EPA simultaneously with the application submitted to the Department. No termination may be granted under this paragraph without prior notice to and opportunity to comment by U.S. EPA.

6.03. Term. Unless ended in accordance with paragraph 6.02, by law, or by the Department in the exercise of its discretion, this Covenant, shall continue in effect in perpetuity.

ARTICLE VII MISCELLANEOUS

7.01. No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof, to the general public or anyone else for any purpose whatsoever.

7.02. Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of Riverside within 10 calendar days of the Covenantor's receipt of a fully executed original. The Covenantor shall also provide copies showing the County Recorder's tracking information of its recording (i.e., document number or book and page number information) to the Department and U.S.EPA within ten (10) days of receiving it from the County Recorder's Office.

7.03. Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (a) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served; or (b) five calendar days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner:
Mark Willett, General Manager
Clow Valve Company
1375 Magnolia Avenue
Corona, California 91719

And

To Department:
A. Edward Morelan, Chief
Cypress Cleanup Branch
Site Mitigation and Restoration Program
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630

To U.S. EPA:
U.S. Environmental Protection Agency
Region IX
Attention: PCB Coordinator (Land Chemicals and
Redevelopment Division)
75 Hawthorne Street
San Francisco, CA 94105-3901

Any party may change its address or the individual to whose attention a Notice is to be sent by giving advance written Notice in compliance with this paragraph.

7.04. Partial Invalidity. If this Covenant or any of its terms are determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall

remain in full force and effect as if such portion found invalid had not been included herein.

7.05. Statutory References. All statutory or regulatory references includesuccessor provisions.

7.06. Incorporation of Exhibits. All exhibits and attachments to this Covenantare incorporated herein by reference.

IN WITNESS WHEREOF, the Covenantor and theDepartment hereby execute this Covenant.

Covenantor: Clow Valve Company

By: 

Date: 11-05-21

Name and Title: Mark Willett, General Manager

Department of Toxic Substances Control:

By: 

Date: 11-18-2021

Name and Title: A. Edward Morelan, Chief
Cypress Cleanup Branch
Site Mitigation and Restoration Program

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of ~~California~~ ^{Iowa}
County of Mahaska

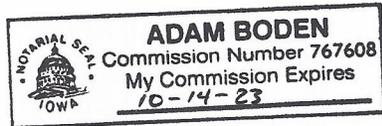
On November 5, 2021 before me,

Adam Boden
(space above this line is for name and title of the officer/notary),

personally appeared Mark Willett, who 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.

I certify under PENALTY OF PERJURY under the laws of the State of ~~California~~ ^{Iowa} that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,



Adam Boden (seal)

Signature of Notary Public

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Los Angeles

On November 18, 2021 before me,

Dana Christine Orozco, Notary Public
(space above this line is for name and title of the officer/notary),

personally appeared A. Edward Morelan, who 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.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,



Dana Christine Orozco (seal)
Signature of Notary Public

Exhibit A – “Legal Description” – APN 107-030-022-3

Exhibit B – “Plot Plan” - APN 107-030-022-3

Exhibit C – “Capped Property” - Legal Description

Exhibit D – “Capped Property” - Sketch

Exhibit E – “LUC Sample Annual Inspection Report”

EXHIBIT "A"

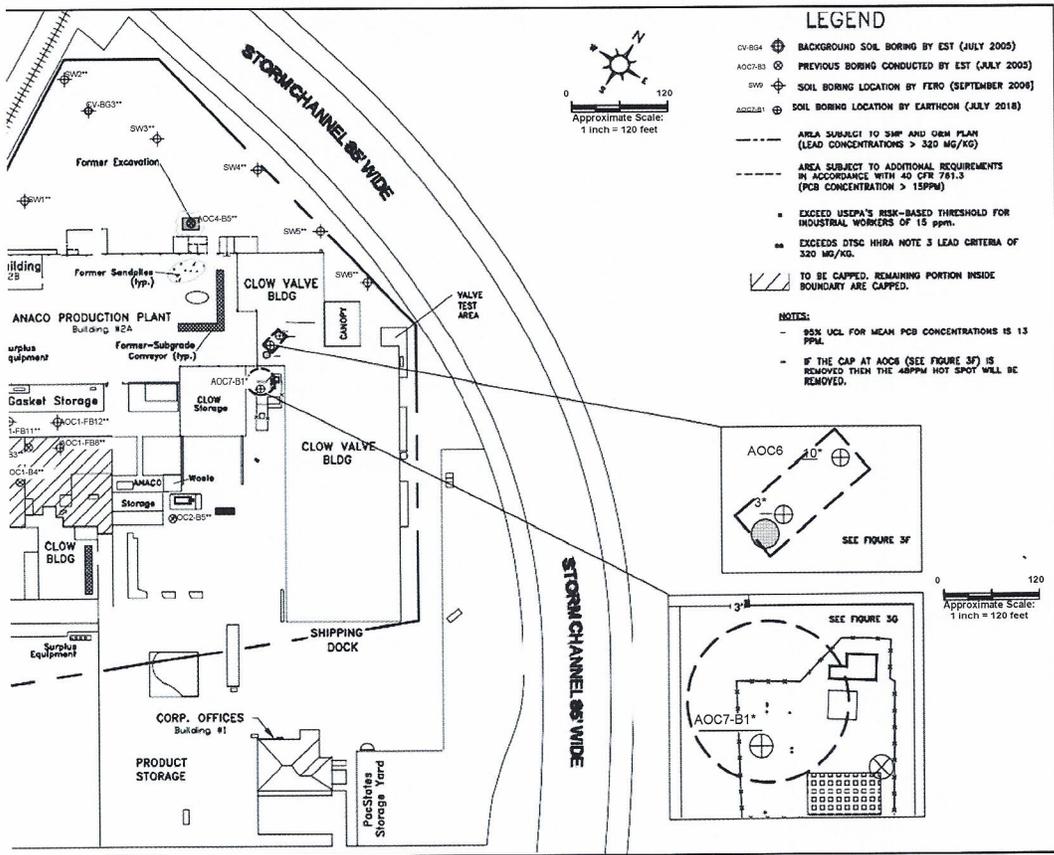
LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CORONA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONALIZED SURVEY OF THE RANCHO EL SOBRANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATING COMPANY, AS SHOWN BY MAP ON FILE IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, BOUNDED AS FOLLOWS: ON THE SOUTHEAST BY THE SOUTHWESTERLY EXTENSION OF THE NORTHWEST LINE OF MAGNOLIA AVENUE, AS SHOWN ON RECORD OF SURVEY ENTITLED "RECORD OF SURVEY OF A PORTION OF LOTS 11, 12, 13, 14, 15, IN BLOCK 63 OF RIVERSIDE LAND AND IRRIGATING COMPANY AND A PORTION OF SECTIONS 29 AND 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, SAN BERNARDINO BASE AND MERIDIAN" ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS; ON THE WEST BY THE EASTERLY LINE OF THE PORPHYRY SPUR OF THE ATCHISON, TOPEKA, AND SANTA FE RAILWAY COMPANY; AND ON THE NORTHEAST BY THE SOUTHERLY AND SOUTHWESTERLY LINE OF PARCELS 5 TO 11, INCLUSIVE, OF SAID RECORD OF SURVEY ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS.

EXCEPTING THEREFROM THAT PORTION GRANTED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER DISTRICT CONSERVATION DISTRICT BY DEED RECORDED OCTOBER 22, 1984 AS INSTRUMENT NO. 84-227367 AND RE-RECORDED FEBRUARY 11, 1985 AS INSTRUMENT NO. 85-028214 BOTH OF OFFICIAL RECORDS.

APN: 107-030-022-3



CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



EARTHCON CONSULTANTS CA, INC
1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

LUC Exhibit B
SITE PLAN WITH
AREAS SUBJECT TO
THE LAND USE COVENANT

DRAWN: AB	CHECKED: JB	DATE: 05/12/21	FIGURE: 1A
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EXHIBIT ^{II}C ^{II}
LEGAL DESCRIPTION
Portion of APN 107-030-022

BEING IN THE CITY OF CORONA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA. THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONIZED SURVEY OF THE RANCHO EL SOBRANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATION COMPANY, AS SHOWN ON MAP FILED IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF COMPTON AVENUE (ALSO KNOWN AS EL CAMINO AVENUE) AND THE CENTERLINE OF TEMESCAL CREEK CHANNEL AS SHOWN ON RECORD OF SURVEY FILED IN BOOK 71, PAGES 7 THROUGH 11, INCLUSIVE, OF RECORDS OF SURVEY IN THE OFFICE OF THE COUNTY RECORDER OF RIVERSIDE COUNTY, THENCE, SOUTHEASTERLY ALONG THE CENTERLINE OF SAID TEMESCAL CREEK CHANNEL, SOUTH 79°49'49" EAST (SHOWN AS S79°48'46" EAST ON SAID RECORD OF SURVEY), 477.06 FEET; THENCE, LEAVING SAID CENTERLINE, SOUTH 10°22'04" WEST, 84.25 FEET TO THE TRUE POINT OF BEGINNING FOR THIS DESCRIPTION, THENCE, NORTH 79°37'56" WEST, 269.59 FEET; THENCE, SOUTH 56°04'15" WEST, 116.07 FEET TO A POINT ON THE EASTERLY LINE OF A.T.&S.F. RAILROAD RIGHT OF WAY AS SHOWN ON SAID RECORD OF SURVEY; THENCE, SOUTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, SOUTH 05°28'23" EAST, 800.61 FEET; THENCE, LEAVING SAID EASTERLY RIGHT OF WAY, NORTH 83°44'45" EAST, 203.93 FEET; THENCE, NORTH 47° 08'29" EAST, 630.00 FEET; THENCE, NORTH 34°06'13" WEST, 404.00 FEET; THENCE, NORTH 79°37'56" WEST, 155.41 FEET TO THE TRUE POINT OF BEGINNING

TOGETHER WITH TWO AREAS WITHIN THE ABOVE DESCRIBED EASEMENT, THE FIRST BEING DESCRIBED AS FOLLOWS: AREA 1, COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF COMPTON AVENUE (ALSO KNOWN AS EL CAMINO AVENUE) AND THE CENTERLINE OF TEMESCAL CREEK CHANNEL AS SHOWN ON RECORD OF SURVEY FILED IN BOOK 71, PAGES 7 THROUGH 11, INCLUSIVE, OF RECORDS OF SURVEY IN THE OFFICE OF THE COUNTY RECORDER OF RIVERSIDE COUNTY, THENCE, SOUTHEASTERLY ALONG THE CENTERLINE OF SAID TEMESCAL CREEK CHANNEL, SOUTH 79°49'49" EAST (SHOWN AS S79°48'46" EAST ON SAID RECORD OF SURVEY), 477.06 FEET; THENCE, LEAVING SAID CENTERLINE, SOUTH 10°22'04" WEST, 214.25 FEET; THENCE, SOUTH 79°49'49" EAST, 75.15 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 1; THENCE, SOUTH 79°49'49" EAST, 30.00 FEET; THENCE, SOUTH 10°10'11" WEST, 30.00 FEET; THENCE, NORTH 79°49'49" WEST, 30.00 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "A". THENCE, NORTH 10°10'11" EAST, 30.00 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 1.

EXHIBIT "C"
LEGAL DESCRIPTION
(Continued)

AREA 2, COMMENCING AT THE POINT HEREINBEFORE REFERRED TO AS POINT "A". THENCE, SOUTH 10°10'11" WEST, 13.15 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 2; THENCE, SOUTH 10°10'11" WEST, 60.00 FEET; THENCE, SOUTH 79°49'49" EAST, 60.00 FEET; THENCE, NORTH 10°10'11" EAST, 60.00 FEET; THENCE, NORTH 79°49'49" WEST, 60.00 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 2.

THE ABOVE DESCRIBED GROSS AREA EASEMENT CONTAINS 422,249 SQ.FT., 9.694 ACRES MORE OR LESS.

THE ABOVE DESCRIBED AREA 1 CONTAINS 900 SQ.FT., 0.021 ACRES MORE OR LESS.

THE ABOVE DESCRIBED AREA 2 CONTAINS 3,600 SQ.FT., 0.083 ACRES MORE OR LESS.

As shown on Exhibit "8" attached hereto and by this reference made a part hereof

Prepared by:



Douglas Boynton, PLS4787

(562) 426-6464

March 17, 2020

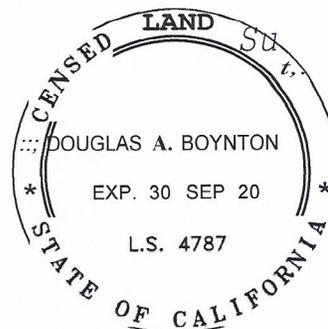
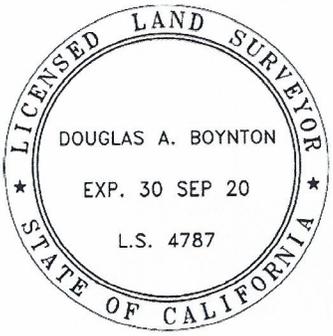
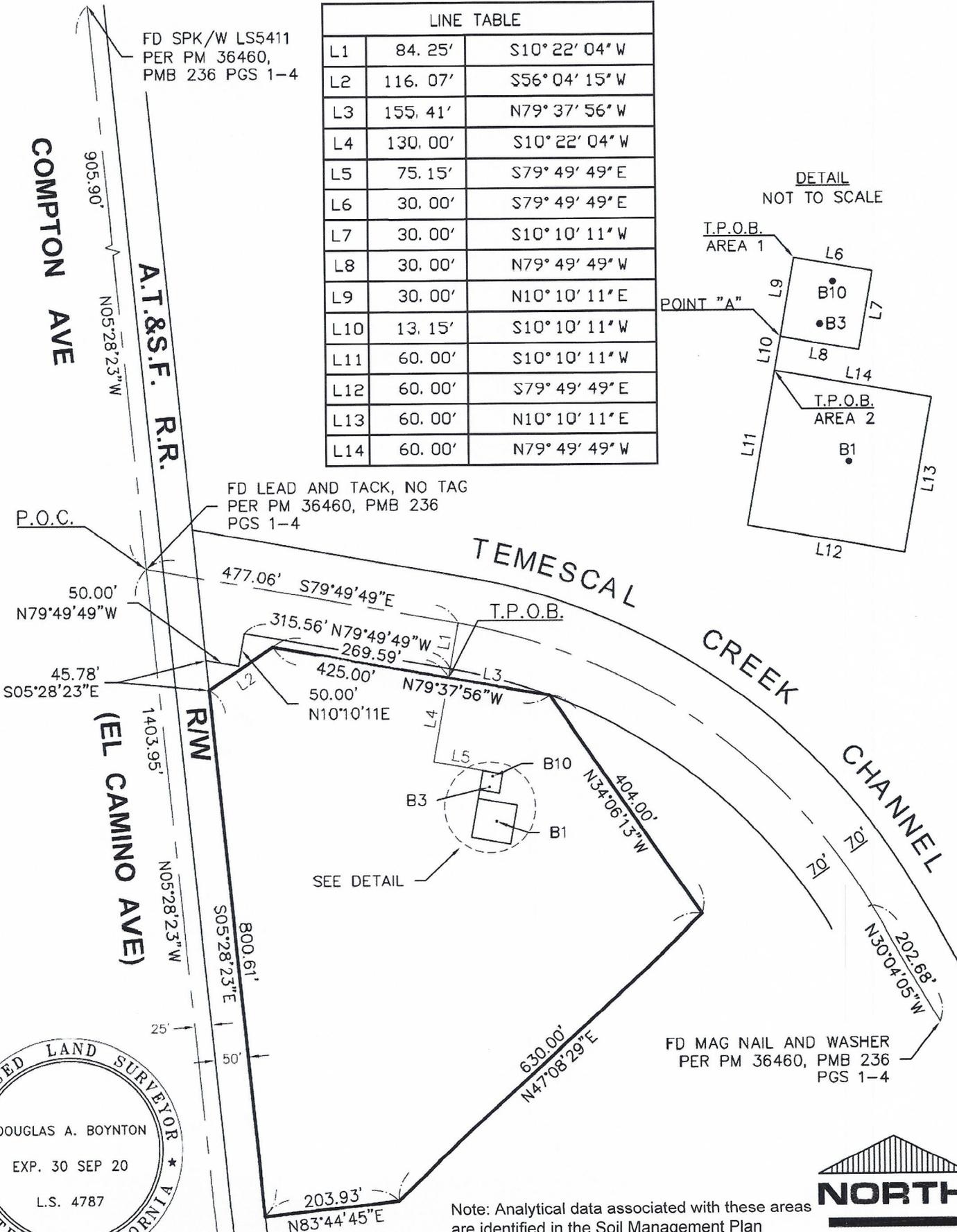
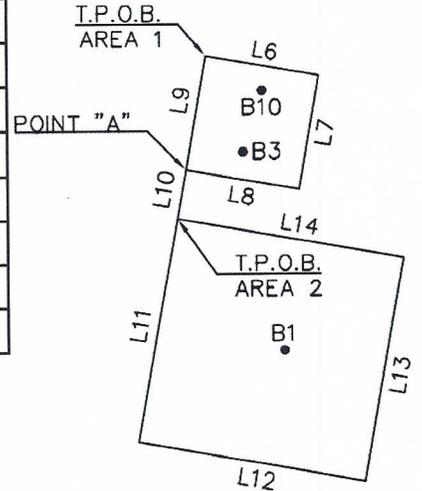


EXHIBIT "D"

Sketch to accompany Legal Description

LINE TABLE		
L1	84.25'	S10°22'04"W
L2	116.07'	S56°04'15"W
L3	155.41'	N79°37'56"W
L4	130.00'	S10°22'04"W
L5	75.15'	S79°49'49"E
L6	30.00'	S79°49'49"E
L7	30.00'	S10°10'11"W
L8	30.00'	N79°49'49"W
L9	30.00'	N10°10'11"E
L10	13.15'	S10°10'11"W
L11	60.00'	S10°10'11"W
L12	60.00'	S79°49'49"E
L13	60.00'	N10°10'11"E
L14	60.00'	N79°49'49"W

DETAIL
NOT TO SCALE



Note: Analytical data associated with these areas are identified in the Soil Management Plan Figures 3A, 3F, 3G, and 3K.

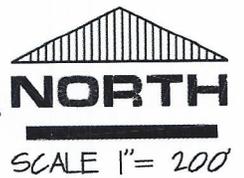


EXHIBIT E

LAND USE COVENANT SAMPLE ANNUAL INSPECTION REPORT (2 Pages)

Site name:

Site address:

Current Site owner:

Date and times of inspection:

Name(s) of individual(s) who performed inspection:

How inspection observations were made (e.g. drive-by, fly-over, walking the Property):

1. Since the last annual inspection, has there been a change in the land use, such that there are now residences, a hospital for humans, a public or private school for persons under 21 years of age, or a day care center for children on the restricted Property?
 Yes No Not an applicable restriction
2. Since the last annual inspection, has the soil been disturbed on the restricted Property?
Was evidence of soil disturbance observed on the restricted Property during the inspection?
 Yes No Not an applicable restriction
3. Since the last annual inspection, has there been any drilling on the restricted Property?
Was evidence of drilling observed on the restricted Property during the inspection?
 Yes No Not an applicable restriction

Cap Condition

4. Since the last annual inspection, has there been any damage to, disturbance of, or modifications to the existing building foundation and/or surrounding pavement that serves as the cap over contaminated soil?
 Yes No

5. Has there been any damage to, disturbance of, or modifications to the asphalt/concrete Cap covering the restricted Property?

Yes No

Land Use Covenant Compliance

6. Has there been a change in the land use of the property from commercial/industrial?

Yes No

If the response to any of the above questions is yes, describe the circumstances.

Photos should be attached to this report that show the use of the Restricted Property at the time of the inspection and the condition of any Caps on the restricted Property. Photos showing any cracks in or damage to the Cap should also be included.

I certify under penalty of law that this document and all attachments were prepared by me or under my direction or supervision. With the exception of any areas of non-compliance noted above, all uses and activities on the restricted Property were found to be in compliance with the restrictions and requirements of the Land Use Covenant. Based on my personal knowledge or inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature of Property Owner or Representative

Date

Print Name

Title

APPENDIX

E SOIL MANAGEMENT PLAN



SOIL MANAGEMENT PLAN

**CLOW VALVE COMPANY
1375 MAGNOLIA AVENUE
CORONA, CALIFORNIA**

PREPARED FOR:

**CLOW VALVE COMPANY
1375 MAGNOLIA AVENUE
CORONA, CALIFORNIA 92879**

PREPARED BY:

**EARTHCON CONSULTANTS CA, INC.
1100 TOWN & CENTER ROAD, SUITE 200
ORANGE, CALIFORNIA 92868**

EARTHCON PROJECT NUMBER. 04.20150013.17

JULY 23, 2021

Certification:

Soil Management Plan

**Clow Valve
1375 Magnolia Avenue
Corona, California**

Prepared for:

**Clow Valve
1375 Magnolia Avenue
Corona, California 92879**

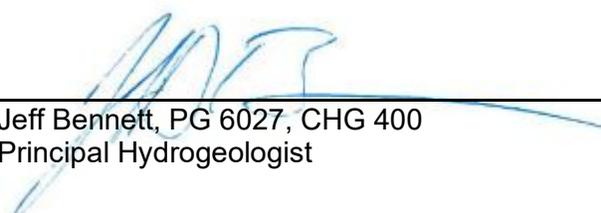
June 23, 2021

EarthCon Consultants CA, Inc. (EarthCon) presents conclusions herein based solely upon the agreed upon scope of work outlined in this plan. EarthCon makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. It is possible that information exists beyond the scope of this plan. Additional information, which was not found or available to EarthCon at the time of writing this plan, may result in modification of the conclusions presented. This plan is not a legal opinion. The services performed by EarthCon have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

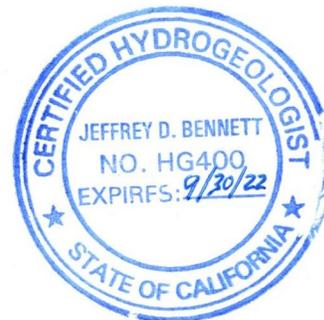
Signed:



Rebecca Sundilson
Senior Scientist



Jeff Bennett, PG 6027, CHG 400
Principal Hydrogeologist



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Appendix

Appendix A	Site Health and Safety Plan (HASP)
Appendix B	State and Federal Hazardous Waste Criteria
Appendix C	Land Use Covenant
Appendix D	Grading Plans and Permit

1.0 INTRODUCTION AND REGULATORY STATUS

On behalf of Clow Valve Company (Clow), a Division of McWane, EarthCon Consultants CA, Inc (EarthCon), has prepared this Soil Management Plan (SMP) to guide future on-site activities that disturb the soil at the property located at 1375 Magnolia Avenue in Corona, California (Site; see Figures 1 and 2). Clow is currently in the process of implementing the field activities as identified in the Corrective Measures Implementation Workplan (CMIWP) for the Site. Proposed CMIWP activities will be conducted under the supervision of the Department of Toxic Substances Control (DTSC) and in accordance with the Corrective Action Consent Agreement between the California Department of Toxic Substances Control (DTSC) and Clow [Docket No. SPRD 00/01SCC-4208, March 2002]. The DTSC-approved corrective measures will be implemented to yield conditions suitable for continued commercial/industrial use. The entire Site will be restricted for industrial use in accordance with the future Land Use Covenant (LUC). Therefore, the future use of the Site must be in accordance with the deed restrictions identified in the proposed LUC. (See Appendix C draft LUC.)

The purpose of this SMP is to provide guidance for management of soils in the event soil disturbance is required during future construction and maintenance activities on-Site. Clow intends to implement the SMP during grading and capping activities at AOC1 and AOC5 associated with the approved CMIWP. Additionally, to support the future Site activities, this SMP has also been prepared to facilitate implementation of future projects and compliance with applicable laws. The current plan for the Site is industrial redevelopment with one or more tilt-up type building(s). This will entail limited over-excavation and re-compaction of the soil on-Site under the future building(s) and concrete truck courts and drive aisles for geotechnical purposes. Current plans are for Clow to retain ownership and redevelop the property in cooperation with a long-term lessee. In addition, both the DTSC and USEPA will be notified of such activities prior to implementation, as specified in Section 6.1.1.

A summary of previous investigations as well as elements of the SMP are described in detail in the following sections.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS

In October of 2000, the DTSC conducted a Compliance Evaluation Inspection at the Site and determined that there may have been potential releases of hazardous waste into the environment. A Corrective Action Consent Agreement (CACA) was prepared for the Site in October 2001 and was subsequently revised on March 6, 2002.

As required by the CACA and through negotiations with DTSC a Preliminary Endangerment Assessment and Facility Work plan was prepared (June 21, 2004) was prepared, which identified the following nine (9) areas of concern (AOC) at the Site (see Figure 2 and Figures 3A through 3J):

- AOC1 – Rail Spur Area (including area of diesel impact)
- AOC2 – Chip-Bin Storage Area
- AOC3 – Water Pressure Test Area
- AOC4 – Former Iron Foundry Sand Cleanup Area
- AOC5 – Oil-Stained Pad (eastern portion of AOC1)
- AOC6 – Former Asphalt Dip Tank
- AOC7 – Transformer Area 1
- AOC8 – Transformer Area 2
- AOC9 – Former Test-Pond (filled)

Upon review of the revised PEA, the DTSC determined that interim measures were necessary due to the presence of a stockpile of dry, unconsolidated foundry sand waste located in the Rail Spur Area (AOC1).

Approximately 393 cubic yards of stockpile material containing elevated concentrations of copper, lead, and zinc was removed from the Site and transported to the Chemical Waste Management Class I disposal facility in Kettleman City, California in June 2005.

Additional investigation included the following:

- A soil sampling investigation was subsequently conducted in June and July of 2005 and the

results were provided in a document titled *Preliminary Summary of Site Assessment Results and Proposed Further Assessment* (November 29, 2005).

- Further delineation of the vertical and lateral extent of subsurface impacts was conducted at AOC1, AOC2, AOC3, AOC5, and AOC7 in September 2006 along with Site wide near surface soil sampling, to address a DTSC concern that metal impacted fill material may have been used on-Site. In addition, one groundwater well was installed at AOC1 to facilitate groundwater sampling. Results from this investigation were provided in a document titled *Report of Findings* (Fero, December 18, 2006).
- Groundwater sampling results from 2006 investigation showed a low level of TCE (1.43 ug/L, which is below the Maximum Contaminant Level of 5 ug/L) in groundwater beneath the Site. Given the absence of any chlorinated solvent use at the Site, the TCE detection was postulated to be related to an off-Site source.

In October 2015, Clow and DTSC reached a mutual decision to restart the stalled process due to the economic uncertainty associated with Site redevelopment. Clow subsequently contracted with EarthCon to assist with restarting the process and revising the Site Corrective Measures Study in the absence of site redevelopment. EarthCon and Clow met with the DTSC on March 15, 2016 to provide an overall project update and identify a path to move forward as requested. EarthCon evaluated the previous environmental activities, site assessment investigations, and the associated analytical results. The analytical results from the previous investigations are illustrated on Figures 1 through 3K. The results from the previous investigations were evaluated and subsequently included in a Site-specific Human Health Risk Assessment.

In February 2017, two additional groundwater monitoring wells were installed on-Site as identified by the locations illustrated on Figure 2. Installation of these wells allowed for calculation of the Site-specific groundwater flow direction and gradient, which confirmed that MW-1 was appropriately positioned to evaluate potential groundwater impacts related to the former TPH-d release at AOC-1. Groundwater monitoring events were conducted in March 2017 and subsequently in May 2017. Groundwater samples reported concentrations of various compounds below their associated MCLs with the exception of arsenic (March 2017 event only). However, the arsenic concentrations reported in MW-1 through MW-3 was within the local background arsenic concentrations. Therefore, it was determined that groundwater would not be incorporated into the overall scope of this CMS and the wells were removed.

The historical data, Human Health Risk Assessment, and current Site operations were used to prepare a CMS for the Site (EarthCon, 2018). The CMS identified that excavation (AOC7) and capping in place (AOC1, AOC5, and AOC7) as the selected remedy. However, due to the presence of PCBs at AOC-7, additional Site assessment activities were conducted in July 2018, October 2018, and January 2019 under the oversight of the USEPA. The USEPA also required that further assessment of potential PCB impacted soil would be evaluated at AOC3 and AOC6 as well. The results were summarized in a document titled *Risk-Based Approval Application 40 CFR 761.61 (c)(1)* (EarthCon, 2019). Based on the results from the PCB related Site assessment activities, EarthCon recommended that rather than excavating PCB-impacted soil at AOC7 that the Site remained capped, with the existing concrete cap having the ability to protect industrial workers from exposure to PCB concentration in the underlying soil. In a letter dated April 23, 2019, the USEPA approved the application with the conditions including preparation of the following: Deed Restriction, Operations and Maintenance Plan, and Soil Management Plan, and PCB Cleanup Report (CMI Report).

Upon receipt of the approval letter from the USEPA, the DTSC approved the CMS in a letter dated May 16, 2019. The CMIWP presented details associated with the cap design, installation and implementation schedule for AOC1 and AOC5. The proposed schedule for the evaluation and repair of the exiting ground cover in AOC2, AOC4, and AOC9 is also addressed. Additionally, potential cap repair and/or construction, if necessary, associated with AOC3, AOC6, and AOC7 was identified to require the oversight of the USEPA.

3.0 SOIL MANAGEMENT

3.1 Pre-Field Activities

Requirements of the Soil Management Plan apply to a portion of the Site depicted in Figure 4, a land survey of an area of the Site subject to 40 CFR 761.3 (PCB impacted soil), and an area subject to SMP and O&M Plan (lead impacted soil at or above 320 mg/kg). Figure 4 was prepared by a California licensed Professional Land Surveyor. Figure 4A, "Site Plan With Areas Subject to Land Use Covenant", depicts historical Site features and identifies the boundary of the area to be capped during the Corrective Measures implementation in addition to depicting the boundary of the area with lead concentrations exceeding 320 mg/kg (the same as in the land survey).

Prior to the commencement of activities that disturb soil, designated Site personnel will ensure that all proper underground utility clearances are conducted and marked with white paint as appropriate. Underground Services Alert (USA) will be subsequently notified at least 72-hours prior to initiation of field activities. Persons conducting soil disturbing activities will coordinate with knowledgeable Site personnel to determine the location of subsurface utilities and a geophysical survey will be conducted if necessary. In addition, field activities should not occur without a Site-specific Site Health and Safety Plan (HASP), elements of which should be discussed daily during tail-gate safety meetings. The current HASP for the Site, associated with the implementation of the CMIWP by Clow, is provided for reference in Appendix A. Updated health and safety documentation (e.g. HAZWOPER) for on-Site personnel will be provided to the DTSC prior to implementing field work.

Site personnel will notify the DTSC a minimum of 30 days before field work begins (see Section 6.1.1). Should the scope of work involve management of soil containing PCBs over 1 part per million (ppm) (AOC-6 or AOC-7), Site personnel will also notify the USEPA¹. Notification to the DTSC and USEPA may require the submittal of documentation, such as excavation plan, soil confirmation sampling plan, waste profiling, transportation plan, destination facility, and City and/or County approved grading plans, to show how the soil under the LUC will be disturbed and ensure proper soil management. See Section 6.1 for details.

3.1.1 Work Description

In accordance with the CMIWP, grading operations within areas with lead impacted soil will involve

¹ The Site Cleanup criteria for PCBs is based on the USEPA approved industrial cleanup level of 15 mg/kg. However, McWane may elect to remove impacted soil exceeding 1 mg/kg PCBs in order to remove references to PCBs from the LUC.

moisture conditioning for dust suppression purposes and recompacting of soil in place. Areas AOC-1 and AOC-5 depicted on Figure 4A and in Appendix D, Drawing No. 20-026P will be graded and paved to establish a barrier between lead contaminated soil and surface receptors and also to facilitate proper Site drainage. Moisture will be applied to soil prior to recompacting it within the borders of areas AOC1 and AOC5. The soil will not be moved to other areas of the project. The project is not anticipated to generate any excess lead contaminated soil to be transported from the Site for off-Site disposal so long as current conditions are encountered.

During Site redevelopment activities, if soil in the vicinity of AOC-6 and/or AOC-7 with PCB concentrations exceeding 1 mg/kg is disturbed, that soil will be removed and managed appropriately. Likewise, areas identified by samples AOC1-B3, AOC1-B17, SW-2, and SW-3 containing lead concentrations exceeding 1,000 mg/kg will be removed and appropriately managed, as discussed further in Sections 4.0, 4.1.1. and 4.2.1.

3.1.2 Unknowns

DTSC will be notified within 24 hours should previously unknown features such as underground storage tanks and/or odorous/discolored soil be encountered during soil excavation or grading activities. If such conditions are encountered, that area will be isolated and samples will be collected for laboratory analysis to assess the nature of the unknown condition.

3.1.3 Off Site Disposal

Any soil brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law. In the event soil is excavated from areas identified on Figure 3K with lead concentrations detected at or above California Code of Regulations, Title 22, Toxicity Threshold Limit Concentrations (1,000 mg/kg) the soil will be profiled and transported to an off-Site permitted hazardous waste treatment or disposal facility consistent with the procedures presented in Section 4 and Section 5.

For disposal purposes, in-situ sampling of PCB-impacted soil is required prior to excavation. Prior to excavating soil from areas identified on Figure 3F or Figure 3G with PCB concentrations above 1 mg/kg, McWane will provide a PCB Removal Workplan, including an in-situ soil sampling plan to US EPA for approval. Consistent with the procedures presented in Section 4 and Section 5, excavated soil will be profiled and soil at or above 50 ppm PCBs will either be transported to a TSCA landfill or with a TSCA

approval to a RCRA hazardous waste landfill. Additionally, McWane will notify USEPA, at a minimum 30 days prior to any soil disturbing activity at the Site, further details are provided in Section 6.1.1(b).

3.1.4 Soil Import

If needed, any off-Site soils brought to the Site for use as backfill (import fill) must be tested in general conformance with the DTSC, *Information Advisory Clean Imported Fill Material* document (DTSC, 2001). Import fill shall be tested for target compounds based on the location of the fill source area; however, at a minimum, the fill should be tested for the following constituents:

- TPHcc using EPA Method 8015;
- VOCs using EPA Method 5035/8260B;
- PCBs using EPA Method 8082 (using soxhlet extraction method 3540C); and
- Title 22 metals using 6010B/7271 A

Other analyses may be required contingent on the source of the import fill or recommendations by the supervising PG or PE. A minimum of one sample will be collected for laboratory analysis per each 1,000 tons, up to 5,000 tons, of import fill per borrow site (single source). For quantities above 5,000 tons of import fill per borrow site (single source), one additional sample will be collected for laboratory analysis per each additional 5,000 tons of import fill. In-situ samples (from the borrow source) will be collected randomly from surface, two feet, and five feet below ground surface, and from the bottom of the excavation if deeper than 5 feet. For PCBs, import soil shall contain less than 1 mg/kg of total PCBs.

3.2 Stockpile Management

Prior to initiation of earthmoving/soil disturbing activities, areas for stockpiling excess soil should be established to control contact by Site employees and dispersal into the environment. Management of excavated soil and subsequent characterization for proper off-Site disposal to an appropriate disposal facility is discussed in further detail in Section 4.

3.3 Air Quality Management

The constituents of concern at the Site do not include Volatile Organic Compound (VOC) contaminated soil. Therefore, Site activities conducted in accordance with this SMP are not expected to require a Rule 1166 permit under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). However, based on the metal and PCB concentrations present in

the soil, earth-moving activities are required to be conducted in accordance with SCAQMD Rule 1466. Rule 1466 requires training and certification from SCAQMD, monitoring, notification, and record keeping.

Ambient air monitoring (AAM) will be conducted during on-Site activities to quantify dust concentrations in the work area breathing zone and at the Site fence line. In accordance with SCAQMD Rule 1466, AAM will be conducted to determine if a two (2) hour average PM₁₀ concentration exceeds 25 micrograms per cubic meter (ug/m³). If the average concentration has been exceeded, earth-moving activities will cease, and dust suppression measures will be implemented as needed until the PM₁₀ concentration is equal to or less than 25 ug/m³ averaged over 30 minutes. At a minimum, PM₁₀ AAM will include one (1) upwind monitor and one (1) downwind monitor which will record the collected direct-reading data every 10 minutes or less using a DustTrak, or equivalent. In addition, when earth-moving activities occur, the wind direction and speed will also be monitored using a weather station.

AAM data will be collected by a qualified designee at each monitoring location (which will include on-Site and fence line locations). Measurements will be recorded via electronic data logging and/or an air monitoring log. Windspeed and direction will be monitored and, if the wind speed is greater than 15 mph average over a 15-minute period or instantaneous wind speeds greater than 25 mph, earth moving activities will cease.

AAM monitoring for dust within the on-Site work zones will be conducted on a continuous basis using a direct reading instrument such as a Miniram, or equivalent. The detected values will be compared to the DTSC required criteria for total dust of 0.05 mg/m³.

During excavation activities, Site workers will implement standard engineering controls available in the industry to manage dust emissions. Minimizing dust will also minimize potential hazards associated with airborne contaminants. The following table summarizes the control measures for the different activities:

Activity	Control Measure
Earth Moving Activities	<ul style="list-style-type: none"> - Apply water to prevent generation of visible dust plumes - Adequately wet to the depth of earth moving activity and allow time for penetration. - Setup fencing with windscreen (50+/-5% porosity). - Stabilize soil once earth-moving activities are completed.

Activity	Control Measure
	<ul style="list-style-type: none"> - If earth-moving activities will not occur for three (3) or more consecutive days, application of a chemical stabilizer to potential sources of fugitive dusts, diluted to the concentration required to maintain a stabilized surface for the period of inactivity, is required. - Within five (5) days of excavation, excess soil will be removed from the site.
Export of Material	<ul style="list-style-type: none"> - Pre-water material prior to loading into the hauling trucks, if applicable. - Provide water while loading/unloading to reduce visible dust plumes. - Post signs stating that vehicle speed will be limited on-Site to 15 mph or less. - Maintain at least six inches of freeboard on the hauling trucks. - Stabilize material while transporting. Use tarps or other suitable enclosures on the hauling trucks. - Comply with track-out prevention/mitigation requirements. Stabilize surface of vehicular traffic by applying dust suppressant, as needed.
Truck Loading	<ul style="list-style-type: none"> - Pre-water material prior to loading. - Empty loader bucket slowly so no dust plumes are created. - Ensure that freeboard exceeds six inches. - Ensure that the loader bucket is close to the truck to minimize drop height while loading. - Completely tarp the truck prior to leaving site.
Off-Site/ Perimeter	<ul style="list-style-type: none"> - Track-out will not extend beyond 25 feet of property line. Remove track-out each day using a vacuum sweeper equipped with a filter(s) rated by the manufacturer to achieve 99.97% capture efficiency for 0.3 micron particles. - Use shaker plates (minimum of 24 feet long and 10 feet wide) and stabilized construction entrance. - Sweep the immediate surroundings continuously or on an as-needed basis. - Clean soil from exterior of trucks prior to leaving site, if applicable. - Apply water as required.
Backfilling	<ul style="list-style-type: none"> - Apply water to prevent generation of visible dust plumes. - Empty loader buckets slowly so dust plumes are not created. - Stabilize material when not actively handling. - Stabilize material during handling. - Stabilize soil at completion of activity. - Minimize drop height from loader bucket.

Site personnel will provide an on-Site dust control supervisor that will be present during earthmoving activities to expeditiously employ sufficient dust control measures to ensure compliance with SCAQMD Rule 1466. Site personnel will have previously completed the SCAQMD Fugitive Dust Control Class and subsequently received a Certificate of Completion. Certificates will be retained with the project related records in accordance with the project record keeping

requirements identified in Section (h) of Rule 1466.

Site personnel will electronically notify the SCAQMD Executive Officer of the intent to conduct soil disturbing activities a minimum of 72 hours, and no more than 30 days, prior to such activities. Requirements of notification are listed in Section (f)(1) of Rule 1466. In addition, the Executive Officer must also be notified electronically of any exceedance of the PM₁₀ emission limit within 72 hours of occurrence (See Section (f)(2) of Rule 1466).

3.4 Storm Water Management

Construction activities that result in land disturbance of 1 acre or greater are regulated by the NPDES *General Permit for Storm Water Discharges Associated with Construction Activity* (Construction General Permit) administered by the State Water Resources Control Board. However, land disturbance of less than 1 acre may be identified as a “Significant Redevelopment Project” according to the City of Corona. This designation requires preparation of a Water Quality Management Plan (WQMP) per the City of Corona Public Works Department for the Site. Therefore, field work associated with the capping of AOC1 and AOC5 (less than 1 acre) requires the preparation of a WQMP in accordance with the City of Corona and/or County of Riverside guidance is required prior to initiating field work, elements of which will be incorporated into Grading Plans for the Site. Future Site activities associated with redevelopment will involve a project area of greater than 1 acre; therefore, preparation of a construction Storm Water Pollution Prevention Plan (SWPPP) will be required prior to initiation of earth disturbing activities.

3.5 Noise Management

Soil disturbing activities at the Site will be conducted from Monday through Friday between the hours of 7:00 AM and 5:00 PM, without causing a nuisance, as defined in the City of Corona municipal code. Noise will be monitored on an as-needed basis with a calibrated noise level meter at the perimeter of the Site and recorded on field logs. Whenever possible, Site workers will conduct the more noise intense activities during less intrusive times such as mid-morning to mid-afternoon. Internal combustion equipment will be equipped with proper and well-maintained mufflers. Access doors and hatches will remain closed when the units are in operation. The Site is located in an industrial area; therefore, noise is not expected to be a concern.

4.0 WASTE MANAGEMENT & CLASSIFICATION

4.1 Waste Management

Any soil removed from the areas of higher lead levels (AOC1-B3, AOC1-B17, SW-2, and SW-3) identified on Figure 3K will be placed into stockpiles and sampled. As noted previously, areas for stockpiles of excess soil will be designated prior to implementation of field activities. Areas with unpaved surfaces will have the upper surface wheel rolled and lined with thick gauge plastic sheeting prior to accepting the excess soil. Soil stockpiles will be covered with thick gauge plastic sheeting at the end of each working day and perimeter berms will be constructed to provide run-on and run-off control. Stockpiled excess material will be characterized prior to transport to an appropriate off-Site disposal facility as discussed in Section 4.2. Stockpiled soil must be transported to a permitted off-site disposal facility within 90 days.

However, soil and/or concrete containing PCBs, that has not been previously characterized, must be tested in-situ prior to excavation and cannot be stockpiled. Further details on the PCB sampling protocol will be provided to the USEPA in a PCB Removal Workplan that will be approved by USEPA prior to implementation.

Following removal of the lead and PCBs hot spot areas, the planned future redevelopment of the Site may include removal of the concrete and asphalt and over-excavation and re-compaction of the soil as part of geotechnical requirements. As the soil is of economic value, it will be the intent of the future redevelopment to reuse all soil excavated during geotechnical grading on Site. Future Site redevelopment must include construction of a cover in the area subject to the Soil Management Plan and Operation & Maintenance Plan as depicted on Figure 4A to prevent exposure to contaminated soil by future Site occupants.

4.1.1 PCBs and Lead

If Site remedial activities during capping of AOC1 and AOC5 include soil disturbance in the vicinity of lead "hot spot" areas exceeding 1,000 mg/kg, or in the event future Site redevelopment activities warrant the removal of soil from areas with elevated lead concentrations associated with sample locations AOC1-B3, AOC1-B17, SW2, and SW3, soil hot spots will be excavated and transported off-Site to Soil Safe facility in Adelanto, CA, the Waste Management facility in Kettleman Hills, CA, or another waste disposal facility subject to DTSC approval upon review of waste profile report.

As noted previously, the Site cleanup criteria for PCBs is based on the USEPA approved Site-specific industrial cleanup level of 15 mg/kg. However, McWane may elect to remove impacted soil exceeding 1 mg/kg PCBs in order to remove references to PCBs from the LUC. PCB “hot spot” areas (>15 mg/kg) in AOC6 and AOC7 are identified on Figure 4 as the area subject to PCB management in accordance with 40 CFR 761.61. In the event soil from this area is being disturbed during future Site development activities following Corrective Measures Implementation, soil with PCB concentrations of 15 ppm or greater will be removed as required by the USEPA², and soil with PCB concentrations greater than 1 ppm may also be removed at McWane’s discretion under the oversight of the USEPA. Once sampled in-situ and characterized, excavated PCB-impacted soil will be loaded directly into labeled containers and securely covered pending transportation. Soil characterized with PCB concentrations at or above 50 ppm will be transported off-Site for disposal at a TSCA-approved facility. Soil from lead impacted areas and soil characterized with PCB concentrations below 50 ppm will be managed and transported to either the Soil Safe facility in Adelanto, CA, the Waste Management facility in Kettleman Hills, CA, or another appropriate facility in accordance with applicable federal, state, and local laws and 40 CFR 761.50(a)(6).

DTSC and USEPA notification requirements, including details associated with confirmation soil sampling for soil disturbing activities, are provided in Section 6.1.1.

4.1.2 Sampling and Analysis Plan

As noted above, in-situ sampling required for the PCB impacted material will be conducted prior to excavation. Characterization sampling for PCB impacted soil will be conducted in-situ, details of which will be provided in a PCB Workplan submitted for approval to the USEPA prior to initiation of field work activities.

Soil and impacted material from area identified on Exhibit E “Legal Description” and Exhibit D “Sketch to Accompany Legal Description” and illustrated on Figure 4A as subject to SMP and O&M Plans with lead concentration at or above 320 mg/kg will be excavated, stockpiled and sampled for waste characterization purposes to determine appropriate management and disposal requirements. Each stockpile will be uniquely numbered in consecutive order and marked in the field with labeled stakes to ensure accurate management.

For stockpiles of lead impacted soil, a sufficient number of samples will be collected to represent the volume of soil to be classified. Therefore, for stockpiles containing up to 1,000 cubic yards, a total of 6 samples will be collected (Simple Random Sampling – USEPA SW-846 Chapter 9). However, the appropriate number of samples should be verified with the selected receiving facility, including for volumes that exceed 1,000 cubic yards.

Each sample container will be labeled with the following information, as appropriate, at the time of sampling:

- Sample Number
- Sample Date
- Container Designation
- Sample Location
- Time of Sampling
- Preservatives, if any
- Sample Type
- Handling Precautions
- Requested Analyses
- Laboratory Name
- Initials of Sampling Personnel

After labeling, the laboratory samples should be placed in a cooler on ice for transportation to the appropriate laboratory. In accordance with Chapter 9, Section 9.2.2.7 of SW-846, a chain of custody record will document sample possession from the time of collection until the samples are analyzed. The record also serves as a sample inventory and analysis order form.

The chain of custody record should be completed with a waterproof pen. When possession of the samples is transferred from sampling personnel to a courier or to the laboratory, both parties will sign the chain of custody. The chain of custody record should be placed in a large resealable plastic bag inside the cooler. Sampling personnel, a courier, a laboratory representative, or a commercial carrier can transport samples to the laboratory. The laboratory should be notified of the time by which analysis must begin so that the sample holding times are not exceeded.

² A PCB Removal Workplan will be submitted to the USEPA and approved prior to removal of PCB impacted soil.

Based on previous analytical results, the analytical methods required for waste classification will include one or more of the following:

- CAM 17 Metals in accordance with USEPA Methods 6010B and 7471A
- PCBs in accordance with USEPA Method 8082 with Soxhlet extraction (SW-846 Method 3500B/3540C)

4.2 Waste Classification

4.2.1 Metals

Total metals concentrations for soil that is to be disposed should initially be compared to the Toxicity Threshold Limit Concentrations (TTLC)³ and the screening levels for Soluble Threshold Limit Concentrations (STLC)⁵ and Toxicity Characteristic Leaching Potential (TCLP)⁴ analyses. Additional analysis to determine soluble metal concentrations should be performed for those samples that indicate total concentrations greater than 10 times the STLC. If the constituent concentration exceeds 10 times the STLC limit but does not exceed the California TTLC limit, the California Waste Extraction Test (WET) should be performed for the specific metal, or metals, exceeding the criterion. A TCLP extraction and subsequent analysis of a constituent should be performed if the constituent total concentration exceeds 20 times the toxicity characteristic leaching procedure (TCLP) limit.

Reported concentrations exceeding the applicable TTLC and/or STLC criteria should be identified as California Hazardous Waste and concentrations exceeding the applicable TCLP criteria should be identified as RCRA Hazardous Waste. Materials to be transported off-Site for disposal must be classified and profiled in accordance with the results of the waste classification analyses. A reference containing both state and federal hazardous waste criteria is provided in Appendix B.

4.2.2 PCBs

Previous investigations identified PCB concentrations ranging up to 2,220 mg/kg at AOC-6 and AOC-7. Additional PCB impacted soil with concentrations greater than the USEPA's Site-specific industrial risk-based threshold of 15 mg/kg are not expected to be encountered. However, PCB impacted soil will be characterized in-situ and transported to the appropriate disposal facility, as noted in Section 4.1.1.

³ As defined in 22CCR 66261.24 a.2.A
⁴ As defined in 22CCR 66261.24 a.1.B

5.0 Transportation and Disposal

The trucks will be staged on the Site and out of traffic lanes to the extent possible. Once on the Site, the trucks will be loaded by a front-end loader. Water will be sprayed on the material to limit dust emissions during the loading process. Once loaded, the truck will proceed to the decontamination area where the load will be covered with a tarp, and material will be removed from the tires and flat surfaces of the trailer as necessary prior to leaving the Site. A stabilized entrance/exit will be used to clean the truck tires. The area outside the access gate will be swept as necessary to remove any residual material.

Each load will be issued a uniquely identified manifest for transportation and each truck will use the appropriate placard as required by the Department of Transportation. Based on previous soil characterization and off-Site disposal, it is assumed that non-hazardous material (soil, concrete, etc.) will be transported via Interstate 15/395 to the Soil Safe facility in Adelanto, CA, or another appropriate location. Depending on the characterization of PCB-impacted soil, subsequent transportation will likely be to a TSCA disposal facility such as the Waste Management facility in Kettleman, CA, or another appropriate location, subject to DTSC approval upon review of the waste profile report. After characterization, PCB impacted material not required to go to a TSCA disposal facility and lead impacted soil will be transported to either a non-hazardous, Cal-haz, or RCRA disposal facility, as appropriate.

Trucks leaving the Site will travel west on Magnolia Street to the entrance of Interstate 15. The trucks will be operated Monday through Friday between 7:00 AM and 5:00 PM only and avoid leaving the Site during peak traffic hours. A hazardous materials response company will be available on an on-call basis for response to any accidents involving the trucks utilized to transport Site wastes.

5.1 Disposal Facility

The proposed off-Site disposal facilities identified above should be contacted to determine if their environmental permits have additional required laboratory testing requirements for the acceptance of soil from the Site. Waste classification/profiling by a proposed disposal facility may include additional or modified parameters. Therefore, the specific list of analyses should be verified with the selected receiving facility. The property owner is responsible for appropriate management of waste soil that is transported off-Site. Laboratory reports and facility disposal information associated

with waste characterization will also be provided to the DTSC prior to transportation off-Site

6.0 IMPLEMENTATION OF SOIL MANAGEMENT PLAN

6.1 Responsibilities

The property owner has ultimate responsibility for following the SMP, HASP, LUC, and grading plan/permit (See Appendix D). The property owner shall oversee implementation of this SMP at the Site. In addition, the property owner shall make available a copy of the SMP to contractors performing soil disturbance activities at the Site. The contractor shall be responsible for adhering to this SMP, following project specifications, and ensuring job site safety. The contractor also is responsible for providing a copy of the SMP to its subcontractors.

6.1.1 Notifications

McWane will notify DTSC and/or the USEPA, as appropriate, at a minimum 30 days prior to any soil disturbing activity at the Site as described in the LUC as Exhibit C, “Legal Description” and/or illustrated in Exhibit D, “Sketch”, also illustrated in Figure 4A as the “Area subject to SMP and O&M Plan (lead concentrations > 320 mg/kg)”.

- a. Notification of soil disturbing activities associated with lead and/or PCB “hot spot” areas will include details of the excavation activities and associated confirmation sampling protocol using the timeline provided below: McWane will notify DTSC 30 days prior to excavation of lead impacted soil (>1,000 mg/kg) (Figure 3K). The notification will include a detailed excavation, disposal, transportation route, and confirmation soil sampling plan and field work schedule. DTSC approval is required before initiating work.
- b. McWane will notify USEPA 30 days prior to excavation of PCB impacted soil (>1 mg/kg) (Figure 3F and Figure 3G). In addition, USEPA approval is required before initiating any future work proposed that will impact the soil, concrete, and/or asphalt with PCB levels over 1 ppm.

6.2 Reporting

Following completion of soil disturbing and associated off-Site disposal activities, a final report will be prepared documenting the results of such activities. The report will summarize on-Site activities, provide figures illustrating soil disturbing activities, and will provide the associated supporting documentation including but not limited to, laboratory data, including waste characterization and confirmation sampling; air monitoring; field sampling data; field notes; pictures; and waste manifest documents. The report will be submitted to the DTSC and the USEPA within 30 days from

receiving the manifests from the destination disposal facility.

7.0 REFERENCES

Advanced Environmental Services, Inc. (AESI). 2002. Clow Valve Company Preliminary Endangerment Assessment and Facility Workplan 1375 Magnolia Avenue, Corona, California 91719. March 28, 2002.

Department of Toxic Substances Control (DTSC). 2002. Corrective Action Consent Agreement. Docket HWCA: SRPD 00/01 SCC-4208. March 6, 2002.

DTSC. 2005. Public Involvement Fact Sheet. Clow Valve Company, Corona. April 2005.

EarthCon Consultants CA, Inc. (EarthCon). 2018. Corrective Measures Study. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. February 19, 2019

EarthCon. 2018. PCB Investigation. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. August 24, 2018.

EarthCon. 2019. Supplemental PCB Investigation. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. March 16, 2019.

Environmental Support Technologies, Inc (EST). 2003. Addendum to Preliminary Endangerment Assessment and Facility Investigation Workplan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. July 24, 2003.

EST. 2004. Preliminary Endangerment Assessment and Facility Investigation Workplan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. June 21, 2004.

EST. 2005. Interim Measures Work Plan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. January 12, 2005.

EST. 2005. Preliminary Summary of Site Assessment Results and Proposed Further Assessment. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. November 29, 2005.

The Fehling Group. 2017. Health Risk Assessment. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. October 26, 2017.

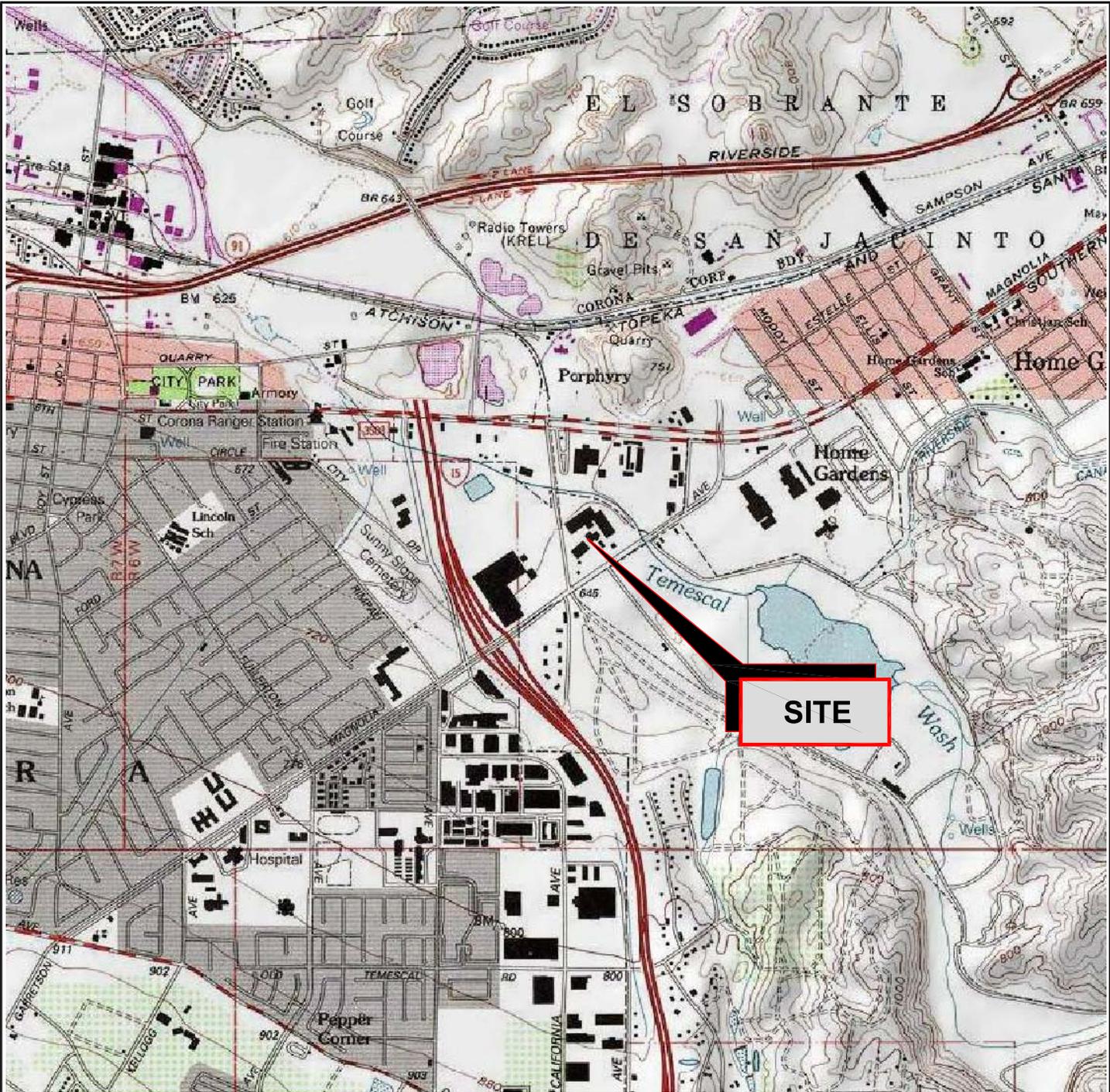
Fero Environmental Engineering, Inc (Fero). 2006. Further Investigation Workplan. Clow Valve Company. 1375 Magnolia Avenue, Corona, California 93446. July 27, 2006.

Fero. 2006. Report of Findings. Clow Valve Company, 1375 Magnolia Avenue, Corona, California 93446. December 18, 2006.

Fero. 2007. Letter Response from Meeting of February 2, 2007. Clow Valve Company. 1375 Magnolia Avenue, Corona, California 93446. EPA ID Number CAD063115133. February 8, 2007.

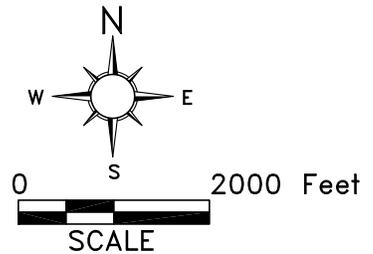
Fero. 2009. Corrective Measures Workplan. Report of Findings. Clow Valve Company, 1375 Magnolia Avenue, Corona, California 93446. EPA ID Number CAD063115133. March 2009.

FIGURES



FROM: U.S. GEOLOGICAL SURVEY, 1997
 QUADRANGLE: CORONA SOUTH
 COUNTY: RIVERSIDE
 SERIES: 7.5-MINUTE QUAD

NOTE: ALL BOUNDARIES AND LOCATIONS ARE APPROXIMATE



CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879



VICINITY MAP

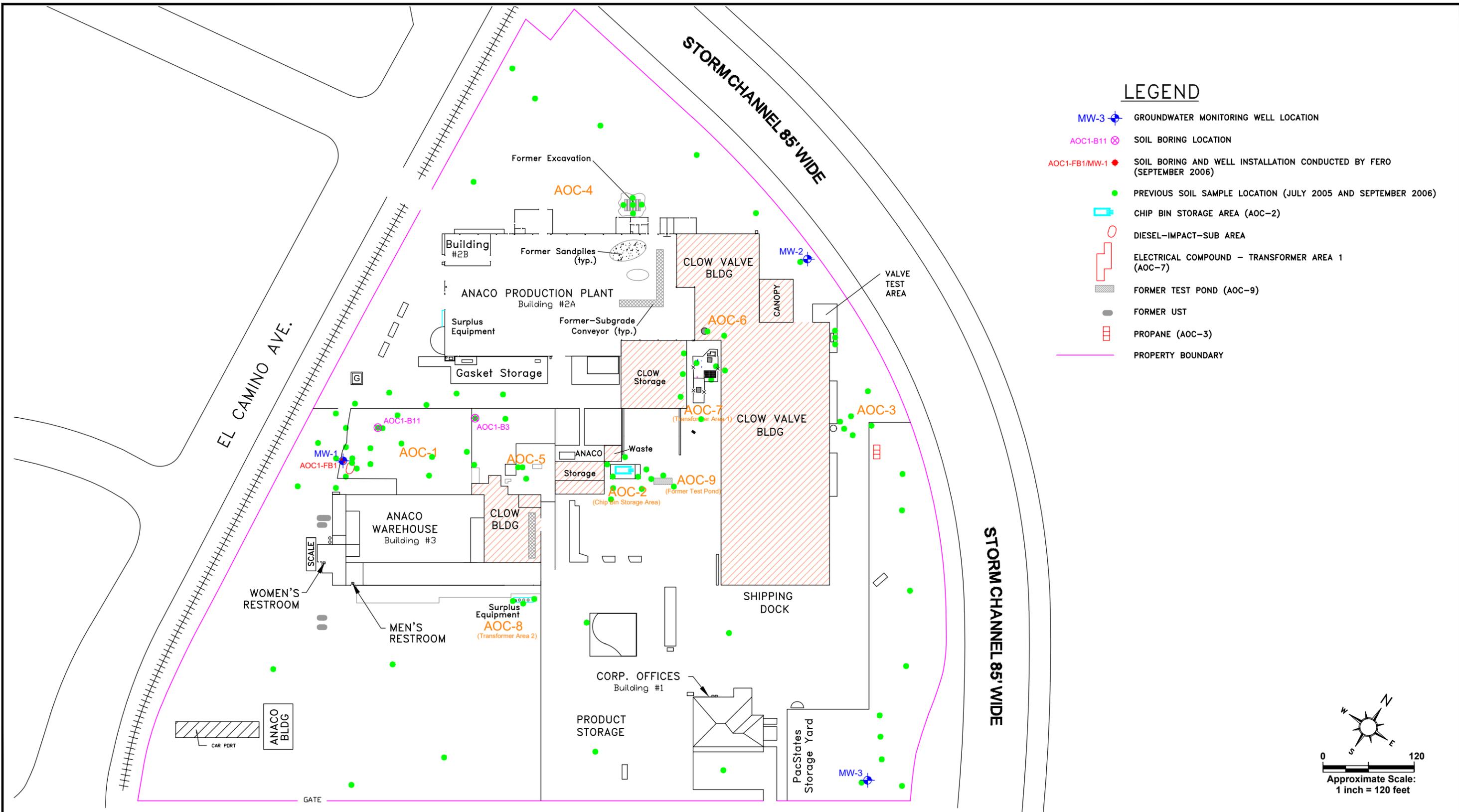
EARTHCON CONSULTANTS CA, INC

1914 W. ORANGEWOOD AVENUE, SUITE 102, ORANGE, CA 92868

PROJECT NO. 04.20150013.00

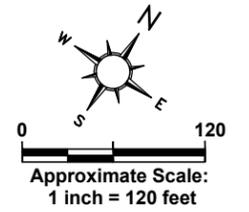
DRAWN: DCN	CHECKED: JB	DATE: 12/30/15	FIGURE: 1
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LEGEND

- MW-3 GROUNDWATER MONITORING WELL LOCATION
- AOC1-B11 SOIL BORING LOCATION
- AOC1-FB1/MW-1 SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERRO (SEPTEMBER 2006)
- PREVIOUS SOIL SAMPLE LOCATION (JULY 2005 AND SEPTEMBER 2006)
- CHIP BIN STORAGE AREA (AOC-2)
- DIESEL-IMPACT-SUB AREA
- ELECTRICAL COMPOUND - TRANSFORMER AREA 1 (AOC-7)
- FORMER TEST POND (AOC-9)
- FORMER UST
- PROPANE (AOC-3)
- PROPERTY BOUNDARY



MAGNOLIA AVE

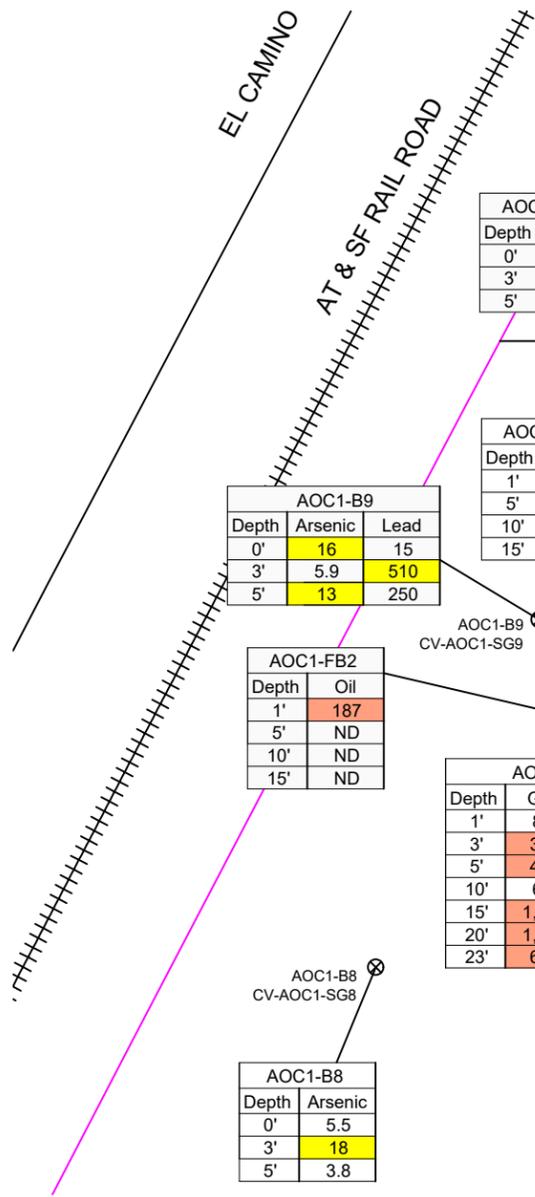
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PROJECT NO. 04.20150013.00

EARTHCON[®]
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1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

SITE PLAN

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AOC1-B1		
Depth	Oil	Arsenic
0-0.5'	630	38
1'	ND<5	15
3'	ND<5	41
5'	ND<5	11
10'	480	29
15'	170	18
20'	90	6.9

AOC1-B10	
Depth	Arsenic
0'	29
3'	11
5'	3.4

AOC1-B2	
Depth	Lead
0'	430
3'	920
5'	ND<1.3

AOC1-FB11	
Depth	Lead
1'	330
3'	3.46
5'	2.04
10'	2.03
15'	4.58

AOC1-FB12	
Depth	Lead
1'	405
3'	2.35
5'	1.8
10'	2.41
15'	2.85

AOC1-FB3	
Depth	Diesel
1'	1,620
5'	ND
10'	4,030
15'	3,800

AOC1-B11	
Depth	Lead
0'	820
1'	760
3'	21
5'	4.0
10'	850

AOC1-FB7	
Depth	Oil
1'	1,780

AOC1-B3			
Depth	Arsenic	Cadmium	Lead
0'	6.3	30	3,600
3'	14	4.4	800
5'	8.6	3.0	450

AOC1-FB8		
Depth	Oil	Lead
1'	992	903

AOC1-B9		
Depth	Arsenic	Lead
0'	16	15
3'	5.9	510
5'	13	250

AOC1-FB2	
Depth	Oil
1'	187
5'	ND
10'	ND
15'	ND

AOC1-B13		
Depth	Gas	Diesel
1'	8.8	660
3'	340	6,600
5'	430	5,800
10'	6.5	9,300
15'	1,300	5,600
20'	1,100	4,700
23'	610	9,200

AOC1-B7	
Depth	Diesel
0'	240
1'	ND<5
3'	ND<5
5'	ND<5
10'	ND<25

AOC1-B17			
Depth	Arsenic	Cadmium	Lead
0'	18	8.7	4,600
3'	5.5	ND<0.51	44
5'	4.5	ND<0.51	ND<1.3

AOC1-B4	
Depth	Lead
0'	470
3'	21
5'	1.9

AOC1-B6	
Depth	Arsenic
0'	12
3'	7.9
5'	3.5

AOC1-B8	
Depth	Arsenic
0'	5.5
3'	18
5'	3.8

AOC1-B14	
Depth	Diesel
3'	ND<5
5'	ND<5
10'	390
15'	ND<5
20'	ND<5

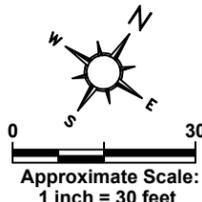
LEGEND

- AOC1-B3 **PREVIOUS BORING CONDUCTED BY EST (JULY 2005)**
- AOC1-FB7 **SOIL BORING LOCATION BY FERO (SEPTEMBER 2006)**
- AOC1-FB1 **SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERO (SEPTEMBER 2006)**
- * **ORIGINALLY IDENTIFIED AS AOC1-FB9**
- PROPOSED AREA OF CAPPING AT AOC-1 (UNPAVED)**

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- RSLs = USEPA Regional Soil Screening Levels, November 2015, HQ=1.0
- (1) = General California Background Concentration (DTSC, January 2009)
- (2) = DTSC HHRA Note 3 (August 2017)
- (3) = OEHA CHSL (September 2009)
- = meet/exceeds the LUFT criteria
- = meet/exceeds the associated RSL

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

	LUFT	RSLs
TPH-gas	100	--
TPH-diesel	100	--
TPH-oil	100	--
Arsenic	--	12 ⁽¹⁾
Cadmium	--	7.3 ⁽²⁾
Lead	--	320 ⁽³⁾



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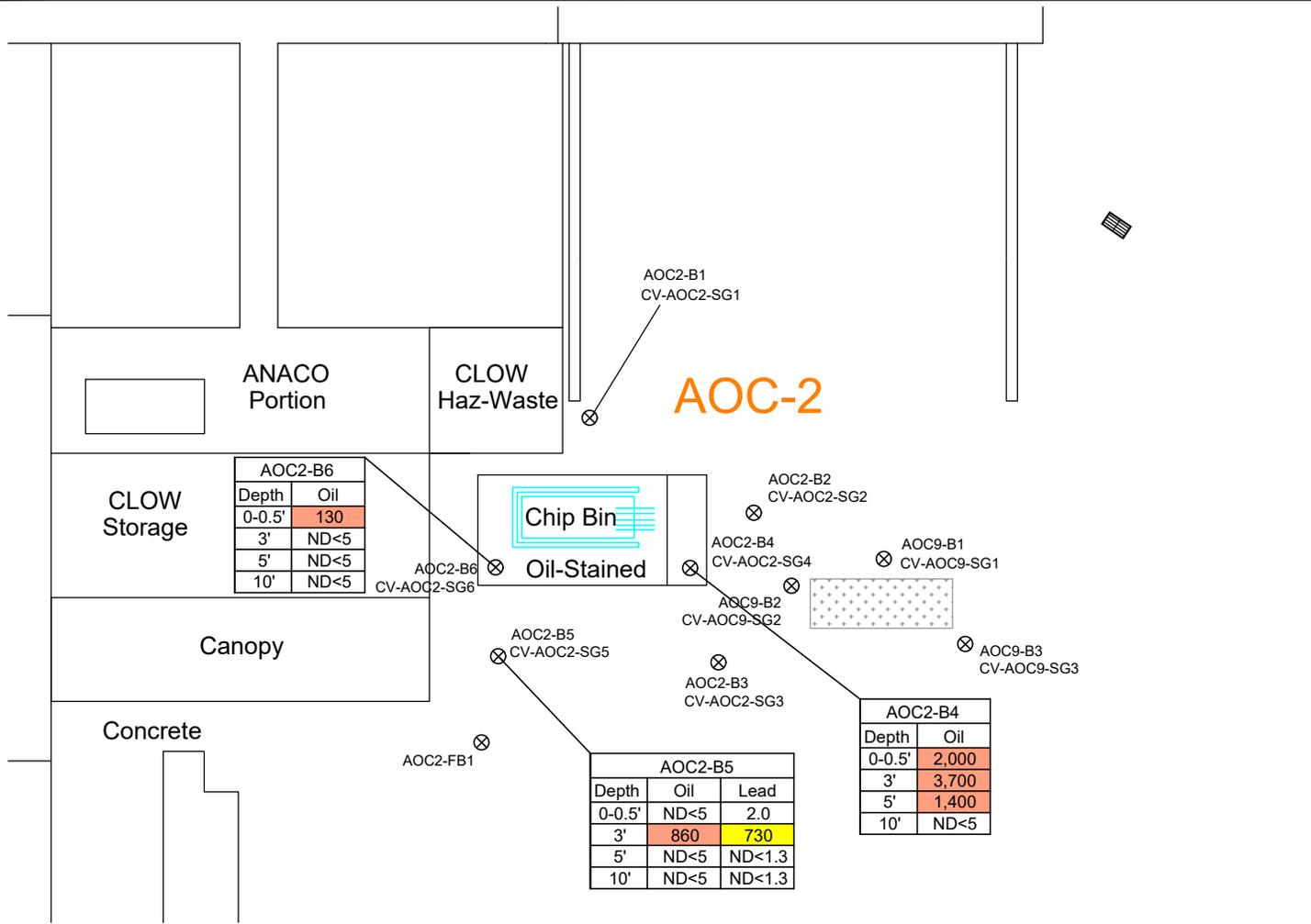
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AOC1 - RAIL SPUR AREA

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AOC2-B6	
Depth	Oil
0-0.5'	130
3'	ND<5
5'	ND<5
10'	ND<5

AOC2-B5		
Depth	Oil	Lead
0-0.5'	ND<5	2.0
3'	860	730
5'	ND<5	ND<1.3
10'	ND<5	ND<1.3

AOC2-B4	
Depth	Oil
0-0.5'	2,000
3'	3,700
5'	1,400
10'	ND<5

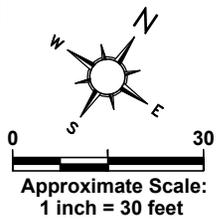
LEGEND

AOC7-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)

Notes: All sample results reported in milligrams per kilogram (mg/kg).
 Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- RSLs = USEPA Regional Soil Screening Levels, June 2017. HQ=1.0
- (2) = DTSC HHRA Note 3 (August 2017)
- = meet/exceeds the LUFT criteria
- = meet/exceeds the associated RSL

	LUFT	RSLs
TPH-oil	100	--
Lead	--	320 ⁽²⁾



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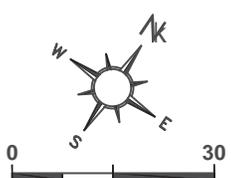
EARTHCON CONSULTANTS CA, INC

1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 2 - CHIP BIN AREA

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Approximate Scale:
1 inch = 30 feet

AOC3-B1 (2018)	
Depth	Oil
0-0.5'	46
1'	1,400
3'	ND<5
5'	ND<5

AOC3-B1 (2018)				
Depth	AROCOR-1248	AROCOR-1254	AROCOR-1260	TOTAL PCBs
0.5'	ND	0.35	5.2	5.55
1'	0.047 J	ND	0.46	0.507
2'	0.13	ND	1.1	1.23

Bay Door

Hydraulic Pump
with Fluid Reservoir

Canopy Covered Storage

Water Cylinder

AOC3-B4	
Depth	Total PCB
0-0.5'	0.092

AOC3-B5	
Depth	Total PCB
0-0.5'	1.3

AOC3-B6	
Depth	Total PCB
0-0.5'	1

AOC3-B2	
Depth	Oil
0-0.5'	33
1'	210
3'	890
5'	ND<5

FLOOD CONTROL CHANNEL ACCESS ROAD

Asphalt Paved

LEGEND

- AOC3-B1 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- AOC3-FB4 ⊕ SOIL BORING LOCATION BY FERRO (SEPTEMBER 2006)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)
- SOIL BORING LOCATION BY EARTHCON (OCTOBER 2018)

TPH-oil	LUFT
	100

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- = meet/exceeds the LUFT criteria

Notes: All sample results reported in milligrams per kilogram (mg/kg).
Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

- AOC3-FB2 ⊕
- AOC3-FB3 ⊕
- AOC3-FB4 ⊕
- AOC3-FB1 ⊕

CV-AOC3-SG1

Propane

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



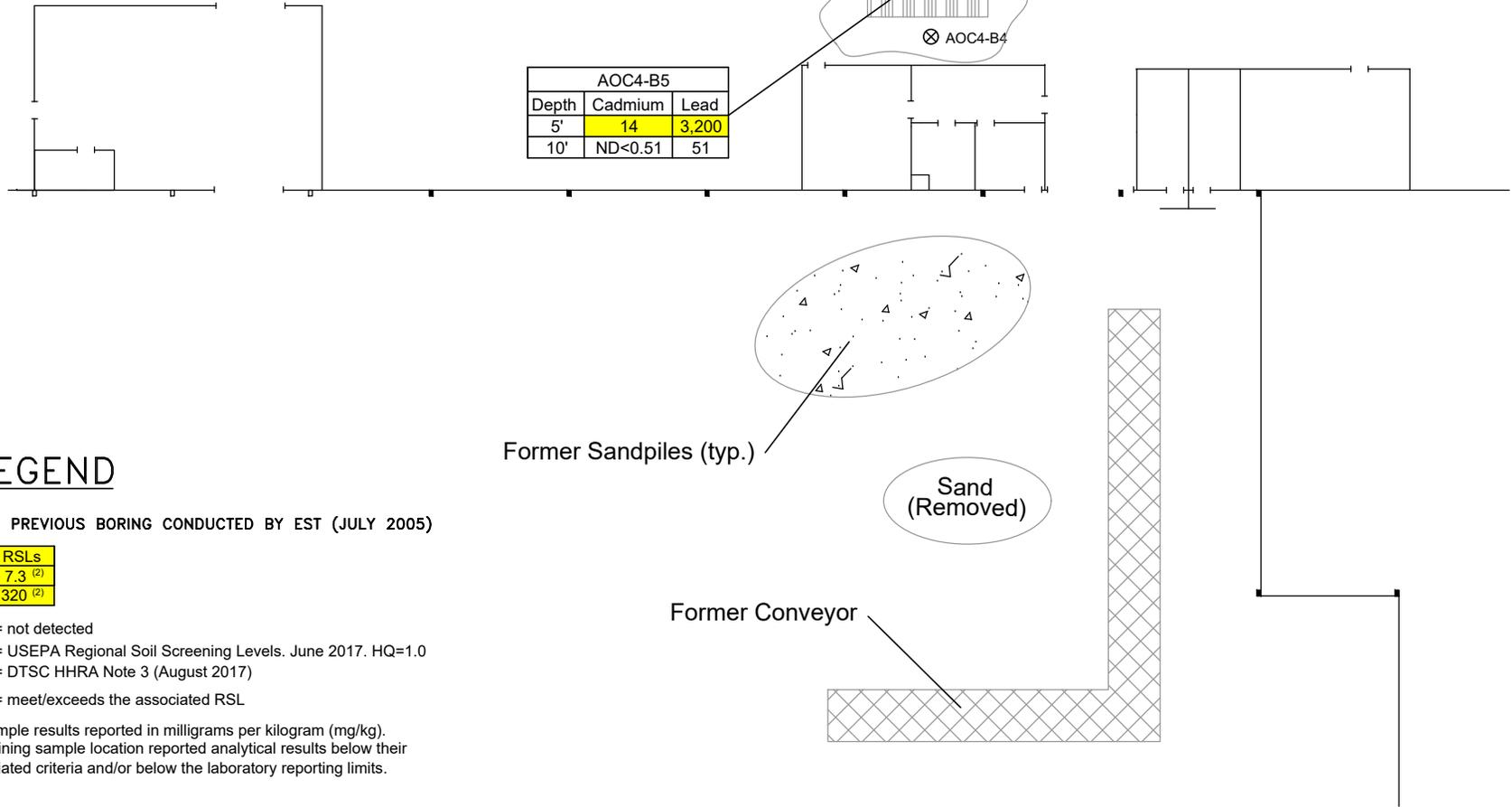
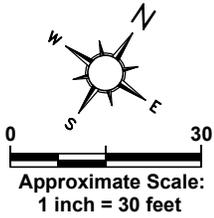
EARTHCON CONSULTANTS CA, INC

1500 SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 3 - WATER PRESSURE TEST AREA

DRAWN: KNB	CHECKED: JB	DATE: 03/05/2019	FIGURE: 3C
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FILENAME: S:\Common\OrangeCAD\Projects\04.20150013.00-Clow Valve\CAD 2019.SP 10-18-19_F3BD.dwg (3D (ADC 4)) 10/18/19 10:44 - kgyawall



CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879

PROJECT NO. 04.20150013.00



EARTHCON CONSULTANTS CA, INC

1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 4 - FORMER IRON
 FOUNDRY SAND CLEANUP AREA

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3D
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FILENAME: S:\Common\Drainage\CAD\Projects\04.20150013.00-Clow Valve\CAD2020\SP_03-26-20_F3EFDI.dwg (3E (ADC 5)) 03/26/20 09:19 - kgvawall

AOC-1

AOC5-B1 (2018)			
Depth	AROCCLOR-1248	AROCCLOR-1260	TOTAL PCBs
1'	0.076	0.28	0
3'	0.033 J	ND	0.033 J

AOC5-B1 (2018)	
Depth	Oil
0'	5,400
3'	330
5'	ND<5

AOC-5

AOC5-B3
AOC5-B4

Oil-Stained

AOC5-B1
CV-AOC5-SG1

AOC5-FB9 *

AOC5-B2
CV-AOC5-SG2

ANACO
Portion

CLOW
Storage

Canopy

CLOW STORAGE

AOC5-B3 (2018)		
AROCCLOR-1248	AROCCLOR-1260	TOTAL PCBs
0.12	0.31	0.43

AOC5-B2	
Depth	Oil
0'	200
3'	ND<5
5'	ND<5

CLOW STORAGE

Bay Door

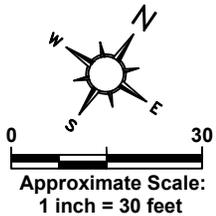
Concrete

LEGEND

- AOC5-FB9 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- AOC5-B2 ⊕ SOIL BORING LOCATION BY FERRO (SEPTEMBER 2006)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)
- CONCRETE SAMPLE LOCATION BY EARTHCON (JULY 2018)
- * ORIGINALLY IDENTIFIED AS AOC1-FB9

- ND = not detected
 - LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
 - Orange box = meet/exceeds the LUFT criteria
 - Pink box = Proposed Area of Capping at AOC- 5 (Primarily Unpaved)
- | TPH-oil | LUFT |
|---------|------|
| | 100 |

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.



CLOW VALVE
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CORONA, CA 92879

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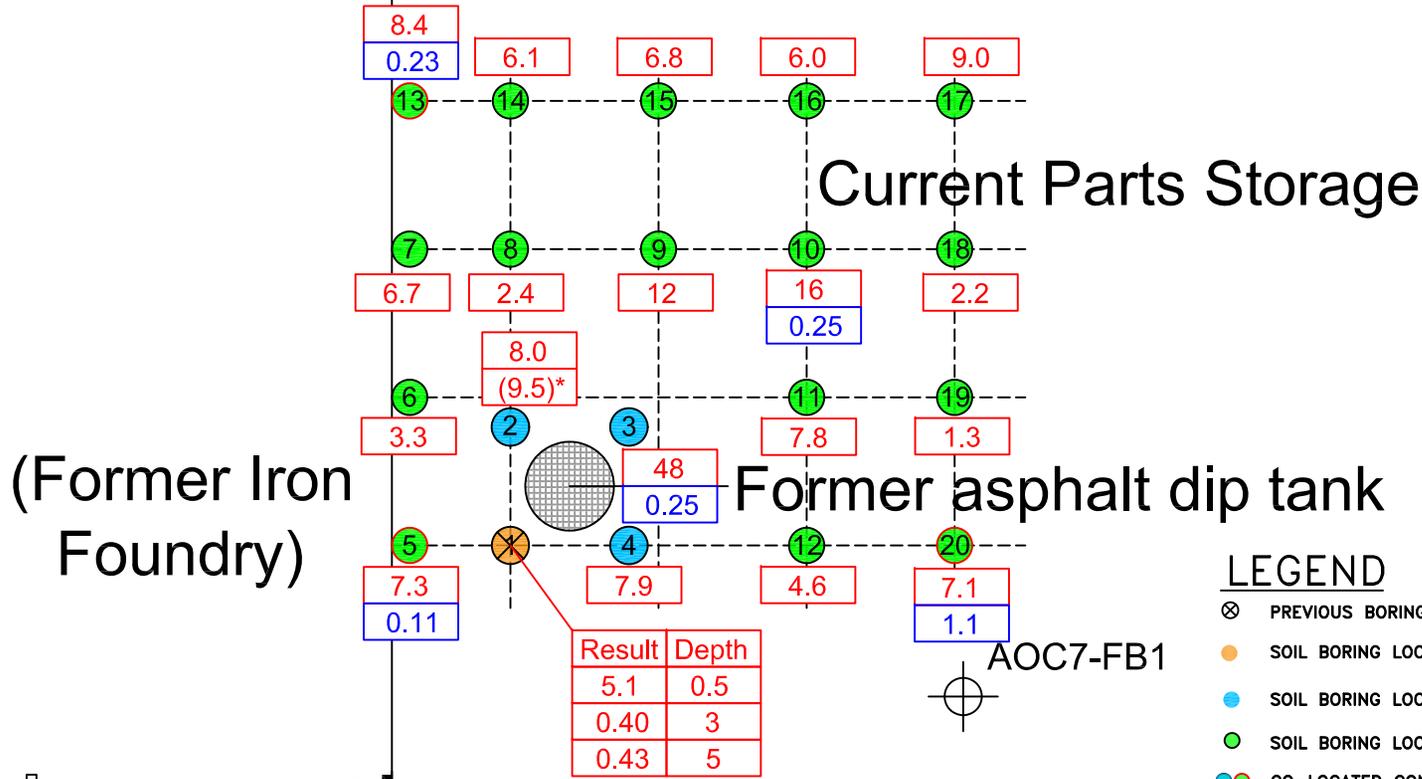
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AOC 5 - OIL STAINED PAD AREA
PCB SAMPLE LOCATIONS

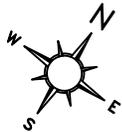
DRAWN: KG CHECKED: JB DATE: 03/26/20 FIGURE: 3E

FILENAME: S:\Common\OrangeCAD\Projects\04.20150013.00-Clow Valve\CAD 2019\SP 10-18-19_19_F3EFH.dwg (3F (ADC6 NEW)) 05/11/21 11:08 - kgyawall



LEGEND

- ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)
- SOIL BORING LOCATION BY EARTHCON (OCT 2018)
- SOIL BORING LOCATION BY EARTHCON (JANUARY 2019)
- CO-LOCATED CONCRETE + SOIL BORING LOCATION BY EARTHCON (FEBRUARY 2019)
- SAMPLE ID (AOC6-B#)
- 1.1 TOTAL PCB RESULTS IN MG/KG (CONCRETE) CONCRETE SAMPLES COLLECTED AT SURFACE.
- 7.1 TOTAL PCB RESULTS IN MG/KG (SOIL) RESULTS FROM 0.5 FT BGS UNLESS OTHERWISE STATED.
- * DUPLICATE



CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO.04.20150013.17



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AOC 6 - FORMER ASPHALT DIP TANK AREA

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3F
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FILENAME: S:\Common\DroneCAD\Projects\04.20150013.00-Clow_Valve\CAD_2019\SP_10-18-19-36.dwg CAD_2019\SP_10-18-19-36.dwg - kava.wal

(Former Iron Foundry)

AOC7-B1 (2018)	
AROCLOR-1248	TOTAL PCBs
0.035 J	0.035 J

AOC7-FB1	
Depth	PCB-1260
1'	ND
3'	ND
5'	ND
10'	ND
15'	ND

AOC7-B1 (2005)			
Depth	PCB-1016	PCB-1254	PCB-1260
0-0.5'	0.030	0.12	0.023
1'	0.085	0.20	0.042
3'	210	1,400	610
5'	800	890	480

AOC7-B1 (2018)		
Depth	PCB-1248	PCB-1260
6.5'	14	2.6

AOC7-FB4	
Depth	PCB-1260
1'	0.602
3'	2.79
5'	ND
10'	ND
15'	ND

AOC7-FB5	
Depth	PCB-1260
1'	1.73
3'	0.726
5'	ND
10'	ND
15'	ND

AOC7-FB2	
Depth	PCB-1260
1'	0.036
3'	ND
5'	ND
10'	ND
15'	ND

AOC7-B2			
Depth	PCB-1016	PCB-1254	PCB-1260
0-0.5'	0.044	0.15	0.035
1'	0.026	0.099	0.022
3'	1.3	5.4	1.0
5'	0.041	0.11	ND<0.020

AOC7-B2 (2018)		
AROCLOR-1248	AROCLOR-1260	TOTAL PCBs
0.046 J	0.087	0.133

AOC7-B3			
Depth	PCB-1016	PCB-1254	PCB-1260
0-0.5'	ND<0.020	0.063	ND<0.020
1'	1.2	4.5	1.3
3'	0.088	0.22	0.038
5'	0.091	0.18	0.024

AOC7-B3 (2018) - ND

CLOW STORAGE

AOC7-B7 (2018) - ND

AOC-7

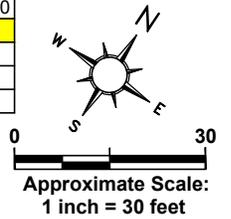
LEGEND

- AOC7-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005) AND ASSOCIATED SOIL SAMPLE RESULTS
- AOC7-FB6 ⊕ SOIL BORING LOCATION BY FERO (SEPTEMBER 2006) AND ASSOCIATED SOIL SAMPLE RESULTS
- CONCRETE SAMPLE LOCATION BY EARTHCON (JULY 2018)

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

	RSLs
PCB-1016	27
PCB-1248	0.95
PCB-1254	0.97
PCB-1260	0.99

ND = not detected
 RSLs = USEPA Regional Soil Screening Levels. June 2017. HQ=1.0
 = meet/exceeds the associated RSL



CLOW VALVE
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AOC 7 - TRANSFORMER AREA 1

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3G
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FILENAME: S:\Common\Drainage\CAD\Projects\04.20150013.00-Clow Valve\CAD 2019\SP_10-18-19_F9EFH.dwg (3H (AOC8)) 10/21/19 13:24 - kg/awall

ANACO WAREHOUSE

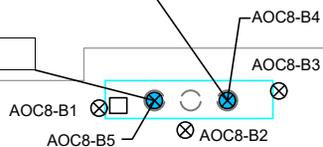
Former Conveyor

Asphalt

Raised Concrete Open Storage Area

AOC8-B4 (2018)		
AROCOLOR-1248	AROCOLOR-1260	TOTAL PCBs
0.041 J	0.12	0.161

AOC8-B5 (2018) - ND



Surplus Equipment

AOC-8

EMPTY PART BASKET STORAGE



0 30

Approximate Scale:
1 inch = 30 feet

LEGEND

- AOC8-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- CONCRETE SAMPLE LOCATION BY EARTHCON (JULY 2018)

Note: No exceedance of detected PCBs

CLOW VALVE
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CORONA, CA 92879

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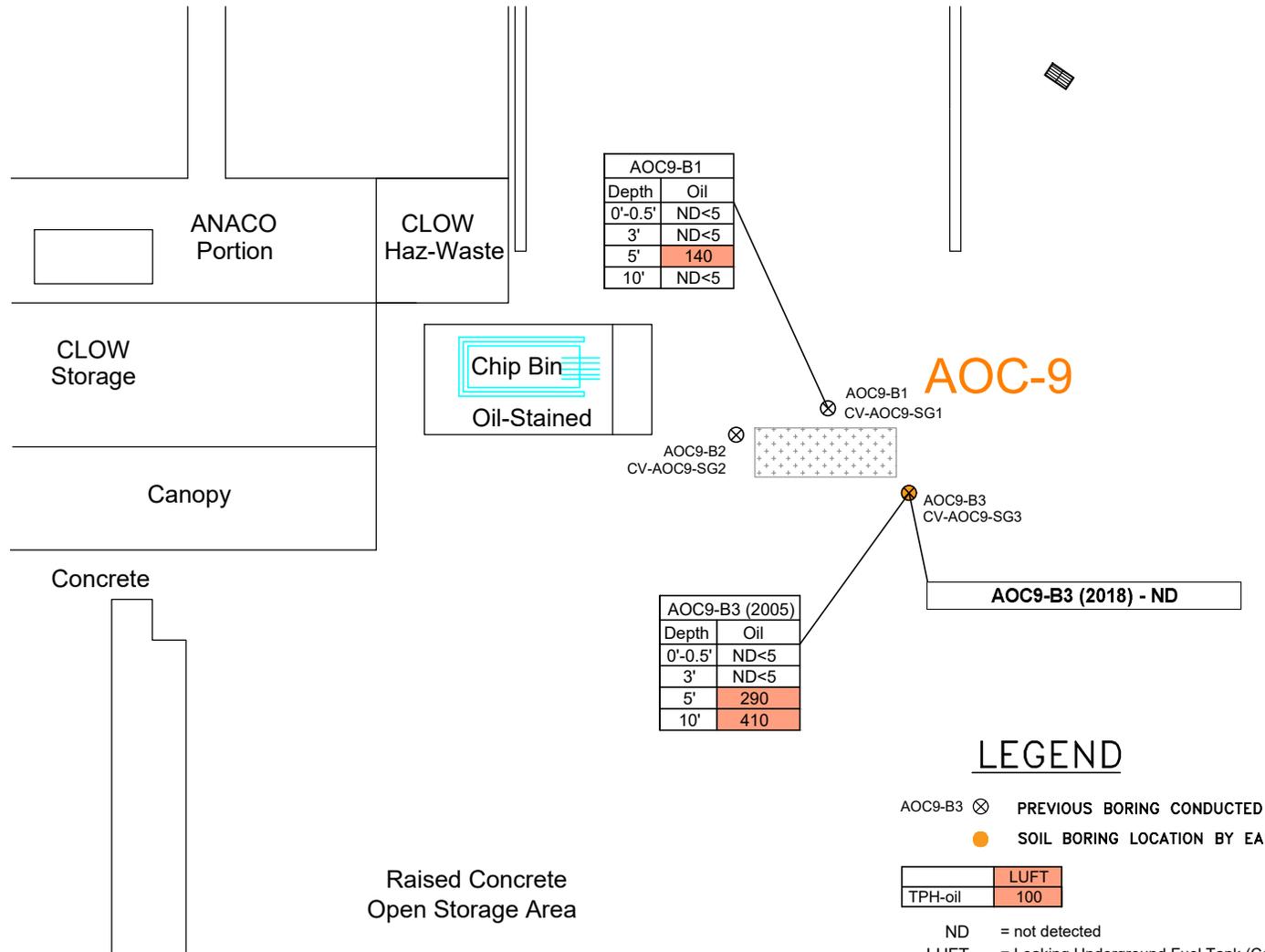
EARTHCON CONSULTANTS CA, INC

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AOC 8 - TRANSFORMER AREA 2
PCB SAMPLE LOCATIONS

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3H
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FILENAME:\Common\Drange\CAD\Projects\04.20150013.00-Clow Valve\CAD 2019\SP_10-18-19_F3EFH.dwg (31 (AOC9)) 10/18/19 10:47 - kgyawell



AOC9-B1	
Depth	Oil
0'-0.5'	ND<5
3'	ND<5
5'	140
10'	ND<5

AOC9-B3 (2005)	
Depth	Oil
0'-0.5'	ND<5
3'	ND<5
5'	290
10'	410

AOC-9

AOC9-B3 (2018) - ND

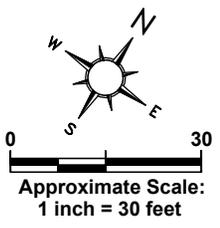
LEGEND

- AOC9-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)

TPH-oil	LUFT
	100

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- [Red Box] = meet/exceeds the LUFT criteria

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.



CLOW VALVE
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**AOC 9 - FORMER TEST POND
PCB SAMPLE LOCATIONS**

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 31
-----------	-------------	----------------	------------

FILENAME: S:\Common\Drange\CAD\Projects\04.20150013.00-Clow Valve\CAD 2019\SP_10-18-19_F3BDD.dwg (3J (ADCD)) 10/18/19 10:49 - kgyawali

SW2			
Depth	Arsenic	Cadmium	Lead
1'	6.28	43.9	7,360
3'	24.6	ND	5.25
5'	10.0	ND	4.16

SW3		
Depth	Cadmium	Lead
1'	25	4,650
3'	ND	74.1
5'	ND	253

SW4	
Depth	Lead
1'	209
3'	185
5'	352

SW5	
Depth	Lead
1'	218
3'	533
5'	1.98

SW6	
Depth	Lead
1'	239
3'	182
5'	897

CV-BG3	
Depth	Lead
1'	360
3'	130
5'	3.6
10'	3.3
15'	4.9
20'	3.2
25'	6.6

SW1		
Depth	Arsenic	Lead
1'	3.37	828
3'	17.2	2.41
5'	6.28	2.23

- ### LEGEND
- CV-BG4 BACKGROUND SOIL BORING BY EST (JULY 2005)
 - AOC7-B3 PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
 - SW9 SOIL BORING LOCATION BY FERO (SEPTEMBER 2006)
 - AOC1-FB1 SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERO (SEPTEMBER 2006)

	LUFT	RSLs
TPH-diesel	100	--
Arsenic	--	12 ⁽¹⁾
Cadmium	--	7.3 ⁽²⁾
Hex Cr	--	6.3
Lead	--	320 ⁽²⁾

ND = not detected
 LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
 RSLs = USEPA Regional Soil Screening Levels. June 2017. HQ=1.0
 (1) = General California Background Concentration (DTSC, January 2009)
 (2) = DTSC HHRA Note 3 (August 2017)

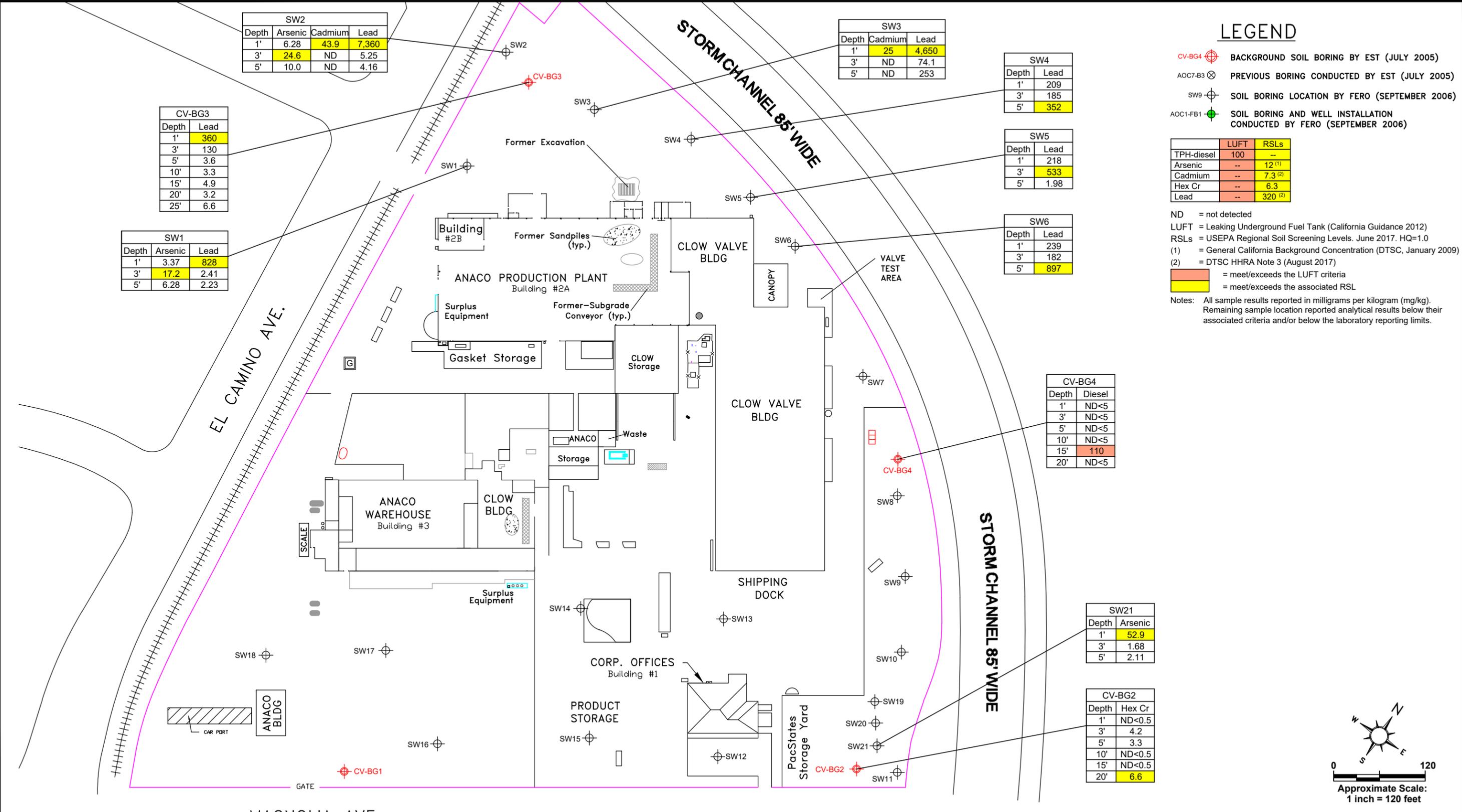
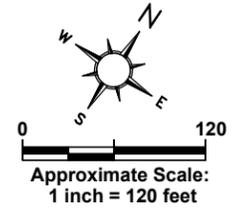
= meet/exceeds the LUFT criteria
 = meet/exceeds the associated RSL

Notes: All sample results reported in milligrams per kilogram (mg/kg).
 Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

CV-BG4	
Depth	Diesel
1'	ND<5
3'	ND<5
5'	ND<5
10'	ND<5
15'	110
20'	ND<5

SW21	
Depth	Arsenic
1'	52.9
3'	1.68
5'	2.11

CV-BG2	
Depth	Hex Cr
1'	ND<0.5
3'	4.2
5'	3.3
10'	ND<0.5
15'	ND<0.5
20'	6.6



MAGNOLIA AVE

CLOW VALVE
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 CORONA, CA 92879
 PROJECT NO. 04.20150013.00

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BACKGROUND AND SITEWIDE SOIL BORINGS

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3J
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FILENAME: S:\Common\Drawings\CAD\Projects\04_20150013_00-Clow Valve\CAD 2019\SP_12-28-20_Fig3K.dwg (F3K) 12/28/20 13:34 - kgayawell

SW2	
Depth (ft)	Lead (mg/kg)
1	7,360

SW3	
Depth (ft)	Lead (mg/kg)
1	4,650

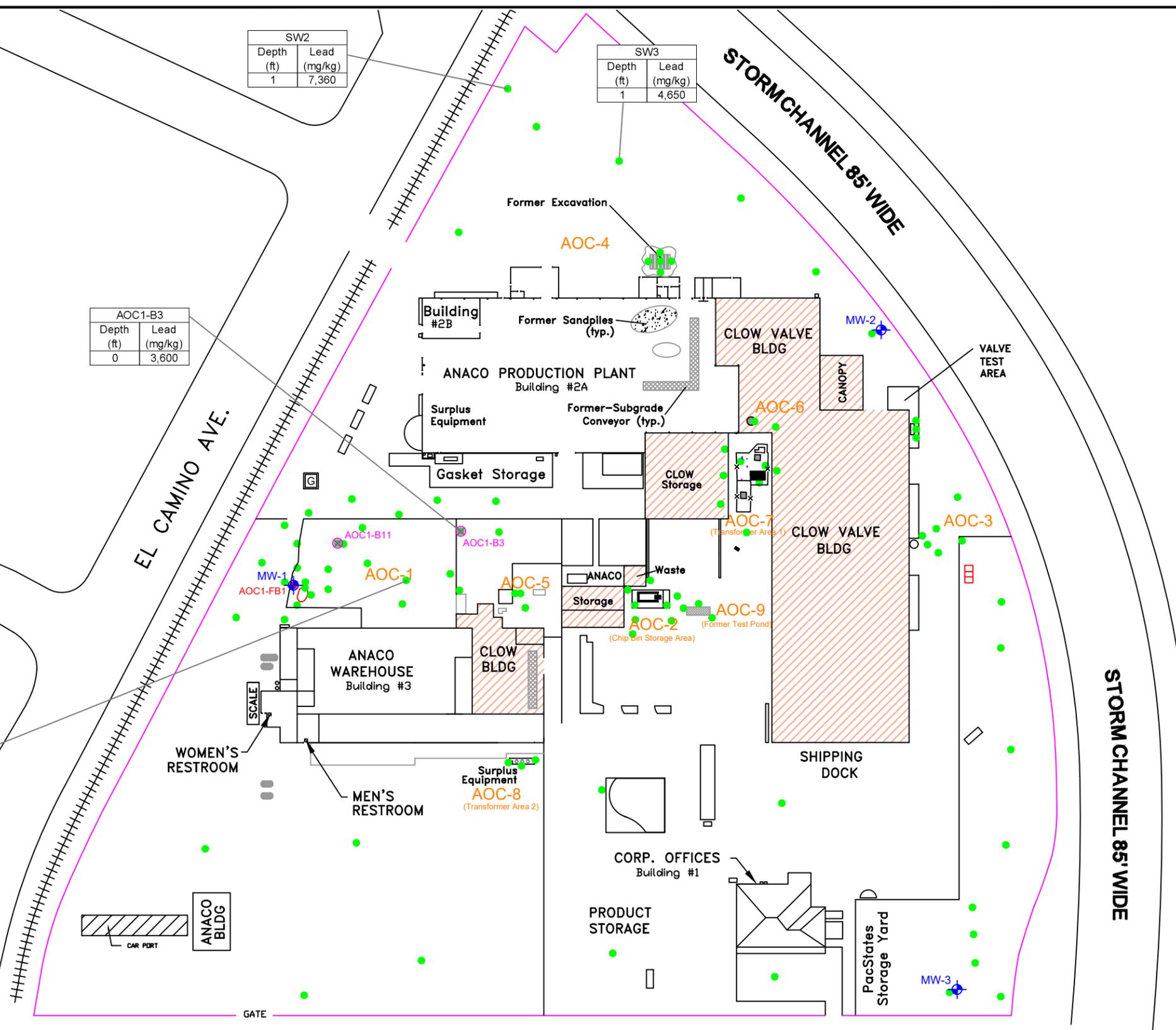
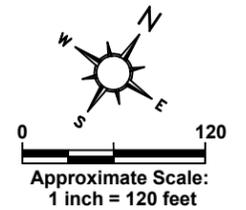
AOC1-B3	
Depth (ft)	Lead (mg/kg)
0	3,600

AOC1-B17	
Depth (ft)	Lead (mg/kg)
0	4,600

LEGEND

- MW-3 GROUNDWATER MONITORING WELL LOCATION
- AOC1-B11 SOIL BORING LOCATION
- AOC1-FB1/MW-1 SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERRO (SEPTEMBER 2006)
- PREVIOUS SOIL SAMPLE LOCATION (JULY 2005 AND SEPTEMBER 2006)
- CHIP BIN STORAGE AREA (AOC-2)
- DIESEL-IMPACT-SUB AREA
- ELECTRICAL COMPOUND - TRANSFORMER AREA 1 (AOC-7)
- FORMER TEST POND (AOC-9)
- FORMER UST
- PROPANE (AOC-3)
- PROPERTY BOUNDARY

Notes: Sample results reported in milligrams per kilogram (mg/kg).
 Remaining sample locations reported analytical results below their associated criteria and/or below the laboratory reporting limits.



MAGNOLIA AVE

CLOW VALVE
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PROJECT NO. 04.20150013.00



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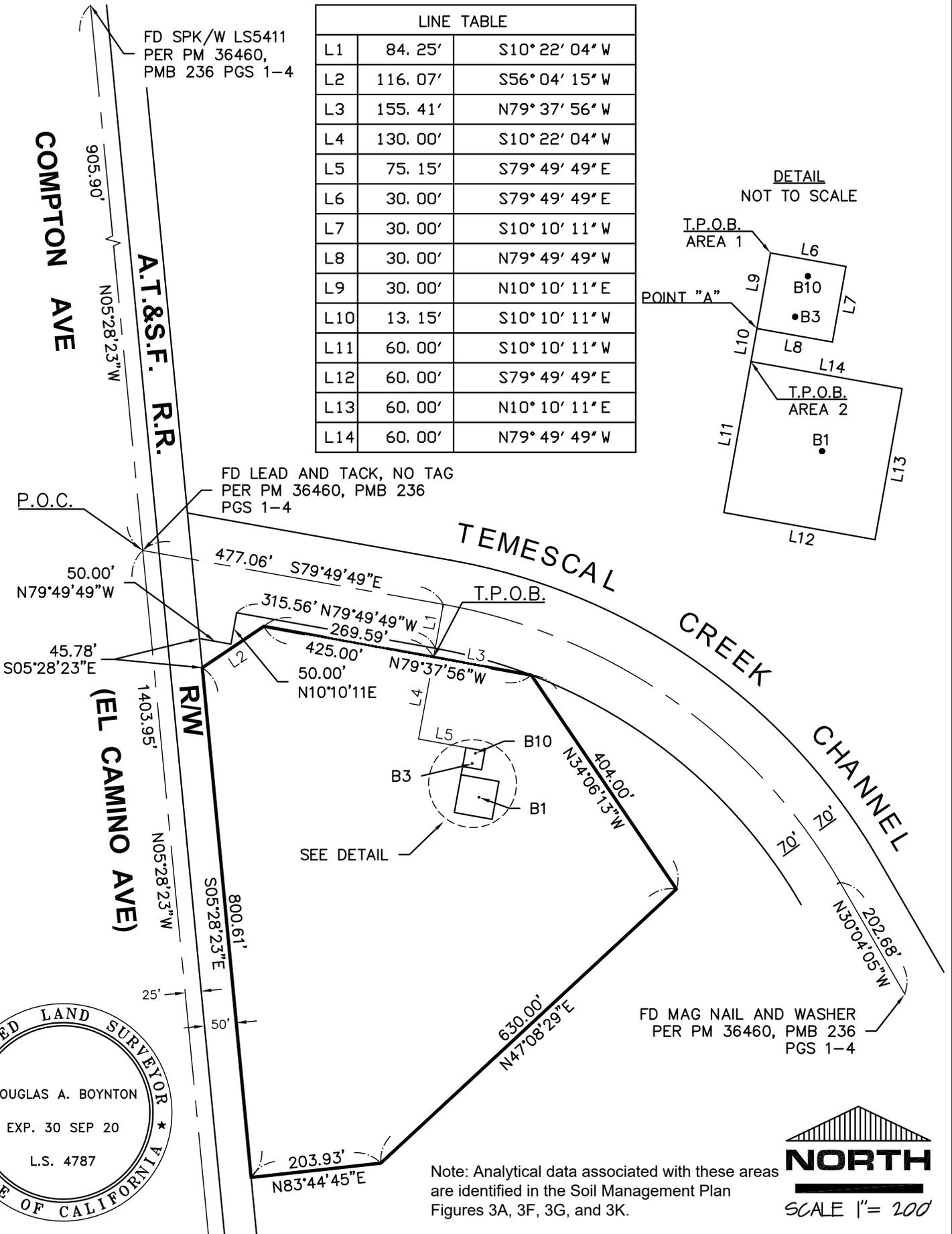
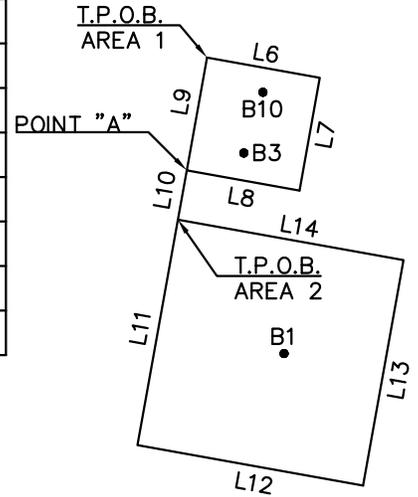
SHALLOW SOIL SAMPLES WITH LEAD
 EXCEEDING 1,000 MG/KG

DRAWN: KG	CHECKED: JB	DATE: 12/28/20	FIGURE: 3K
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FIGURE 4
SURVEY OF AREA SUBJECT TO LAND USE COVENANT

LINE TABLE		
L1	84.25'	S10° 22' 04" W
L2	116.07'	S56° 04' 15" W
L3	155.41'	N79° 37' 56" W
L4	130.00'	S10° 22' 04" W
L5	75.15'	S79° 49' 49" E
L6	30.00'	S79° 49' 49" E
L7	30.00'	S10° 10' 11" W
L8	30.00'	N79° 49' 49" W
L9	30.00'	N10° 10' 11" E
L10	13.15'	S10° 10' 11" W
L11	60.00'	S10° 10' 11" W
L12	60.00'	S79° 49' 49" E
L13	60.00'	N10° 10' 11" E
L14	60.00'	N79° 49' 49" W

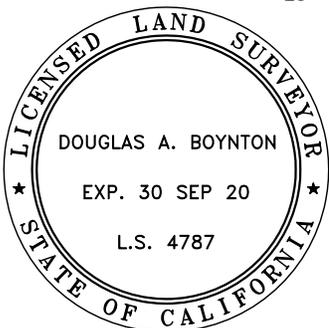
DETAIL
 NOT TO SCALE



FD SPK/W LS5411
 PER PM 36460,
 PMB 236 PGS 1-4

FD LEAD AND TACK, NO TAG
 PER PM 36460, PMB 236
 PGS 1-4

FD MAG NAIL AND WASHER
 PER PM 36460, PMB 236
 PGS 1-4



Note: Analytical data associated with these areas are identified in the Soil Management Plan Figures 3A, 3F, 3G, and 3K.



APPENDICES

APPENDIX A



**PROJECT HEALTH & SAFETY PLAN
(HASP)**

**Corrective Measures Study
Clow Valve
1375 Magnolia Avenue
Corona, California**

EarthCon Project No. 04.20150013.00

**August 22, 2016
Revised October 2, 2017**

Project Health and Safety Plan (HASP)

Project Name: Corrective Measures Study - Clow Valve
1375 Magnolia Avenue
Corona, California

Project Number: 04.20150013.00

Prepared by:	Jennifer McGervey EarthCon Consultants CA, Inc.	8/19/16
Project Manager:	Jeff Bennett, PG EarthCon Consultants CA, Inc.	8/19/16
Approved by:	J. Ryan Clarke EarthCon HASP Reviewer	08/20/2016

Brief Description of Amendment

Update field scope to include capping; updated dust action level;

Amendment Date

10/2/17

Update of EarthCon H&S personnel

10/2/17

Health and Safety Plan Consent Agreement

Because of the potentially hazardous nature of this site and activity occurring at the site, it is not possible to discover, evaluate, and provide protection for all possible hazards that may be encountered. Strict adherence to the health and safety guidelines set forth in this document will reduce, but may not eliminate, the potential for injury and illness at this site. Guidelines in this Plan were prepared specifically for this site and should not be used on any other site without prior evaluation by trained health and safety personnel.

Site workers must also review this HASP. The Site Safety Officer (SSO) must conduct a pre-work briefing prior to initiating this project. All sections of this HASP must be reviewed during this briefing and documented via **Appendix A**. Any worker not attending the initial meeting must be trained by the SSO on the information covered in the pre-work briefing meeting. *The SSO must hold tailgate meetings at the beginning of each work shift to discuss important safety and health issues concerning tasks to be performed on that day.* After reading the HASP and attending a pre-work briefing, workers must sign the following acknowledgment statement.

I have read, understand, and will abide by the information set forth in this HASP. I have also attended a pre-work briefing. I agree to perform my work in accordance with this HASP (See **Appendix F**).

Name (Print)		Signature	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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Appendix A: Site Safety Meeting Minutes

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Appendix F: Contractor and Outside Company HASP Consent Agreement

Appendix G: OSHA Onsite Training Document Form

Appendix H: Health & Safety Inspection Check list

1.0 HASP SUMMARY INFORMATION

The first phase of this project is anticipated to include the collection of soil samples, using a direct push drill rig, at a total depth of 10 feet below ground surface (ft bgs) and installation of two groundwater monitoring wells. The second phase is to implement the CMS activities which includes removing impacted soil, collection of soil confirmation samples, and capping the identified exposed surfaces. This HASP will be updated or amended, as necessary, to reflect any changes that may be encountered. Personnel responsibilities are described in **Table 1** and personnel training requirements are provided in **Table 2**.

Project Name	Corrective Measures Study
Project Location	Clow Valve 1375 Magnolia Avenue Corona, California (see Figures 1 and 2)
Project Number	04.20150013.00
Project Manager	Jeff Bennett 714-500-5400 ext.5454
Start Date / End Date	September 2016-October 2016
Site Safety Officer(s)	Tim Eyres
Client Contact	Larry Bowers 256-388-0001
Supervisor	Jeff Bennett 714-500-5400 ext. 5454
Regional Health & Safety Coordinator	Hugh Walker, Jr. – 662-871-8753 (Cell)
Planned Activities	Monitoring well install & sampling; soil sampling, capping
Chemical Hazards	PCBs, Lead, Cadmium, Arsenic, Diesel, Gasoline
Initial PPE	Level D
Emergency Phone	911
Hospital Information	(951) 737-4343 Corona Regional Medical Center 800 S Main St, Corona, CA 92882

2.0 INTRODUCTION

This HASP serves the following purposes:

- Identifies and describes the potentially hazardous substances and working conditions that may be encountered during the field work;
- Specifies personal protective and monitoring equipment to be used during onsite activities; and
- Outlines measures to be implemented in the event of an emergency.

2.1 Site Location and Description

The Site is southwest corner of the intersection at 1375 Magnolia Avenue in Corona, California. **Figure 1** shows the site location. **Figure 2** provides a site layout for the facility. It is identified as Riverside County Assessor Parcel Number 107-030-022-3 and covers approximately 16 acres. Approximately 60% of the property is currently used for machining, product finishing and testing, and product storage. The remaining 40% includes asphalt-paved parking areas and unpaved areas. Unused foundry buildings, small offices and open areas are leased to other tenants.

2.2 Project Objectives

EarthCon will collect soil samples to assess the extent of soil contamination on-Site. The soil samples will be managed according to the workplan protocol.

EarthCon will provide oversight of advancement for well installation using a subcontracted drilling company. EarthCon will collect and manage water samples according to the workplan protocol.

EarthCon will provide oversight of the grading and asphalt cap placement associated with AOC-1 and AOC-5.

The ultimate objective is to conduct all activities in a safe and compliant manner.

2.3 Personnel Requirements and Responsibilities

Provisions of this HASP apply to all EarthCon personnel and subcontractors that will be participating in the above noted field activities. On-site personnel will be required to review the HASP prior to commencement of field activities and conduct all field activities in accordance with plan specifications. Other personnel on the site are expected to follow the provisions of the health and safety procedures outlined in this HASP as a minimum base standard but will retain full responsibility for the health and safety of their own employees or sub-subcontractors.

General safe work practices that must be implemented during work activities at this site are included in **Table 3**.

EarthCon considers each subcontractor to be an expert in all aspects of the work operations which they are tasked to provide, and each subcontractor is responsible for compliance with those regulatory and/or legal requirements which pertain to those services. While the EarthCon HASP will be the minimum H&S requirements for the work completed by EarthCon and its subcontractors, each subcontractor, in coordination with EarthCon's H&S personnel, is expected to perform its operations in accordance with its own H&S plans, policies and procedures unique to the subcontractor's work to ensure that hazards associated with the performance of the subcontractor's work activities are properly controlled. Copies of any required safety documentation for a subcontractor's work activities will be provided to EarthCon for review prior to the start of on-site activities. No review of any subcontractor plan or document by EarthCon will serve as an approval or ratification of such plan by or on behalf of EarthCon, and no such review will operate as any assumption of any duty or responsibility on the part of EarthCon (or any EarthCon employee or representative) for or as to any aspect of any subcontractor's own H&S responsibilities. Any comments or feedback from EarthCon to any subcontractor following any review by EarthCon of any subcontractor document or practice is provided solely for informational purposes and not for reliance.

In the event that the subcontractor's procedures/requirements conflict with requirements specified in this HASP, the more stringent guidance will be adopted after discussion and agreement between the subcontractor and EarthCon project H&S personnel. Hazards not listed in this HASP, but known to the subcontractor or known to be associated with the subcontractor's services, must be identified by the subcontractor and addressed to the EarthCon Project Manager prior to beginning work operations.

EarthCon personnel who have responsibility for the safe operations of this project include the Project Manager (PM), EarthCon Corporate Safety and Health Manager (CSHM), the Site Safety Officer (SSO) and the Project Field Staff. Responsibilities of each of the above referenced personnel as they relate to project safety and health are provided in **Table 1**.

2.4 Site Control

Site control procedures must be implemented **before** the start of site tasks to control worker exposures to hazardous substances. A Vicinity Map that shows the site location is included as **Figure 1**. A Site Layout Plan with proposed sampling locations is included as **Figure 2**. Changes may be made to the site map by the SSO, as needed, based on site conditions. The site map should be posted in the work area and/or field notebook. This site control program is designed to reduce the spread of hazardous substances from contaminated areas to clean areas, to identify and isolate contaminated areas of the site, to facilitate emergency evacuation and medical care, to prevent unauthorized entry to the site, and to deter vandalism and theft. The Site Safety Officer is responsible for evaluating site conditions and for verifying that the

site control program functions effectively. The site control program will be updated regularly to reflect current site conditions, work operations, and procedures.

2.4.1 Site Access

Access to the site shall be controlled using the following method(s):

- | | |
|--|--|
| <input type="checkbox"/> Security fence | <input checked="" type="checkbox"/> Temporary barricades and/or warning tape |
| <input type="checkbox"/> Sign in/Sign out log | <input type="checkbox"/> Guard |
| <input type="checkbox"/> Identification badges | <input type="checkbox"/> Other: Onsite Manager |

2.4.2 Work Zones

Restricted work zones may be established to limit the spread of hazardous substances (when applicable) by workers from potentially affected areas to non-affected areas. The exact location and extent of the work zones will be modified as necessary as site investigation information becomes available. Delineation of work zones is as follows:

- **Exclusion Zone:** The Exclusion Zone is the area where the potential for exposure to hazards and contact with hazardous materials could occur. The zone may be marked by caution tape. Personnel working within the Exclusion Zone will be expected to follow protective measures as prescribed by the SSO.
- **Contamination Reduction Zone:** The Contamination Reduction Zone is a transition area between the potentially affected areas/materials and assumed non-affected areas/materials. Decontamination of personnel and equipment, if necessary, shall be conducted in this area to reduce the probability of contamination transfer to a non-affected area. The Contamination Reduction Zone shall be situated upwind of the Exclusion Zone.
- **Support Zone:** The Support Zone is the area, outside the Exclusion and Contamination Reduction Zone, where administrative and other project support functions are performed. The Support Zone shall be situated upwind of the Contamination Reduction Zone and/or the Exclusion Zone.

See Figure 2A for the location of the work zones.

2.4.3 Communications

Typical on-site communications may be conducted through the use of:

- | | |
|--|---------------------------------------|
| <input checked="" type="checkbox"/> Verbal | |
| <input type="checkbox"/> Two-way radio | <input type="checkbox"/> Horn |
| <input checked="" type="checkbox"/> Cellular telephone | <input type="checkbox"/> Siren |
| <input checked="" type="checkbox"/> Hand signals | <input type="checkbox"/> Other: _____ |

Off-site communications may be conducted through the use of:

- Cellular telephone: Verify cell phone reception in all work areas prior to starting work.
- Site Phone: Location & No. _____
- Pay phone: Location & No. _____
- Other: _____

Cell Phone reception should be verified throughout the site prior to commencing work.

2.4.4 Visitors

Visitors to the Site shall be continually escorted in order to assure their safety. Visitors will not be allowed past the Support Zone (if such a zone is established at this Site) unless they read, understand, sign, and abide by the requirements outlined in this HASP.

2.5 Worker Training

Table 2 will be used to document on-site workers who have received the appropriate training according to the company Environmental, Health, and Safety (EH&S) Training Program. **Table 2** must be completed prior to initiation of field activities. Pre-work briefing and routine tailgate meetings will be conducted to facilitate on-site training. Subcontractors must provide information requested in **Appendix G** prior to starting to work.

2.6 Safety Meetings

Project personnel who will be involved with on-site field activities must be appropriately trained in accordance with 29 CFR Part 1910.120 “Hazardous Waste Operations and Emergency Response”. Before field work begins, the SSO will review the HASP with the field workers addressing the potential hazards associated with the proposed field activities. Components of the safety meeting will include, but will not be limited to, a review of the following:

- Location of sanitation facilities as seen on site plan.
- Potential chemical, operational and physical hazards present at the site.
- Personal protective equipment (PPE)/personal protection procedures.
- Hazardous materials handling procedures.
- Buddy system.
- Personal hygiene - general guidelines.
- Personal and equipment decontamination procedures.
- Emergency response procedures.
- Symptom awareness.
- Stop Work Authority

Periodic meetings with project personnel may be conducted by the SSO pending changes to the scope of work or modification to this HASP. To document the meetings, the SSO will complete

the Site Safety Meeting Minutes Form provided in **Appendix A**. Verification will be provided to the CHSM upon request.

2.7 Medical Monitoring Requirements

OSHA requires medical monitoring for personnel potentially exposed to chemical hazards at concentrations in excess of the PEL for more than 30 days per year and for personnel who must use respiratory protection for more than 30 days per year.

Will personnel working at this site be enrolled in a medical monitoring program? Yes No

Personnel who are diagnosed as having medical conditions which could directly or indirectly be aggravated by either exposure to chemical substances suspected of being present at the Site, or by the use of Personal Protective Equipment (PPE), will not be allowed to participate in field activities. In addition, personnel with injuries or illnesses involving open wounds may not be allowed on-site. Field personnel who develop an illness or injury during the project may be examined by a physician. A physician must determine if the employee is fit to return to work before they can return to field activities. In addition, the CHSM, SSO, or Site employees may request additional medical testing if a chemical exposure is suspected.

2.8 Hazard Communication Requirements

When chemicals are used on-site, EarthCon workers must adhere to the company's Hazard Communication Program (29 CFR §1910.1200). The following procedures must be followed for chemicals brought on-site (i.e., decontamination solution, sampling preservatives, etc.):

- Labels on incoming primary chemical containers must not be defaced (until after the container is empty, decontaminated and ready for disposal).
- Chemical containers must be stored in appropriate storage cabinets.
- Secondary containers and storage cabinets must be correctly and clearly labeled using the Hazardous Materials Identification System (HMIS).
- Incompatible chemicals must not be stored together.
- Workers must receive training on the hazards indicated in **Table 4**.
- Containers must be secured closed unless adding to or removing something from the container.
- Safety Data Sheets for the chemicals should be recent and are included in **Appendix B**.; they should be made available to workers upon request and applicable hazards covered during safety meetings.
- Workers must receive training on the hazards of the chemicals indicted in **Appendix C**.
- Include a safety training sign off sheet to document this training and provide a copy to the CHSM.
- Training on this information should be documented in **Appendix F**.

3.0 GENERAL PERFORMANCE REQUIREMENTS

General safe work practices that must be implemented during work activities at this site are included in **Table 3**.

3.1 Performance Requirements

- Workers are expected to show up alert and ready to work. No sleeping is allowed on the job.
- Any unsafe equipment, condition or work practice and injuries, no matter how slight, must be reported to the SSO immediately.
- Procedures for the proper set up and control of the worksite task area should be planned and implemented prior to starting individual tasks.
- Field personnel must have ready access to a telephone and a vehicle in case of emergency.
- Field personnel working in the Exclusion Zone are to work with another person at all times. The subcontractor's representative can serve as the second person while the work is being conducted in the field.

3.2 Hygiene Requirements

- Long hair will be secured away from the face so it does not interfere with any activities.
- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated as being potentially affected by site related chemicals.
- Hands and face must be thoroughly washed upon leaving the work area, and before eating, drinking, or other non-project activities.
- Personnel leaving potentially contaminated areas will shower (including washing hair) and change to clean clothing as soon as possible after leaving the site.
- Kneeling, sitting, leaning, or general contact with potentially affected surfaces or with surfaces suspected of being potentially affected by hazardous materials (i.e., puddles, mud, leachate, etc.) should be avoided.
- Medicine and alcohol can potentiate the effects of exposure to toxic chemicals. Neither should be taken by personnel if the likelihood of risk exists. Ingestion of alcohol during and immediately prior to field activities is prohibited.
- Sanitation facilities are provided on site. Potable water and restroom facilities are available and in accordance with 8 CCR 5192 for all employees and visitors.

4.0 HAZARD EVALUATION

A preliminary hazard evaluation was performed to identify existing site conditions and is documented in **Table 4**. The preliminary hazard evaluation addressed the following, where applicable:

- Identification of the suspected hazardous materials/wastes on-site;
- Toxicological aspects of the suspected hazardous materials on-site;
- Suspected chemical/elemental concentrations within the various media on-site;
- Inherent site hazards;
- Operational hazards; and
- Climate extremes.

Environmental site personnel have indicated fire, inhalation and skin absorption to pose a hazard on site. Reactivity including ionizing radiation is not of concern for the site due to past investigations and the operational history. All scrap steel and raw steel entering the site has been screened by radiation detection devices. Further information is documented in **Table 4**.

4.1 Suspected Chemical/Elemental Hazards

To select those contaminants that may cause health and safety concerns, henceforth referred to as potential Contaminants of Concern (COCs), a review of the site remediation and sampling history was performed. Based on this review, potential COCs were selected and are listed in **Table 5**. Chemical information for each of the potential COCs are provided in the NIOSH Pocket Guide pages located in **Appendix C**.

Information from the NIOSH Pocket Guide (e.g., flash point, water reactive, etc.) has been used in performing the chemical hazard analysis in **Table 5** (e.g., fire, inhalation, reactivity, and skin absorption hazards). If, based on the hazard analysis, chemical hazards exist, hazard mitigators must be implemented (**Appendix D**). In addition, air monitoring and personal protective equipment must also be used to evaluate airborne concentrations and protect workers.

After review of the relevant background information and data, if there is a potential for dermal and/or respiratory exposure to the materials or contaminants of concern, personnel shall perform the monitoring requirements summarized in **Section 5.2** and execute actions as appropriate. If action levels are exceeded, work shall be suspended until on-site conditions can be re-assessed and this HASP modified.

4.2 Operational/Physical Hazards/Biological Hazards

Potential operational/physical associated with tasks to be performed and the site have been analyzed in **Table 4**. If, based on the hazard analysis, these hazards exist; the hazard mitigators described in **Appendix D** must be implemented.

- **Utility (e.g., Electrical) hazards:** Utility hazards include buried cables, which pose a danger of shock or electrocution if workers or equipment contact or sever them during site operations. Onsite personnel are advised to pay special attention to the presence of utility hazards. Observe as built plans (if available) for the presence of underground hazards and advance the borings cautiously. A subsurface survey shall be conducted at each of the suspect locations, if necessary.

Lockout/Tag out procedures, in accordance with the EarthCon Lockout/Tag out Program, will be followed when working in the vicinity of electrical equipment. Electrical equipment will be considered energized unless tested and determined otherwise. Energized parts will be insulated or guarded from personal contact. Extension cords used with electrical tools will be the 3-wire type and connected to a ground fault circuit interrupter (GFCI). Wooden or fiberglass ladders will be used. Metal ladders will not be used in the work area.

- **Mechanical hazards:** Mechanical hazards include being struck by heavy equipment and being injured by excavation cave-ins. Onsite personnel are advised to stand at least 15 feet clear of heavy equipment and excavations, and wear appropriate protective equipment, including steel-toe boots and hard hats during the field activities. Fall, slip, and/or trip hazards exist when working with equipment and tools. Field personnel will observe walking surfaces in the work area to prevent tripping on equipment/tools placed on the ground. Good housekeeping will also be practiced. All walking surfaces with a drop of more than six feet will have fall protection devices. Fall protection devices may include adequate delineation of the excavation and trenches, guardrails, or climbing devices such as a harness and lanyard.

- **Noise Hazards:** Noise hazards may exist when working around heavy equipment. Loud noises interfere with communication and also lead to temporary and/or permanent hearing loss. Noise hazards may exist wherever heavy equipment such as loaders and any operating machinery, produce noise levels at or above the Action Level of 85 dBA for 8-hr Time Weighted Average (TWA). Noise in excess of 85 dBA may produce the following effects:
 1. Distraction, annoyance, or sudden surprise
 2. Inability to effectively communicate with co-workers
 3. Physical damage expressed initially as a Temporary Threshold Shift (TTS) and then, as a Permanent Threshold Shift (PTS), or immediately as a Permanent Threshold Shift if the impact noise is sufficient enough (usually greater than 100 dBA)

Appropriate hearing protection must be utilized in areas of unacceptable noise levels.

If, based on the hazard analysis (**Table 4**), biological hazards exist associated with tasks to be performed and site location (e.g., allergic reactions to poisonous plants or insects indigenous to the area, etc.); hazard mitigators (**Appendix D**) must be implemented.

5.0 PERSONAL PROTECTION

5.1 Personal Protective Equipment (PPE)

The levels of personal protection required for each task are provided in **Appendix E**. This PPE is based on the hazards identified in **Section 4**. Required equipment and types of protective clothing materials are listed, as well as an indication of the initial level of protection.

Is there potential for a respirator to be donned during fieldwork? Yes No

It is not anticipated that the use of respirators will be needed, however during the drilling work and sampling the area will be monitored via dust particulate monitor (MiniRam or equivalent). If there is an indication that a respirator is required work will be halted until tasks have been re-evaluated and the HASP has been updated as needed.

The general use of PPE is acceptable when engineering controls cannot adequately eliminate the hazard. The use of PPE is intended to provide protection for on-site personnel from chemical, physical, and operational hazards that cannot be controlled through other safety procedures. Initially, Level D Protection will be employed by on-site personnel and will include varying levels of eye, head, body, hand, foot, and hearing protection.

Respiratory protection will not be required. However, if respirators are worn, workers must adhere to the company's Respiratory Protection Program (29 CFR §1910.134). **Table 2** should be used to provide a record of the site workers' last fit test. Beards (i.e., facial hair interfering with the respirator seal) are not allowed.

Acceptable PPE are further described below.

- Eye Protection: Eye protection will include the use of chemical splash goggles and/or face shields and impact resistant safety glasses with side shield protection that meet the current ANSI standard Z87.1.
- Head Protection: Non-metallic hard hats meeting the current ANSI standard Z89.1 will be worn by on-site personnel as required during field activities.
- Body Protection: Body protection will include the use of long sleeved shirt and pants work clothes.
- Hand Protection: Hand protection will include the use of nitrile gloves when hand contact with affected materials (e.g., groundwater and soil) may occur. Otherwise use work gloves of leather or other appropriate material.
- Foot Protection: Foot protection will include the use of impact resistant boots meeting the current ANSI standard Z41.1.

These levels shall only be downgraded upon approval by either the CSHM or SSO. Project personnel are not permitted to deviate from the specified levels of protection without prior approval of the SSO.

5.2 Personal Air Monitoring

Corrective measure activities may have the potential to generate dust; therefore, dust monitoring will be conducted on-Site. Airborne particulate concentrations will be measured with a portable particulate monitor (MiniRam or equivalent) to ensure compliance with the action levels (stop work level) and Cal OSHA Permissible Exposure Limits (PELs). The PELs for COCs potentially present on-Site, along with stop work levels are provided in Table 5.

According to calculations using the site specific maximum concentrations documented in **Table 5** and the OSHA Permissible Exposure Limit (PEL) for total dust, the only constituent of concern is lead. Total dust must measure below 6.8 mg per cubic meter (mg/m^3) to remain below the PEL for lead. However, at the direction of the DTSC the action level for total dust is $0.05 \text{ mg}/\text{m}^3$. A MiniRam will be on site at all times monitoring dust concentrations. The MiniRam is gravimetrically calibrated in mg/m^3 using the standard SAE Fine (ISO fine) test dust. A zeroing kit will be present to accomplish zeroing in particle free air when on-site. In the case where dust levels measure over $0.05 \text{ mg}/\text{m}^3$, work will be suspended and on-site conditions will be re-assessed.

5.3 Vehicle Safety

Vehicle safety requires the following:

- Vehicles are to be operated in a safe manner and in compliance with statutory traffic regulations and ordinances.
- Operators are to practice defensive driving and drive in a courteous manner.
- Operators are required to have a valid driver's license and liability insurance (per local/state laws).
- Seat belts are to be worn by the driver and passengers.
- No persons are allowed to ride in the back of any trucks or vans.
- Vehicles are to be driven in conformance with local speed limits.
- Personnel who are impaired by fatigue, illness, alcohol, illegal or prescription drugs, or who are otherwise physically unfit, are not allowed to drive.
- Personnel are to avoid using cellular phones or engaging in other distractions while driving.
- Vehicles should be maintained in a safe and clean condition.
- Field vehicles should be equipped with the following items; first-aid kit, fire extinguisher, spares tire and jack.
- Motor vehicle accidents shall be reported to the responsible law enforcement agency (when appropriate), the EarthCon CHSM, the EarthCon HR Director, the SSO and the EarthCon PM.
- Daily and monthly check lists to verify safe operations have been generated and should be utilized prior to operating a vehicle.
- If the site has specific driving rules, these should be reviewed and adhered to.

5.4 Illumination

Work will be completed during daylight hours only. This will ensure all work is done in accordance with 8 CCR 5192(m) illumination requirements.

6.0 DECONTAMINATION

The following decontamination (cleansing) procedures for the sampling equipment and PPE have been developed with the intent of reducing the potential for the transfer of hazardous chemicals.

6.1 Sampling Equipment

To reduce the potential for the distribution of contaminants or cross contamination of samples, the following procedures will be used. Decontamination of the sampling equipment will include washing the equipment in a detergent solution (Liqui-nox and water), rinse with potable water, rinse with organic-free/distilled water, and allow to air dry. Disposable equipment will be used when practical to eliminate the need for on-site decontamination.

6.2 Personnel and PPE

During this project the goal will be to use disposal PPE (nitrile gloves), therefore no PPE decontamination will be required. If this cannot be accomplished, PPE must be decontaminated (cleaned) per 29 CFR §1910.120(k). In an emergency, the primary concern is *to prevent the loss of life or severe injury to site personnel*. If *immediate medical treatment* is required to save a life, decontamination should be delayed until the victim is stabilized. If decontamination can be performed without interfering with essential life saving measures or first-aid, or if a worker has been contaminated with an extremely toxic or corrosive material that could cause severe injury or loss of life, decontamination must be performed in coordination with or prior to initial medical treatment at the scene.

Decontamination of PPE (e.g., gloves) shall be accomplished by passing personnel through appropriate stages of contamination reduction and removing contaminated clothing and equipment in decreasing order of the degree of potential contamination. Personnel who have entered areas suspected of containing hazardous materials (i.e., the Exclusion Zone) will be subjected to decontamination. The personnel decontamination corridor may be comprised of the following procedural stages. These stages/procedures are listed sequentially below.

Stage No. 1: Segregated Equipment Drop – Personnel will brush off loose dirt and wash off remaining soil, sediment, and dirt from clothes and shoes upon completion of sampling and field work. Equipment and consumables that require either disposal or special handling (e.g., special and/or equipment decontamination) shall remain in this area and be decontaminated, if appropriate, or disposed of with the excavated materials or other potentially contaminated materials.

Stage No. 2: PPE Decontamination - PPE that has been potentially contaminated will be washed with a TSP and water mixture followed by a water rinse.

Stage No. 3: General Field Wash - Personnel shall wash and rinse face and hands with soap and water before leaving the site and/or eating. If a change of clothing is necessary, it shall be done at this time.

6.3 Decontamination Fluids and Investigation-Derived Waste Disposal

Decontamination water and drill cuttings will be placed in appropriate containers. Disposal methods will be determined after characterizations have been completed. Solid waste generated during decontamination and field activities (i.e., paper towels, plastic tarps, used PPE) will be removed from the Site and disposed as refuse/trash.

6.4 Vehicles

Typically, vehicles will not be allowed inside the exclusion zone. If vehicles are required in the exclusion zone (e.g., drill rigs) the following procedures will be used. Personnel will wash or remove boots and change to dry clothing prior to vehicle entry. Non-disposable equipment will be washed or bagged before placement into field vehicles. Drill rigs will be decontaminated with detergent solution and rinsed with water before leaving the exclusion zone.

7.0 EMERGENCY PROCEDURES

A list of Emergency Response contacts and telephone numbers for applicable local off-site emergency responders is provided in **Table 6**. The following emergency response equipment is required for this project:

- Fire Extinguisher(s): Type A Type B Type C Type ABC
 Air Monitoring: PID Air Sampling Pumps CG/O2 meter
 MiniRam H2S Meter Radiation Meter
 Draeger Pump w/ Sample Tubes Other:
- Eyewash (Note: portable eyewash bottle)
 SCBA
 First Aid Kit
 Shower (Note: for acids and caustics)
 Personal Flotation Device(s)
 Windsock
 Stop Watch &Thermoscan for Measuring Heart Rate and Heat Stress
 Global Positioning System
 Other:

As a minimum, the project shall have the following equipment available during field activities:

- A first aid kit (mandatory, including adhesive Band-Aids, gauze, tape, gloves, CPR shield, triangle bandage) shall be available in the Support Zone at all times.

Check additional items required for the site.

- Emergency Blanket Sunscreen (as needed)
 Insect Repellent (as needed) Other: ointment for poison plants and insect bites_____

- Copious amounts of cool potable water shall be readily available for both drinking purposes and for personal hygiene purposes (e.g., washing, rinsing, and cooling of face and body, etc.).
- Emergency references (e.g., nearest phone, emergency phone numbers and services, etc.) shall accompany the first aid kit.
- Communication equipment such as a cellular phone will be accessible in case of an emergency.
- A vehicle shall be easily accessible for transport/emergency.

The emergency response communication system for the site is:

- Verbal
- Two-way radio
- Hand signals: Hand gripping throat =“Out of Air, Can’t Breathe”
 Grip partner’s wrist or both hands around waist =“Leave area immediately”
 Hands on top of head =“Need assistance”
 Thumps up =“OK; I am all right; I understand”
 Thumps down =“No; negative”
- Horn
- Siren
- Other: Cellular Phone

If an on-site emergency develops, the procedures outlined in **Table 7** shall be followed immediately.

7.1 Natural Disasters

In the event of emergency conditions associated with natural disasters, such as severe weather, site personnel will remain calm, turn off equipment and ignition sources, and move away from buildings, cranes, and overhead utilities. Following an emergency, personnel will proceed to a designated meeting place. The SSO will take a head count to ensure that all personnel are present. Crews must remain together until accounted for. The SSO will assess any injuries and the need for emergency assistance.

7.2 Workplace Violence

If any employee or visitor is confronted by a potentially hostile person, he/she will remain calm and refrain from further aggravating the individual. Site personnel should contact the SSO. Protocol established by the site will be followed or local police will be contacted for assistance when needed.

8.0 SHIPMENT OF RESTRICTED ARTICLES

Federal laws and international guidelines place restrictions on what materials may be shipped by passenger and cargo aircraft. In the course of field activities, the following items may be shipped to and from the site in the following manner.

Item	Hazardous Constituent	Quantity	Packaging	How Shipped
Soil samples	*NA	5	8 oz. glass jar with Teflon lid. Laboratory provided	EarthCon Personnel

Item	Hazardous Constituent	Quantity	Packaging	How Shipped
Groundwater Samples	HCL & HNO3 – lab preservatives	3	VOAs and HDPE laboratory provided containers	EarthCon Personnel

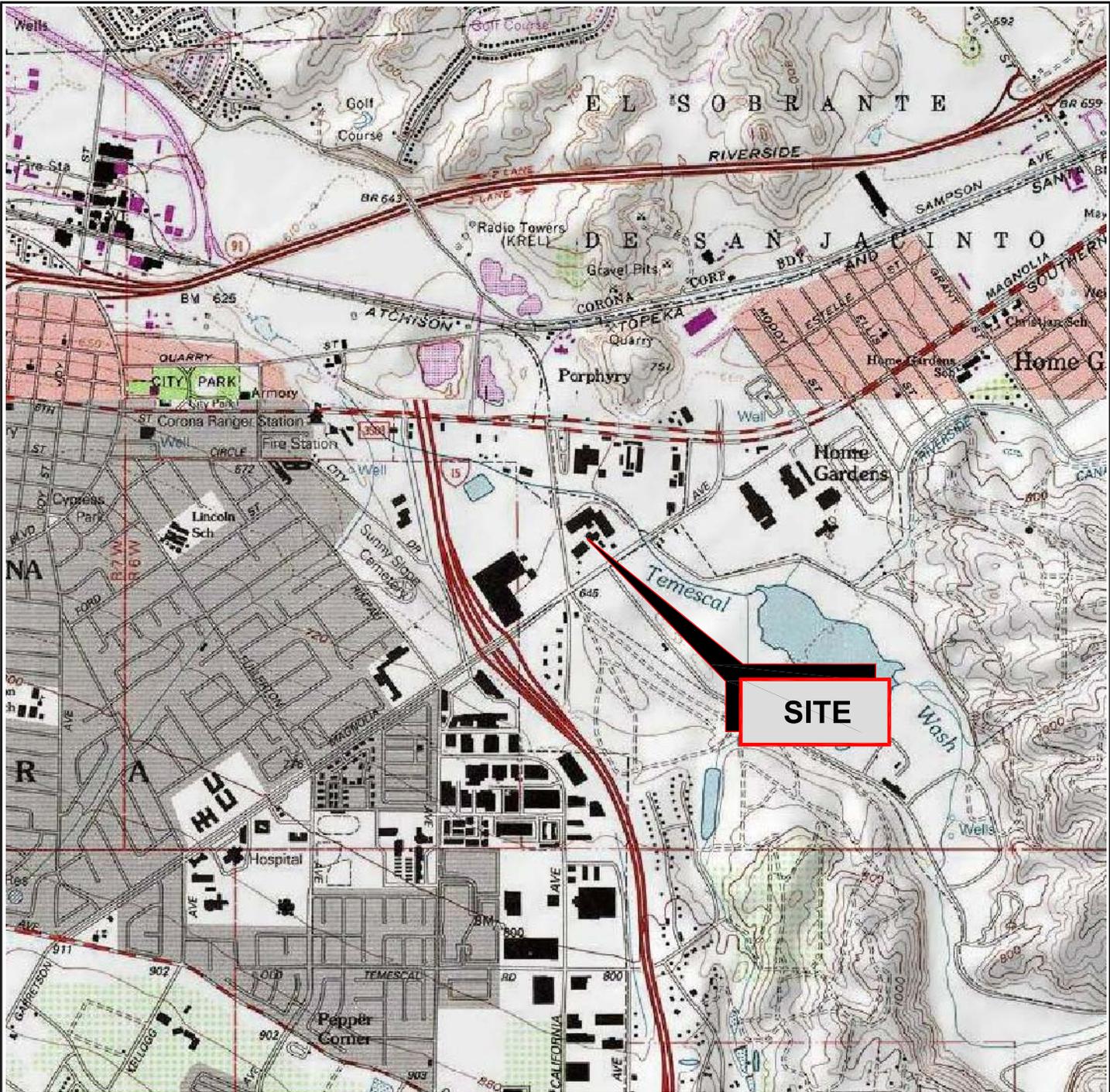
*soil samples do not have preservatives

9.0 SPILL CONTAINMENT

An evaluation was conducted to determine the potential for hazardous substance spills at this site. That evaluation indicates that there is no potential for a hazardous substance spill of a sufficient quantity to require containment planning, equipment, and procedures. For that reason, no spill containment program is implemented at this site. Employee training on how to respond and take protective measures during incidental releases of hazardous substances are provided consistent with the Hazard Communication Standard, 29 CFR 1910.12

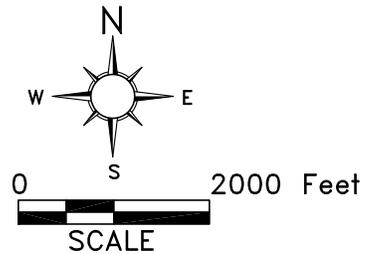
Incidental spills are different from emergency releases. Incidental spills can safely be absorbed, neutralized, or otherwise controlled by EarthCon employees or contractors with the appropriate training.

Figure 1
Vicinity Map



FROM: U.S. GEOLOGICAL SURVEY, 1997
 QUADRANGLE: CORONA SOUTH
 COUNTY: RIVERSIDE
 SERIES: 7.5-MINUTE QUAD

NOTE: ALL BOUNDARIES AND LOCATIONS ARE APPROXIMATE



CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879



VICINITY MAP

EARTHCON CONSULTANTS CA, INC

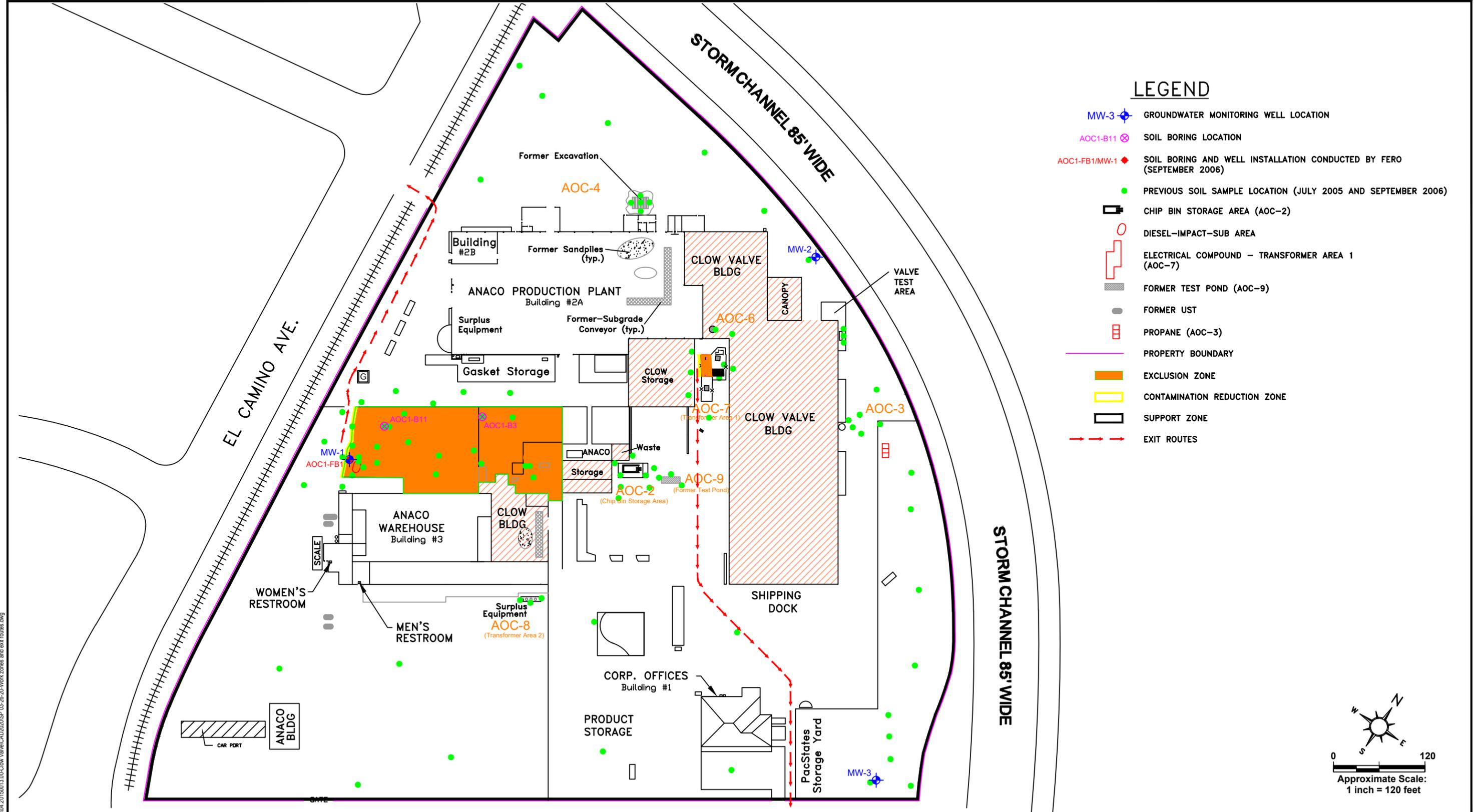
1914 W. ORANGEWOOD AVENUE, SUITE 102, ORANGE, CA 92868

PROJECT NO. 04.20150013.00

DRAWN: DCN	CHECKED: JB	DATE: 12/30/15	FIGURE: 1
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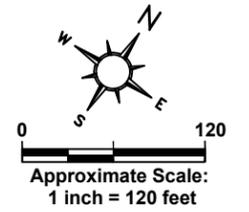
Figure 2
Site Plan

Figure 2A
Site Plan with Work Zones and Exit Routes



LEGEND

- MW-3 GROUNDWATER MONITORING WELL LOCATION
- AOC1-B11 SOIL BORING LOCATION
- AOC1-FB1/MW-1 SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERRO (SEPTEMBER 2006)
- PREVIOUS SOIL SAMPLE LOCATION (JULY 2005 AND SEPTEMBER 2006)
- CHIP BIN STORAGE AREA (AOC-2)
- DIESEL-IMPACT-SUB AREA
- ELECTRICAL COMPOUND - TRANSFORMER AREA 1 (AOC-7)
- FORMER TEST POND (AOC-9)
- FORMER UST
- PROPANE (AOC-3)
- PROPERTY BOUNDARY
- EXCLUSION ZONE
- CONTAMINATION REDUCTION ZONE
- SUPPORT ZONE
- EXIT ROUTES



MAGNOLIA AVE

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



EARTHCON CONSULTANTS CA, INC

1914 W. ORANGEWOOD AVE., SUITE 102, ORANGE, CA 92868

SITE PLAN WITH WORK ZONES
AND EXIT ROUTES

DRAWN: DCN	CHECKED: JB	DATE: 03/26/20	FIGURE: 2A
------------	-------------	----------------	------------

FILENAME: S:\Comment\OrangeCAD\Projects\04-20150013.00-Clow Valve\CAD\2020\SP_03-26-20-Work zones and exit routes.dwg

Figure 3
Hospital Location Map

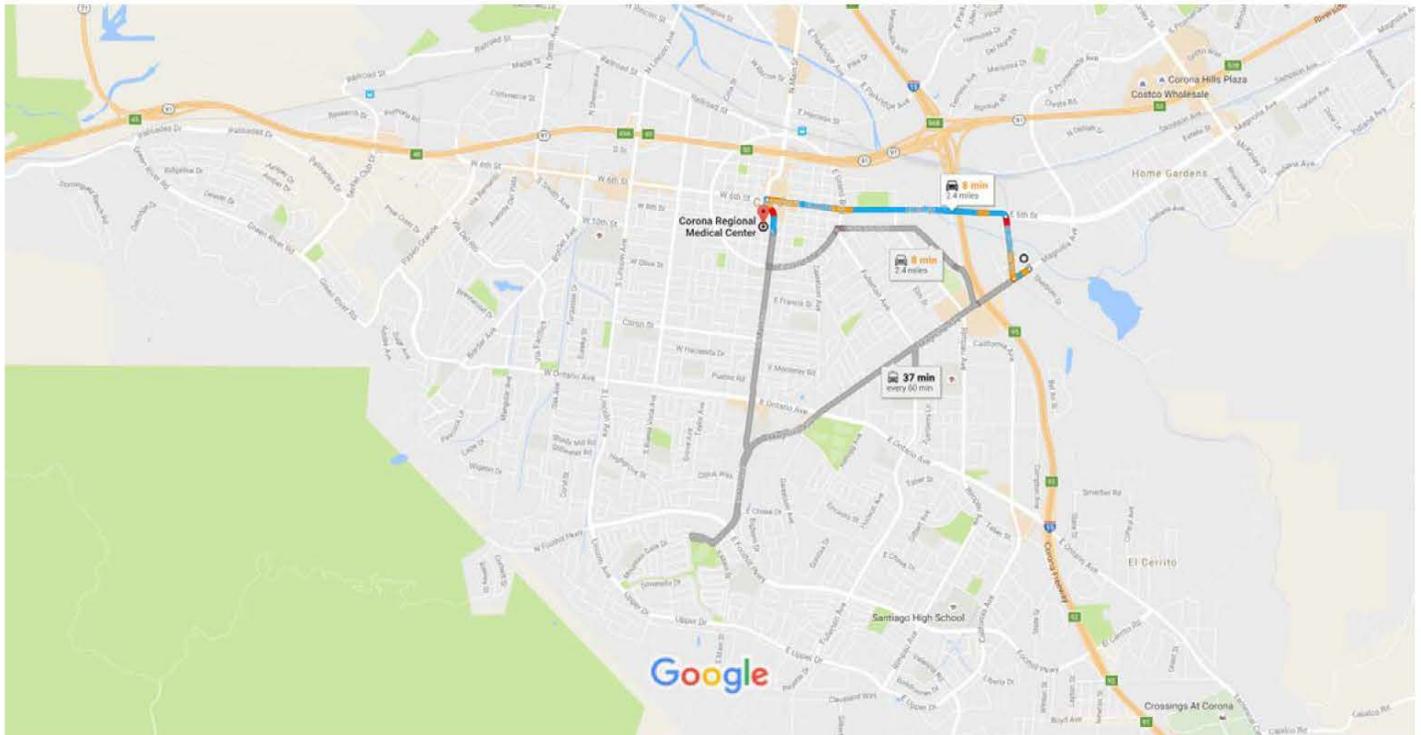
8/19/2016

1375 Magnolia Avenue, Corona, CA 92879 to Corona Regional Medical Center - Google Maps



1375 Magnolia Avenue, Corona, CA 92879 to Corona Regional Medical Center

Drive 2.4 miles, 8 min



Map data ©2016 Google 2000 ft

1375 Magnolia Avenue

Corona, CA 92879

Head southwest on Magnolia Ave toward Sherborn St

0.1 mi

Turn right onto El Camino Ave

0.4 mi

Turn left onto E 6th St

1.6 mi

Turn left onto S Main St

0.2 mi

Corona Regional Medical Center

800 South Main Street, Corona, CA 92882

Table 1

Key Personnel and Health & Safety Responsibilities

Project Manager (PM) Jeff Bennett	Regional H&S Coordinator Hugh Walker	Site Safety Officer (SSO) Lindsey Langer/Jenn McGervey	Project Field Staff Lindsey Langer/Jenn McGervey
<ul style="list-style-type: none"> • Coordinate, approve, implement and manage this HASP and amendments, if any. • Incorporate H&S planning, implementation, and supplies (PPE, decontamination materials) into project plans and budget. • Select and assign responsibility to the SSO to implement HASP. • Monitor the Field Logbooks for health and safety work practices employed. • Coordinate with SSO so that emergency response procedures are implemented, if needed. • Inform CSHM of HASP violations, if any, and verify corrective actions are implemented. • Ensure personnel receive this plan, are aware of its provisions, are aware of the potential hazards associated with site operations, are instructed in safe work practices, are familiar with emergency response procedures and document this information • Coordinate with Client and SSO. • In the event of an incident or other emergency complete & submit appropriate forms and make proper notifications. 	<ul style="list-style-type: none"> • Review and approve HASP; approve any associated amendments. • Evaluate documentation presented of site hazards for HASP preparation. Maintain a final copy of the completed HASP. • Perform periodic audits of documentation of project activities to evaluate general compliance with policies, procedures, directives and guidelines presented in this HASP. • Assist with the implementation of the Corporate Health and Safety Program. • Provide environmental, health and industrial hygiene consultation as needed. • In the event of an emergency, if required set up an incident investigation team and notify applicable outside agencies. 	<ul style="list-style-type: none"> • Be present on-site, as appropriate, with the authority to implement HASP and EarthCon H&S protocols. • Confirm that site personnel meet the training and medical requirements. • Verify that monitoring equipment and personal protective equipment is operating correctly according to manufacturer's instructions and such equipment is utilized by on site personnel. Calibrate or verify calibration of monitoring equipment and record results. • Verify that decontamination procedures are being implemented and Site Control Plan is in place. • Provide and document pre-work briefing and daily tailgate safety meetings, monitor activities for safe work practices and HASP compliance. • Perform routine H&S inspections. Document meetings and inspections. Provide copies to CHSM as requested. • Report to the Project Manager deviations from the anticipated conditions, and authorize the cessation of work if necessary. • Notify the PM and CSHM in the event an emergency occurs, and implement site emergency response and follow-up procedures, provide First Aid, as needed. • Work with PM to verify appropriate notifications and forms are completed for any incident or near miss. • Secure the scene after an emergency until given notification to release the scene by the CHSM. 	<ul style="list-style-type: none"> • Provide verification of required health and safety training and medical surveillance prior to arriving at the site. • Notify the SSO of any special medical conditions (e.g., allergies). • Review, be familiar with and abide by the HASP. • Attend pre-work briefings and daily tailgate safety meetings. • Comply with requests of PM, SSO, and HASP. • Perform work using safe techniques; be responsible for their personal safety. • Immediately report any accidents and/or unsafe conditions to the SSO.

Table 2

Training / Medical Surveillance / Respirator Fit Test Records

<i>Name</i>	<i>EHS Category</i>	<i>Initial 40-Hour</i>	<i>Annual 8-Hour Refresher</i>	<i>8-Hour Supervisor (if applicable)</i>	<i>CPR/ First Aid¹ (initial or refresher)</i>	<i>Medical Surveillance² (if applicable)</i>	<i>Annual Respirator Fit Test³ (if applicable)</i>	<i>Other:⁴</i>
		<i>Date</i>	<i>Date</i>	<i>Date</i>	<i>Date</i>	<i>Date</i>	<i>Date</i>	<i>Date</i>
Jeff Bennett	I	1990	1/2017	6/1990	1/2016	N/A	N/A	---
Jenn McGervey	I	8/2015	1/2017		1/2016	NA	NA	---
Lindsey Langer	I	8/2019						

Footnotes:

- ¹ CPR Refresher: every year; First Aid Refresher: every three years.
- ² Annual Medical Surveillance for EHS Category I.
- ³ For EHS Categories I & II only.
- ⁴ Could include task-specific training, project-specific training, or project-specific medical surveillance.

Table 3

General Safe Work Practices

- Report to work alert and ready to perform assigned duties; no sleeping is allowed at the jobsite.
- Immediately report any unsafe acts, incidents, accidents, or near misses. Utilize Stop Work Authority if needed.
- Minimize contact with excavated or contaminated materials. Do not place equipment on the ground. Do not sit or kneel on potentially contaminated surfaces.
- Smoking, eating, or drinking after entering the work zone and before decontamination is prohibited. Use of illegal drugs and alcohol are prohibited. Workers taking prescribed medication that may cause drowsiness should not be operating heavy equipment, and should be prohibited from performing tasks where Level C, B, or A personal protective equipment is required.
- Practice good housekeeping. Keep everything orderly and out of potentially harmful situations.
- Use of contact lenses on-site shall only be allowed when dictated by working conditions.
- The following conditions must be observed when operating a motor vehicle.
 - Wearing of seat belts is mandatory
 - During periods of rain, fog, or other adverse weather conditions, the use of headlights is mandatory
 - A backup warning system or use of vehicle horn is mandatory when the vehicle is engaged in a backward motion
 - Posted traffic signs and directions from flagmen must be observed
 - Equipment and/or samples transported in vehicles must be secured from movement
 - The use of contractor acquired vehicles by non-contractor personnel is prohibited
 - Daily inspection sheets should be completed by driver and kept with equipment for the duration of the project.
- In an unknown situation, always assume the worst conditions.
- Be observant of your immediate surroundings and the surroundings of others. It is a team effort to notice and warn of impending dangerous situations. Withdrawal from a hazardous situation to reassess procedures is the preferred course of action.
- Conflicting situations may arise concerning safety requirements and working conditions and must be addressed and resolved rapidly by the SSO and PM to relieve any motivations or pressures to circumvent established safety policies.
- Unauthorized breaches of specified safety protocol must not be allowed. Workers unwilling or unable to comply with the established procedures must be removed from the site immediately.

Table 4

Hazard Analysis

<i>Tasks</i>	
① Capping	⑤
② Soil Sampling	⑥
③ Well Installation	⑦
④ GW Sampling	⑧

①	②	③	④	⑤	⑥		
---	---	---	---	---	---	--	--

<i>I. Chemical Hazards</i>							
Fire	X	X	X	X			
Inhalation	X	X	X	X			
Reactivity							
Skin absorption	X	X	X	X			
<i>II. Physical Hazards</i>							
Cold Stress	X	X	X	X			
Compressed Gas Cylinder							
Drowning							
Drum Handling	X	X	X	X			
Electrocution	X	X	X	X			
Excavation/Trenching			X				
Eye Injury	X	X	X	X			
Hand/Foot Injury	X	X	X	X			
Heat Stress	X	X	X	X			
Heavy Equipment	X		X				
Lifting Heavy Loads	X		X				
Noise	X		X				
Portable Power/Hand Tool	X	X	X	X			
Radiation Exposure							
Slipping/Tripping/Falling	X	X	X	X			
<i>III. Biological Hazards</i>							
Poisonous Plants							
Insect/Vermin/Snake Bites							
Medical Waste							

Instructions: For each task, place an "X" in the blank corresponding to associated hazards.

Table 5
Potential Contaminants of Concern

<i>Contaminant</i>	<i>IP(eV)</i>	<i>REL (ppm) or PEL (mg/m3)</i>	<i>IDLH (mg/m3)</i>	<i>LEL/UEL %</i>	<i>Flash Point (°F)</i>	<i>Routes of Exposure</i>	<i>Hazards</i>	<i>Medium¹</i>	<i>Maximum Concentration²</i>
Total Dust	--	0.05	--	--	--	--	--	soil/dust	--
PCBs	N/A	PEL – 1.0 TWA	5	N/A	N/A	Skin, Inhalation, Ingestion	C	soil	1,400 mg/kg
Lead	N/A	PEL – 0.05 TWA	100	N/A	N/A	Skin, Inhalation, Ingestion	C	soil	7,360 mg/kg
Cadmium	N/A	PEL - 0.005 TWA	9	N/A	N/A	Skin, Inhalation, Ingestion	C,T	soil	43.9 mg/kg
Arsenic	N/A	PEL - 0.01 TWA	5	N/A	N/A	Skin, Inhalation, Ingestion	C,T	soil	52.90 mg/kg
Diesel	--	REL – 100TWA	--	0.6/6.5	125.6	Skin, Inhalation, Ingestion	F,C,Co	soil	9,300 mg/kg
Gasoline	--	None cited/300	--	1.4/7.6	-45	Skin, Inhalation, Ingestion	F, C, Co	soil	1,300 mg/kg

-- - none established

IDLH - immediately dangerous to life and health*R* - reactive*C* - carcinogen*O-Oxidizer**IP(eV)* - ionization potential*PEL* - permissible exposure level*SC* - suspected carcinogen *Co* - corrosive*E*- explosive*STEL* - short term exposure level*F* - flammable*NA* - not applicable*P*- poison*V* - varies depending on compound mixture

ND – Not determined

Footnotes:¹ Indicate type of medium (i.e. soil, water, sludge, etc.).² Indicate the maximum concentration detected for the contaminant

Table 6**Emergency Response Contacts**

<i>Name</i>	<i>Telephone Numbers</i>		<i>Date of Pre-Emergency Notification</i>
	<i>Office</i>	<i>Mobile</i>	
Fire Department	911	NA	NA
Hospital – Corona Regional Medical Center	911 or (951) 737-4343	NA	NA
Police Department	911	NA	NA
Site Safety Officer – Lindsey Langer	--	562-322-7934	NA
Project Manager – Jeff Bennett	714-500-5400 ext 5454	714-743-0482	NA
Regional Manager – Larry Lew	281-240-5200 X 2761	713-829-3215	NA
Corp. HR Manager – Glenda Croft	770-973-2100 x2870	NA	NA
Regional Health & Safety Coordinator – Julia Wlson	281-240-5200 X 2705	551-486-4382	NA

NA – Not applicable in general or for the level of hazard at this Site.

WRITTEN DIRECTIONS TO HOSPITAL: (See Figure 3).

1375 Magnolia Avenue

Corona, CA 92879

Head southwest on Magnolia Ave toward Sherborn St

0.1 mi

Turn right onto El Camino Ave

0.4 mi

Turn left onto E 6th St

1.6 mi

Turn left onto S Main St

0.2 mi

Corona Regional Medical Center

800 South Main Street, Corona, CA 92882

Table 7**Emergency Response Procedures**

- This plan must be discussed with verbal training for onsite EarthCon employees and subcontractors
- This training should be documented and a copy provided to the CHSM.
- The SSO (or alternate) should be immediately notified via the on-site communication system.
- If applicable, the SSO must notify off-site emergency responders (i.e., fire department, hospital, police department, etc.) and must inform the response team as to the nature and location of the emergency on site.
- If applicable, the SSO evacuates the site. Site workers should move to their respective refuge stations using the evacuation routes provided on the Site Map. SSO must account for all workers associated with the project.
- The SSO notifies the PM, Principal, and the CHSM of the emergency. If an EarthCon employee is injured, the SSO must contact the worker's Regional Manager/Branch Office Manager immediately. If the Regional Manager/Branch Office Manager cannot be contacted, then the Corporate Human Resources Department must be notified.
- For small fires, flames should be extinguished using the fire extinguisher. Large fires should be handled by the local fire department.
- In an unknown situation or if responding to toxic gas emergencies, appropriate PPE, including SCBAs, should be donned.
- If chemicals are accidentally spilled or splashed into eyes or on skin, use eyewash and/or shower.
- Before continuing site operations after an emergency involving toxic gas, the appropriate responder will don a SCBA and utilize appropriate air monitoring equipment to verify that the site is safe.
- An injured worker must be decontaminated appropriately.
- If a worker is injured, first aid will be administered by workers certified in first aid.
- If necessary, the SSO will secure the scene after the response. The scene should not be released until notification from the CHSM.
- After the response, the SSO and /or PM must complete and submit the appropriate incident reports.
- The PM or SSO should secure written /signed witness statements as appropriate, take pictures, etc. immediately and before the end of the shift.
- If an investigation is required, the CHSM and Safety Team will set up a team to start the investigation with input from the DL.
- The CHSM will notify outside agencies as appropriate.

Appendix A

Site Safety Meeting Minutes

Site Name: _____ Contract No. _____

Meeting Location _____

Meeting Date _____ Time _____ Conducted By _____

_____ Pre-Fieldwork Orientation _____ Weekly Site Meeting _____ Other

Subjects Discussed:

Safety Officer Comments:

Name and Signature of Participating Personnel (list company name if subcontractor)

Note: Attach additional pages if necessary. Send this form to the EarthCon Project Manager. Copies will be placed in the appropriate project files.

Appendix B
Safety Data Sheets

Chlorodiphenyl (42% chlorine)

Synonyms & Trade Names

Aroclor® 1242, PCB [Chlorodiphenyl (42% chlorine)], Polychlorinated biphenyl [Chlorodiphenyl (42% chlorine)]

CAS No.

53469-21-9

RTECS No.

TQ1356000

DOT ID & Guide

2315 171

Formula

$C_6H_4ClC_6H_3Cl_2$ (approx)

Conversion

IDLH

Ca [5 mg/m³]

See: 53469219

Exposure Limits**NIOSH REL**

Ca TWA 0.001 mg/m³ See Appendix A (nengapdx.html) [*Note: The REL also applies to other PCBs.]

OSHA PEL

TWA 1 mg/m³ [skin]

Measurement Methods

NIOSH 5503 ;

OSHA PV2089

See: NMAM or OSHA Methods

Physical Description

Colorless to light-colored, viscous liquid with a mild, hydrocarbon odor.

Molecular Weight

258 (approx)

Boiling Point

617-691°F

Freezing Point

-2°F

Solubility

Insoluble

Vapor Pressure

vapor Pressure

0.001 mmHg

Ionization Potential

?

Specific Gravity

(77°F): 1.39

Flash Point

NA

Upper Exposive Limit

NA

Lower Explosive Limit

NA

Nonflammable Liquid, but exposure in a fire results in the formation of a black soot containing PCBs, polychlorinated dibenzofurans & chlorinated dibenzo-p-dioxins.

Incompatibilities & Reactivities

Strong oxidizers

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes; chloracne; liver damage; reproductive effects; [potential occupational carcinogen]

Target Organs

Skin, eyes, liver, reproductive system

Cancer Site

[in animals: tumors of the pituitary gland & liver, leukemia]

Personal Protection/Sanitation

(See protection codes (protect.html))

Skin:Prevent skin contact

Eyes:Prevent eye contact

Wash skin:When contaminated

Remove:When wet or contaminated

Change:Daily

Provide:Eyewash, Quick drench

First Aid

(See procedures (firstaid.html))

Eye:Irrigate immediately

Skin:Soap wash immediately

Breathing:Respiratory support

Swallow:Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having an N100, R100, or P100 filter.

[Click here \(pgintrod.html#nrp\)](#) for information on selection of N, R, or P filters.

Any appropriate escape-type, self-contained breathing apparatus

[Important additional information about respirator selection \(pgintrod.html#mustread\)](#)

See also

INTRODUCTION MEDICAL TESTS: 0175

File Formats Help:

How do I view different file formats (PDF, DOC, PPT, MPEG) on this site? ([//www.cdc.gov/Other/plugins/](http://www.cdc.gov/Other/plugins/))

([//www.cdc.gov/Other/plugins/#pdf](http://www.cdc.gov/Other/plugins/#pdf))

Page last reviewed: April 11, 2016

Page last updated: April 11, 2016

Content source: National Institute for Occupational Safety and Health (NIOSH) ([/niosh/](http://niosh/)) Education and Information Division

Chlorodiphenyl (54% chlorine)

Synonyms & Trade Names

Aroclor® 1254, PCB [Chlorodiphenyl (54% chlorine)], Polychlorinated biphenyl [Chlorodiphenyl (54% chlorine)]

CAS No.

11097-69-1

RTECS No.

TQ1360000

DOT ID & Guide

2315 171

Formula

$C_6H_3Cl_2C_6H_2Cl_3$ (approx)

Conversion

IDLH

Ca [5 mg/m³]

See: IDLH INDEX

Exposure Limits**NIOSH REL**

Ca TWA 0.001 mg/m³ See Appendix A (nengapdx.html) [*Note: The REL also applies to other PCBs.]

OSHA PEL

TWA 0.5 mg/m³ [skin]

Measurement Methods

NIOSH 5503 ;

OSHA PV2088

See: NMAM or OSHA Methods

Physical Description

Colorless to pale-yellow, viscous liquid or solid (below 50°F) with a mild, hydrocarbon odor.

Molecular Weight

326 (approx)

Boiling Point

689-734°F

Freezing Point

50°F

Solubility

Insoluble

Vapor Pressure

vapor Pressure

0.00006 mmHg

Ionization Potential

?

Specific Gravity

(77°F): 1.38

Flash Point

NA

Upper Exposive Limit

NA

Lower Explosive Limit

NA

Nonflammable Liquid, but exposure in a fire results in the formation of a black soot containing PCBs, polychlorinated dibenzofurans, and chlorinated dibenzo-p-dioxins.

Incompatibilities & Reactivities

Strong oxidizers

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, chloracne; liver damage; reproductive effects; [potential occupational carcinogen]

Target Organs

Skin, eyes, liver, reproductive system

Cancer Site

[in animals: tumors of the pituitary gland & liver, leukemia]

Personal Protection/Sanitation

(See protection codes (protect.html))

Skin:Prevent skin contact

Eyes:Prevent eye contact

Wash skin:When contaminated

Remove:When wet or contaminated

Change:Daily

Provide:Eyewash, Quick drench

First Aid

(See procedures (firstaid.html))

Eye:Irrigate immediately

Skin:Soap wash immediately

Breathing:Respiratory support

Swallow:Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having an N100, R100, or P100 filter.

[Click here \(pgintrod.html#nrp\)](#) for information on selection of N, R, or P filters.

Any appropriate escape-type, self-contained breathing apparatus

[Important additional information about respirator selection \(pgintrod.html#mustread\)](#)

See also

INTRODUCTION ICSC CARD: 0939 MEDICAL TESTS: 0176

File Formats Help:

How do I view different file formats (PDF, DOC, PPT, MPEG) on this site? ([//www.cdc.gov/Other/plugins/](http://www.cdc.gov/Other/plugins/))

([//www.cdc.gov/Other/plugins/#pdf](http://www.cdc.gov/Other/plugins/#pdf))

Page last reviewed: April 11, 2016

Page last updated: April 11, 2016

Content source: National Institute for Occupational Safety and Health (NIOSH) ([/niosh/](http://niosh/)) Education and Information Division



Health	3
Fire	1
Reactivity	2
Personal Protection	E

Material Safety Data Sheet

Arsenic MSDS

Section 1: Chemical Product and Company Identification

Product Name: Arsenic

Catalog Codes: SLA1006

CAS#: 7440-38-2

RTECS: CG0525000

TSCA: TSCA 8(b) inventory: Arsenic

CI#: Not applicable.

Synonym:

Chemical Name: Arsenic

Chemical Formula: As

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Arsenic	7440-38-2	100

Toxicological Data on Ingredients: Arsenic: ORAL (LD50): Acute: 763 mg/kg [Rat]. 145 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH. **MUTAGENIC EFFECTS:** Not available.

TERATOGENIC EFFECTS: Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance is toxic to kidneys, lungs, the nervous system, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances: Flammable in presence of open flames and sparks, of heat, of oxidizing materials.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards:

Material in powder form, capable of creating a dust explosion. When heated to decomposition it emits highly toxic fumes.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable

protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, moisture.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.01 from ACGIH (TLV) [United States] [1995] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Lustrous solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 74.92 g/mole

Color: Silvery.

pH (1% soln/water): Not applicable.

Boiling Point: Not available.

Melting Point: Sublimation temperature: 615°C (1139°F)

Critical Temperature: Not available.

Specific Gravity: 5.72 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Reactive with oxidizing agents, acids, moisture.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 145 mg/kg [Mouse].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH. Causes damage to the following organs: kidneys, lungs, the nervous system, mucous membranes.

Other Toxic Effects on Humans:

Very hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Arsenic UNNA: UN1558 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Arsenic California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Arsenic Pennsylvania RTK: Arsenic Massachusetts RTK: Arsenic TSCA 8(b) inventory: Arsenic

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:**WHMIS (Canada):**

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R22- Harmful if swallowed. R45- May cause cancer.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 2

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 2

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information**References:**

-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987. -Liste des produits purs tératogènes, mutagènes, cancérigènes. Répertoire toxicologique de la Commission de la Santé et de la Sécurité du Travail du Québec. -Material safety data sheet emitted by: la Commission de la Santé et de la Sécurité du Travail du Québec. -SAX, N.I. Dangerous Properties of Industrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984. -The Sigma-Aldrich Library of Chemical Safety Data, Edition II. -Guide de la loi et du règlement sur le transport des marchandises dangereuses au Canada. Centre de conformité international Ltée. 1986.

Other Special Considerations: Not available.

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Health	3
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet Cadmium MSDS

Section 1: Chemical Product and Company Identification

Product Name: Cadmium

Catalog Codes: SLC3484, SLC5272, SLC2482

CAS#: 7440-43-9

RTECS: EU9800000

TSCA: TSCA 8(b) inventory: Cadmium

CI#: Not applicable.

Synonym:

Chemical Name: Cadmium

Chemical Formula: Cd

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Cadmium	7440-43-9	100

Toxicological Data on Ingredients: Cadmium: ORAL (LD50): Acute: 2330 mg/kg [Rat.]. 890 mg/kg [Mouse]. DUST (LC50): Acute: 50 ppm 4 hour(s) [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant). Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified A2 (Suspected for human.) by ACGIH, 2 (Reasonably anticipated.) by NTP.

MUTAGENIC EFFECTS: Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance is toxic to kidneys, lungs, liver. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact: No known effect on eye contact, rinse with water for a few minutes.

Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not available.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: 570°C (1058°F)

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances:

Non-flammable in presence of open flames and sparks, of heat, of oxidizing materials, of reducing materials, of combustible materials, of moisture.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards:

Material in powder form, capable of creating a dust explosion. When heated to decomposition it emits toxic fumes.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage:

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.01 (ppm) Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Lustrous solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 112.4 g/mole

Color: Silvery.

pH (1% soln/water): Not applicable.

Boiling Point: 765°C (1409°F)

Melting Point: 320.9°C (609.6°F)

Critical Temperature: Not available.

Specific Gravity: 8.64 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water, hot water, methanol, diethyl ether, n-octanol.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Not considered to be corrosive for metals and glass.

Special Remarks on Reactivity: Reacts violently with potassium.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 890 mg/kg [Mouse]. Acute toxicity of the dust (LC50): 229.9 mg/m³ 4 hour(s) [Rat].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A2 (Suspected for human.) by ACGIH, 2 (Reasonably anticipated.) by NTP. The substance is toxic to kidneys, lungs, liver.

Other Toxic Effects on Humans:

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: An allergen. 0047 Animal: embryotoxic, passes through the placental barrier.

Special Remarks on other Toxic Effects on Humans: May cause allergic reactions, exzema and/or dehydration of the skin.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification:

Identification:

Special Provisions for Transport:

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Cadmium California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Cadmium Pennsylvania RTK: Cadmium Massachusetts RTK: Cadmium TSCA 8(b) inventory: Cadmium SARA 313 toxic chemical notification and release reporting: Cadmium CERCLA: Hazardous substances.: Cadmium

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R26- Very toxic by inhalation. R45- May cause cancer.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information

References:

-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987. -Liste des produits purs tératogènes, mutagènes, cancérogènes. Répertoire toxicologique de la Commission de la Santé et de la Sécurité du Travail du Québec. -Material safety data sheet emitted by: la Commission de la Santé et de la Sécurité du Travail du Québec. -SAX, N.I. Dangerous Properties of Industrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984. -The Sigma-Aldrich Library of Chemical Safety Data, Edition II. -Guide de la loi et du règlement sur le transport des marchandises dangereuses au Canada. Centre de conformité international Ltée. 1986.

Other Special Considerations: Not available.

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Gasoline

Synonyms & Trade Names

Motor fuel, Motor spirits, Natural gasoline, Petrol [Note: A complex mixture of volatile hydrocarbons (paraffins, cycloparaffins, and aromatics).]

CAS No.

8006-61-9

RTECS No.

LX3300000

DOT ID & Guide

1203 128

Formula

Conversion

1 ppm = 4.5 mg/m³ (approx)

IDLH

Ca [N.D.]

See: IDLH INDEX

Exposure Limits**NIOSH REL**

Ca See Appendix A ([nengapdx.html](#))

OSHA PEL

none See Appendix G ([nengapdxg.html](#))

Measurement Methods**OSHA PV2028**

See: NMAM or OSHA Methods

Physical Description

Clear liquid with a characteristic odor.

Molecular Weight

110 (approx)

Boiling Point

102°F

Freezing Point

?

Solubility

Insoluble

Vapor Pressure

vapor Pressure
38-300 mmHg

Ionization Potential
?

Specific Gravity
(60°F): 0.72-0.76

Flash Point
-45°F

Upper Explosive Limit
7.6%

Lower Explosive Limit
1.4%

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities
Strong oxidizers such as peroxides, nitric acid & perchlorates

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, skin, mucous membrane; dermatitis; headache, lassitude (weakness, exhaustion), blurred vision, dizziness, slurred speech, confusion, convulsions; chemical pneumonitis (aspiration liquid); possible liver, kidney damage; [potential occupational carcinogen]

Target Organs

Eyes, skin, respiratory system, central nervous system, liver, kidneys

Cancer Site

[in animals: liver & kidney cancer]

Personal Protection/Sanitation

(See protection codes (protect.html))

Skin:Prevent skin contact

Eyes:Prevent eye contact

Wash skin:When contaminated

Remove:When wet (flammable)

Change:No recommendation

Provide:Eyewash, Quick drench

First Aid

(See procedures (firstaid.html))

Eye:Irrigate immediately

Skin:Soap flush immediately

Breathing:Respiratory support

Swallow:Medical attention immediately

Respirator Recommendations**NIOSH**

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister

Any appropriate escape-type, self-contained breathing apparatus

[Important additional information about respirator selection \(pgintrod.html#mustread\)](#)

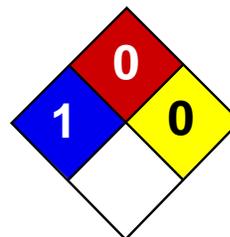
See also

INTRODUCTION

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Content source: National Institute for Occupational Safety and Health (NIOSH) (/niosh/) Education and Information Division



Health	1
Fire	0
Reactivity	0
Personal Protection	E

Material Safety Data Sheet

Lead MSDS

Section 1: Chemical Product and Company Identification

Product Name: Lead

Catalog Codes: SLL1291, SLL1669, SLL1081, SLL1459, SLL1834

CAS#: 7439-92-1

RTECS: OF7525000

TSCA: TSCA 8(b) inventory: Lead

CI#: Not available.

Synonym: Lead Metal, granular; Lead Metal, foil; Lead Metal, sheet; Lead Metal, shot

Chemical Name: Lead

Chemical Formula: Pb

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Lead	7439-92-1	100

Toxicological Data on Ingredients: Lead LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

Slightly hazardous in case of skin contact (permeator). **CARCINOGENIC EFFECTS:** Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to blood, kidneys, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances: Non-flammable in presence of open flames and sparks, of shocks, of heat.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: When heated to decomposition it emits highly toxic fumes of lead.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable

protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.05 (mg/m³) from ACGIH (TLV) [United States] TWA: 0.05 (mg/m³) from OSHA (PEL) [United States] TWA: 0.03 (mg/m³) from NIOSH [United States] TWA: 0.05 (mg/m³) [Canada] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Metal solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 207.21 g/mole

Color: Bluish-white. Silvery. Gray

pH (1% soln/water): Not applicable.

Boiling Point: 1740°C (3164°F)

Melting Point: 327.43°C (621.4°F)

Critical Temperature: Not available.

Specific Gravity: 11.3 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, excess heat

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Can react vigorously with oxidizing materials. Incompatible with sodium carbide, chlorine trifluoride, trioxane + hydrogen peroxide, ammonium nitrate, sodium azide, disodium acetylide, sodium acetylide, hot concentrated nitric acid, hot concentrated hydrochloric acid, hot concentrated sulfuric acid, zirconium.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Inhalation. Ingestion.

Toxicity to Animals:

LD50: Not available. LC50: Not available.

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC. May cause damage to the following organs: blood, kidneys, central nervous system (CNS).

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential: Skin: Lead metal granules or dust: May cause skin irritation by mechanical action. Lead metal foil, shot or sheets: Not likely to cause skin irritation Eyes: Lead metal granules or dust: Can irritate eyes by mechanical action. Lead metal foil, shot or sheets: No hazard. Will not cause eye irritation. Inhalation: In an industrial setting, exposure to lead mainly occurs from inhalation of dust or fumes. Lead dust or fumes: Can irritate the upper respiratory tract (nose, throat) as well as the bronchi and lungs by mechanical action. Lead dust can be absorbed through the respiratory system. However, inhaled lead does not accumulate in the lungs. All of an inhaled dose is eventually absorbed or transferred to the gastrointestinal tract. Inhalation effects of exposure to fumes or dust of inorganic lead may not develop quickly. Symptoms may include metallic taste, chest pain, decreased physical fitness, fatigue, sleep disturbance, headache, irritability, reduces memory, mood and personality changes, aching bones and muscles, constipation, abdominal pains, decreasing appetite. Inhalation of large amounts may lead to ataxia, delirium, convulsions/seizures, coma, and death. Lead metal foil, shot, or sheets: Not an inhalation hazard unless metal is heated. If metal is heated, fumes will be released. Inhalation of these fumes may cause "fume metal fever", which is characterized by flu-like symptoms. Symptoms may include metallic taste, fever, nausea, vomiting, chills, cough, weakness, chest pain, generalized muscle pain/aches, and increased white blood cell count. Ingestion: Lead metal granules or dust: The symptoms of lead poisoning include abdominal pain or cramps (lead colic), spasms, nausea, vomiting, headache, muscle weakness, hallucinations, distorted perceptions, "lead line" on the gums, metallic taste, loss of appetite, insomnia, dizziness and other symptoms similar to that of inhalation. Acute poisoning may result in high lead levels in the blood and urine, shock, coma and death in extreme cases. Lead metal foil, shot or sheets: Not an ingestion hazard for usual industrial handling.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information**Federal and State Regulations:**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Lead California prop. 65 (no significant risk level): Lead: 0.0005 mg/day (value) California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead Connecticut hazardous material survey.: Lead Illinois toxic substances disclosure to employee act: Lead Illinois chemical safety act: Lead New York release reporting list: Lead Rhode Island RTK hazardous substances: Lead Pennsylvania RTK: Lead

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R20/22- Harmful by inhalation and if swallowed. R33- Danger of cumulative effects. R61- May cause harm to the unborn child. R62- Possible risk of impaired fertility. S36/37- Wear suitable protective clothing and gloves. S44- If you feel unwell, seek medical advice (show the label when possible). S53- Avoid exposure - obtain special instructions before use.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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Appendix C

Chemical Information Directory

<i>Included in HASP</i>	<i>Chemical Name</i>	<i>Synonyms</i>
	Acetone	Dimethyl Ketone; Ketone propane; 2-Propanone
	Aldrin	HHDN; Octalene
	Aniline	Aminobenzene; Aniline Oil; Benzeneamine
X	Arsenic	Arsenic metal; Arsenia
	Barium	Barium metal
	Benzene	Benzol; Phenyl hydride
	Bis(2-ethylhexyl)phthalate	Di(2-ethylhexyl)phthalate
X	Cadmium	Cadmium metal
	Carbon disulfide	Carbon bisulfide
	Chlorobenzene	Benzene chloride; Chlorobenzyl; MCB; Phenyl chloride
	Chloroethane	Ethyl chloride
	Chloroform	Methane trichloride; Trichloromethane
	Chromic Acid	Chromic anhydride; Chromium trioxide
	Chromium	Chromium metal
	Cobalt	Cobalt metal dust, cobalt metal fume
	Copper	Copper metal dusts; Copper metal mists
	Cyanide	Cyanide
	Cyclohexane	Benzene Hexahydride; hexamethylene
	Dieldrin	Dieldrin
	DIPE	Diisopropyl ether
	Dioxin	Dioxin
	1,2-Dichlorobenzene	O-DCB; Orthodichlorobenzene
	1,1-Dichloroethane	Ethylidene chloride
	1,2-Dichloroethane	Ethylene dichloride; Glycol dichloride
	1,1-Dichloroethylene	1,1-Dichloroethene, vinylidene chloride
	1,2-Dichloroethylene	1,2-Dichloroethene; (cis, trans, or sym-) Acetylene dichloride
	1,2-Dichloropropane	Propylene dichloride; Dichloro-1,2-propane
	2,4-Dinitrotoluene	Dinitrotoluene; DNT; Methyl dinitrobenzene
	1,4-Dioxane	Dioxane, Diethylene dioxide, Diethylene ether

Appendix C
Chemical Information Directory
 (continued)

<i>Included in HASP</i>	<i>Chemical Name</i>	<i>Synonyms</i>
	Ethylbenzene	Ethylbenzol; Phenylethane
	ETBE	Ethyl tert-butyl ether
	Ethylene Dibromide	EDB; 1,2-Dibromoethane, Ethylene bromide, Glycol dibromide
	Formaldehyde	Methanal; Methyl aldehyde; Methylene oxide
X	Gasoline& Diesel	Motor fuel; Motor spirits; Natural gasoline; Petrol
	Motor oil	Motor oil
	Hexachloroethane	Carbon hexachloride; Ethane hexachloride; Perchloroethane
	Hydrochloric Acid	Anhydrous hydrogen chloride; Aqueous hydrogen chloride; Muriatic acid
	Hydrogen Sulfide	Hydrosulfuric acid; Sewer gas; Sulfuretted hydrogen
	Iron	Iron
	Isophorone	Isoacetophorone; 3,5,5-Trimethyl 2- cyclohexenone
	Isopropanol	Isopropyl alcohol; IPA; 2-Propanol
X	Lead (inorganic)	Lead metal
	Manganese	Manganese
	MTBE	Methyl Tert Butyl Ether
	Mercury	Colloidal mercury; Metallic mercury; Quicksilver
	Methane	Fire damp; March gas; Methyl hydride
	Methanol	Carbinol; Columbian spirits; Pyroligneous spirit; Wood alcohol; Wood naphtha; Wood spirit
	Methoxycor	p,p-Dimethoxydiphenyl/trichlorethane; DMDY
	Methyl chloroform	1,1,1-Trichloroethane
	Methylcyclohexane	Cyclohexylmethane; Hexahydrotoluene
	Methylene chloride	Dichloromethane; Methylene Dichloride
	Naphthalene	Naphthalin; Tar Camphor; White Tar
	Nickel	Nickel catalyst

Appendix C

Chemical Information Directory (continued)

<i>Included in HASP</i>	<i>Chemical Name</i>	<i>Synonyms</i>
	Nitrobenzene	Essence of mirbane; Nitrobenzol; Oil of mirbane
	PAHs	Poly Aromatic Hydrocarbons
	Pentachlorophenol	PCP; Penta; 2,3,4,5,6-Pentachlorophenol
	Phenol	Carbonic acid; Hydroxybenzene; Monohydroxybenzene; Phenol alcohol; Phenyl hydroxide
	Phosgene	Carbonyl chloride; Carbon oxychloride; Chloroformyl chloride
X	Polychlorinated biphenyls (54%)	PCBs; Chlorodiphenyl
	Sodium bisulfate	
	Synergist-D	Proprietary product
	Silver	Silver metal; Argentum
	TAME	Tertiary-amyl methyl ether
	TBA	Tert butyl alcohol
	Tetrachloroethylene	Tetrachloroethylene; Perchlorethylene; Perk
	Toluene	Methyl benzene; Methyl benzol
	Toxaphene	Chlorinated camphene
	1,1,2-Trichloroethane	Ethane trichloride; B-Trichloroethane; Vinyl trichloride
	1,2,4-Trichlorobenzene	Trichlorobenzene; 1,2,4-Trichlorobenzel
	Trichloroethene	Trichloroethylene; TCE
	Trichlorofluoromethane	Fluorotrchloromethane; Freon II
	Trichlorotrifluoroethane	Freon 113; 1,1,2-Trichloro-1,2,2-trifluoroethane; CFC-113
	1,2,3-Trichloropropane	Allyl trichloride, Glycerol trichlorohydrin, Glyceryl trichlorohydrin; Trichlorohydrin
	1,2,3-Trimethylbenzene	Hemellitol
	1,2,4-Trimethylbenzene	psi-Cumene; Pseudocumene
	1,3,5-Trimethylbenzene	Mesitylene; sym-Trimethylbenzene
	Vinyl chloride	Chloroethene; VC; VCM
	Xylene (Mixed Isomers)	o-xylene; p-xylene; m-xylene

Appendix D

Hazard Mitigators Directory

<i>Included in HASP</i>	<i>Hazards</i>
X	Fire
X	Inhalation
	Reactivity
X	Skin Absorption
<i>Physical Hazards</i>	
	Compressed Gas Cylinder
X	Drilling
	Drowning
X	Drum Handling
X	Electrocution
X	Excavation/Trenching
X	Eye Injury
X	Hand/Foot Injury
X	Heat Stress
X	Cold Stress
X	Heavy Equipment
X	Lifting Heavy Loads
X	Noise
X	Portable Power/Hand Tool
	Radiation Exposure
X	Slipping/Tripping/Falling
	Allergic Reaction to Poisonous Plants
	Insect/Vermin/Snake Bites
	Medical Waste

- * All members of the drilling crews shall be trained in the safety features and procedures to be utilized during operation, inspection, and maintenance of the equipment.
- * Conduct a survey, prior to bringing drilling equipment to the job site, to identify overhead electrical hazards, potential subsurface hazards, and terrain hazard. Once on-site, before drilling equipment is moved, the travel route shall again be visually surveyed for overhead and terrain hazards.
- * Use only drilling equipment equipped with two easily accessible emergency shutdown devices, one for the operator and one for the helper.
- * Do not transport drilling equipment with the mast in the upward position.
- * Set up equipment on stable ground. Cribbing (a system of timbers, arranged in a rectangular pattern, used to support and distribute the weight of the equipment) shall be used when necessary.
- * Extend outriggers per the manufacturer's specifications.
- * Monitor weather conditions. Operations shall cease during electrical storms or when electrical storms are imminent.
- * Wearing of loose clothing or equipment is not permitted.
- * Use auger guides on hard surfaces.
- * Verbally alert employees and visually ensure employees are clear from dangerous parts of equipment prior to starting or engaging equipment.
- * Channel the discharge of drilling fluids away from the work area to prevent the pooling of water.
- * Use hoists only for their designed intent. Hoists shall not be loaded beyond their rated capacity. Steps shall be taken to prevent two-blocking of hoists (the condition when the lower load block or hook assembly comes in contact with the upper load block, or when the load block comes in contact with the boom tip).
- * Follow the equipment manufacturer's procedures if ropes become caught in, or objects are pulled into a cathead.

- * Do not run or rotate drill rods through rod slipping devices. No more than one foot of drill rod column shall be hoisted above the top of the drill mast. Drill rod tool joints shall not be made up, tightened, or loosened while the rod column is supported by a rod slipping device.
- * Control dust using dust suppression techniques.
- * Clean augers only when the rotating mechanism is in neutral and the auger is stopped. Tools such as long handled shovels shall be used to remove cuttings from the auger.
- * Cap and flag open boreholes; open excavations shall be barricaded.
- * Keep all hand tool used during drilling operations clean and in good working condition.
- * Wear hard hats and steel-toed boots at all times when performing drilling operations.
- * Wear hearing protection when required.

During Geoprobe drilling

- Pay close attention to acetate sampling sleeves; can cause minor cuts when they become jiggered
- Probes /rods can have pinch points; take care when removing or adjusting.
- There will be noise so use hearing protections

- Be aware of the potential hazards of the contents of drums or containers before handling.
- Inspect the integrity of the drum or container before moving. Any drum or container lacking integrity shall be over packed.
- Consider any unlabeled drum or container as containing a hazardous substance and leave alone until contents are properly identified and labeled.
- Organize site operations to minimize the amount of drum or container movement.
- Never stand on drums or containers.
- Know that bulging drums or containers are an indication of pressure build-up. Pressure can be relieved slowly by carefully loosening the bung. If the possibility of fire or explosion exists, protective shield and/or remote opening devices should be used.
- Utilize drum/container handling equipment whenever possible. The equipment utilized should have a sufficiently rated load capacity, and should be able to operate smoothly on the available surface.
- Use proper lifting and moving techniques to prevent back injuries, if handling equipment is not available.
- Have a clear view of the available pathway when moving drums. If needed, an additional person should be available to provide guidance.
- Set up drum/container staging areas to safely identify and classify contents for proper shipment. Staging areas shall be provided with adequate ingress and egress routes.
- Label and identify drums and containers as to their contents when moved to the staging areas.
- Cease all site operations immediately if site activities uncover buried drums or containers. The SSO must be notified. The SSO will evacuate the site. All unknown situations must be evaluated before site activities are resumed. The services of a specialized contractor trained in handling unknown contaminants may be needed. If, after evaluating the situation, only a portion of the site is affected, that
- Use only drums and containers that meet the appropriate DOT, OSHA, and EPA regulations.

- When scheduling or work conditions necessitate leaving excavations open overnight, security fencing will be erected to restrict access to the site or work zones. An exclusion zone, contamination reduction zone and support zone will be identified for each soil disturbance site, as described in Section 2.4.5.
- Underground Service Alert must be notified of subsurface work at a minimum of 48 hours prior to the commencement of field activities.
- As part of the on-site health and safety meeting, a Site walk with the operators will be conducted to identify work locations (locations shown on the work plan/site plan will be in areas free of utilities/subsurface structures). Mark outs of all utilities will be verified.
- If pea-gravel is encountered while excavating all work must stop and the SSO will be contacted for further instruction. Pea-gravel is a potential indication of underground storage tank(s) or utility bedding/backfilling material.
- If any utility/subsurface feature is hit or damaged the SSO will be IMMEDIATELY contacted for further instruction. If the SSO cannot be reached contact the Project Manager for further instruction.

- * A minimum clearance of 12 feet (radius) will be maintained between heavy equipment (i.e., drill rig) and any overhead power lines, regardless of voltage.
- * Before subsurface work, a utilities search for underground lines will occur and will be documented.
- * Installation and maintenance of electrical facilities or equipment must only be performed by qualified and properly authorized personnel or electrical subcontractors. Apprentice personnel permitted to work on electrical equipment shall be under the surveillance of a fully qualified electrician.
- * Electricians shall be familiar with the National Electrical Code; state and local electric codes; OSHA standards, including 29 CFR 1926, Subpart K; and applicable sections of the National Fire Protection Association Codes.
- * When working on energized circuits of 440 volts or higher, at least one qualified electrician and one other employee shall be present.
- * Do not wear rings, watches or metallic objects that could act as conductors when working with electrical circuits.
- * Do not use metal ladders and un-insulated tools while working with electrical circuits and equipment.
- * Follow the company Lock-out/Tag-out procedures when applicable. Electrical equipment and lines shall always be considered “energized” until proven “de-energized”. Before beginning work, each electrical circuit shall be inspected, tested, and where possible, isolated from the power source. Extreme care shall be exercised as wires designed to operate at ground potential may become energized by faulty or inadequate connections.
- * Use only approved grounding equipment as a ground for electrical equipment. Metal frames on electricity powered equipment, electrical facilities, and transmission equipment shall be connected to the grounding system. Alternative grounding systems complying with applicable electrical codes may be used for temporary portable equipment.
- * Protect electrical wires with suitable protective conduits or devices where they are exposed to possible damage.
- * Connect grounding devices to a ground before contacting any conductor of a circuit. When grounding devices are removed, they shall be disconnected from the circuit before being disconnected from ground.
- * Equip all portable extension cords with a non-conducting plug and/or another socket shell. All electrical cords shall be equipped with three-blade grounding type plugs.

HAZARD MITIGATORS – ELECTROCUTION *EarthCon Consultants CA, Inc.*

- * Use only heavy duty electrical cords that are not subjected to excessive bending, stretching, or kicking. All cords and wires shall be frequently inspected for signs of defects. Damaged or frayed electrical wires, cords, and plugs shall be immediately replaced by a qualified electrician or other properly trained personnel.
- * Install adequate warning signs and barriers (in plain sight) in all areas where hazardous electrical facilities exist.
- * Do not permit overloading of electrical circuits at any time. The replacement of fuses or circuit breakers with makeshift materials or over-capacity fuses is strictly prohibited.
- * The type of circuit shall determine the type of protective equipment required. Rubber gloves, sleeves, blankets, mats, and insulated platforms shall be used as required. Questions regarding PPE should be directed to the SSO.
- * Inspect all insulated protective equipment continuously for defects or damages. Any defective equipment shall be replaced before using.
- * Establish and enforce testing schedules for insulation qualities for protective equipment. All users shall verify that equipment has been satisfactorily tested prior to use.

- * Wear appropriate eye protection according to the task at hand (e.g., goggles if liquid splash could occur, welding lenses, etc.).
- * Minimize the amount of vapor or particulate matter generated, if possible.
- * Avoid touching the face and eyes.
- * Flush eye with water for at least 15 minutes if chemicals do get into the eye.

- * Be aware of “pinch points” when working with tools and heavy equipment.
- * Use proper lifting techniques to avoid dropping heavy loads on hands and feet.
- * Be aware of moving machinery and heavy equipment in the work area.
- * Wear protective gloves as required in the Health and Safety Plan.
- * Wear steel-toed boots as required in the Health and Safety Plan.

Fatal exposures to cold among workers have almost always resulted from accidental exposures involving failure to escape from low environmental air temperatures or from immersion in low temperature water. The single most important aspect of life-threatening hypothermia is the fall in the deep core temperature of the body. Workers should be protected from exposure to cold so that the deep core temperature does not fall below 96.8°F; lower body temperatures will very likely result in reduced mental alertness, reduction in rational decision making, or loss of consciousness with the threat of fatal consequences. Pain in the extremities may be the first early warning of danger to cold stress. During exposure to cold, maximum severe shivering develops when the body temperature has fallen to 95°F. This must be taken as a sign of danger to the workers and exposure to cold should be immediately terminated for any workers when severe shivering becomes evident. Since prolonged exposure to cold air, or to immersion in cold water, at temperatures well above freezing can lead to dangerous hypothermia, whole body protection must be provided.

Adequate insulating dry clothing to maintain core temperatures above 96.8°F must be provided to workers if work is performed in air temperatures below 40°F. Wind chill cooling rate must also be considered when determining protective clothing. The equivalent chill temperature should be used when estimating the combined cooling effect of wind and low air temperatures on exposed skin or when determining clothing insulation requirements to maintain the deep body core temperature.

Unless there are unusual or extenuating circumstances, cold injury to other than hands, feet, and head is not likely to occur without the development of the initial signs of hypothermia. Older workers or workers with circulatory problems require special precautionary protection against cold injury. The use of extra insulating clothing and/or a reduction in the duration of the exposure period are among the special precautions which should be considered.

Workers handling evaporative liquid (gasoline, alcohol, or cleaning fluids) at air temperatures below 39.2°F should take special precautions to avoid soaking of clothing or gloves with the liquids because of the added danger of cold injury due to evaporative cooling. Special note should be taken of the particularly acute effects of splashes of “cryogenic fluids” or those liquids and gases with a boiling point that is just above ambient temperature.

Heat stress is a medical condition where a worker exerts energy above his body's ability to adapt to the stress. Malfunctioning or overload of the body's temperature and sweat mechanisms results in heat stress. Poor adaptation to heat may lead to heat cramps, heat exhaustion, or heat stroke. There are three primary causes of heat stress: insufficient water intake; insufficient salt intake; and a deficiency in the production of sweat, the evaporation of which helps to cool the body naturally. Heat stress or heat exhaustion can result in a more life-threatening condition called heat stroke, which is an overexposure to extreme heat, where the body can no longer provide natural regulation of heat. The body overheats and core temperatures may reach 107F which can result in a coma and death

Field team members shall be observed for signs and symptoms of heat stress that include: confusion, dizziness, profuse sweating, skin color change, increased heart rate and vision problems. Personnel who exhibit any of these symptoms shall be removed from field work and requested to consume two to four pints of electrolyte fluid or cool water every hour while resting in a shaded area. The individual should not return to work until the symptoms are no longer recognizable. If symptoms appear critical, persist, or get worse, seek immediate medical attention.

To control the potential occurrence of heat stress, preventive measures will be evaluated and implemented on a daily basis. These measures may include:

- Frequent rest periods;
- Inducement of fluids (e.g., water, Gatorade, etc.) at a rate of one-half to one cup of cool (55°F) water every 20 minutes of the workday; and
- Periodic cooling of personnel (e.g., via shaded areas, hose-downs with water, etc.).
- Sensitive personnel should wear sunscreen containing a minimum Sun Protection Factor of 15 when working outdoors in the sun. Sunscreen lotion should be applied prior to entering the work zones.



against heat, sun exposure, and other hazards. Employers and employees should know the potential hazards in their workplaces and how to manage them.

Sun

Sunlight contains ultraviolet (UV) radiation, which causes premature aging of the skin, wrinkles, cataracts, and skin cancer. There are no safe UV rays or safe suntans. Be especially careful in the sun if you burn easily, spend a lot of time outdoors, or have any of the following physical features: numerous, irregular, or large moles; freckles; fair skin; or blond, red, or light brown hair. Here's how to block those harmful rays:

- Cover up. Wear loose-fitting, long-sleeved shirts and long pants.
- Use sunscreen with a sun protection factor (SPF) of at least 30. Be sure to follow application directions on the bottle or tube.
- Wear a hat. A wide brim hat, not a baseball cap, works best because it protects the neck, ears, eyes, forehead, nose, and scalp.
- Wear UV-absorbent sunglasses (eye protection). Sunglasses don't have to be expensive, but they should block 99 to 100 percent of UVA and UVB radiation. Before you buy sunglasses, read the product tag or label.
- Limit exposure. UV rays are most intense between 10 a.m. and 4 p.m.

OSHA Card—Protecting Yourself in the Sun
www.osha.gov/Publications/osha3166.pdf

Heat

The combination of heat and humidity can be a serious health threat during the summer months. If you work outside (for example, at a beach resort, on a farm, at a construction site) or in a kitchen, laundry, or bakery you may be at increased risk for heat-related illness. So, take precautions. Here's how:

- Drink small amounts of water frequently.
- Wear light-colored, loose-fitting, breathable clothing—cotton is good.

- Take frequent short breaks in cool shade.
- Eat smaller meals before work activity.
- Avoid caffeine and alcohol or large amounts of sugar.
- Work in the shade.
- Find out from your health care provider if your medications and heat don't mix.
- Know that equipment such as respirators or work suits can increase heat stress.

There are three kinds of major heat-related disorders—heat cramps, heat exhaustion and heat stroke. You need to know how to recognize each one and what first aid treatment is necessary.

OSHA Heat Stress Fact Sheet:
www.osha.gov/OshDoc/data_Hurricane_Facts/heat_stress.pdf

OSHA Heat Stress Quick Card:
www.osha.gov/Publications/osha3154.pdf

Lyme Disease/Tick-Borne Diseases

These illnesses (i.e., Rocky Mountain spotted fever) are transmitted to people by bacteria from bites of infected deer (blacklegged) ticks. In the case of Lyme disease, most, but not all, victims will develop a “bull's-eye” rash. Other signs and symptoms may be non-specific and similar to flu-like symptoms such as fever, lymph node swelling, neck stiffness, generalized fatigue, headaches, migrating joint aches, or muscle aches. You are at increased risk if your work outdoors involves construction, landscaping, forestry, brush clearing, land surveying, farming, railroads, oil fields, utility lines, or park and wildlife management. Protect yourself with these precautions:

- Wear light-colored clothes to see ticks more easily.

- Wear long sleeves; tuck pant legs into socks or boots.
- Wear high boots or closed shoes that cover your feet completely.
- Wear a hat.
- Use tick repellants, but not on your face.
- Shower after work. Wash and dry your work clothes at high temperature.
- Examine your body for ticks after work. Remove any attached ticks promptly and carefully with fine-tipped tweezers by gripping the tick. Do not use petroleum jelly, a hot match, or nail polish to remove the tick.

OSHA Lyme Disease Fact Sheet:
www.osha.gov/OshDoc/data_LymeFacts/LymeFac.pdf

West Nile Virus

West Nile virus is transmitted by the bite of an infected mosquito. Mild symptoms include fever, headache, and body aches, occasionally with a skin rash on the trunk of the body and swollen lymph glands. Symptoms of severe infection include headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis. You can protect yourself from mosquito bites in these ways:

- Apply Picaridin or insect repellent with DEET to exposed skin.
- Spray clothing with repellents containing DEET or permethrin. (Note: Do not spray permethrin directly onto exposed skin.)
- Wear long sleeves, long pants, and socks.
- Be extra vigilant at dusk and dawn when mosquitoes are most active.
- Get rid of sources of standing water (used tires, buckets) to reduce or eliminate mosquito breeding areas.

OSHA West Nile Virus Fact Sheet:
www.osha.gov/OshDoc/data_Hurricane_Facts/west_nile_virus.pdf

OSHA Safety and Health Information Bulletin:
 “Workplace Precautions Against West Nile Virus”

<http://www.osha.gov/dts/shib/shib082903b.pdf>

Poison Ivy-Related Plants

Poison ivy, poison oak and poison sumac have poisonous sap (urushiol) in their roots, stems, leaves and fruits. The urushiol may be deposited on the skin by direct contact with the plant or by contact with contaminated objects, such as clothing, shoes, tools, and animals.

Approximately 85 percent of the general population will develop an allergy if exposed to poison ivy, oak or sumac. Forestry workers and firefighters who battle forest fires have developed rashes or lung irritations from inhaling the smoke of burning plants.

- Wear long-sleeved shirts and long pants, tucked into boots. Wear cloth or leather gloves.
- Apply barrier creams to exposed skin.
- Educate workers on the identification of poison ivy, oak, and sumac plants.
- Educate workers on signs and symptoms of contact with poisonous ivy, oak, and sumac.
- Keep rubbing alcohol accessible. It removes the oily resin up to 30 minutes after exposure.

OSHA Web Page—Poisonous Plants:
www.osha.gov/SLTC/etools/sawmills/poison.html

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For more complete information:



U.S. Department of Labor

www.osha.gov

(800) 321-OSHA

DSTM 9/2005

- * Apply Hazard Mitigators for motor vehicles when utilizing heavy equipment (where applicable).
- * Remember, heavy equipment has the right-of-way over regular vehicles. Yield to heavy equipment.
- * Listen for warning signals on heavy equipment.
- * Perform a visual inspection and walk around parked heavy equipment before moving to assure that equipment is in good condition and that there are no personnel on the ground that could be injured or objects that could be damaged by vehicle movement.
- * Use hand rails and footholds when mounting and dismounting equipment,
- * Follow appropriate equipment startup procedures. Brakes, steering, clutches and controls shall be tested.
- * Pay attention to workers on the ground that may be in the path and provide warning prior to moving the equipment.
- * Permit no one to ride on, or in, heavy equipment. This includes any portion of a backhoe, bulldozer, forklift or the back of a pickup truck, except in locations specifically designed for passenger use and approved by the SSO.
- * Locate and flag underground utilities and buried cables, whenever possible, prior to intrusive activities (such as excavation and drilling).
- * Keep haulage vehicles under positive control at all times while operating. Vehicles shall be kept in gear when descending grades.
- * Do not use heavy equipment on slopes with steepness exceeding 3H:1V unless operations are consistent with manufacturer's recommendations (if the Owner's Manual is not with the equipment or does not specify slope operating procedures, see the SSO).

- * Operate equipment with booms, blades, buckets, beds, etc., lowered or in a stable position while on slopes. Safety cables tethered to appropriate anchors shall be used for equipment working on steep slopes, where appropriate. The use of cables and anchors must be approved by the SSO.
- * Use rollover protection and seat belts.
- * Lower hydraulic systems (e.g., blades, rippers, etc.) to the ground, set brakes, and shut down equipment if malfunction occurs which impairs the ability to control a piece of equipment.
- * Suspend in slings or support by hoists or jacks heavy equipment in need of repair. The equipment must also be blocked or cribbed before workers are permitted to work underneath. Working under heavy equipment can pose a crushing hazard.
- * Shut off motors, do not allow smoking, and use proper dispensing equipment when refueling gasoline-operated equipment to prevent fire hazards.
- * Wear hearing protection if required.
- * Maintain eye contact with the heavy equipment operator when working near equipment.
- * Be aware of changes in sound of equipment that may indicate a change in direction or activity.

- * Know and practice proper lifting techniques.
- * Limit continuous lifting of weights to 50 pounds or less. Lifts of heavier weights are permitted on an interim basis. Help shall be obtained for lifting of loads greater than 50 pounds. Mechanical equipment should be used on heavy materials when possible. If mechanical assistance is not available, adequate manpower to maintain the 50-pound limit per employee will be required.
- * Do not lift more weight than can be handled comfortably, regardless of load weight. If necessary, help should be requested to lift a load so that the lifting is comfortable.
- * Use drum dollies when moving drums or barrels.
- * Inspect objects for grease or slippery substances before they are lifted to ensure that the object will not slip.
- * Do not carry long, bulky or heavy objects without first verifying that the way is clear and that vision is unobstructed. This ensures that other persons or objects will not be struck by the load.
- * Do not carry loads that cannot be seen over or around.
- * Make sure workers are physically suited for the job before assigning jobs requiring heavy and/or frequent lifting. A person's lifting ability is not necessarily indicated by his height or weight.
- * Before lifting an object, consideration should be given to how the object will be set down without pinching or crushing hands or fingers. For example, to place an object on a bench or table, the object should be set on the edge and pushed far enough onto the support so it will not fall. The object can then be released gradually as it is set down, and pushed in place with the hands and body from in front of the object.
- * When two or more persons are handling the same object, one should "call the signals". All the persons on the lift should know who this person is and should warn him if anyone in the crew is about to relax his grip.
- * Proper lifting includes:
 - *Feet* - Feet should be parted, with one foot alongside the object being lifted and one behind. Feet should be comfortably spread to give greater stability. The rear foot should be in position for the upward thrust of the lift.
 - *Back* - Use the sit-down position and keep the back straight, but remember that "straight" does not mean "vertical". A straight back keeps the spine, back muscles, and organs of the body in correct alignment. It minimizes the compression of the abdomen that can cause a hernia.
 - *Arms and Elbows* - The load should be drawn close, and the arms and elbows should be tucked into the side of the body. When the arms are held away from the body, they lose much of their strength and power. Keeping the arms tucked in also helps keep body

weight centered.

- *Palm* - The palm grip is one of the most important elements of lifting. The fingers and the hand are extended around the object to be lifted. Use the full palm; fingers alone have very little power.
- *Chin* - Tuck in the chin so the neck and head continue the straight back line. Keep the spine straight and firm.
- *Body Weight* - Position the body so its weight is centered over the feet. This provides a more powerful line of thrust and assures better balance. Start the lift with a thrust of the rear foot. Shift hand positions so the object can be boosted after knees are bent. Straighten knees as object is lifted or shifted to the shoulders. To change direction, lift the object to a carrying position, and turn the entire body, including the feet. Do not twist your body. In repetitive work, both the person and the material should be positioned so that the worker will not have to twist his body when moving the material. If the object is too heavy to be handled by one person, get help.

- * Know the effects of noise, including:
 - Workers being startled, annoyed, or distracted.
 - Physical damage to the ear, pain, and temporary and/or permanent hearing loss.
 - Communication interference that may increase potential hazards due to the inability to warn of danger and proper safety precautions to be taken.
- * Utilize feasible administrative or engineering controls if workers are subjected to noise exceeding an 8-hour, time-weighted average (TWA) sound level of 90 dBA (decibels on the A-weighted scale).
- * Implement the company Hearing Conservation Program when noise exposures equal or exceed an 8-hour, TWA sound level of 85 dBA.
- * Wear hearing protection where applicable.

- * Route cords, hoses, and cables supplying power to portable power tools to prevent tripping hazards or contact with equipment or machinery.
- * Avoid abusing the power supply lines of portable equipment. Excessive scraping, kicking, stretching, and exposure to grease and oils will damage lines or cause them to fail prematurely, and possibly injure the operator or fellow workers.
- * Inspect cords, hoses, and cables for wear or deterioration prior to each use. Defective power supply lines shall not be used.
- * Do not use electrically powered tools near flammable materials or explosive atmosphere, unless they are of the explosion-proof type meeting the National Electrical Code for explosive area. Employees operating the equipment should be aware of sparks and or metal fragments when using this equipment.
- * Ground-check portable electric power tools with metal cases initially and quarterly. At no time will electrical power equipment be operated without proper grounding. All electrical cords and cables, including extension cords, shall include a third wire ground.
- * Prohibit operations of electric tools in wet or damp areas except in unusual emergency circumstances. When operation is required in wet or damp conditions, extreme care will be exercised to ensure effective grounding of equipment and proper use of protective gear.
- * Size cords adequately for length and the electrical demand of the tool. Otherwise, they may cause a fire hazard.
- * Limit use of tools to the purpose for which the tool is intended (e.g., wrenches will not be used as hammers). Defective tools (e.g., with mushroomed heads or split or defective handles) shall not be used.
- * Protect tools from corrosion damage.
- * Keep tools free of accumulated dirt and unnecessary oil or grease. Moving and adjustable parts shall be lubricated frequently to prevent wear and misalignment.
- * Replace or repair damaged or worn tools promptly. Temporary or makeshift repairs are prohibited. At the discretion of the supervisor, discard all tools that cannot be repaired safely. Supervisors shall decide when to discard a tool.
- * Store tools in suitable boxes or containers. Loose tools shall not be stored on ledges or where they might fall. Tools shall be picked up when a job is completed and not be allowed to accumulate in the work area. Store all tools in a safe place.
- * Do not use conducting (i.e., metal) tools around electrical facilities. Insulated tools, approved for electrical work, shall be tested frequently for proper insulation.

- * Select the correct size and type of wrench for each job. Wrench handles shall not be extended with a pipe or cheater because the jaws will spread.
- * Repair mushroomed punch, drift and chisel heads. Mushroomed heads represent crystallized metal that will break and fly off when struck.
- * Wear eye protection at all times.

- * Wear the proper footwear for the task at hand.
- * Pay attention to the environment and use caution when moving about on site.
- * Follow the easiest and safest path to the destination.
- * Follow good housekeeping procedures.
- * Remove objects that pose tripping hazards where practicable.
- * Prevent water accumulation where practicable.

The following sections address the major workplace fire hazards and the procedures for controlling the hazards.

A. Electrical Fire Hazards

Electrical system failures and the misuse of electrical equipment are leading causes of workplace fires. Fires can result from loose ground connections, wiring with frayed insulation, or overloaded fuses, circuits, motors, or outlets.

To prevent electrical fires, employees shall:

1. Make sure that worn wires are replaced.
2. Use only appropriately rated fuses.
3. Never use extension cords as substitutes for wiring improvements.
4. Use only approved extension cords [i.e., those with the Underwriters Laboratory (UL) or Factory Mutual (FM) label].
5. Check wiring in hazardous locations where the risk of fire is especially high.
6. Check electrical equipment to ensure that it is either properly grounded or double insulated.
7. Ensure adequate spacing while performing maintenance.

B. Portable Heaters

All portable heaters shall be approved by **SSO**. Portable electric heaters shall have tip-over protection that automatically shuts off the unit when it is tipped over. There shall be adequate clearance between the heater and combustible furnishings or other materials at all times.

C. Office Fire Hazards

Fire risks are not limited to industrial facilities. Fires in offices have become more likely because of the increased use of electrical equipment, such as computers and fax machines. To prevent office fires, employees shall:

1. Avoid overloading circuits with office equipment.
2. Turn off nonessential electrical equipment at the end of each workday.
3. Keep storage areas clear of rubbish.
4. Ensure that extension cords are not placed under carpets.
5. Ensure that trash and paper set aside for recycling is not allowed to accumulate.

D. Cutting, Welding, and Open Flame Work

The **SSO** will ensure the following:

1. All necessary hot work permits have been obtained prior to work beginning.
2. Cutting and welding are done by authorized personnel in designated cutting and welding areas whenever possible.

3. Adequate ventilation is provided.
4. Torches, regulators, pressure-reducing valves, and manifolds are UL listed or FM approved.
5. Oxygen-fuel gas systems are equipped with listed and/or approved backflow valves and pressure-relief devices.
6. Cutters, welders, and helpers are wearing eye protection and protective clothing as appropriate.
7. Cutting or welding is prohibited in sprinklered areas while sprinkler protection is out of service.
8. Cutting or welding is prohibited in areas where explosive atmospheres of gases, vapors, or dusts could develop from residues or accumulations in confined spaces.
9. Cutting or welding is prohibited on metal walls, ceilings, or roofs built of combustible sandwich-type panel construction or having combustible covering.
10. Confined spaces such as tanks are tested to ensure that the atmosphere is not over ten percent of the lower flammable limit before cutting or welding in or on the tank.
11. Small tanks, piping, or containers that cannot be entered are cleaned, purged, and tested before cutting or welding on them begins.
12. Fire watch has been established.

E. Flammable and Combustible Materials

The **SSO** shall regularly evaluate the presence of combustible materials at.

Certain types of substances can ignite at relatively low temperatures or pose a risk of catastrophic explosion if ignited. Such substances obviously require special care and handling.

1. Class A combustibles.

These include common combustible materials (wood, paper, cloth, rubber, and plastics) that can act as fuel and are found in non-specialized areas such as offices.

To handle Class A combustibles safely:

- a. Dispose of waste daily.
- b. Keep trash in metal-lined receptacles with tight-fitting covers (metal wastebaskets that are emptied every day do not need to be covered).
- c. Keep work areas clean and free of fuel paths that could allow a fire to spread.
- d. Keep combustibles away from accidental ignition sources, such as hot plates, soldering irons, or other heat- or spark-producing devices.
- e. Store paper stock in metal cabinets.
- f. Store rags in metal bins with self-closing lids.
- g. Do not order excessive amounts of combustibles.
- h. Make frequent inspections to anticipate fires before they start.

Water, multi-purpose dry chemical (ABC), and halon 1211 are approved fire extinguishing agents for Class A combustibles.

2. Class B combustibles.

These include flammable and combustible liquids (oils, greases, tars, oil-based paints, and lacquers), flammable gases, and flammable aerosols.

To handle Class B combustibles safely:

- a. Use only approved pumps, taking suction from the top, to dispense liquids from tanks, drums, barrels, or similar containers (or use approved self-closing valves or faucets).
- b. Do not dispense Class B flammable liquids into containers unless the nozzle and container are electrically interconnected by contact or by a bonding wire. Either the tank or container must be grounded.
- c. Store, handle, and use Class B combustibles only in approved locations where vapors are prevented from reaching ignition sources such as heating or electric equipment, open flames, or mechanical or electric sparks.
- d. Do not use a flammable liquid as a cleaning agent inside a building (the only exception is in a closed machine approved for cleaning with flammable liquids).
- e. Do not use, handle, or store Class B combustibles near exits, stairs, or any other areas normally used as exits.
- f. Do not weld, cut, grind, or use unsafe electrical appliances or equipment near Class B combustibles.
- g. Do not generate heat, allow an open flame, or smoke near Class B combustibles.
- h. Know the location of and how to use the nearest portable fire extinguisher rated for Class B fire.

Water should not be used to extinguish Class B fires caused by flammable liquids. Water can cause the burning liquid to spread, making the fire worse. To extinguish a fire caused by flammable liquids, exclude the air around the burning liquid. The following fire-extinguishing agents are approved for Class B combustibles: carbon dioxide, multi-purpose dry chemical (ABC), halon 1301, and halon 1211. (**NOTE:** Halon has been determined to be an ozone-depleting substance and is no longer being manufactured. Existing systems using halon can be kept in place.)

F. Smoking

Smoking is prohibited at the facility.

- Be aware of chemicals of concern that can directly injure the skin or that can be absorbed into the bloodstream and subsequently transported to other organs.
- Know that skin absorption is enhanced by abrasions, cuts, heat, and moisture.
- Do not wear contact lenses in contaminated atmospheres (since they may trap chemicals against the eye surface). The eye is particularly vulnerable because airborne chemicals can dissolve in its moist surface and be carried to the rest of the body through the bloodstream (capillaries are very close to the surface of the eye).
- Keep hands away from face.
- Minimize contact with liquid and solid chemicals.

Wear protective clothing (e.g., suits and gloves) as required by the Health and Safety Plan

- * Adhere to the 0.05 mg/m³ action level for dust
- * Be aware that the lungs are extremely vulnerable to chemical agents. Even substances that do not directly affect the lungs may pass through lung tissue into the bloodstream, where they are transported to other vulnerable areas of the body.
- * Know the odor and odor threshold of the chemicals of concern. Some toxic chemicals present in the atmosphere may not be detected by human senses (i.e., they may be odorless and colorless, and their toxic effects may not produce any immediate symptoms).
- * Use engineering controls to reduce vapor concentrations (e.g., ventilation) or dusty atmospheres (e.g., dust suppression techniques).
- * Wear respiratory protection as indicated by air monitoring results and/or as required by the Health and Safety Plan.
- * Conduct work zone air monitoring as required by the Health and Safety Plan.

Appendix E

Personal Protective Equipment Per Task

Applies to Task: 1. Excavation, soil sampling, well installation, GW sampling and capping

<input checked="" type="checkbox"/> <i>Modified Level D*</i>		<input type="checkbox"/> <i>Level C*</i>		<input type="checkbox"/> <i>Level B*</i>	
<i>Equipment</i>	<i>Material/ Type</i>	<i>Equipment</i>	<i>Material/Type</i>	<i>Equipment</i>	<i>Material/Type</i>
<input checked="" type="checkbox"/> Protective clothing	Long sleeve shirt and long pants, Tyvek coveralls	<input type="checkbox"/> Full-face air-purifying respirator	Cartridge Type:	<input type="checkbox"/> SCBA (pressure demand)	
<input checked="" type="checkbox"/> Outer gloves	Nitrile	<input type="checkbox"/> Half-mask air-purifying respirator	Cartridge Type:	<input type="checkbox"/> Air-line System (pressure demand)	
<input type="checkbox"/> Outer boots		<input type="checkbox"/> Protective clothing		<input type="checkbox"/> Protective clothing	
<input checked="" type="checkbox"/> Hard hat		<input type="checkbox"/> Outer gloves		<input type="checkbox"/> Outer gloves	
<input checked="" type="checkbox"/> Safety glasses May include full-face shield		<input type="checkbox"/> Inner gloves		<input type="checkbox"/> Inner gloves	
<input checked="" type="checkbox"/> Hard-toed boots		<input type="checkbox"/> Outer boots		<input type="checkbox"/> Outer boots	
<input checked="" type="checkbox"/> Hearing protection		<input type="checkbox"/> Hard hat**		<input type="checkbox"/> Hard hat**	
<input type="checkbox"/> Other:		<input type="checkbox"/> Safety glasses**		<input type="checkbox"/> Hard-toed boots**	
		<input type="checkbox"/> Hard-toed boots**		<input type="checkbox"/> Hearing protection**	
		<input type="checkbox"/> Hearing protection**		<input type="checkbox"/> Escape respirator**	
		<input type="checkbox"/> Other:		<input type="checkbox"/> Safety "tag" rope**	
				<input type="checkbox"/> Other:	

* If checked, indicates initial level of PPE. Other completed columns indicate information to upgrade/downgrade.

** Optional as applicable

Appendix G

OSHA Onsite Training Documentation Form

After completion of the OSHA 40-hour training class, 29 CFR 1910.120 states that 3 days of onsite experience under the direct supervision of a trained, experienced supervisor are required to complete the OSHA HAZWOPER training requirements. This form is to be used to document this requirement, and shall be completed by a qualified supervisor (i.e., someone who has completed the 8-hour supervisory training class). Upon completion of this form, please submit it to the EarthCon project manager.

EMPLOYEE INFORMATION

Name: _____

Signature: _____

40-Hour Training Completion Date: _____

Dates of Onsite Training: _____

Name of Site: _____

Type of Site: _____

SUPERVISOR CERTIFICATION

Supervisor: _____

Signature: _____

Appendix H – Health & Safety Inspection Checklist

EarthCon Consultants CA, Inc.

Project: _____ Date: _____	
Inspected by: _____	
<i>Category</i>	<i>Observations/Corrective Actions (N/A, if Not Applicable)</i>
Pre-field activity briefing records are current	
Tailgate meeting records are current	
Training/medical surveillance/respiratory protection records are current	
Site map is posted	
Buddy system is implemented	
Work zones are identified	
Site access is controlled	
Visitors are escorted	
On-site/off-site communications are in working order	
Safe work practices are implemented	
Any additional hazards incurred?	
Air monitoring equipment is in working condition	
Air monitoring records are being recorded in field logbook	
Air monitoring calibration records are recorded in field logbook	
PPE storage area is neat and organized	
Standard operating procedures are implemented	
Housekeeping at decontamination zone is appropriate	
Decontamination procedures are implemented	
Emergency response equipment is in working condition	
Route to hospital is posted	
Confined space entry program is implemented	
Spill containment equipment is available	
Chemical inventory is up to date	
Safety data sheets are available	
Primary and secondary containers are properly labeled	
Housekeeping at the chemical storage area is appropriate	

APPENDIX B

FEDERAL (RCRA-TCLP) AND STATE (TITLE 22-STLC,TTLC) HAZARDOUS WASTE CRITERIA

Inorganic Parameters/Metals (Methods: EPA 6010B, 7000 Series)

	TCLP	STLC	TTLC ^a
Parameters	mg/l	mg/l	mg/kg
Antimony		15	500
Arsenic	5.0	5.0	500
Barium	100	100	10,000 ^b
Beryllium		0.75	75
Cadmium	1.0	1.0	100
Chromium	5	5 (560)	2,500
Cobalt		80	8,000
Copper		25	2,500
Lead	5.0	5.0	1,000
Mercury	0.2	0.2	20
Molybdenum		350	3,500
Nickel		20	2,000
Selenium	1.0	1.0	100
Silver	5	5	500
Thallium		7.0	700
Vanadium		24	2,400
Zinc		250	5,000
Chromium (VI)		5	500
Fluoride Salts		180	18,000
Asbestos			1%

Chlorophenoxy Acid Herbicides (Method: EPA 8151A)

	TCLP	STLC	TTLC ^a
Compound	mg/l	mg/l	mg/kg
2,4-Dichlorophenoxyacetic acid	10.0	10	100
2,4,5-TP (Silvex)	1.0	1.0	10

Organochlorine Pesticides / PCBs (Method: EPA 8081A)

	TCLP	STLC	TTLC ^a
Compound	mg/l	mg/l	mg/kg
Aldrin		0.14	1.4
Chlordane	0.03	0.25	2.5
DDT/DDE/DDD		0.1	1.0
Dieldrin		0.8	8.0
Endrin	0.02	0.02	0.2
Heptachlor (& its Epoxide)	0.008	0.47	4.7
Kepone		2.1	21
Lindane	0.4	0.4	4.0
Methoxychlor	10.0	10	100
Mirex		2.1	21
Toxaphene	0.5	0.5	5.0

Semi-Volatiles (Method: EPA 8270C)

	TCLP	STLC	TTLC ^a
Compound	mg/l	mg/l	mg/kg
o-Cresol	200.0		
m-Cresol	200.0		
p-Cresol	200.0		
Cresols (Total)	200.0		
2,4-Dinitrotoluene	0.13		
Hexachlorobenzene	0.13		
Hexachlorobutadiene	0.5		
Hexachloroethane	3.0		
Nitrobenzene	2.0		
Pentachlorophenol	100.0	1.7	17
Pyridine	5.0		
2,4,5-Trichlorophenol	400.0		
2,4,6-Trichlorophenol	2.0		

Miscellaneous (Methods: EPA 8280*, CADHS-LUFT/7420)**

	TCLP	STLC	TTLC ^a
Compound	mg/l	mg/l	mg/kg
Dioxin (2,3,7,8-TCDD)*		0.001	0.01
Organic Lead Compounds**			13

See Sec 22-66261.27.(a).(7) for Additional Toxicity Compound/Criteria. Title (26) 22 Toxicity Criteria Section 22-66261.24

Volatiles (Method: EPA 8260B)

	TCLP	STLC	TTLC ^a
Compound	mg/l	mg/l	mg/kg
Benzene	0.5		
Carbon tetrachloride	0.5		
Chlorobenzene	100.0		
Chloroform	6.0		
1,4-Dichlorobenzene	7.5		
1,2-Dichloroethane	0.5		
1,1-Dichloroethylene	0.7		
Methyl ethyl ketone (MEK)	200.0		
Tetrachloroethylene (PCE)	0.7		
Trichloroethylene (TCE)	0.5	204	2,040
Vinyl chloride	0.2		

^a Values expressed as wet weight

^b Excluding barium sulfate.

HAZARDOUS WASTE CHARACTERISTICS	Ignitability (40 CFR 261.21) (T22: 22-66261.21)	Matrix	Method	Criteria
		Liquid	ASTM D-93	Exhibits the characteristic of ignitability: if it is a liquid, and has a flash point <60°C (140°F). Aqueous solutions containing >24% alcohol by volume are considered ignitable and do not require flash point testing.
		Solid		Exhibits the characteristic of ignitability: if it is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.
		Solid	EPA 9045	If it is not aqueous and, when mixed with an equivalent weight of water, produces a solution having a pH ≤ 2 or ≥ 12.5
	Corrosivity (40 CFR 261.22) (T22: 22-66261.22)	Liquid	EPA 9040 EPA 1110, NACE	Exhibits the characteristic of corrosivity if it is aqueous and has a pH ≤ 2 or ≥ 12.5 (Sec 260.20 and 260.21) If it corrodes steel (SAE 1020) at rate >6.35 mm or 0.250 in. per year at a test temperature of 55°C (130°F)
	Reactivity (40 CFR 261.22) (T22:22-66261.23)		SW846, Chapter 7 Sec.7.3.3.	Exhibits the characteristic of reactivity: if the waste has any of the following properties: 1. It is normally unstable and readily undergoes violent change without detonating. 2. It reacts violently with water. 3. It forms potentially explosive mixtures with water. 4. When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or environment. 5. It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment. The current EPA guidance level is: Total releasable cyanide: 250 mg HCN/kg waste. The current EPA guidance level is: Total releasable sulfide: 500 mg H ₂ S/kg waste. 6. It is readily capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement. 7. It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure 8. It is a forbidden explosive, as defined in 49 CFR 173.51 or a class A or B explosive, as defined in 49 CFR 173.53 and 173.88.

TOXICITY Fish (Title 26 sec 66261.24(6)) SMWW 18th Ed. A waste, or material is toxic and hazardous if (6) has an acute aquatic 96-Hour LC50 less than 500mb/L.

NOTE: Criteria and limits are abbreviated for quick reference purposes only. Specific sources should always be referenced for a detailed, complete and up-to-date listing of regulatory criteria.

APPENDIX C

RECORDING REQUESTED BY:

Clow Valve Company
1375 Magnolia Avenue
Corona, California 91719

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630
Attention: A. Edward Morelan, Branch Chief
Site Mitigation and Restoration Program

And

U.S. Environmental Protection Agency
Region IX
Attention: PCB Coordinator (Land
Chemicals and Redevelopment
Division)
75 Hawthorne Street
San Francisco, CA 94105-3901

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

LAND USE COVENANT AND AGREEMENT
ENVIRONMENTAL RESTRICTIONS

County of Riverside, Assessor Parcel Number(s): 107-030-022-3
Clow Valve Company
(Department Site Code 600876-48)

This Land Use Covenant and Agreement ("Covenant") is made by and between Clow Valve Company (the "Covenantor"), the current owner of property located at 1375 Magnolia Avenue, Corona in the County of Riverside, State of California (the "Property"), and the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471, the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials as defined

in Health and Safety Code section 25260. The Covenantor and the Department hereby agree that, pursuant to Civil Code section 1471 and Health and Safety Code section 25202.5 the use of the Property be restricted as set forth in this Covenant and that the Covenant shall conform with the requirements of California Code of Regulations, title 22, section 67391.1. With respect to the Polychlorinated Biphenyls (PCBs) at the Property, the provisions of this Covenant shall be for the benefit of, and shall be enforceable by, the United States Environmental Protection Agency ("U.S. EPA"), as a third party beneficiary pursuant to general contract law, including but not limited to Civil Code section 1559.

ARTICLE I
STATEMENT OF FACTS

1.01. Property Location. The Property, located at 1375 Magnolia Avenue, Corona, County of Riverside, California, that is subject to this Covenant, totaling approximately 16 acres, is more particularly described in the attached Exhibit A, "Legal Description of the Property", and depicted in Exhibit B, "Plot Plan". The Property is located in the area generally bounded by Magnolia Avenue on the south, railroad tracks and El Camino Avenue on the west, and a storm water channel towards the north and east. The Property is also identified as County of Riverside, Assessor's Parcel Number 107-030-022-3.

(a) A limited portion of the Property is more particularly described in Exhibit C, "Legal Description of the Capped Property", and illustrated in Exhibit D, "Sketch", referred to as the "Capped Property". The "Capped Property", totaling approximately 9.964 acres of soil impacted by hazardous substances, is located on the northern portion of the Property now generally bounded by railroad and El Camino Avenue on the west, storm channel on the north and east. Its southern border runs parallel to Magnolia Avenue, approximately 195 feet north of Magnolia Avenue.

(b) A limited portion of the Property is more particularly described in Exhibit D as "Area 1" a Former Asphalt Dip Tank and as "Area2" a PCB Transformer area. Former Asphalt Dip Tank was previously located, approximately 620 feet north of Magnolia

Avenue, 510 feet east of El Camino Avenue, and 200 feet west of the storm channel western edge. The PCB Transformer area is located approximately 240 feet west of the storm channel western edge, 510 feet east of El Camino Avenue, and 600 feet north of Magnolia Avenue.

1.02. Hazardous Substances. Hazardous wastes, or constituents of hazardous waste, including Polychlorinated Biphenyl's (PCBs) (Total Aroclors up to a maximum of 2,220 milligrams per kilogram (mg/kg)), Total Petroleum Hydrocarbons (TPH) (up to a maximum of 9,300 mg/kg), arsenic (up to a maximum of 52.9 mg/kg), cadmium (up to a maximum of 43.9 mg/kg), hexavalent chromium (up to a maximum of 6.6 mg/kg), and lead (up to a maximum of 7,360 mg/kg) in soil, and volatile organic compounds, such as tetrachloroethylene (PCE) (up to a maximum of 3 microgram/liter (ug/l)), in the soil gas remain at the Property above levels acceptable for unrestricted land use.

As of February 25, 2021, PCB concentrations in the soil at the Former Asphalt Dip Tank Bottom and PCB Transformer exceed the level for unrestricted use and the USEPA's site-specific industrial risk-based threshold of 15 mg/kg. PCB concentrations present in soils of the PCB Transformer area exceed the California hazardous waste level of Total Threshold Limit Concentration (TTLC) of 50 mg/kg.

As of February 25, 2021, lead concentrations detected in the soil at the Capped Property exceeded 320 milligrams per kilogram, a level deemed safe by DTSC for the continued use of the Site for industrial use and the TTLC of 1,000 mg/kg. A Human Health Risk Assessment (HHRA) was performed to evaluate the potential health risks associated with direct exposure of workers at the Property to soil containing Chemicals of Potential Concern (COPCs). Based on the HHRA, potential health risk to a commercial or industrial worker is 1×10^{-5} and to a construction worker is 2×10^{-4} . The estimated Hazard Index (HI) for a commercial/industrial worker at the Property is 1.9, primarily due to the potential exposure to PCBs and cadmium. The estimated HI for a construction worker at the Property is 458. U.S. EPA recommends an HI of 1 or below and health risk below 1×10^{-6} . The calculated risks were primarily associated with direct exposure to impacted soil and associated soil ingestion or dermal exposure, both of which will be eliminated by installation and maintenance of the capping materials described herein.

1.03. Remediation of Property. This Property has been investigated and/or remediated under the Department's oversight. The Department approved a Corrective Measures Study, dated February 19, 2018, prepared by EarthCon Consultants CA, Inc, in accordance with Health and Safety Code, Division 20, Chapter 6.5. The remediation activities at the Property include:

- a) Construction of an approximately 5,000 square foot, 6-inch thick concrete or 3-inch thick asphalt cap in two areas encompassing approximately one-half acre, identified as Areas of Concern (AOCs), AOC-1 and AOC-5 (see Exhibit B).
- b) Repair and maintenance of the existing asphalt and/or concrete surface cover of the Capped Property;
- c) Soil Management Plan and Operation and Maintenance Plan preapproval by the Department for all future construction work involving soil excavation at the Capped Property; and,
- d) Land use restriction recorded with the Riverside County Assessor's Office to prohibit sensitive uses.

1.04. PCB Remediation overseen by U.S. EPA. In addition to the corrective action measures for the Property under the Department's oversight, U.S. EPA approved with conditions the Risk-Based Approval Application submitted by EarthCon Consultants, CA, Inc. on behalf of Clow Valve Company dated April 9, 2019 to remediate PCBs at the Property. PCBs are regulated by the U.S. EPA pursuant to the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2601 et seq., and the PCB regulations at 40 Code of Federal Regulations (CFR) Part 761. This document is available in Envirostor, an online document repository at https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/1318022012/2019-04-23_EPA%20to%20Clow%20Valve_761.61%28c%29_SIGNED.pdf

1.05. Basis for Environmental Restrictions. As a result of the presence of Hazardous Wastes, PCBs, TPH, arsenic, cadmium, lead, and PCE, which are also hazardous materials as defined in Health and Safety Code section 25260, at the Property, the Department has concluded that it is reasonably necessary to restrict the

use of the Property in order to protect present or future human health or safety or the environment, and that this Covenant is required as part of the Department-approved remedy for the Property. The Department has also concluded that the Property, as remediated and when used in compliance with the Environmental Restrictions of this Covenant, does not present an unacceptable risk to present and future human health or safety or the environment.

1.06. Land Use Covenant. A land use covenant is necessary to preclude potential users' exposure to hazardous substances that remain at the Property and to complete the remedy selected in the Corrective Measures Study. U.S. EPA, with the concurrence of the Department, has concluded that the Property, remediated to the goals presented in the Corrective Measures Study, subject to the restrictions of this Covenant, and used in compliance with such restrictions, does not present an unacceptable threat to present or future human health or safety or the environment. Additional information about the Site, including the 2019 PCB risk analysis by U.S. EPA, is available at the Envirostor, an online repository listed in paragraph 1.04, above.

ARTICLE II **DEFINITIONS**

2.01. Department. "Department" means the California Department of Toxic Substances Control and includes its successor agencies, if any.

2.02. Environmental Restrictions. "Environmental Restrictions" means all protective provisions, covenants, restrictions, requirements, prohibitions, and terms and conditions as set forth in this Covenant.

2.03. Improvements. "Improvements" includes, but is not limited to buildings, structures, roads, driveways, improved parking areas, wells, pipelines, or other utilities.

2.04. Lease. "Lease" means lease, rental agreement, or any other document that creates a right to use or occupy any portion of the Property.

2.05. Occupant. "Occupant" or "Occupants" means Owner and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.06. Owner. "Owner" or "Owners" means the Covenantor, and any successor in interest including any heir and assignee, who at any time holds title to all or any portion of the Property.

2.07. U.S. EPA. "U.S. EPA" means the United States Environmental Protection Agency, and includes its successor agencies, if any.

ARTICLE III

GENERAL PROVISIONS

3.01. Runs with the Land. This Covenant sets forth Environmental Restrictions that apply to and encumber the Property and every portion thereof no matter how it is improved, held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. This Covenant: (a) runs with the land pursuant to Civil Code section 1471 and Health and Safety Code section 25202.5; (b) inures to the benefit of and passes with each and every portion of the Property; (c) is for the benefit of, and is enforceable by the Department; and (d) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02. Binding upon Owners/Occupants. This Covenant: (a) binds all Owners of the Property, their heirs, successors, and assignees; and (b) the agents, employees, and lessees of the Owners and the Owners' heirs, successors, and assignees. Pursuant to Civil Code section 1471, all successive Owners of the Property are expressly bound hereby for the benefit of the Department; this Covenant, however, is binding on all Owners and Occupants, and their respective successors and assignees, only during their respective periods of ownership or occupancy except that such Owners or Occupants shall continue to be liable for any violations of, or non-compliance with, the Environmental Restrictions of this Covenant or any acts or omissions during their ownership or occupancy.

3.03. Written Notice of the Presence of Hazardous Substances. Prior to the sale, lease, assignment, or other transfer of the Property, or any portion thereof, the Owner, lessor, or sublessor shall give the buyer, lessee, or sublessee written notice of the existence of this Covenant and its Environmental Restrictions.

3.04. Incorporation into Deeds and Leases. This Covenant shall be

incorporated by reference in each and every deed and Lease for any portion of the Property.

3.05. Conveyance of Property. The Owner and new Owner shall provide Notice to the Department and the U.S. EPA not later than 30 calendar days after any conveyance or receipt of any ownership interest in the Property (excluding Leases, and mortgages, liens, and other non-possessory encumbrances). The Notice shall include the name and mailing address of the new Owner of the Property and shall reference the site name and site code as listed on page one of this Covenant. The notice shall also include the Assessor's Parcel Number(s) noted on page one. If the new Owner's property has been assigned a different Assessor Parcel Number, each such Assessor Parcel Number that covers the Property must be provided. The Department shall not, by reason of this Covenant, have authority to approve, disapprove, or otherwise affect proposed conveyance, except as otherwise provided by law or by administrative order.

3.06. Costs of Administering the Covenant to Be Paid by Owner. The Department has already incurred and will in the future incur costs associated with this Covenant. Therefore, the Covenantor hereby covenants for the Covenantor and for all subsequent Owners that, pursuant to California Code of Regulations, title 22, section 67391.1(h), the Owner agrees to pay the Department's costs in administering, implementing and enforcing this Covenant.

ARTICLE IV

RESTRICTIONS AND REQUIREMENTS

4.01. Prohibited Uses. The Property shall not be used for any of the following purposes without prior written approval by the Department pursuant to Health and Safety Code section 25227 and prior written notice to U.S. EPA :

- (a) A residence, including single or multifamily housing, mobile homes, or factory-built housing constructed or installed for use as residential human habitation.
- (b) A hospital for humans.
- (c) A public or private school for persons under 18 years of age.
- (d) A day care center or a playground for children.

4.02. Soil Management. Soil management activities at the Capped Property are subject to the following requirements in addition to any other applicable Environmental Restrictions:

- (a) No activities that will disturb the soil at or below grade or below concrete (e.g., excavation, grading, removal, trenching, filling, earth movement, mining, or drilling) shall be allowed at the Property without a Soil Management Plan pre-approved by the Department and U.S. EPA in writing.
- (b) Any soil brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

4.03. Prohibited Activities. The following activities shall not be conducted at the Property:

- (a) Drilling for any water, oil, or gas without prior written approval by the Department.
- (b) Extraction or removal of groundwater without a Groundwater Management Plan pre-approved by the Department in writing.
- (c) Activity that may alter, interfere with, or otherwise affect the integrity or effectiveness of, or the access to, monitoring, operation or maintenance of the concrete cover at the Capped Property without prior written approval of the Department and U.S. EPA.

4.04. Written Notice of Covenant. Prior to any sale, lease, or rental of any portion of the Property, the Owner shall provide a copy of this Covenant to the buyer, lessee, or renter to ensure that the buyer, lessee, or renter is on notice of the restrictions and requirements of this Covenant. Prior to recordation of any easement on any portion of the Property, the Owner shall provide a copy of this Covenant to the easement holder to ensure that the easement holder is on notice of the restrictions and requirements of this Covenant. Covenantor shall also provide a copy of this Covenant to all existing Occupants and easement holders of record within 30 days of recording this Covenant.

4.05. Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, investigation, remediation, monitoring, and other activities as deemed necessary by the Department in order to protect human health or safety or the environment. Nothing in this instrument shall limit or otherwise affect the Department's right of entry and access, or authority to take response actions, under any applicable State Law.

4.06. Access for U.S EPA. The U.S. EPA shall have reasonable right of entry and access to the Property for inspection, investigation, remediation, monitoring, and other activities as deemed necessary by the U.S. EPA in order to protect human health or safety or the environment. Nothing in this instrument shall limit or otherwise affect U.S. EPA's right of entry and access, or U.S. EPA's authority to take actions, under any applicable law.

4.07. Access for Implementing Operation and Maintenance. The entity or person responsible for implementing the operation and maintenance activities, if any, shall have reasonable right of entry and access to the Property for the purpose of implementing such operation and maintenance activities until the Department determines that no further operation and maintenance activity is required.

4.08. Inspection and Reporting Requirements. The Owner shall conduct an annual inspection of the Property verifying compliance with this Covenant; shall submit an annual inspection report to the Department for its approval by January 15th of each year; and also send a copy to U.S. EPA. Attached as Exhibit F is a sample format for an annual inspection report. The annual inspection report must include the dates, times, and names of those who conducted the inspection and reviewed the annual inspection report. It also shall describe how the observations that were the basis for the statements and conclusions in the annual inspection report were performed (e.g., drive by, fly over, walk in, etc.). If any violation is noted, the annual inspection report must detail the steps taken to correct the violation and return to compliance. If the Owner identifies any violations of this Covenant during the annual inspection or at any other

time, the Owner must within 10 calendar days of identifying the violation: (a) determine the identity of the party in violation; (b) send a letter advising the party of the violation of the Covenant; and (c) demand that the violation cease immediately. Additionally, a copy of any correspondence related to the violation of this Covenant shall be sent to the Department and U.S. EPA within 10 calendar days of its original transmission.

4.09. Five-Year Review. In addition to the annual reviews noted above, after a period of five (5) years from January 15, 2021 and every five (5) years thereafter, Owner shall submit a Five-Year Review report documenting its review of the remedy implemented and its evaluation to determine if human health and the environment are being adequately protected by the remedy as implemented. The Owner shall submit this report to DTSC, and submit a copy to U.S. EPA. The report shall describe the results of all inspections, sampling analyses, tests and other data generated or received by Owner and evaluate the adequacy of the implemented remedy in protecting human health and the environment. As a result of any review work performed, Department may require Owner to perform additional review work or modify the review work previously performed by Owner.

4.10. Changes to Use or Condition of Property. Any changes to land use, movement of PCB contaminated soils, or discovery of new contamination requires notification to, and may require additional approval from, the U.S. EPA by the Owner and/or Occupant.

4.11. Access for Five-Year Reviews. The entity, person or persons responsible for Five-Year Reviews shall have reasonable right of entry and access to the Property for the purpose of implementing these activities. Such right of entry and access shall continue until such time as the U.S. EPA and DTSC both determine that no further Five-Year Review activities are required.

ARTICLE V ENFORCEMENT

5.01. Enforcement. Failure of the Owner or Occupant to comply with this Covenant shall be grounds for the Department to require modification or removal of any Improvements constructed or placed upon any portion of the Property in violation of this

Covenant. Violation of this Covenant, such as failure to submit (including submission of any false statement) record or report to the Department, shall be grounds for the Department to pursue administrative, civil, or criminal actions, as provided by law.

5.02. Enforcement Rights of U.S. EPA as Third-Party Beneficiary. U.S. EPA, as a third-party beneficiary, has the right to enforce the Environmental Restrictions contained herein.

ARTICLE VI

VARIANCE, REMOVAL AND TERM

6.01. Variance from Environmental Restrictions. Any person may apply to the Department for a written variance from any of the Environmental Restrictions imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25223. A copy of the application shall be submitted to the U.S. EPA simultaneously with the application submitted to the Department. No variance may be granted under this paragraph without prior notice and opportunity to comment by U.S. EPA.

6.02 Termination, Modification, and/or Removal of Environmental Restrictions. Any person may apply to the Department to terminate, modify, and/or remove any or all of the Environmental Restrictions imposed by this Covenant or terminate the Covenant in its entirety. Such application shall be made in accordance with Health and Safety Code section 25224 and a copy of the application shall be submitted to U.S. EPA simultaneously with the application submitted to the Department. No termination may be granted under this paragraph without prior notice to and opportunity to comment by U.S. EPA.

6.03 Term. Unless ended in accordance with paragraph 6.02, by law, or by the Department in the exercise of its discretion, this Covenant, after providing notice to and an opportunity to comment by U.S. EPA, shall continue in effect in perpetuity.

ARTICLE VII

MISCELLANEOUS

7.01. No Dedication Intended. Nothing set forth in this Covenant shall be

construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof, to the general public or anyone else for any purpose whatsoever.

7.02. Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of Riverside within 10 calendar days of the Covenantor's receipt of a fully executed original. The Covenantor shall also provide copies showing the County Recorder's tracking information of its recording (i.e., document number or book and page number information) to the Department and U.S. EPA within ten (10) days of receiving it from the County Recorder's Office.

7.03. Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (a) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served; or (b) five calendar days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner:

Mark Willett, General Manager
Clow Valve Company
1375 Magnolia Avenue
Corona, California 91719
And

To Department:

A. Edward Morelan, Chief
Cypress Cleanup Branch
Site Mitigation and Restoration Program
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630

To U.S. EPA:

U.S. Environmental Protection Agency
Region IX
Attention: PCB Coordinator (Land Chemicals and
Redevelopment Division)
75 Hawthorne Street
San Francisco, CA 94105-3901

Any party may change its address or the individual to whose attention a Notice is to be

sent by giving advance written Notice in compliance with this paragraph.

7.04. Partial Invalidity. If this Covenant or any of its terms are determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.05. Statutory References. All statutory or regulatory references include successor provisions.

7.06. Incorporation of Exhibits. All exhibits and attachments to this Covenant are incorporated herein by reference.

IN WITNESS WHEREOF, the Covenantor and the Department hereby execute this Covenant.

Covenantor: Clow Valve Company

By: _____

Date: _____

Name and Title: Mark Willett, General Manager

Department of Toxic Substances Control:

By: _____

Date: _____

Name and Title: A. Edward Morelan, Chief
Cypress Cleanup Branch
Site Mitigation and Restoration Program

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of _____

On _____ before me,

(space above this line is for name and title of the officer/notary),

personally appeared _____, who 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.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

_____ (seal)

Signature of Notary Public

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of _____

On _____ before me,

(space above this line is for name and title of the officer/notary),

personally appeared _____, who 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.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

_____ (seal)

Signature of Notary Public

Exhibit A – “Legal Description” – APN 107-030-022-3

Exhibit B – “Plot Plan” - APN 107-030-022-3

Exhibit C – “Capped Property” - Legal Description

Exhibit D – “Capped Property” - Sketch

Exhibit E – “AOC7 – Transformer Area 1”,

Exhibit F – “LUC Sample Annual inspection Report”

EXHIBIT "A"

LEGAL DESCRIPTION

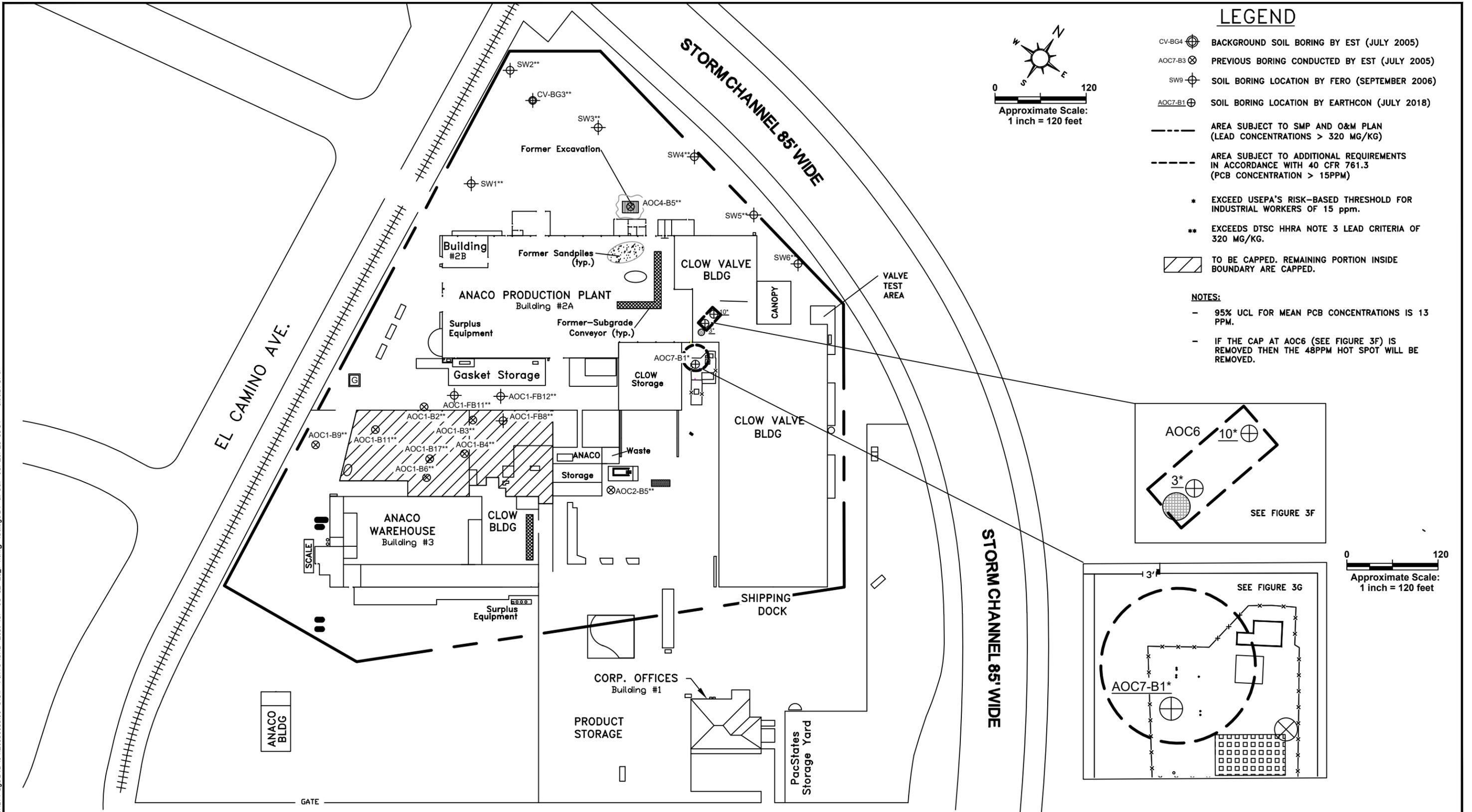
THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CORONA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONALIZED SURVEY OF THE RANCHO EL SOBRANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATING COMPANY, AS SHOWN BY MAP ON FILE IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, BOUNDED AS FOLLOWS: ON THE SOUTHEAST BY THE SOUTHWESTERLY EXTENSION OF THE NORTHWEST LINE OF MAGNOLIA AVENUE, AS SHOWN ON RECORD OF SURVEY ENTITLED "RECORD OF SURVEY OF A PORTION OF LOTS 11, 12, 13, 14, 15, IN BLOCK 63 OF RIVERSIDE LAND AND IRRIGATING COMPANY AND A PORTION OF SECTIONS 29 AND 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, SAN BERNARDINO BASE AND MERIDIAN" ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS; ON THE WEST BY THE EASTERLY LINE OF THE PORPHYRY SPUR OF THE ATCHISON, TOPEKA, AND SANTA FE RAILWAY COMPANY; AND ON THE NORTHEAST BY THE SOUTHERLY AND SOUTHWESTERLY LINE OF PARCELS 5 TO 11, INCLUSIVE, OF SAID RECORD OF SURVEY ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS.

EXCEPTING THEREFROM THAT PORTION GRANTED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER DISTRICT CONSERVATION DISTRICT BY DEED RECORDED OCTOBER 22, 1984 AS INSTRUMENT NO. 84-227367 AND RE-RECORDED FEBRUARY 11, 1985 AS INSTRUMENT NO. 85-028214 BOTH OF OFFICIAL RECORDS.

APN: 107-030-022-3

FILENAME: S:\Common\OrangeCADProjects\04.20150013.00-Clow Valve\CAD 2019\SP 05-12-21\F4.dwg (Subject area) 05/20/21 13:14 - abasford



MAGNOLIA AVE

CLOW VALVE

1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



EARTHCON CONSULTANTS CA, INC

1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

LUC Exhibit B
SITE PLAN WITH
AREAS SUBJECT TO
THE LAND USE COVENANT

DRAWN: AB	CHECKED: JB	DATE: 05/12/21	FIGURE: 4A
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EXHIBIT "C"
LEGAL DESCRIPTION
Portion of APN 107-030-022

BEING IN THE CITY OF CORONA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA. THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONIZED SURVEY OF THE RANCHO EL SOBRANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATION COMPANY, AS SHOWN ON MAP FILED IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF COMPTON AVENUE (ALSO KNOWN AS EL CAMINO AVENUE) AND THE CENTERLINE OF TEMESCAL CREEK CHANNEL AS SHOWN ON RECORD OF SURVEY FILED IN BOOK 71, PAGES 7 THROUGH 11, INCLUSIVE, OF RECORDS OF SURVEY IN THE OFFICE OF THE COUNTY RECORDER OF RIVERSIDE COUNTY, THENCE, SOUTHEASTERLY ALONG THE CENTERLINE OF SAID TEMESCAL CREEK CHANNEL, SOUTH 79°49'49" EAST (SHOWN AS S79°48'46" EAST ON SAID RECORD OF SURVEY), 477.06 FEET; THENCE, LEAVING SAID CENTERLINE, SOUTH 10°22'04" WEST, 84.25 FEET TO THE TRUE POINT OF BEGINNING FOR THIS DESCRIPTION; THENCE, NORTH 79°37'56" WEST, 269.59 FEET; THENCE, SOUTH 56°04'15" WEST, 116.07 FEET TO A POINT ON THE EASTERLY LINE OF A.T.&S.F. RAILROAD RIGHT OF WAY AS SHOWN ON SAID RECORD OF SURVEY; THENCE, SOUTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, SOUTH 05°28'23" EAST, 800.61 FEET; THENCE, LEAVING SAID EASTERLY RIGHT OF WAY, NORTH 83°44'45" EAST, 203.93 FEET; THENCE, NORTH 47° 08'29" EAST, 630.00 FEET; THENCE, NORTH 34°06'13" WEST, 404.00 FEET; THENCE, NORTH 79°37'56" WEST, 155.41 FEET TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH TWO AREAS WITHIN THE ABOVE DESCRIBED EASEMENT, THE FIRST BEING DESCRIBED AS FOLLOWS: AREA 1, COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF COMPTON AVENUE (ALSO KNOWN AS EL CAMINO AVENUE) AND THE CENTERLINE OF TEMESCAL CREEK CHANNEL AS SHOWN ON RECORD OF SURVEY FILED IN BOOK 71, PAGES 7 THROUGH 11, INCLUSIVE, OF RECORDS OF SURVEY IN THE OFFICE OF THE COUNTY RECORDER OF RIVERSIDE COUNTY, THENCE, SOUTHEASTERLY ALONG THE CENTERLINE OF SAID TEMESCAL CREEK CHANNEL, SOUTH 79°49'49" EAST (SHOWN AS S79°48'46" EAST ON SAID RECORD OF SURVEY), 477.06 FEET; THENCE, LEAVING SAID CENTERLINE, SOUTH 10°22'04" WEST, 214.25 FEET; THENCE, SOUTH 79°49'49" EAST, 75.15 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 1; THENCE, SOUTH 79°49'49" EAST, 30.00 FEET; THENCE, SOUTH 10°10'11" WEST, 30.00 FEET; THENCE, NORTH 79°49'49" WEST, 30.00 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "A"; THENCE, NORTH 10°10'11" EAST, 30.00 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 1.

EXHIBIT "C"
LEGAL DESCRIPTION
(Continued)

AREA 2, COMMENCING AT THE POINT HEREINBEFORE REFERRED TO AS POINT "A", THENCE, SOUTH 10°10'11" WEST, 13.15 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 2; THENCE, SOUTH 10°10'11" WEST, 60.00 FEET; THENCE, SOUTH 79°49'49" EAST, 60.00 FEET; THENCE, NORTH 10°10'11" EAST, 60.00 FEET; THENCE, NORTH 79°49'49" WEST, 60.00 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 2.

THE ABOVE DESCRIBED GROSS AREA EASEMENT CONTAINS 422,249 SQ.FT., 9.694 ACRES MORE OR LESS.

THE ABOVE DESCRIBED AREA 1 CONTAINS 900 SQ.FT., 0.021 ACRES MORE OR LESS.

THE ABOVE DESCRIBED AREA 2 CONTAINS 3,600 SQ.FT., 0.083 ACRES MORE OR LESS.

As shown on Exhibit "B" attached hereto and by this reference made a part hereof.

Prepared by:


Douglas Boynton, PLS4787
(562) 426-6464
March 17, 2020

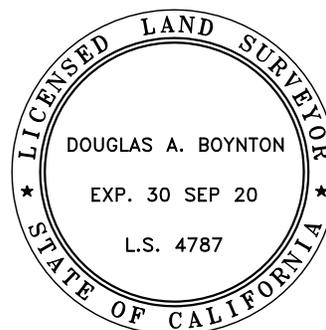
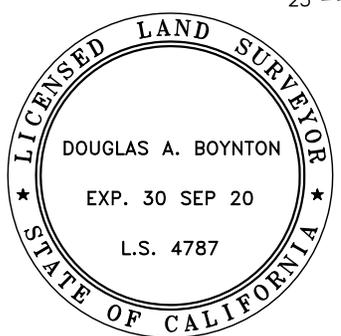
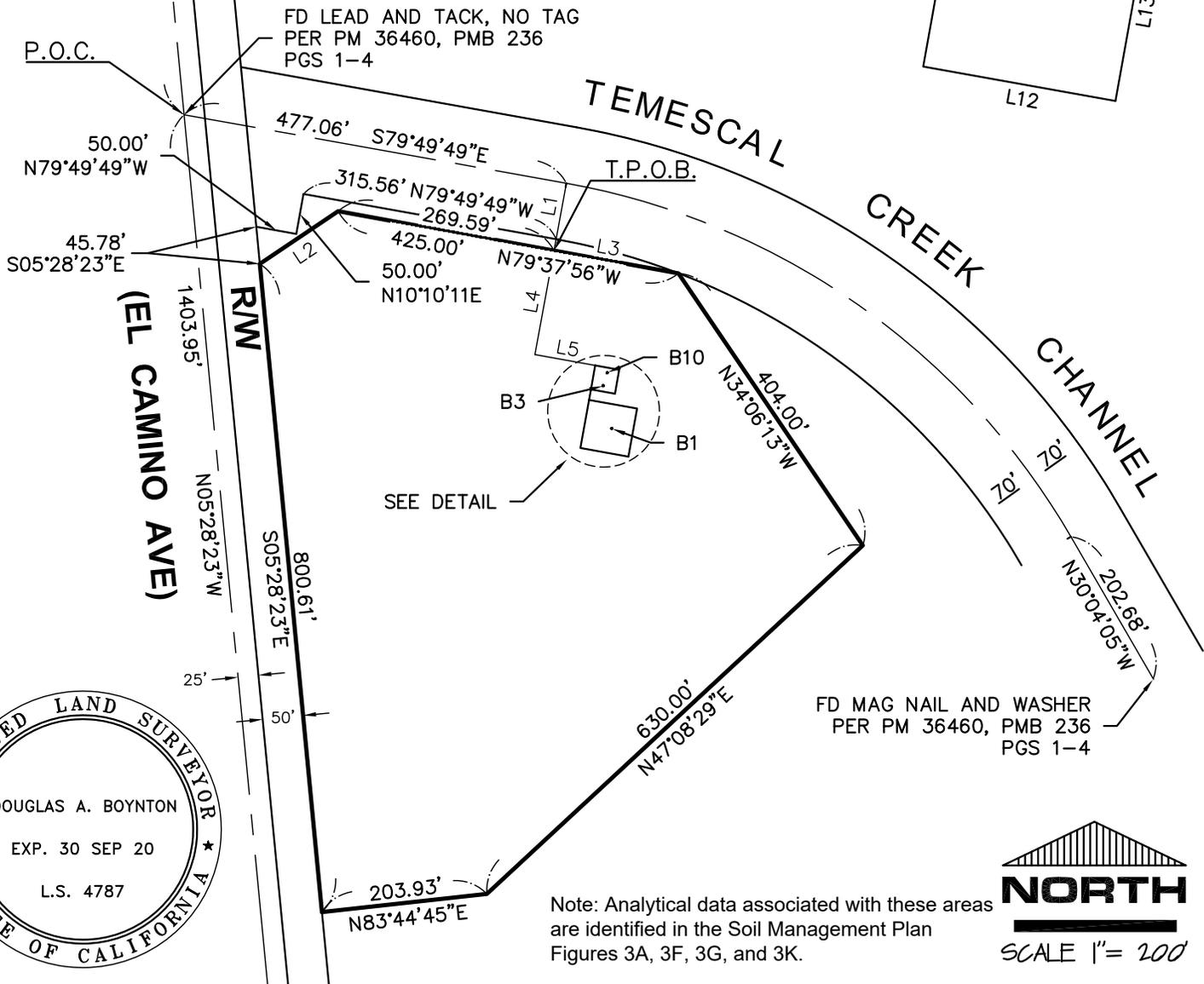
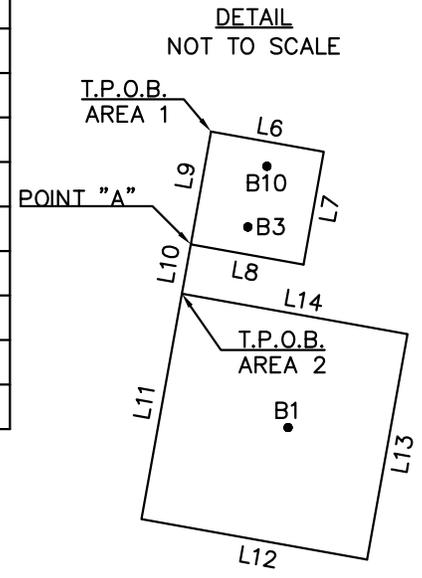
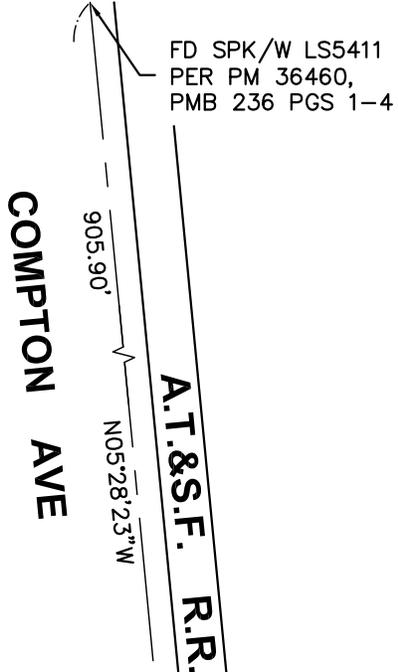


EXHIBIT "D"

Sketch to accompany Legal Description

LINE TABLE		
L1	84.25'	S10° 22' 04" W
L2	116.07'	S56° 04' 15" W
L3	155.41'	N79° 37' 56" W
L4	130.00'	S10° 22' 04" W
L5	75.15'	S79° 49' 49" E
L6	30.00'	S79° 49' 49" E
L7	30.00'	S10° 10' 11" W
L8	30.00'	N79° 49' 49" W
L9	30.00'	N10° 10' 11" E
L10	13.15'	S10° 10' 11" W
L11	60.00'	S10° 10' 11" W
L12	60.00'	S79° 49' 49" E
L13	60.00'	N10° 10' 11" E
L14	60.00'	N79° 49' 49" W



Note: Analytical data associated with these areas are identified in the Soil Management Plan Figures 3A, 3F, 3G, and 3K.



EXHIBIT F

LAND USE COVENANT SAMPLE ANNUAL INSPECTION REPORT (2 Pages)

Site name:

Site address:

Current Site owner:

Date and times of inspection:

Name(s) of individual(s) who performed inspection:

How inspection observations were made (e.g. drive-by, fly-over, walking the Property):

1. Since the last annual inspection, has there been a change in the land use, such that there are now residences, a hospital for humans, a public or private school for persons under 21 years of age, or a day care center for children on the restricted Property?
 Yes No Not an applicable restriction
2. Since the last annual inspection, has the soil been disturbed on the restricted Property? Was evidence of soil disturbance observed on the restricted Property during the inspection?
 Yes No Not an applicable restriction
3. Since the last annual inspection, has there been any drilling on the restricted Property? Was evidence of drilling observed on the restricted Property during the inspection?
 Yes No Not an applicable restriction

Cap Condition

4. Since the last annual inspection, has there been any damage to, disturbance of, or modifications to the existing building foundation and/or surrounding pavement that serves as the cap over contaminated soil?
 Yes No

5. Has there been any damage to, disturbance of, or modifications to the asphalt/concrete Cap covering the restricted Property?
 Yes No

Land Use Covenant Compliance

6. Has there been a change in the land use of the property from commercial/industrial?
 Yes No

If the response to any of the above questions is yes, describe the circumstances.

Photos should be attached to this report that show the use of the Restricted Property at the time of the inspection and the condition of any Caps on the restricted Property. Photos showing any cracks in or damage to the Cap should also be included.

I certify under penalty of law that this document and all attachments were prepared by me or under my direction or supervision. With the exception of any areas of non-compliance noted above, all uses and activities on the restricted Property were found to be in compliance with the restrictions and requirements of the Land Use Covenant. Based on my personal knowledge or inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature of Property Owner or Representative

Date

Print Name

Title

APPENDIX D

GRADING GENERAL NOTES

- A GRADING PERMIT FROM THE PUBLIC WORKS DEPARTMENT IS REQUIRED. ALL GRADING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF CORONA GRADING REGULATIONS - CORONA MUNICIPAL CODE 15.36, THESE PLANS, SPECIAL INSTRUCTIONS ON THE PERMIT, AND THE GEOTECHNICAL INVESTIGATION AND LIQUIDATION EVALUATION DATED SEPTEMBER 10, 2019 BY GEOTECHNICAL PROFESSIONALS INC., AND ALL SUBSEQUENT ADDENDA.
- SOURCE OF TOPOGRAPHY IS BASED ON FIELD SURVEY DATED SEPTEMBER 23, 2018.
- A PRE-GRADING MEETING AT THE SITE IS REQUIRED BETWEEN THE CITY INSPECTOR, THE CIVIL ENGINEER, THE GEOTECHNICAL ENGINEER AND THE GRADING CONTRACTOR. CALL THE PUBLIC WORKS DEPARTMENT INSPECTION DIVISION AT (951) 279-3511 TO SCHEDULE A PRE-GRADING MEETING AT LEAST 48 HOURS PRIOR TO START OF ANY WORK.
- HOURS OF OPERATION ARE 7:00 A.M. TO 5:00 P.M. - MONDAY THROUGH FRIDAY EXCLUDING HOLIDAYS.
- SEPARATE PERMITS SHALL BE REQUIRED FOR ANY IMPROVEMENT WORK IN THE PUBLIC RIGHT-OF-WAY.
- CONSTRUCTION MATERIAL AND EQUIPMENT SHALL NOT OCCUPY ANY PORTION OF THE PUBLIC RIGHT-OF-WAY, SUCH AS STREET, ALLEY OR PUBLIC SIDEWALK AT ANY TIME. TEMPORARY USE OF PUBLIC RIGHT-OF-WAY, WHENEVER REQUESTED, MUST BE REVIEWED AND APPROVED BY THE PUBLIC WORKS DIRECTOR.
- REPAIR OR REPLACE ALL EXISTING DAMAGED OR ALTERED PUBLIC IMPROVEMENTS AS REQUIRED BY THE PUBLIC WORKS DIRECTOR.
- ALL SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED IN PLACE. ANY DISTURBED OR COVERED MONUMENTS SHALL BE RESET BY A QUALIFIED CIVIL ENGINEER OR A LICENSED LAND SURVEYOR.
- PRIOR TO TAKING WATER FROM A CITY FIRE HYDRANT, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE PUBLIC WORKS DEPARTMENT TO OBTAIN A FIRE HYDRANT WATER METER. METER LOCATION MAY NOT BE ALTERED WITHOUT DEPARTMENT OF WATER AND POWER APPROVAL.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES OR STRUCTURES ABOVE OR BELOW GROUND SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES OR STRUCTURES CAUSED BY HIS OPERATION.
- STRICT ADHERENCE TO DUST CONTROL REQUIREMENTS SHALL BE ENFORCED. ADJACENT STREETS ARE TO BE CLEANED DAILY OF ALL DIRT AND DEBRIS RESULTING FROM THIS OPERATION.
- SEPARATE PERMITS FROM THE BUILDING DIVISION SHALL BE REQUIRED FOR ALL WALLS.
- AN APPROVED PRECISE GRADING PLAN WILL BE REQUIRED PRIOR TO A BUILDING PERMIT BEING ISSUED.
- THE DESIGN CIVIL ENGINEER/GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST OF RECORD SHALL EXERCISE SUFFICIENT CONTROL DURING GRADING AND CONSTRUCTION TO ENSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS, AND CODE REQUIREMENTS WITHIN THEIR PURVIEW. THE ENGINEERS SHALL SUBMIT "ACKNOWLEDGMENT CONCERNING EMPLOYMENT" FORM TO THE CITY PRIOR TO THE ISSUANCE OF A GRADING PERMIT.
- REVISIONS TO THE PLANS ARE TO BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR REVIEW AND APPROVAL PRIOR TO CHANGING ORIGINAL MYLARS.
- THE CIVIL ENGINEER SHALL SUBMIT WRITTEN CERTIFICATION OF COMPLETION OF ROUGH GRADING IN ACCORDANCE WITH THE APPROVED GRADING PLAN AND CERTIFICATION OF BUILDING PAD ELEVATION PRIOR TO ISSUANCE OF THE BUILDING PERMIT. PAD ELEVATION GRADING TOLERANCE SHALL NOT EXCEED ±0.10'.
- AN "AS-BUILT" GRADING PLAN SHALL BE SUBMITTED AT THE COMPLETION OF WORK SHOWING ALL WATER QUALITY MANAGEMENT PLAN FACILITIES.
- GRADING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER WHO SHALL CERTIFY THAT ALL FILL HAS BEEN PROPERLY PLACED AND SUBMIT A FINAL COMPACTION REPORT FOR ALL FILLS OVER 1' DEEP.
- THE GEOTECHNICAL ENGINEER SHALL, AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUBSURFACE WATER OR SPRING FLOW. IF NEEDED, DRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
- FILL AREAS SHALL BE CLEARED OF ALL VEGETATION AND DEBRIS, SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACING OF FILL.
- ALL DELETERIOUS MATERIALS, I.E. LUMBER, LOGS, BRUSH, OR ANY OTHER ORGANIC MATERIALS OR RUBBISH SHALL BE REMOVED FROM ALL AREAS TO RECEIVE COMPACTED FILL.
- UNSATURABLE MATERIALS, SUCH AS TOPSOIL, WEATHERED BEDROCK, ETC., SHALL BE REMOVED AS REQUIRED BY GEOTECHNICAL ENGINEER (AND ENGINEERING GEOLOGIST, WHERE EMPLOYED) FROM ALL AREAS TO RECEIVE COMPACTED FILL OR DRAINAGE STRUCTURES.
- FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL.
- WHEN CUT PADS ARE BROUGHT TO NEAR GRADE, THE GEOTECHNICAL ENGINEER SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE GEOTECHNICAL ENGINEER, A COMPACTED FILL BLANKET WILL BE PLACED.
- WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE GEOTECHNICAL ENGINEER, THE GEOTECHNICAL ENGINEER SHALL SUBMIT DESIGN, LOCATIONS AND CALCULATIONS TO THE PUBLIC WORKS DIRECTOR PRIOR TO CONSTRUCTION. THE GEOTECHNICAL ENGINEER WILL INSPECT AND CONTROL THE CONSTRUCTION OF THE BUTTRESSING AND CERTIFY TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION.
- ALL CUT SLOPES SHALL BE INVESTIGATED, BOTH DURING AND AFTER GRADING BY THE GEOTECHNICAL ENGINEER, TO DETERMINE IF ANY SLOPE HAS STABILITY PROBLEMS. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS, THE GEOTECHNICAL ENGINEER SHALL RECOMMEND NECESSARY TREATMENT TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL. ALL APPROVALS TO BE GRANTED ON THE BASIS OF DETAILED GEOLOGICAL MAPPING AND WRITTEN RECOMMENDATION FROM THE GEOTECHNICAL ENGINEER.
- MAXIMUM ALLOWABLE CUT AND FILL SLOPES ARE 2 TO 1 OR 30' IN HEIGHT WITHOUT APPROVAL OF THE PUBLIC WORKS DIRECTOR. IF PROPOSED CUT AND FILL SLOPES ARE STEEPER THAN 2:1 OR OVER 30' IN HEIGHT, STABILITY CALCULATIONS WITH A SAFETY FACTOR OF AT LEAST ONE AND FIVE TENTHS (1.5) SHALL BE SUBMITTED BY A GEOTECHNICAL ENGINEER FOR APPROVAL FROM THE PUBLIC WORKS DIRECTOR.
- PROVIDE 4' WIDE BY 1' HIGH BERM OR EQUIVALENT ALONG THE TOP OF ALL FILL SLOPES OVER 5' HIGH, EXCEPT WHERE SHOWN OTHERWISE ON THE PLANS.

- ALL SLOPES ADJACENT TO PUBLIC RIGHT-OF-WAY SHALL CONFORM TO SECTION 15.36.220 OF THE CORONA MUNICIPAL CODE.
- ALL SLOPES 4' OR HIGHER SHALL BE PLANTED AND COMPLY WITH REQUIREMENTS OF CHAPTER 17 OF THE CORONA MUNICIPAL CODE.
- TERRACE DRAINS, INTERCEPTOR DRAINS AND DOWN DRAINS SHALL BE CONSTRUCTED OF 4" P.C.C. (OR GUNITE) REINFORCED WITH 6"x6" - 2 1.4x1.4 W.W.M. REBAR SHALL BE GRADE 60 BILLET STEEL CONFORMING TO ASTM A615.
- ALL CONCRETE STRUCTURES THAT COME IN CONTACT WITH THE ON-SITE SOILS SHALL BE CONSTRUCTED WITH TYPE II OR V CEMENT AS DEEMED NECESSARY BY SOLUBLE SULFATE CONTENT TEST CONDUCTED BY THE GEOTECHNICAL ENGINEER. ALL CONCRETE SHALL BE CITY STANDARD 560-C-3250 (600-E 3250 FOR GUNITE) PER CITY STANDARD SPECIFICATIONS.
- GROUND SHALL BE PRE-WETTED PRIOR TO THE PLACEMENT OF CONCRETE. MOISTURE LOSS RETARDANT SHALL BE USED WHEN REQUIRED BY THE GEOTECHNICAL ENGINEER OR PUBLIC WORKS DIRECTOR.
- CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND/OR OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.

POST CONSTRUCTION BMP GENERAL NOTES:

- THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMPs) FOR POST CONSTRUCTION STORM WATER TREATMENT.
- CONSTRUCT THE STORM WATER TREATMENT FACILITIES AFTER ALL CONTRIBUTING DRAINAGE AREAS ARE STABILIZED AND TO THE SATISFACTION OF THE ENGINEER OF RECORD.
- DO NOT USE THE DEVICES AS TEMPORARY SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
- THE FOLLOWING BMPs HAVE BEEN DESIGNED INTO THE PLANS. PLEASE REFER TO THE PROJECT'S APPROVED WATER QUALITY MANAGEMENT PLAN (WQMP) FOR ADDITIONAL BMP'S AND OPERATION AND MAINTENANCE DETAILS:
 - BIORETENTION FACILITY AND OR ON-SITE RETENTION

NOTE:

- A SEWER BACKFLOW PREVENTOR IS NOT REQUIRED FOR THIS PROJECT
- WATER PRESSURE REDUCING VALVES ARE REQUIRED FOR THIS PROJECT

NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES, SHOWN OR NOT SHOWN ON THESE PLANS.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION ON THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS OR PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, THE OWNER, AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA) PH. 811 TWO (2) WORKING DAYS PRIOR TO DIGGING. NO CONSTRUCTION PERMIT ISSUED BY THE PUBLIC WORKS DEPARTMENT SHALL BE VALID INVOLVING UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS AN INQUIRY IDENTIFICATION NUMBER ISSUED BY U.S.A.

CARE SHOULD BE TAKEN TO PREVENT GRADED DITCHES AND SWALES FROM UNDERMINING STREET IMPROVEMENTS. UPON INSPECTION OF THE SITES, THE PUBLIC WORKS DIRECTOR MAY REQUIRE TEMPORARY GUNITE SWALES, ENTERING OR LEAVING IMPROVEMENTS.

DECLARATION OF ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS SHOWN ON THESE PLANS COMPLIES WITH ALL PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER OF RECORD FOR THE PLANS, I ASSUME FULL RESPONSIBILITY FOR THE DESIGN OF THE IMPROVEMENTS. WITH RESPECT TO THE PLAN CHECK PERFORMED BY THE CITY OF CORONA, I UNDERSTAND AND ACKNOWLEDGE THE FOLLOWING: (1) THE PLAN CHECK IS A REVIEW FOR THE LIMITED PURPOSE OF ENSURING THE PLANS COMPLY WITH THE CITY'S STANDARDS, PROCEDURES, POLICIES, AND ORDINANCES, (2) THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS, AND (3) THE PLAN CHECK DOES NOT RELIEVE ME OF MY LEGAL AND PROFESSIONAL RESPONSIBILITY FOR THE DESIGN OF THE IMPROVEMENTS. AS THE ENGINEER OF RECORD, I AGREE TO DEFEND, INDEMNIFY, AND HOLD HARMLESS THE CITY, ITS ELECTED OFFICIALS, EMPLOYEES, AND AGENTS FROM ANY AND ALL ACTUAL OR ALLEGED CLAIMS, DEMANDS, CAUSES OF ACTION, LIABILITY, LOSS, DAMAGE, OR INJURY TO PROPERTY OR PERSONS, INCLUDING WRONGFUL DEATH, WHETHER IMPOSED BY A COURT OF LAW OR BY ADMINISTRATIVE ACTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENTAL AGENCY, ARISING OUT OF OR INCIDENT TO ANY NEGLIGENT ACTS, OMISSIONS, OR ERRORS BY THE ENGINEER OF RECORD, ITS EMPLOYEES, CONSULTANTS, OR AGENTS.

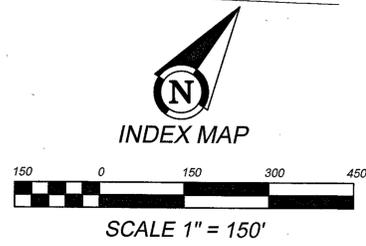
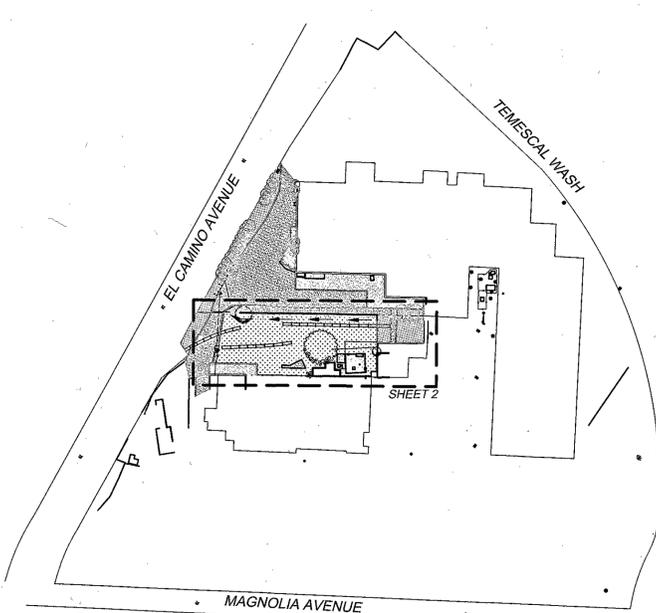
William D. Brooks
 WILLIAM D. BROOKS, RCE #53114 EXPIRES 6/30/21 DATE
 ENGINEER OF RECORD

GEOTECHNICAL ENGINEER'S STATEMENT

THIS PLAN HAS BEEN REVIEWED BY GEOTECHNICAL PROFESSIONALS INC. AND APPEARS TO BE IN GENERAL CONFORMANCE WITH RECOMMENDATIONS IN OUR REPORT DATED SEPTEMBER 10, 2019-PROJECT NO. 2945.1. THIS PLAN HAS BEEN REVIEWED FOR GEOTECHNICAL ASPECTS ONLY. WE MAKE NO REPRESENTATION REGARDING ACCURACY OF DIMENSIONS, QUANTITIES, MEASUREMENTS, CALCULATIONS, OR ANY PORTION OF THE DESIGN. GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS SHOULD BE CONFIRMED BY THE GEOTECHNICAL CONSULTANT IN THE FIELD AT TIME OF CONSTRUCTION.

Paul R. Schade
 PAUL R. SCHADE, RCE# GE#2371 9-30-22 EXP.
 GEOTECHNICAL ENGINEER
 ENGINEERING GEOLOGIST CEG# EXP.

**CITY OF CORONA
 PRECISE GRADING PLAN
 1375 MAGNOLIA AVENUE**

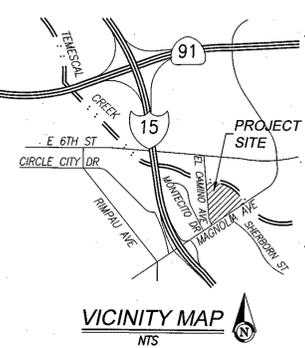


LEGEND

- EXIST. PCC PAVING
- EXIST. AC PAVING
- EXIST. LANDSCAPING
- PROP. PCC PAVING
- EXIST. BUILDING
- (XX.XX) FS EXIST. SPOT ELEVATION
- XX.XX FS PROP. SPOT ELEVATION
- EXIST. FENCE
- EXIST. TREES
- WALL/RET. WALL
- 1200 PROP. CONTOUR
- X.XX% PROP. RATE OF GRADE
- FLOWLINE

ABBREVIATIONS

- AC ASPHALT CONCRETE
- C.O.C. CITY OF CORONA
- CONC CONCRETE
- DIAM. DIAMETER
- EXIST. EXISTING
- FS FINISH GRADE
- FL OR E FLOWLINE
- FS FINISH SURFACE
- L.F. LINEAR FEET
- MAX. MAXIMUM
- MIN. MINIMUM
- NO. NUMBER
- PCC PORTLAND CEMENT CONCRETE
- P.P.P. PROTECT-IN-PLACE
- PROP. PROPOSED
- STD. STANDARD
- TYP. TYPICAL
- TW TOP OF WALL



OWNER

CLOW VALVE COMPANY
 1375 MAGNOLIA AVE.
 CORONA, CA 92879
 888-888-2411

ENGINEER

ARMSTRONG & BROOKS CONSULTING ENGINEERS
 MAILING ADDRESS:
 P.O. BOX 78088
 CORONA, CA 92877-9998
 OFFICE LOCATION:
 1350 EAST CHASE DRIVE
 CORONA, CA 92881
 PH. (951) 372-8400 FAX (951) 372-8430
 CONTACT: WILLIAM D. BROOKS

GEOTECHNICAL ENGINEER

GEOTECHNICAL PROFESSIONALS, INC.
 5736 CORPORATE AVE
 CYPRESS, CA 90630
 PH: 714-220-9211
 CONTACT: PAUL SCHADE, G.E.

ASSESSOR'S PARCEL NO.

107-030-022

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CORONA, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:
 THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONALIZED SURVEY OF THE RANCHO EL SOBRIANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATING COMPANY, AS SHOWN BY MAP ON FILE IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, BOUNDED AS FOLLOWS: ON THE SOUTHEAST BY THE SOUTHWESTERLY EXTENSION OF THE NORTHWEST LINE OF MAGNOLIA AVENUE, AS SHOWN ON RECORD OF SURVEY ENTITLED "RECORD OF SURVEY OF A PORTION OF LOTS 11, 12, 13, 14, 15, IN BLOCK 63 OF RIVERSIDE LAND AND IRRIGATING COMPANY AND A PORTION OF SECTIONS 29 AND 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, SAN BERNARDINO BASE AND MERIDIAN" ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS; ON THE WEST BY THE EASTERLY LINE OF THE PROPERTY SPUR OF THE ATCHINSON, TOPEKA, AND SANTA FE RAILWAY COMPANY; AND ON THE NORTHEAST BY THE SOUTHERLY AND SOUTHWESTERLY LINE OF PARCELS 5 TO 11, INCLUSIVE, OF SAID RECORD OF SURVEY ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS.

EXCEPTING THEREFROM THAT PORTION GRANTED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER DISTRICT CONSERVATION DISTRICT BY DEED RECORDED OCTOBER 22, 1984 AS INSTRUMENT NO. 84-227367 AND RE-RECORDED FEBRUARY 11, 1985 AS INSTRUMENT NO. 85-028214 BOTH OF OFFICIAL RECORDS.

EARTHWORK QUANTITIES

NOTE: THE CONSTRUCTION QUANTITIES SHOWN ON THESE PLANS ARE FOR CITY FEE PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM INDIVIDUAL TAKEOFFS FOR BIDDING PURPOSES.

(PRELIMINARY QUANTITIES DO NOT INCLUDE SHRINKAGE FACTOR AND OVEREXCAVATION OVER THE SITE)

RAW CUT	582 CU. YDS.
RAW FILL	0 CU. YDS.
NET EXPORT	-582 CU. YDS.

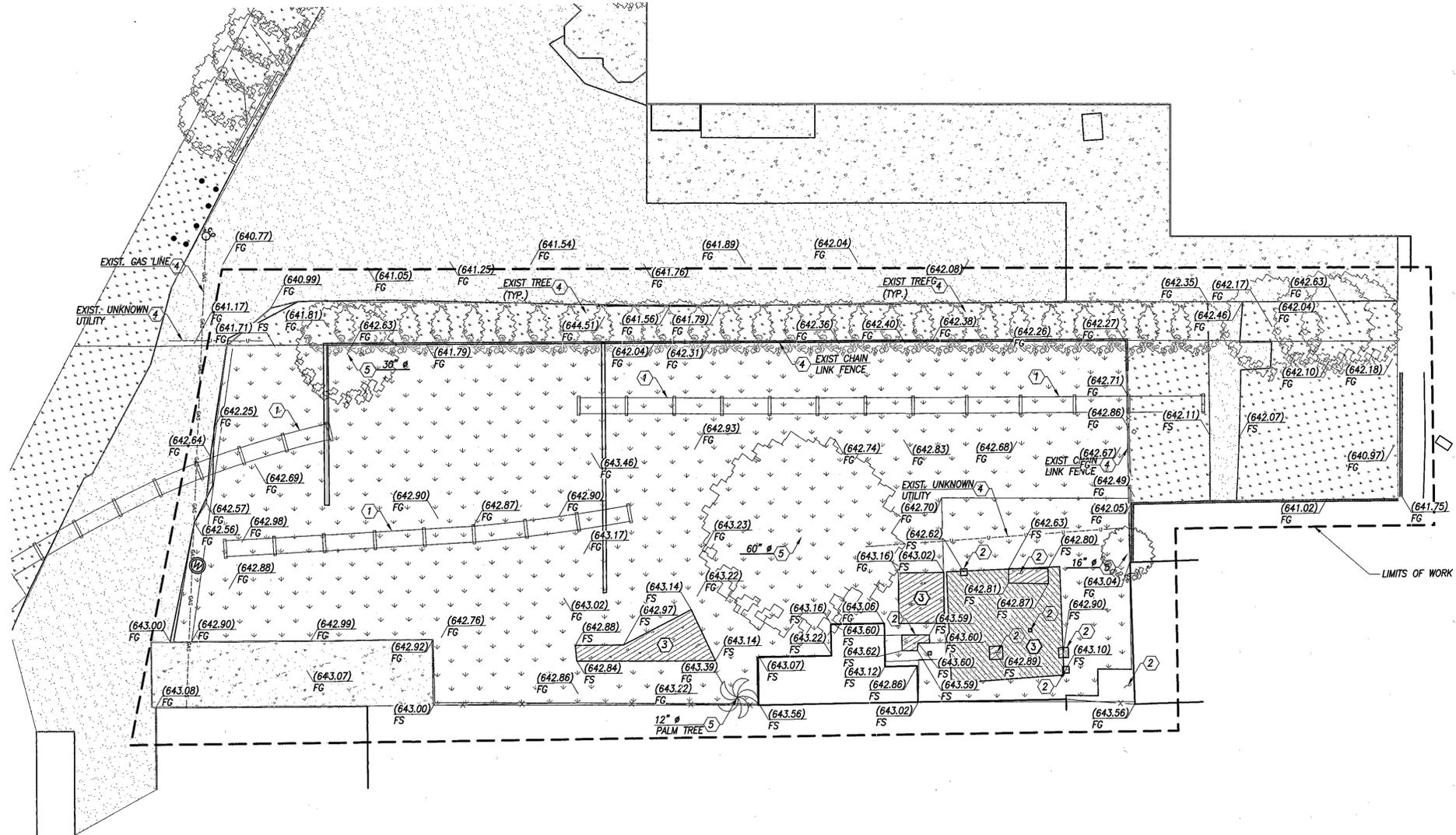
SITE AREA

TOTAL AREA - 16.9 ACRES
 DISTURBED AREA - 0.7 ACRES
 TOTAL LOTS: 1
 PARKING SPACES: N/A

SHEET INDEX:

TITLE SHEET	1
DEMOLITION PLAN	2
PRECISE GRADING & DRAINAGE PLAN	3
EROSION CONTROL PLAN	4

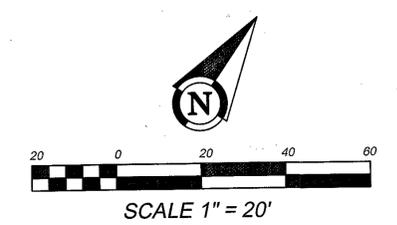




DEMOLITION NOTES

1	REMOVE EXIST. RAIL SPUR
2	REMOVE EXIST. CONCRETE PAD (6"± THICKNESS)
3	REMOVE EXIST. AC PAVEMENTS (3"±)
4	PROTECT IN PLACE EXIST. APPURTENANCE (AS LISTED)
5	REMOVE EXIST. TREE (DIA. PER PLAN)

EXIST. PCC		ASPHALTIC CONCRETE
EXIST. LANDSCAPE		EXISTING
EXIST. AC		FINISH GRADE
EXIST. LANDSCAPING TO BE REMOVED		FINISH SURFACE
REMOVE EXIST. AC		PORTLAND CEMENT CONCRETE
REMOVE EXIST. PCC		
AC		
EXIST		
FG		
FS		
PCC		



811
Know what's below.
Call before you dig.

ARMSTRONG & BROOKS CONSULTING ENGINEERS
PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES
1350 EAST CHASE DRIVE - CORONA, CA 92681
MAIL: P.O. BOX 3968 CORONA, CA 92737-9968
P: 951-272-8400 F: 951-272-8430

Designed by **W.D.B.**
Drawn by **R.R.T.**
Checked by **W.D.B.**
PLANS PREPARED UNDER SUPERVISION OF
WILLIAM D. BROOKS
R.C.E. No. 53114
Date **3-8-2022**

7020A, 05-138 D, 05-138P					
90-113P, 97-56S, 1971, C-1-118					
Reference Plans for these Improvements	Date	By	REVISIONS	App'd	

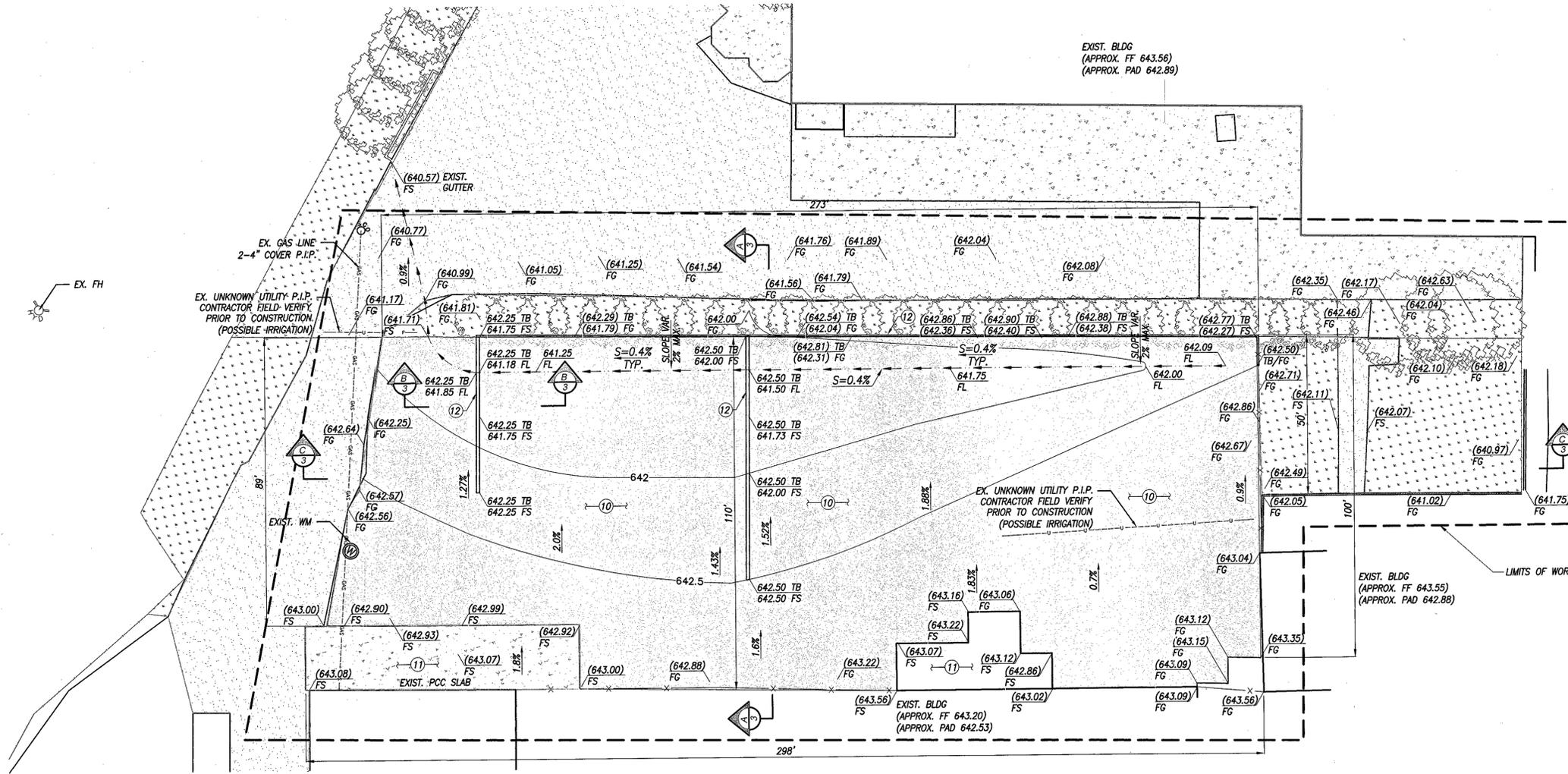
BENCH MARK
TBM ELEV.=603.80
SEE SHEET NO. 1 FOR DESCRIPTION
Scale AS SHOWN

Engineering **JK MK**
Planning **LA**
Fire

Approved By **Savat Khamphou** 3/11/21
SAVAT KHAMPHOU
City Engineer
R.C.E. No. 62019

CITY OF CORONA 1375 MAGNOLIA AVENUE
PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE
DEMOLITION PLAN

PWGR2020-0025
Drawing No. 20-026P
Sh 2 of 4

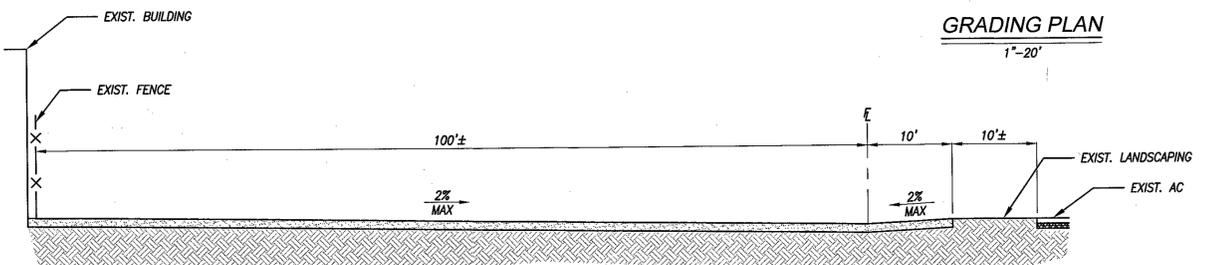


- CONSTRUCTION NOTES**
- (10) CONSTRUCT 3.5" AC PAVEMENT OVER 12" COMPACTED (90% RC) NATIVE MATERIAL
 - (11) PROTECT IN PLACE
 - (12) INSTALL 6" AC BERM PER C.O.C. STD. PLAN 140

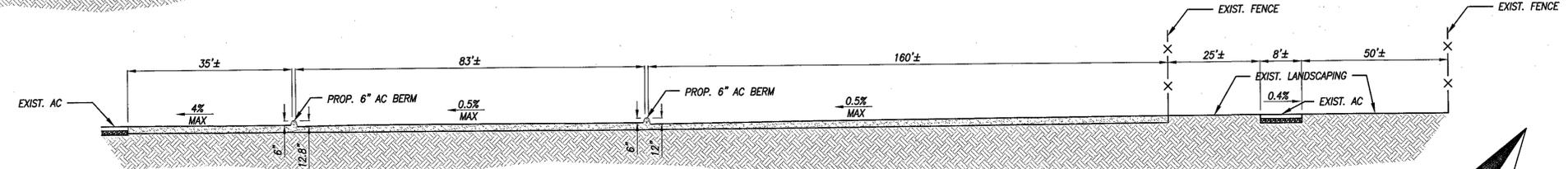
LEGEND

EXIST. PCC		ASPHALTIC CONCRETE
EXIST. LANDSCAPE		EXISTING
EXIST. AC		FINISH GRADE
PROP. 3.5" AC PAVEMENT		FINISH SURFACE
AC		MAXIMUM
EXIST.		PORTLAND CEMENT CONCRETE
FG		REINFORCED CONCRETE
FS		TOP OF WALL
MAX.		TYPICAL
RC		VARIABLE
TW		
TYP.		
VAR.		

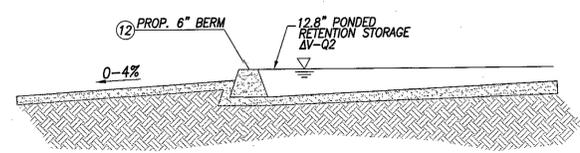
GRADING PLAN
1"=20'



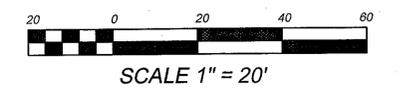
SECTION A-A
NTS



SECTION C-C
NTS



SECTION B-B
NTS



Know what's below.
Call before you dig.

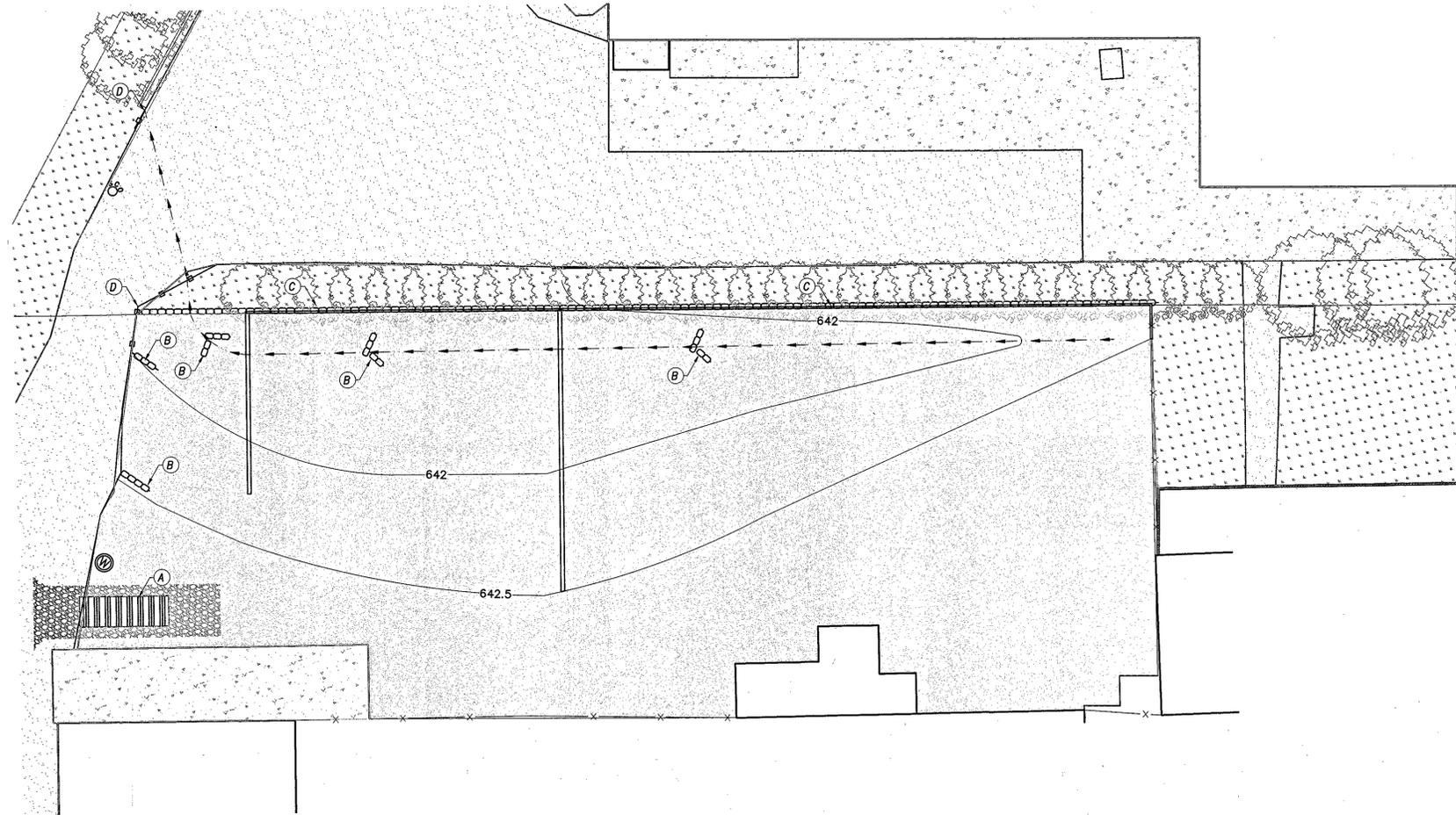
<p>ARMSTRONG & BROOKS CONSULTING ENGINEERS PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES 1800 EAST GRAND AVENUE, CORONA, CA 92608 MAIL: P.O. BOX 7868 CORONA, CA 92677-9948 P: 951-372-8400 F: 951-372-8430</p>	Designed by W.D.B.	Drawn by R.R.T.	Checked by W.D.B.	7020A, 05-138 D, 05-138P 90-113P, 97-56S, 1971, C-1-118	BENCH MARK TBM ELEV.=603.80	Engineering JL-MH	Approved By SMM	CITY OF CORONA 1375 MAGNOLIA AVENUE PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE GRADING PLANS	Drawing No. 20-026P
	PLANS PREPARED UNDER SUPERVISION OF WILLIAM D. BROOKS R.C.E. No. 53114	Reference Plans for these Improvements	Date	By	REVISIONS	Scale AS SHOWN	Planning LG		3/11/21

PWGR2020-0025

24" x 36"

EROSION CONTROL GENERAL NOTES:

- EROSION CONTROL IS REQUIRED FOR GRADING OPERATIONS ON A YEAR ROUND BASIS. APPROVED PLANS ARE REQUIRED FOR ALL WORK REQUIRING A GRADING PERMIT.
- IN CASE OF EMERGENCY CALL TIFFANY SMITH OF CLOW VALVE MANUFACTURING AT 317-384-0998.
- THE ENGINEER OF RECORD WILL SUPERVISE EROSION CONTROL WORK AND INSURE THAT WORK IS IN ACCORDANCE WITH APPROVED PLANS.
- CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.
- THE PUBLIC WORKS DIRECTOR RESERVES THE RIGHT TO MAKE CHANGES OR MODIFICATIONS TO THIS PLAN AS DEEMED NECESSARY.
- STANDBY CREW FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) OR TO REPAIR ANY DAMAGED BMP'S WHEN RAIN IS IMMINENT.
- AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL BMP'S SHALL BE IMPLEMENTED AND MAINTAINED TO PREVENT AND/OR MINIMIZE THE TRANSPORT OF SOIL IN RUNOFF FROM DISTURBED SOIL AREAS ON THE CONSTRUCTION SITE AT ALL TIMES. IN ADDITION, BMP'S SHALL BE INSPECTED PRIOR TO PREDICTED STORM EVENTS AND FOLLOWING STORM EVENTS. BMP'S SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE CITY INSPECTOR.
- ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT, AS FORECASTED BY THE NATIONAL WEATHER SERVICE.
- AFTER A RAIN EVENT EXCEEDING ONE-QUARTER INCH IN ANY 12 HOUR PERIOD, OR UPON DIRECTION OF THE PUBLIC WORKS DIRECTOR, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS, SILT FENCES, AND DESILTING BASINS; AND THE BASINS SHALL BE PUMPED DRY AND RESTORED TO ORIGINAL DESIGN CONDITION. ANY EROSION CONTROL MEASURES DAMAGED DURING A RAIN EVENT SHALL ALSO BE IMMEDIATELY REPAIRED.
- DESILTING BASINS ARE TO BE CONSTRUCTED AS GRADING OF INDIVIDUAL GRADING AREAS ARE COMPLETE PER ROUGH GRADING PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
- AREAS SHALL BE MAINTAINED IN SUCH A STATE THAT FIRE ACCESS SHALL BE MAINTAINED AT ALL TIMES (INCLUDING ACCESS TO NEIGHBORING PROPERTIES).
- GRADED AREAS AROUND THE SITE PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
- TEMPORARY EROSION PROTECTION IS REQUIRED FOR MANUFACTURED SLOPES PRIOR TO PERMANENT PLANTING.
- ALL DISTURBED SLOPES SHALL BE PLANTED AND PROTECTED WITHIN 45 DAYS OF THE COMPLETION OF EACH STAGE OF GRADING. SUITABLE MEASURES TO PREVENT SOIL EROSION INCLUDING, BUT NOT LIMITED TO, RAPID GROWTH VEGETATION SUFFICIENT TO STABILIZE THE SOIL, SHALL BE INSTALLED ON ALL DISTURBED AREAS UNTIL SUCH TIME AS THE PERMANENT VEGETATIVE COVER SUFFICIENTLY MATURES TO PROVIDE PERMANENT STABILITY.
- NO OBSTRUCTION OR DISTURBANCE OF NATURAL DRAINAGE COURSES OR EXISTING STORM DRAIN INLETS SHALL OCCUR DURING GRADING OPERATIONS, UNLESS ADEQUATE TEMPORARY/PERMANENT DRAINAGE FACILITIES HAVE BEEN APPROVED AND INSTALLED TO CARRY SURFACE WATER TO THE NEAREST PRACTICAL STREET, STORM DRAIN OR NATURAL WATER COURSE. ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST BE MAINTAINED IN A STATE TO ALLOW FOR CONTINUOUS FUNCTION.
- THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER THAT STORM RUNOFF WILL BE CONTAINED WITHIN THE PROJECT OR CHANNLED INTO THE STORM DRAIN SYSTEM WHICH SERVES THE RUNOFF AREA. STORM RUNOFF FROM ONE AREA SHALL NOT BE ALLOWED TO DIVERT TO ANOTHER RUNOFF AREA.
- CONFORMANCE WITH THE REQUIREMENTS OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TO THIS SITE AND ADJACENT PROPERTIES. DURING GRADING OPERATIONS, TEMPORARY DRAINAGE CONTROL SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES. TEMPORARY DRAINAGE CONTROL SHALL CONSIST OF, BUT NOT BE LIMITED TO, CONSTRUCTING SUCH FACILITIES AND TAKING SUCH MEASURES AS ARE NECESSARY TO PREVENT, CONTROL AND ABATE WATER, MUD AND EROSION DAMAGE TO PUBLIC AND PRIVATE PROPERTY AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT.
- FILL AREAS WHILE BEING BROUGHT UP TO GRADE AND DURING PERIODS OF COMPLETION PRIOR TO FINAL GRADE, SHALL BE PROTECTED BY VARIOUS MEASURES TO ELIMINATE EROSION AND THE SILTATION OF DOWNSTREAM FACILITIES AND ADJACENT AREAS. THESE MEASURES MAY INCLUDE, BUT SHALL NOT BE LIMITED TO: TEMPORARY DOWN DRAINS, EITHER IN THE FORM OF PIPES OR PAVED DITCHES TO DESILT RUNOFF; PROTECTION SUCH AS SAND BAGS AROUND INLETS WHICH HAVE NOT BEEN BROUGHT UP TO GRADE; AND EARTH BERMS AND APPROPRIATE GRADING TO DIRECT DRAINAGE AWAY FROM THE EDGE OF THE TOP OF SLOPES SHALL BE CONSTRUCTED AND MAINTAINED ON THOSE FILL AREAS WHERE EARTHWORK OPERATIONS ARE NOT IN PROGRESS.
- CLEARING AND GRUBBING SHOULD BE LIMITED TO AREAS THAT WILL RECEIVE IMMEDIATE GRADING. EROSION CONTROL MEASURES WILL BE REQUIRED TO PROTECT AREAS WHICH HAVE BEEN CLEARED AND GRUBBED PRIOR TO GRADING OPERATION, AND WHICH ARE SUBJECT TO RUNOFF DURING A RAIN EVENT. THESE MEASURES MAY INCLUDE BUT SHALL NOT BE LIMITED TO: GRADED DITCHES; BRUSH BARRIERS AND SILT FENCES. CARE SHALL BE EXERCISED TO PRESERVE VEGETATION BEYOND LIMITS OF GRADING.
- CONSTRUCTION SITES SHALL BE MANAGED TO MINIMIZE THE EXPOSURE TIME OF DISTURBED SOIL AREAS THROUGH PHASING AND SCHEDULING OF GRADING TO THE EXTENT FEASIBLE AND THE USE OF TEMPORARY AND PERMANENT SOIL STABILIZATION.
- STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
- CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT WIND OR RUNOFF DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJOINING PROPERTIES.
- DISCHARGES OTHER THAN STORM WATER (NON-STORM WATER DISCHARGES) ARE PROHIBITED, EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT, THE STATEWIDE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY, OR OTHER APPLICABLE GENERAL NPDES PERMIT. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES, AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM STREET CLEANING; SUPER-CHLORINATED POTABLE WATER FROM LINE FLUSHING AND TESTING, AND RUNOFF FROM EQUIPMENT AND VEHICLE WASHING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS
- PAVED STREETS, SIDEWALKS AND OTHER IMPROVEMENTS SHALL BE MAINTAINED IN A NEAT CLEAN CONDITION, FREE OF LOOSE SOIL, CONSTRUCTION DEBRIS AND TRASH. STREET SWEEPING OR OTHER EQUALLY EFFECTIVE MEANS SHALL BE USED ON A REGULAR BASIS TO CONTROL SILT THAT HAS BEEN DEPOSITED ON STREETS OR SIDEWALKS. WATERING SHALL NOT BE USED TO CLEAN STREETS.
- DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON-CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING ACTIVITIES MAY REQUIRE A NPDES PERMIT FROM THE SANTA ANA REGIONAL BOARD.
- ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.

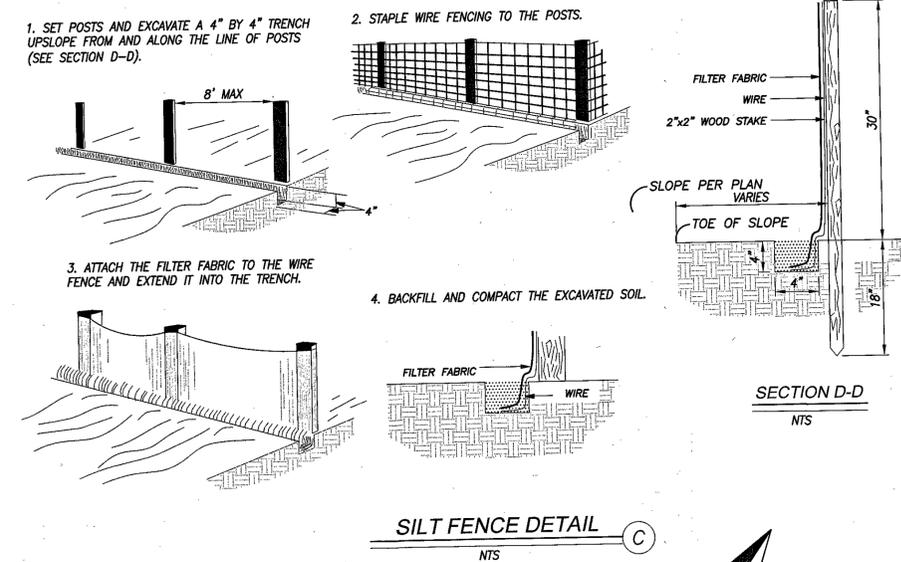
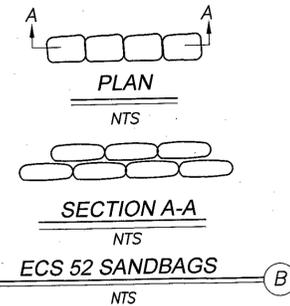
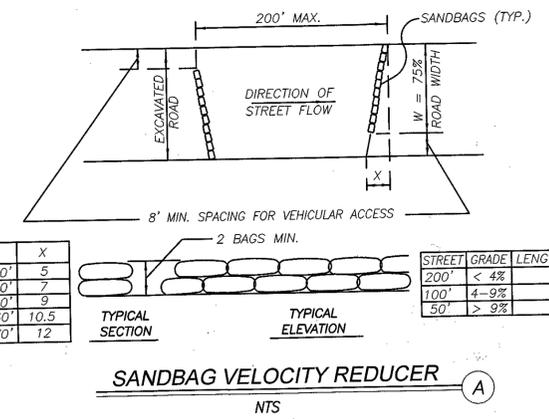


LEGEND

EXIST. POC	
EXIST. LANDSCAPE	
EXIST. AC	
PROP. AC	
SANBAGS	
SILT FENCE	

EROSION CONTROL PLAN

1"=20'

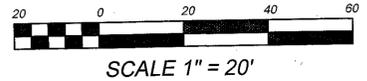


EROSION CONTROL NOTES

*ALL EROSION CONTROL MEASURES PER CA. STORMWATER BMP'S

	QTY.	UNIT
(A) INSTALL STABILIZED CONSTRUCTION ENTRANCE PER C.O.C. STD 225	1	EA.
(B) INSTALL SANDBAG VELOCITY REDUCER PER DETAIL A	53	L.F.
(C) INSTALL SINGLE ROW GRAVEL BAGS - 2 BAG HIGH PER DETAIL B	275	L.F.
(D) INSTALL SILT FENCE PER DETAIL C	47	L.F.

NOTE: FINAL LOCATION OF EROSION CONTROL MEASURES WILL BE DETERMINED AT THE CONSTRUCTION MANAGER'S DISCRETION



Know what's below.
Call before you dig.

ARMSTRONG & BROOKS CONSULTING ENGINEERS
PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES
1800 S. RAY STREET, SUITE 200, CORONA, CA 92626
MAIL: P.O. BOX 7808 CORONA, CA 92727-9988
TEL: 951-522-1400, 951-521-4400

Designed by **W.D.B.** Drawn by **R.R.T.** Checked by **W.D.B.**
PLANS PREPARED UNDER SUPERVISION OF
WILLIAM D. BROOKS
R.C.E. No. 53114

7020A, 05-138 D, 05-138P
90-113P, 97-56S, 1971, C-1-118
Reference Plans for these Improvements
Date By REVISIONS App'd

BENCH MARK ELEV.=603.80
SEE SHEET NO. 1 FOR DESCRIPTION
Scale AS SHOWN

Engineering **JK**
Planning **LG**
File

Approved By: **Savat Khampou** 3/11/21
SAVAT KHAMPHOU
City Engineer
R.C.E. No. 62019

CITY OF CORONA 1375 MAGNOLIA AVENUE
PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE
EROSION CONTROL PLAN

PWGR2020-0025
Drawing No. 20-026P
Sh 4 of 4



City of Corona

GRADING PERMIT
City of Corona
PUBLIC WORKS DEPARTMENT
400 S Vicentia Ave
Corona, CA 92882

Permit No:
PWGP21-00005
Permit Status:
ISSUED
(951) 736-2259

Permit Type: GRADING Permit Subtype: PRECISE Job Valuation: \$0.00	Applied Date: 03/04/2021 Issued Date: 04/15/2021 Expiration Date: 10/12/2021
Project Address: 1375 MAGNOLIA AVE Tract No: Lot No:	Project Description: 1375 MAGNOLIA AVE - GRADING PERMIT
Contractor: B & D CONSTRUCTION CO., INC Corona Business License No: AEC1647 Contractor State License No:	Owner: CLOW VALVE COMPANY Applicant: B & D CONSTRUCTION CO., INC

Lots: 1
Disturbed Acreage: 0.7
Total Acreage: 16.9
Land Use: I-M Industrial/Manufacturing
WDID Number:
Erosion Control Plan Included? Yes

Cut: 582
Fill: 0
Plan #: 20-026P
Dig Alert #: A210980279
Cal-OSHA #:
Additional Notes: CONSTRUCT ON SITE GRADING IMPROVEMENTS PER APPROVED PLAN. ANY OFF SITE WORK WILL REQUIRE A SEPARATE ENCROACHMENT PERMIT

Applicant/Owner hereby requests permission to perform work as described below. It is expressly agreed that such work and all Traffic Control shall be performed in accordance with applicable ordinances, Standard Plans and Special Provisions of the City of Corona, approved plans and the latest edition of the Work Area Traffic Control Handbook (WATCH Manual). Only that person listed below is duly authorized by Applicant/Owner to obtain this permit.

INDEMNIFICATION

Applicant/Owner shall defend and hold the City, its officers, employees, and agents (Indemnities) free and harmless from any and all claims, demands, causes of injury arising out of or incident to any alleged acts, omissions or willful misconduct or Applicant/Owner, its officials, officers, employees, agents, consultants or contractors in connection with the performance of any work under this Permit, including, without limitation, the payment of all consequential damages, attorneys fees and other related costs and expenses. Applicant/Owner shall pay any judgement award or decree that may be rendered against the Indemnities for any and all legal expenses and costs incurred by any of them in connection therewith or in enforcing the indemnity herein provided. Applicant/Owner's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Indemnities.

THIS PERMIT EXPIRES ONE YEAR FROM THE DATE OF ISSUANCE.

***CALL (951) 279-3511 48 HOURS PRIOR TO COMMENCING AND WORK DESCRIBED ON THIS PERMIT**

Permittee Signature:

Date: 04/15/21



Cash Register Receipt
City of Corona

Receipt Number
R25984

DESCRIPTION	ACCOUNT	QTY	PAID
PermitTRAK			\$913.00
PWGP21-00005 Address: 1375 MAGNOLIA AVE APN: 107030022			\$913.00
GRADING INSPECTION			\$853.00
GRADING INSPECTION	11039000 31607	0	\$853.00
PW			\$60.00
ENCROACHMENT PERMIT FEE	11039000 31219	0	\$60.00
TOTAL FEES PAID BY RECEIPT:R25984			\$913.00



Date Paid: Thursday, April 15, 2021

Paid By: B & D CONSTRUCTION CO., INC

Cashier: KAV2

Pay Method: CHECK 007320

WORKS DEPARTMENT

APPENDIX

F OPERATIONS & MAINTENANCE PLAN



OPERATIONS AND MAINTENANCE PLAN

**CLOW VALVE COMPANY
1375 MAGNOLIA AVENUE
CORONA, CALIFORNIA**

PREPARED FOR:

**CLOW VALVE COMPANY
1375 MAGNOLIA AVENUE
CORONA, CALIFORNIA 92879**

PREPARED BY:

**EARTHCON CONSULTANTS CA, INC.
1100 TOWN & COUNTRY ROAD, SUITE 200
ORANGE, CALIFORNIA 92868**

EARTHCON PROJECT NUMBER. 04.20150013.17

JUNE 18, 2021

Certification:

Operations and Maintenance Plan

**Clow Valve
1375 Magnolia Avenue
Corona, California**

Prepared for:

**Clow Valve
1375 Magnolia Avenue
Corona, California 92879**

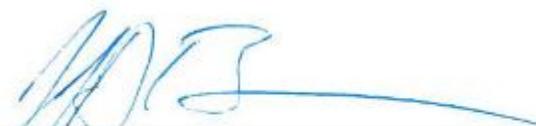
June 18, 2021

EarthCon Consultants CA, Inc. (EarthCon) presents conclusions herein based solely upon the agreed upon scope of work outlined in this plan. EarthCon makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. It is possible that information exists beyond the scope of this plan. Additional information, which was not found or available to EarthCon at the time of writing this plan, may result in modification of the conclusions presented. This plan is not a legal opinion. The services performed by EarthCon have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

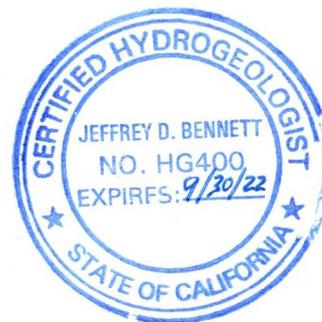
Signed:



Rebecca Sundilson
Senior Scientist



Jeff Bennett, PG 6027, CHG 400
Principal Hydrogeologist



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Figure 4	Areas Subject to the Land Use Covenant - Survey
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Appendix

Appendix A	Site Health and Safety Plan (HASP)
Appendix B	Inspection Form
Appendix C	Draft Land Use Covenant
Appendix D	O&M Cost Estimate

1.0 INTRODUCTION AND REGULATORY STATUS

On behalf of Clow Valve Company (Clow), a Division of McWane, EarthCon Consultants CA, Inc (EarthCon), has prepared this Operations and Maintenance Plan (O&M Plan) for the property located at 1375 Magnolia Avenue in Corona, California (Site; see Figures 1 and 2). The O&M Plan is required by the Corrective Measures Study (CMS) (EarthCon, 2019).

Clow will implement the field activities as identified in the Corrective Measures Implementation Workplan (CMIWP) for the Site during the Winter/Spring 2021. Proposed CMIWP activities will be conducted under the supervision of the Department of Toxic Substances Control (DTSC) and in accordance with the Corrective Action Consent Agreement between the California Department of Toxic Substances Control (DTSC) and Clow [Docket No. SPRD 00/01SCC-4208, March 2002]. The DTSC-approved corrective measures will be implemented to yield conditions suitable for continued commercial/industrial use. The entire Site is restricted for industrial use in accordance with the Land Use Covenant (LUC), executed by Clow and DTSC on (draft – TBD)

As noted in the CMS, the majority of the Site is covered by concrete or asphalt, with the exception of AOC1 and AOC5. A discussion of the capping activities associated with AOC1 and AOC5 are provided in the CMIWP. Minor localized cracking was identified in some of the remaining AOCs on-Site. Further, requirements for the Site included the implementation of institutional controls including an O&M Plan, as discussed in detail in the following sections.

1.1 O&M Plan Goals and Objectives

The O&M Plan has been designed to establish a set of procedures for LUC required inspection of the Site and inspection and maintenance of the concrete and/or asphalt cover (cap) on-Site. Additionally, this O&M Plan has been prepared in order to ensure compliance with the LUC and applicable State and Federal Hazardous Waste Control laws and regulations. The goal of the O&M Plan is to prevent contact with contaminated soil, reduce water infiltration, erosion, and dispersion of soil contaminated with constituents of concern. In addition, the O&M Plan will be utilized to protect on-Site personnel, contractors, personnel conducting O&M activities, and/or visitors. Therefore, this O&M Plan will address the following objectives:

- Provide a schedule and procedures for routine inspections and unplanned events.
- Provide procedures, construction details, and schedule for timely repair and/or replacement for concrete/asphalt cover (cap) on-Site.
- Maintain O&M related documentation (inspections, repairs, reporting to agencies, etc.) .
- Notify DTSC and US EPA of O&M and redevelopment plans that involve soil disturbance and or soil cover disturbance activities (See Section 5).
- Notify future Site lessees/occupants of the LUC requirements (See Section 3 and Appendix C). Provide annual notifications to DTSC and US EPA of the inspections outcome and return to compliance.

A summary of previous investigations as well as elements of the O&M Plan are described in detail in the following sections.

1.2 Responsibilities

The property owner has ultimate responsibility for following the O&M Plan, HASP, and LUC. The property owner shall oversee implementation of this O&M Plan at the Site. In addition, the property owner shall make available a copy of the O&M Plan to contractors that may be performing O&M activities at the Site and to lessees / occupants.

Any maintenance and redevelopment activities conducted by the property owner will be done in accordance with the requirements of this O&M Plan. In addition, both the DTSC and US EPA will be notified of such activities prior to implementation.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS

A DTSC Compliance Evaluation Inspection at the Site lead to development of a Corrective Action Consent Agreement (CACA) that was finalized on March 6, 2002 (Docket No. SPRD 00/01SCC-4208). In accordance with the CACA, the following nine (9) areas of concern (AOC) were identified at the Site (see Figure 2 and Figures 3A through 3J):

- AOC1 – Rail Spur Area (including area of diesel impact)
- AOC2 – Chip-Bin Storage Area
- AOC3 – Water Pressure Test Area
- AOC4 – Former Iron Foundry Sand Cleanup Area
- AOC5 – Oil-Stained Pad (eastern portion of AOC1)
- AOC6 – Former Asphalt Dip Tank
- AOC7 – Transformer Area 1
- AOC8 – Transformer Area 2
- AOC9 – Former Test-Pond (filled)

Groundwater investigations at the Site included installation of an initial groundwater monitoring well (MW-1) and sampling results from 2006 showed a low level of TCE (1.43 ug/L, which is below the Maximum Contaminant Level of 5 ug/L). Given the absence of any chlorinated solvent use at the Site, the TCE detection was postulated to be related to an off-Site source.

In February 2017, two additional groundwater monitoring wells (MW-2, MW-3) were installed on-Site as identified by the locations illustrated on Figure 2. Installation of these wells allowed for calculation of the Site-specific groundwater flow direction and gradient, which confirmed that MW-1 was appropriately positioned to evaluate potential groundwater impacts related to the former TPH-d release at AOC1. Subsequent monitoring demonstrated that groundwater chemistry beneath the Site was similar to local background concentrations; therefore, it was determined that groundwater would not be incorporated into the corrective measures for the Site.

The historical data, a Human Health Risk Assessment, and current Site operations were used to

prepare a *Corrective Measures Study* (CMS) for the Site (EarthCon, 2018). The CMS identified that excavation (AOC7) and capping in place (AOC1, AOC5, and AOC7) as the selected remedy. However, due to the presence of PCBs at AOC-7, additional Site assessment activities were conducted in July 2018, October 2018, and January 2019 under the oversight of the USEPA. The USEPA also required that further assessment of potential PCB impacted soil would be evaluated at AOC3 and AOC6 as well. The results were summarized in a document titled *Risk-Based Approval Application 40 CFR 761.61 (c)(1)* (EarthCon, 2019). Based on the results from the PCB related Site assessment activities, EarthCon recommended that rather than excavating PCB-impacted soil at AOC7 that the Site remained capped, with the existing concrete cap having the ability to protect industrial workers from exposure to PCB concentration in the underlying soil. In a letter dated April 23, 2019, the USEPA approved the application with the conditions including preparation of the following: Deed Restriction, Operations and Maintenance Plan, and Soil Management Plan, and PCB Cleanup Report (CMI Report).

Upon receipt of the approval letter from the USEPA, the DTSC approved the CMS in a letter dated May 16, 2019. The *Corrective Measures Implementation Work Plan* presented details associated with the cap design and the installation and implementation schedule for AOC1 and AOC5. The proposed schedule for the evaluation and repair of the exiting ground cover in AOC2, AOC4, and AOC9 was also addressed. Additionally, potential cap repair and/or construction, if necessary, associated with AOC3, AOC6, and AOC7 was identified to require the oversight of the USEPA.

3.0 LAND USE COVENANT

As noted previously, a LUC will be recorded to restrict the future use of the entire Site to commercial/industrial uses appropriate for the human health risk hazard and prohibits Site development for residential and sensitive receptor uses for the entire Site. For all restrictions and requirements in the LUC see Appendix C. In addition, for AOC3, AOC6, and AOC7, specific requirements of 40 CFR 761.61(a)(8) must also be met, including:

- Record deed restriction within 60 days of completion of cleanup activity
- Indicate that land has been used for PCB remediation waste disposal and is restricted to use as a low occupancy area as defined in 40 CFR 761.3
 - *Low occupancy area* means any area where PCB remediation waste has been disposed of on-site and where occupancy for any individual not wearing dermal and respiratory protection for a calendar year is: less than 840 hours (an average of 16.8 hours per week) for non-porous surfaces and less than 335 hours (an average of 6.7 hours per week) for bulk PCB remediation waste. Examples could include an electrical substation or a location in an industrial facility where a worker spends small amounts of time per week (such as an unoccupied area outside a building, an electrical equipment vault, or in the non-office space in a warehouse where occupancy is transitory).
- Identify the existence of the cap and the requirement to maintain the cap
- Denote the applicable cleanup levels used at the site, under the cap
- Submit a certification, signed by the owner, that he/she has recorded the notation specified in 40 CFR 761.61 (a)(8)(i)(A) to the EPA Regional Administrator
- If, in the future, additional cleanup activities are conducted to remove PCBs to achieve cleanup levels specified in 40 CFR 761.61(a)(4), which do not require a cap, the owner may remove the notice on the deed no earlier than 30 days after achieving the applicable cleanup levels.¹
- A land survey was prepared by a California licensed Professional Land Surveyor is included to provide a basis for the LUC. This survey depicts the Site, area subject to 40 CFR 761.3 (PCB impacted soil), and the area subject to soil cover O&M (lead impacted soil) (See Figure 4).

¹ As noted in the *Site Management Plan* the Site soil with PCB concentrations of 15 ppm or greater will be removed, as required by the USEPA. Soil characterized with PCB concentrations \geq to 50 ppm will be transported off-Site for disposal at a TSCA-approved facility.

4.0 O&M PLAN IMPLEMENTATION

The purpose of the O&M Plan is to ensure clarity of the ongoing requirements for the remedial surface cover (concrete/asphalt cap) for the Site after the CMIWP has been completed. The O&M Plan will be implemented while the LUC remains in effect. Projected costs associated with the O&M Plan are provided in Appendix D.

4.1 Routine Inspections

As noted in the CMIWP, annual inspections of the surface cover will continue in perpetuity until the contaminated material is removed or demonstrated to no longer represent a risk to human health or the environment.

During inspection of the surface cover, any crack visible at the surface should be identified as a “penetrating crack”. One or more of following observations will identify which cracks that will require repair:

- Length equal or greater to 12 inches
- Width equal or greater to 0.25 inches
- Evidence of base course or soil exposure
- Evidence of vegetation (e.g. grass, weeds, etc.) growing through crack
- Evidence of surface deterioration
- Evidence of difference in elevation
- Evidence of ponding water

The corrective action for cracks, if warranted, should be identified on the inspection form. Corrective action may include a rubberized asphalt-emulsion crack filler, application of an area-wide slurry seal, or repaving. In addition, repairs will be made in the event that ponding is present/observed.

In addition to the inspection of the surface cover, the following items must be reported to if observed during inspections:

- Cap disturbing activities,
- Activities that bring soil to the surface,
- Unauthorized Site use for residential, or

- Unauthorized Site use for a school or day care for children under 18 years of age.

Annual inspections will be conducted by knowledgeable personnel as designated by the property owner. The knowledgeable personnel will inspect the condition of the surface cover noting observations on a Site-specific inspection form (see Appendix B for an example).

4.2 Inspections for Unplanned Events

Additional inspections should be conducted in the case of unexpected events occur that have the potential to affect the integrity of the surface cover (i.e. earthquake, on-Site fire, etc.). Details of the unplanned event should be noted on the inspection form. In the case of an earthquake, identify the magnitude and proximity to the Site. Generally, an earthquake with a magnitude 5.0 or greater within 100 miles would trigger an unexpected event inspection. Damage noted by Site personnel will be investigated whether it was determined to have been the result of a specific unplanned event or not.

4.3 Reporting

Written reporting of both annual and unplanned event inspections shall be submitted to DTSC for review within three (3) weeks of completing the on-Site inspection. In addition, a “Five Year Review” of the O&M inspections will be prepared and subsequently submitted to the DTSC.

4.4 Recordkeeping

Records will be maintained on-Site while the LUC remains in effect. Records will include, but not be limited to, inspections, Five Year Review, and associated agency correspondence. Cap repair records, soil management, and disposal records.

5.0 SOIL MANAGEMENT PLAN

The purpose of the Soil Management Plan (SMP) is to provide guidance for management of soils in the event excavation or soil disturbance is required. Areas of the Site subject to the SMP are identified in Figure 4. In the event repairs and/or replacement of the concrete/asphalt surface cover (cap) may require soil disturbing activities, such activities will be conducted in accordance with the SMP Plan. The O&M knowledgeable personnel is responsible for identifying such activities and subsequently notifying the property owner and/or designated individuals responsible for implementing the SMP.

6.0 REFERENCES

Advanced Environmental Services, Inc. (AESI). 2002. Clow Valve Company Preliminary Endangerment Assessment and Facility Workplan 1375 Magnolia Avenue, Corona, California 91719. March 28, 2002.

Department of Toxic Substances Control (DTSC). 2002. Corrective Action Consent Agreement. Docket HWCA: SRPD 00/01 SCC-4208. March 6, 2002.

DTSC. 2005. Public Involvement Fact Sheet. Clow Valve Company, Corona. April 2005.

EarthCon Consultants CA, Inc. (EarthCon). 2018. Corrective Measures Study. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. February 19, 2019

EarthCon. 2018. PCB Investigation. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. August 24, 2018.

EarthCon. 2019. Supplemental PCB Investigation. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. March 16, 2019.

Environmental Support Technologies, Inc (EST). 2003. Addendum to Preliminary Endangerment Assessment and Facility Investigation Workplan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. July 24, 2003.

EST. 2004. Preliminary Endangerment Assessment and Facility Investigation Workplan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. June 21, 2004.

EST. 2005. Interim Measures Work Plan. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. January 12, 2005.

EST. 2005. Preliminary Summary of Site Assessment Results and Proposed Further Assessment. Clow Valve Company, 1375 magnolia Avenue, Corona, California. November 29, 2005.

The Fehling Group. 2017. Health Risk Assessment. Clow Valve Company, 1375 Magnolia Avenue, Corona, California. October 26, 2017.

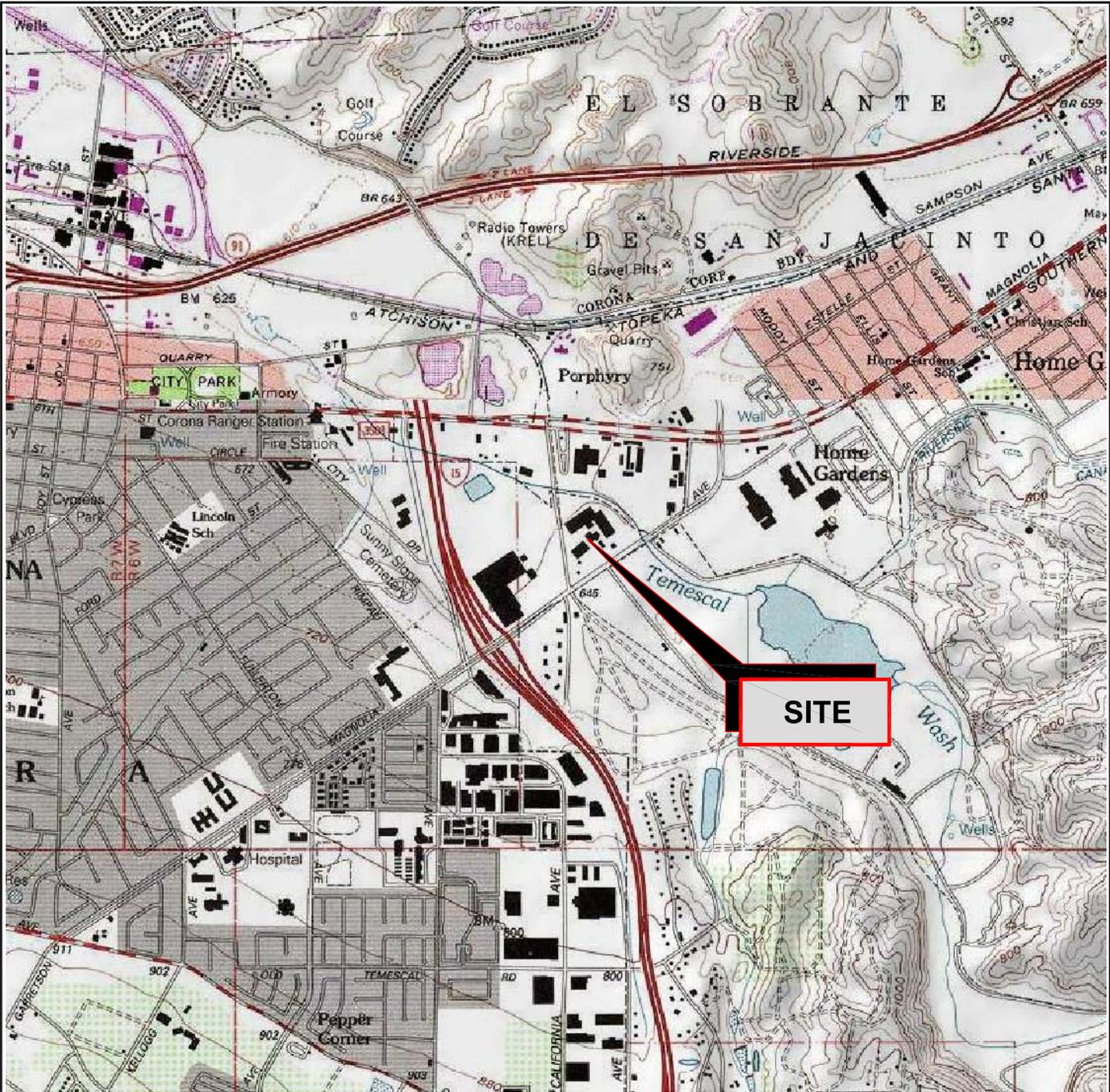
Fero Environmental Engineering, Inc (Fero). 2006. Further Investigation Workplan. Clow Valve Company. 1375 magnolia Avenue, Corona, California 93446. July 27, 2006.

Fero. 2006. Report of Findings. Clow Valve Company, 1375 Magnolia Avenue, Corona, California 93446. December 18, 2006.

Fero. 2007. Letter Response from Meeting of February 2, 2007. Clow Valve Company. 1375 Magnolia Avenue, Corona, California 93446. EPA ID Number CAD063115133. February 8, 2007.

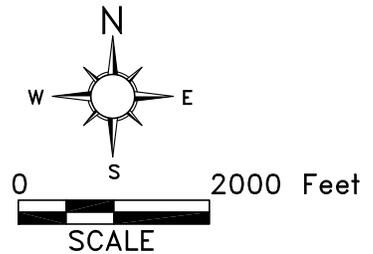
Fero. 2009. Corrective Measures Workplan. Report of Findings. Clow Valve Company, 1375 Magnolia Avenue, Corona, California 93446. EPA ID Number CAD063115133. March 2009.

FIGURES



FROM: U.S. GEOLOGICAL SURVEY, 1997
 QUADRANGLE: CORONA SOUTH
 COUNTY: RIVERSIDE
 SERIES: 7.5-MINUTE QUAD

NOTE: ALL BOUNDARIES AND LOCATIONS ARE APPROXIMATE



CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879



VICINITY MAP

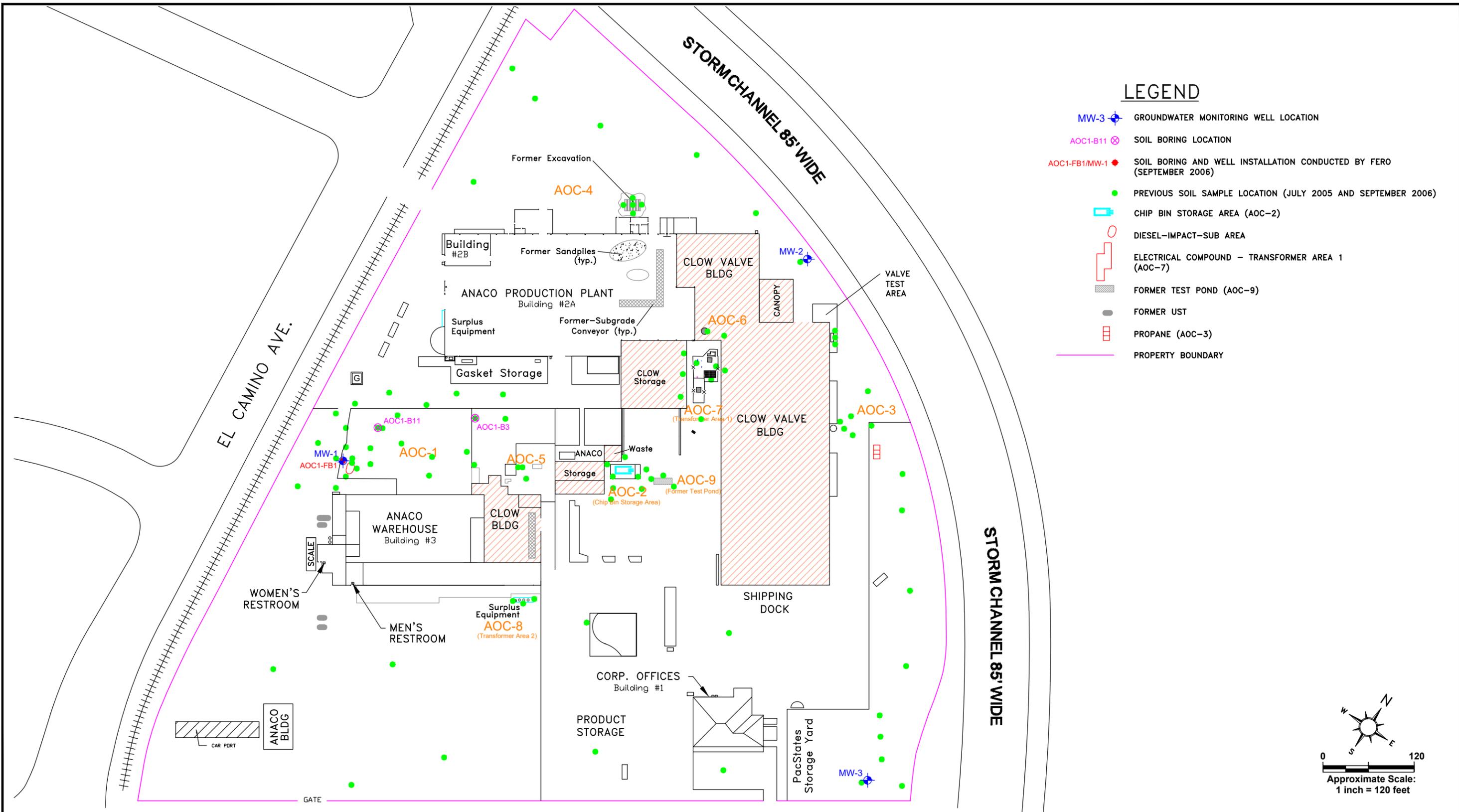
EARTHCON CONSULTANTS CA, INC

1914 W. ORANGEWOOD AVENUE, SUITE 102, ORANGE, CA 92868

PROJECT NO. 04.20150013.00

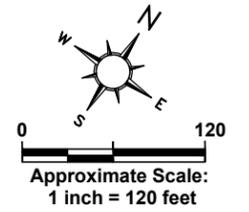
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LEGEND

- + MW-3 GROUNDWATER MONITORING WELL LOCATION
- ⊗ AOC1-B11 SOIL BORING LOCATION
- AOC1-FB1/MW-1 SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERRO (SEPTEMBER 2006)
- PREVIOUS SOIL SAMPLE LOCATION (JULY 2005 AND SEPTEMBER 2006)
- CHIP BIN STORAGE AREA (AOC-2)
- DIESEL-IMPACT-SUB AREA
- ELECTRICAL COMPOUND - TRANSFORMER AREA 1 (AOC-7)
- FORMER TEST POND (AOC-9)
- FORMER UST
- PROPANE (AOC-3)
- PROPERTY BOUNDARY



MAGNOLIA AVE

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879
PROJECT NO. 04.20150013.00

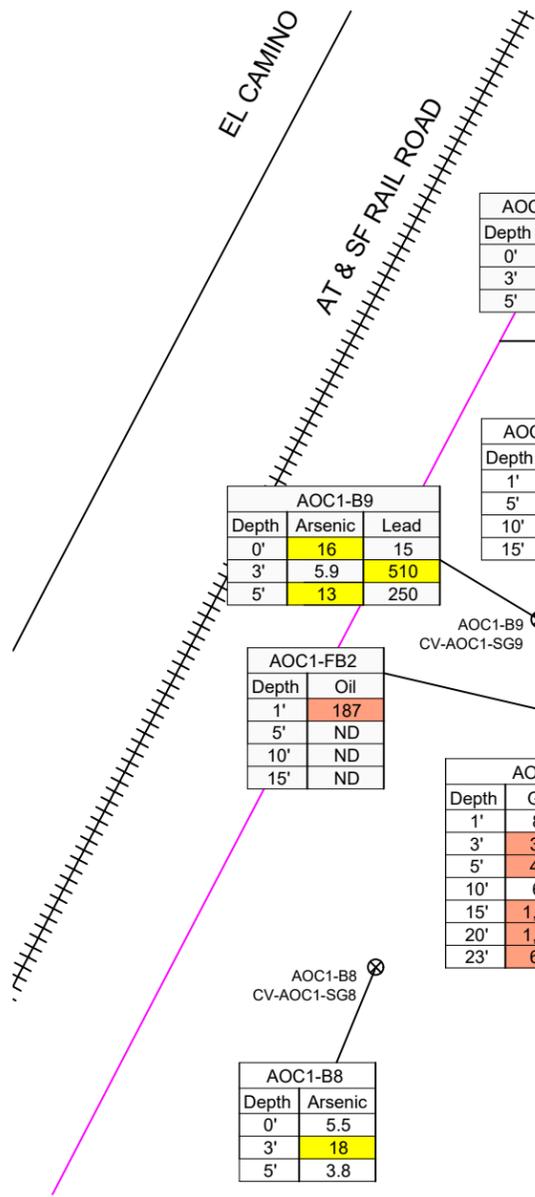


EARTHCON
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1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

SITE PLAN

DRAWN: KG	CHECKED: JB	DATE: 10/21/19	FIGURE: 2
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FILENAME: S:\Common\DrainageCAD\Projects\04-20150013-00-Clov Valve\CAD\2020\SP 03-26-20_F3A.dwg (3A(AOC1)) 03/26/20 09:06 - kgayawell



AOC1-B1		
Depth	Oil	Arsenic
0-0.5'	630	38
1'	ND<5	15
3'	ND<5	41
5'	ND<5	11
10'	480	29
15'	170	18
20'	90	6.9

AOC1-B10	
Depth	Arsenic
0'	29
3'	11
5'	3.4

AOC1-B2	
Depth	Lead
0'	430
3'	920
5'	ND<1.3

AOC1-FB11	
Depth	Lead
1'	330
3'	3.46
5'	2.04
10'	2.03
15'	4.58

AOC1-FB12	
Depth	Lead
1'	405
3'	2.35
5'	1.8
10'	2.41
15'	2.85

AOC1-FB3	
Depth	Diesel
1'	1,620
5'	ND
10'	4,030
15'	3,800

AOC1-B11	
Depth	Lead
0'	820
1'	760
3'	21
5'	4.0
10'	850

AOC1-FB7	
Depth	Oil
1'	1,780

AOC1-B3			
Depth	Arsenic	Cadmium	Lead
0'	6.3	30	3,600
3'	14	4.4	800
5'	8.6	3.0	450

AOC1-FB8		
Depth	Oil	Lead
1'	992	903

AOC1-B9		
Depth	Arsenic	Lead
0'	16	15
3'	5.9	510
5'	13	250

AOC1-FB2	
Depth	Oil
1'	187
5'	ND
10'	ND
15'	ND

AOC1-B13		
Depth	Gas	Diesel
1'	8.8	660
3'	340	6,600
5'	430	5,800
10'	6.5	9,300
15'	1,300	5,600
20'	1,100	4,700
23'	610	9,200

AOC1-B7	
Depth	Diesel
0'	240
1'	ND<5
3'	ND<5
5'	ND<5
10'	ND<25

AOC1-B17			
Depth	Arsenic	Cadmium	Lead
0'	18	8.7	4,600
3'	5.5	ND<0.51	44
5'	4.5	ND<0.51	ND<1.3

AOC1-B4	
Depth	Lead
0'	470
3'	21
5'	1.9

AOC1-B6	
Depth	Arsenic
0'	12
3'	7.9
5'	3.5

AOC1-B8	
Depth	Arsenic
0'	5.5
3'	18
5'	3.8

AOC1-B14	
Depth	Diesel
3'	ND<5
5'	ND<5
10'	390
15'	ND<5
20'	ND<5

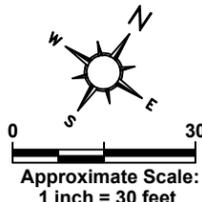
LEGEND

- AOC1-B3 ⓧ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- AOC1-FB7 ⊕ SOIL BORING LOCATION BY FERO (SEPTEMBER 2006)
- AOC1-FB1 ⊕ SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERO (SEPTEMBER 2006)
- * ORIGINALY IDENTIFIED AS AOC1-FB9
- PROPOSED AREA OF CAPPING AT AOC-1 (UNPAVED)

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- RSLs = USEPA Regional Soil Screening Levels, November 2015, HQ=1.0
- (1) = General California Background Concentration (DTSC, January 2009)
- (2) = DTSC HHRA Note 3 (August 2017)
- (3) = OEHA CHSL (September 2009)
- = meet/exceeds the LUFT criteria
- = meet/exceeds the associated RSL

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

	LUFT	RSLs
TPH-gas	100	--
TPH-diesel	100	--
TPH-oil	100	--
Arsenic	--	12 ⁽¹⁾
Cadmium	--	7.3 ⁽²⁾
Lead	--	320 ⁽³⁾



CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



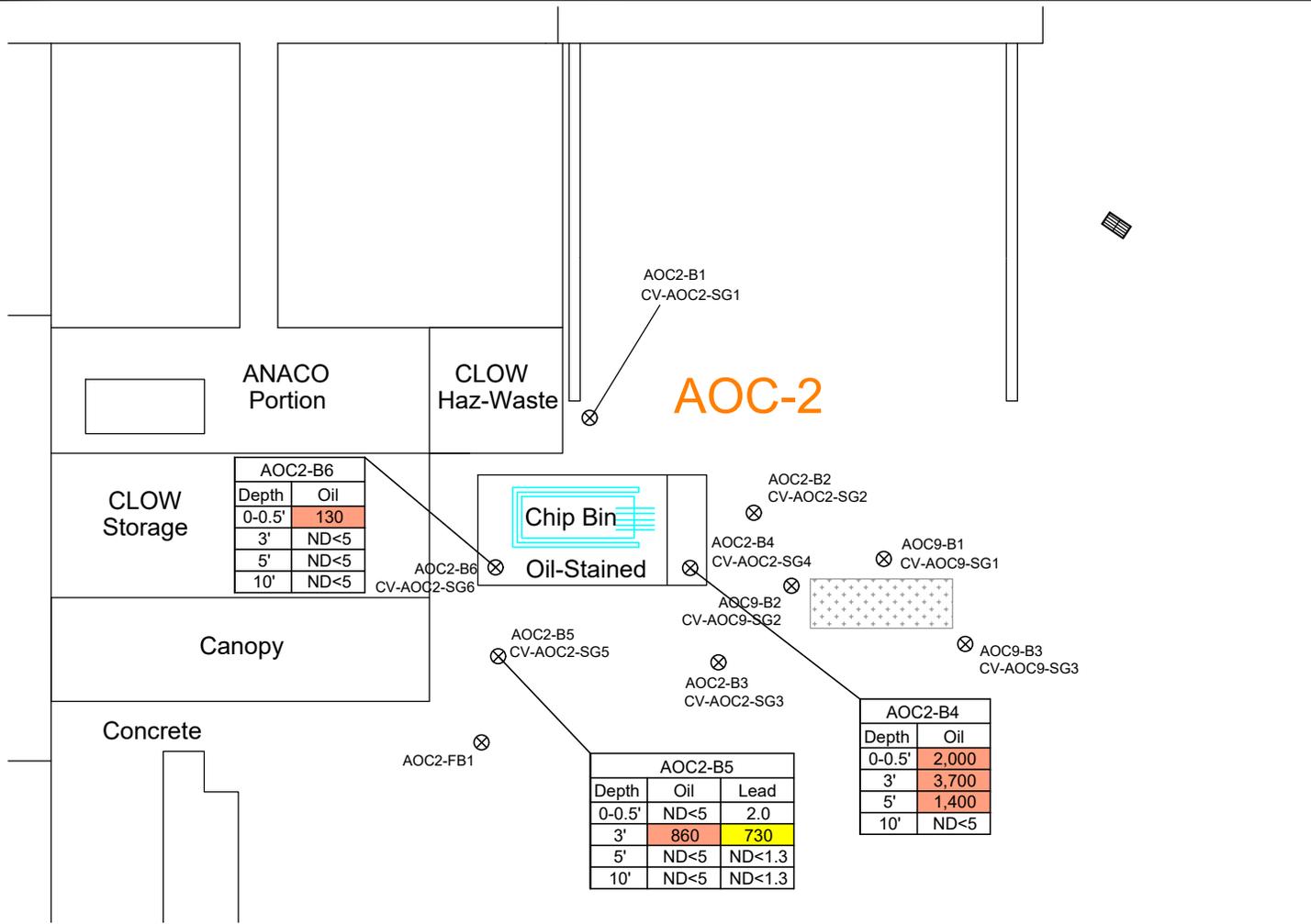
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1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC1 - RAIL SPUR AREA

DRAWN: KG	CHECKED: JB	DATE: 03/26/20	FIGURE: 3A
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AOC2-B6	
Depth	Oil
0-0.5'	130
3'	ND<5
5'	ND<5
10'	ND<5

AOC2-B5		
Depth	Oil	Lead
0-0.5'	ND<5	2.0
3'	860	730
5'	ND<5	ND<1.3
10'	ND<5	ND<1.3

AOC2-B4	
Depth	Oil
0-0.5'	2,000
3'	3,700
5'	1,400
10'	ND<5

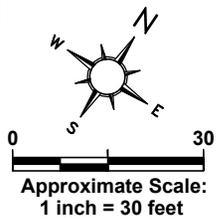
LEGEND

AOC7-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)

Notes: All sample results reported in milligrams per kilogram (mg/kg).
 Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- RSLs = USEPA Regional Soil Screening Levels, June 2017. HQ=1.0
- (2) = DTSC HHRA Note 3 (August 2017)
- = meet/exceeds the LUFT criteria
- = meet/exceeds the associated RSL

	LUFT	RSLs
TPH-oil	100	--
Lead	--	320 ⁽²⁾



CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879

PROJECT NO. 04.20150013.00

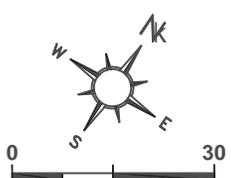


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AOC 2 - CHIP BIN AREA

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3B
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Approximate Scale:
1 inch = 30 feet

AOC3-B1 (2018)	
Depth	Oil
0-0.5'	46
1'	1,400
3'	ND<5
5'	ND<5

AOC3-B1 (2018)				
Depth	AROCOR-1248	AROCOR-1254	AROCOR-1260	TOTAL PCBs
0.5'	ND	0.35	5.2	5.55
1'	0.047 J	ND	0.46	0.507
2'	0.13	ND	1.1	1.23

Bay Door

Hydraulic Pump
with Fluid Reservoir

Canopy Covered Storage

Water Cylinder

AOC3-B4	
Depth	Total PCB
0-0.5'	0.092

AOC3-B5	
Depth	Total PCB
0-0.5'	1.3

AOC3-B6	
Depth	Total PCB
0-0.5'	1

AOC3-B2	
Depth	Oil
0-0.5'	33
1'	210
3'	890
5'	ND<5

FLOOD CONTROL CHANNEL ACCESS ROAD

Asphalt Paved

LEGEND

- AOC3-B1 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- AOC3-FB4 ⊕ SOIL BORING LOCATION BY FERRO (SEPTEMBER 2006)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)
- SOIL BORING LOCATION BY EARTHCON (OCTOBER 2018)

TPH-oil	LUFT
	100

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- = meet/exceeds the LUFT criteria

Notes: All sample results reported in milligrams per kilogram (mg/kg).
Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

- AOC3-FB2 ⊕
- AOC3-FB3 ⊕
- AOC3-FB4 ⊕
- AOC3-FB1 ⊕

CV-AOC3-SG1

Propane

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



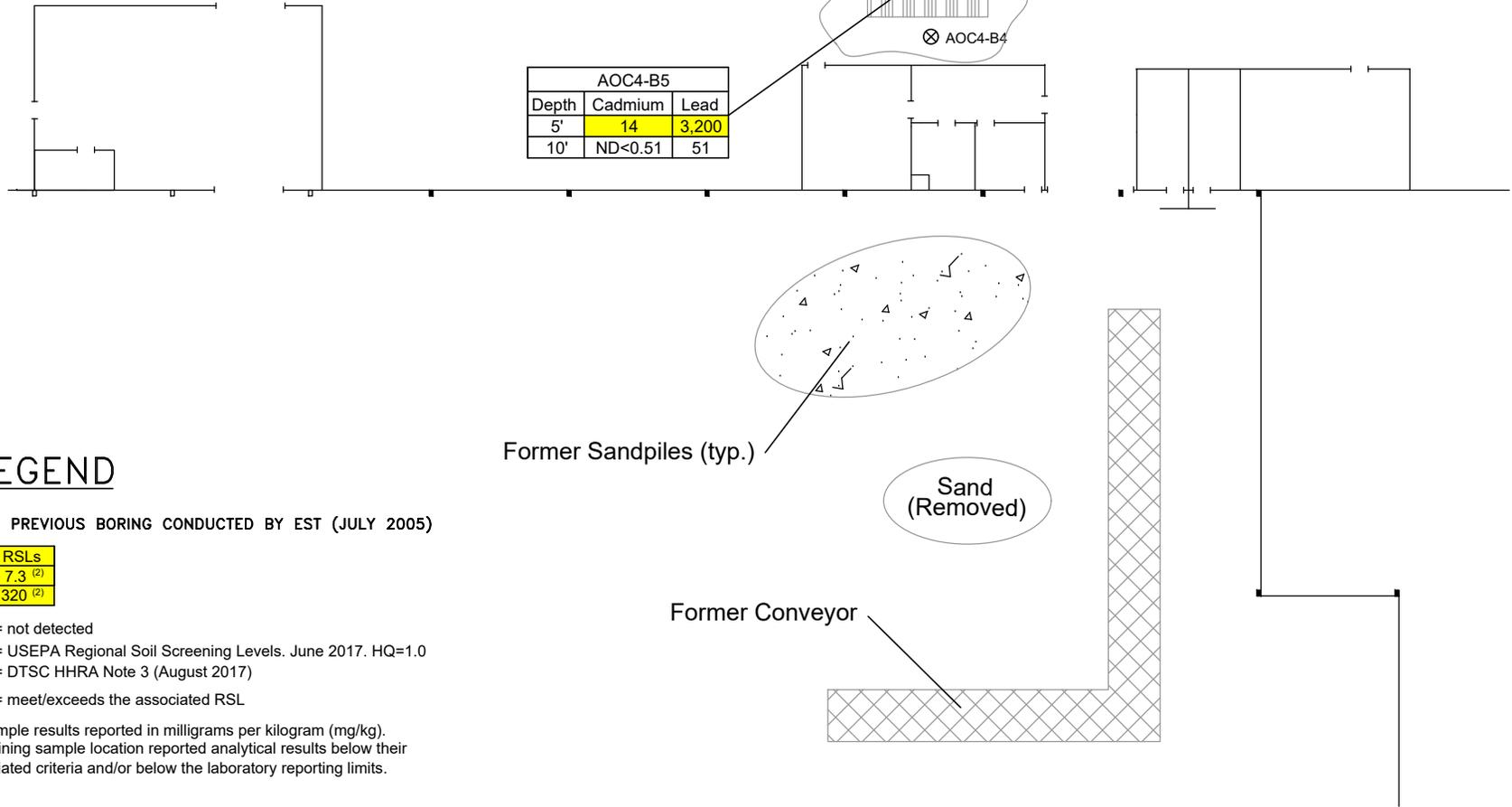
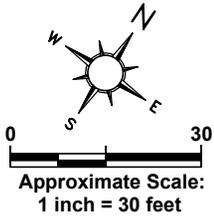
EARTHCON CONSULTANTS CA, INC

1500 SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 3 - WATER PRESSURE TEST AREA

DRAWN: KNB	CHECKED: JB	DATE: 03/05/2019	FIGURE: 3C
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LEGEND

AOC4-B5 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)

	RSLs
Cadmium	7.3 ⁽²⁾
Lead	320 ⁽²⁾

- ND = not detected
- RSLs = USEPA Regional Soil Screening Levels, June 2017, HQ=1.0
- (2) = DTSC HHRA Note 3 (August 2017)
- = meet/exceeds the associated RSL

Notes: All sample results reported in milligrams per kilogram (mg/kg).
Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



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AOC 4 - FORMER IRON
FOUNDRY SAND CLEANUP AREA

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3D
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AOC-1

AOC5-B1 (2018)			
Depth	AROCCLOR-1248	AROCCLOR-1260	TOTAL PCBs
1'	0.076	0.28	0
3'	0.033 J	ND	0.033 J

AOC5-B1 (2018)	
Depth	Oil
0'	5,400
3'	330
5'	ND<5

AOC-5

AOC5-B2		
Depth	Oil	
0'	200	
3'	ND<5	
5'	ND<5	

AOC5-B3 (2018)		
AROCCLOR-1248	AROCCLOR-1260	TOTAL PCBs
0.12	0.31	0.43

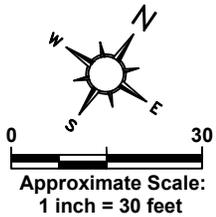
CLOW STORAGE

LEGEND

- AOC5-FB9 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- AOC5-B2 ⊕ SOIL BORING LOCATION BY FERO (SEPTEMBER 2006)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)
- CONCRETE SAMPLE LOCATION BY EARTHCON (JULY 2018)
- * ORIGINALLY IDENTIFIED AS AOC1-FB9

- ND = not detected
 - LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
 - Orange box = meet/exceeds the LUFT criteria
 - Pink box = Proposed Area of Capping at AOC- 5 (Primarily Unpaved)
- | TPH-oil | LUFT |
|---------|------|
| | 100 |

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.



CLOW STORAGE

ANACO Portion

CLOW Storage

Canopy

Concrete

Bay Door

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879



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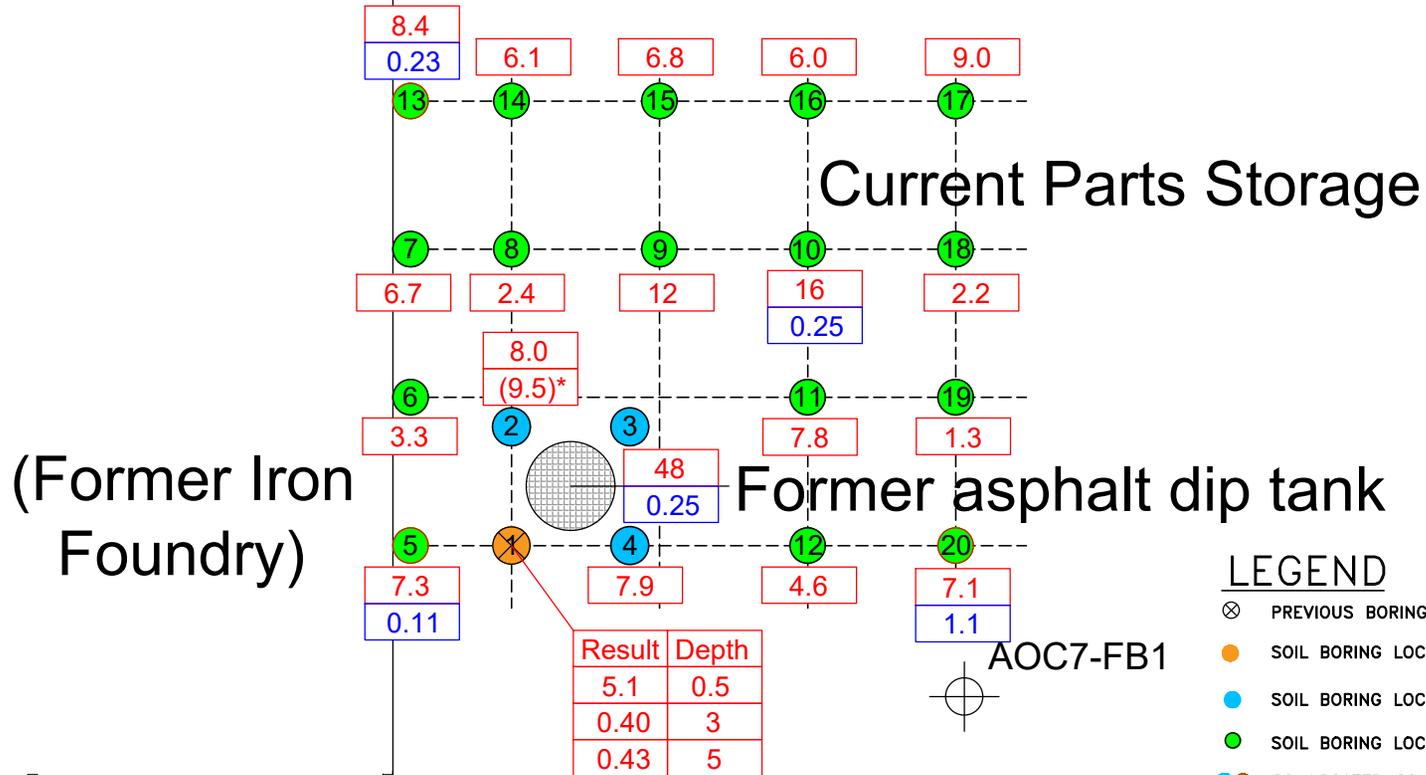
1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 5 - OIL STAINED PAD AREA
PCB SAMPLE LOCATIONS

PROJECT NO. 04.20150013.00

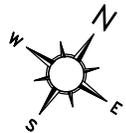
DRAWN: KG CHECKED: JB DATE: 03/26/20 FIGURE: 3E

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LEGEND

- ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)
- SOIL BORING LOCATION BY EARTHCON (OCT 2018)
- SOIL BORING LOCATION BY EARTHCON (JANUARY 2019)
- CO-LOCATED CONCRETE + SOIL BORING LOCATION BY EARTHCON (FEBRUARY 2019)
- SAMPLE ID (AOC6-B#)
- 1.1 RESULTS IN MG/KG (CONCRETE)
CONCRETE SAMPLES COLLECTED AT SURFACE.
- 7.1 RESULTS IN MG/KG (SOIL)
RESULTS FROM 0.5 FT BGS UNLESS OTHERWISE STATED.
- * DUPLICATE



CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO.04.20150013.17



EARTHCON CONSULTANTS CA, INC

1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 6 - FORMER ASPHALT DIP TANK AREA

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3F
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(Former Iron Foundry)

AOC7-B1 (2018)	
AROCLOR-1248	TOTAL PCBs
0.035 J	0.035 J

AOC7-FB1	
Depth	PCB-1260
1'	ND
3'	ND
5'	ND
10'	ND
15'	ND

AOC7-B1 (2005)			
Depth	PCB-1016	PCB-1254	PCB-1260
0-0.5'	0.030	0.12	0.023
1'	0.085	0.20	0.042
3'	210	1,400	610
5'	800	890	480

AOC7-B1 (2018)		
Depth	PCB-1248	PCB-1260
6.5'	14	2.6

AOC7-FB4	
Depth	PCB-1260
1'	0.602
3'	2.79
5'	ND
10'	ND
15'	ND

AOC7-FB5	
Depth	PCB-1260
1'	1.73
3'	0.726
5'	ND
10'	ND
15'	ND

AOC7-FB2	
Depth	PCB-1260
1'	0.036
3'	ND
5'	ND
10'	ND
15'	ND

AOC7-B2			
Depth	PCB-1016	PCB-1254	PCB-1260
0-0.5'	0.044	0.15	0.035
1'	0.026	0.099	0.022
3'	1.3	5.4	1.0
5'	0.041	0.11	ND<0.020

AOC7-B2 (2018)		
AROCLOR-1248	AROCLOR-1260	TOTAL PCBs
0.046 J	0.087	0.133

AOC7-B3			
Depth	PCB-1016	PCB-1254	PCB-1260
0-0.5'	ND<0.020	0.063	ND<0.020
1'	1.2	4.5	1.3
3'	0.088	0.22	0.038
5'	0.091	0.18	0.024

AOC7-B3 (2018) - ND

CLOW STORAGE

AOC7-B7 (2018) - ND

AOC-7

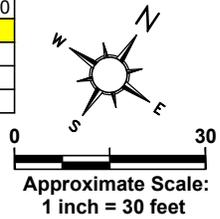
LEGEND

- AOC7-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005) AND ASSOCIATED SOIL SAMPLE RESULTS
- AOC7-FB6 ⊕ SOIL BORING LOCATION BY FERO (SEPTEMBER 2006) AND ASSOCIATED SOIL SAMPLE RESULTS
- CONCRETE SAMPLE LOCATION BY EARTHCON (JULY 2018)

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

	RSLs
PCB-1016	27
PCB-1248	0.95
PCB-1254	0.97
PCB-1260	0.99

ND = not detected
 RSLs = USEPA Regional Soil Screening Levels. June 2017. HQ=1.0
 = meet/exceeds the associated RSL



CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879

PROJECT NO. 04.20150013.00



EARTHCON CONSULTANTS CA, INC
 1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 7 - TRANSFORMER AREA 1

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3G
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FILENAME: S:\Common\Drainage\CAD\Projects\04.20150013.00-Clow Valve\CAD 2019\SP_10-18-19_F9EFH.dwg (3H (AOC8)) 10/21/19 13:24 - kg/awall

ANACO WAREHOUSE

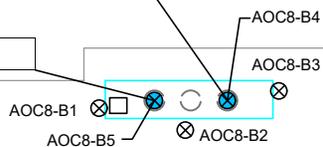
Former Conveyor

Asphalt

Raised Concrete Open Storage Area

AOC8-B4 (2018)		
AROCOLOR-1248	AROCOLOR-1260	TOTAL PCBs
0.041 J	0.12	0.161

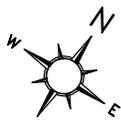
AOC8-B5 (2018) - ND



Surplus Equipment

AOC-8

EMPTY PART BASKET STORAGE



0 30

Approximate Scale:
1 inch = 30 feet

LEGEND

- AOC8-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- CONCRETE SAMPLE LOCATION BY EARTHCON (JULY 2018)

Note: No exceedance of detected PCBs

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



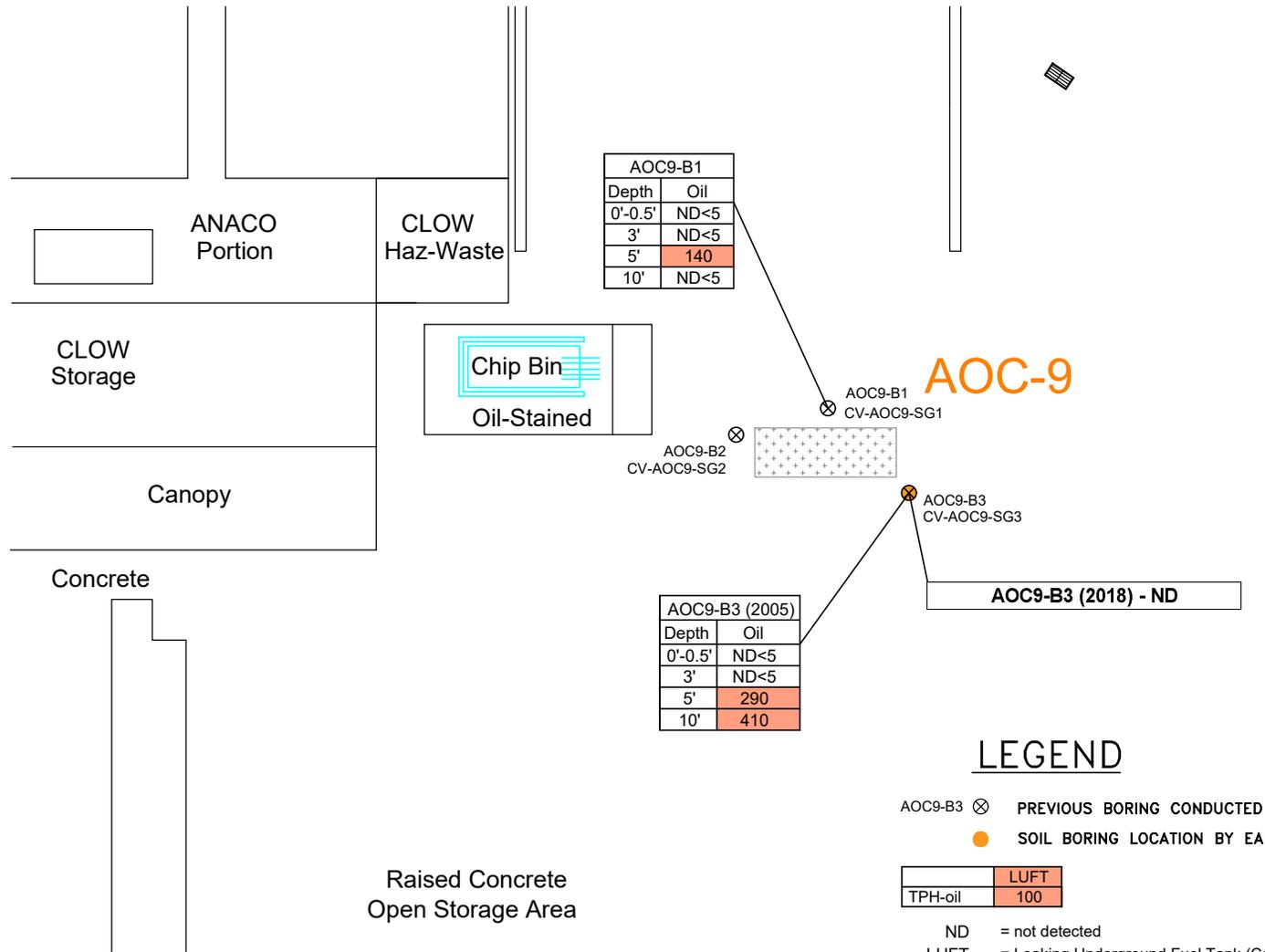
EARTHCON CONSULTANTS CA, INC

1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 8 - TRANSFORMER AREA 2
PCB SAMPLE LOCATIONS

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 3H
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FILENAME:\Common\Drange\CAD\Projects\04.20150013.00-Clow Valve\CAD 2019\SP_10-18-19_F3EFH.dwg (31 (AOC9)) 10/18/19 10:47 - kgyawell



AOC9-B1	
Depth	Oil
0'-0.5'	ND<5
3'	ND<5
5'	140
10'	ND<5

AOC9-B3 (2005)	
Depth	Oil
0'-0.5'	ND<5
3'	ND<5
5'	290
10'	410

AOC-9

AOC9-B3 (2018) - ND

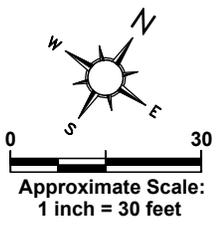
LEGEND

- AOC9-B3 ⊗ PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- SOIL BORING LOCATION BY EARTHCON (JULY 2018)

TPH-oil	LUFT
	100

- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- [Orange Box] = meet/exceeds the LUFT criteria

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.



Raised Concrete
Open Storage Area

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



EARTHCON CONSULTANTS CA, INC
1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

AOC 9 - FORMER TEST POND
PCB SAMPLE LOCATIONS

DRAWN: KG	CHECKED: JB	DATE: 10/18/19	FIGURE: 31
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FILENAME: S:\Common\Drange\CAD\Projects\04.20150013.00-Clov Valve\CAD 2019\SP_10-18-19_F3BDD.dwg (3J (ADCI)) 10/18/19 10:49 - kgyawali

SW2			
Depth	Arsenic	Cadmium	Lead
1'	6.28	43.9	7,360
3'	24.6	ND	5.25
5'	10.0	ND	4.16

SW3		
Depth	Cadmium	Lead
1'	25	4,650
3'	ND	74.1
5'	ND	253

SW4	
Depth	Lead
1'	209
3'	185
5'	352

SW5	
Depth	Lead
1'	218
3'	533
5'	1.98

SW6	
Depth	Lead
1'	239
3'	182
5'	897

CV-BG3	
Depth	Lead
1'	360
3'	130
5'	3.6
10'	3.3
15'	4.9
20'	3.2
25'	6.6

SW1		
Depth	Arsenic	Lead
1'	3.37	828
3'	17.2	2.41
5'	6.28	2.23

LEGEND

- CV-BG4 BACKGROUND SOIL BORING BY EST (JULY 2005)
- AOC7-B3 PREVIOUS BORING CONDUCTED BY EST (JULY 2005)
- SW9 SOIL BORING LOCATION BY FERO (SEPTEMBER 2006)
- AOC1-FB1 SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERO (SEPTEMBER 2006)

	LUFT	RSLs
TPH-diesel	100	--
Arsenic	--	12 ⁽¹⁾
Cadmium	--	7.3 ⁽²⁾
Hex Cr	--	6.3
Lead	--	320 ⁽²⁾

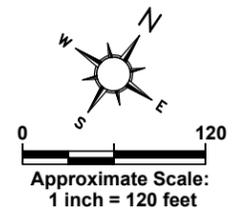
- ND = not detected
- LUFT = Leaking Underground Fuel Tank (California Guidance 2012)
- RSLs = USEPA Regional Soil Screening Levels. June 2017. HQ=1.0
- (1) = General California Background Concentration (DTSC, January 2009)
- (2) = DTSC HHRA Note 3 (August 2017)
- = meet/exceeds the LUFT criteria
- = meet/exceeds the associated RSL

Notes: All sample results reported in milligrams per kilogram (mg/kg). Remaining sample location reported analytical results below their associated criteria and/or below the laboratory reporting limits.

CV-BG4	
Depth	Diesel
1'	ND<5
3'	ND<5
5'	ND<5
10'	ND<5
15'	110
20'	ND<5

SW21	
Depth	Arsenic
1'	52.9
3'	1.68
5'	2.11

CV-BG2	
Depth	Hex Cr
1'	ND<0.5
3'	4.2
5'	3.3
10'	ND<0.5
15'	ND<0.5
20'	6.6



MAGNOLIA AVE

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



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1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

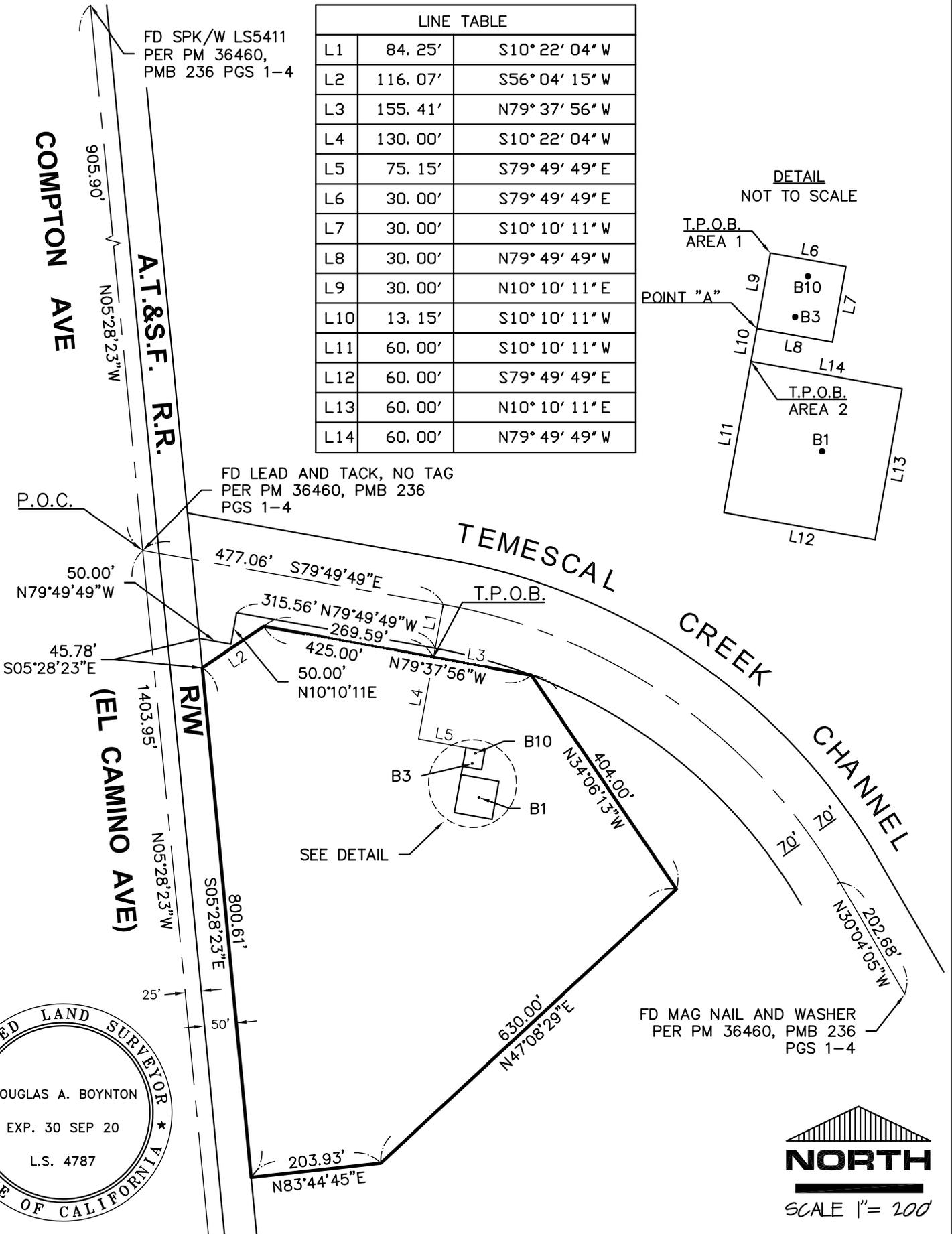
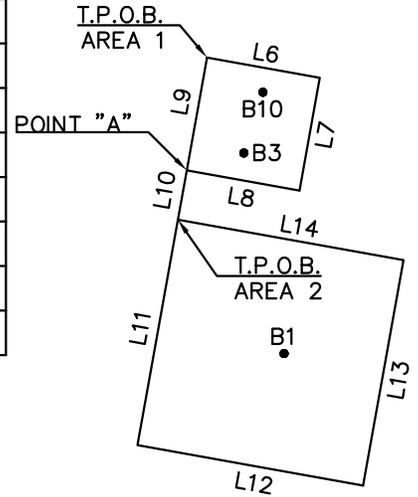
BACKGROUND AND SITEWIDE SOIL BORINGS

DRAWN: KG CHECKED: JB DATE: 10/18/19 FIGURE: 3J

FIGURE 4

LINE TABLE		
L1	84.25'	S10° 22' 04" W
L2	116.07'	S56° 04' 15" W
L3	155.41'	N79° 37' 56" W
L4	130.00'	S10° 22' 04" W
L5	75.15'	S79° 49' 49" E
L6	30.00'	S79° 49' 49" E
L7	30.00'	S10° 10' 11" W
L8	30.00'	N79° 49' 49" W
L9	30.00'	N10° 10' 11" E
L10	13.15'	S10° 10' 11" W
L11	60.00'	S10° 10' 11" W
L12	60.00'	S79° 49' 49" E
L13	60.00'	N10° 10' 11" E
L14	60.00'	N79° 49' 49" W

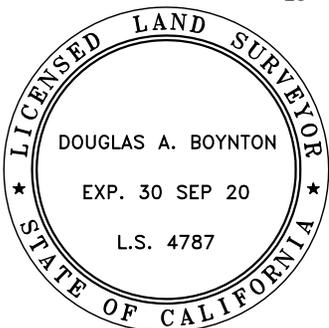
DETAIL
NOT TO SCALE



FD SPK/W LS5411
PER PM 36460,
PMB 236 PGS 1-4

FD LEAD AND TACK, NO TAG
PER PM 36460, PMB 236
PGS 1-4

FD MAG NAIL AND WASHER
PER PM 36460, PMB 236
PGS 1-4



GRADING GENERAL NOTES

- A GRADING PERMIT FROM THE PUBLIC WORKS DEPARTMENT IS REQUIRED. ALL GRADING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF CORONA GRADING REGULATIONS - CORONA MUNICIPAL CODE 15.36. THESE PLANS, SPECIAL INSTRUCTIONS ON THE PERMIT, AND THE GEOTECHNICAL INVESTIGATION AND LIQUIDATION EVALUATION DATED SEPTEMBER 10, 2019 BY GEOTECHNICAL PROFESSIONALS INC., AND ALL SUBSEQUENT ADDENDA.
- SOURCE OF TOPOGRAPHY IS BASED ON FIELD SURVEY DATED SEPTEMBER 23, 2018.
- A PRE-GRADING MEETING AT THE SITE IS REQUIRED BETWEEN THE CITY INSPECTOR, THE CIVIL ENGINEER, THE GEOTECHNICAL ENGINEER AND THE GRADING CONTRACTOR. CALL THE PUBLIC WORKS DEPARTMENT INSPECTION DIVISION AT (951) 279-3511 TO SCHEDULE A PRE-GRADING MEETING AT LEAST 48 HOURS PRIOR TO START OF ANY WORK.
- HOURS OF OPERATION ARE 7:00 A.M. TO 5:00 P.M. - MONDAY THROUGH FRIDAY EXCLUDING HOLIDAYS.
- SEPARATE PERMITS SHALL BE REQUIRED FOR ANY IMPROVEMENT WORK IN THE PUBLIC RIGHT-OF-WAY.
- CONSTRUCTION MATERIAL AND EQUIPMENT SHALL NOT OCCUPY ANY PORTION OF THE PUBLIC RIGHT-OF-WAY, SUCH AS STREET, ALLEY OR PUBLIC SIDEWALK AT ANY TIME. TEMPORARY USE OF PUBLIC RIGHT-OF-WAY, WHENEVER REQUESTED, MUST BE REVIEWED AND APPROVED BY THE PUBLIC WORKS DIRECTOR.
- REPAIR OR REPLACE ALL EXISTING DAMAGED OR ALTERED PUBLIC IMPROVEMENTS AS REQUIRED BY THE PUBLIC WORKS DIRECTOR.
- ALL SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED IN PLACE. ANY DISTURBED OR COVERED MONUMENTS SHALL BE RESET BY A QUALIFIED CIVIL ENGINEER OR A LICENSED LAND SURVEYOR.
- PRIOR TO TAKING WATER FROM A CITY FIRE HYDRANT, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE PUBLIC WORKS DEPARTMENT TO OBTAIN A FIRE HYDRANT WATER METER. METER LOCATION MAY NOT BE ALTERED WITHOUT DEPARTMENT OF WATER AND POWER APPROVAL.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES OR STRUCTURES ABOVE OR BELOW GROUND SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES OR STRUCTURES CAUSED BY HIS OPERATION.
- STRICT ADHERENCE TO DUST CONTROL REQUIREMENTS SHALL BE ENFORCED. ADJACENT STREETS ARE TO BE CLEANED DAILY OF ALL DIRT AND DEBRIS RESULTING FROM THIS OPERATION.
- SEPARATE PERMITS FROM THE BUILDING DIVISION SHALL BE REQUIRED FOR ALL WALLS.
- AN APPROVED PRECISE GRADING PLAN WILL BE REQUIRED PRIOR TO A BUILDING PERMIT BEING ISSUED.
- THE DESIGN CIVIL ENGINEER/GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST OF RECORD SHALL EXERCISE SUFFICIENT CONTROL DURING GRADING AND CONSTRUCTION TO ENSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS, AND CODE REQUIREMENTS WITHIN THEIR PURVIEW. THE ENGINEERS SHALL SUBMIT "ACKNOWLEDGMENT CONCERNING EMPLOYMENT" FORM TO THE CITY PRIOR TO THE ISSUANCE OF A GRADING PERMIT.
- REVISIONS TO THE PLANS ARE TO BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR REVIEW AND APPROVAL PRIOR TO CHANGING ORIGINAL MYLARS.
- THE CIVIL ENGINEER SHALL SUBMIT WRITTEN CERTIFICATION OF COMPLETION OF ROUGH GRADING IN ACCORDANCE WITH THE APPROVED GRADING PLAN AND CERTIFICATION OF BUILDING PAD ELEVATION PRIOR TO ISSUANCE OF THE BUILDING PERMIT. PAD ELEVATION GRADING TOLERANCE SHALL NOT EXCEED ±0.10'.
- AN "AS-BUILT" GRADING PLAN SHALL BE SUBMITTED AT THE COMPLETION OF WORK SHOWING ALL WATER QUALITY MANAGEMENT PLAN FACILITIES.
- GRADING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER WHO SHALL CERTIFY THAT ALL FILL HAS BEEN PROPERLY PLACED AND SUBMIT A FINAL COMPACTION REPORT FOR ALL FILLS OVER 1' DEEP.
- THE GEOTECHNICAL ENGINEER SHALL, AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUBSURFACE WATER OR SPRING FLOW. IF NEEDED, DRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
- FILL AREAS SHALL BE CLEANED OF ALL VEGETATION AND DEBRIS, SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACING OF FILL.
- ALL DELETERIOUS MATERIALS, I.E. LUMBER, LOGS, BRUSH, OR ANY OTHER ORGANIC MATERIALS OR RUBBISH SHALL BE REMOVED FROM ALL AREAS TO RECEIVE COMPACTED FILL.
- UNSATURABLE MATERIALS, SUCH AS TOPSOIL, WEATHERED BEDROCK, ETC., SHALL BE REMOVED AS REQUIRED BY GEOTECHNICAL ENGINEER (AND ENGINEERING GEOLOGIST, WHERE EMPLOYED) FROM ALL AREAS TO RECEIVE COMPACTED FILL OR DRAINAGE STRUCTURES.
- FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL.
- WHEN CUT PADS ARE BROUGHT TO NEAR GRADE, THE GEOTECHNICAL ENGINEER SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE GEOTECHNICAL ENGINEER, A COMPACTED FILL BLANKET WILL BE PLACED.
- WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE GEOTECHNICAL ENGINEER, THE GEOTECHNICAL ENGINEER SHALL SUBMIT DESIGN, LOCATIONS AND CALCULATIONS TO THE PUBLIC WORKS DIRECTOR PRIOR TO CONSTRUCTION. THE GEOTECHNICAL ENGINEER WILL INSPECT AND CONTROL THE CONSTRUCTION OF THE BUTTRESSING AND CERTIFY TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION.
- ALL CUT SLOPES SHALL BE INVESTIGATED, BOTH DURING AND AFTER GRADING BY THE GEOTECHNICAL ENGINEER, TO DETERMINE IF ANY SLOPE HAS STABILITY PROBLEMS. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS, THE GEOTECHNICAL ENGINEER SHALL RECOMMEND NECESSARY TREATMENT TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL. ALL APPROVALS TO BE GRANTED ON THE BASIS OF DETAILED GEOLOGICAL MAPPING AND WRITTEN RECOMMENDATION FROM THE GEOTECHNICAL ENGINEER.
- MAXIMUM ALLOWABLE CUT AND FILL SLOPES ARE 2 TO 1 OR 30' IN HEIGHT WITHOUT APPROVAL OF THE PUBLIC WORKS DIRECTOR. IF PROPOSED CUT AND FILL SLOPES ARE STEEPER THAN 2:1 OR OVER 30' IN HEIGHT, STABILITY CALCULATIONS WITH A SAFETY FACTOR OF AT LEAST ONE AND FIVE TENTHS (1.5) SHALL BE SUBMITTED BY A GEOTECHNICAL ENGINEER FOR APPROVAL FROM THE PUBLIC WORKS DIRECTOR.
- PROVIDE 4' WIDE BY 1' HIGH BERM OR EQUIVALENT ALONG THE TOP OF ALL FILL SLOPES OVER 5' HIGH, EXCEPT WHERE SHOWN OTHERWISE ON THE PLANS.

- ALL SLOPES ADJACENT TO PUBLIC RIGHT-OF-WAY SHALL CONFORM TO SECTION 15.36.220 OF THE CORONA MUNICIPAL CODE.
- ALL SLOPES 4' OR HIGHER SHALL BE PLANTED AND COMPLY WITH REQUIREMENTS OF CHAPTER 17 OF THE CORONA MUNICIPAL CODE.
- TERRACE DRAINS, INTERCEPTOR DRAINS AND DOWN DRAINS SHALL BE CONSTRUCTED OF 4" P.C.C. (OR GUNITE) REINFORCED WITH 6"x6" - 2 1.4x1.4 W.W.M. REBAR SHALL BE GRADE 60 BILLET STEEL CONFORMING TO ASTM A615.
- ALL CONCRETE STRUCTURES THAT COME IN CONTACT WITH THE ON-SITE SOILS SHALL BE CONSTRUCTED WITH TYPE II OR V CEMENT AS DEEMED NECESSARY BY SOLUBLE SULFATE CONTENT TEST CONDUCTED BY THE GEOTECHNICAL ENGINEER. ALL CONCRETE SHALL BE CITY STANDARD 560-C-3250 (600-E 3250 FOR GUNITE) PER CITY STANDARD SPECIFICATIONS.
- GROUND SHALL BE PRE-WETTED PRIOR TO THE PLACEMENT OF CONCRETE. MOISTURE LOSS RETARDANT SHALL BE USED WHEN REQUIRED BY THE GEOTECHNICAL ENGINEER OR PUBLIC WORKS DIRECTOR.
- CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND/OR OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.

POST CONSTRUCTION BMP GENERAL NOTES:

- THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMPs) FOR POST CONSTRUCTION STORM WATER TREATMENT.
- CONSTRUCT THE STORM WATER TREATMENT FACILITIES AFTER ALL CONTRIBUTING DRAINAGE AREAS ARE STABILIZED AND TO THE SATISFACTION OF THE ENGINEER OF RECORD.
- DO NOT USE THE DEVICES AS TEMPORARY SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
- THE FOLLOWING BMPs HAVE BEEN DESIGNED INTO THE PLANS. PLEASE REFER TO THE PROJECT'S APPROVED WATER QUALITY MANAGEMENT PLAN (WQMP) FOR ADDITIONAL BMP'S AND OPERATION AND MAINTENANCE DETAILS:
 - BIORETENTION FACILITY AND OR ON-SITE RETENTION

NOTE:

- A SEWER BACKFLOW PREVENTOR IS NOT REQUIRED FOR THIS PROJECT
- WATER PRESSURE REDUCING VALVES ARE REQUIRED FOR THIS PROJECT

NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES, SHOWN OR NOT SHOWN ON THESE PLANS.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION ON THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS OR PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, THE OWNER, AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA) PH. 811 TWO (2) WORKING DAYS PRIOR TO DIGGING. NO CONSTRUCTION PERMIT ISSUED BY THE PUBLIC WORKS DEPARTMENT SHALL BE VALID INVOLVING UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS AN INQUIRY IDENTIFICATION NUMBER ISSUED BY U.S.A.

CARE SHOULD BE TAKEN TO PREVENT GRADED DITCHES AND SWALES FROM UNDERMINING STREET IMPROVEMENTS. UPON INSPECTION OF THE SITES, THE PUBLIC WORKS DIRECTOR MAY REQUIRE TEMPORARY GUNITE SWALES, ENTERING OR LEAVING IMPROVEMENTS.

DECLARATION OF ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS SHOWN ON THESE PLANS COMPLIES WITH ALL PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER OF RECORD FOR THE PLANS, I ASSUME FULL RESPONSIBILITY FOR THE DESIGN OF THE IMPROVEMENTS. WITH RESPECT TO THE PLAN CHECK PERFORMED BY THE CITY OF CORONA, I UNDERSTAND AND ACKNOWLEDGE THE FOLLOWING: (1) THE PLAN CHECK IS A REVIEW FOR THE LIMITED PURPOSE OF ENSURING THE PLANS COMPLY WITH THE CITY'S STANDARDS, PROCEDURES, POLICIES, AND ORDINANCES, (2) THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS, AND (3) THE PLAN CHECK DOES NOT RELIEVE ME OF MY LEGAL AND PROFESSIONAL RESPONSIBILITY FOR THE DESIGN OF THE IMPROVEMENTS. AS THE ENGINEER OF RECORD, I AGREE TO DEFEND, INDEMNIFY, AND HOLD HARMLESS THE CITY, ITS ELECTED OFFICIALS, EMPLOYEES, AND AGENTS FROM ANY AND ALL ACTUAL OR ALLEGED CLAIMS, DEMANDS, CAUSES OF ACTION, LIABILITY, LOSS, DAMAGE, OR INJURY TO PROPERTY OR PERSONS, INCLUDING WRONGFUL DEATH, WHETHER IMPOSED BY A COURT OF LAW OR BY ADMINISTRATIVE ACTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENTAL AGENCY, ARISING OUT OF OR INCIDENT TO ANY NEGLIGENT ACTS, OMISSIONS, OR ERRORS BY THE ENGINEER OF RECORD, ITS EMPLOYEES, CONSULTANTS, OR AGENTS.

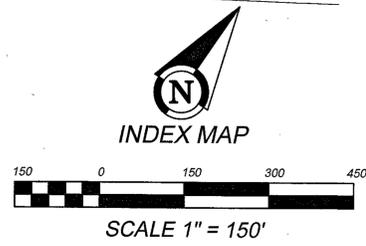
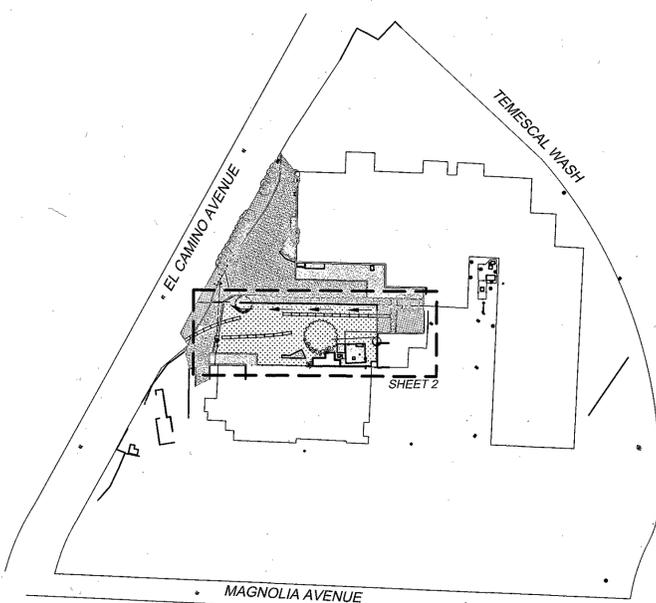
William D. Brooks
 WILLIAM D. BROOKS, RCE #53114 EXPIRES 6/30/21 DATE
 ENGINEER OF RECORD

GEOTECHNICAL ENGINEER'S STATEMENT

THIS PLAN HAS BEEN REVIEWED BY GEOTECHNICAL PROFESSIONALS INC. AND APPEARS TO BE IN GENERAL CONFORMANCE WITH RECOMMENDATIONS IN OUR REPORT DATED SEPTEMBER 10, 2019-PROJECT NO. 2945.1. THIS PLAN HAS BEEN REVIEWED FOR GEOTECHNICAL ASPECTS ONLY. WE MAKE NO REPRESENTATION REGARDING ACCURACY OF DIMENSIONS, QUANTITIES, MEASUREMENTS, CALCULATIONS, OR ANY PORTION OF THE DESIGN. GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS SHOULD BE CONFIRMED BY THE GEOTECHNICAL CONSULTANT IN THE FIELD AT TIME OF CONSTRUCTION.

Paul R. Schade
 PAUL R. SCHADE, RCE# GE#2371 9-30-22 EXP.
 GEOTECHNICAL ENGINEER
 ENGINEERING GEOLOGIST CE# EXP.

**CITY OF CORONA
 PRECISE GRADING PLAN
 1375 MAGNOLIA AVENUE**

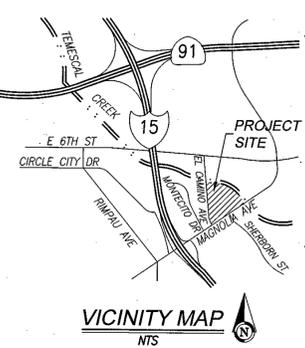


LEGEND

- EXIST. PCC PAVING
- EXIST. AC PAVING
- EXIST. LANDSCAPING
- PROP. PCC PAVING
- EXIST. BUILDING
- EXIST. SPOT ELEVATION
- PROP. SPOT ELEVATION
- EXIST. FENCE
- EXIST. TREES
- WALL/RET. WALL
- PROP. CONTOUR
- PROP. RATE OF GRADE
- FLOWLINE

ABBREVIATIONS

- AC ASPHALT CONCRETE
- C.O.C. CITY OF CORONA
- CONC CONCRETE
- DIAM. DIAMETER
- EXIST. EXISTING
- FS FINISH GRADE
- FL OR E FLOWLINE
- FS FINISH SURFACE
- L.F. LINEAR FEET
- MAX. MAXIMUM
- MIN. MINIMUM
- NO. NUMBER
- PCC PORTLAND CEMENT CONCRETE
- P.P.P. PROTECT-IN-PLACE
- PROP. PROPOSED
- STD. STANDARD
- TYP. TYPICAL
- TW TOP OF WALL



OWNER

CLOW VALVE COMPANY
 1375 MAGNOLIA AVE.
 CORONA, CA 92879
 888-888-2411

ENGINEER

ARMSTRONG & BROOKS CONSULTING ENGINEERS
 MAILING ADDRESS:
 P.O. BOX 78088
 CORONA, CA 92877-9998
 OFFICE LOCATION:
 1350 EAST CHASE DRIVE
 CORONA, CA 92881
 PH. (951) 372-8400 FAX (951) 372-8430
 CONTACT: WILLIAM D. BROOKS

GEOTECHNICAL ENGINEER

GEOTECHNICAL PROFESSIONALS, INC.
 5736 CORPORATE AVE
 CYPRESS, CA 90630
 PH: (714) 220-9211
 CONTACT: PAUL SCHADE, G.E.

ASSESSOR'S PARCEL NO.

107-030-022

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CORONA, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONALIZED SURVEY OF THE RANCHO EL SOBRIANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATING COMPANY, AS SHOWN BY MAP ON FILE IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, BOUNDED AS FOLLOWS: ON THE SOUTHEAST BY THE SOUTHWESTERLY EXTENSION OF THE NORTHWEST LINE OF MAGNOLIA AVENUE, AS SHOWN ON RECORD OF SURVEY ENTITLED "RECORD OF SURVEY OF A PORTION OF LOTS 11, 12, 13, 14, 15, IN BLOCK 63 OF RIVERSIDE LAND AND IRRIGATING COMPANY AND A PORTION OF SECTIONS 29 AND 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, SAN BERNARDINO BASE AND MERIDIAN" ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS; ON THE WEST BY THE EASTERLY LINE OF THE PROPERTY SPUR OF THE ATCHINSON, TOPEKA, AND SANTA FE RAILWAY COMPANY; AND ON THE NORTHEAST BY THE SOUTHERLY AND SOUTHWESTERLY LINE OF PARCELS 5 TO 11, INCLUSIVE, OF SAID RECORD OF SURVEY ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS.

EXCEPTING THEREFROM THAT PORTION GRANTED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER DISTRICT CONSERVATION DISTRICT BY DEED RECORDED OCTOBER 22, 1984 AS INSTRUMENT NO. 84-227367 AND RE-RECORDED FEBRUARY 11, 1985 AS INSTRUMENT NO. 85-028214 BOTH OF OFFICIAL RECORDS.

EARTHWORK QUANTITIES

NOTE: THE CONSTRUCTION QUANTITIES SHOWN ON THESE PLANS ARE FOR CITY FEE PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM INDIVIDUAL TAKEOFFS FOR BIDDING PURPOSES.

(PRELIMINARY QUANTITIES DO NOT INCLUDE SHRINKAGE FACTOR AND OVEREXCAVATION OVER THE SITE)

RAW CUT	582 CU. YDS.
RAW FILL	0 CU. YDS.
NET EXPORT	-582 CU. YDS.

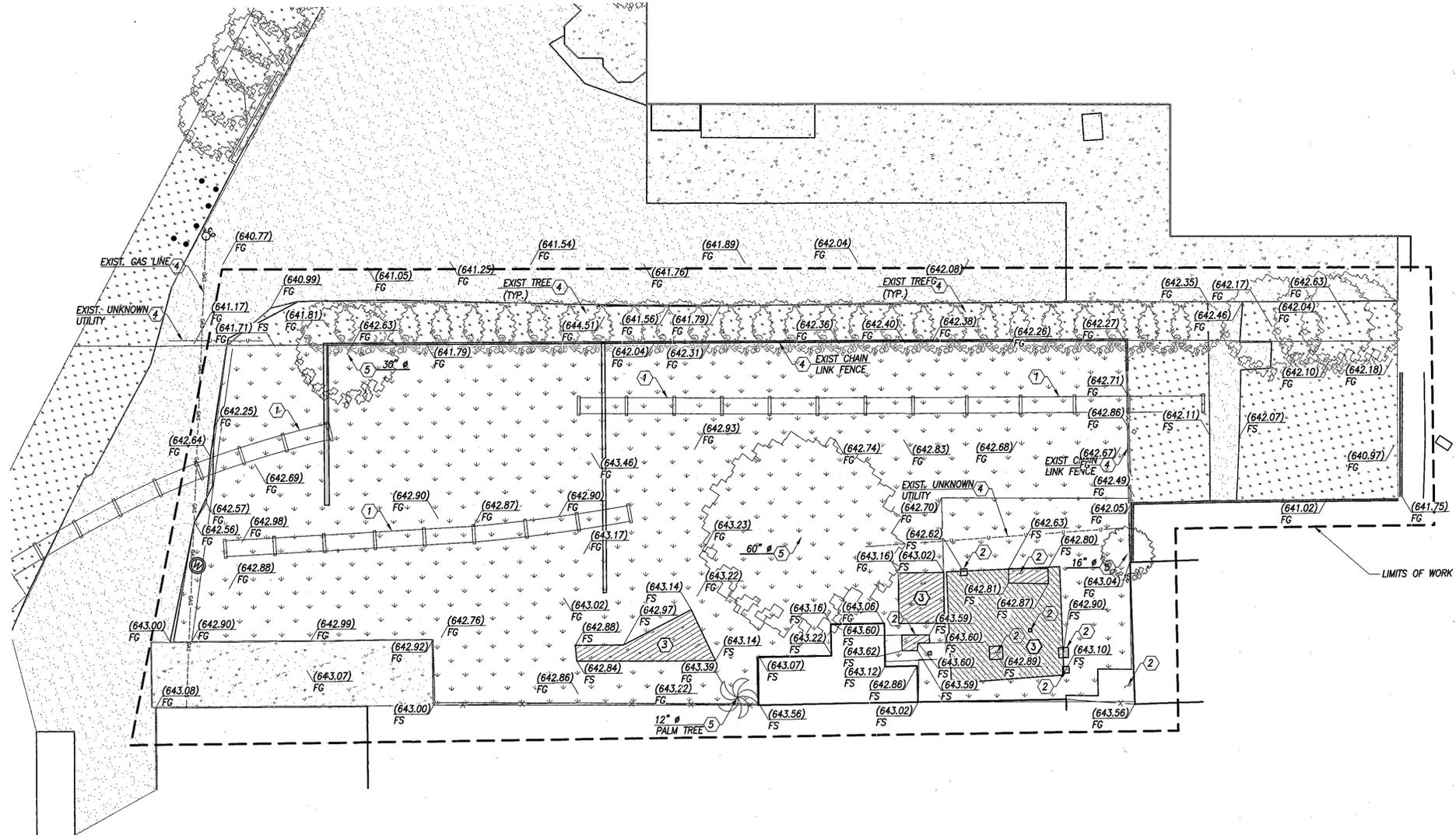
SITE AREA

TOTAL AREA - 16.9 ACRES
 DISTURBED AREA - 0.7 ACRES
 TOTAL LOTS: 1
 PARKING SPACES: N/A

SHEET INDEX:

TITLE SHEET	1
DEMOLITION PLAN	2
PRECISE GRADING & DRAINAGE PLAN	3
EROSION CONTROL PLAN	4

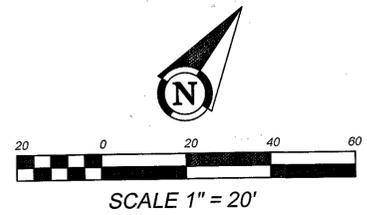




DEMOLITION NOTES

1	REMOVE EXIST. RAIL SPUR
2	REMOVE EXIST. CONCRETE PAD (6"± THICKNESS)
3	REMOVE EXIST. AC PAVEMENTS (3"±)
4	PROTECT IN PLACE EXIST. APPURTENANCE (AS LISTED)
5	REMOVE EXIST. TREE (DIA. PER PLAN)

EXIST. PCC		ASPHALTIC CONCRETE
EXIST. LANDSCAPE		EXISTING
EXIST. AC		FINISH GRADE
EXIST. LANDSCAPING TO BE REMOVED		FINISH SURFACE
REMOVE EXIST. AC		PORTLAND CEMENT CONCRETE
REMOVE EXIST. PCC		
AC		
EXIST		
FG		
FS		
PCC		



811
Know what's below.
Call before you dig.

ARMSTRONG & BROOKS CONSULTING ENGINEERS
PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES
1350 EAST CHASE DRIVE - CORONA, CA 92618
MAIL: P.O. BOX 3968 CORONA, CA 92737-9968
P: 951-272-8400 F: 951-272-8430

Designed by **W.D.B.**
Drawn by **R.R.T.**
Checked by **W.D.B.**
PLANS PREPARED UNDER SUPERVISION OF
WILLIAM D. BROOKS
R.C.E. No. 53114
Date **3-8-2022**

7020A, 05-138 D, 05-138P					
90-113P, 97-56S, 1971, C-1-118					
Reference Plans for these Improvements	Date	By	REVISIONS	App'd	

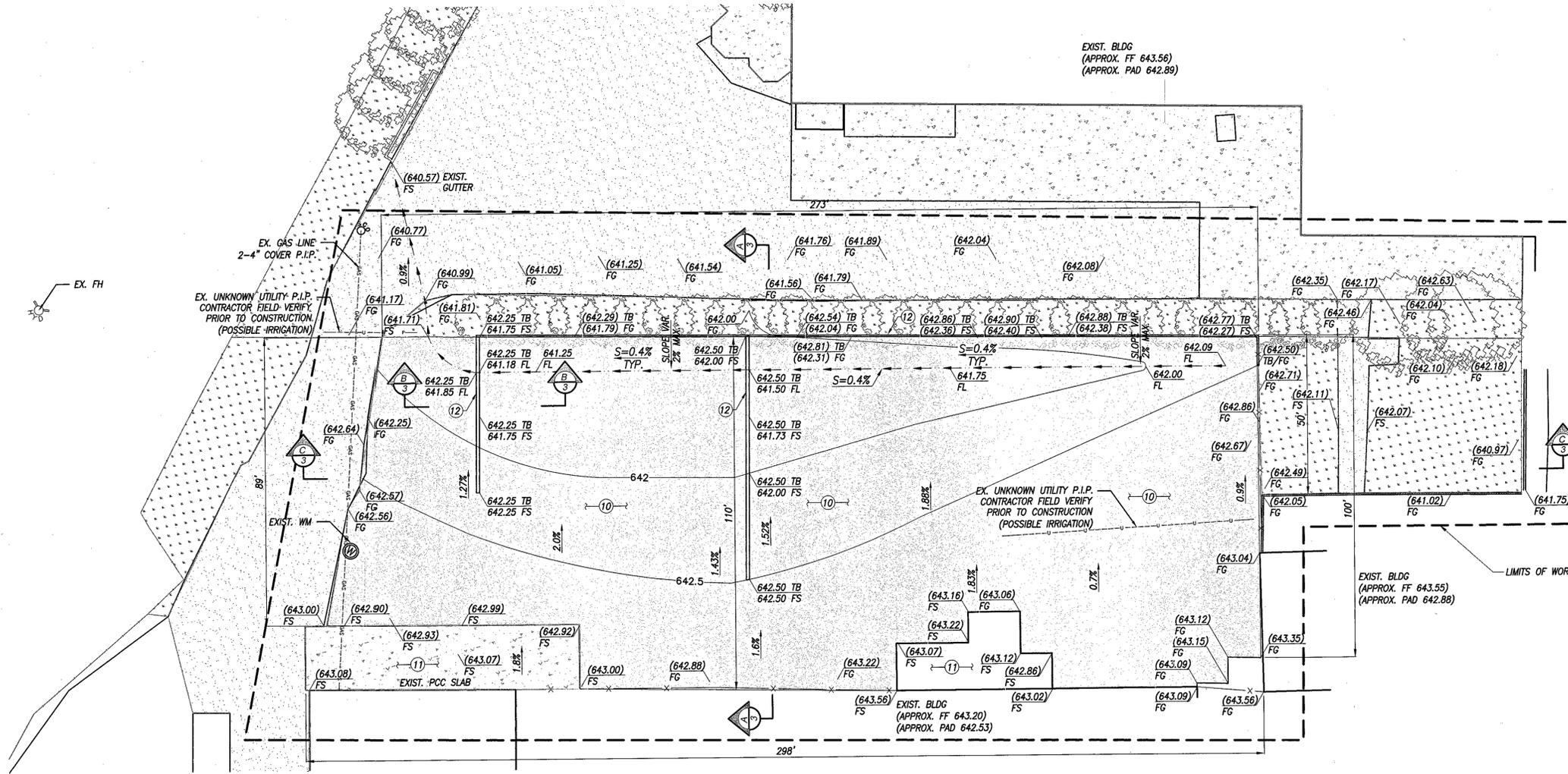
BENCH MARK
TBM ELEV.=603.80
SEE SHEET NO. 1 FOR DESCRIPTION
Scale AS SHOWN

Engineering **JK MK**
Planning **LA**
Fire

Approved By **Savath Khamphou** 3/11/21
SAVAT KHAMPHOU
City Engineer
R.C.E. No. 62019

CITY OF CORONA 1375 MAGNOLIA AVENUE
PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE
DEMOLITION PLAN

PWGR2020-0025
Drawing No. 20-026P
Sh 2 of 4

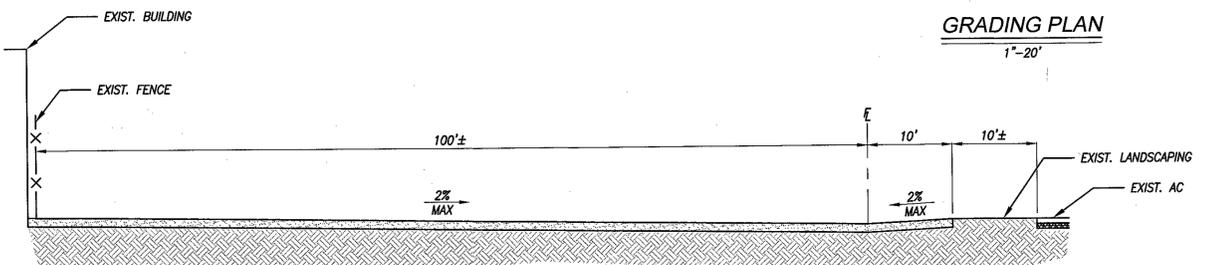


- CONSTRUCTION NOTES**
- (10) CONSTRUCT 3.5" AC PAVEMENT OVER 12" COMPACTED (90% RC) NATIVE MATERIAL
 - (11) PROTECT IN PLACE
 - (12) INSTALL 6" AC BERM PER C.O.C. STD. PLAN 140

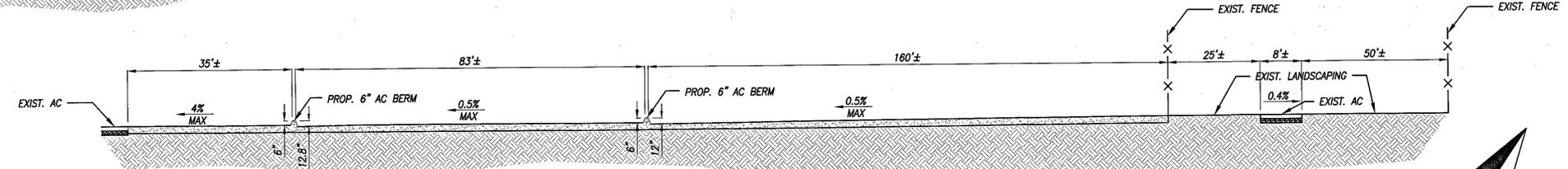
LEGEND

EXIST. PCC		ASPHALTIC CONCRETE
EXIST. LANDSCAPE		EXISTING
EXIST. AC		FINISH GRADE
PROP. 3.5" AC PAVEMENT		FINISH SURFACE
AC		MAXIMUM
EXIST.		PORTLAND CEMENT CONCRETE
FG		REINFORCED CONCRETE
FS		TOP OF WALL
MAX.		TYPICAL
RC		VARIABLE
TW		
TYP.		
VAR.		

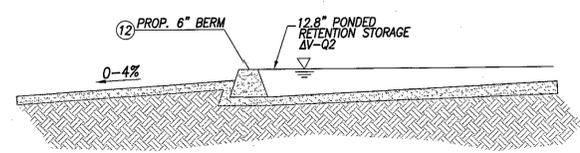
GRADING PLAN
1"=20'



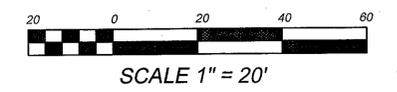
SECTION A-A
NTS



SECTION C-C
NTS



SECTION B-B
NTS

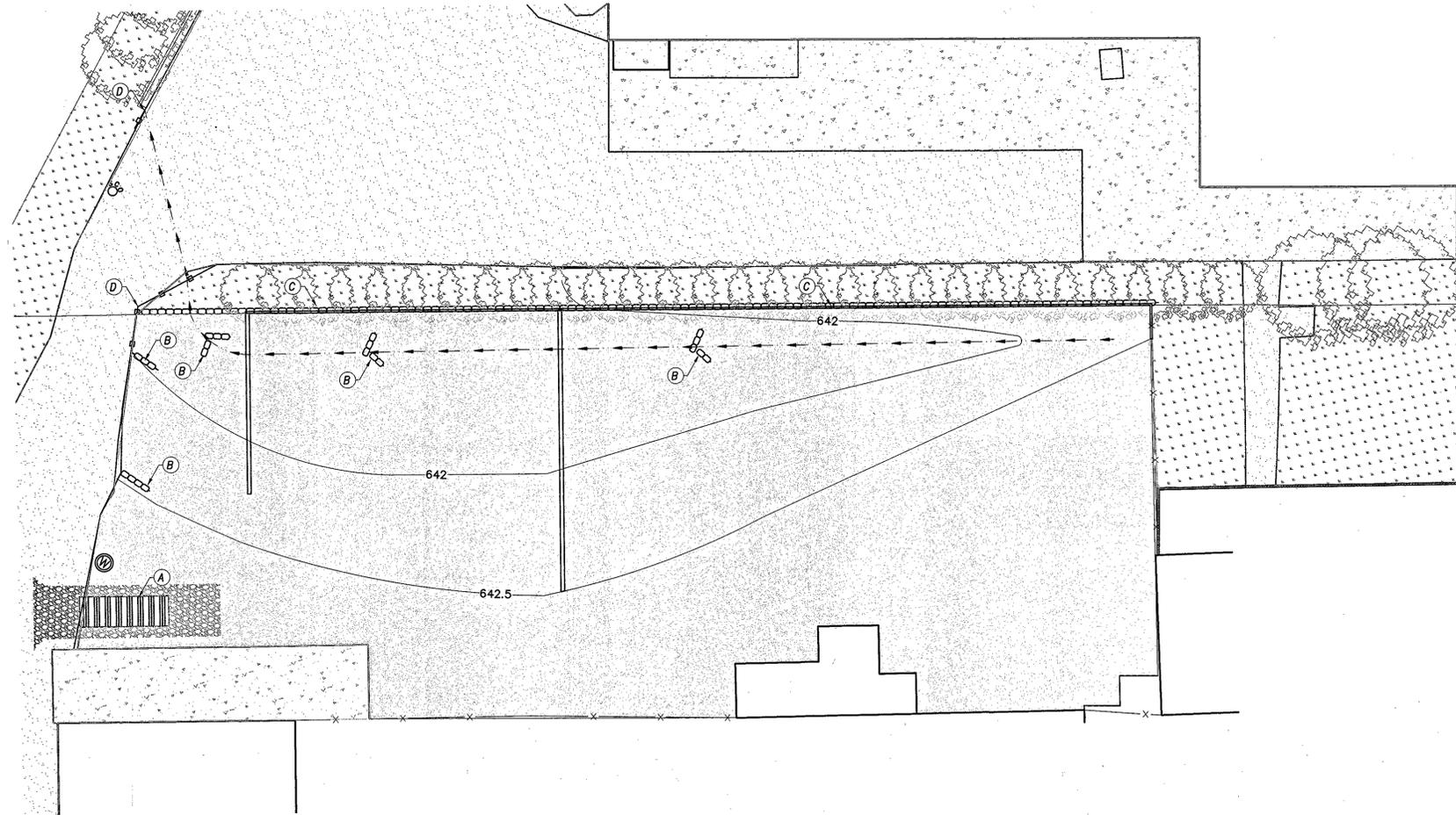


Know what's below.
Call before you dig.

 ARMSTRONG & BROOKS CONSULTING ENGINEERS PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES 1800 EAST SPRING STREET, CORONA, CA 92608 MAIL: P.O. BOX 7868 CORONA, CA 92677-9948 P: 951-372-8400 F: 951-372-8430	Designed by W.D.B.	Drawn by R.R.T.	Checked by W.D.B.	7020A, 05-138 D, 05-138P 90-113P, 97-56S, 1971, C-1-118	BENCH MARK TBM ELEV.=603.80 SEE SHEET NO. 1 FOR DESCRIPTION	Engineering JL-MH Planning LG Fire	Approved By [Signature] Date 3/11/21 SAUAT KHAMPHOU City Engineer R.C.E. No. 62019	CITY OF CORONA 1375 MAGNOLIA AVENUE PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE GRADING PLANS	Drawing No. 20-026P Sh 3 of 4
	PLANS PREPARED UNDER SUPERVISION OF WILLIAM D. BROOKS R.C.E. No. 53114 Date 3-8-2021				Reference Plans for these Improvements	Scale AS SHOWN	PWGR2020-0025		

EROSION CONTROL GENERAL NOTES:

1. EROSION CONTROL IS REQUIRED FOR GRADING OPERATIONS ON A YEAR ROUND BASIS. APPROVED PLANS ARE REQUIRED FOR ALL WORK REQUIRING A GRADING PERMIT.
2. IN CASE OF EMERGENCY CALL TIFFANY SMITH OF CLOW VALVE MANUFACTURING AT 317-384-0998.
3. THE ENGINEER OF RECORD WILL SUPERVISE EROSION CONTROL WORK AND INSURE THAT WORK IS IN ACCORDANCE WITH APPROVED PLANS.
4. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.
5. THE PUBLIC WORKS DIRECTOR RESERVES THE RIGHT TO MAKE CHANGES OR MODIFICATIONS TO THIS PLAN AS DEEMED NECESSARY.
6. STANDBY CREW FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) OR TO REPAIR ANY DAMAGED BMP'S WHEN RAIN IS IMMINENT.
7. AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL BMP'S SHALL BE IMPLEMENTED AND MAINTAINED TO PREVENT AND/OR MINIMIZE THE TRANSPORT OF SOIL IN RUNOFF FROM DISTURBED SOIL AREAS ON THE CONSTRUCTION SITE AT ALL TIMES. IN ADDITION, BMP'S SHALL BE INSPECTED PRIOR TO PREDICTED STORM EVENTS AND FOLLOWING STORM EVENTS. BMP'S SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE CITY INSPECTOR.
8. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT, AS FORECASTED BY THE NATIONAL WEATHER SERVICE.
9. AFTER A RAIN EVENT EXCEEDING ONE-QUARTER INCH IN ANY 12 HOUR PERIOD, OR UPON DIRECTION OF THE PUBLIC WORKS DIRECTOR, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS, SILT FENCES, AND DESILTING BASINS; AND THE BASINS SHALL BE PUMPED DRY AND RESTORED TO ORIGINAL DESIGN CONDITION. ANY EROSION CONTROL MEASURES DAMAGED DURING A RAIN EVENT SHALL ALSO BE IMMEDIATELY REPAIRED.
10. DESILTING BASINS ARE TO BE CONSTRUCTED AS GRADING OF INDIVIDUAL GRADING AREAS ARE COMPLETE PER ROUGH GRADING PLANS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
12. AREAS SHALL BE MAINTAINED IN SUCH A STATE THAT FIRE ACCESS SHALL BE MAINTAINED AT ALL TIMES (INCLUDING ACCESS TO NEIGHBORING PROPERTIES).
13. GRADED AREAS AROUND THE SITE PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
14. TEMPORARY EROSION PROTECTION IS REQUIRED FOR MANUFACTURED SLOPES PRIOR TO PERMANENT PLANTING.
15. ALL DISTURBED SLOPES SHALL BE PLANTED AND PROTECTED WITHIN 45 DAYS OF THE COMPLETION OF EACH STAGE OF GRADING. SUITABLE MEASURES TO PREVENT SLOPE EROSION INCLUDING, BUT NOT LIMITED TO, RAPID GROWTH VEGETATION SUFFICIENT TO STABILIZE THE SOIL, SHALL BE INSTALLED ON ALL DISTURBED AREAS UNTIL SUCH TIME AS THE PERMANENT VEGETATIVE COVER SUFFICIENTLY MATURES TO PROVIDE PERMANENT STABILITY.
16. NO OBSTRUCTION OR DISTURBANCE OF NATURAL DRAINAGE COURSES OR EXISTING STORM DRAIN INLETS SHALL OCCUR DURING GRADING OPERATIONS, UNLESS ADEQUATE TEMPORARY/PERMANENT DRAINAGE FACILITIES HAVE BEEN APPROVED AND INSTALLED TO CARRY SURFACE WATER TO THE NEAREST PRACTICAL STREET, STORM DRAIN OR NATURAL WATER COURSE. ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST BE MAINTAINED IN A STATE TO ALLOW FOR CONTINUOUS FUNCTION.
17. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER THAT STORM RUNOFF WILL BE CONTAINED WITHIN THE PROJECT OR CHANNLED INTO THE STORM DRAIN SYSTEM WHICH SERVES THE RUNOFF AREA. STORM RUNOFF FROM ONE AREA SHALL NOT BE ALLOWED TO DIVERT TO ANOTHER RUNOFF AREA.
18. CONFORMANCE WITH THE REQUIREMENTS OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TO THIS SITE AND ADJACENT PROPERTIES. DURING GRADING OPERATIONS, TEMPORARY DRAINAGE CONTROL SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES. TEMPORARY DRAINAGE CONTROL SHALL CONSIST OF, BUT NOT BE LIMITED TO, CONSTRUCTING SUCH FACILITIES AND TAKING SUCH MEASURES AS ARE NECESSARY TO PREVENT, CONTROL AND ABATE WATER, MUD AND EROSION DAMAGE TO PUBLIC AND PRIVATE PROPERTY AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT.
19. FILL AREAS WHILE BEING BROUGHT UP TO GRADE AND DURING PERIODS OF COMPLETION PRIOR TO FINAL GRADE, SHALL BE PROTECTED BY VARIOUS MEASURES TO ELIMINATE EROSION AND THE SILTATION OF DOWNSTREAM FACILITIES AND ADJACENT AREAS. THESE MEASURES MAY INCLUDE, BUT SHALL NOT BE LIMITED TO: TEMPORARY DOWN DRAINS, EITHER IN THE FORM OF PIPES OR PAVED DITCHES TO DESILT RUNOFF; PROTECTION SUCH AS SAND BAGS AROUND INLETS WHICH HAVE NOT BEEN BROUGHT UP TO GRADE; AND EARTH BERMS AND APPROPRIATE GRADING TO DIRECT DRAINAGE AWAY FROM THE EDGE OF THE TOP OF SLOPES SHALL BE CONSTRUCTED AND MAINTAINED ON THOSE FILL AREAS WHERE EARTHWORK OPERATIONS ARE NOT IN PROGRESS.
20. CLEARING AND GRUBBING SHOULD BE LIMITED TO AREAS THAT WILL RECEIVE IMMEDIATE GRADING. EROSION CONTROL MEASURES WILL BE REQUIRED TO PROTECT AREAS WHICH HAVE BEEN CLEARED AND GRUBBED PRIOR TO GRADING OPERATION, AND WHICH ARE SUBJECT TO RUNOFF DURING A RAIN EVENT. THESE MEASURES MAY INCLUDE BUT SHALL NOT BE LIMITED TO: GRADED DITCHES; BRUSH BARRIERS AND SILT FENCES. CARE SHALL BE EXERCISED TO PRESERVE VEGETATION BEYOND LIMITS OF GRADING.
21. CONSTRUCTION SITES SHALL BE MANAGED TO MINIMIZE THE EXPOSURE TIME OF DISTURBED SOIL AREAS THROUGH PHASING AND SCHEDULING OF GRADING TO THE EXTENT FEASIBLE AND THE USE OF TEMPORARY AND PERMANENT SOIL STABILIZATION.
22. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
23. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT WIND OR RUNOFF DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJOINING PROPERTIES.
24. DISCHARGES OTHER THAN STORM WATER (NON-STORM WATER DISCHARGES) ARE PROHIBITED, EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT, THE STATEWIDE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY, OR OTHER APPLICABLE GENERAL NPDES PERMIT. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES, AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM STREET CLEANING; SUPER-CHLORINATED POTABLE WATER FROM LINE FLUSHING AND TESTING, AND RUNOFF FROM EQUIPMENT AND VEHICLE WASHING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
25. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.
26. PAVED STREETS, SIDEWALKS AND OTHER IMPROVEMENTS SHALL BE MAINTAINED IN A NEAT CLEAN CONDITION, FREE OF LOOSE SOIL, CONSTRUCTION DEBRIS AND TRASH. STREET SWEEPING OR OTHER EQUALLY EFFECTIVE MEANS SHALL BE USED ON A REGULAR BASIS TO CONTROL SILT THAT HAS BEEN DEPOSITED ON STREETS OR SIDEWALKS. WATERING SHALL NOT BE USED TO CLEAN STREETS.
27. DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON-CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING ACTIVITIES MAY REQUIRE A NPDES PERMIT FROM THE SANTA ANA REGIONAL BOARD.
28. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.

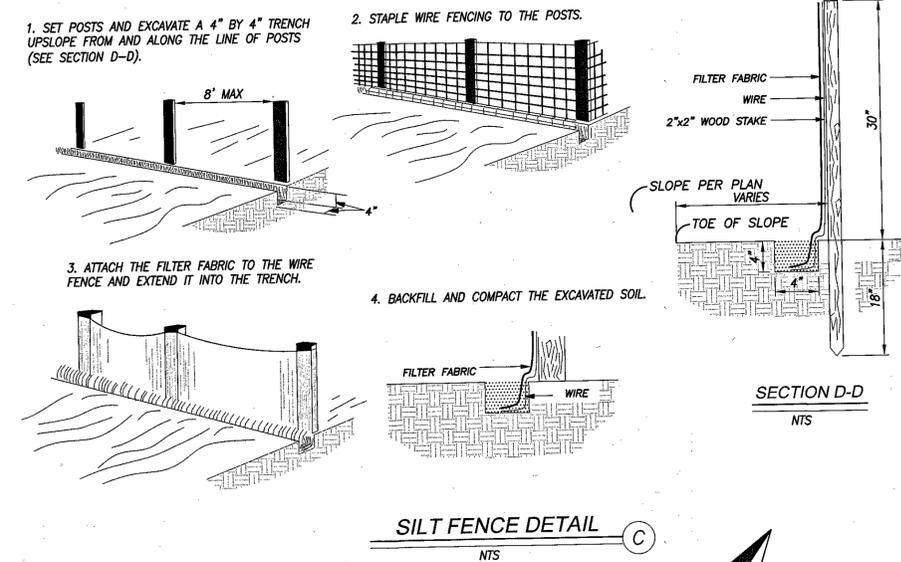
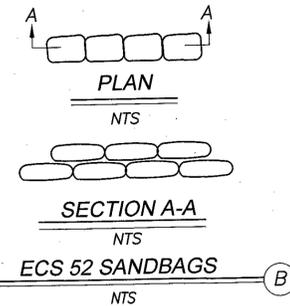
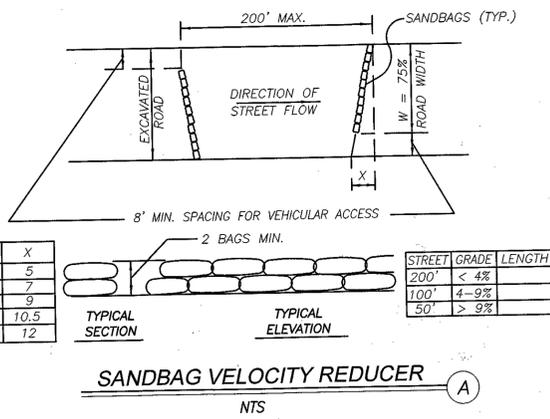


LEGEND

EXIST. POC	
EXIST. LANDSCAPE	
EXIST. AC	
PROP. AC	
SANBAGS	
SILT FENCE	

EROSION CONTROL PLAN

1"=20'

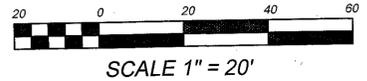


EROSION CONTROL NOTES

*ALL EROSION CONTROL MEASURES PER CA. STORMWATER BMP'S

	QTY.	UNIT
(A) INSTALL STABILIZED CONSTRUCTION ENTRANCE PER C.O.C. STD 225	1	EA.
(B) INSTALL SANDBAG VELOCITY REDUCER PER DETAIL A	53	L.F.
(C) INSTALL SINGLE ROW GRAVEL BAGS - 2 BAG HIGH PER DETAIL B	275	L.F.
(D) INSTALL SILT FENCE PER DETAIL C	47	L.F.

NOTE: FINAL LOCATION OF EROSION CONTROL MEASURES WILL BE DETERMINED AT THE CONSTRUCTION MANAGER'S DISCRETION



Know what's below.
Call before you dig.

ARMSTRONG & BROOKS CONSULTING ENGINEERS
PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES
1800 S. BARKER BLVD., SUITE 200, CORONA, CA 92605
MAIL: P.O. BOX 7808 CORONA, CA 92727-9988
TEL: 951-522-1400 FAX: 951-522-4400

Designed by W.D.B.
Drawn by R.R.T.
Checked by W.D.B.
PLANS PREPARED UNDER SUPERVISION OF WILLIAM D. BROOKS
R.C.E. No. 53114

7020A, 05-138 D, 05-138P
90-113P, 97-56S, 1971, C-1-118
Reference Plans for these Improvements
Date By REVISIONS App'd

BENCH MARK ELEV.=603.80
SEE SHEET NO. 1 FOR DESCRIPTION
Scale AS SHOWN

Engineering JK - MK
Planning LG
Fire

Approved By: [Signature]
3/11/21
SAVAT KHAMPHOU
City Engineer
R.C.E. No. 62019

CITY OF CORONA 1375 MAGNOLIA AVENUE
PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE
EROSION CONTROL PLAN

PWGR2020-0025
Drawing No. 20-026P
Sh 4 of 4

APPENDICES

APPENDIX A



**PROJECT HEALTH & SAFETY PLAN
(HASP)**

**Corrective Measures Study
Clow Valve
1375 Magnolia Avenue
Corona, California**

EarthCon Project No. 04.20150013.00

**August 22, 2016
Revised October 2, 2017**

Project Health and Safety Plan (HASP)

Project Name: Corrective Measures Study - Clow Valve
1375 Magnolia Avenue
Corona, California

Project Number: 04.20150013.00

Prepared by:	Jennifer McGervey EarthCon Consultants CA, Inc.	8/19/16
Project Manager:	Jeff Bennett, PG EarthCon Consultants CA, Inc.	8/19/16
Approved by:	J. Ryan Clarke EarthCon HASP Reviewer	08/20/2016

Brief Description of Amendment

Update field scope to include capping; updated dust action level;

Amendment Date

10/2/17

Update of EarthCon H&S personnel

10/2/17

Health and Safety Plan Consent Agreement

Because of the potentially hazardous nature of this site and activity occurring at the site, it is not possible to discover, evaluate, and provide protection for all possible hazards that may be encountered. Strict adherence to the health and safety guidelines set forth in this document will reduce, but may not eliminate, the potential for injury and illness at this site. Guidelines in this Plan were prepared specifically for this site and should not be used on any other site without prior evaluation by trained health and safety personnel.

Site workers must also review this HASP. The Site Safety Officer (SSO) must conduct a pre-work briefing prior to initiating this project. All sections of this HASP must be reviewed during this briefing and documented via **Appendix A**. Any worker not attending the initial meeting must be trained by the SSO on the information covered in the pre-work briefing meeting. *The SSO must hold tailgate meetings at the beginning of each work shift to discuss important safety and health issues concerning tasks to be performed on that day.* After reading the HASP and attending a pre-work briefing, workers must sign the following acknowledgment statement.

I have read, understand, and will abide by the information set forth in this HASP. I have also attended a pre-work briefing. I agree to perform my work in accordance with this HASP (See **Appendix F**).

Name (Print)		Signature	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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1.0 HASP SUMMARY INFORMATION

The first phase of this project is anticipated to include the collection of soil samples, using a direct push drill rig, at a total depth of 10 feet below ground surface (ft bgs) and installation of two groundwater monitoring wells. The second phase is to implement the CMS activities which includes removing impacted soil, collection of soil confirmation samples, and capping the identified exposed surfaces. This HASP will be updated or amended, as necessary, to reflect any changes that may be encountered. Personnel responsibilities are described in **Table 1** and personnel training requirements are provided in **Table 2**.

Project Name	Corrective Measures Study
Project Location	Clow Valve 1375 Magnolia Avenue Corona, California (see Figures 1 and 2)
Project Number	04.20150013.00
Project Manager	Jeff Bennett 714-500-5400 ext.5454
Start Date / End Date	September 2016-October 2016
Site Safety Officer(s)	Tim Eyres
Client Contact	Larry Bowers 256-388-0001
Supervisor	Jeff Bennett 714-500-5400 ext. 5454
Regional Health & Safety Coordinator	Hugh Walker, Jr. – 662-871-8753 (Cell)
Planned Activities	Monitoring well install & sampling; soil sampling, capping
Chemical Hazards	PCBs, Lead, Cadmium, Arsenic, Diesel, Gasoline
Initial PPE	Level D
Emergency Phone	911
Hospital Information	(951) 737-4343 Corona Regional Medical Center 800 S Main St, Corona, CA 92882

2.0 INTRODUCTION

This HASP serves the following purposes:

- Identifies and describes the potentially hazardous substances and working conditions that may be encountered during the field work;
- Specifies personal protective and monitoring equipment to be used during onsite activities; and
- Outlines measures to be implemented in the event of an emergency.

2.1 Site Location and Description

The Site is southwest corner of the intersection at 1375 Magnolia Avenue in Corona, California. **Figure 1** shows the site location. **Figure 2** provides a site layout for the facility. It is identified as Riverside County Assessor Parcel Number 107-030-022-3 and covers approximately 16 acres. Approximately 60% of the property is currently used for machining, product finishing and testing, and product storage. The remaining 40% includes asphalt-paved parking areas and unpaved areas. Unused foundry buildings, small offices and open areas are leased to other tenants.

2.2 Project Objectives

EarthCon will collect soil samples to assess the extent of soil contamination on-Site. The soil samples will be managed according to the workplan protocol.

EarthCon will provide oversight of advancement for well installation using a subcontracted drilling company. EarthCon will collect and manage water samples according to the workplan protocol.

EarthCon will provide oversight of the grading and asphalt cap placement associated with AOC-1 and AOC-5.

The ultimate objective is to conduct all activities in a safe and compliant manner.

2.3 Personnel Requirements and Responsibilities

Provisions of this HASP apply to all EarthCon personnel and subcontractors that will be participating in the above noted field activities. On-site personnel will be required to review the HASP prior to commencement of field activities and conduct all field activities in accordance with plan specifications. Other personnel on the site are expected to follow the provisions of the health and safety procedures outlined in this HASP as a minimum base standard but will retain full responsibility for the health and safety of their own employees or sub-subcontractors.

General safe work practices that must be implemented during work activities at this site are included in **Table 3**.

EarthCon considers each subcontractor to be an expert in all aspects of the work operations which they are tasked to provide, and each subcontractor is responsible for compliance with those regulatory and/or legal requirements which pertain to those services. While the EarthCon HASP will be the minimum H&S requirements for the work completed by EarthCon and its subcontractors, each subcontractor, in coordination with EarthCon's H&S personnel, is expected to perform its operations in accordance with its own H&S plans, policies and procedures unique to the subcontractor's work to ensure that hazards associated with the performance of the subcontractor's work activities are properly controlled. Copies of any required safety documentation for a subcontractor's work activities will be provided to EarthCon for review prior to the start of on-site activities. No review of any subcontractor plan or document by EarthCon will serve as an approval or ratification of such plan by or on behalf of EarthCon, and no such review will operate as any assumption of any duty or responsibility on the part of EarthCon (or any EarthCon employee or representative) for or as to any aspect of any subcontractor's own H&S responsibilities. Any comments or feedback from EarthCon to any subcontractor following any review by EarthCon of any subcontractor document or practice is provided solely for informational purposes and not for reliance.

In the event that the subcontractor's procedures/requirements conflict with requirements specified in this HASP, the more stringent guidance will be adopted after discussion and agreement between the subcontractor and EarthCon project H&S personnel. Hazards not listed in this HASP, but known to the subcontractor or known to be associated with the subcontractor's services, must be identified by the subcontractor and addressed to the EarthCon Project Manager prior to beginning work operations.

EarthCon personnel who have responsibility for the safe operations of this project include the Project Manager (PM), EarthCon Corporate Safety and Health Manager (CSHM), the Site Safety Officer (SSO) and the Project Field Staff. Responsibilities of each of the above referenced personnel as they relate to project safety and health are provided in **Table 1**.

2.4 Site Control

Site control procedures must be implemented **before** the start of site tasks to control worker exposures to hazardous substances. A Vicinity Map that shows the site location is included as **Figure 1**. A Site Layout Plan with proposed sampling locations is included as **Figure 2**. Changes may be made to the site map by the SSO, as needed, based on site conditions. The site map should be posted in the work area and/or field notebook. This site control program is designed to reduce the spread of hazardous substances from contaminated areas to clean areas, to identify and isolate contaminated areas of the site, to facilitate emergency evacuation and medical care, to prevent unauthorized entry to the site, and to deter vandalism and theft. The Site Safety Officer is responsible for evaluating site conditions and for verifying that the

site control program functions effectively. The site control program will be updated regularly to reflect current site conditions, work operations, and procedures.

2.4.1 Site Access

Access to the site shall be controlled using the following method(s):

- | | |
|--|--|
| <input type="checkbox"/> Security fence | <input checked="" type="checkbox"/> Temporary barricades and/or warning tape |
| <input type="checkbox"/> Sign in/Sign out log | <input type="checkbox"/> Guard |
| <input type="checkbox"/> Identification badges | <input type="checkbox"/> Other: Onsite Manager |

2.4.2 Work Zones

Restricted work zones may be established to limit the spread of hazardous substances (when applicable) by workers from potentially affected areas to non-affected areas. The exact location and extent of the work zones will be modified as necessary as site investigation information becomes available. Delineation of work zones is as follows:

- **Exclusion Zone:** The Exclusion Zone is the area where the potential for exposure to hazards and contact with hazardous materials could occur. The zone may be marked by caution tape. Personnel working within the Exclusion Zone will be expected to follow protective measures as prescribed by the SSO.
- **Contamination Reduction Zone:** The Contamination Reduction Zone is a transition area between the potentially affected areas/materials and assumed non-affected areas/materials. Decontamination of personnel and equipment, if necessary, shall be conducted in this area to reduce the probability of contamination transfer to a non-affected area. The Contamination Reduction Zone shall be situated upwind of the Exclusion Zone.
- **Support Zone:** The Support Zone is the area, outside the Exclusion and Contamination Reduction Zone, where administrative and other project support functions are performed. The Support Zone shall be situated upwind of the Contamination Reduction Zone and/or the Exclusion Zone.

See Figure 2A for the location of the work zones.

2.4.3 Communications

Typical on-site communications may be conducted through the use of:

- | | |
|--|---------------------------------------|
| <input checked="" type="checkbox"/> Verbal | |
| <input type="checkbox"/> Two-way radio | <input type="checkbox"/> Horn |
| <input checked="" type="checkbox"/> Cellular telephone | <input type="checkbox"/> Siren |
| <input checked="" type="checkbox"/> Hand signals | <input type="checkbox"/> Other: _____ |

Off-site communications may be conducted through the use of:

- Cellular telephone: Verify cell phone reception in all work areas prior to starting work.
- Site Phone: Location & No. _____
- Pay phone: Location & No. _____
- Other: _____

Cell Phone reception should be verified throughout the site prior to commencing work.

2.4.4 Visitors

Visitors to the Site shall be continually escorted in order to assure their safety. Visitors will not be allowed past the Support Zone (if such a zone is established at this Site) unless they read, understand, sign, and abide by the requirements outlined in this HASP.

2.5 Worker Training

Table 2 will be used to document on-site workers who have received the appropriate training according to the company Environmental, Health, and Safety (EH&S) Training Program. **Table 2** must be completed prior to initiation of field activities. Pre-work briefing and routine tailgate meetings will be conducted to facilitate on-site training. Subcontractors must provide information requested in **Appendix G** prior to starting to work.

2.6 Safety Meetings

Project personnel who will be involved with on-site field activities must be appropriately trained in accordance with 29 CFR Part 1910.120 “Hazardous Waste Operations and Emergency Response”. Before field work begins, the SSO will review the HASP with the field workers addressing the potential hazards associated with the proposed field activities. Components of the safety meeting will include, but will not be limited to, a review of the following:

- Location of sanitation facilities as seen on site plan.
- Potential chemical, operational and physical hazards present at the site.
- Personal protective equipment (PPE)/personal protection procedures.
- Hazardous materials handling procedures.
- Buddy system.
- Personal hygiene - general guidelines.
- Personal and equipment decontamination procedures.
- Emergency response procedures.
- Symptom awareness.
- Stop Work Authority

Periodic meetings with project personnel may be conducted by the SSO pending changes to the scope of work or modification to this HASP. To document the meetings, the SSO will complete

the Site Safety Meeting Minutes Form provided in **Appendix A**. Verification will be provided to the CHSM upon request.

2.7 Medical Monitoring Requirements

OSHA requires medical monitoring for personnel potentially exposed to chemical hazards at concentrations in excess of the PEL for more than 30 days per year and for personnel who must use respiratory protection for more than 30 days per year.

Will personnel working at this site be enrolled in a medical monitoring program? Yes No

Personnel who are diagnosed as having medical conditions which could directly or indirectly be aggravated by either exposure to chemical substances suspected of being present at the Site, or by the use of Personal Protective Equipment (PPE), will not be allowed to participate in field activities. In addition, personnel with injuries or illnesses involving open wounds may not be allowed on-site. Field personnel who develop an illness or injury during the project may be examined by a physician. A physician must determine if the employee is fit to return to work before they can return to field activities. In addition, the CHSM, SSO, or Site employees may request additional medical testing if a chemical exposure is suspected.

2.8 Hazard Communication Requirements

When chemicals are used on-site, EarthCon workers must adhere to the company's Hazard Communication Program (29 CFR §1910.1200). The following procedures must be followed for chemicals brought on-site (i.e., decontamination solution, sampling preservatives, etc.):

- Labels on incoming primary chemical containers must not be defaced (until after the container is empty, decontaminated and ready for disposal).
- Chemical containers must be stored in appropriate storage cabinets.
- Secondary containers and storage cabinets must be correctly and clearly labeled using the Hazardous Materials Identification System (HMIS).
- Incompatible chemicals must not be stored together.
- Workers must receive training on the hazards indicated in **Table 4**.
- Containers must be secured closed unless adding to or removing something from the container.
- Safety Data Sheets for the chemicals should be recent and are included in **Appendix B**.; they should be made available to workers upon request and applicable hazards covered during safety meetings.
- Workers must receive training on the hazards of the chemicals indicted in **Appendix C**.
- Include a safety training sign off sheet to document this training and provide a copy to the CHSM.
- Training on this information should be documented in **Appendix F**.

3.0 GENERAL PERFORMANCE REQUIREMENTS

General safe work practices that must be implemented during work activities at this site are included in **Table 3**.

3.1 Performance Requirements

- Workers are expected to show up alert and ready to work. No sleeping is allowed on the job.
- Any unsafe equipment, condition or work practice and injuries, no matter how slight, must be reported to the SSO immediately.
- Procedures for the proper set up and control of the worksite task area should be planned and implemented prior to starting individual tasks.
- Field personnel must have ready access to a telephone and a vehicle in case of emergency.
- Field personnel working in the Exclusion Zone are to work with another person at all times. The subcontractor's representative can serve as the second person while the work is being conducted in the field.

3.2 Hygiene Requirements

- Long hair will be secured away from the face so it does not interfere with any activities.
- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated as being potentially affected by site related chemicals.
- Hands and face must be thoroughly washed upon leaving the work area, and before eating, drinking, or other non-project activities.
- Personnel leaving potentially contaminated areas will shower (including washing hair) and change to clean clothing as soon as possible after leaving the site.
- Kneeling, sitting, leaning, or general contact with potentially affected surfaces or with surfaces suspected of being potentially affected by hazardous materials (i.e., puddles, mud, leachate, etc.) should be avoided.
- Medicine and alcohol can potentiate the effects of exposure to toxic chemicals. Neither should be taken by personnel if the likelihood of risk exists. Ingestion of alcohol during and immediately prior to field activities is prohibited.
- Sanitation facilities are provided on site. Potable water and restroom facilities are available and in accordance with 8 CCR 5192 for all employees and visitors.

4.0 HAZARD EVALUATION

A preliminary hazard evaluation was performed to identify existing site conditions and is documented in **Table 4**. The preliminary hazard evaluation addressed the following, where applicable:

- Identification of the suspected hazardous materials/wastes on-site;
- Toxicological aspects of the suspected hazardous materials on-site;
- Suspected chemical/elemental concentrations within the various media on-site;
- Inherent site hazards;
- Operational hazards; and
- Climate extremes.

Environmental site personnel have indicated fire, inhalation and skin absorption to pose a hazard on site. Reactivity including ionizing radiation is not of concern for the site due to past investigations and the operational history. All scrap steel and raw steel entering the site has been screened by radiation detection devices. Further information is documented in **Table 4**.

4.1 Suspected Chemical/Elemental Hazards

To select those contaminants that may cause health and safety concerns, henceforth referred to as potential Contaminants of Concern (COCs), a review of the site remediation and sampling history was performed. Based on this review, potential COCs were selected and are listed in **Table 5**. Chemical information for each of the potential COCs are provided in the NIOSH Pocket Guide pages located in **Appendix C**.

Information from the NIOSH Pocket Guide (e.g., flash point, water reactive, etc.) has been used in performing the chemical hazard analysis in **Table 5** (e.g., fire, inhalation, reactivity, and skin absorption hazards). If, based on the hazard analysis, chemical hazards exist, hazard mitigators must be implemented (**Appendix D**). In addition, air monitoring and personal protective equipment must also be used to evaluate airborne concentrations and protect workers.

After review of the relevant background information and data, if there is a potential for dermal and/or respiratory exposure to the materials or contaminants of concern, personnel shall perform the monitoring requirements summarized in **Section 5.2** and execute actions as appropriate. If action levels are exceeded, work shall be suspended until on-site conditions can be re-assessed and this HASP modified.

4.2 Operational/Physical Hazards/Biological Hazards

Potential operational/physical associated with tasks to be performed and the site have been analyzed in **Table 4**. If, based on the hazard analysis, these hazards exist; the hazard mitigators described in **Appendix D** must be implemented.

- **Utility (e.g., Electrical) hazards:** Utility hazards include buried cables, which pose a danger of shock or electrocution if workers or equipment contact or sever them during site operations. Onsite personnel are advised to pay special attention to the presence of utility hazards. Observe as built plans (if available) for the presence of underground hazards and advance the borings cautiously. A subsurface survey shall be conducted at each of the suspect locations, if necessary.

Lockout/Tag out procedures, in accordance with the EarthCon Lockout/Tag out Program, will be followed when working in the vicinity of electrical equipment. Electrical equipment will be considered energized unless tested and determined otherwise. Energized parts will be insulated or guarded from personal contact. Extension cords used with electrical tools will be the 3-wire type and connected to a ground fault circuit interrupter (GFCI). Wooden or fiberglass ladders will be used. Metal ladders will not be used in the work area.

- **Mechanical hazards:** Mechanical hazards include being struck by heavy equipment and being injured by excavation cave-ins. Onsite personnel are advised to stand at least 15 feet clear of heavy equipment and excavations, and wear appropriate protective equipment, including steel-toe boots and hard hats during the field activities. Fall, slip, and/or trip hazards exist when working with equipment and tools. Field personnel will observe walking surfaces in the work area to prevent tripping on equipment/tools placed on the ground. Good housekeeping will also be practiced. All walking surfaces with a drop of more than six feet will have fall protection devices. Fall protection devices may include adequate delineation of the excavation and trenches, guardrails, or climbing devices such as a harness and lanyard.

- **Noise Hazards:** Noise hazards may exist when working around heavy equipment. Loud noises interfere with communication and also lead to temporary and/or permanent hearing loss. Noise hazards may exist wherever heavy equipment such as loaders and any operating machinery, produce noise levels at or above the Action Level of 85 dBA for 8-hr Time Weighted Average (TWA). Noise in excess of 85 dBA may produce the following effects:
 1. Distraction, annoyance, or sudden surprise
 2. Inability to effectively communicate with co-workers
 3. Physical damage expressed initially as a Temporary Threshold Shift (TTS) and then, as a Permanent Threshold Shift (PTS), or immediately as a Permanent Threshold Shift if the impact noise is sufficient enough (usually greater than 100 dBA)

Appropriate hearing protection must be utilized in areas of unacceptable noise levels.

If, based on the hazard analysis (**Table 4**), biological hazards exist associated with tasks to be performed and site location (e.g., allergic reactions to poisonous plants or insects indigenous to the area, etc.); hazard mitigators (**Appendix D**) must be implemented.

5.0 PERSONAL PROTECTION

5.1 Personal Protective Equipment (PPE)

The levels of personal protection required for each task are provided in **Appendix E**. This PPE is based on the hazards identified in **Section 4**. Required equipment and types of protective clothing materials are listed, as well as an indication of the initial level of protection.

Is there potential for a respirator to be donned during fieldwork? Yes No

It is not anticipated that the use of respirators will be needed, however during the drilling work and sampling the area will be monitored via dust particulate monitor (MiniRam or equivalent). If there is an indication that a respirator is required work will be halted until tasks have been re-evaluated and the HASP has been updated as needed.

The general use of PPE is acceptable when engineering controls cannot adequately eliminate the hazard. The use of PPE is intended to provide protection for on-site personnel from chemical, physical, and operational hazards that cannot be controlled through other safety procedures. Initially, Level D Protection will be employed by on-site personnel and will include varying levels of eye, head, body, hand, foot, and hearing protection.

Respiratory protection will not be required. However, if respirators are worn, workers must adhere to the company's Respiratory Protection Program (29 CFR §1910.134). **Table 2** should be used to provide a record of the site workers' last fit test. Beards (i.e., facial hair interfering with the respirator seal) are not allowed.

Acceptable PPE are further described below.

- Eye Protection: Eye protection will include the use of chemical splash goggles and/or face shields and impact resistant safety glasses with side shield protection that meet the current ANSI standard Z87.1.
- Head Protection: Non-metallic hard hats meeting the current ANSI standard Z89.1 will be worn by on-site personnel as required during field activities.
- Body Protection: Body protection will include the use of long sleeved shirt and pants work clothes.
- Hand Protection: Hand protection will include the use of nitrile gloves when hand contact with affected materials (e.g., groundwater and soil) may occur. Otherwise use work gloves of leather or other appropriate material.
- Foot Protection: Foot protection will include the use of impact resistant boots meeting the current ANSI standard Z41.1.

These levels shall only be downgraded upon approval by either the CSHM or SSO. Project personnel are not permitted to deviate from the specified levels of protection without prior approval of the SSO.

5.2 Personal Air Monitoring

Corrective measure activities may have the potential to generate dust; therefore, dust monitoring will be conducted on-Site. Airborne particulate concentrations will be measured with a portable particulate monitor (MiniRam or equivalent) to ensure compliance with the action levels (stop work level) and Cal OSHA Permissible Exposure Limits (PELs). The PELs for COCs potentially present on-Site, along with stop work levels are provided in Table 5.

According to calculations using the site specific maximum concentrations documented in **Table 5** and the OSHA Permissible Exposure Limit (PEL) for total dust, the only constituent of concern is lead. Total dust must measure below 6.8 mg per cubic meter (mg/m^3) to remain below the PEL for lead. However, at the direction of the DTSC the action level for total dust is $0.05 \text{ mg}/\text{m}^3$. A MiniRam will be on site at all times monitoring dust concentrations. The MiniRam is gravimetrically calibrated in mg/m^3 using the standard SAE Fine (ISO fine) test dust. A zeroing kit will be present to accomplish zeroing in particle free air when on-site. In the case where dust levels measure over $0.05 \text{ mg}/\text{m}^3$, work will be suspended and on-site conditions will be re-assessed.

5.3 Vehicle Safety

Vehicle safety requires the following:

- Vehicles are to be operated in a safe manner and in compliance with statutory traffic regulations and ordinances.
- Operators are to practice defensive driving and drive in a courteous manner.
- Operators are required to have a valid driver's license and liability insurance (per local/state laws).
- Seat belts are to be worn by the driver and passengers.
- No persons are allowed to ride in the back of any trucks or vans.
- Vehicles are to be driven in conformance with local speed limits.
- Personnel who are impaired by fatigue, illness, alcohol, illegal or prescription drugs, or who are otherwise physically unfit, are not allowed to drive.
- Personnel are to avoid using cellular phones or engaging in other distractions while driving.
- Vehicles should be maintained in a safe and clean condition.
- Field vehicles should be equipped with the following items; first-aid kit, fire extinguisher, spares tire and jack.
- Motor vehicle accidents shall be reported to the responsible law enforcement agency (when appropriate), the EarthCon CHSM, the EarthCon HR Director, the SSO and the EarthCon PM.
- Daily and monthly check lists to verify safe operations have been generated and should be utilized prior to operating a vehicle.
- If the site has specific driving rules, these should be reviewed and adhered to.

5.4 Illumination

Work will be completed during daylight hours only. This will ensure all work is done in accordance with 8 CCR 5192(m) illumination requirements.

6.0 DECONTAMINATION

The following decontamination (cleansing) procedures for the sampling equipment and PPE have been developed with the intent of reducing the potential for the transfer of hazardous chemicals.

6.1 Sampling Equipment

To reduce the potential for the distribution of contaminants or cross contamination of samples, the following procedures will be used. Decontamination of the sampling equipment will include washing the equipment in a detergent solution (Liqui-nox and water), rinse with potable water, rinse with organic-free/distilled water, and allow to air dry. Disposable equipment will be used when practical to eliminate the need for on-site decontamination.

6.2 Personnel and PPE

During this project the goal will be to use disposal PPE (nitrile gloves), therefore no PPE decontamination will be required. If this cannot be accomplished, PPE must be decontaminated (cleaned) per 29 CFR §1910.120(k). In an emergency, the primary concern is *to prevent the loss of life or severe injury to site personnel*. If *immediate medical treatment* is required to save a life, decontamination should be delayed until the victim is stabilized. If decontamination can be performed without interfering with essential life saving measures or first-aid, or if a worker has been contaminated with an extremely toxic or corrosive material that could cause severe injury or loss of life, decontamination must be performed in coordination with or prior to initial medical treatment at the scene.

Decontamination of PPE (e.g., gloves) shall be accomplished by passing personnel through appropriate stages of contamination reduction and removing contaminated clothing and equipment in decreasing order of the degree of potential contamination. Personnel who have entered areas suspected of containing hazardous materials (i.e., the Exclusion Zone) will be subjected to decontamination. The personnel decontamination corridor may be comprised of the following procedural stages. These stages/procedures are listed sequentially below.

Stage No. 1: Segregated Equipment Drop – Personnel will brush off loose dirt and wash off remaining soil, sediment, and dirt from clothes and shoes upon completion of sampling and field work. Equipment and consumables that require either disposal or special handling (e.g., special and/or equipment decontamination) shall remain in this area and be decontaminated, if appropriate, or disposed of with the excavated materials or other potentially contaminated materials.

Stage No. 2: PPE Decontamination - PPE that has been potentially contaminated will be washed with a TSP and water mixture followed by a water rinse.

Stage No. 3: General Field Wash - Personnel shall wash and rinse face and hands with soap and water before leaving the site and/or eating. If a change of clothing is necessary, it shall be done at this time.

6.3 Decontamination Fluids and Investigation-Derived Waste Disposal

Decontamination water and drill cuttings will be placed in appropriate containers. Disposal methods will be determined after characterizations have been completed. Solid waste generated during decontamination and field activities (i.e., paper towels, plastic tarps, used PPE) will be removed from the Site and disposed as refuse/trash.

6.4 Vehicles

Typically, vehicles will not be allowed inside the exclusion zone. If vehicles are required in the exclusion zone (e.g., drill rigs) the following procedures will be used. Personnel will wash or remove boots and change to dry clothing prior to vehicle entry. Non-disposable equipment will be washed or bagged before placement into field vehicles. Drill rigs will be decontaminated with detergent solution and rinsed with water before leaving the exclusion zone.

7.0 EMERGENCY PROCEDURES

A list of Emergency Response contacts and telephone numbers for applicable local off-site emergency responders is provided in **Table 6**. The following emergency response equipment is required for this project:

- Fire Extinguisher(s): Type A Type B Type C Type ABC
 Air Monitoring: PID Air Sampling Pumps CG/O2 meter
 MiniRam H2S Meter Radiation Meter
 Draeger Pump w/ Sample Tubes Other:
- Eyewash (Note: portable eyewash bottle)
 SCBA
 First Aid Kit
 Shower (Note: for acids and caustics)
 Personal Flotation Device(s)
 Windsock
 Stop Watch &Thermoscan for Measuring Heart Rate and Heat Stress
 Global Positioning System
 Other:

As a minimum, the project shall have the following equipment available during field activities:

- A first aid kit (mandatory, including adhesive Band-Aids, gauze, tape, gloves, CPR shield, triangle bandage) shall be available in the Support Zone at all times.

Check additional items required for the site.

- Emergency Blanket Sunscreen (as needed)
 Insect Repellent (as needed) Other: ointment for poison plants and insect bites_____

- Copious amounts of cool potable water shall be readily available for both drinking purposes and for personal hygiene purposes (e.g., washing, rinsing, and cooling of face and body, etc.).
- Emergency references (e.g., nearest phone, emergency phone numbers and services, etc.) shall accompany the first aid kit.
- Communication equipment such as a cellular phone will be accessible in case of an emergency.
- A vehicle shall be easily accessible for transport/emergency.

The emergency response communication system for the site is:

- Verbal
- Two-way radio
- Hand signals: Hand gripping throat =“Out of Air, Can’t Breathe”
 Grip partner’s wrist or both hands around waist =“Leave area immediately”
 Hands on top of head =“Need assistance”
 Thumps up =“OK; I am all right; I understand”
 Thumps down =“No; negative”
- Horn
- Siren
- Other: Cellular Phone

If an on-site emergency develops, the procedures outlined in **Table 7** shall be followed immediately.

7.1 Natural Disasters

In the event of emergency conditions associated with natural disasters, such as severe weather, site personnel will remain calm, turn off equipment and ignition sources, and move away from buildings, cranes, and overhead utilities. Following an emergency, personnel will proceed to a designated meeting place. The SSO will take a head count to ensure that all personnel are present. Crews must remain together until accounted for. The SSO will assess any injuries and the need for emergency assistance.

7.2 Workplace Violence

If any employee or visitor is confronted by a potentially hostile person, he/she will remain calm and refrain from further aggravating the individual. Site personnel should contact the SSO. Protocol established by the site will be followed or local police will be contacted for assistance when needed.

8.0 SHIPMENT OF RESTRICTED ARTICLES

Federal laws and international guidelines place restrictions on what materials may be shipped by passenger and cargo aircraft. In the course of field activities, the following items may be shipped to and from the site in the following manner.

Item	Hazardous Constituent	Quantity	Packaging	How Shipped
Soil samples	*NA	5	8 oz. glass jar with Teflon lid. Laboratory provided	EarthCon Personnel

Item	Hazardous Constituent	Quantity	Packaging	How Shipped
Groundwater Samples	HCL & HNO3 – lab preservatives	3	VOAs and HDPE laboratory provided containers	EarthCon Personnel

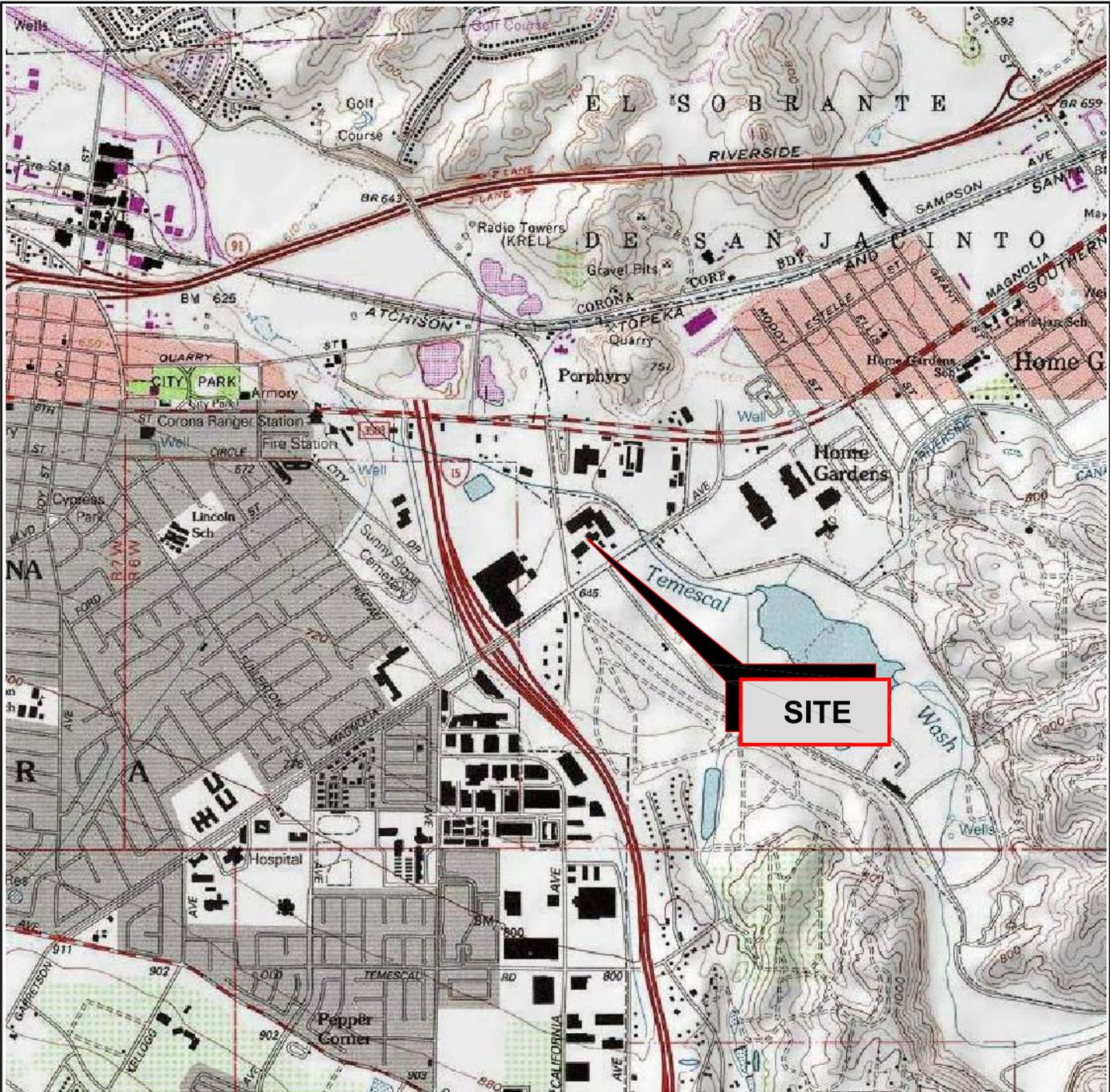
*soil samples do not have preservatives

9.0 SPILL CONTAINMENT

An evaluation was conducted to determine the potential for hazardous substance spills at this site. That evaluation indicates that there is no potential for a hazardous substance spill of a sufficient quantity to require containment planning, equipment, and procedures. For that reason, no spill containment program is implemented at this site. Employee training on how to respond and take protective measures during incidental releases of hazardous substances are provided consistent with the Hazard Communication Standard, 29 CFR 1910.12

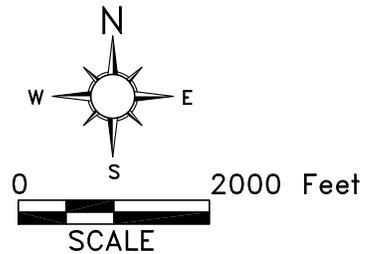
Incidental spills are different from emergency releases. Incidental spills can safely be absorbed, neutralized, or otherwise controlled by EarthCon employees or contractors with the appropriate training.

Figure 1
Vicinity Map



FROM: U.S. GEOLOGICAL SURVEY, 1997
 QUADRANGLE: CORONA SOUTH
 COUNTY: RIVERSIDE
 SERIES: 7.5-MINUTE QUAD

NOTE: ALL BOUNDARIES AND LOCATIONS ARE APPROXIMATE



CLOW VALVE
 1375 MAGNOLIA AVENUE
 CORONA, CA 92879



VICINITY MAP

EARTHCON CONSULTANTS CA, INC

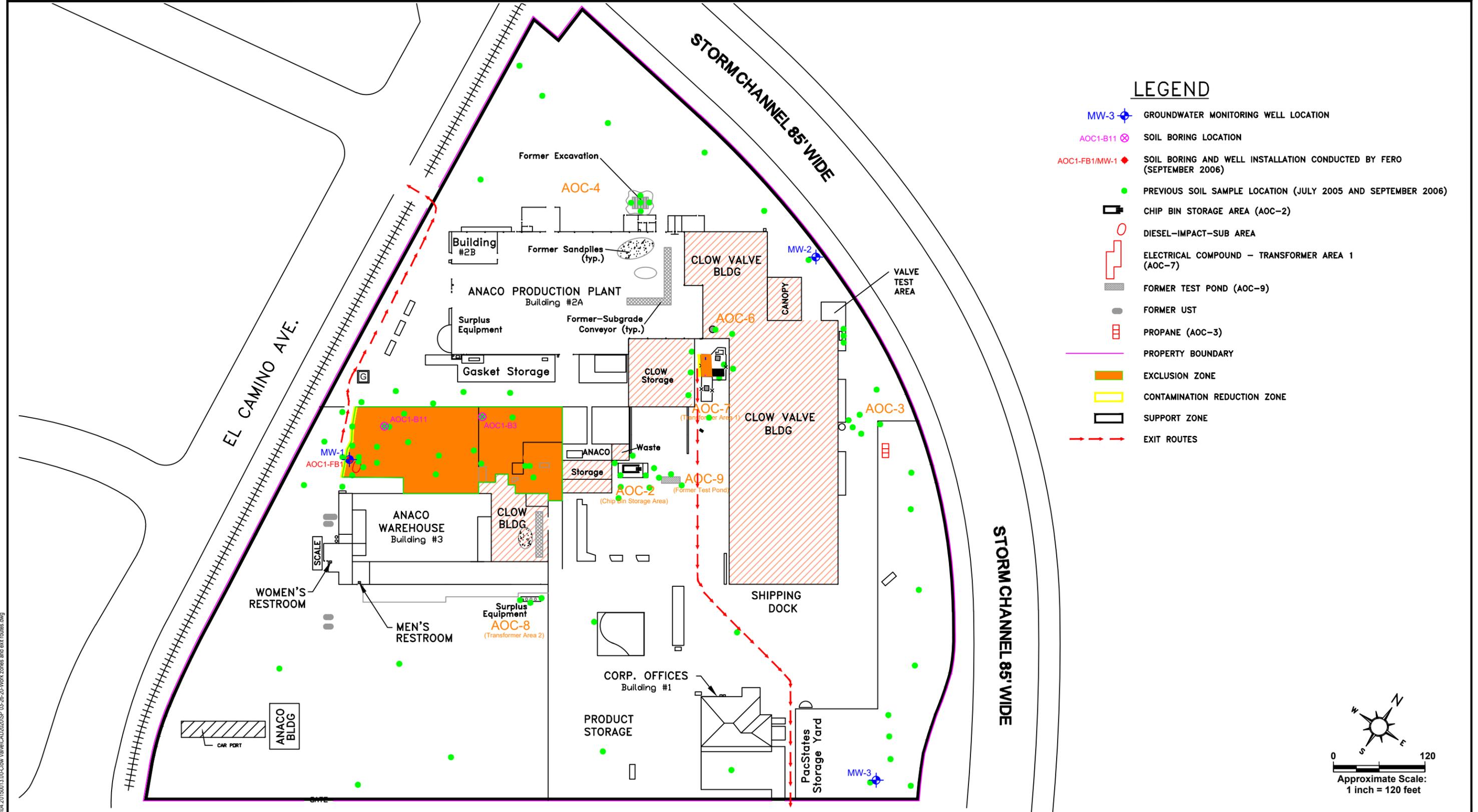
1914 W. ORANGEWOOD AVENUE, SUITE 102, ORANGE, CA 92868

PROJECT NO. 04.20150013.00

DRAWN: DCN	CHECKED: JB	DATE: 12/30/15	FIGURE: 1
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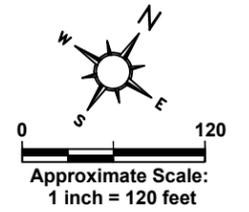
Figure 2
Site Plan

Figure 2A
Site Plan with Work Zones and Exit Routes



LEGEND

- MW-3 GROUNDWATER MONITORING WELL LOCATION
- AOC1-B11 SOIL BORING LOCATION
- AOC1-FB1/MW-1 SOIL BORING AND WELL INSTALLATION CONDUCTED BY FERRO (SEPTEMBER 2006)
- PREVIOUS SOIL SAMPLE LOCATION (JULY 2005 AND SEPTEMBER 2006)
- CHIP BIN STORAGE AREA (AOC-2)
- DIESEL-IMPACT-SUB AREA
- ELECTRICAL COMPOUND - TRANSFORMER AREA 1 (AOC-7)
- FORMER TEST POND (AOC-9)
- FORMER UST
- PROPANE (AOC-3)
- PROPERTY BOUNDARY
- EXCLUSION ZONE
- CONTAMINATION REDUCTION ZONE
- SUPPORT ZONE
- EXIT ROUTES



MAGNOLIA AVE

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879
PROJECT NO. 04.20150013.00

EARTHCON[®]
EARTHCON CONSULTANTS CA, INC
1914 W. ORANGEWOOD AVE., SUITE 102, ORANGE, CA 92868

SITE PLAN WITH WORK ZONES
AND EXIT ROUTES

DRAWN: DCN	CHECKED: JB	DATE: 03/26/20	FIGURE: 2A
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FILENAME: S:\Comment\OrangeCAD\Projects\04-20150013.00-Clow ValveCAD\2020\SP_03-26-20-Work zones and exit routes.dwg

Figure 3
Hospital Location Map

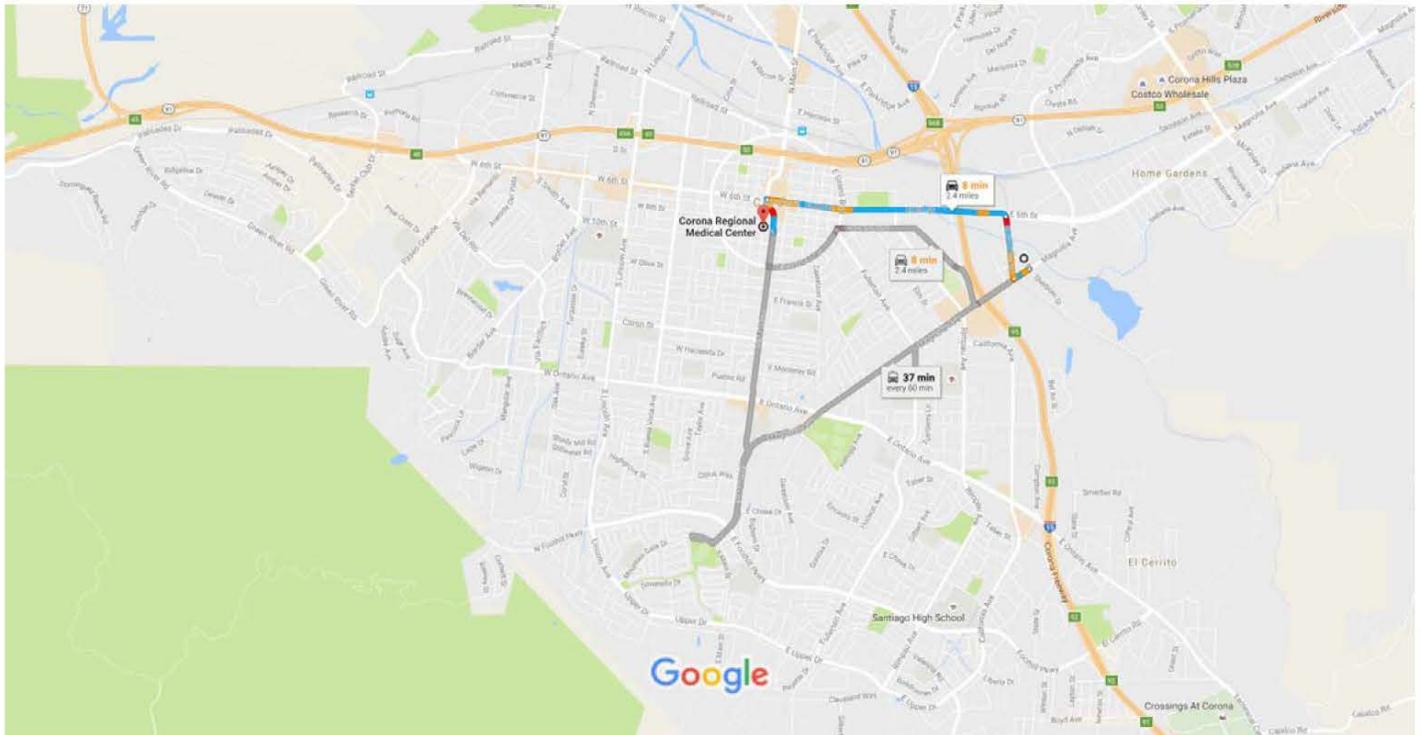
8/19/2016

1375 Magnolia Avenue, Corona, CA 92879 to Corona Regional Medical Center - Google Maps



1375 Magnolia Avenue, Corona, CA 92879 to Corona Regional Medical Center

Drive 2.4 miles, 8 min



Map data ©2016 Google 2000 ft

1375 Magnolia Avenue

Corona, CA 92879

Head southwest on Magnolia Ave toward Sherborn St

0.1 mi

Turn right onto El Camino Ave

0.4 mi

Turn left onto E 6th St

1.6 mi

Turn left onto S Main St

0.2 mi

Corona Regional Medical Center

800 South Main Street, Corona, CA 92882

Table 1

Key Personnel and Health & Safety Responsibilities

Project Manager (PM) Jeff Bennett	Regional H&S Coordinator Hugh Walker	Site Safety Officer (SSO) Lindsey Langer/Jenn McGervey	Project Field Staff Lindsey Langer/Jenn McGervey
<ul style="list-style-type: none"> • Coordinate, approve, implement and manage this HASP and amendments, if any. • Incorporate H&S planning, implementation, and supplies (PPE, decontamination materials) into project plans and budget. • Select and assign responsibility to the SSO to implement HASP. • Monitor the Field Logbooks for health and safety work practices employed. • Coordinate with SSO so that emergency response procedures are implemented, if needed. • Inform CSHM of HASP violations, if any, and verify corrective actions are implemented. • Ensure personnel receive this plan, are aware of its provisions, are aware of the potential hazards associated with site operations, are instructed in safe work practices, are familiar with emergency response procedures and document this information • Coordinate with Client and SSO. • In the event of an incident or other emergency complete & submit appropriate forms and make proper notifications. 	<ul style="list-style-type: none"> • Review and approve HASP; approve any associated amendments. • Evaluate documentation presented of site hazards for HASP preparation. Maintain a final copy of the completed HASP. • Perform periodic audits of documentation of project activities to evaluate general compliance with policies, procedures, directives and guidelines presented in this HASP. • Assist with the implementation of the Corporate Health and Safety Program. • Provide environmental, health and industrial hygiene consultation as needed. • In the event of an emergency, if required set up an incident investigation team and notify applicable outside agencies. 	<ul style="list-style-type: none"> • Be present on-site, as appropriate, with the authority to implement HASP and EarthCon H&S protocols. • Confirm that site personnel meet the training and medical requirements. • Verify that monitoring equipment and personal protective equipment is operating correctly according to manufacturer's instructions and such equipment is utilized by on site personnel. Calibrate or verify calibration of monitoring equipment and record results. • Verify that decontamination procedures are being implemented and Site Control Plan is in place. • Provide and document pre-work briefing and daily tailgate safety meetings, monitor activities for safe work practices and HASP compliance. • Perform routine H&S inspections. Document meetings and inspections. Provide copies to CHSM as requested. • Report to the Project Manager deviations from the anticipated conditions, and authorize the cessation of work if necessary. • Notify the PM and CSHM in the event an emergency occurs, and implement site emergency response and follow-up procedures, provide First Aid, as needed. • Work with PM to verify appropriate notifications and forms are completed for any incident or near miss. • Secure the scene after an emergency until given notification to release the scene by the CHSM. 	<ul style="list-style-type: none"> • Provide verification of required health and safety training and medical surveillance prior to arriving at the site. • Notify the SSO of any special medical conditions (e.g., allergies). • Review, be familiar with and abide by the HASP. • Attend pre-work briefings and daily tailgate safety meetings. • Comply with requests of PM, SSO, and HASP. • Perform work using safe techniques; be responsible for their personal safety. • Immediately report any accidents and/or unsafe conditions to the SSO.

Table 2

Training / Medical Surveillance / Respirator Fit Test Records

<i>Name</i>	<i>EHS Category</i>	<i>Initial 40-Hour</i>	<i>Annual 8-Hour Refresher</i>	<i>8-Hour Supervisor (if applicable)</i>	<i>CPR/ First Aid¹ (initial or refresher)</i>	<i>Medical Surveillance² (if applicable)</i>	<i>Annual Respirator Fit Test³ (if applicable)</i>	<i>Other:⁴</i>
		<i>Date</i>	<i>Date</i>	<i>Date</i>	<i>Date</i>	<i>Date</i>	<i>Date</i>	<i>Date</i>
Jeff Bennett	I	1990	1/2017	6/1990	1/2016	N/A	N/A	---
Jenn McGervey	I	8/2015	1/2017		1/2016	NA	NA	---
Lindsey Langer	I	8/2019						

Footnotes:

- ¹ CPR Refresher: every year; First Aid Refresher: every three years.
- ² Annual Medical Surveillance for EHS Category I.
- ³ For EHS Categories I & II only.
- ⁴ Could include task-specific training, project-specific training, or project-specific medical surveillance.

Table 3

General Safe Work Practices

- Report to work alert and ready to perform assigned duties; no sleeping is allowed at the jobsite.
- Immediately report any unsafe acts, incidents, accidents, or near misses. Utilize Stop Work Authority if needed.
- Minimize contact with excavated or contaminated materials. Do not place equipment on the ground. Do not sit or kneel on potentially contaminated surfaces.
- Smoking, eating, or drinking after entering the work zone and before decontamination is prohibited. Use of illegal drugs and alcohol are prohibited. Workers taking prescribed medication that may cause drowsiness should not be operating heavy equipment, and should be prohibited from performing tasks where Level C, B, or A personal protective equipment is required.
- Practice good housekeeping. Keep everything orderly and out of potentially harmful situations.
- Use of contact lenses on-site shall only be allowed when dictated by working conditions.
- The following conditions must be observed when operating a motor vehicle.
 - Wearing of seat belts is mandatory
 - During periods of rain, fog, or other adverse weather conditions, the use of headlights is mandatory
 - A backup warning system or use of vehicle horn is mandatory when the vehicle is engaged in a backward motion
 - Posted traffic signs and directions from flagmen must be observed
 - Equipment and/or samples transported in vehicles must be secured from movement
 - The use of contractor acquired vehicles by non-contractor personnel is prohibited
 - Daily inspection sheets should be completed by driver and kept with equipment for the duration of the project.
- In an unknown situation, always assume the worst conditions.
- Be observant of your immediate surroundings and the surroundings of others. It is a team effort to notice and warn of impending dangerous situations. Withdrawal from a hazardous situation to reassess procedures is the preferred course of action.
- Conflicting situations may arise concerning safety requirements and working conditions and must be addressed and resolved rapidly by the SSO and PM to relieve any motivations or pressures to circumvent established safety policies.
- Unauthorized breaches of specified safety protocol must not be allowed. Workers unwilling or unable to comply with the established procedures must be removed from the site immediately.

Table 4

Hazard Analysis

<i>Tasks</i>	
① Capping	⑤
② Soil Sampling	⑥
③ Well Installation	⑦
④ GW Sampling	⑧

①	②	③	④	⑤	⑥		
---	---	---	---	---	---	--	--

<i>I. Chemical Hazards</i>							
Fire	X	X	X	X			
Inhalation	X	X	X	X			
Reactivity							
Skin absorption	X	X	X	X			
<i>II. Physical Hazards</i>							
Cold Stress	X	X	X	X			
Compressed Gas Cylinder							
Drowning							
Drum Handling	X	X	X	X			
Electrocution	X	X	X	X			
Excavation/Trenching			X				
Eye Injury	X	X	X	X			
Hand/Foot Injury	X	X	X	X			
Heat Stress	X	X	X	X			
Heavy Equipment	X		X				
Lifting Heavy Loads	X		X				
Noise	X		X				
Portable Power/Hand Tool	X	X	X	X			
Radiation Exposure							
Slipping/Tripping/Falling	X	X	X	X			
<i>III. Biological Hazards</i>							
Poisonous Plants							
Insect/Vermin/Snake Bites							
Medical Waste							

Instructions: For each task, place an "X" in the blank corresponding to associated hazards.

Table 5
Potential Contaminants of Concern

<i>Contaminant</i>	<i>IP(eV)</i>	<i>REL (ppm) or PEL (mg/m3)</i>	<i>IDLH (mg/m3)</i>	<i>LEL/UEL %</i>	<i>Flash Point (°F)</i>	<i>Routes of Exposure</i>	<i>Hazards</i>	<i>Medium¹</i>	<i>Maximum Concentration²</i>
Total Dust	--	0.05	--	--	--	--	--	soil/dust	--
PCBs	N/A	PEL – 1.0 TWA	5	N/A	N/A	Skin, Inhalation, Ingestion	C	soil	1,400 mg/kg
Lead	N/A	PEL – 0.05 TWA	100	N/A	N/A	Skin, Inhalation, Ingestion	C	soil	7,360 mg/kg
Cadmium	N/A	PEL - 0.005 TWA	9	N/A	N/A	Skin, Inhalation, Ingestion	C,T	soil	43.9 mg/kg
Arsenic	N/A	PEL - 0.01 TWA	5	N/A	N/A	Skin, Inhalation, Ingestion	C,T	soil	52.90 mg/kg
Diesel	--	REL – 100TWA	--	0.6/6.5	125.6	Skin, Inhalation, Ingestion	F,C,Co	soil	9,300 mg/kg
Gasoline	--	None cited/300	--	1.4/7.6	-45	Skin, Inhalation, Ingestion	F, C, Co	soil	1,300 mg/kg

-- - none established

IDLH - immediately dangerous to life and health*R* - reactive*C* - carcinogen*O-Oxidizer**IP(eV)* - ionization potential*PEL* - permissible exposure level*SC* - suspected carcinogen *Co* - corrosive*E* - explosive*STEL* - short term exposure level*F* - flammable*NA* - not applicable*P* - poison*V* - varies depending on compound mixture

ND – Not determined

Footnotes:¹ Indicate type of medium (i.e. soil, water, sludge, etc.).² Indicate the maximum concentration detected for the contaminant

Table 6**Emergency Response Contacts**

<i>Name</i>	<i>Telephone Numbers</i>		<i>Date of Pre-Emergency Notification</i>
	<i>Office</i>	<i>Mobile</i>	
Fire Department	911	NA	NA
Hospital – Corona Regional Medical Center	911 or (951) 737-4343	NA	NA
Police Department	911	NA	NA
Site Safety Officer – Lindsey Langer	--	562-322-7934	NA
Project Manager – Jeff Bennett	714-500-5400 ext 5454	714-743-0482	NA
Regional Manager – Larry Lew	281-240-5200 X 2761	713-829-3215	NA
Corp. HR Manager – Glenda Croft	770-973-2100 x2870	NA	NA
Regional Health & Safety Coordinator – Julia Wlson	281-240-5200 X 2705	551-486-4382	NA

NA – Not applicable in general or for the level of hazard at this Site.

WRITTEN DIRECTIONS TO HOSPITAL: (See Figure 3).

1375 Magnolia Avenue

Corona, CA 92879

Head southwest on Magnolia Ave toward Sherborn St

0.1 mi

Turn right onto El Camino Ave

0.4 mi

Turn left onto E 6th St

1.6 mi

Turn left onto S Main St

0.2 mi

Corona Regional Medical Center

800 South Main Street, Corona, CA 92882

Table 7**Emergency Response Procedures**

- This plan must be discussed with verbal training for onsite EarthCon employees and subcontractors
- This training should be documented and a copy provided to the CHSM.
- The SSO (or alternate) should be immediately notified via the on-site communication system.
- If applicable, the SSO must notify off-site emergency responders (i.e., fire department, hospital, police department, etc.) and must inform the response team as to the nature and location of the emergency on site.
- If applicable, the SSO evacuates the site. Site workers should move to their respective refuge stations using the evacuation routes provided on the Site Map. SSO must account for all workers associated with the project.
- The SSO notifies the PM, Principal, and the CHSM of the emergency. If an EarthCon employee is injured, the SSO must contact the worker's Regional Manager/Branch Office Manager immediately. If the Regional Manager/Branch Office Manager cannot be contacted, then the Corporate Human Resources Department must be notified.
- For small fires, flames should be extinguished using the fire extinguisher. Large fires should be handled by the local fire department.
- In an unknown situation or if responding to toxic gas emergencies, appropriate PPE, including SCBAs, should be donned.
- If chemicals are accidentally spilled or splashed into eyes or on skin, use eyewash and/or shower.
- Before continuing site operations after an emergency involving toxic gas, the appropriate responder will don a SCBA and utilize appropriate air monitoring equipment to verify that the site is safe.
- An injured worker must be decontaminated appropriately.
- If a worker is injured, first aid will be administered by workers certified in first aid.
- If necessary, the SSO will secure the scene after the response. The scene should not be released until notification from the CHSM.
- After the response, the SSO and /or PM must complete and submit the appropriate incident reports.
- The PM or SSO should secure written /signed witness statements as appropriate, take pictures, etc. immediately and before the end of the shift.
- If an investigation is required, the CHSM and Safety Team will set up a team to start the investigation with input from the DL.
- The CHSM will notify outside agencies as appropriate.

Appendix A

Site Safety Meeting Minutes

Site Name: _____ Contract No. _____

Meeting Location _____

Meeting Date _____ Time _____ Conducted By _____

_____ Pre-Fieldwork Orientation _____ Weekly Site Meeting _____ Other

Subjects Discussed:

Safety Officer Comments:

Name and Signature of Participating Personnel (list company name if subcontractor)

Note: Attach additional pages if necessary. Send this form to the EarthCon Project Manager. Copies will be placed in the appropriate project files.

Appendix B
Safety Data Sheets

Chlorodiphenyl (42% chlorine)

Synonyms & Trade Names

Aroclor® 1242, PCB [Chlorodiphenyl (42% chlorine)], Polychlorinated biphenyl [Chlorodiphenyl (42% chlorine)]

CAS No.

53469-21-9

RTECS No.

TQ1356000

DOT ID & Guide

2315 171

Formula

$C_6H_4ClC_6H_3Cl_2$ (approx)

Conversion

IDLH

Ca [5 mg/m³]

See: 53469219

Exposure Limits**NIOSH REL**

Ca TWA 0.001 mg/m³ See Appendix A (nengapdx.html) [*Note: The REL also applies to other PCBs.]

OSHA PEL

TWA 1 mg/m³ [skin]

Measurement Methods

NIOSH 5503 ;

OSHA PV2089

See: NMAM or OSHA Methods

Physical Description

Colorless to light-colored, viscous liquid with a mild, hydrocarbon odor.

Molecular Weight

258 (approx)

Boiling Point

617-691°F

Freezing Point

-2°F

Solubility

Insoluble

Vapor Pressure

vapor Pressure

0.001 mmHg

Ionization Potential

?

Specific Gravity

(77°F): 1.39

Flash Point

NA

Upper Exposive Limit

NA

Lower Explosive Limit

NA

Nonflammable Liquid, but exposure in a fire results in the formation of a black soot containing PCBs, polychlorinated dibenzofurans & chlorinated dibenzo-p-dioxins.

Incompatibilities & Reactivities

Strong oxidizers

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes; chloracne; liver damage; reproductive effects; [potential occupational carcinogen]

Target Organs

Skin, eyes, liver, reproductive system

Cancer Site

[in animals: tumors of the pituitary gland & liver, leukemia]

Personal Protection/Sanitation

(See protection codes (protect.html))

Skin:Prevent skin contact

Eyes:Prevent eye contact

Wash skin:When contaminated

Remove:When wet or contaminated

Change:Daily

Provide:Eyewash, Quick drench

First Aid

(See procedures (firstaid.html))

Eye:Irrigate immediately

Skin:Soap wash immediately

Breathing:Respiratory support

Swallow:Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having an N100, R100, or P100 filter.

[Click here \(pgintrod.html#nrp\)](#) for information on selection of N, R, or P filters.

Any appropriate escape-type, self-contained breathing apparatus

[Important additional information about respirator selection \(pgintrod.html#mustread\)](#)

See also

INTRODUCTION MEDICAL TESTS: 0175

File Formats Help:

How do I view different file formats (PDF, DOC, PPT, MPEG) on this site? ([//www.cdc.gov/Other/plugins/](http://www.cdc.gov/Other/plugins/))

([//www.cdc.gov/Other/plugins/#pdf](http://www.cdc.gov/Other/plugins/#pdf))

Page last reviewed: April 11, 2016

Page last updated: April 11, 2016

Content source: National Institute for Occupational Safety and Health (NIOSH) ([/niosh/](http://niosh/)) Education and Information Division

Chlorodiphenyl (54% chlorine)

Synonyms & Trade Names

Aroclor® 1254, PCB [Chlorodiphenyl (54% chlorine)], Polychlorinated biphenyl [Chlorodiphenyl (54% chlorine)]

CAS No.

11097-69-1

RTECS No.

TQ1360000

DOT ID & Guide

2315 171

Formula

$C_6H_3Cl_2C_6H_2Cl_3$ (approx)

Conversion

IDLH

Ca [5 mg/m³]

See: IDLH INDEX

Exposure Limits**NIOSH REL**

Ca TWA 0.001 mg/m³ See Appendix A (nengapdx.html) [*Note: The REL also applies to other PCBs.]

OSHA PEL

TWA 0.5 mg/m³ [skin]

Measurement Methods

NIOSH 5503 ;

OSHA PV2088

See: NMAM or OSHA Methods

Physical Description

Colorless to pale-yellow, viscous liquid or solid (below 50°F) with a mild, hydrocarbon odor.

Molecular Weight

326 (approx)

Boiling Point

689-734°F

Freezing Point

50°F

Solubility

Insoluble

Vapor Pressure

vapor Pressure

0.00006 mmHg

Ionization Potential

?

Specific Gravity

(77°F): 1.38

Flash Point

NA

Upper Exposive Limit

NA

Lower Explosive Limit

NA

Nonflammable Liquid, but exposure in a fire results in the formation of a black soot containing PCBs, polychlorinated dibenzofurans, and chlorinated dibenzo-p-dioxins.

Incompatibilities & Reactivities

Strong oxidizers

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, chloracne; liver damage; reproductive effects; [potential occupational carcinogen]

Target Organs

Skin, eyes, liver, reproductive system

Cancer Site

[in animals: tumors of the pituitary gland & liver, leukemia]

Personal Protection/Sanitation

(See protection codes (protect.html))

Skin:Prevent skin contact

Eyes:Prevent eye contact

Wash skin:When contaminated

Remove:When wet or contaminated

Change:Daily

Provide:Eyewash, Quick drench

First Aid

(See procedures (firstaid.html))

Eye:Irrigate immediately

Skin:Soap wash immediately

Breathing:Respiratory support

Swallow:Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having an N100, R100, or P100 filter.

[Click here \(pgintrod.html#nrp\)](#) for information on selection of N, R, or P filters.

Any appropriate escape-type, self-contained breathing apparatus

[Important additional information about respirator selection \(pgintrod.html#mustread\)](#)

See also

INTRODUCTION ICSC CARD: 0939 MEDICAL TESTS: 0176

File Formats Help:

How do I view different file formats (PDF, DOC, PPT, MPEG) on this site? ([//www.cdc.gov/Other/plugins/](http://www.cdc.gov/Other/plugins/))

([//www.cdc.gov/Other/plugins/#pdf](http://www.cdc.gov/Other/plugins/#pdf))

Page last reviewed: April 11, 2016

Page last updated: April 11, 2016

Content source: National Institute for Occupational Safety and Health (NIOSH) ([/niosh/](http://niosh/)) Education and Information Division



Health	3
Fire	1
Reactivity	2
Personal Protection	E

Material Safety Data Sheet Arsenic MSDS

Section 1: Chemical Product and Company Identification

Product Name: Arsenic

Catalog Codes: SLA1006

CAS#: 7440-38-2

RTECS: CG0525000

TSCA: TSCA 8(b) inventory: Arsenic

CI#: Not applicable.

Synonym:

Chemical Name: Arsenic

Chemical Formula: As

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Arsenic	7440-38-2	100

Toxicological Data on Ingredients: Arsenic: ORAL (LD50): Acute: 763 mg/kg [Rat]. 145 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH. **MUTAGENIC EFFECTS:** Not available.

TERATOGENIC EFFECTS: Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance is toxic to kidneys, lungs, the nervous system, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances: Flammable in presence of open flames and sparks, of heat, of oxidizing materials.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards:

Material in powder form, capable of creating a dust explosion. When heated to decomposition it emits highly toxic fumes.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable

protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, moisture.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.01 from ACGIH (TLV) [United States] [1995] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Lustrous solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 74.92 g/mole

Color: Silvery.

pH (1% soln/water): Not applicable.

Boiling Point: Not available.

Melting Point: Sublimation temperature: 615°C (1139°F)

Critical Temperature: Not available.

Specific Gravity: 5.72 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Reactive with oxidizing agents, acids, moisture.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 145 mg/kg [Mouse].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH. Causes damage to the following organs: kidneys, lungs, the nervous system, mucous membranes.

Other Toxic Effects on Humans:

Very hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Arsenic UNNA: UN1558 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Arsenic California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Arsenic Pennsylvania RTK: Arsenic Massachusetts RTK: Arsenic TSCA 8(b) inventory: Arsenic

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:**WHMIS (Canada):**

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R22- Harmful if swallowed. R45- May cause cancer.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 2

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 2

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information**References:**

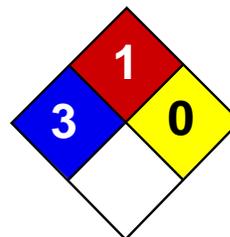
-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987. -Liste des produits purs tératogènes, mutagènes, cancérogènes. Répertoire toxicologique de la Commission de la Santé et de la Sécurité du Travail du Québec. -Material safety data sheet emitted by: la Commission de la Santé et de la Sécurité du Travail du Québec. -SAX, N.I. Dangerous Properties of Industrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984. -The Sigma-Aldrich Library of Chemical Safety Data, Edition II. -Guide de la loi et du règlement sur le transport des marchandises dangereuses au Canada. Centre de conformité international Ltée. 1986.

Other Special Considerations: Not available.

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Last Updated: 05/21/2013 12:00 PM

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Health	3
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet

Cadmium MSDS

Section 1: Chemical Product and Company Identification

Product Name: Cadmium

Catalog Codes: SLC3484, SLC5272, SLC2482

CAS#: 7440-43-9

RTECS: EU9800000

TSCA: TSCA 8(b) inventory: Cadmium

CI#: Not applicable.

Synonym:

Chemical Name: Cadmium

Chemical Formula: Cd

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Cadmium	7440-43-9	100

Toxicological Data on Ingredients: Cadmium: ORAL (LD50): Acute: 2330 mg/kg [Rat.]. 890 mg/kg [Mouse]. DUST (LC50): Acute: 50 ppm 4 hour(s) [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant). Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified A2 (Suspected for human.) by ACGIH, 2 (Reasonably anticipated.) by NTP.
MUTAGENIC EFFECTS: Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance is toxic to kidneys, lungs, liver. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact: No known effect on eye contact, rinse with water for a few minutes.

Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not available.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: 570°C (1058°F)

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances:

Non-flammable in presence of open flames and sparks, of heat, of oxidizing materials, of reducing materials, of combustible materials, of moisture.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards:

Material in powder form, capable of creating a dust explosion. When heated to decomposition it emits toxic fumes.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage:

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.01 (ppm) Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Lustrous solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 112.4 g/mole

Color: Silvery.

pH (1% soln/water): Not applicable.

Boiling Point: 765°C (1409°F)

Melting Point: 320.9°C (609.6°F)

Critical Temperature: Not available.

Specific Gravity: 8.64 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water, hot water, methanol, diethyl ether, n-octanol.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Not considered to be corrosive for metals and glass.

Special Remarks on Reactivity: Reacts violently with potassium.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 890 mg/kg [Mouse]. Acute toxicity of the dust (LC50): 229.9 mg/m³ 4 hour(s) [Rat].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A2 (Suspected for human.) by ACGIH, 2 (Reasonably anticipated.) by NTP. The substance is toxic to kidneys, lungs, liver.

Other Toxic Effects on Humans:

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: An allergen. 0047 Animal: embryotoxic, passes through the placental barrier.

Special Remarks on other Toxic Effects on Humans: May cause allergic reactions, exzema and/or dehydration of the skin.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification:

Identification:

Special Provisions for Transport:

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Cadmium California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Cadmium Pennsylvania RTK: Cadmium Massachusetts RTK: Cadmium TSCA 8(b) inventory: Cadmium SARA 313 toxic chemical notification and release reporting: Cadmium CERCLA: Hazardous substances.: Cadmium

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R26- Very toxic by inhalation. R45- May cause cancer.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information

References:

-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987. -Liste des produits purs tératogènes, mutagènes, cancérogènes. Répertoire toxicologique de la Commission de la Santé et de la Sécurité du Travail du Québec. -Material safety data sheet emitted by: la Commission de la Santé et de la Sécurité du Travail du Québec. -SAX, N.I. Dangerous Properties of Industrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984. -The Sigma-Aldrich Library of Chemical Safety Data, Edition II. -Guide de la loi et du règlement sur le transport des marchandises dangereuses au Canada. Centre de conformité international Ltée. 1986.

Other Special Considerations: Not available.

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Gasoline

Synonyms & Trade Names

Motor fuel, Motor spirits, Natural gasoline, Petrol [Note: A complex mixture of volatile hydrocarbons (paraffins, cycloparaffins, and aromatics).]

CAS No.

8006-61-9

RTECS No.

LX3300000

DOT ID & Guide

1203 128

Formula

Conversion

1 ppm = 4.5 mg/m³ (approx)

IDLH

Ca [N.D.]

See: IDLH INDEX

Exposure Limits**NIOSH REL**

Ca See Appendix A ([nengapdxa.html](#))

OSHA PEL

none See Appendix G ([nengapdxg.html](#))

Measurement Methods**OSHA PV2028**

See: NMAM or OSHA Methods

Physical Description

Clear liquid with a characteristic odor.

Molecular Weight

110 (approx)

Boiling Point

102°F

Freezing Point

?

Solubility

Insoluble

Vapor Pressure

vapor Pressure
38-300 mmHg

Ionization Potential
?

Specific Gravity
(60°F): 0.72-0.76

Flash Point
-45°F

Upper Explosive Limit
7.6%

Lower Explosive Limit
1.4%

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities
Strong oxidizers such as peroxides, nitric acid & perchlorates

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, skin, mucous membrane; dermatitis; headache, lassitude (weakness, exhaustion), blurred vision, dizziness, slurred speech, confusion, convulsions; chemical pneumonitis (aspiration liquid); possible liver, kidney damage; [potential occupational carcinogen]

Target Organs

Eyes, skin, respiratory system, central nervous system, liver, kidneys

Cancer Site

[in animals: liver & kidney cancer]

Personal Protection/Sanitation

(See protection codes (protect.html))

Skin:Prevent skin contact

Eyes:Prevent eye contact

Wash skin:When contaminated

Remove:When wet (flammable)

Change:No recommendation

Provide:Eyewash, Quick drench

First Aid

(See procedures (firstaid.html))

Eye:Irrigate immediately

Skin:Soap flush immediately

Breathing:Respiratory support

Swallow:Medical attention immediately

Respirator Recommendations**NIOSH**

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister

Any appropriate escape-type, self-contained breathing apparatus

[Important additional information about respirator selection \(pgintrod.html#mustread\)](#)

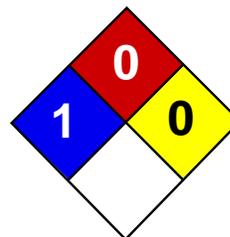
See also

INTRODUCTION

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Content source: National Institute for Occupational Safety and Health (NIOSH) (/niosh/) Education and Information Division



Health	1
Fire	0
Reactivity	0
Personal Protection	E

Material Safety Data Sheet

Lead MSDS

Section 1: Chemical Product and Company Identification

Product Name: Lead

Catalog Codes: SLL1291, SLL1669, SLL1081, SLL1459, SLL1834

CAS#: 7439-92-1

RTECS: OF7525000

TSCA: TSCA 8(b) inventory: Lead

CI#: Not available.

Synonym: Lead Metal, granular; Lead Metal, foil; Lead Metal, sheet; Lead Metal, shot

Chemical Name: Lead

Chemical Formula: Pb

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Lead	7439-92-1	100

Toxicological Data on Ingredients: Lead LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

Slightly hazardous in case of skin contact (permeator). **CARCINOGENIC EFFECTS:** Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to blood, kidneys, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances: Non-flammable in presence of open flames and sparks, of shocks, of heat.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: When heated to decomposition it emits highly toxic fumes of lead.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable

protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.05 (mg/m³) from ACGIH (TLV) [United States] TWA: 0.05 (mg/m³) from OSHA (PEL) [United States] TWA: 0.03 (mg/m³) from NIOSH [United States] TWA: 0.05 (mg/m³) [Canada] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Metal solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 207.21 g/mole

Color: Bluish-white. Silvery. Gray

pH (1% soln/water): Not applicable.

Boiling Point: 1740°C (3164°F)

Melting Point: 327.43°C (621.4°F)

Critical Temperature: Not available.

Specific Gravity: 11.3 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, excess heat

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Can react vigorously with oxidizing materials. Incompatible with sodium carbide, chlorine trifluoride, trioxane + hydrogen peroxide, ammonium nitrate, sodium azide, disodium acetylide, sodium acetylide, hot concentrated nitric acid, hot concentrated hydrochloric acid, hot concentrated sulfuric acid, zirconium.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Inhalation. Ingestion.

Toxicity to Animals:

LD50: Not available. LC50: Not available.

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC. May cause damage to the following organs: blood, kidneys, central nervous system (CNS).

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential: Skin: Lead metal granules or dust: May cause skin irritation by mechanical action. Lead metal foil, shot or sheets: Not likely to cause skin irritation Eyes: Lead metal granules or dust: Can irritate eyes by mechanical action. Lead metal foil, shot or sheets: No hazard. Will not cause eye irritation. Inhalation: In an industrial setting, exposure to lead mainly occurs from inhalation of dust or fumes. Lead dust or fumes: Can irritate the upper respiratory tract (nose, throat) as well as the bronchi and lungs by mechanical action. Lead dust can be absorbed through the respiratory system. However, inhaled lead does not accumulate in the lungs. All of an inhaled dose is eventually absorbed or transferred to the gastrointestinal tract. Inhalation effects of exposure to fumes or dust of inorganic lead may not develop quickly. Symptoms may include metallic taste, chest pain, decreased physical fitness, fatigue, sleep disturbance, headache, irritability, reduces memory, mood and personality changes, aching bones and muscles, constipation, abdominal pains, decreasing appetite. Inhalation of large amounts may lead to ataxia, delirium, convulsions/seizures, coma, and death. Lead metal foil, shot, or sheets: Not an inhalation hazard unless metal is heated. If metal is heated, fumes will be released. Inhalation of these fumes may cause "fume metal fever", which is characterized by flu-like symptoms. Symptoms may include metallic taste, fever, nausea, vomiting, chills, cough, weakness, chest pain, generalized muscle pain/aches, and increased white blood cell count. Ingestion: Lead metal granules or dust: The symptoms of lead poisoning include abdominal pain or cramps (lead colic), spasms, nausea, vomiting, headache, muscle weakness, hallucinations, distorted perceptions, "lead line" on the gums, metallic taste, loss of appetite, insomnia, dizziness and other symptoms similar to that of inhalation. Acute poisoning may result in high lead levels in the blood and urine, shock, coma and death in extreme cases. Lead metal foil, shot or sheets: Not an ingestion hazard for usual industrial handling.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information**Federal and State Regulations:**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Lead California prop. 65 (no significant risk level): Lead: 0.0005 mg/day (value) California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead Connecticut hazardous material survey.: Lead Illinois toxic substances disclosure to employee act: Lead Illinois chemical safety act: Lead New York release reporting list: Lead Rhode Island RTK hazardous substances: Lead Pennsylvania RTK: Lead

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R20/22- Harmful by inhalation and if swallowed. R33- Danger of cumulative effects. R61- May cause harm to the unborn child. R62- Possible risk of impaired fertility. S36/37- Wear suitable protective clothing and gloves. S44- If you feel unwell, seek medical advice (show the label when possible). S53- Avoid exposure - obtain special instructions before use.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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Appendix C

Chemical Information Directory

<i>Included in HASP</i>	<i>Chemical Name</i>	<i>Synonyms</i>
	Acetone	Dimethyl Ketone; Ketone propane; 2-Propanone
	Aldrin	HHDN; Octalene
	Aniline	Aminobenzene; Aniline Oil; Benzeneamine
X	Arsenic	Arsenic metal; Arsenia
	Barium	Barium metal
	Benzene	Benzol; Phenyl hydride
	Bis(2-ethylhexyl)phthalate	Di(2-ethylhexyl)phthalate
X	Cadmium	Cadmium metal
	Carbon disulfide	Carbon bisulfide
	Chlorobenzene	Benzene chloride; Chlorobenzyl; MCB; Phenyl chloride
	Chloroethane	Ethyl chloride
	Chloroform	Methane trichloride; Trichloromethane
	Chromic Acid	Chromic anhydride; Chromium trioxide
	Chromium	Chromium metal
	Cobalt	Cobalt metal dust, cobalt metal fume
	Copper	Copper metal dusts; Copper metal mists
	Cyanide	Cyanide
	Cyclohexane	Benzene Hexahydride; hexamethylene
	Dieldrin	Dieldrin
	DIPE	Diisopropyl ether
	Dioxin	Dioxin
	1,2-Dichlorobenzene	O-DCB; Orthodichlorobenzene
	1,1-Dichloroethane	Ethylidene chloride
	1,2-Dichloroethane	Ethylene dichloride; Glycol dichloride
	1,1-Dichloroethylene	1,1-Dichloroethene, vinylidene chloride
	1,2-Dichloroethylene	1,2-Dichloroethene; (cis, trans, or sym-) Acetylene dichloride
	1,2-Dichloropropane	Propylene dichloride; Dichloro-1,2-propane
	2,4-Dinitrotoluene	Dinitrotoluene; DNT; Methyl dinitrobenzene
	1,4-Dioxane	Dioxane, Diethylene dioxide, Diethylene ether

Appendix C
Chemical Information Directory
 (continued)

<i>Included in HASP</i>	<i>Chemical Name</i>	<i>Synonyms</i>
	Ethylbenzene	Ethylbenzol; Phenylethane
	ETBE	Ethyl tert-butyl ether
	Ethylene Dibromide	EDB; 1,2-Dibromoethane, Ethylene bromide, Glycol dibromide
	Formaldehyde	Methanal; Methyl aldehyde; Methylene oxide
X	Gasoline& Diesel	Motor fuel; Motor spirits; Natural gasoline; Petrol
	Motor oil	Motor oil
	Hexachloroethane	Carbon hexachloride; Ethane hexachloride; Perchloroethane
	Hydrochloric Acid	Anhydrous hydrogen chloride; Aqueous hydrogen chloride; Muriatic acid
	Hydrogen Sulfide	Hydrosulfuric acid; Sewer gas; Sulfuretted hydrogen
	Iron	Iron
	Isophorone	Isoacetophorone; 3,5,5-Trimethyl 2- cyclohexenone
	Isopropanol	Isopropyl alcohol; IPA; 2-Propanol
X	Lead (inorganic)	Lead metal
	Manganese	Manganese
	MTBE	Methyl Tert Butyl Ether
	Mercury	Colloidal mercury; Metallic mercury; Quicksilver
	Methane	Fire damp; March gas; Methyl hydride
	Methanol	Carbinol; Columbian spirits; Pyroligneous spirit; Wood alcohol; Wood naphtha; Wood spirit
	Methoxycor	p,p-Dimethoxydiphenyl/trichlorethane; DMDY
	Methyl chloroform	1,1,1-Trichloroethane
	Methylcyclohexane	Cyclohexylmethane; Hexahydrotoluene
	Methylene chloride	Dichloromethane; Methylene Dichloride
	Naphthalene	Naphthalin; Tar Camphor; White Tar
	Nickel	Nickel catalyst

Appendix C

Chemical Information Directory (continued)

<i>Included in HASP</i>	<i>Chemical Name</i>	<i>Synonyms</i>
	Nitrobenzene	Essence of mirbane; Nitrobenzol; Oil of mirbane
	PAHs	Poly Aromatic Hydrocarbons
	Pentachlorophenol	PCP; Penta; 2,3,4,5,6-Pentachlorophenol
	Phenol	Carbonic acid; Hydroxybenzene; Monohydroxybenzene; Phenol alcohol; Phenyl hydroxide
	Phosgene	Carbonyl chloride; Carbon oxychloride; Chloroformyl chloride
X	Polychlorinated biphenyls (54%)	PCBs; Chlorodiphenyl
	Sodium bisulfate	
	Synergist-D	Proprietary product
	Silver	Silver metal; Argentum
	TAME	Tertiary-amyl methyl ether
	TBA	Tert butyl alcohol
	Tetrachloroethylene	Tetrachloroethylene; Perchlorethylene; Perk
	Toluene	Methyl benzene; Methyl benzol
	Toxaphene	Chlorinated camphene
	1,1,2-Trichloroethane	Ethane trichloride; B-Trichloroethane; Vinyl trichloride
	1,2,4-Trichlorobenzene	Trichlorobenzene; 1,2,4-Trichlorobenzel
	Trichloroethene	Trichloroethylene; TCE
	Trichlorofluoromethane	Fluorotrichloromethane; Freon II
	Trichlorotrifluoroethane	Freon 113; 1,1,2-Trichloro-1,2,2-trifluoroethane; CFC-113
	1,2,3-Trichloropropane	Allyl trichloride, Glycerol trichlorohydrin, Glyceryl trichlorohydrin; Trichlorohydrin
	1,2,3-Trimethylbenzene	Hemellitol
	1,2,4-Trimethylbenzene	psi-Cumene; Pseudocumene
	1,3,5-Trimethylbenzene	Mesitylene; sym-Trimethylbenzene
	Vinyl chloride	Chloroethene; VC; VCM
	Xylene (Mixed Isomers)	o-xylene; p-xylene; m-xylene

Appendix D

Hazard Mitigators Directory

<i>Included in HASP</i>	<i>Hazards</i>
X	Fire
X	Inhalation
	Reactivity
X	Skin Absorption
<i>Physical Hazards</i>	
	Compressed Gas Cylinder
X	Drilling
	Drowning
X	Drum Handling
X	Electrocution
X	Excavation/Trenching
X	Eye Injury
X	Hand/Foot Injury
X	Heat Stress
X	Cold Stress
X	Heavy Equipment
X	Lifting Heavy Loads
X	Noise
X	Portable Power/Hand Tool
	Radiation Exposure
X	Slipping/Tripping/Falling
	Allergic Reaction to Poisonous Plants
	Insect/Vermin/Snake Bites
	Medical Waste

- * All members of the drilling crews shall be trained in the safety features and procedures to be utilized during operation, inspection, and maintenance of the equipment.
- * Conduct a survey, prior to bringing drilling equipment to the job site, to identify overhead electrical hazards, potential subsurface hazards, and terrain hazard. Once on-site, before drilling equipment is moved, the travel route shall again be visually surveyed for overhead and terrain hazards.
- * Use only drilling equipment equipped with two easily accessible emergency shutdown devices, one for the operator and one for the helper.
- * Do not transport drilling equipment with the mast in the upward position.
- * Set up equipment on stable ground. Cribbing (a system of timbers, arranged in a rectangular pattern, used to support and distribute the weight of the equipment) shall be used when necessary.
- * Extend outriggers per the manufacturer's specifications.
- * Monitor weather conditions. Operations shall cease during electrical storms or when electrical storms are imminent.
- * Wearing of loose clothing or equipment is not permitted.
- * Use auger guides on hard surfaces.
- * Verbally alert employees and visually ensure employees are clear from dangerous parts of equipment prior to starting or engaging equipment.
- * Channel the discharge of drilling fluids away from the work area to prevent the pooling of water.
- * Use hoists only for their designed intent. Hoists shall not be loaded beyond their rated capacity. Steps shall be taken to prevent two-blocking of hoists (the condition when the lower load block or hook assembly comes in contact with the upper load block, or when the load block comes in contact with the boom tip).
- * Follow the equipment manufacturer's procedures if ropes become caught in, or objects are pulled into a cathead.

- * Do not run or rotate drill rods through rod slipping devices. No more than one foot of drill rod column shall be hoisted above the top of the drill mast. Drill rod tool joints shall not be made up, tightened, or loosened while the rod column is supported by a rod slipping device.
- * Control dust using dust suppression techniques.
- * Clean augers only when the rotating mechanism is in neutral and the auger is stopped. Tools such as long handled shovels shall be used to remove cuttings from the auger.
- * Cap and flag open boreholes; open excavations shall be barricaded.
- * Keep all hand tool used during drilling operations clean and in good working condition.
- * Wear hard hats and steel-toed boots at all times when performing drilling operations.
- * Wear hearing protection when required.

During Geoprobe drilling

- Pay close attention to acetate sampling sleeves; can cause minor cuts when they become jiggered
- Probes /rods can have pinch points; take care when removing or adjusting.
- There will be noise so use hearing protections

- Be aware of the potential hazards of the contents of drums or containers before handling.
- Inspect the integrity of the drum or container before moving. Any drum or container lacking integrity shall be over packed.
- Consider any unlabeled drum or container as containing a hazardous substance and leave alone until contents are properly identified and labeled.
- Organize site operations to minimize the amount of drum or container movement.
- Never stand on drums or containers.
- Know that bulging drums or containers are an indication of pressure build-up. Pressure can be relieved slowly by carefully loosening the bung. If the possibility of fire or explosion exists, protective shield and/or remote opening devices should be used.
- Utilize drum/container handling equipment whenever possible. The equipment utilized should have a sufficiently rated load capacity, and should be able to operate smoothly on the available surface.
- Use proper lifting and moving techniques to prevent back injuries, if handling equipment is not available.
- Have a clear view of the available pathway when moving drums. If needed, an additional person should be available to provide guidance.
- Set up drum/container staging areas to safely identify and classify contents for proper shipment. Staging areas shall be provided with adequate ingress and egress routes.
- Label and identify drums and containers as to their contents when moved to the staging areas.
- Cease all site operations immediately if site activities uncover buried drums or containers. The SSO must be notified. The SSO will evacuate the site. All unknown situations must be evaluated before site activities are resumed. The services of a specialized contractor trained in handling unknown contaminants may be needed. If, after evaluating the situation, only a portion of the site is affected, that
- Use only drums and containers that meet the appropriate DOT, OSHA, and EPA regulations.

- When scheduling or work conditions necessitate leaving excavations open overnight, security fencing will be erected to restrict access to the site or work zones. An exclusion zone, contamination reduction zone and support zone will be identified for each soil disturbance site, as described in Section 2.4.5.
- Underground Service Alert must be notified of subsurface work at a minimum of 48 hours prior to the commencement of field activities.
- As part of the on-site health and safety meeting, a Site walk with the operators will be conducted to identify work locations (locations shown on the work plan/site plan will be in areas free of utilities/subsurface structures). Mark outs of all utilities will be verified.
- If pea-gravel is encountered while excavating all work must stop and the SSO will be contacted for further instruction. Pea-gravel is a potential indication of underground storage tank(s) or utility bedding/backfilling material.
- If any utility/subsurface feature is hit or damaged the SSO will be IMMEDIATELY contacted for further instruction. If the SSO cannot be reached contact the Project Manager for further instruction.

- * A minimum clearance of 12 feet (radius) will be maintained between heavy equipment (i.e., drill rig) and any overhead power lines, regardless of voltage.
- * Before subsurface work, a utilities search for underground lines will occur and will be documented.
- * Installation and maintenance of electrical facilities or equipment must only be performed by qualified and properly authorized personnel or electrical subcontractors. Apprentice personnel permitted to work on electrical equipment shall be under the surveillance of a fully qualified electrician.
- * Electricians shall be familiar with the National Electrical Code; state and local electric codes; OSHA standards, including 29 CFR 1926, Subpart K; and applicable sections of the National Fire Protection Association Codes.
- * When working on energized circuits of 440 volts or higher, at least one qualified electrician and one other employee shall be present.
- * Do not wear rings, watches or metallic objects that could act as conductors when working with electrical circuits.
- * Do not use metal ladders and un-insulated tools while working with electrical circuits and equipment.
- * Follow the company Lock-out/Tag-out procedures when applicable. Electrical equipment and lines shall always be considered “energized” until proven “de-energized”. Before beginning work, each electrical circuit shall be inspected, tested, and where possible, isolated from the power source. Extreme care shall be exercised as wires designed to operate at ground potential may become energized by faulty or inadequate connections.
- * Use only approved grounding equipment as a ground for electrical equipment. Metal frames on electricity powered equipment, electrical facilities, and transmission equipment shall be connected to the grounding system. Alternative grounding systems complying with applicable electrical codes may be used for temporary portable equipment.
- * Protect electrical wires with suitable protective conduits or devices where they are exposed to possible damage.
- * Connect grounding devices to a ground before contacting any conductor of a circuit. When grounding devices are removed, they shall be disconnected from the circuit before being disconnected from ground.
- * Equip all portable extension cords with a non-conducting plug and/or another socket shell. All electrical cords shall be equipped with three-blade grounding type plugs.

HAZARD MITIGATORS – ELECTROCUTION *EarthCon Consultants CA, Inc.*

- * Use only heavy duty electrical cords that are not subjected to excessive bending, stretching, or kicking. All cords and wires shall be frequently inspected for signs of defects. Damaged or frayed electrical wires, cords, and plugs shall be immediately replaced by a qualified electrician or other properly trained personnel.
- * Install adequate warning signs and barriers (in plain sight) in all areas where hazardous electrical facilities exist.
- * Do not permit overloading of electrical circuits at any time. The replacement of fuses or circuit breakers with makeshift materials or over-capacity fuses is strictly prohibited.
- * The type of circuit shall determine the type of protective equipment required. Rubber gloves, sleeves, blankets, mats, and insulated platforms shall be used as required. Questions regarding PPE should be directed to the SSO.
- * Inspect all insulated protective equipment continuously for defects or damages. Any defective equipment shall be replaced before using.
- * Establish and enforce testing schedules for insulation qualities for protective equipment. All users shall verify that equipment has been satisfactorily tested prior to use.

- * Wear appropriate eye protection according to the task at hand (e.g., goggles if liquid splash could occur, welding lenses, etc.).
- * Minimize the amount of vapor or particulate matter generated, if possible.
- * Avoid touching the face and eyes.
- * Flush eye with water for at least 15 minutes if chemicals do get into the eye.

- * Be aware of “pinch points” when working with tools and heavy equipment.
- * Use proper lifting techniques to avoid dropping heavy loads on hands and feet.
- * Be aware of moving machinery and heavy equipment in the work area.
- * Wear protective gloves as required in the Health and Safety Plan.
- * Wear steel-toed boots as required in the Health and Safety Plan.

Fatal exposures to cold among workers have almost always resulted from accidental exposures involving failure to escape from low environmental air temperatures or from immersion in low temperature water. The single most important aspect of life-threatening hypothermia is the fall in the deep core temperature of the body. Workers should be protected from exposure to cold so that the deep core temperature does not fall below 96.8°F; lower body temperatures will very likely result in reduced mental alertness, reduction in rational decision making, or loss of consciousness with the threat of fatal consequences. Pain in the extremities may be the first early warning of danger to cold stress. During exposure to cold, maximum severe shivering develops when the body temperature has fallen to 95°F. This must be taken as a sign of danger to the workers and exposure to cold should be immediately terminated for any workers when severe shivering becomes evident. Since prolonged exposure to cold air, or to immersion in cold water, at temperatures well above freezing can lead to dangerous hypothermia, whole body protection must be provided.

Adequate insulating dry clothing to maintain core temperatures above 96.8°F must be provided to workers if work is performed in air temperatures below 40°F. Wind chill cooling rate must also be considered when determining protective clothing. The equivalent chill temperature should be used when estimating the combined cooling effect of wind and low air temperatures on exposed skin or when determining clothing insulation requirements to maintain the deep body core temperature.

Unless there are unusual or extenuating circumstances, cold injury to other than hands, feet, and head is not likely to occur without the development of the initial signs of hypothermia. Older workers or workers with circulatory problems require special precautionary protection against cold injury. The use of extra insulating clothing and/or a reduction in the duration of the exposure period are among the special precautions which should be considered.

Workers handling evaporative liquid (gasoline, alcohol, or cleaning fluids) at air temperatures below 39.2°F should take special precautions to avoid soaking of clothing or gloves with the liquids because of the added danger of cold injury due to evaporative cooling. Special note should be taken of the particularly acute effects of splashes of “cryogenic fluids” or those liquids and gases with a boiling point that is just above ambient temperature.

Heat stress is a medical condition where a worker exerts energy above his body's ability to adapt to the stress. Malfunctioning or overload of the body's temperature and sweat mechanisms results in heat stress. Poor adaptation to heat may lead to heat cramps, heat exhaustion, or heat stroke. There are three primary causes of heat stress: insufficient water intake; insufficient salt intake; and a deficiency in the production of sweat, the evaporation of which helps to cool the body naturally. Heat stress or heat exhaustion can result in a more life-threatening condition called heat stroke, which is an overexposure to extreme heat, where the body can no longer provide natural regulation of heat. The body overheats and core temperatures may reach 107F which can result in a coma and death

Field team members shall be observed for signs and symptoms of heat stress that include: confusion, dizziness, profuse sweating, skin color change, increased heart rate and vision problems. Personnel who exhibit any of these symptoms shall be removed from field work and requested to consume two to four pints of electrolyte fluid or cool water every hour while resting in a shaded area. The individual should not return to work until the symptoms are no longer recognizable. If symptoms appear critical, persist, or get worse, seek immediate medical attention.

To control the potential occurrence of heat stress, preventive measures will be evaluated and implemented on a daily basis. These measures may include:

- Frequent rest periods;
- Inducement of fluids (e.g., water, Gatorade, etc.) at a rate of one-half to one cup of cool (55°F) water every 20 minutes of the workday; and
- Periodic cooling of personnel (e.g., via shaded areas, hose-downs with water, etc.).
- Sensitive personnel should wear sunscreen containing a minimum Sun Protection Factor of 15 when working outdoors in the sun. Sunscreen lotion should be applied prior to entering the work zones.



against heat, sun exposure, and other hazards. Employers and employees should know the potential hazards in their workplaces and how to manage them.

Sun

Sunlight contains ultraviolet (UV) radiation, which causes premature aging of the skin, wrinkles, cataracts, and skin cancer. There are no safe UV rays or safe suntans. Be especially careful in the sun if you burn easily, spend a lot of time outdoors, or have any of the following physical features: numerous, irregular, or large moles; freckles; fair skin; or blond, red, or light brown hair. Here's how to block those harmful rays:

- Cover up. Wear loose-fitting, long-sleeved shirts and long pants.
- Use sunscreen with a sun protection factor (SPF) of at least 30. Be sure to follow application directions on the bottle or tube.
- Wear a hat. A wide brim hat, not a baseball cap, works best because it protects the neck, ears, eyes, forehead, nose, and scalp.
- Wear UV-absorbent sunglasses (eye protection). Sunglasses don't have to be expensive, but they should block 99 to 100 percent of UVA and UVB radiation. Before you buy sunglasses, read the product tag or label.
- Limit exposure. UV rays are most intense between 10 a.m. and 4 p.m.

OSHA Card—Protecting Yourself in the Sun
www.osha.gov/Publications/osha3166.pdf

Heat

The combination of heat and humidity can be a serious health threat during the summer months. If you work outside (for example, at a beach resort, on a farm, at a construction site) or in a kitchen, laundry, or bakery you may be at increased risk for heat-related illness. So, take precautions. Here's how:

- Drink small amounts of water frequently.
- Wear light-colored, loose-fitting, breathable clothing—cotton is good.

- Take frequent short breaks in cool shade.
- Eat smaller meals before work activity.
- Avoid caffeine and alcohol or large amounts of sugar.
- Work in the shade.
- Find out from your health care provider if your medications and heat don't mix.
- Know that equipment such as respirators or work suits can increase heat stress.

There are three kinds of major heat-related disorders—heat cramps, heat exhaustion and heat stroke. You need to know how to recognize each one and what first aid treatment is necessary.

OSHA Heat Stress Fact Sheet:
www.osha.gov/OshDoc/data_Hurricane_Facts/heat_stress.pdf

OSHA Heat Stress Quick Card:
www.osha.gov/Publications/osha3154.pdf

Lyme Disease/Tick-Borne Diseases

These illnesses (i.e., Rocky Mountain spotted fever) are transmitted to people by bacteria from bites of infected deer (blacklegged) ticks. In the case of Lyme disease, most, but not all, victims will develop a “bulls-eye” rash. Other signs and symptoms may be non-specific and similar to flu-like symptoms such as fever, lymph node swelling, neck stiffness, generalized fatigue, headaches, migrating joint aches, or muscle aches. You are at increased risk if your work outdoors involves construction, landscaping, forestry, brush clearing, land surveying, farming, railroads, oil fields, utility lines, or park and wildlife management. Protect yourself with these precautions:

- Wear light-colored clothes to see ticks more easily.

- Wear long sleeves; tuck pant legs into socks or boots.
- Wear high boots or closed shoes that cover your feet completely.
- Wear a hat.
- Use tick repellants, but not on your face.
- Shower after work. Wash and dry your work clothes at high temperature.
- Examine your body for ticks after work. Remove any attached ticks promptly and carefully with fine-tipped tweezers by gripping the tick. Do not use petroleum jelly, a hot match, or nail polish to remove the tick.

OSHA Lyme Disease Fact Sheet:
www.osha.gov/OshDoc/data_LymeFacts/LymeFac.pdf

West Nile Virus

West Nile virus is transmitted by the bite of an infected mosquito. Mild symptoms include fever, headache, and body aches, occasionally with a skin rash on the trunk of the body and swollen lymph glands. Symptoms of severe infection include headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis. You can protect yourself from mosquito bites in these ways:

- Apply Picaridin or insect repellent with DEET to exposed skin.
- Spray clothing with repellents containing DEET or permethrin. (Note: Do not spray permethrin directly onto exposed skin.)
- Wear long sleeves, long pants, and socks.
- Be extra vigilant at dusk and dawn when mosquitoes are most active.
- Get rid of sources of standing water (used tires, buckets) to reduce or eliminate mosquito breeding areas.

OSHA West Nile Virus Fact Sheet:
www.osha.gov/OshDoc/data_Hurricane_Facts/west_nile_virus.pdf

OSHA Safety and Health Information Bulletin:
 “Workplace Precautions Against West Nile Virus”

<http://www.osha.gov/dts/shib/shib082903b.pdf>

Poison Ivy-Related Plants

Poison ivy, poison oak and poison sumac have poisonous sap (urushiol) in their roots, stems, leaves and fruits. The urushiol may be deposited on the skin by direct contact with the plant or by contact with contaminated objects, such as clothing, shoes, tools, and animals.

Approximately 85 percent of the general population will develop an allergy if exposed to poison ivy, oak or sumac. Forestry workers and firefighters who battle forest fires have developed rashes or lung irritations from inhaling the smoke of burning plants.

- Wear long-sleeved shirts and long pants, tucked into boots. Wear cloth or leather gloves.
- Apply barrier creams to exposed skin.
- Educate workers on the identification of poison ivy, oak, and sumac plants.
- Educate workers on signs and symptoms of contact with poisonous ivy, oak, and sumac.
- Keep rubbing alcohol accessible. It removes the oily resin up to 30 minutes after exposure.

OSHA Web Page—Poisonous Plants:
www.osha.gov/SLTC/etools/sawmills/poison.html

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For more complete information:



U.S. Department of Labor

www.osha.gov

(800) 321-OSHA

DSTM 9/2005

- * Apply Hazard Mitigators for motor vehicles when utilizing heavy equipment (where applicable).
- * Remember, heavy equipment has the right-of-way over regular vehicles. Yield to heavy equipment.
- * Listen for warning signals on heavy equipment.
- * Perform a visual inspection and walk around parked heavy equipment before moving to assure that equipment is in good condition and that there are no personnel on the ground that could be injured or objects that could be damaged by vehicle movement.
- * Use hand rails and footholds when mounting and dismounting equipment,
- * Follow appropriate equipment startup procedures. Brakes, steering, clutches and controls shall be tested.
- * Pay attention to workers on the ground that may be in the path and provide warning prior to moving the equipment.
- * Permit no one to ride on, or in, heavy equipment. This includes any portion of a backhoe, bulldozer, forklift or the back of a pickup truck, except in locations specifically designed for passenger use and approved by the SSO.
- * Locate and flag underground utilities and buried cables, whenever possible, prior to intrusive activities (such as excavation and drilling).
- * Keep haulage vehicles under positive control at all times while operating. Vehicles shall be kept in gear when descending grades.
- * Do not use heavy equipment on slopes with steepness exceeding 3H:1V unless operations are consistent with manufacturer's recommendations (if the Owner's Manual is not with the equipment or does not specify slope operating procedures, see the SSO).

- * Operate equipment with booms, blades, buckets, beds, etc., lowered or in a stable position while on slopes. Safety cables tethered to appropriate anchors shall be used for equipment working on steep slopes, where appropriate. The use of cables and anchors must be approved by the SSO.
- * Use rollover protection and seat belts.
- * Lower hydraulic systems (e.g., blades, rippers, etc.) to the ground, set brakes, and shut down equipment if malfunction occurs which impairs the ability to control a piece of equipment.
- * Suspend in slings or support by hoists or jacks heavy equipment in need of repair. The equipment must also be blocked or cribbed before workers are permitted to work underneath. Working under heavy equipment can pose a crushing hazard.
- * Shut off motors, do not allow smoking, and use proper dispensing equipment when refueling gasoline-operated equipment to prevent fire hazards.
- * Wear hearing protection if required.
- * Maintain eye contact with the heavy equipment operator when working near equipment.
- * Be aware of changes in sound of equipment that may indicate a change in direction or activity.

- * Know and practice proper lifting techniques.
- * Limit continuous lifting of weights to 50 pounds or less. Lifts of heavier weights are permitted on an interim basis. Help shall be obtained for lifting of loads greater than 50 pounds. Mechanical equipment should be used on heavy materials when possible. If mechanical assistance is not available, adequate manpower to maintain the 50-pound limit per employee will be required.
- * Do not lift more weight than can be handled comfortably, regardless of load weight. If necessary, help should be requested to lift a load so that the lifting is comfortable.
- * Use drum dollies when moving drums or barrels.
- * Inspect objects for grease or slippery substances before they are lifted to ensure that the object will not slip.
- * Do not carry long, bulky or heavy objects without first verifying that the way is clear and that vision is unobstructed. This ensures that other persons or objects will not be struck by the load.
- * Do not carry loads that cannot be seen over or around.
- * Make sure workers are physically suited for the job before assigning jobs requiring heavy and/or frequent lifting. A person's lifting ability is not necessarily indicated by his height or weight.
- * Before lifting an object, consideration should be given to how the object will be set down without pinching or crushing hands or fingers. For example, to place an object on a bench or table, the object should be set on the edge and pushed far enough onto the support so it will not fall. The object can then be released gradually as it is set down, and pushed in place with the hands and body from in front of the object.
- * When two or more persons are handling the same object, one should "call the signals". All the persons on the lift should know who this person is and should warn him if anyone in the crew is about to relax his grip.
- * Proper lifting includes:
 - *Feet* - Feet should be parted, with one foot alongside the object being lifted and one behind. Feet should be comfortably spread to give greater stability. The rear foot should be in position for the upward thrust of the lift.
 - *Back* - Use the sit-down position and keep the back straight, but remember that "straight" does not mean "vertical". A straight back keeps the spine, back muscles, and organs of the body in correct alignment. It minimizes the compression of the abdomen that can cause a hernia.
 - *Arms and Elbows* - The load should be drawn close, and the arms and elbows should be tucked into the side of the body. When the arms are held away from the body, they lose much of their strength and power. Keeping the arms tucked in also helps keep body

weight centered.

- *Palm* - The palm grip is one of the most important elements of lifting. The fingers and the hand are extended around the object to be lifted. Use the full palm; fingers alone have very little power.
- *Chin* - Tuck in the chin so the neck and head continue the straight back line. Keep the spine straight and firm.
- *Body Weight* - Position the body so its weight is centered over the feet. This provides a more powerful line of thrust and assures better balance. Start the lift with a thrust of the rear foot. Shift hand positions so the object can be boosted after knees are bent. Straighten knees as object is lifted or shifted to the shoulders. To change direction, lift the object to a carrying position, and turn the entire body, including the feet. Do not twist your body. In repetitive work, both the person and the material should be positioned so that the worker will not have to twist his body when moving the material. If the object is too heavy to be handled by one person, get help.

- * Know the effects of noise, including:
 - Workers being startled, annoyed, or distracted.
 - Physical damage to the ear, pain, and temporary and/or permanent hearing loss.
 - Communication interference that may increase potential hazards due to the inability to warn of danger and proper safety precautions to be taken.
- * Utilize feasible administrative or engineering controls if workers are subjected to noise exceeding an 8-hour, time-weighted average (TWA) sound level of 90 dBA (decibels on the A-weighted scale).
- * Implement the company Hearing Conservation Program when noise exposures equal or exceed an 8-hour, TWA sound level of 85 dBA.
- * Wear hearing protection where applicable.

- * Route cords, hoses, and cables supplying power to portable power tools to prevent tripping hazards or contact with equipment or machinery.
- * Avoid abusing the power supply lines of portable equipment. Excessive scraping, kicking, stretching, and exposure to grease and oils will damage lines or cause them to fail prematurely, and possibly injure the operator or fellow workers.
- * Inspect cords, hoses, and cables for wear or deterioration prior to each use. Defective power supply lines shall not be used.
- * Do not use electrically powered tools near flammable materials or explosive atmosphere, unless they are of the explosion-proof type meeting the National Electrical Code for explosive area. Employees operating the equipment should be aware of sparks and or metal fragments when using this equipment.
- * Ground-check portable electric power tools with metal cases initially and quarterly. At no time will electrical power equipment be operated without proper grounding. All electrical cords and cables, including extension cords, shall include a third wire ground.
- * Prohibit operations of electric tools in wet or damp areas except in unusual emergency circumstances. When operation is required in wet or damp conditions, extreme care will be exercised to ensure effective grounding of equipment and proper use of protective gear.
- * Size cords adequately for length and the electrical demand of the tool. Otherwise, they may cause a fire hazard.
- * Limit use of tools to the purpose for which the tool is intended (e.g., wrenches will not be used as hammers). Defective tools (e.g., with mushroomed heads or split or defective handles) shall not be used.
- * Protect tools from corrosion damage.
- * Keep tools free of accumulated dirt and unnecessary oil or grease. Moving and adjustable parts shall be lubricated frequently to prevent wear and misalignment.
- * Replace or repair damaged or worn tools promptly. Temporary or makeshift repairs are prohibited. At the discretion of the supervisor, discard all tools that cannot be repaired safely. Supervisors shall decide when to discard a tool.
- * Store tools in suitable boxes or containers. Loose tools shall not be stored on ledges or where they might fall. Tools shall be picked up when a job is completed and not be allowed to accumulate in the work area. Store all tools in a safe place.
- * Do not use conducting (i.e., metal) tools around electrical facilities. Insulated tools, approved for electrical work, shall be tested frequently for proper insulation.

- * Select the correct size and type of wrench for each job. Wrench handles shall not be extended with a pipe or cheater because the jaws will spread.
- * Repair mushroomed punch, drift and chisel heads. Mushroomed heads represent crystallized metal that will break and fly off when struck.
- * Wear eye protection at all times.

- * Wear the proper footwear for the task at hand.
- * Pay attention to the environment and use caution when moving about on site.
- * Follow the easiest and safest path to the destination.
- * Follow good housekeeping procedures.
- * Remove objects that pose tripping hazards where practicable.
- * Prevent water accumulation where practicable.

The following sections address the major workplace fire hazards and the procedures for controlling the hazards.

A. Electrical Fire Hazards

Electrical system failures and the misuse of electrical equipment are leading causes of workplace fires. Fires can result from loose ground connections, wiring with frayed insulation, or overloaded fuses, circuits, motors, or outlets.

To prevent electrical fires, employees shall:

1. Make sure that worn wires are replaced.
2. Use only appropriately rated fuses.
3. Never use extension cords as substitutes for wiring improvements.
4. Use only approved extension cords [i.e., those with the Underwriters Laboratory (UL) or Factory Mutual (FM) label].
5. Check wiring in hazardous locations where the risk of fire is especially high.
6. Check electrical equipment to ensure that it is either properly grounded or double insulated.
7. Ensure adequate spacing while performing maintenance.

B. Portable Heaters

All portable heaters shall be approved by **SSO**. Portable electric heaters shall have tip-over protection that automatically shuts off the unit when it is tipped over. There shall be adequate clearance between the heater and combustible furnishings or other materials at all times.

C. Office Fire Hazards

Fire risks are not limited to industrial facilities. Fires in offices have become more likely because of the increased use of electrical equipment, such as computers and fax machines. To prevent office fires, employees shall:

1. Avoid overloading circuits with office equipment.
2. Turn off nonessential electrical equipment at the end of each workday.
3. Keep storage areas clear of rubbish.
4. Ensure that extension cords are not placed under carpets.
5. Ensure that trash and paper set aside for recycling is not allowed to accumulate.

D. Cutting, Welding, and Open Flame Work

The **SSO** will ensure the following:

1. All necessary hot work permits have been obtained prior to work beginning.
2. Cutting and welding are done by authorized personnel in designated cutting and welding areas whenever possible.

3. Adequate ventilation is provided.
4. Torches, regulators, pressure-reducing valves, and manifolds are UL listed or FM approved.
5. Oxygen-fuel gas systems are equipped with listed and/or approved backflow valves and pressure-relief devices.
6. Cutters, welders, and helpers are wearing eye protection and protective clothing as appropriate.
7. Cutting or welding is prohibited in sprinklered areas while sprinkler protection is out of service.
8. Cutting or welding is prohibited in areas where explosive atmospheres of gases, vapors, or dusts could develop from residues or accumulations in confined spaces.
9. Cutting or welding is prohibited on metal walls, ceilings, or roofs built of combustible sandwich-type panel construction or having combustible covering.
10. Confined spaces such as tanks are tested to ensure that the atmosphere is not over ten percent of the lower flammable limit before cutting or welding in or on the tank.
11. Small tanks, piping, or containers that cannot be entered are cleaned, purged, and tested before cutting or welding on them begins.
12. Fire watch has been established.

E. Flammable and Combustible Materials

The **SSO** shall regularly evaluate the presence of combustible materials at.

Certain types of substances can ignite at relatively low temperatures or pose a risk of catastrophic explosion if ignited. Such substances obviously require special care and handling.

1. Class A combustibles.

These include common combustible materials (wood, paper, cloth, rubber, and plastics) that can act as fuel and are found in non-specialized areas such as offices.

To handle Class A combustibles safely:

- a. Dispose of waste daily.
- b. Keep trash in metal-lined receptacles with tight-fitting covers (metal wastebaskets that are emptied every day do not need to be covered).
- c. Keep work areas clean and free of fuel paths that could allow a fire to spread.
- d. Keep combustibles away from accidental ignition sources, such as hot plates, soldering irons, or other heat- or spark-producing devices.
- e. Store paper stock in metal cabinets.
- f. Store rags in metal bins with self-closing lids.
- g. Do not order excessive amounts of combustibles.
- h. Make frequent inspections to anticipate fires before they start.

Water, multi-purpose dry chemical (ABC), and halon 1211 are approved fire extinguishing agents for Class A combustibles.

2. Class B combustibles.

These include flammable and combustible liquids (oils, greases, tars, oil-based paints, and lacquers), flammable gases, and flammable aerosols.

To handle Class B combustibles safely:

- a. Use only approved pumps, taking suction from the top, to dispense liquids from tanks, drums, barrels, or similar containers (or use approved self-closing valves or faucets).
- b. Do not dispense Class B flammable liquids into containers unless the nozzle and container are electrically interconnected by contact or by a bonding wire. Either the tank or container must be grounded.
- c. Store, handle, and use Class B combustibles only in approved locations where vapors are prevented from reaching ignition sources such as heating or electric equipment, open flames, or mechanical or electric sparks.
- d. Do not use a flammable liquid as a cleaning agent inside a building (the only exception is in a closed machine approved for cleaning with flammable liquids).
- e. Do not use, handle, or store Class B combustibles near exits, stairs, or any other areas normally used as exits.
- f. Do not weld, cut, grind, or use unsafe electrical appliances or equipment near Class B combustibles.
- g. Do not generate heat, allow an open flame, or smoke near Class B combustibles.
- h. Know the location of and how to use the nearest portable fire extinguisher rated for Class B fire.

Water should not be used to extinguish Class B fires caused by flammable liquids. Water can cause the burning liquid to spread, making the fire worse. To extinguish a fire caused by flammable liquids, exclude the air around the burning liquid. The following fire-extinguishing agents are approved for Class B combustibles: carbon dioxide, multi-purpose dry chemical (ABC), halon 1301, and halon 1211. (**NOTE:** Halon has been determined to be an ozone-depleting substance and is no longer being manufactured. Existing systems using halon can be kept in place.)

F. Smoking

Smoking is prohibited at the facility.

- Be aware of chemicals of concern that can directly injure the skin or that can be absorbed into the bloodstream and subsequently transported to other organs.
- Know that skin absorption is enhanced by abrasions, cuts, heat, and moisture.
- Do not wear contact lenses in contaminated atmospheres (since they may trap chemicals against the eye surface). The eye is particularly vulnerable because airborne chemicals can dissolve in its moist surface and be carried to the rest of the body through the bloodstream (capillaries are very close to the surface of the eye).
- Keep hands away from face.
- Minimize contact with liquid and solid chemicals.

Wear protective clothing (e.g., suits and gloves) as required by the Health and Safety Plan

- * Adhere to the 0.05 mg/m³ action level for dust
- * Be aware that the lungs are extremely vulnerable to chemical agents. Even substances that do not directly affect the lungs may pass through lung tissue into the bloodstream, where they are transported to other vulnerable areas of the body.
- * Know the odor and odor threshold of the chemicals of concern. Some toxic chemicals present in the atmosphere may not be detected by human senses (i.e., they may be odorless and colorless, and their toxic effects may not produce any immediate symptoms).
- * Use engineering controls to reduce vapor concentrations (e.g., ventilation) or dusty atmospheres (e.g., dust suppression techniques).
- * Wear respiratory protection as indicated by air monitoring results and/or as required by the Health and Safety Plan.
- * Conduct work zone air monitoring as required by the Health and Safety Plan.

Appendix E

Personal Protective Equipment Per Task

Applies to Task: 1. Excavation, soil sampling, well installation, GW sampling and capping

<input checked="" type="checkbox"/> <i>Modified Level D*</i>		<input type="checkbox"/> <i>Level C*</i>		<input type="checkbox"/> <i>Level B*</i>	
<i>Equipment</i>	<i>Material/ Type</i>	<i>Equipment</i>	<i>Material/Type</i>	<i>Equipment</i>	<i>Material/Type</i>
<input checked="" type="checkbox"/> Protective clothing	Long sleeve shirt and long pants, Tyvek coveralls	<input type="checkbox"/> Full-face air-purifying respirator	Cartridge Type:	<input type="checkbox"/> SCBA (pressure demand)	
<input checked="" type="checkbox"/> Outer gloves	Nitrile	<input type="checkbox"/> Half-mask air-purifying respirator	Cartridge Type:	<input type="checkbox"/> Air-line System (pressure demand)	
<input type="checkbox"/> Outer boots		<input type="checkbox"/> Protective clothing		<input type="checkbox"/> Protective clothing	
<input checked="" type="checkbox"/> Hard hat		<input type="checkbox"/> Outer gloves		<input type="checkbox"/> Outer gloves	
<input checked="" type="checkbox"/> Safety glasses May include full-face shield		<input type="checkbox"/> Inner gloves		<input type="checkbox"/> Inner gloves	
<input checked="" type="checkbox"/> Hard-toed boots		<input type="checkbox"/> Outer boots		<input type="checkbox"/> Outer boots	
<input checked="" type="checkbox"/> Hearing protection		<input type="checkbox"/> Hard hat**		<input type="checkbox"/> Hard hat**	
<input type="checkbox"/> Other:		<input type="checkbox"/> Safety glasses**		<input type="checkbox"/> Hard-toed boots**	
		<input type="checkbox"/> Hard-toed boots**		<input type="checkbox"/> Hearing protection**	
		<input type="checkbox"/> Hearing protection**		<input type="checkbox"/> Escape respirator**	
		<input type="checkbox"/> Other:		<input type="checkbox"/> Safety "tag" rope**	
				<input type="checkbox"/> Other:	

* If checked, indicates initial level of PPE. Other completed columns indicate information to upgrade/downgrade.

** Optional as applicable

Appendix G

OSHA Onsite Training Documentation Form

After completion of the OSHA 40-hour training class, 29 CFR 1910.120 states that 3 days of onsite experience under the direct supervision of a trained, experienced supervisor are required to complete the OSHA HAZWOPER training requirements. This form is to be used to document this requirement, and shall be completed by a qualified supervisor (i.e., someone who has completed the 8-hour supervisory training class). Upon completion of this form, please submit it to the EarthCon project manager.

EMPLOYEE INFORMATION

Name: _____

Signature: _____

40-Hour Training Completion Date: _____

Dates of Onsite Training: _____

Name of Site: _____

Type of Site: _____

SUPERVISOR CERTIFICATION

Supervisor: _____

Signature: _____

Appendix H – Health & Safety Inspection Checklist

EarthCon Consultants CA, Inc.

Project: _____ Date: _____	
Inspected by: _____	
<i>Category</i>	<i>Observations/Corrective Actions (N/A, if Not Applicable)</i>
Pre-field activity briefing records are current	
Tailgate meeting records are current	
Training/medical surveillance/respiratory protection records are current	
Site map is posted	
Buddy system is implemented	
Work zones are identified	
Site access is controlled	
Visitors are escorted	
On-site/off-site communications are in working order	
Safe work practices are implemented	
Any additional hazards incurred?	
Air monitoring equipment is in working condition	
Air monitoring records are being recorded in field logbook	
Air monitoring calibration records are recorded in field logbook	
PPE storage area is neat and organized	
Standard operating procedures are implemented	
Housekeeping at decontamination zone is appropriate	
Decontamination procedures are implemented	
Emergency response equipment is in working condition	
Route to hospital is posted	
Confined space entry program is implemented	
Spill containment equipment is available	
Chemical inventory is up to date	
Safety data sheets are available	
Primary and secondary containers are properly labeled	
Housekeeping at the chemical storage area is appropriate	

APPENDIX B

O&M Inspection Form

GENERAL INFORMATION	
Site Location	1375 Magnolia Avenue, Corona, California
Inspector's Name	
Inspector's Title	
Signature	
Type of Inspection	Annual_____ Unplanned Event_____ (If marked, Reason_____)
Date of Inspection	

	Yes	No	Corrective Action
Evidence of any "penetrating cracks"? (Penetrating cracks are defined as any crack visible at the surface).			
Location? Measurements – L_____ W_____ Base material and/or soil exposed? Vegetation present? Surface deterioration present? Difference in elevation?			
Location? Measurements – L_____ W_____ Base material and/or soil exposed? Vegetation present? Surface deterioration present? Difference in elevation?			
Location? Measurements – L_____ W_____ Base material and/or soil exposed? Vegetation present? Surface deterioration present? Difference in elevation?			
Photographs taken?			
Evidence of ponded water?			
Location? Source?			
Location? Source?			
Location? Source?			
Photographs taken?			
Are areas present identified as having differential settlement?			
Location? Measurements– L_____ W_____ D_____			
Were any of the following observed:			
Cap disturbing activities			
Activities that bring soil to the surface,			

	Yes	No	Corrective Action
Unauthorized Site use for residential, or			
Unauthorized Site use for a school or day care for children under 18 years of age.			
Additional Comments:			

APPENDIX C

RECORDING REQUESTED BY:

Clow Valve Company
1375 Magnolia Avenue
Corona, California 91719

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630
Attention: A. Edward Morelan, Branch Chief
Site Mitigation and Restoration Program

And

U.S. Environmental Protection Agency
Region IX
Attention: PCB Coordinator (Land
Chemicals and Redevelopment
Division)
75 Hawthorne Street
San Francisco, CA 94105-3901

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

LAND USE COVENANT AND AGREEMENT
ENVIRONMENTAL RESTRICTIONS

County of Riverside, Assessor Parcel Number(s): 107-030-022-3
Clow Valve Company
(Department Site Code 600876-48)

This Land Use Covenant and Agreement ("Covenant") is made by and between Clow Valve Company (the "Covenantor"), the current owner of property located at 1375 Magnolia Avenue, Corona in the County of Riverside, State of California (the "Property"), and the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471, the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials as defined

in Health and Safety Code section 25260. The Covenantor and the Department hereby agree that, pursuant to Civil Code section 1471 and Health and Safety Code section 25202.5 the use of the Property be restricted as set forth in this Covenant and that the Covenant shall conform with the requirements of California Code of Regulations, title 22, section 67391.1. With respect to the Polychlorinated Biphenyls (PCBs) at the Property, the provisions of this Covenant shall be for the benefit of, and shall be enforceable by, the United States Environmental Protection Agency ("U.S. EPA"), as a third party beneficiary pursuant to general contract law, including but not limited to Civil Code section 1559.

ARTICLE I
STATEMENT OF FACTS

1.01. Property Location. The Property, located at 1375 Magnolia Avenue, Corona, County of Riverside, California, that is subject to this Covenant, totaling approximately 16 acres, is more particularly described in the attached Exhibit A, "Legal Description of the Property", and depicted in Exhibit B, "Plot Plan". The Property is located in the area generally bounded by Magnolia Avenue on the south, railroad tracks and El Camino Avenue on the west, and a storm water channel towards the north and east. The Property is also identified as County of Riverside, Assessor's Parcel Number 107-030-022-3.

(a) A limited portion of the Property is more particularly described in Exhibit C, "Legal Description of the Capped Property", and illustrated in Exhibit D, "Sketch", referred to as the "Capped Property". The "Capped Property", totaling approximately 9.964 acres of soil impacted by hazardous substances, is located on the northern portion of the Property now generally bounded by railroad and El Camino Avenue on the west, storm channel on the north and east. Its southern border runs parallel to Magnolia Avenue, approximately 195 feet north of Magnolia Avenue.

(b) A limited portion of the Property is more particularly described in Exhibit D as "Area 1" a Former Asphalt Dip Tank and as "Area2" a PCB Transformer area. Former Asphalt Dip Tank was previously located, approximately 620 feet north of Magnolia

Avenue, 510 feet east of El Camino Avenue, and 200 feet west of the storm channel western edge. The PCB Transformer area is located approximately 240 feet west of the storm channel western edge, 510 feet east of El Camino Avenue, and 600 feet north of Magnolia Avenue.

1.02. Hazardous Substances. Hazardous wastes, or constituents of hazardous waste, including Polychlorinated Biphenyl's (PCBs) (Total Aroclors up to a maximum of 2,220 milligrams per kilogram (mg/kg)), Total Petroleum Hydrocarbons (TPH) (up to a maximum of 9,300 mg/kg), arsenic (up to a maximum of 52.9 mg/kg), cadmium (up to a maximum of 43.9 mg/kg), hexavalent chromium (up to a maximum of 6.6 mg/kg), and lead (up to a maximum of 7,360 mg/kg) in soil, and volatile organic compounds, such as tetrachloroethylene (PCE) (up to a maximum of 3 microgram/liter (ug/l)), in the soil gas remain at the Property above levels acceptable for unrestricted land use.

As of February 25, 2021, PCB concentrations in the soil at the Former Asphalt Dip Tank Bottom and PCB Transformer exceed the level for unrestricted use and the USEPA's site-specific industrial risk-based threshold of 15 mg/kg. PCB concentrations present in soils of the PCB Transformer area exceed the California hazardous waste level of Total Threshold Limit Concentration (TTLC) of 50 mg/kg.

As of February 25, 2021, lead concentrations detected in the soil at the Capped Property exceeded 320 milligrams per kilogram, a level deemed safe by DTSC for the continued use of the Site for industrial use and the TTLC of 1,000 mg/kg. A Human Health Risk Assessment (HHRA) was performed to evaluate the potential health risks associated with direct exposure of workers at the Property to soil containing Chemicals of Potential Concern (COPCs). Based on the HHRA, potential health risk to a commercial or industrial worker is 1×10^{-5} and to a construction worker is 2×10^{-4} . The estimated Hazard Index (HI) for a commercial/industrial worker at the Property is 1.9, primarily due to the potential exposure to PCBs and cadmium. The estimated HI for a construction worker at the Property is 458. U.S. EPA recommends an HI of 1 or below and health risk below 1×10^{-6} . The calculated risks were primarily associated with direct exposure to impacted soil and associated soil ingestion or dermal exposure, both of which will be eliminated by installation and maintenance of the capping materials described herein.

1.03. Remediation of Property. This Property has been investigated and/or remediated under the Department's oversight. The Department approved a Corrective Measures Study, dated February 19, 2018, prepared by EarthCon Consultants CA, Inc, in accordance with Health and Safety Code, Division 20, Chapter 6.5. The remediation activities at the Property include:

- a) Construction of an approximately 5,000 square foot, 6-inch thick concrete or 3-inch thick asphalt cap in two areas encompassing approximately one-half acre, identified as Areas of Concern (AOCs), AOC-1 and AOC-5 (see Exhibit B).
- b) Repair and maintenance of the existing asphalt and/or concrete surface cover of the Capped Property;
- c) Soil Management Plan and Operation and Maintenance Plan preapproval by the Department for all future construction work involving soil excavation at the Capped Property; and,
- d) Land use restriction recorded with the Riverside County Assessor's Office to prohibit sensitive uses.

1.04. PCB Remediation overseen by U.S. EPA. In addition to the corrective action measures for the Property under the Department's oversight, U.S. EPA approved with conditions the Risk-Based Approval Application submitted by EarthCon Consultants, CA, Inc. on behalf of Clow Valve Company dated April 9, 2019 to remediate PCBs at the Property. PCBs are regulated by the U.S. EPA pursuant to the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2601 et seq., and the PCB regulations at 40 Code of Federal Regulations (CFR) Part 761. This document is available in Envirostor, an online document repository at https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/1318022012/2019-04-23_EPA%20to%20Clow%20Valve_761.61%28c%29_SIGNED.pdf

1.05. Basis for Environmental Restrictions. As a result of the presence of Hazardous Wastes, PCBs, TPH, arsenic, cadmium, lead, and PCE, which are also hazardous materials as defined in Health and Safety Code section 25260, at the Property, the Department has concluded that it is reasonably necessary to restrict the

use of the Property in order to protect present or future human health or safety or the environment, and that this Covenant is required as part of the Department-approved remedy for the Property. The Department has also concluded that the Property, as remediated and when used in compliance with the Environmental Restrictions of this Covenant, does not present an unacceptable risk to present and future human health or safety or the environment.

1.06. Land Use Covenant. A land use covenant is necessary to preclude potential users' exposure to hazardous substances that remain at the Property and to complete the remedy selected in the Corrective Measures Study. U.S. EPA, with the concurrence of the Department, has concluded that the Property, remediated to the goals presented in the Corrective Measures Study, subject to the restrictions of this Covenant, and used in compliance with such restrictions, does not present an unacceptable threat to present or future human health or safety or the environment. Additional information about the Site, including the 2019 PCB risk analysis by U.S. EPA, is available at the Envirostor, an online repository listed in paragraph 1.04, above.

ARTICLE II **DEFINITIONS**

2.01. Department. "Department" means the California Department of Toxic Substances Control and includes its successor agencies, if any.

2.02. Environmental Restrictions. "Environmental Restrictions" means all protective provisions, covenants, restrictions, requirements, prohibitions, and terms and conditions as set forth in this Covenant.

2.03. Improvements. "Improvements" includes, but is not limited to buildings, structures, roads, driveways, improved parking areas, wells, pipelines, or other utilities.

2.04. Lease. "Lease" means lease, rental agreement, or any other document that creates a right to use or occupy any portion of the Property.

2.05. Occupant. "Occupant" or "Occupants" means Owner and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.06. Owner. "Owner" or "Owners" means the Covenantor, and any successor in interest including any heir and assignee, who at any time holds title to all or any portion of the Property.

2.07. U.S. EPA. "U.S. EPA" means the United States Environmental Protection Agency, and includes its successor agencies, if any.

ARTICLE III

GENERAL PROVISIONS

3.01. Runs with the Land. This Covenant sets forth Environmental Restrictions that apply to and encumber the Property and every portion thereof no matter how it is improved, held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. This Covenant: (a) runs with the land pursuant to Civil Code section 1471 and Health and Safety Code section 25202.5; (b) inures to the benefit of and passes with each and every portion of the Property; (c) is for the benefit of, and is enforceable by the Department; and (d) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02. Binding upon Owners/Occupants. This Covenant: (a) binds all Owners of the Property, their heirs, successors, and assignees; and (b) the agents, employees, and lessees of the Owners and the Owners' heirs, successors, and assignees. Pursuant to Civil Code section 1471, all successive Owners of the Property are expressly bound hereby for the benefit of the Department; this Covenant, however, is binding on all Owners and Occupants, and their respective successors and assignees, only during their respective periods of ownership or occupancy except that such Owners or Occupants shall continue to be liable for any violations of, or non-compliance with, the Environmental Restrictions of this Covenant or any acts or omissions during their ownership or occupancy.

3.03. Written Notice of the Presence of Hazardous Substances. Prior to the sale, lease, assignment, or other transfer of the Property, or any portion thereof, the Owner, lessor, or sublessor shall give the buyer, lessee, or sublessee written notice of the existence of this Covenant and its Environmental Restrictions.

3.04. Incorporation into Deeds and Leases. This Covenant shall be

incorporated by reference in each and every deed and Lease for any portion of the Property.

3.05. Conveyance of Property. The Owner and new Owner shall provide Notice to the Department and the U.S. EPA not later than 30 calendar days after any conveyance or receipt of any ownership interest in the Property (excluding Leases, and mortgages, liens, and other non-possessory encumbrances). The Notice shall include the name and mailing address of the new Owner of the Property and shall reference the site name and site code as listed on page one of this Covenant. The notice shall also include the Assessor's Parcel Number(s) noted on page one. If the new Owner's property has been assigned a different Assessor Parcel Number, each such Assessor Parcel Number that covers the Property must be provided. The Department shall not, by reason of this Covenant, have authority to approve, disapprove, or otherwise affect proposed conveyance, except as otherwise provided by law or by administrative order.

3.06. Costs of Administering the Covenant to Be Paid by Owner. The Department has already incurred and will in the future incur costs associated with this Covenant. Therefore, the Covenantor hereby covenants for the Covenantor and for all subsequent Owners that, pursuant to California Code of Regulations, title 22, section 67391.1(h), the Owner agrees to pay the Department's costs in administering, implementing and enforcing this Covenant.

ARTICLE IV

RESTRICTIONS AND REQUIREMENTS

4.01. Prohibited Uses. The Property shall not be used for any of the following purposes without prior written approval by the Department pursuant to Health and Safety Code section 25227 and prior written notice to U.S. EPA :

- (a) A residence, including single or multifamily housing, mobile homes, or factory-built housing constructed or installed for use as residential human habitation.
- (b) A hospital for humans.
- (c) A public or private school for persons under 18 years of age.
- (d) A day care center or a playground for children.

4.02. Soil Management. Soil management activities at the Capped Property are subject to the following requirements in addition to any other applicable Environmental Restrictions:

- (a) No activities that will disturb the soil at or below grade or below concrete (e.g., excavation, grading, removal, trenching, filling, earth movement, mining, or drilling) shall be allowed at the Property without a Soil Management Plan pre-approved by the Department and U.S. EPA in writing.
- (b) Any soil brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

4.03. Prohibited Activities. The following activities shall not be conducted at the Property:

- (a) Drilling for any water, oil, or gas without prior written approval by the Department.
- (b) Extraction or removal of groundwater without a Groundwater Management Plan pre-approved by the Department in writing.
- (c) Activity that may alter, interfere with, or otherwise affect the integrity or effectiveness of, or the access to, monitoring, operation or maintenance of the concrete cover at the Capped Property without prior written approval of the Department and U.S. EPA.

4.04. Written Notice of Covenant. Prior to any sale, lease, or rental of any portion of the Property, the Owner shall provide a copy of this Covenant to the buyer, lessee, or renter to ensure that the buyer, lessee, or renter is on notice of the restrictions and requirements of this Covenant. Prior to recordation of any easement on any portion of the Property, the Owner shall provide a copy of this Covenant to the easement holder to ensure that the easement holder is on notice of the restrictions and requirements of this Covenant. Covenantor shall also provide a copy of this Covenant to all existing Occupants and easement holders of record within 30 days of recording this Covenant.

4.05. Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, investigation, remediation, monitoring, and other activities as deemed necessary by the Department in order to protect human health or safety or the environment. Nothing in this instrument shall limit or otherwise affect the Department's right of entry and access, or authority to take response actions, under any applicable State Law.

4.06. Access for U.S EPA. The U.S. EPA shall have reasonable right of entry and access to the Property for inspection, investigation, remediation, monitoring, and other activities as deemed necessary by the U.S. EPA in order to protect human health or safety or the environment. Nothing in this instrument shall limit or otherwise affect U.S. EPA's right of entry and access, or U.S. EPA's authority to take actions, under any applicable law.

4.07. Access for Implementing Operation and Maintenance. The entity or person responsible for implementing the operation and maintenance activities, if any, shall have reasonable right of entry and access to the Property for the purpose of implementing such operation and maintenance activities until the Department determines that no further operation and maintenance activity is required.

4.08. Inspection and Reporting Requirements. The Owner shall conduct an annual inspection of the Property verifying compliance with this Covenant; shall submit an annual inspection report to the Department for its approval by January 15th of each year; and also send a copy to U.S. EPA. Attached as Exhibit F is a sample format for an annual inspection report. The annual inspection report must include the dates, times, and names of those who conducted the inspection and reviewed the annual inspection report. It also shall describe how the observations that were the basis for the statements and conclusions in the annual inspection report were performed (e.g., drive by, fly over, walk in, etc.). If any violation is noted, the annual inspection report must detail the steps taken to correct the violation and return to compliance. If the Owner identifies any violations of this Covenant during the annual inspection or at any other

time, the Owner must within 10 calendar days of identifying the violation: (a) determine the identity of the party in violation; (b) send a letter advising the party of the violation of the Covenant; and (c) demand that the violation cease immediately. Additionally, a copy of any correspondence related to the violation of this Covenant shall be sent to the Department and U.S. EPA within 10 calendar days of its original transmission.

4.09. Five-Year Review. In addition to the annual reviews noted above, after a period of five (5) years from January 15, 2021 and every five (5) years thereafter, Owner shall submit a Five-Year Review report documenting its review of the remedy implemented and its evaluation to determine if human health and the environment are being adequately protected by the remedy as implemented. The Owner shall submit this report to DTSC, and submit a copy to U.S. EPA. The report shall describe the results of all inspections, sampling analyses, tests and other data generated or received by Owner and evaluate the adequacy of the implemented remedy in protecting human health and the environment. As a result of any review work performed, Department may require Owner to perform additional review work or modify the review work previously performed by Owner.

4.10. Changes to Use or Condition of Property. Any changes to land use, movement of PCB contaminated soils, or discovery of new contamination requires notification to, and may require additional approval from, the U.S. EPA by the Owner and/or Occupant.

4.11. Access for Five-Year Reviews. The entity, person or persons responsible for Five-Year Reviews shall have reasonable right of entry and access to the Property for the purpose of implementing these activities. Such right of entry and access shall continue until such time as the U.S. EPA and DTSC both determine that no further Five-Year Review activities are required.

ARTICLE V ENFORCEMENT

5.01. Enforcement. Failure of the Owner or Occupant to comply with this Covenant shall be grounds for the Department to require modification or removal of any Improvements constructed or placed upon any portion of the Property in violation of this

Covenant. Violation of this Covenant, such as failure to submit (including submission of any false statement) record or report to the Department, shall be grounds for the Department to pursue administrative, civil, or criminal actions, as provided by law.

5.02. Enforcement Rights of U.S. EPA as Third-Party Beneficiary. U.S. EPA, as a third-party beneficiary, has the right to enforce the Environmental Restrictions contained herein.

ARTICLE VI

VARIANCE, REMOVAL AND TERM

6.01. Variance from Environmental Restrictions. Any person may apply to the Department for a written variance from any of the Environmental Restrictions imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25223. A copy of the application shall be submitted to the U.S. EPA simultaneously with the application submitted to the Department. No variance may be granted under this paragraph without prior notice and opportunity to comment by U.S. EPA.

6.02 Termination, Modification, and/or Removal of Environmental Restrictions. Any person may apply to the Department to terminate, modify, and/or remove any or all of the Environmental Restrictions imposed by this Covenant or terminate the Covenant in its entirety. Such application shall be made in accordance with Health and Safety Code section 25224 and a copy of the application shall be submitted to U.S. EPA simultaneously with the application submitted to the Department. No termination may be granted under this paragraph without prior notice to and opportunity to comment by U.S. EPA.

6.03 Term. Unless ended in accordance with paragraph 6.02, by law, or by the Department in the exercise of its discretion, this Covenant, after providing notice to and an opportunity to comment by U.S. EPA, shall continue in effect in perpetuity.

ARTICLE VII

MISCELLANEOUS

7.01. No Dedication Intended. Nothing set forth in this Covenant shall be

construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof, to the general public or anyone else for any purpose whatsoever.

7.02. Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of Riverside within 10 calendar days of the Covenantor's receipt of a fully executed original. The Covenantor shall also provide copies showing the County Recorder's tracking information of its recording (i.e., document number or book and page number information) to the Department and U.S. EPA within ten (10) days of receiving it from the County Recorder's Office.

7.03. Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (a) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served; or (b) five calendar days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner:

Mark Willett, General Manager
Clow Valve Company
1375 Magnolia Avenue
Corona, California 91719
And

To Department:

A. Edward Morelan, Chief
Cypress Cleanup Branch
Site Mitigation and Restoration Program
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630

To U.S. EPA:

U.S. Environmental Protection Agency
Region IX
Attention: PCB Coordinator (Land Chemicals and
Redevelopment Division)
75 Hawthorne Street
San Francisco, CA 94105-3901

Any party may change its address or the individual to whose attention a Notice is to be

sent by giving advance written Notice in compliance with this paragraph.

7.04. Partial Invalidity. If this Covenant or any of its terms are determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.05. Statutory References. All statutory or regulatory references include successor provisions.

7.06. Incorporation of Exhibits. All exhibits and attachments to this Covenant are incorporated herein by reference.

IN WITNESS WHEREOF, the Covenantor and the Department hereby execute this Covenant.

Covenantor: Clow Valve Company

By: _____

Date: _____

Name and Title: Mark Willett, General Manager

Department of Toxic Substances Control:

By: _____

Date: _____

Name and Title: A. Edward Morelan, Chief
Cypress Cleanup Branch
Site Mitigation and Restoration Program

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of _____

On _____ before me,

(space above this line is for name and title of the officer/notary),

personally appeared _____, who 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.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

_____ (seal)

Signature of Notary Public

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of _____

On _____ before me,

(space above this line is for name and title of the officer/notary),

personally appeared _____, who 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.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

_____ (seal)

Signature of Notary Public

Exhibit A – “Legal Description” – APN 107-030-022-3

Exhibit B – “Plot Plan” - APN 107-030-022-3

Exhibit C – “Capped Property” - Legal Description

Exhibit D – “Capped Property” - Sketch

Exhibit E – “AOC7 – Transformer Area 1”,

Exhibit F – “LUC Sample Annual inspection Report”

EXHIBIT "A"

LEGAL DESCRIPTION

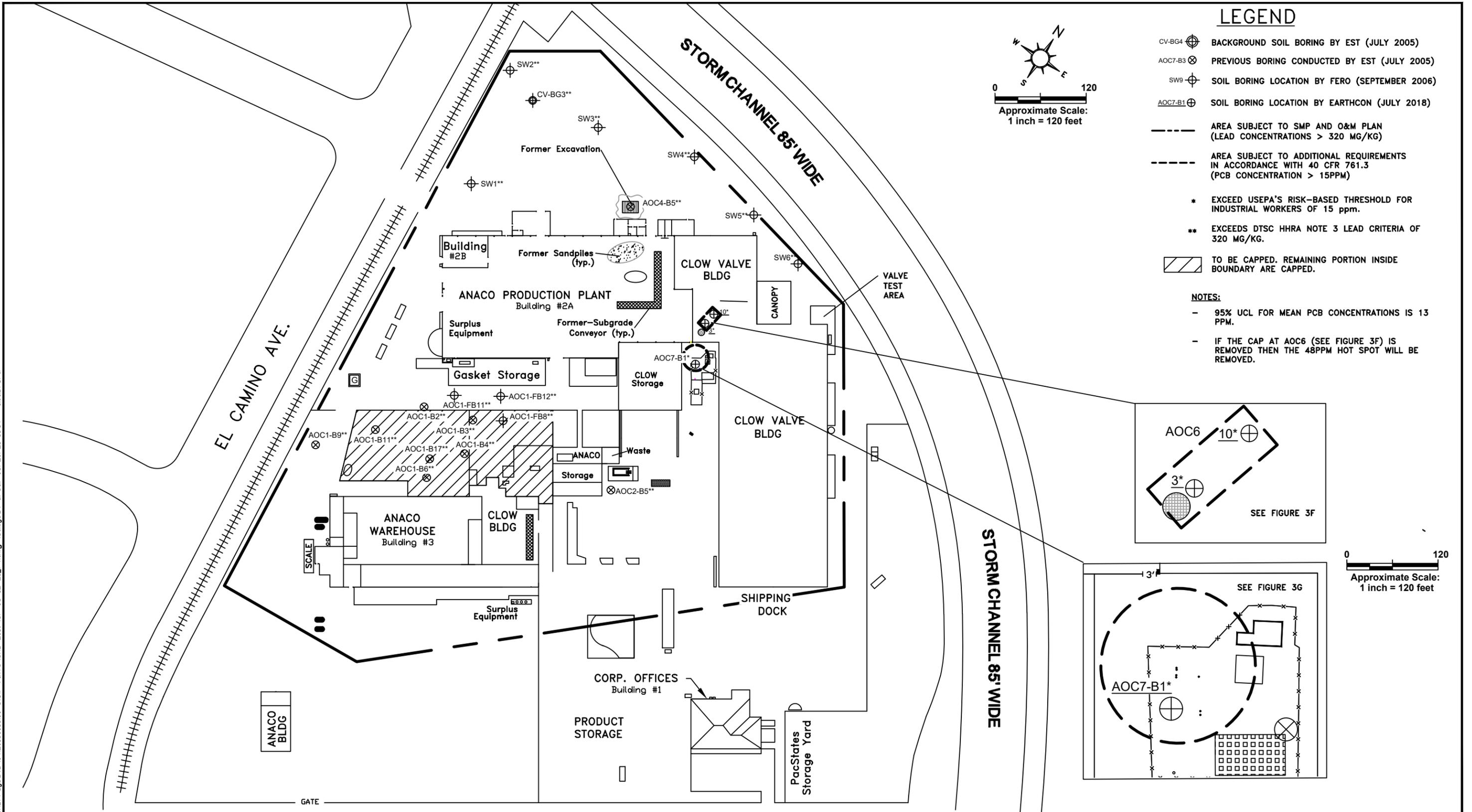
THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CORONA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONALIZED SURVEY OF THE RANCHO EL SOBRANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATING COMPANY, AS SHOWN BY MAP ON FILE IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, BOUNDED AS FOLLOWS: ON THE SOUTHEAST BY THE SOUTHWESTERLY EXTENSION OF THE NORTHWEST LINE OF MAGNOLIA AVENUE, AS SHOWN ON RECORD OF SURVEY ENTITLED "RECORD OF SURVEY OF A PORTION OF LOTS 11, 12, 13, 14, 15, IN BLOCK 63 OF RIVERSIDE LAND AND IRRIGATING COMPANY AND A PORTION OF SECTIONS 29 AND 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, SAN BERNARDINO BASE AND MERIDIAN" ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS; ON THE WEST BY THE EASTERLY LINE OF THE PORPHYRY SPUR OF THE ATCHISON, TOPEKA, AND SANTA FE RAILWAY COMPANY; AND ON THE NORTHEAST BY THE SOUTHERLY AND SOUTHWESTERLY LINE OF PARCELS 5 TO 11, INCLUSIVE, OF SAID RECORD OF SURVEY ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS.

EXCEPTING THEREFROM THAT PORTION GRANTED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER DISTRICT CONSERVATION DISTRICT BY DEED RECORDED OCTOBER 22, 1984 AS INSTRUMENT NO. 84-227367 AND RE-RECORDED FEBRUARY 11, 1985 AS INSTRUMENT NO. 85-028214 BOTH OF OFFICIAL RECORDS.

APN: 107-030-022-3

FILENAME: S:\Common\OrangeCAD\Projects\04.20150013.00-Clow Valve\CAD 2019\SP 05-12-21\F4.dwg (Subject area) 05/20/21 13:14 - abasford



MAGNOLIA AVE

CLOW VALVE
1375 MAGNOLIA AVENUE
CORONA, CA 92879

PROJECT NO. 04.20150013.00



EARTHCON CONSULTANTS CA, INC

1500 SOUTH SUNKIST STREET, SUITE D, ANAHEIM, CA 92806

LUC Exhibit B
SITE PLAN WITH
AREAS SUBJECT TO
THE LAND USE COVENANT

DRAWN: AB CHECKED: JB DATE: 05/12/21 FIGURE: 4A

EXHIBIT "C"
LEGAL DESCRIPTION
Portion of APN 107-030-022

BEING IN THE CITY OF CORONA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA. THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONIZED SURVEY OF THE RANCHO EL SOBRANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATION COMPANY, AS SHOWN ON MAP FILED IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF COMPTON AVENUE (ALSO KNOWN AS EL CAMINO AVENUE) AND THE CENTERLINE OF TEMESCAL CREEK CHANNEL AS SHOWN ON RECORD OF SURVEY FILED IN BOOK 71, PAGES 7 THROUGH 11, INCLUSIVE, OF RECORDS OF SURVEY IN THE OFFICE OF THE COUNTY RECORDER OF RIVERSIDE COUNTY, THENCE, SOUTHEASTERLY ALONG THE CENTERLINE OF SAID TEMESCAL CREEK CHANNEL, SOUTH 79°49'49" EAST (SHOWN AS S79°48'46" EAST ON SAID RECORD OF SURVEY), 477.06 FEET; THENCE, LEAVING SAID CENTERLINE, SOUTH 10°22'04" WEST, 84.25 FEET TO THE TRUE POINT OF BEGINNING FOR THIS DESCRIPTION; THENCE, NORTH 79°37'56" WEST, 269.59 FEET; THENCE, SOUTH 56°04'15" WEST, 116.07 FEET TO A POINT ON THE EASTERLY LINE OF A.T.&S.F. RAILROAD RIGHT OF WAY AS SHOWN ON SAID RECORD OF SURVEY; THENCE, SOUTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, SOUTH 05°28'23" EAST, 800.61 FEET; THENCE, LEAVING SAID EASTERLY RIGHT OF WAY, NORTH 83°44'45" EAST, 203.93 FEET; THENCE, NORTH 47° 08'29" EAST, 630.00 FEET; THENCE, NORTH 34°06'13" WEST, 404.00 FEET; THENCE, NORTH 79°37'56" WEST, 155.41 FEET TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH TWO AREAS WITHIN THE ABOVE DESCRIBED EASEMENT, THE FIRST BEING DESCRIBED AS FOLLOWS: AREA 1, COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF COMPTON AVENUE (ALSO KNOWN AS EL CAMINO AVENUE) AND THE CENTERLINE OF TEMESCAL CREEK CHANNEL AS SHOWN ON RECORD OF SURVEY FILED IN BOOK 71, PAGES 7 THROUGH 11, INCLUSIVE, OF RECORDS OF SURVEY IN THE OFFICE OF THE COUNTY RECORDER OF RIVERSIDE COUNTY, THENCE, SOUTHEASTERLY ALONG THE CENTERLINE OF SAID TEMESCAL CREEK CHANNEL, SOUTH 79°49'49" EAST (SHOWN AS S79°48'46" EAST ON SAID RECORD OF SURVEY), 477.06 FEET; THENCE, LEAVING SAID CENTERLINE, SOUTH 10°22'04" WEST, 214.25 FEET; THENCE, SOUTH 79°49'49" EAST, 75.15 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 1; THENCE, SOUTH 79°49'49" EAST, 30.00 FEET; THENCE, SOUTH 10°10'11" WEST, 30.00 FEET; THENCE, NORTH 79°49'49" WEST, 30.00 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "A"; THENCE, NORTH 10°10'11" EAST, 30.00 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 1.

EXHIBIT "C"
LEGAL DESCRIPTION
(Continued)

AREA 2, COMMENCING AT THE POINT HEREINBEFORE REFERRED TO AS POINT "A", THENCE, SOUTH 10°10'11" WEST, 13.15 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 2; THENCE, SOUTH 10°10'11" WEST, 60.00 FEET; THENCE, SOUTH 79°49'49" EAST, 60.00 FEET; THENCE, NORTH 10°10'11" EAST, 60.00 FEET; THENCE, NORTH 79°49'49" WEST, 60.00 FEET TO THE TRUE POINT OF BEGINNING FOR SAID AREA 2.

THE ABOVE DESCRIBED GROSS AREA EASEMENT CONTAINS 422,249 SQ.FT., 9.694 ACRES MORE OR LESS.

THE ABOVE DESCRIBED AREA 1 CONTAINS 900 SQ.FT., 0.021 ACRES MORE OR LESS.

THE ABOVE DESCRIBED AREA 2 CONTAINS 3,600 SQ.FT., 0.083 ACRES MORE OR LESS.

As shown on Exhibit "B" attached hereto and by this reference made a part hereof.

Prepared by:


Douglas Boynton, PLS4787
(562) 426-6464
March 17, 2020

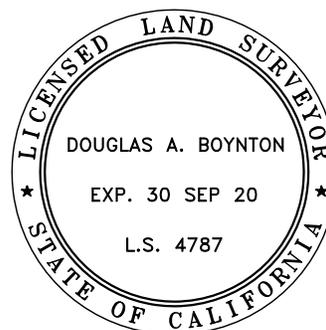
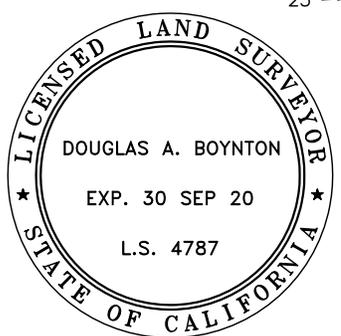
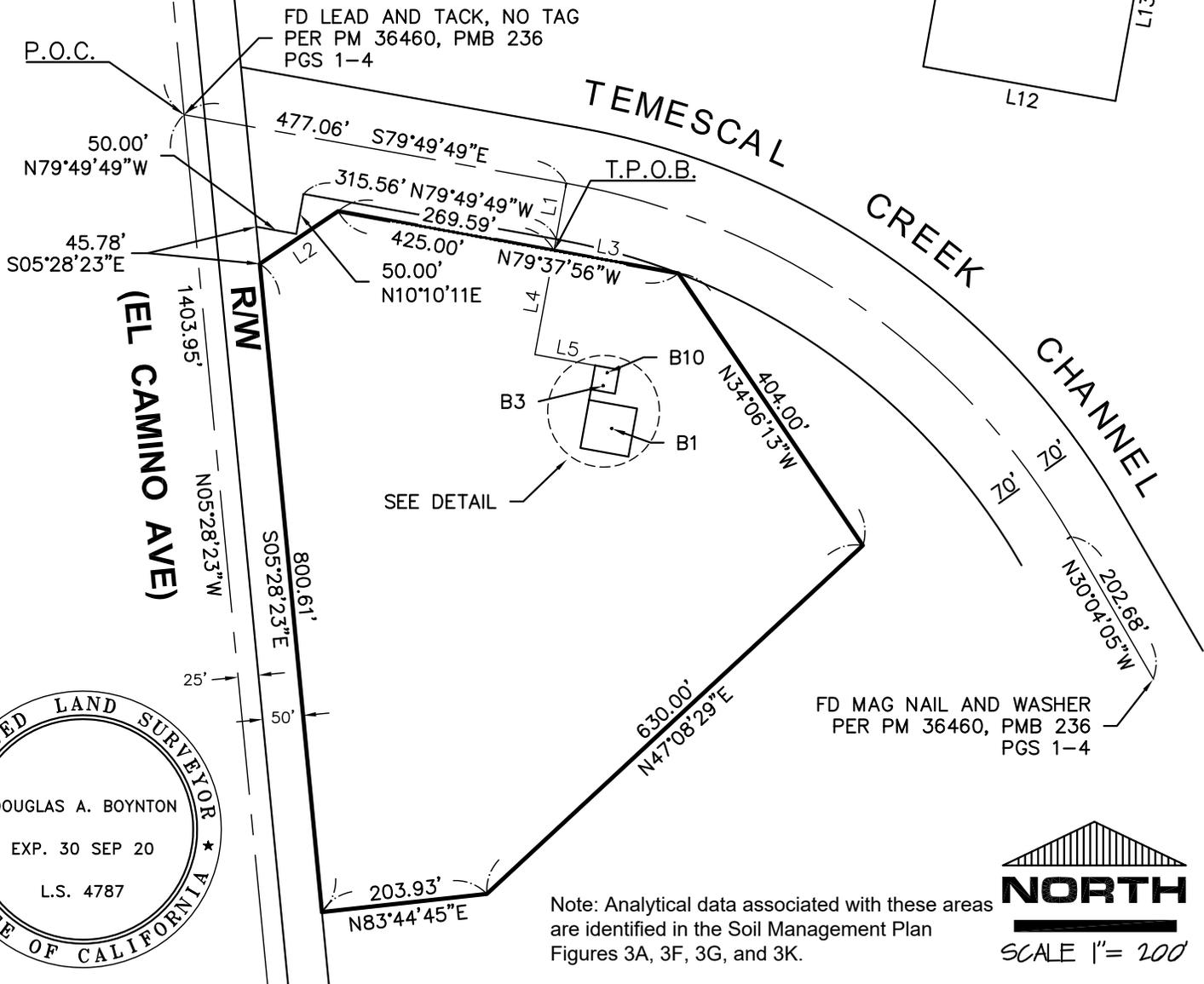
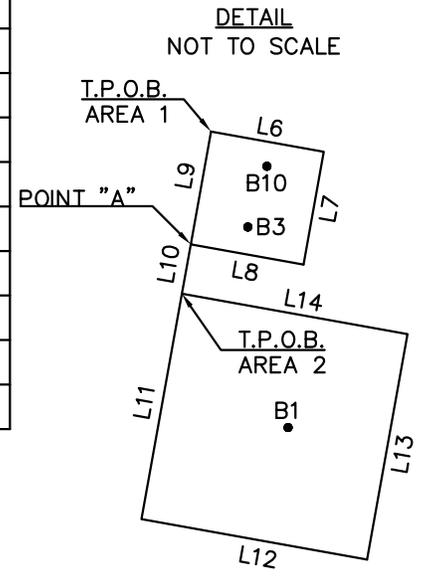
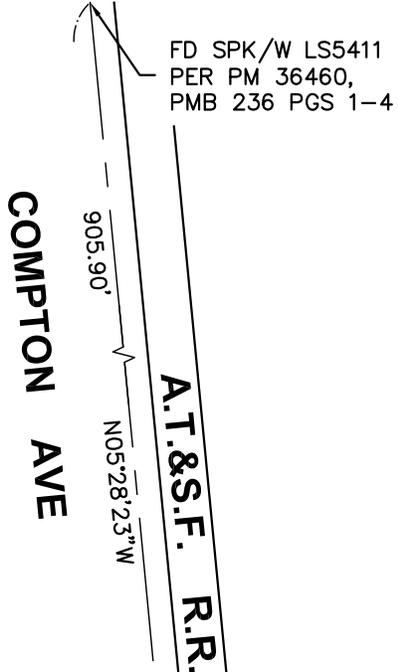


EXHIBIT "D"

Sketch to accompany Legal Description

LINE TABLE		
L1	84.25'	S10° 22' 04" W
L2	116.07'	S56° 04' 15" W
L3	155.41'	N79° 37' 56" W
L4	130.00'	S10° 22' 04" W
L5	75.15'	S79° 49' 49" E
L6	30.00'	S79° 49' 49" E
L7	30.00'	S10° 10' 11" W
L8	30.00'	N79° 49' 49" W
L9	30.00'	N10° 10' 11" E
L10	13.15'	S10° 10' 11" W
L11	60.00'	S10° 10' 11" W
L12	60.00'	S79° 49' 49" E
L13	60.00'	N10° 10' 11" E
L14	60.00'	N79° 49' 49" W



Note: Analytical data associated with these areas are identified in the Soil Management Plan Figures 3A, 3F, 3G, and 3K.



EXHIBIT F

LAND USE COVENANT SAMPLE ANNUAL INSPECTION REPORT (2 Pages)

Site name:

Site address:

Current Site owner:

Date and times of inspection:

Name(s) of individual(s) who performed inspection:

How inspection observations were made (e.g. drive-by, fly-over, walking the Property):

1. Since the last annual inspection, has there been a change in the land use, such that there are now residences, a hospital for humans, a public or private school for persons under 21 years of age, or a day care center for children on the restricted Property?
 Yes No Not an applicable restriction
2. Since the last annual inspection, has the soil been disturbed on the restricted Property? Was evidence of soil disturbance observed on the restricted Property during the inspection?
 Yes No Not an applicable restriction
3. Since the last annual inspection, has there been any drilling on the restricted Property? Was evidence of drilling observed on the restricted Property during the inspection?
 Yes No Not an applicable restriction

Cap Condition

4. Since the last annual inspection, has there been any damage to, disturbance of, or modifications to the existing building foundation and/or surrounding pavement that serves as the cap over contaminated soil?
 Yes No

5. Has there been any damage to, disturbance of, or modifications to the asphalt/concrete Cap covering the restricted Property?
 Yes No

Land Use Covenant Compliance

6. Has there been a change in the land use of the property from commercial/industrial?
 Yes No

If the response to any of the above questions is yes, describe the circumstances.

Photos should be attached to this report that show the use of the Restricted Property at the time of the inspection and the condition of any Caps on the restricted Property. Photos showing any cracks in or damage to the Cap should also be included.

I certify under penalty of law that this document and all attachments were prepared by me or under my direction or supervision. With the exception of any areas of non-compliance noted above, all uses and activities on the restricted Property were found to be in compliance with the restrictions and requirements of the Land Use Covenant. Based on my personal knowledge or inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature of Property Owner or Representative

Date

Print Name

Title

APPENDIX D



Department of Toxic Substances Control



Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, PhD
Director
5796 Corporate Drive
Cypress, California 90620

Govin Newsom
Governor

FINANCIAL ASSURANCE COST ESTIMATE VALIDATION M E M O R A N D U M

TO: Irena Edwards
Environmental Scientist
Site Mitigation and Restoration Program
DTSC Cypress Office

FROM: Christine P. Brown, P.E.
Hazardous Substances Engineer
Engineering Services, Southern California
Engineering and Special Projects Office

REVIEWER: Perry Myers, P.E.
Unit Chief, Engineering Services North
Engineering and Special Projects Office, Sacramento

SUBJECT: REVIEW OF THE FINANCIAL ASSURANCE OPERATION AND
MAINTENANCE COST ESTIMATE FOR CLOW VALVE COMPANY, 1375
MAGNOLIA AVENUE, CORONA, RIVERSIDE COUNTY, CALIFORNIA
(Site Code: DTSC600876)

DATE: May 28, 2021

Documents Reviewed

The result of this review is limited to the following documents, or sections thereof:

1. Operation and Maintenance Cost Estimate, part of Response to Comments, dated April 21, 2021, provided by EarthCon Consultants, CA.

COST ESTIMATE REVIEW

The Department of Toxic Substances Control's (DTSC's) Cost Estimating Work Group (CEWG) engineering staff reviewed the Operation and Maintenance Financial Assurance Cost Estimate for the Clow Valve Company in Corona, Riverside County, California to determine if the estimated dollar amount is sufficient for compliance with the financial assurance cost estimate requirements established for the site. This memorandum provides the findings of our review. CEWG provided a previous memorandum dated March 8, 2021 with review of the corrective action cost estimate. All comments in that memorandum have been adequately addressed.

BACKGROUND

The following information is taken from the Revised Corrective Measures Study (CMS) dated February 19, 2018.

The Site was originally developed for the production of iron pipes and connections by American Foundry in approximately 1950. In 1960, Rich Manufacturing of Los Angeles acquired the property and moved their iron pipe manufacturing business to the Corona location, adding additional structures in 1967 for the machine shop and brass foundry. Clow Valve, a manufacturer of wrought iron pipe and other foundry products as early as 1878, acquired Rich Manufacturing Company of Corona in 1972. This acquisition added the wet barrel fire hydrant to Clow Valve's product line of waterworks products. In 1985, McWane, Inc. purchased all Clow Corporation's stock and Clow became a wholly owned subsidiary and eventually operating division of McWane.

Current manufacturing processes include machining, testing, coating, and shipping wet barrel fire hydrants. Finished valves are also stored and distributed from this location. Anaco, Clow Valve's sister company, is also on-Site and is engaged in the manufacturing of rubber soil pipe couplings. Two other McWane Divisions, McWane Ductile-Utah and Tyler Union operate product distribution centers on the Site.

Site soils are comprised of Holocene Older and Younger alluvium and bedrock. The younger alluvium consists of unconsolidated sand, gravel, and silt. The older alluvium consists of semi-consolidated buff to dark brown sand, gravel, and silt. During previous site investigations, groundwater beneath the Site was encountered at approximately 47 ft bgs in coarse granular material composed of sand and gravel. The regional aquifer is reported to start at 124 ft bgs.

As a result of facility operations, site soils have been contaminated with lead, TPH and polychlorinated biphenyls (PCBs), and 1,1,2,2-tetrachloroethane has been found in soil gas. The CMS proposed a combined remedial approach including engineering controls (capping system – asphalt-concrete pavement), excavation with off-site disposal for soils

with high concentrations of PCBs (concentrations exceeding 100 mg/kg), and institutional controls (Soil Management Plan and Use Covenant). The remediation of PCB contamination is regulated by USEPA. Corrective Measures are ongoing.

The Scope of Work for the Operation and Maintenance activities at the site includes:

- Pavement inspection, maintenance, and repair.
- Land Use Covenant inspection and reporting.
- DTSC oversight

Based on my review of the above listed document, I have concluded that the Financial Assurance Cost Estimate for \$1,559,685.16 in 2021-year dollars is valid and reasonably estimates the costs for a third party to perform the Scope of Work in the event the Owner or Operator will not.

The Cost Estimating Working Group (CEWG) review was based on the information available at the time the review was performed and does not constitute a guarantee of the accuracy of the assumptions used by the responsible party to develop their financial assurance cost estimate. The review of this financial assurance cost estimate is not intended to be all-inclusive as this review does not include a technical assessment and evaluation of the remedial design/controlling document or the accuracy and reliability of data used to support the assumptions.

The Financial Assurance Cost Estimate and supporting documentation was reviewed under the responsible charge of the following qualified Civil Engineer licensed in the State of California.

Seal

Name: Christine P. Brown, P.E.



Signature: Christine P. Brown

Date: May 28, 2021

Quality Assurance Reviewer: Perry Myers

Date: May 28, 2021

April 21, 2021

Irena Edwards
Department of Toxic Substances Control
5796 Corporate Ave
Cypress, California 90630

SUBJECT: RESPONSE TO COMMENTS

FINANCIAL ASSURANCE COST ESTIMATE REVIEW – CLOW VALVE COMPANY, 1375 MAGNOLIA AVENUE, CORONA. 22120-600876-48 WR:20039018

Dear Ms. Edwards,

EarthCon Consultants CA, Inc. (EarthCon) on behalf of Clow Valve Company (Clow), is submitting this Response to Comments (RTC) letter addressing the DTSC comments provided on the *Financial Assurance Cost Estimate Review* letter dated March 8, 2021. Based on the comments provided, the RTCs associated with the requested information are provided below:

Comment 1: *The cost estimate should include a basis of estimate that describes the tasks involved and costs for each task. Line items should be included under each task. Cost data should include unit costs, materials, labor, and equipment and show adequate detail to allow CEWG to verify the cost estimate.*

Response: Line items for the individual tasks are provided in Appendix A. The general tasks include annual site inspections, cover operations and maintenance (O&M), and DTSC oversight. The costs associated with O&M of the asphalt cover utilize the City of Corona's Public Works form titled Quantity Estimate for Public Improvements (see Appendix B). This form includes materials, labor, and equipment in their cost estimate. In addition, when redevelopment activities occur the associated details will be utilized to prepare a revised O&M cost estimate.

Comment 2: *A figure showing the capped area of the site should be included with the cost estimate. The areal extent of the cap should be specified in the cost estimate. An engineering description of the cap should also be included in the basis of the estimate.*

Response: A copy of the grading plan is provided in Appendix B. The areal extent of the cap is identified on page one of the plans and is also utilized for the area calculations for the maintenance associated with AOC1/AOC5. Additionally, a description of the cap is included in the text portions of the grading plan documents.

Comment 3: *The asphalt pavement maintenance should include costs for crack repair, fog/slurry seal, and pavement resurfacing. CEWG recommends a resurfacing interval of 10 years.*

Response: As noted in Comment 1, line items for the individual tasks are provided in Appendix A. This includes minor crack repair, fog/slurry seal, and pavement resurfacing. As requested, the resurfacing interval of 10 years is included.

Comment 4: *DTSC oversight costs, including Land Use Covenant oversight, should be specified in the cost estimate.*

Response: As noted in Comment 1, the DTSC oversight costs are included. See Appendix A.

Comment 5: *A contingency should be included in the cost estimate. CEWG recommends at least a 15% contingency.*

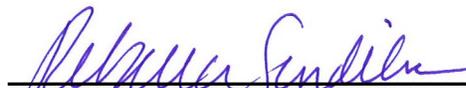
Response: A 15% contingency is included. See Appendix A.

Comment 6: *The cost estimate should be prepared by a California licensed professional engineer because the operation and maintenance activities involve civil engineering. The cost estimate should be dated, signed, and stamped by the engineer in responsible charge who prepared the cost estimate.*

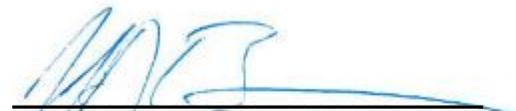
Response: The cost estimates have been approved and certified by a California licensed professional civil engineer. Please see the estimates provided in Appendix A.

If there are any questions regarding this letter, please contact one of the undesigned at 714-500-5400.

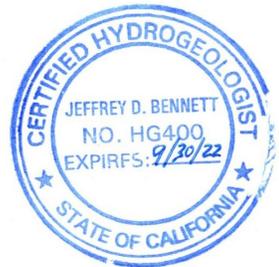
Respectfully submitted,



Rebecca Sundilson
Senior Scientist



Jeffrey D. Bennett, P.G. 6027
Principal Hydrogeologist





Thomas M. Hill, PE 28837
Professional Engineer



Enclosure: Appendix A - Cost Estimate Spreadsheets
Appendix B - Supporting Documentation

O&M COST ESTIMATE - ASPHALT COVER 30 YEAR

ANNUAL SITE INSPECTIONS				
Year	Fee*	Unit	# of Units	Subtotal
1	\$2,500	Per Inspection	1	\$2,500
2	\$2,575	Per Inspection	1	\$2,575.00
3	\$2,652	Per Inspection	1	\$2,652.25
4	\$2,732	Per Inspection	1	\$2,731.82
5	\$5,628	Per Inspection	1	\$5,627.54
6	\$2,898	Per Inspection	1	\$2,898.19
7	\$2,985	Per Inspection	1	\$2,985.13
8	\$3,075	Per Inspection	1	\$3,074.68
9	\$3,167	Per Inspection	1	\$3,166.93
10	\$6,524	Per Inspection	1	\$6,523.87
11	\$3,360	Per Inspection	1	\$3,359.79
12	\$3,461	Per Inspection	1	\$3,460.58
13	\$3,564	Per Inspection	1	\$3,564.40
14	\$3,671	Per Inspection	1	\$3,671.33
15	\$7,563	Per Inspection	1	\$7,562.95
16	\$3,895	Per Inspection	1	\$3,894.92
17	\$4,012	Per Inspection	1	\$4,011.77
18	\$4,132	Per Inspection	1	\$4,132.12
19	\$4,256	Per Inspection	1	\$4,256.08
20	\$8,768	Per Inspection	1	\$8,767.53
21	\$4,515	Per Inspection	1	\$4,515.28
22	\$4,651	Per Inspection	1	\$4,650.74
23	\$4,790	Per Inspection	1	\$4,790.26
24	\$4,934	Per Inspection	1	\$4,933.97
25	\$10,164	Per Inspection	1	\$10,163.97
26	\$5,234	Per Inspection	1	\$5,234.44
27	\$5,391	Per Inspection	1	\$5,391.48
28	\$5,553	Per Inspection	1	\$5,553.22
29	\$5,720	Per Inspection	1	\$5,719.82
30	\$11,783	Per Inspection	1	\$11,782.83
Inspection Subtotal				\$144,153

*3% annual increase

**Includes 5 Year Evaluation (2X Routine Inspection Costs)

See Supporting Calculations

COVER O&M		
Year	Task Item	Estimate*
1	Minor Crack Repair	\$ 1,244.85
2	Minor Crack Repair	\$ 1,282.20
3	Minor Crack Repair	\$ 1,320.66
4	Minor Crack Repair	\$ 1,360.28
5	Seal Coat	\$ 136,132.56
6	Minor Crack Repair	\$ 1,443.12
7	Minor Crack Repair	\$ 1,486.42
8	Minor Crack Repair	\$ 1,531.01
9	Minor Crack Repair	\$ 1,576.94
10	Resurfacing	\$ 193,616.59
11	Minor Crack Repair	\$ 1,672.97
12	Minor Crack Repair	\$ 1,723.16
13	Minor Crack Repair	\$ 1,774.86
14	Minor Crack Repair	\$ 1,828.10
15	Seal Coat	\$ 140,656.36
16	Minor Crack Repair	\$ 1,939.44
17	Minor Crack Repair	\$ 1,997.62
18	Minor Crack Repair	\$ 2,057.55
19	Minor Crack Repair	\$ 2,119.27
20	Resurfacing	\$ 199,934.96
21	Minor Crack Repair	\$ 2,248.34
22	Minor Crack Repair	\$ 2,315.79
23	Minor Crack Repair	\$ 2,385.26
24	Minor Crack Repair	\$ 2,456.82
25	Seal Coat	\$ 141,303.93
26	Minor Crack Repair	\$ 2,606.44
27	Minor Crack Repair	\$ 2,684.63
28	Minor Crack Repair	\$ 2,765.17
29	Minor Crack Repair	\$ 2,848.13
30	Resurfacing	\$ 200,685.68
Cover O&M Subtotal		\$ 1,058,999.10

*3% annual increase

**Per City of Corona-Quantity Estimate for Public Improvements (March 2018)

See Supporting Calculations

DTSC OVERSIGHT					OVERALL COST ESTIMATE	
Year		Hourly Rate***	Hours	Subtotal	Year	
1	Annual Inspection & Report Review	\$191	16	\$3,056	1	\$6,800.85
2	Annual Inspection & Report Review	\$196.73	16	\$3,148	2	\$7,004.88
3	Annual Inspection & Report Review	\$202.63	16	\$3,242	3	\$7,215.02
4	Annual Inspection & Report Review	\$208.71	16	\$3,339	4	\$7,431.47
5	Annual Inspection & 5 Yr Report Review	\$214.97	20	\$4,299	5	\$146,059.54
6	Annual Inspection & Report Review	\$221.42	16	\$3,543	6	\$7,884.05
7	Annual Inspection & Report Review	\$228.06	16	\$3,649	7	\$8,120.57
8	Annual Inspection & Report Review	\$234.91	16	\$3,758	8	\$8,364.19
9	Annual Inspection & Report Review	\$241.95	16	\$3,871	9	\$8,615.11
10	Annual Inspection & 5 Yr Report Review	\$249.21	20	\$4,984	10	\$205,124.69
11	Annual Inspection & Report Review	\$256.69	16	\$4,107	11	\$9,139.77
12	Annual Inspection & Report Review	\$264.39	16	\$4,230	12	\$9,413.97
13	Annual Inspection & Report Review	\$272.32	16	\$4,357	13	\$9,696.39
14	Annual Inspection & Report Review	\$280.49	16	\$4,488	14	\$9,987.28
15	Annual Inspection & 5 Yr Report Review	\$288.90	20	\$5,778	15	\$153,997.40
16	Annual Inspection & Report Review	\$297.57	16	\$4,761	16	\$10,595.50
17	Annual Inspection & Report Review	\$306.50	16	\$4,904	17	\$10,913.37
18	Annual Inspection & Report Review	\$315.69	16	\$5,051	18	\$11,240.77
19	Annual Inspection & Report Review	\$325.16	16	\$5,203	19	\$11,577.99
20	Annual Inspection & 5 Yr Report Review	\$334.92	20	\$6,698	20	\$215,400.88
21	Annual Inspection & Report Review	\$344.97	16	\$5,519	21	\$12,283.09
22	Annual Inspection & Report Review	\$355.32	16	\$5,685	22	\$12,651.58
23	Annual Inspection & Report Review	\$365.98	16	\$5,856	23	\$13,031.13
24	Annual Inspection & Report Review	\$376.96	16	\$6,031	24	\$13,422.07
25	Annual Inspection & 5 Yr Report Review	\$388.26	20	\$7,765	25	\$159,233.17
26	Annual Inspection & Report Review	\$399.91	16	\$6,399	26	\$14,239.47
27	Annual Inspection & Report Review	\$411.91	16	\$6,591	27	\$14,666.65
28	Annual Inspection & Report Review	\$424.27	16	\$6,788	28	\$15,106.65
29	Annual Inspection & Report Review	\$436.99	16	\$6,992	29	\$15,559.85
30	Annual Inspection & 5 Yr Report Review	\$450.10	20	\$9,002	30	\$221,470.59
Oversight Subtotal				\$153,096		

*3% annual increase

**Based on 2020-2021 Rate provided by Irena Edwards from email 3/23/21

TOTAL	\$1,356,247.96
Contingency 15%	\$203,437.19
PROJECT LIFETIME ESTIMATE	\$1,559,685.16

Thomas M Hill

Thomas M. Hill, PE 28837
Professional Engineer



SUPPORTING CALCULATIONS

ASPHALT CALCULATIONS

Area Calculations

AOC	Area (ft2)	
AOC1/AOC5	28,410	See Grading Plan
ACO2/AOC9	7503.39	See Attached figures
AOC3	13745.79	See Attached figures
AOC4	31179.7	See Attached figures
Total Area	80,838.88	

AC Pavement*	Area (ft2)	Depth (ft)	Conversion	Ton	Unit Cost	Subtotal
Asphalt (sf x depth x 0.075)	80,838.88	0.16666667	0.075	1010.486	\$ 190.00	\$ 191,992.34

Slurry Seal Coat*	Area (ft2)	yds2	Unit Cost	Subtotal
AC Fogseal	80,838.88	26946.2933	\$ 5.00	\$ 134,731.47

Crack Repair	Area (ft2)	Unit Cost	Subtotal
1% of Area	808.39	\$ 1.50	\$ 1,212.58

*Per City of Corona-Quantity Estimate for Public Improvements (March 2018)
Includes labor, materials, and equipment per City of Corona email 3/29/21 (Andrea Cisneros)

INSPECTION CALCULATIONS

Labor	Rate	Units	Subtotal
Principal	\$ 190	2	\$ 380
Senior Scientist	\$ 130	10	\$ 1,300
Staff Scientist	\$ 100	6	\$ 600
Admin	\$ 60	1	\$ 60
Expenses			
Vehicle Fee	\$ 85	1	\$ 85
Report Supplies	\$ 25	1	\$ 25
Shipping	\$ 50	1	\$ 50
			\$ 2,500

Thomas M Hill

Thomas M. Hill, PE 28837
Professional Engineer



GRADING GENERAL NOTES

- A GRADING PERMIT FROM THE PUBLIC WORKS DEPARTMENT IS REQUIRED. ALL GRADING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF CORONA GRADING REGULATIONS - CORONA MUNICIPAL CODE 15.36. THESE PLANS, SPECIAL INSTRUCTIONS ON THE PERMIT, AND THE GEOTECHNICAL INVESTIGATION AND LIQUIDATION EVALUATION DATED SEPTEMBER 10, 2019 BY GEOTECHNICAL PROFESSIONALS INC., AND ALL SUBSEQUENT ADDENDA.
- SOURCE OF TOPOGRAPHY IS BASED ON FIELD SURVEY DATED SEPTEMBER 23, 2018.
- A PRE-GRADING MEETING AT THE SITE IS REQUIRED BETWEEN THE CITY INSPECTOR, THE CIVIL ENGINEER, THE GEOTECHNICAL ENGINEER AND THE GRADING CONTRACTOR. CALL THE PUBLIC WORKS DEPARTMENT INSPECTION DIVISION AT (951) 279-3511 TO SCHEDULE A PRE-GRADING MEETING AT LEAST 48 HOURS PRIOR TO START OF ANY WORK.
- HOURS OF OPERATION ARE 7:00 A.M. TO 5:00 P.M. - MONDAY THROUGH FRIDAY EXCLUDING HOLIDAYS.
- SEPARATE PERMITS SHALL BE REQUIRED FOR ANY IMPROVEMENT WORK IN THE PUBLIC RIGHT-OF-WAY.
- CONSTRUCTION MATERIAL AND EQUIPMENT SHALL NOT OCCUPY ANY PORTION OF THE PUBLIC RIGHT-OF-WAY, SUCH AS STREET, ALLEY OR PUBLIC SIDEWALK AT ANY TIME. TEMPORARY USE OF PUBLIC RIGHT-OF-WAY, WHENEVER REQUESTED, MUST BE REVIEWED AND APPROVED BY THE PUBLIC WORKS DIRECTOR.
- REPAIR OR REPLACE ALL EXISTING DAMAGED OR ALTERED PUBLIC IMPROVEMENTS AS REQUIRED BY THE PUBLIC WORKS DIRECTOR.
- ALL SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED IN PLACE. ANY DISTURBED OR COVERED MONUMENTS SHALL BE RESET BY A QUALIFIED CIVIL ENGINEER OR A LICENSED LAND SURVEYOR.
- PRIOR TO TAKING WATER FROM A CITY FIRE HYDRANT, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE PUBLIC WORKS DEPARTMENT TO OBTAIN A FIRE HYDRANT WATER METER. METER LOCATION MAY NOT BE ALTERED WITHOUT DEPARTMENT OF WATER AND POWER APPROVAL.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES OR STRUCTURES ABOVE OR BELOW GROUND SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES OR STRUCTURES CAUSED BY HIS OPERATION.
- STRICT ADHERENCE TO DUST CONTROL REQUIREMENTS SHALL BE ENFORCED. ADJACENT STREETS ARE TO BE CLEANED DAILY OF ALL DIRT AND DEBRIS RESULTING FROM THIS OPERATION.
- SEPARATE PERMITS FROM THE BUILDING DIVISION SHALL BE REQUIRED FOR ALL WALLS.
- AN APPROVED PRECISE GRADING PLAN WILL BE REQUIRED PRIOR TO A BUILDING PERMIT BEING ISSUED.
- THE DESIGN CIVIL ENGINEER/GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST OF RECORD SHALL EXERCISE SUFFICIENT CONTROL DURING GRADING AND CONSTRUCTION TO ENSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS, AND CODE REQUIREMENTS WITHIN THEIR PURVIEW. THE ENGINEERS SHALL SUBMIT "ACKNOWLEDGMENT CONCERNING EMPLOYMENT" FORM TO THE CITY PRIOR TO THE ISSUANCE OF A GRADING PERMIT.
- REVISIONS TO THE PLANS ARE TO BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR REVIEW AND APPROVAL PRIOR TO CHANGING ORIGINAL MYLARS.
- THE CIVIL ENGINEER SHALL SUBMIT WRITTEN CERTIFICATION OF COMPLETION OF ROUGH GRADING IN ACCORDANCE WITH THE APPROVED GRADING PLAN AND CERTIFICATION OF BUILDING PAD ELEVATION PRIOR TO ISSUANCE OF THE BUILDING PERMIT. PAD ELEVATION GRADING TOLERANCE SHALL NOT EXCEED ±0.10'.
- AN "AS-BUILT" GRADING PLAN SHALL BE SUBMITTED AT THE COMPLETION OF WORK SHOWING ALL WATER QUALITY MANAGEMENT PLAN FACILITIES.
- GRADING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER WHO SHALL CERTIFY THAT ALL FILL HAS BEEN PROPERLY PLACED AND SUBMIT A FINAL COMPACTION REPORT FOR ALL FILLS OVER 1' DEEP.
- THE GEOTECHNICAL ENGINEER SHALL, AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUBSURFACE WATER OR SPRING FLOW. IF NEEDED, DRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
- FILL AREAS SHALL BE CLEARED OF ALL VEGETATION AND DEBRIS, SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACING OF FILL.
- ALL DELETERIOUS MATERIALS, I.E. LUMBER, LOGS, BRUSH, OR ANY OTHER ORGANIC MATERIALS OR RUBBISH SHALL BE REMOVED FROM ALL AREAS TO RECEIVE COMPACTED FILL.
- UNSATURABLE MATERIALS, SUCH AS TOPSOIL, WEATHERED BEDROCK, ETC., SHALL BE REMOVED AS REQUIRED BY GEOTECHNICAL ENGINEER (AND ENGINEERING GEOLOGIST, WHERE EMPLOYED) FROM ALL AREAS TO RECEIVE COMPACTED FILL OR DRAINAGE STRUCTURES.
- FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL.
- WHEN CUT PADS ARE BROUGHT TO NEAR GRADE, THE GEOTECHNICAL ENGINEER SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE GEOTECHNICAL ENGINEER, A COMPACTED FILL BLANKET WILL BE PLACED.
- WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE GEOTECHNICAL ENGINEER, THE GEOTECHNICAL ENGINEER SHALL SUBMIT DESIGN, LOCATIONS AND CALCULATIONS TO THE PUBLIC WORKS DIRECTOR PRIOR TO CONSTRUCTION. THE GEOTECHNICAL ENGINEER WILL INSPECT AND CONTROL THE CONSTRUCTION OF THE BUTTRESSING AND CERTIFY TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION.
- ALL CUT SLOPES SHALL BE INVESTIGATED, BOTH DURING AND AFTER GRADING BY THE GEOTECHNICAL ENGINEER, TO DETERMINE IF ANY SLOPE HAS STABILITY PROBLEMS. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS, THE GEOTECHNICAL ENGINEER SHALL RECOMMEND NECESSARY TREATMENT TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL. ALL APPROVALS TO BE GRANTED ON THE BASIS OF DETAILED GEOLOGICAL MAPPING AND WRITTEN RECOMMENDATION FROM THE GEOTECHNICAL ENGINEER.
- MAXIMUM ALLOWABLE CUT AND FILL SLOPES ARE 2 TO 1 OR 30' IN HEIGHT WITHOUT APPROVAL OF THE PUBLIC WORKS DIRECTOR. IF PROPOSED CUT AND FILL SLOPES ARE STEEPER THAN 2:1 OR OVER 30' IN HEIGHT, STABILITY CALCULATIONS WITH A SAFETY FACTOR OF AT LEAST ONE AND FIVE TENTHS (1.5) SHALL BE SUBMITTED BY A GEOTECHNICAL ENGINEER FOR APPROVAL FROM THE PUBLIC WORKS DIRECTOR.
- PROVIDE 4' WIDE BY 1' HIGH BERM OR EQUIVALENT ALONG THE TOP OF ALL FILL SLOPES OVER 5' HIGH, EXCEPT WHERE SHOWN OTHERWISE ON THE PLANS.

- ALL SLOPES ADJACENT TO PUBLIC RIGHT-OF-WAY SHALL CONFORM TO SECTION 15.36.220 OF THE CORONA MUNICIPAL CODE.
- ALL SLOPES 4' OR HIGHER SHALL BE PLANTED AND COMPLY WITH REQUIREMENTS OF CHAPTER 17 OF THE CORONA MUNICIPAL CODE.
- TERRACE DRAINS, INTERCEPTOR DRAINS AND DOWN DRAINS SHALL BE CONSTRUCTED OF 4" P.C.C. (OR GUNITE) REINFORCED WITH 6"x6" - 2 1.4x1.4 W.W.M. REBAR SHALL BE GRADE 60 BILLET STEEL CONFORMING TO ASTM A615.
- ALL CONCRETE STRUCTURES THAT COME IN CONTACT WITH THE ON-SITE SOILS SHALL BE CONSTRUCTED WITH TYPE II OR V CEMENT AS DEEMED NECESSARY BY SOLUBLE SULFATE CONTENT TEST CONDUCTED BY THE GEOTECHNICAL ENGINEER. ALL CONCRETE SHALL BE CITY STANDARD 560-C-3250 (600-E 3250 FOR GUNITE) PER CITY STANDARD SPECIFICATIONS.
- GROUND SHALL BE PRE-WETTED PRIOR TO THE PLACEMENT OF CONCRETE. MOISTURE LOSS RETARDANT SHALL BE USED WHEN REQUIRED BY THE GEOTECHNICAL ENGINEER OR PUBLIC WORKS DIRECTOR.
- CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND/OR OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.

POST CONSTRUCTION BMP GENERAL NOTES:

- THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMPs) FOR POST CONSTRUCTION STORM WATER TREATMENT.
- CONSTRUCT THE STORM WATER TREATMENT FACILITIES AFTER ALL CONTRIBUTING DRAINAGE AREAS ARE STABILIZED AND TO THE SATISFACTION OF THE ENGINEER OF RECORD.
- DO NOT USE THE DEVICES AS TEMPORARY SEDIMENT CONTROL FACILITIES DURING CONSTRUCTION.
- THE FOLLOWING BMPs HAVE BEEN DESIGNED INTO THE PLANS. PLEASE REFER TO THE PROJECT'S APPROVED WATER QUALITY MANAGEMENT PLAN (WQMP) FOR ADDITIONAL BMP'S AND OPERATION AND MAINTENANCE DETAILS:
 - BIORETENTION FACILITY AND OR ON-SITE RETENTION

NOTE:

- A SEWER BACKFLOW PREVENTOR IS NOT REQUIRED FOR THIS PROJECT
- WATER PRESSURE REDUCING VALVES ARE REQUIRED FOR THIS PROJECT

NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES, SHOWN OR NOT SHOWN ON THESE PLANS.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION ON THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS OR PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, THE OWNER, AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA) PH. 811 TWO (2) WORKING DAYS PRIOR TO DIGGING. NO CONSTRUCTION PERMIT ISSUED BY THE PUBLIC WORKS DEPARTMENT SHALL BE VALID INVOLVING UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS AN INQUIRY IDENTIFICATION NUMBER ISSUED BY U.S.A.

CARE SHOULD BE TAKEN TO PREVENT GRADED DITCHES AND SWALES FROM UNDERMINING STREET IMPROVEMENTS. UPON INSPECTION OF THE SITES, THE PUBLIC WORKS DIRECTOR MAY REQUIRE TEMPORARY GUNITE SWALES, ENTERING OR LEAVING IMPROVEMENTS.

DECLARATION OF ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS SHOWN ON THESE PLANS COMPLIES WITH ALL PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER OF RECORD FOR THE PLANS, I ASSUME FULL RESPONSIBILITY FOR THE DESIGN OF THE IMPROVEMENTS. WITH RESPECT TO THE PLAN CHECK PERFORMED BY THE CITY OF CORONA, I UNDERSTAND AND ACKNOWLEDGE THE FOLLOWING: (1) THE PLAN CHECK IS A REVIEW FOR THE LIMITED PURPOSE OF ENSURING THE PLANS COMPLY WITH THE CITY'S STANDARDS, PROCEDURES, POLICIES, AND ORDINANCES, (2) THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS, AND (3) THE PLAN CHECK DOES NOT RELIEVE ME OF MY LEGAL AND PROFESSIONAL RESPONSIBILITY FOR THE DESIGN OF THE IMPROVEMENTS. AS THE ENGINEER OF RECORD, I AGREE TO DEFEND, INDEMNIFY, AND HOLD HARMLESS THE CITY, ITS ELECTED OFFICIALS, EMPLOYEES, AND AGENTS FROM ANY AND ALL ACTUAL OR ALLEGED CLAIMS, DEMANDS, CAUSES OF ACTION, LIABILITY, LOSS, DAMAGE, OR INJURY TO PROPERTY OR PERSONS, INCLUDING WRONGFUL DEATH, WHETHER IMPOSED BY A COURT OF LAW OR BY ADMINISTRATIVE ACTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENTAL AGENCY, ARISING OUT OF OR INCIDENT TO ANY NEGLIGENT ACTS, OMISSIONS, OR ERRORS BY THE ENGINEER OF RECORD, ITS EMPLOYEES, CONSULTANTS, OR AGENTS.

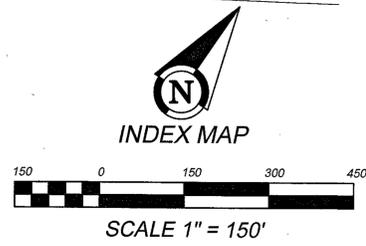
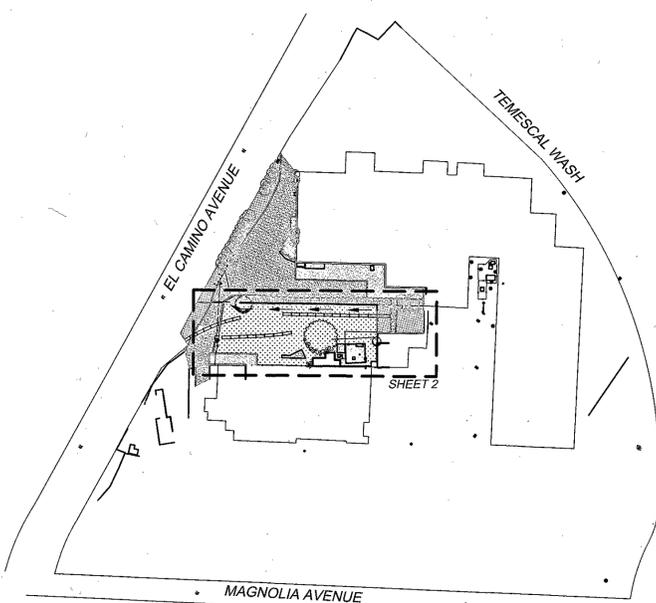
William D. Brooks
 WILLIAM D. BROOKS, RCE 53114 EXPIRES 6/30/21 DATE
 ENGINEER OF RECORD

GEOTECHNICAL ENGINEER'S STATEMENT

THIS PLAN HAS BEEN REVIEWED BY GEOTECHNICAL PROFESSIONALS INC. AND APPEARS TO BE IN GENERAL CONFORMANCE WITH RECOMMENDATIONS IN OUR REPORT DATED SEPTEMBER 10, 2019-PROJECT NO. 2945.1. THIS PLAN HAS BEEN REVIEWED FOR GEOTECHNICAL ASPECTS ONLY. WE MAKE NO REPRESENTATION REGARDING ACCURACY OF DIMENSIONS, QUANTITIES, MEASUREMENTS, CALCULATIONS, OR ANY PORTION OF THE DESIGN. GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS SHOULD BE CONFIRMED BY THE GEOTECHNICAL CONSULTANT IN THE FIELD AT TIME OF CONSTRUCTION.

Paul R. Schade
 PAUL R. SCHADE, RCE# GE#2371 9-30-22 EXP.
 GEOTECHNICAL ENGINEER
 ENGINEERING GEOLOGIST CEG# EXP.

**CITY OF CORONA
 PRECISE GRADING PLAN
 1375 MAGNOLIA AVENUE**

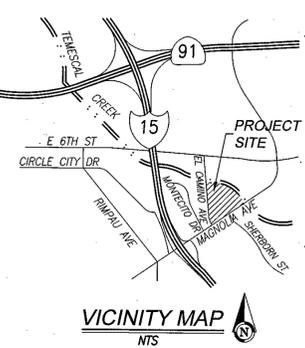


LEGEND

- EXIST. PCC PAVING
- EXIST. AC PAVING
- EXIST. LANDSCAPING
- PROP. PCC PAVING
- EXIST. BUILDING
- EXIST. SPOT ELEVATION
- PROP. SPOT ELEVATION
- EXIST. FENCE
- EXIST. TREES
- WALL/RET. WALL
- PROP. CONTOUR
- PROP. RATE OF GRADE
- FLOWLINE

ABBREVIATIONS

- AC ASPHALT CONCRETE
- C.O.C. CITY OF CORONA
- CONC CONCRETE
- DIAM. DIAMETER
- EXIST. EXISTING
- FS FINISH GRADE
- FL OR E FLOWLINE
- FS FINISH SURFACE
- L.F. LINEAR FEET
- MAX. MAXIMUM
- MIN. MINIMUM
- NO. NUMBER
- PCC PORTLAND CEMENT CONCRETE
- P.P.P. PROTECT-IN-PLACE
- PROP. PROPOSED
- STD. STANDARD
- TYP. TYPICAL
- TW TOP OF WALL



OWNER

CLOW VALVE COMPANY
 1375 MAGNOLIA AVE.
 CORONA, CA 92879
 888-888-2411

ENGINEER

ARMSTRONG & BROOKS CONSULTING ENGINEERS
 MAILING ADDRESS:
 P.O. BOX 78088
 CORONA, CA 92877-9999
 OFFICE LOCATION:
 1350 EAST CHASE DRIVE
 CORONA, CA 92881
 PH. (951) 372-8400 FAX (951) 372-8430
 CONTACT: WILLIAM D. BROOKS

GEOTECHNICAL ENGINEER

GEOTECHNICAL PROFESSIONALS, INC.
 5736 CORPORATE AVE
 CYPRESS, CA 90630
 PH: 714-220-9211
 CONTACT: PAUL SCHADE, G.E.

ASSESSOR'S PARCEL NO.

107-030-022

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CORONA, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, AS SHOWN BY SECTIONALIZED SURVEY OF THE RANCHO EL SOBRIANTE DE SAN JACINTO AND OF LOT 13 IN BLOCK 63 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATING COMPANY, AS SHOWN BY MAP ON FILE IN BOOK 1 PAGE 70 OF MAPS, SAN BERNARDINO COUNTY RECORDS, BOUNDED AS FOLLOWS: ON THE SOUTHEAST BY THE SOUTHWESTERLY EXTENSION OF THE NORTHWEST LINE OF MAGNOLIA AVENUE, AS SHOWN ON RECORD OF SURVEY ENTITLED "RECORD OF SURVEY OF A PORTION OF LOTS 11, 12, 13, 14, 15, IN BLOCK 63 OF RIVERSIDE LAND AND IRRIGATING COMPANY AND A PORTION OF SECTIONS 29 AND 32, TOWNSHIP 3 SOUTH, RANGE 6 WEST, SAN BERNARDINO BASE AND MERIDIAN" ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS; ON THE WEST BY THE EASTERLY LINE OF THE PROPERTY SPUR OF THE ATCHINSON, TOPEKA, AND SANTA FE RAILWAY COMPANY; AND ON THE NORTHEAST BY THE SOUTHERLY AND SOUTHWESTERLY LINE OF PARCELS 5 TO 11, INCLUSIVE, OF SAID RECORD OF SURVEY ON FILE IN BOOK 20, PAGE 3 OF RECORDS OF SURVEY, RIVERSIDE COUNTY RECORDS.

EXCEPTING THEREFROM THAT PORTION GRANTED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER DISTRICT CONSERVATION DISTRICT BY DEED RECORDED OCTOBER 22, 1984 AS INSTRUMENT NO. 84-227367 AND RE-RECORDED FEBRUARY 11, 1985 AS INSTRUMENT NO. 85-028214 BOTH OF OFFICIAL RECORDS.

EARTHWORK QUANTITIES

NOTE: THE CONSTRUCTION QUANTITIES SHOWN ON THESE PLANS ARE FOR CITY FEE PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM INDIVIDUAL TAKEOFFS FOR BIDDING PURPOSES.

(PRELIMINARY QUANTITIES DO NOT INCLUDE SHRINKAGE FACTOR AND OVEREXCAVATION OVER THE SITE)

RAW CUT	582 CU. YDS.
RAW FILL	0 CU. YDS.
NET EXPORT	-582 CU. YDS.

SITE AREA

TOTAL AREA - 16.9 ACRES
 DISTURBED AREA - 0.7 ACRES
 TOTAL LOTS: 1
 PARKING SPACES: N/A

SHEET INDEX:

TITLE SHEET	1
DEMOLITION PLAN	2
PRECISE GRADING & DRAINAGE PLAN	3
EROSION CONTROL PLAN	4



ARMSTRONG & BROOKS CONSULTING ENGINEERS
 PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES
 1350 EAST CHASE DRIVE, CORONA, CA 92881
 MAIL: P.O. BOX 78088 CORONA, CA 92877-9998
 (951) 372-8400 (951) 372-8430

Designed by W.D.B.
 Drawn by R.R.T.
 Checked by W.D.B.
 PLANS PREPARED UNDER SUPERVISION OF WILLIAM D. BROOKS, R.C.E. No. 53114
 Date 3-8-2021

7020A, 05-138 D, 05-138P
 90-113P, 97-56S, 1971, C-1-118
 Reference Plans for these Improvements
 Date By REVISIONS App'd

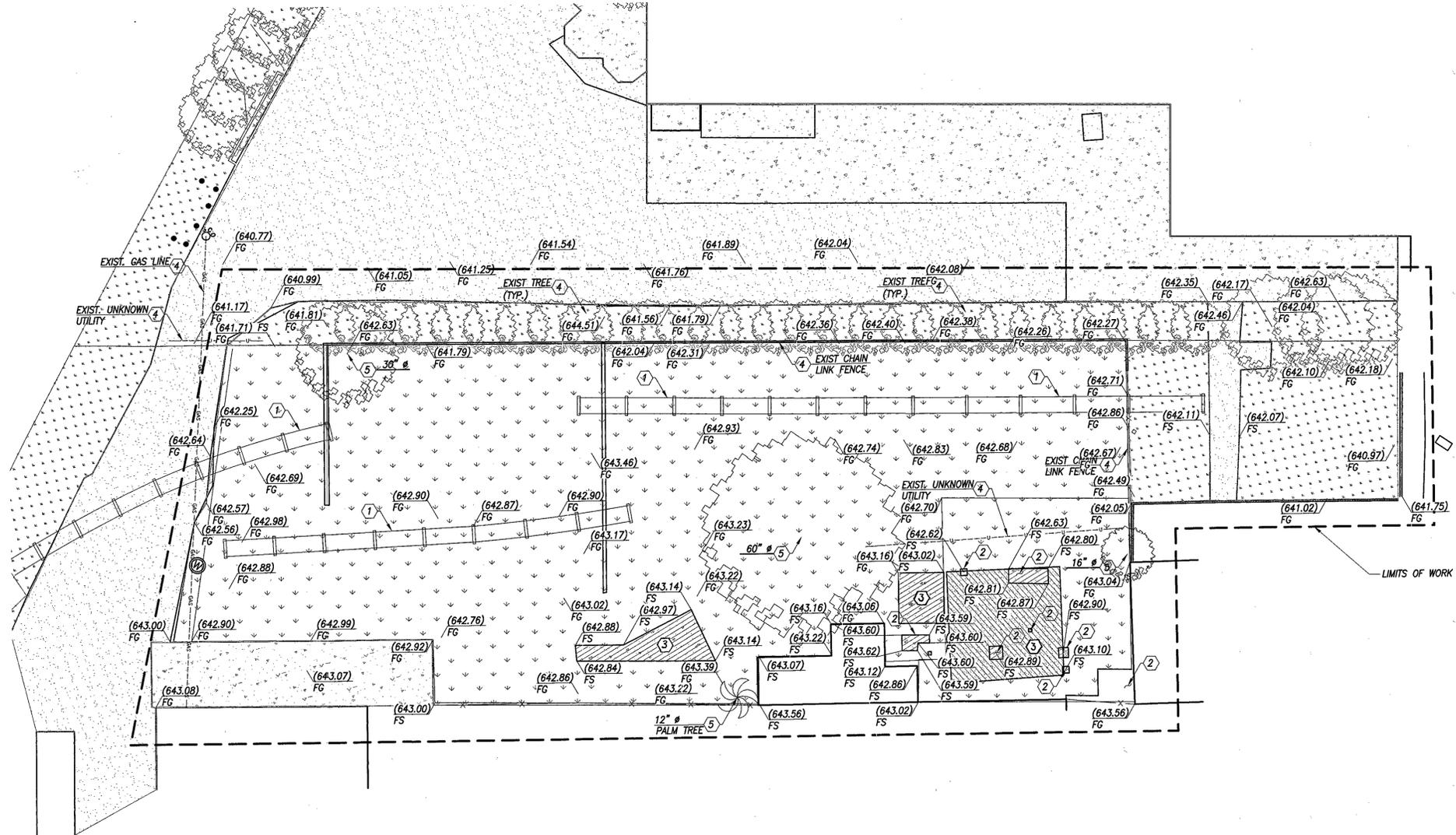
BENCH MARK TEM ELEV.=603.80
 SEE SHEET NO. 1 FOR DESCRIPTION
 Scale AS SHOWN

Engineering Jk mt
 Planning LG
 Fire

Approved By *Paul R. Schade*
 SAVAT KHAMPHOU
 City Engineer
 R.C.E. No. 62019
 Date 3/11/21

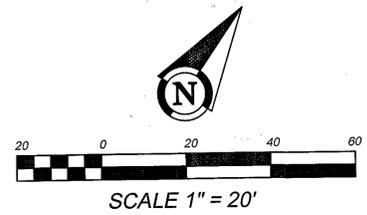
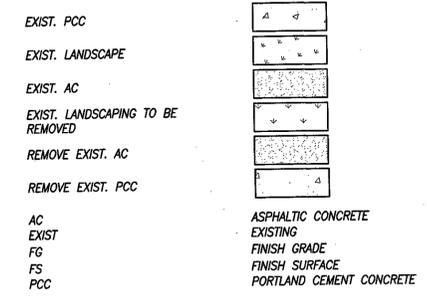
CITY OF CORONA 1375 MAGNOLIA AVENUE
 PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE
 TITLE SHEET

PWGR2020-0025
 Drawing No. 20-026P
 Sh 1 of 4



DEMOLITION NOTES

- | | |
|---|--|
| 1 | REMOVE EXIST. RAIL SPUR |
| 2 | REMOVE EXIST. CONCRETE PAD (6"± THICKNESS) |
| 3 | REMOVE EXIST. AC PAVEMENTS (3"±) |
| 4 | PROTECT IN PLACE EXIST. APPURTENANCE (AS LISTED) |
| 5 | REMOVE EXIST. TREE (DIA. PER PLAN) |



ARMSTRONG & BROOKS CONSULTING ENGINEERS
 PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES
 1550 EAST CHASE DRIVE - CORONA, CA 92681
 MAIL: P.O. BOX 3968 CORONA, CA 92737-9968
 P: 951-272-8400 F: 951-272-8430

Designed by **W.D.B.** Drawn by **R.R.T.** Checked by **W.D.B.**
 PLANS PREPARED UNDER SUPERVISION OF
WILLIAM D. BROOKS
 R.C.E. No. 53114
 Date **3-8-2022**

Reference Plans for these Improvements	Date	By	REVISIONS	App'd
7020A, 05-138 D, 05-138P				
90-113P, 97-56S, 1971, C-1-118				

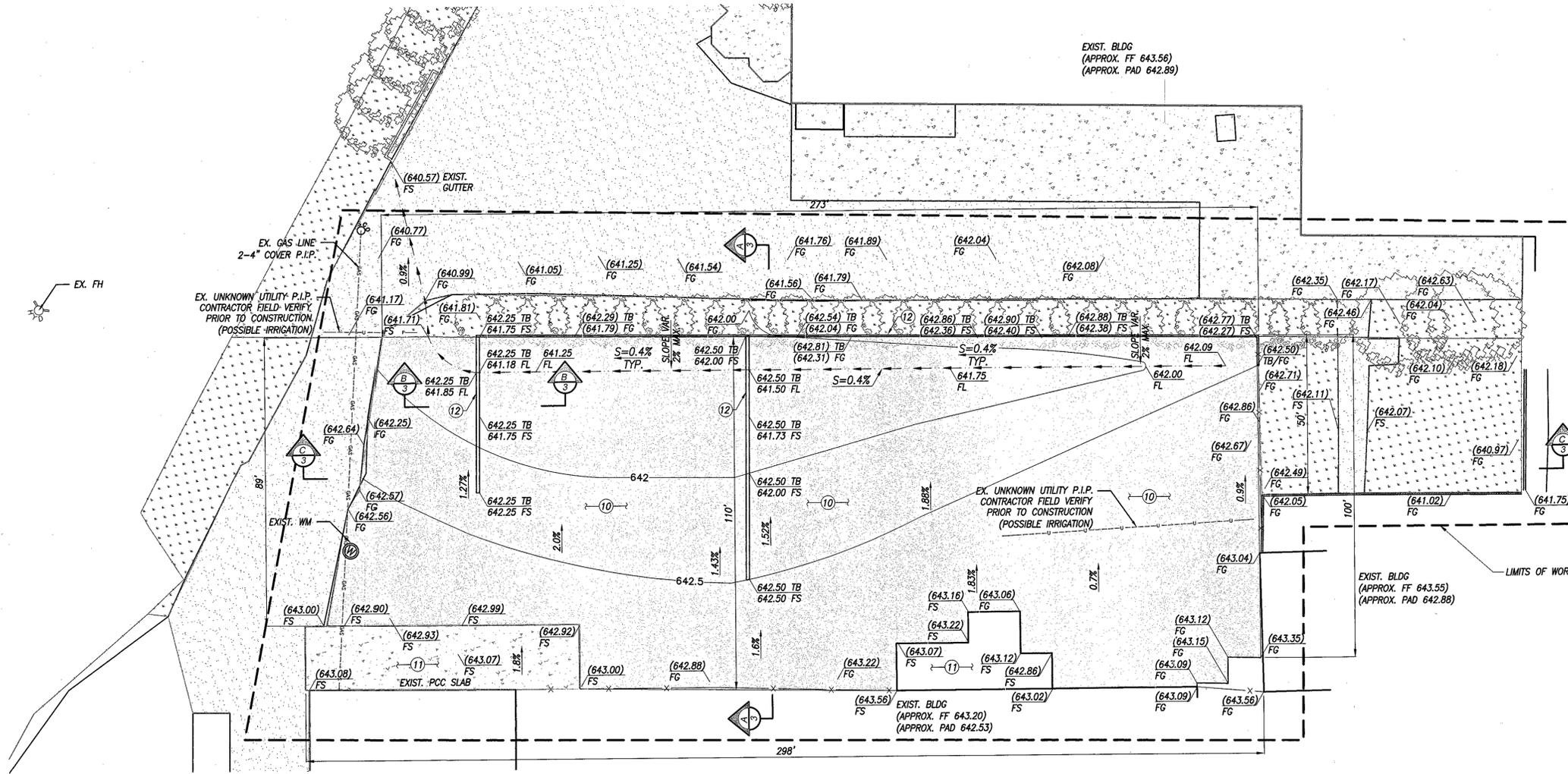
BENCH MARK
 TBM ELEV.=603.80
 SEE SHEET NO. 1 FOR DESCRIPTION
 Scale AS SHOWN

Engineering **JK MK**
 Planning **LA**
 Fire

Approved By **Savath Khamphou** 3/11/21
 SA VAT KHAMP HOU
 City Engineer
 R.C.E. No. 62019

CITY OF CORONA 1375 MAGNOLIA AVENUE
 PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE
 DEMOLITION PLAN

PWGR2020-0025
 Drawing No. 20-026P
 Sh 2 of 4

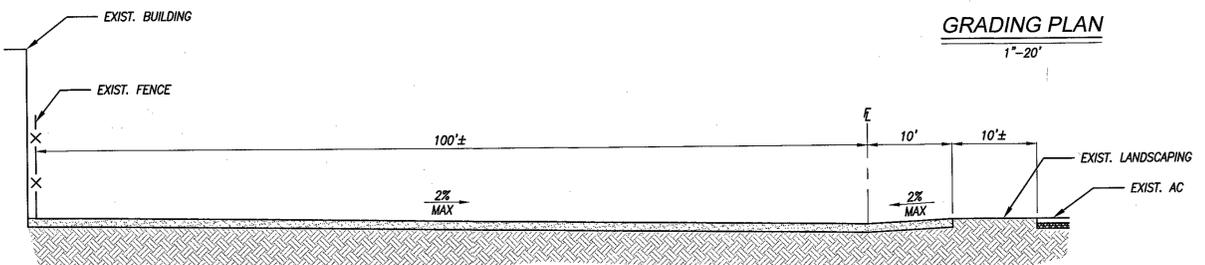


- CONSTRUCTION NOTES**
- (10) CONSTRUCT 3.5" AC PAVEMENT OVER 12" COMPACTED (90% RC) NATIVE MATERIAL
 - (11) PROTECT IN PLACE
 - (12) INSTALL 6" AC BERM PER C.O.C. STD. PLAN 140

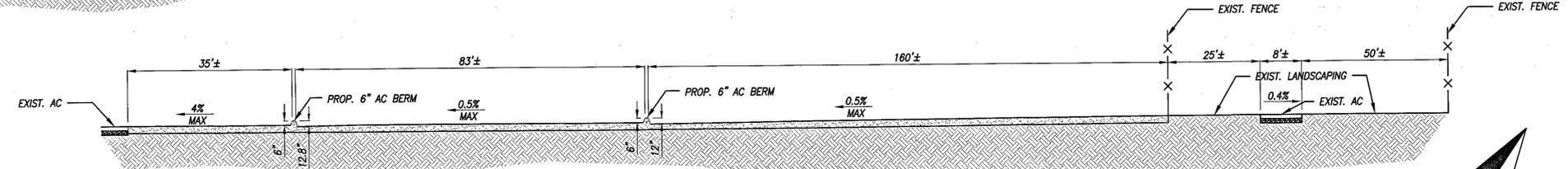
LEGEND

EXIST. PCC		ASPHALTIC CONCRETE
EXIST. LANDSCAPE		EXISTING
EXIST. AC		FINISH GRADE
PROP. 3.5" AC PAVEMENT		FINISH SURFACE
AC		MAXIMUM
EXIST.		PORTLAND CEMENT CONCRETE
FG		REINFORCED CONCRETE
FS		TOP OF WALL
MAX.		TYPICAL
RC		VARIABLE
TW		
TYP.		
VAR.		

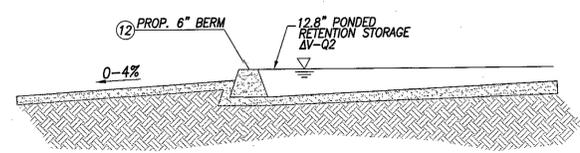
GRADING PLAN
1"=20'



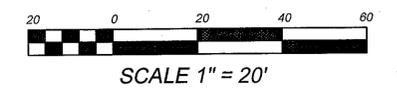
SECTION A-A
NTS



SECTION C-C
NTS



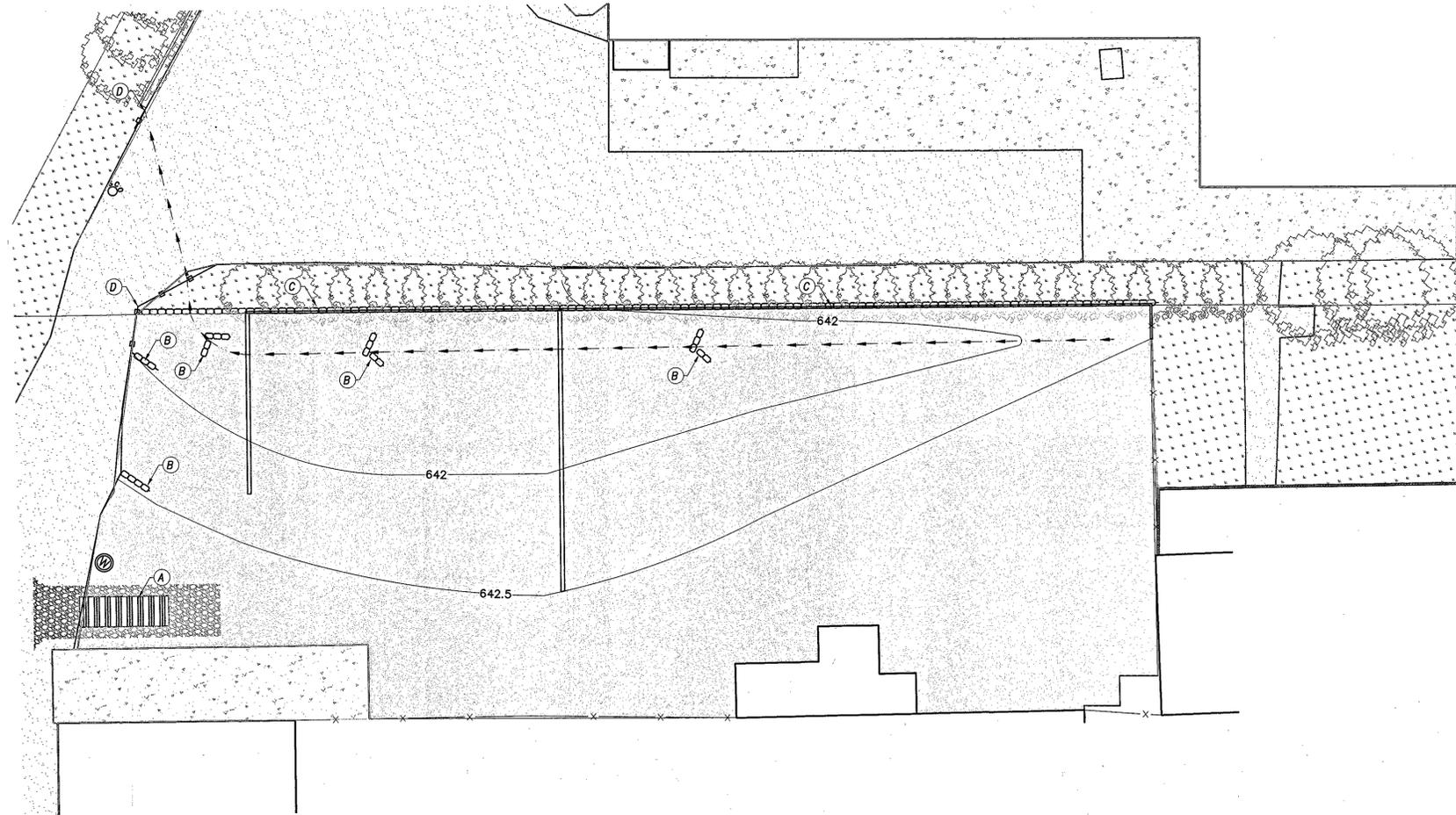
SECTION B-B
NTS



 ARMSTRONG & BROOKS CONSULTING ENGINEERS PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES 1800 EAST GRAND AVENUE, CORONA, CA 92608 MAIL: P.O. BOX 7868 CORONA, CA 92677-9948 P: 951-372-8400 F: 951-372-8430	Designed by W.D.B.	Drawn by R.R.T.	Checked by W.D.B.	7020A, 05-138 D, 05-138P 90-113P, 97-56S, 1971, C-1-118	BENCH MARK TBM ELEV.=603.80 SEE SHEET NO. 1 FOR DESCRIPTION	Engineering JL-MH Planning LG Fire	Approved By [Signature] Date 3/11/21 SAUAT KHAMPHOU City Engineer R.C.E. No. 62019	CITY OF CORONA 1375 MAGNOLIA AVENUE PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE GRADING PLANS	Drawing No. 20-026P Sh 3 of 4
	PLANS PREPARED UNDER SUPERVISION OF WILLIAM D. BROOKS R.C.E. No. 53114 Date 3-8-2021				Reference Plans for these Improvements	Scale AS SHOWN	PWGR2020-0025		24" x 36"

EROSION CONTROL GENERAL NOTES:

- EROSION CONTROL IS REQUIRED FOR GRADING OPERATIONS ON A YEAR ROUND BASIS. APPROVED PLANS ARE REQUIRED FOR ALL WORK REQUIRING A GRADING PERMIT.
- IN CASE OF EMERGENCY CALL TIFFANY SMITH OF CLOW VALVE MANUFACTURING AT 317-384-0998.
- THE ENGINEER OF RECORD WILL SUPERVISE EROSION CONTROL WORK AND INSURE THAT WORK IS IN ACCORDANCE WITH APPROVED PLANS.
- CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.
- THE PUBLIC WORKS DIRECTOR RESERVES THE RIGHT TO MAKE CHANGES OR MODIFICATIONS TO THIS PLAN AS DEEMED NECESSARY.
- STANDBY CREW FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) OR TO REPAIR ANY DAMAGED BMP'S WHEN RAIN IS IMMINENT.
- AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL BMP'S SHALL BE IMPLEMENTED AND MAINTAINED TO PREVENT AND/OR MINIMIZE THE TRANSPORT OF SOIL IN RUNOFF FROM DISTURBED SOIL AREAS ON THE CONSTRUCTION SITE AT ALL TIMES. IN ADDITION, BMP'S SHALL BE INSPECTED PRIOR TO PREDICTED STORM EVENTS AND FOLLOWING STORM EVENTS. BMP'S SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE CITY INSPECTOR.
- ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT, AS FORECASTED BY THE NATIONAL WEATHER SERVICE.
- AFTER A RAIN EVENT EXCEEDING ONE-QUARTER INCH IN ANY 12 HOUR PERIOD, OR UPON DIRECTION OF THE PUBLIC WORKS DIRECTOR, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS, SILT FENCES, AND DESILTING BASINS; AND THE BASINS SHALL BE PUMPED DRY AND RESTORED TO ORIGINAL DESIGN CONDITION. ANY EROSION CONTROL MEASURES DAMAGED DURING A RAIN EVENT SHALL ALSO BE IMMEDIATELY REPAIRED.
- DESILTING BASINS ARE TO BE CONSTRUCTED AS GRADING OF INDIVIDUAL GRADING AREAS ARE COMPLETE PER ROUGH GRADING PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
- AREAS SHALL BE MAINTAINED IN SUCH A STATE THAT FIRE ACCESS SHALL BE MAINTAINED AT ALL TIMES (INCLUDING ACCESS TO NEIGHBORING PROPERTIES).
- GRADED AREAS AROUND THE SITE PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
- TEMPORARY EROSION PROTECTION IS REQUIRED FOR MANUFACTURED SLOPES PRIOR TO PERMANENT PLANTING.
- ALL DISTURBED SLOPES SHALL BE PLANTED AND PROTECTED WITHIN 45 DAYS OF THE COMPLETION OF EACH STAGE OF GRADING. SUITABLE MEASURES TO PREVENT SLOPE EROSION INCLUDING, BUT NOT LIMITED TO, RAPID GROWTH VEGETATION SUFFICIENT TO STABILIZE THE SOIL, SHALL BE INSTALLED ON ALL DISTURBED AREAS UNTIL SUCH TIME AS THE PERMANENT VEGETATIVE COVER SUFFICIENTLY MATURES TO PROVIDE PERMANENT STABILITY.
- NO OBSTRUCTION OR DISTURBANCE OF NATURAL DRAINAGE COURSES OR EXISTING STORM DRAIN INLETS SHALL OCCUR DURING GRADING OPERATIONS, UNLESS ADEQUATE TEMPORARY/PERMANENT DRAINAGE FACILITIES HAVE BEEN APPROVED AND INSTALLED TO CARRY SURFACE WATER TO THE NEAREST PRACTICAL STREET, STORM DRAIN OR NATURAL WATER COURSE. ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST BE MAINTAINED IN A STATE TO ALLOW FOR CONTINUOUS FUNCTION.
- THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER THAT STORM RUNOFF WILL BE CONTAINED WITHIN THE PROJECT OR CHANNLED INTO THE STORM DRAIN SYSTEM WHICH SERVES THE RUNOFF AREA. STORM RUNOFF FROM ONE AREA SHALL NOT BE ALLOWED TO DIVERT TO ANOTHER RUNOFF AREA.
- CONFORMANCE WITH THE REQUIREMENTS OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TO THIS SITE AND ADJACENT PROPERTIES. DURING GRADING OPERATIONS, TEMPORARY DRAINAGE CONTROL SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES. TEMPORARY DRAINAGE CONTROL SHALL CONSIST OF, BUT NOT BE LIMITED TO, CONSTRUCTING SUCH FACILITIES AND TAKING SUCH MEASURES AS ARE NECESSARY TO PREVENT, CONTROL AND ABATE WATER, MUD AND EROSION DAMAGE TO PUBLIC AND PRIVATE PROPERTY AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT.
- FILL AREAS WHILE BEING BROUGHT UP TO GRADE AND DURING PERIODS OF COMPLETION PRIOR TO FINAL GRADE, SHALL BE PROTECTED BY VARIOUS MEASURES TO ELIMINATE EROSION AND THE SILTATION OF DOWNSTREAM FACILITIES AND ADJACENT AREAS. THESE MEASURES MAY INCLUDE, BUT SHALL NOT BE LIMITED TO: TEMPORARY DOWN DRAINS, EITHER IN THE FORM OF PIPES OR PAVED DITCHES TO DESILT RUNOFF; PROTECTION SUCH AS SAND BAGS AROUND INLETS WHICH HAVE NOT BEEN BROUGHT UP TO GRADE; AND EARTH BERMS AND APPROPRIATE GRADING TO DIRECT DRAINAGE AWAY FROM THE EDGE OF THE TOP OF SLOPES SHALL BE CONSTRUCTED AND MAINTAINED ON THOSE FILL AREAS WHERE EARTHWORK OPERATIONS ARE NOT IN PROGRESS.
- CLEARING AND GRUBBING SHOULD BE LIMITED TO AREAS THAT WILL RECEIVE IMMEDIATE GRADING. EROSION CONTROL MEASURES WILL BE REQUIRED TO PROTECT AREAS WHICH HAVE BEEN CLEARED AND GRUBBED PRIOR TO GRADING OPERATION, AND WHICH ARE SUBJECT TO RUNOFF DURING A RAIN EVENT. THESE MEASURES MAY INCLUDE BUT SHALL NOT BE LIMITED TO: GRADED DITCHES; BRUSH BARRIERS AND SILT FENCES. CARE SHALL BE EXERCISED TO PRESERVE VEGETATION BEYOND LIMITS OF GRADING.
- CONSTRUCTION SITES SHALL BE MANAGED TO MINIMIZE THE EXPOSURE TIME OF DISTURBED SOIL AREAS THROUGH PHASING AND SCHEDULING OF GRADING TO THE EXTENT FEASIBLE AND THE USE OF TEMPORARY AND PERMANENT SOIL STABILIZATION.
- STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
- CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT WIND OR RUNOFF DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJOINING PROPERTIES.
- DISCHARGES OTHER THAN STORM WATER (NON-STORM WATER DISCHARGES) ARE PROHIBITED, EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT, THE STATEWIDE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY, OR OTHER APPLICABLE GENERAL NPDES PERMIT. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES, AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM STREET CLEANING; SUPER-CHLORINATED POTABLE WATER FROM LINE FLUSHING AND TESTING, AND RUNOFF FROM EQUIPMENT AND VEHICLE WASHING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.
- PAVED STREETS, SIDEWALKS AND OTHER IMPROVEMENTS SHALL BE MAINTAINED IN A NEAT CLEAN CONDITION, FREE OF LOOSE SOIL, CONSTRUCTION DEBRIS AND TRASH. STREET SWEEPING OR OTHER EQUALLY EFFECTIVE MEANS SHALL BE USED ON A REGULAR BASIS TO CONTROL SILT THAT HAS BEEN DEPOSITED ON STREETS OR SIDEWALKS. WATERING SHALL NOT BE USED TO CLEAN STREETS.
- DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON-CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING ACTIVITIES MAY REQUIRE A NPDES PERMIT FROM THE SANTA ANA REGIONAL BOARD.
- ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.

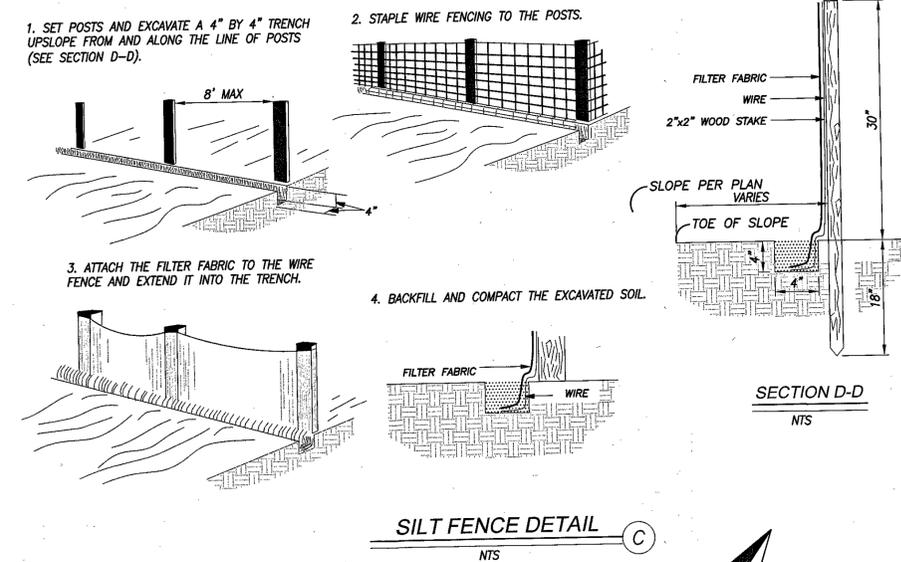
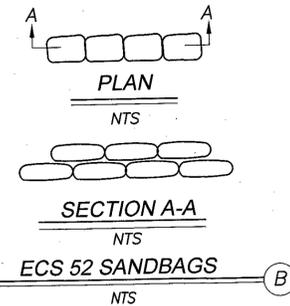
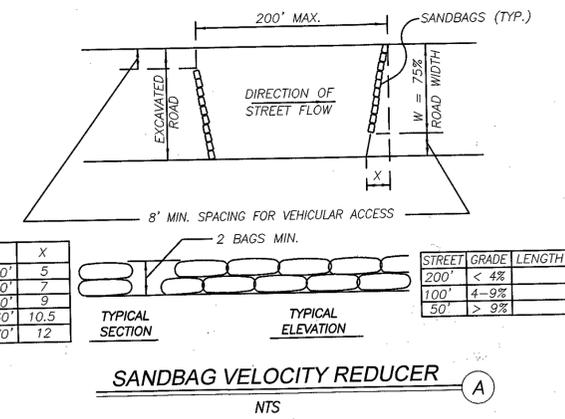


LEGEND

EXIST. POC	
EXIST. LANDSCAPE	
EXIST. AC	
PROP. AC	
SANBAGS	
SILT FENCE	

EROSION CONTROL PLAN

1"=20'

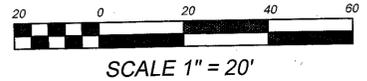


EROSION CONTROL NOTES

*ALL EROSION CONTROL MEASURES PER CA. STORMWATER BMP'S

	QTY.	UNIT
(A) INSTALL STABILIZED CONSTRUCTION ENTRANCE PER C.O.C. STD 225	1	EA.
(B) INSTALL SANDBAG VELOCITY REDUCER PER DETAIL A	53	L.F.
(C) INSTALL SINGLE ROW GRAVEL BAGS - 2 BAG HIGH PER DETAIL B	275	L.F.
(D) INSTALL SILT FENCE PER DETAIL C	47	L.F.

NOTE: FINAL LOCATION OF EROSION CONTROL MEASURES WILL BE DETERMINED AT THE CONSTRUCTION MANAGER'S DISCRETION



Know what's below.
Call before you dig.

ARMSTRONG & BROOKS CONSULTING ENGINEERS
PLANNING - INFRASTRUCTURE - SITE DEVELOPMENT - WATER RESOURCES
1800 S. RAY STREET, SUITE 200, CORONA, CA 92626
MAIL: P.O. BOX 7808 CORONA, CA 92727-9988
TEL: 951-522-1400, 951-521-4400

Designed by **W.D.B.** Drawn by **R.R.T.** Checked by **W.D.B.**
PLANS PREPARED UNDER SUPERVISION OF
WILLIAM D. BROOKS
R.C.E. No. 53114

7020A, 05-138 D, 05-138P
90-113P, 97-56S, 1971, C-1-118
Reference Plans for these Improvements
Date By REVISIONS App'd

BENCH MARK ELEV.=603.80
SEE SHEET NO. 1 FOR DESCRIPTION
Scale AS SHOWN

Engineering **JK**
Planning **LG**
File

Approved By: **Savat Khampou** 3/11/21
SAVAT KHAMPHOU
City Engineer
R.C.E. No. 62019

CITY OF CORONA 1375 MAGNOLIA AVENUE
PRECISE GRADING & DRAINAGE PLANS-CLOW VALVE
EROSION CONTROL PLAN

PWGR2020-0025
Drawing No. 20-026P
Sh 4 of 4

Ruler

Line Path Polygon Circle 3D path 3D polygon

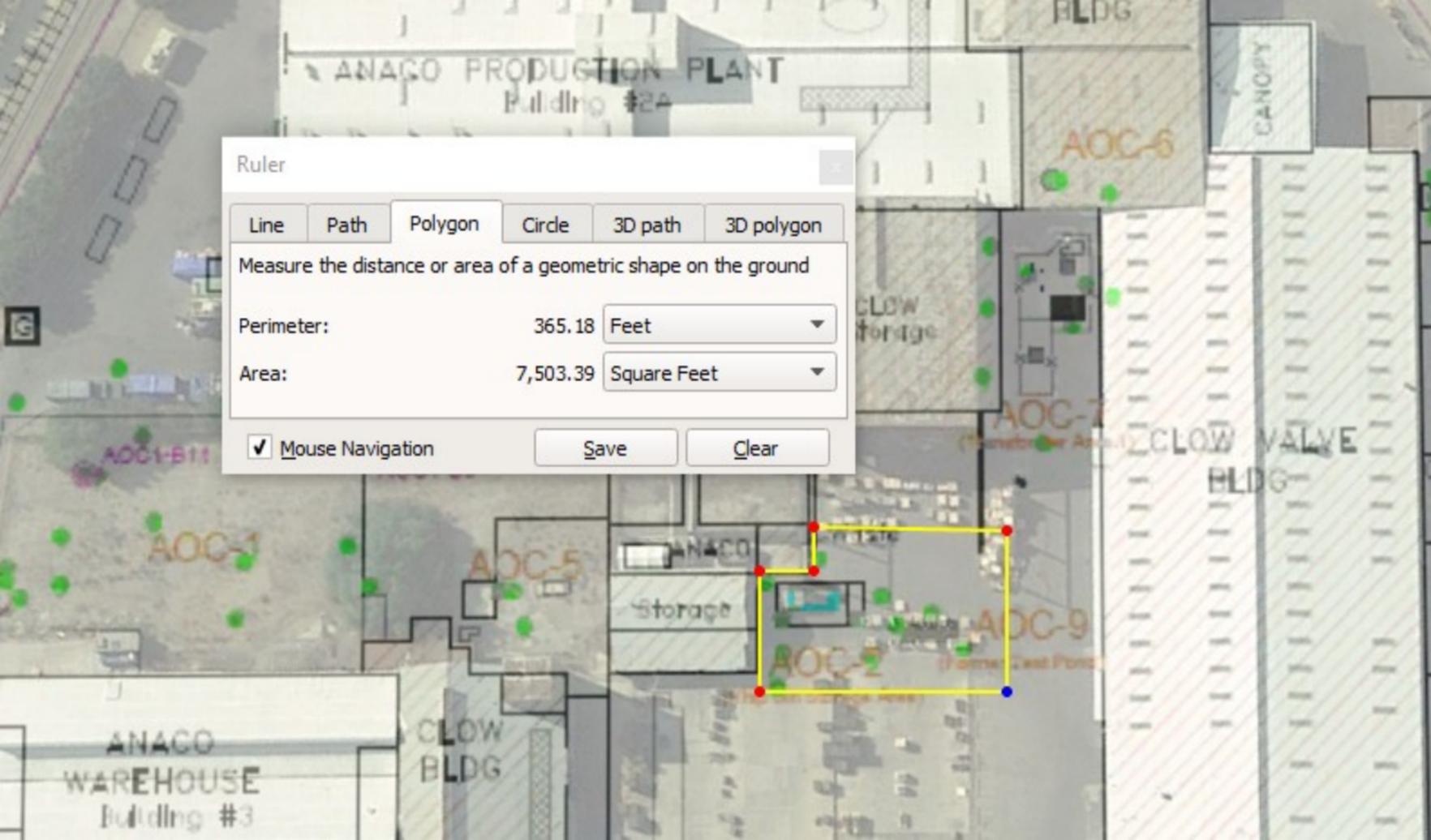
Measure the distance or area of a geometric shape on the ground

Perimeter: 365.18 Feet

Area: 7,503.39 Square Feet

Mouse Navigation

Save Clear



ANAGO PRODUCTION PLANT

Building #24

AOC-6

CANOPY

Ruler

Line Path Polygon Circle 3D path 3D polygon

Measure the distance or area of a geometric shape on the ground

Perimeter: 365.18 Feet

Area: 7,503.39 Square Feet

Mouse Navigation

Save

Clear

AOC-1-B11

AOC-1

AOC-5

Storage

AOC-2

AOC-9

(Former East Pond)

ANAGO
WAREHOUSE
Building #3

CLOW
BLDG

ANAGO

CLOW
Storage

AOC-7

(Former East Pond)

CLOW VALVE
BLDG

Ruler

Line Path Polygon Circle 3D path 3D polygon

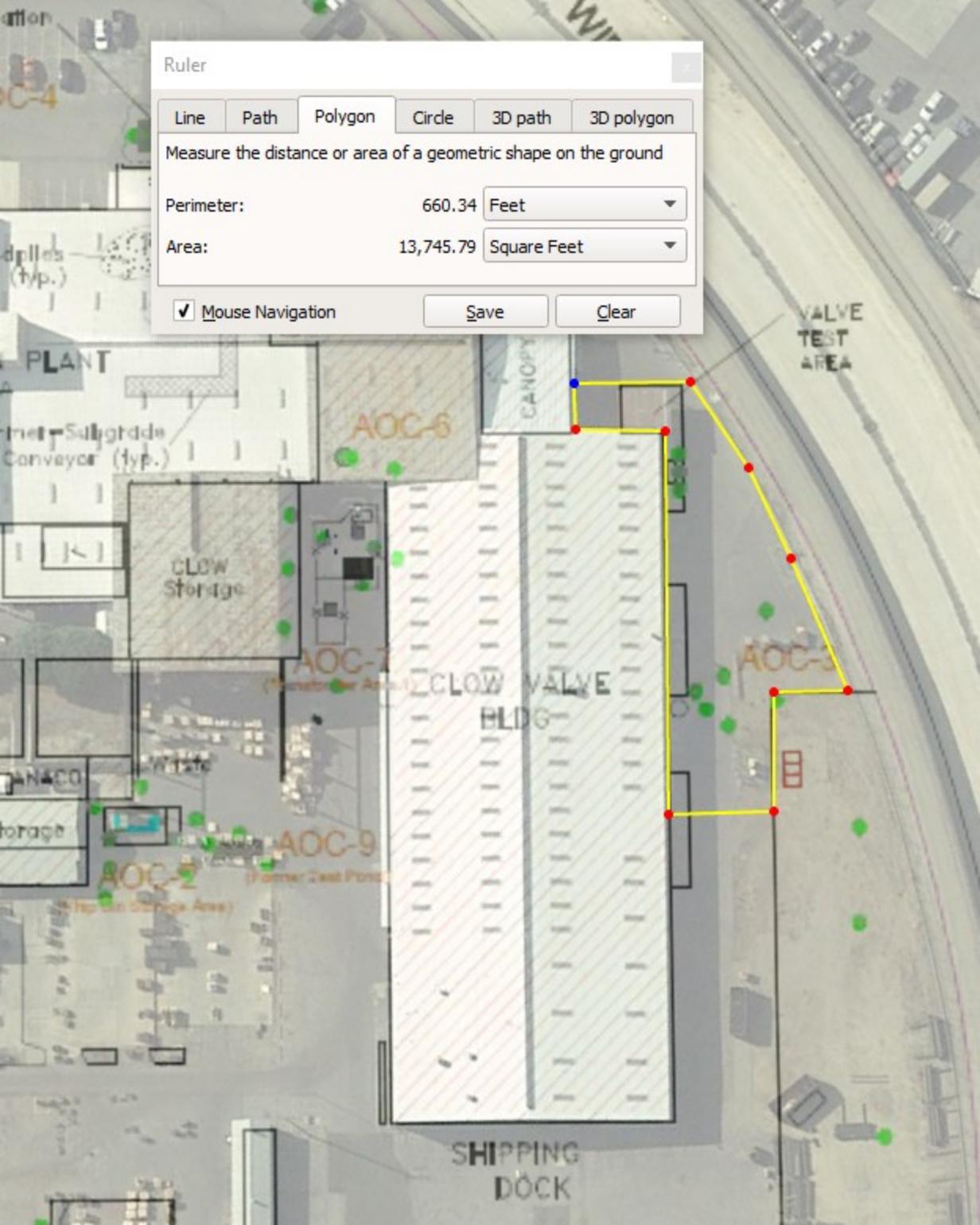
Measure the distance or area of a geometric shape on the ground

Perimeter: 660.34 Feet

Area: 13,745.79 Square Feet

Mouse Navigation

Save Clear



Ruler

Line Path Polygon Circle 3D path 3D polygon

Measure the distance or area of a geometric shape on the ground

Perimeter: 233.51 Feet

Area: 3,119.70 Square Feet

Mouse Navigation

Save

Clear



QUANTITY ESTIMATE FOR PUBLIC IMPROVEMENTS MARCH 2018

Project #: _____

Location: _____

<i>Item</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Quantity</i>	<i>Cost</i>
Removal				
AC Berm	LF	\$8.00	_____	\$ _____
AC Pavement	SF	\$3.00	_____	\$ _____
Curb Only	LF	\$10.00	_____	\$ _____
Curb & Gutter	LF	\$16.00	_____	\$ _____
D/W Approach	SF	\$13.00	_____	\$ _____
Sidewalk	SF	\$8.00	_____	\$ _____
W/C Ramp	SF	\$8.00	_____	\$ _____
OTHER=	_____	_____	_____	\$ _____
OTHER=	_____	_____	_____	\$ _____
OTHER=	_____	_____	_____	\$ _____
			SUBTOTAL	\$ _____
Relocation				
Power/Telephone Pole	EA	\$5,000.00	_____	\$ _____
Pull Boxes	EA	\$500.00	_____	\$ _____
Street Light	EA	\$6,000.00	_____	\$ _____
Street Sign	EA	\$400.00	_____	\$ _____
OTHER=	_____	_____	_____	\$ _____
OTHER=	_____	_____	_____	\$ _____
			SUBTOTAL	\$ _____
Asphalt				
AC Berm 6"	LF	\$35.00	_____	\$ _____
AC Berm 8"	LF	\$38.00	_____	\$ _____
AC Fogseal	SY	\$5.00	_____	\$ _____
AC Overlay	SY	\$8.00	_____	\$ _____
AC Pavement	SF		_____	\$ _____
Asphalt (sf x depth x 0.075)	TON	\$190.00	_____	\$ _____
Base (sf x depth / 27)	CY	\$110.00	_____	\$ _____
Fogseal	SY	\$5.00	_____	\$ _____
OTHER=	_____	_____	_____	\$ _____
OTHER=	_____	_____	_____	\$ _____
OTHER=	_____	_____	_____	\$ _____
			SUBTOTAL	\$ _____
Concrete				
Alley Approach, 8" PCC	SF	\$28.00	_____	\$ _____
Curb Only 6"	LF	\$35.00	_____	\$ _____
Curb Only 8"	LF	\$39.00	_____	\$ _____
Curb & Gutter 6"	LF	\$42.00	_____	\$ _____
Curb & Gutter 8"	LF	\$44.00	_____	\$ _____

Cross Gutter & Spandrel	SF	\$29.00		\$
D/W Approach, Complete	EA	\$6,000.00		\$
D/W Approach, 6"	SF	\$28.00		\$
D/W Approach, 8"	SF	\$30.00		\$
Pavement, 6"	SF	\$13.00		\$
Pavement, 8"	SF	\$15.00		\$
Sidewalk, 4"	SF	\$13.00		\$
V-Gutter	SF	\$38.00		\$
W/C Ramp	EA	\$3,800.00		\$
W/C Ramp	SF	\$30.00		\$
OTHER=				\$
OTHER=				\$
OTHER=				\$
			SUBTOTAL	\$

Storm Drain

Box Culvert (Including Backfill)	CY	\$3,500.00		\$
Box Culvert (Unapp. Areas)	CY	\$2,500.00		\$
Catch Basin, W<8'	EA	\$7,000.00		\$
Catch Basin, W>8'	EA	\$10,500.00		\$
Channel, Reinf. Conc. Lined	SF	\$13.00		\$
Channel, Open Conc. <24"	LF	\$150.00		\$
Channel, Open Conc. 27"-36"	LF	\$250.00		\$
Channel, Open Conc. 42"-72"	LF	\$500.00		\$
Collar, 45"-60"	EA	\$1,300.00		\$
Collar, >60"	EA	\$2,000.00		\$
Encasement	LF	\$65.00		\$
Energy Dissipater	LS	\$10,000.00		\$
Grate Inlet, 12" x 12"	EA	\$500.00		\$
Grate Inlet, 24" x 24"	EA	\$1,300.00		\$
Grate Inlet, 36" x 36"	EA	\$5,000.00		\$
Headwalls, Gravity Type	EA	\$2,000.00		\$
Headwalls, Wing Type	EA	\$9,000.00		\$
Inlet Apron	EA	\$3,000.00		\$
Junction Structure	EA	\$10,000.00		\$
Manhole, H<8'	EA	\$6,000.00		\$
Manhole, H>8'	EA	\$8,000.00		\$
Pipe, 18" RCP	LF	\$159.00		\$
Pipe, 24" RCP	LF	\$201.00		\$
Pipe, 30" RCP	LF	\$241.00		\$
Pipe, 36" RCP	LF	\$280.00		\$
Pipe, 42" RCP	LF	\$318.00		\$
Pipe, 48" RCP	LF	\$355.00		\$
Pipe, 54" RCP	LF	\$391.00		\$
Pipe, 60" RCP	LF	\$426.00		\$
Pipe, 66" RCP	LF	\$461.00		\$
Pipe, 72" RCP	LF	\$495.00		\$
Pipe, 78" RCP	LF	\$528.00		\$

Pipe, 84" RCP	LF	\$561.00		\$
Rip-Rap, Grouted	SF	\$10.00		\$
Rip-Rap, Grouted	Ton	\$75.00		\$
Transition Structure	EA	\$5,000.00		\$
Underwalk Drain, W<6'	EA	\$3,000.00		\$
Underwalk Drain, W>6'	EA	\$4,000.00		\$
OTHER=				\$
OTHER=				\$
OTHER=				\$
			SUBTOTAL	\$

Street Lights

Pull Box No. 3 1/2	EA	\$500.00		\$
Pull Box No. 5	EA	\$700.00		\$
Service Point	EA	\$7,000.00		\$
St. Light, 501 - 1 only	EA	\$5,000.00		\$
St. Light, 501 - 2 to 5	EA	\$4,900.00		\$
St. Light, 501 - 5+	EA	\$4,800.00		\$
St. Light, 502 - 1 only	EA	\$5,500.00		\$
St. Light, 502 - 2 to 5	EA	\$5,400.00		\$
St. Light, 502 - 5+	EA	\$5,300.00		\$
St. Lt. Conduit, 1" Sch 80				\$
<500 LF	LF	\$12.00		\$
>500 LF	LF	\$10.00		\$
St. Lt. Conduit, 1 1/2"				\$
<500 LF	LF	\$16.00		\$
>500 LF	LF	\$14.00		\$
OTHER=				\$
OTHER=				\$
			SUBTOTAL	\$

Traffic

Signal, 6 phse+MstrCont.	EA	\$300,000.00		\$
Signal, 8 phse+MstrCont.	EA	\$350,000.00		\$
Signal, Both+Intrconnect	LF	\$25.00		\$
Striping, 4" Sld wht/ylw	LF	\$0.50		\$
Striping, 8" Sld wht/ylw	LF	\$0.65		\$
Striping 12" Sld wht/ylw	LF	\$2.50		\$
Striping, Skip	LF	\$0.35		\$
Striping, Double	LF	\$0.75		\$
			SUBTOTAL	\$

Walls

Retaining Walls	SF	\$15.00		\$
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Miscellaneous

Barricade, 40'	EA	\$1,600.00		\$
Water Lateral	EA	\$5,000.00		\$

Water Meter Installation	EA	\$2,500.00		\$
Paving Replacement, Trench	LF	\$16.00		\$
Pressure Reducing Station	EA	\$90,000.00		\$
Shoring for Trenches > 5' Deep	LF	\$17.00		\$
Street Name Signs	EA	\$500.00		\$
OTHER=				\$
			SUBTOTAL	\$

Sewer

Manhole, 5' dia., 12' to 20' deep	EA	\$10,000.00		\$
Manhole, 5' dia. > 20' deep	EA	\$13,000.00		\$
Pipe, 4" VCP	LF	\$70.00		\$
Pipe, 6" VCP	LF	\$106.00		\$
Pipe, 8" VCP	LF	\$142.00		\$
Pipe, 10" VCP	LF	\$178.00		\$
Pipe, 12" VCP	LF	\$215.00		\$
Pipe, 15" VCP	LF	\$270.00		\$
Pipe, 4" DIP	LF	\$70.00		\$
Pipe, 6" DIP	LF	\$106.00		\$
Pipe, 8" DIP	LF	\$142.00		\$
Pipe, 10" DIP	LF	\$178.00		\$
Pipe, 12" DIP	LF	\$215.00		\$
Pipe, 15" DIP	LF	\$270.00		\$
			SUBTOTAL	\$

Miscellaneous Sewer

Adjust Manhole	EA	\$2,000.00		\$
Clean Out	EA	\$2,000.00		\$
Saddle	EA	\$2,610.00		\$
OTHER=				\$
OTHER=				\$
OTHER=				\$
			SUBTOTAL	\$

Water

Pipe, 4" DIP	LF	\$43.00		\$
Pipe, 6" DIP	LF	\$57.00		\$
Pipe, 8" DIP	LF	\$75.00		\$
Pipe, 10" DIP	LF	\$93.00		\$
Pipe, 12" DIP	LF	\$105.00		\$
Valve, 4"	EA	\$1,500.00		\$
Valve, 6"	EA	\$1,800.00		\$
Valve, 8"	EA	\$2,800.00		\$
Valve, 10"	EA	\$4,000.00		\$

Valve, 12"	EA	\$5,300.00		\$
Valve, 16"	EA	\$7,500.00		\$
			SUBTOTAL	\$

Miscellaneous Water				
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Air & Vac, 1"	EA	\$2,700.00		\$
Fire Hydrant, 6"	EA	\$4,900.00		\$
Fire Service, 6"	EA	\$12,000.00		\$
Fire Service, 8"	EA	\$20,000.00		\$
Fire Service 10"	EA	\$30,000.00		\$
Hot Tap, 8"	EA	\$3,550.00		\$
Hot Tap, 10"	EA	\$3,900.00		\$
Hot Tap, 12"	EA	\$4,750.00		\$
Service, 1"	EA	\$2,500.00		\$
Service, 2"	EA	\$3,400.00		\$
OTHER=				\$
OTHER=				\$
OTHER=				\$
			SUBTOTAL	\$
			TOTAL COST	\$

PREPARED BY:

Engineer's Name & Signature

WET STAMP & DATE

 Company

 Tel No/Email