PARTNER
Engineering and Science, Inc.

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Borba Land Phase II (189 acres)
14545 South Grove Avenue
Ontario, California 91762

Report Date: May 2, 2017
Partner Project No. 17-180354.1

Prepared for:

Prologis
Pier 1, Bay 1
San Francisco, California 94111

May 2, 2017

Ms. Janet Frentzel
Prologis
Pier 1, Bay 1
San Francisco, California 94111

Subject: Phase I Environmental Site Assessment
Borba Land Phase II (189 acres)
14545 South Grove Avenue
Ontario, California 91762
Partner Project No. 17-180354.1

Dear Ms. Frentzel:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Phase I Environmental Site Assessment* (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in general conformance with the scope and limitations as detailed in the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (818) 337-1203.

Sincerely,

Misty Ponce
Principal

EXECUTIVE SUMMARY

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in general accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and as set forth by the Master Services Agreement between Prologis and Partner dated April 18, 2013 for the property located at 14545 South Grove Avenue in the City of Ontario, San Bernardino County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Prologis with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is bound by Eucalyptus Avenue to the north; Merrill Avenue to the south; and South Grove Avenue to the west within a mixed agricultural and industrial area in the City of Ontario in San Bernardino County. Please refer to the table below for further description of the subject property:

Subject Property Data	
Primary Address:	14545 South Grove Avenue, Ontario, California
Additional/Historical Addresses:	14525, 14651, 14545, and 14715 South Grove Avenue 8321, 8451, 8477, 8521 and 8551 Eucalyptus Avenue
Property Use:	Dairy Farm, Residential and Office
Land Acreage (Ac):	Approximately 189.78 acres
Number of Buildings:	Five single-family residences (SFR); one office; two active milk barns; two former milk barns; one maintenance shop/commodities barn; and one scale building with a break room
Number of Floors:	One
Gross Building Area (SF):	Approximately 18,105 SF (Total)*
Net Rentable Area (SF):	Approximately 18,105 SF (Total)*
Date of Construction:	Residences 1958-1980 Dairy Operation Buildings circa 1966-late 2000s
Assessor's Parcel Numbers (APNs):	1054-111-01 (Parcel A); 1054-111-02 (Parcel B); 1054-121-01 (Parcel C); 1054-121-02 (Parcel D); 1054-131-01 (Parcel E); 1054-131-02 (Parcel F); 1054-141-01 (Parcel G); 1054-141-02 (Parcel H); 1054-151-01 (Parcel I); 1054-161-01 (Parcel J); 1054-201-01 (Parcel K); 1054-211-01 (Parcel L); 1054-211-02 (Parcel M); 1054-221-01 (Parcel N); 1054-221-02 (Parcel O); 1054-331-01 (Parcel P); 1054-331-02 (Parcel Q); 1054-341-01 (Parcel R); 1054-341-02 (Parcel S); and 1054-351-01 (Parcel T)
Type of Construction:	Wood-framed with stucco exterior (residences), and wood framed/metal-framed (barns and associated farm buildings)
Current Tenants:	GH Dairy
Site Assessment Performed By:	Brittney Eugenio of Partner
Site Assessment Conducted On:	February 21, 2017

*Estimated from San Bernardino County Online Records and Google Maps

The subject property comprises an approximately 189.78-acre dairy farm occupied by GH Dairy. Onsite operations consist of dairy farm activities (which includes milking/breeding of cows and equipment fueling/maintenance) and general residential space. The subject property is occupied by five single-family residences; one office; two active milk barns; two former milk barns; one maintenance shop/commodities barn with a fueling area; and one scale building with a break room. Additional features include a pasture and corral areas; three domestic water wells (two active and one inactive); two irrigation wells; at least six private septic systems, seven detention ponds; and miscellaneous vehicle parts and scrap metal storage areas. The construction details of the wells has not been established in the materials reviewed as part of this report.

According to available historical sources and interviews, the subject property was a potato farm from at least 1938 until at least 1953 and was observed as a dairy farm by at least 1966 (with operations expanding throughout the property from the 1970s through the late 2000s). The subject property has been owned by the Borba Family since the 1950s and has been occupied by several residential tenants and various dairy farms including Joe Borba Dairy (from at least 1970 to 2008); Half and Half Dairy (from at least 1996 to at least 2003); B&B Dairy (in at least 2003); and GH Dairy (from 2008 to present). Dairy farm operations have remained relatively consistent.

The immediately surrounding properties consist of dairy farms and crop land to the north across Eucalyptus Avenue; a dairy farm to the northwest across the intersection of Eucalyptus Avenue and South Grove Avenue; a sod farm, dairy farm and Watson Industrial Park to the south across Merrill Avenue; a sod farm and Chino Airport to the southwest across Merrill Avenue; a dairy farm to the east; and dairy farms to the west across South Grove Avenue.

According to information from the Santa Ana Regional Water Quality Control Board (RWQCB) and topographic map interpretation, the depth of groundwater in the vicinity of the subject property is inferred to be approximately 130 feet below ground surface (bgs) and flow toward the south-southwest.

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- The subject property has been utilized as a dairy farm since as early as the 1960s. In general, dairy farms generate and store large amounts of manure from the livestock, which typically results in elevated concentrations of nitrates, urea, methane, and ammonia in shallow soil. Currently, the majority of the manure is reportedly hauled off-site. Dairy farm operations have remained relatively consistent; however, the long term use of the subject property as a dairy farm (at least 60 years) represents a REC. Soils removed from the subject property during development activities should be handled appropriately in accordance with a soil management plan.

- Farm equipment including tractors, loaders, trucks, and feed packers used at the subject property, as well as used at nearby farms that operated by the site contact, is repaired at the onsite maintenance area, located on the northern/central portion of the subject property. The maintenance shop contains numerous drums and small containers of virgin automotive fluids as well as two 275-gallon new oil aboveground storage tanks (AST) and one 500-gallon waste oil AST and one 275-gallon waste oil AST. Evidence of staining was noted on the concrete floor at the maintenance shop ASTs. In addition, staining was observed on the concrete floor beneath virgin materials, including a 55-gallon drum of heavy duty emulsifier equipped with a hand pump (reportedly used to clean parts and disposed of in the waste oil AST).

In addition, a 2008 San Bernardino County Fire Department (SBCFD) Hazardous Waste Generator and Hazardous Materials Handler Inspection Report reviewed as part of this assessment indicated that when Joe Borba Dairy operations ceased in May 2008 and GH Dairy relocated to this address, a SBCFD inspection revealed several containers of abandoned hazardous waste ranging in capacities from five-gallon containers to 55-gallon drums left at the property. In general, the contents of the hazardous waste containers appeared to be located at the "old repair shop" and "old community barn" (assumed to be the maintenance area) and included used oil, oily sludge, aerosols, permethrin, fly spray, spent lead-acid automotive battery and diesel. In addition, several containers were not labeled and the contents of the drums could not be determined. Several violations were issued including hazardous waste containers not sound, leaking and not closed; and the abandonment of hazardous waste. Partner has requested SBCFD records to understand the status of these violations and to determine if the materials and any associated contamination have since been removed.

- An exterior vehicle/equipment refueling area is located west of the maintenance area. The following five ASTs were observed to be used for fueling operations to the south of the scale building in this area: one 10,000-gallon diesel AST, three 1,000-gallon diesel ASTs and one 500-gallon diesel AST. Oil staining was observed at the base of the fuel pump for the 10,000-gallon diesel AST and a pump/hose attached to the 1,000-gallon diesel ASTs, as well as at the 500-gallon diesel AST located outside of the bermed area. The staining appeared to be both on concrete paved and unpaved areas.
- A scrap metal storage area is located on the northwestern portion of the subject property. Several drums, three ASTs, farming equipment, and vehicles were stored throughout this area during the site visit. According to Mr. Hettinga, the ASTs were transported empty from other farms to be accumulated in this area for later sale as scrap. Additionally, Mr. Hettinga indicated that the drums were used to transport feed material onto the subject property (which is obtained as waste from local food manufacturers). Partner inspected the three abandoned ASTs and approximately 20 drums and confirmed that they were empty (and the drums labeled as food products); however, it is noted that not all stored materials were readily visible or accessible for inspection. Oil staining was observed on the ground near one of the pieces of farm equipment.
- According to RWQCB records reviewed and interviews with a RWQCB representative, the subject property and surrounding area are located within the South Archibald Trichloroethylene (TCE) Plume, which is an area of contaminated groundwater located in the City of Ontario. The

contaminated groundwater plume, which underlies an area of approximately 2,000 acres, contains TCE and nitrates. The concentrations of TCE detected in drinking water wells located north (upgradient) of the subject property exceed the Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for TCE of 5 micrograms per liter (µg/L). According to a 2014 plume map on file with the RWQCB and available sample data for the subject property, an area of groundwater beneath the northeastern and eastern portions of the subject property is depicted with concentrations of TCE less than 5 µg/L. The plume is being managed by the Chino Basin Desalter Authority, Inland Empire Utilities Agency, and the City of Ontario.

The presence of the TCE plume beneath the subject property is considered a REC. However, groundwater is greater than 100 feet bgs in the vicinity of the subject property and therefore vapor intrusion is not considered an environmental issue at this time.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- As part of herd care, cows are washed with two separate treatments; a foot bath consisting of a 2 to 5% formaldehyde solution and iodine for rinsing the udders. In addition, a chlorinated alkaline cleaning solution is used to clean the milk silos and other areas of the milk barns. Waste water from these processes is discharged to the pastures to irrigate the fields. Based on this information, the use of these chemicals and subsequent discharge to the pastures is considered an environmental issue.
- Partner visually assessed the 189-acre active dairy farm via a vehicular tour lead by the tenant, Mr. Hettinga. In addition to the scrap metal storage area and maintenance/fueling area noted above, Partner observed other storage areas on the property that appeared to be *de minimis* in nature. These areas included a vehicle equipment staging area at the center of the property (where

vehicles/equipment are stored along with used tires and parts in dumpsters and trailers), concrete rubble piles on the southern border of the site (reportedly from the on-site demolition of concrete pads for hay storage), oil staining at the pumps in the well pump houses for the wells, and dairy barns containing one or more compressors, an emergency generator, and milk storage silos with disinfectant/cleaners added to the lines. During review of these areas, Partner did not observe staining indicative of a significant release in association with any of these areas.

- The subject property is equipped with at least six septic systems. The septic systems are reportedly connected to the single-family residences, office and scale buildings, and are used solely for domestic waste disposal. Mr. Hettinga was unware of the exact locations of the septic systems and reported that the septic systems have not been serviced throughout the time of his occupancy at the subject property. In addition, no building permits or plans were on file indicating the installation dates or locations of the septic systems. Based on the use of the septic system solely for domestic waste, the septic systems are not expected to represent a significant environmental concern.
- Due to the age of the subject property buildings, there is a potential that asbestos-containing materials (ACMs) and/or lead-based paint (LBP) are present. Overall, all suspect ACMs and painted surfaces in the accessible structures were observed in good condition and do not pose a health and safety concern to the occupants of the subject property at this time. A demolition-level survey will be required prior to building demolition activities to prevent potential exposure to workers and/or building occupants.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 14545 South Grove Avenue in the City of Ontario, San Bernardino County, California (the “subject property”). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed evidence of recognized environmental conditions and/or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends the following:

- A limited subsurface investigation should be conducted in order to determine the presence or absence of soil contamination due to the presence of scrap metal storage, maintenance activities, and refueling operations.
- A soil management plan should be put in place to address any contaminated soils encountered during property redevelopment (specifically the potential for nitrates).
- A methane survey should be conducted in the footprint of the proposed building pad prior to building construction.
- A demolition-level ACM and LBP survey should be performed in order identify suspect ACMs and LBP to prepare for the safe removal of the suspect materials prior to building demolition.

TABLE OF CONTENTS

PARTNER

Figures

Appendices

1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in general conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at 14545 and as set forth by the Master Services Agreement between Prologis and Partner dated April 18, 2013. South Grove Avenue in the City of Ontario, San Bernardino County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the *User* to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"). ASTM Standard E1527-13 constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in general accordance with the requirements of ASTM Standard E1527-13. This assessment included: 1) a property and adjacent site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments, and building departments in order to determine any current and/or former hazardous substances usage, storage, and/or releases of hazardous substances on the subject property. Additionally, Partner researched information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

Prologis engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope, and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Prologis. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted the Terms and Conditions for which this report was completed.

1.5 Limiting Conditions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past owners, operators, and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner was unable to determine the property use at 5-year intervals, which constitutes a data gap. Information concerning historical use of the subject property was unavailable prior to 1938. Except for property tax files and recorded land title records, which were not considered to be sufficiently useful, Partner reviewed all standard historical sources and conducted appropriate interviews.
- Due to the size of the property, Partner performed a site inspection of the property utilizing a field technique which includes traversing the site in an attempt to provide an overlapping field of view. Due to the size of the property and the dairy farm features and storage present onsite, isolated areas of the ground surface may have not been accessible for direct observation during Partner's inspection. Partner recommends reassessment of these areas once the visual obstructions are no longer present.
- Partner observed the main operational buildings for the dairy farm and the office building (former residence) during the site reconnaissance. The interiors of the single-family residences were not accessible. Based on the size and nature of use of the unobserved units (residential), this limited method of survey is not expected to alter the overall findings of this assessment.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property is comprised of an approximately 189.78-acre dairy farm identified as Borba Land Phase II with the primary address of 14545 South Grove Avenue in City of Ontario, San Bernardino County, California. Additional addresses associated with the subject property include 14525, 14651, and 14715 South Grove Avenue and 8321, 8477, 8521, and 8551 Eucalyptus Avenue.

The subject property is bound by Eucalyptus Avenue to the north; Merrill Avenue to the south; and South Grove Avenue to the west within a mixed agricultural and industrial area of San Bernardino County.

According to the San Bernardino County Assessor, the subject property is identified as Assessor's Parcel Numbers (APNs) 1054-111-01 (Parcel A); 1054-111-02 (Parcel B); 1054-121-01 (Parcel C); 1054-121-02 (Parcel D); 1054-131-01 (Parcel E); 1054-131-02 (Parcel F); 1054-141-01 (Parcel G); 1054-141-02 (Parcel H); 1054-151-01 (Parcel I); 1054-161-01 (Parcel J); 1054-201-01 (Parcel K); 1054-211-01 (Parcel L); 1054-211-02 (Parcel M); 1054-221-01 (Parcel N); 1054-221-02 (Parcel O); 1054-331-01 (Parcel P); 1054-331-02 (Parcel Q); 1054-341-01 (Parcel R); 1054-341-02 (Parcel S); and 1054-351-01 (Parcel T) and is legally described as:

RANCHO SANTA ANA DEL CHINO LOT 9 SEC 21 TP 2S R 7W EX ST 9.24 AC M/L (Parcel A); *RANCHO SANTA ANA DEL CHINO LOT 10 SEC 21 TP 2S R 7W* (Parcel B); *RANCHO SANTA ANA DEL CHINO LOT 8 SEC 21 TP 2S R 7W EX ST PER DEED RECORDED 10-27-81 DOC NO 237434* (Parcel C); *RANCHO SANTA ANA DEL CHINO LOT 7 SEC 21 TP 2S R 7W* (Parcel D); *RANCHO SANTA ANA DEL CHINO LOT 6 SEC 21 TP 2S R 7W* (Parcel E); *RANCHO SANTA ANA DEL CHINO LOT 5 SEC 21 TP 2S R 7W AND W ½ WALKER AVENUE CLOSE ADJ ON E* (Parcel F); *RANCHO SANTA ANA DEL CHINO LOT 11 SEC 21 TP 2S R 7W* (Parcel G); *RANCHO SANTA ANA DEL CHINO LOT 12 SEC 21 TP 2S R 7W AND W 1/2 WALKER AVENUE CLOSED ADJ ON E* (Parcel H); *RANCHO SANTA ANA DEL CHINO LOT 13 SEC 21 TP 2S R 7W AND E 1/2 WALKER AVE CLOSED ADJ ON W* (Parcel I); *RANCHO SANTA ANA DEL CHINO LOT 4 SEC 21 TP 2S R 7W AND E 1/2 WALKER AVE CLOSED ADJ ON W* (Parcel J); *RANCHO SANTA ANA DEL CHINO LOT 20 SEC 21 TP 2S R 7W AND E 1/2 WALKER AVE CLOSED ADJ ON W* (Parcel K); *RANCHO SANTA ANA DEL CHINO LOT 22 SEC 21 TP 2S R 7W* (Parcel L); *RANCHO SANTA ANA DEL CHINO LOT 21 SEC 21 TP 2S R 7W AND W 1/2 WALKER AVE CLOSED ADJ ON E* (Parcel M); *RANCHO SANTA ANA DEL CHINO LOT 24 SEC 21 TP 2S R 7W 9.5 AC* (Parcel N); *RANCHO SANTA ANA DEL CHINO LOT 23 SEC 21 TP 2S R 7W* (Parcel O); *RANCHO SANTA ANA DEL CHINO LOT 25 SEC 21 TP 2S R 7W 9 AC* (Parcel P); *RANCHO SANTA ANA DEL CHINO LOT 26 SEC 21 TP 2S R 7W* (Parcel Q); *RANCHO SANTA ANA DEL CHINO LOT 27 SEC 21 TP 2S R 7W* (Parcel R); *RANCHO SANTA ANA DEL CHINO LOT 28 SEC 21 TP 2S R 7W AND W 1/2 WALKER AVE CLOSED ADJ ON E* (Parcel S); and *RANCHO SANTA ANA DEL CHINO LOT 29 SEC 21 TP 2S 7W AND E 1/2 WALKER AVE CLOSED ADJ ON W* (Parcel T).

Ownership is currently vested in Joseph and Doleen Borba Administrative Trust since 2009.

Please refer to Figure 1: Site Location Map, Figure 2a: Site Plan, Figure 2b: Site Detail, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is comprised of an approximately 189.78-acre dairy farm occupied by GH Dairy. The subject property is occupied by five single-family residences; one office; two active milk barns; two former milk barns; one maintenance shop/commodities barn with a fueling area; and one scale building with a break room. Additional features include a pasture and corral areas; three domestic water wells (two active and one inactive); two irrigation wells; at least six private septic systems, seven detention ponds; and junk and scrap metal storage areas. The construction details of the wells has not been established in the materials reviewed as part of this report.

Onsite operations consist of dairy farm activities (which includes milking/breeding of cows and equipment fueling/maintenance) and general residential space. As part of milking operations, large volumes of water sourced from the four active onsite wells (combined system) are used as wash water to clean the milk silos and associated lines. In addition, wash water is used for herd care (cow washing). The wash water from both operations is captured in numerous drains and pumped to one of seven detention ponds located on the southeastern portion of the subject property, where it is allowed to settle before being recycled back into washing operations or field irrigation. A chlorinated alkaline cleaning solution is used to clean the milk silos and other areas of the milk barns.

As part of operations, the cows are treated with two separate treatments: a foot bath consisting of a copper sulfate solution and iodine for sealing/coating the udders after milking. These additives are included in the wash water waste stream but are diluted with large volumes of water. Discharge/recycling operations are being conducted in accordance with the *Engineered Waste Management Plan* prepared by Nolte in November 2003.

In general, dairy farms generate and store large amounts of manure from the livestock, which typically results in elevated concentrations of nitrates, urea, methane, and ammonia in shallow soil. The majority of the manure that is generated on the subject property is located within the corrals. Manure is picked up and hauled off-site by a licensed hauler. According to Mr. Hettinga, no manure is stockpiled on the subject property.

The subject property is designated for agricultural development by the City of Ontario.

The subject property is identified as Enforcement Action Listing (ENF) and San Bernardino County Permit (San Bern Co Permit) sites in the regulatory database report, as further discussed in Section 4.2.

2.3 Current Use of Adjacent Properties

The subject property is located within a mixed agricultural and industrial area of San Bernardino County. During the vicinity reconnaissance, Partner observed the following land use on properties in the immediate vicinity of the subject property:

Immediately Surrounding Properties	
North:	Eucalyptus Avenue beyond which are dairy farms (14474 South Grove Avenue and 14333 and 14350 Walker Avenue) and crop land (8381 Edison Avenue)

Immediately Surrounding Properties	
Northwest:	Intersection of South Grove Avenue and Eucalyptus Avenue beyond which is a dairy farm (14400 South Grove Avenue)
South:	Merrill Avenue beyond which are a sod farm (8191 Merrill Avenue), a dairy farm (8315 and 8375 Merrill Avenue) and Watson Industrial Park (8601 Merrill Avenue)
Southwest:	Merrill Avenue beyond which is a sod farm and Chino Airport (7000 Merrill Avenue)
East:	A dairy farm (8643 Eucalyptus Avenue)
West:	South Grove Avenue beyond which are dairy farms (14544, 14756, and 14848 South Grove Avenue)

The adjacent properties to the north across Eucalyptus Avenue are identified as ENF and San Bern Co Permit sites; the adjacent property to the northwest across the intersection of Eucalyptus Avenue and South Grove Avenue is identified as a Leaking Underground Storage Tank (LUST) and San Bern Co Permit sites; the adjacent properties to the south across Merrill Avenue are identified as Emissions Inventory Data (EMI), San Bern Co Permit and Waste Discharge System (WDS) sites; the adjacent property to the southwest across Merrill Avenue is identified as a Superfund Enterprise Management System (SEMS), Potentially Responsible Parties (PRP), AST, Statewide Environmental Evaluation and Planning System UST (SWEEPS UST), Historic UST (HIST UST), California Facility Inventory Database UST (CA FID UST), Cortese, EMI, San Bern Co Permit, Spills, Leaks, Investigations and Cleanups (SLIC), Facility and Manifest Data (HazNet) and an EnviroStor site; the adjacent property to the east is identified as an ENF and San Bern Co Permit site; and the adjacent properties to the west are identified as San Bern Co Permit sites in the regulatory database report. These sites are further discussed in Section 4.2.

2.4 Physical Setting Sources

2.4.1 Topography

The United States Geological Survey (USGS) *Corona North and Prado Dam, California* Quadrangle 7.5-minute series topographic map, dated 2012, was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is ranges from 655 to 675 feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping gently toward the south-southwest. Improvements with the exception of roadways and the Chino Airport are not depicted on the 2012 map.

A copy of the 2012 topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

According to topographic map interpretation, the direction of groundwater in the vicinity of the subject property is inferred to flow toward the south-southwest. The nearest surface water in the vicinity of the subject property is the Cucamonga Creek located approximately 1 mile east of the subject property. No lagoons or wetlands were observed at the subject property during this assessment; however, seven detention ponds were observed on the southeastern portion of the subject property.

According to Mr. Hettinga, three domestic water wells (two active and one inactive) and two irrigation wells are located on the subject property. The two active domestic water wells are located at the calf milk barn on the northeastern portion of the subject property and the single-family residence identified as 8477

Eucalyptus Avenue located on the northern central portion of the subject property. The inactive domestic water well is located at the single-family residence identified as 14525 South Grove Avenue located on the northwestern portion of the subject property. The two irrigation wells are located near the hay barns on the northeastern portion of the subject property and near the scale building located on the northern central portion of the subject property.

According to Mr. Kamron Saremi of the Santa Ana Regional Water Quality Control Board (RWQCB), who has managed the area's South Archibald trichloroethylene (TCE) plume for RWQCB for at least 20 years, the depth of groundwater in the vicinity of the subject property is approximately 130 feet below ground surface (bgs). Further detail on the South Archibald TCE plume is presented in Section 4.1.

2.4.3 Geology/Soils

The subject property is located in the Upper Santa Ana Valley, a broad alluvial and fluvial plain located within the Los Angeles, Orange, Riverside, and San Bernardino Counties. The Upper Santa Ana Valley is a southwesterly draining basin bounded by the San Gabriel Mountains and San Bernardino Mountains on the north and east, the Puente and San Jose Hills on the west and the Jurupa Hills and the Santa Ana Mountains to the south. The mountain range on the north and south and the basement rock underlying the Valley, are primarily composed of granitic and metamorphic rock. The hills to the west are comprised of Miocene sandstone, shale, siltstone, and conglomerate. Within the Valley, the basement complex is overlain by a series of unconsolidated and semi-consolidated alluvial and fluvial sediments eroded from the surrounding mountain ranges. Subsurface lithology in the general vicinity is mapped as recent-age alluvium and colluvium.

Based on information obtained from the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Tujunga loamy sand (northwestern portion), Hilmar loamy fine sand (southwestern and northeastern portions), Chino silt loam (southwestern portion), and Delhi fine sand (eastern portion). The Tujunga series consists of deep, somewhat excessively drained, highly to very highly permeable soils that formed in alluvium derived from granite. Slopes range from zero to five percent. The Hilmar series consists of somewhat shallow, somewhat poorly drained, moderately highly to highly permeable soils that formed in alluvium derived from granite. Slopes range from zero to two percent. The Chino series consists of deep, somewhat poorly drained, moderately highly permeable soils that formed in alluvium derived from mixed sources. Slopes range from zero to two percent. The Delhi series consists of deep, somewhat excessively drained, highly to very highly permeable soils that formed in sandy alluvium derived from granite. Slopes range from zero to two percent.

2.4.4 Flood Zone Information

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Numbers 06071C9335H and 06071C9375H, dated August 28, 2008, the western portion of the subject property appears to be located in Zone X, an area located outside of the 100-year and 500-year flood plains.

A copy of the reviewed flood maps is included in Appendix B of this report.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

Historical Use Information		
Period/Date	**Source**	**Description/Use**
1938-1953	Aerial Photographs, Topographic Maps, Interviews	Agricultural land (potato farm) and residential
Circa 1966-Present	Aerial Photographs, Topographic Maps, City Directories, Building Records, Interviews, Onsite Observations	Dairy Farm and residential

According to available historical sources and interviews, the subject property was a potato farm from at least 1938 until at least 1953 and was observed as a dairy farm by at least 1966 (with operations expanding throughout the property from the 1970s through the late 2000s). The subject property has been owned by the Borba Family since the 1950s and has been occupied by several residential tenants and various dairy farms including Joe Borba Dairy (from at least 1970 to 2008); Half and Half Dairy (from at least 1996 to at least 2003); B&B Dairy (in at least 2003); and GH Dairy (from 2008 to present).

In general, dairy farms generate and store large amounts of manure from the livestock, which typically results in elevated concentrations of nitrates, urea, methane, and ammonia in shallow soil. Currently, the majority of the manure is reportedly hauled off-site. Dairy farm operations have remained relatively consistent; however, the long term use of the subject property as a dairy farm (at least 60 years) represents a recognized environmental condition (REC). Additional potential environmental concerns associated with specific site operations are further discussed in Sections 4.0 and 6.0.

In addition, the subject property parcel was historically used for agricultural purposes. There is a potential that agricultural related chemicals such as pesticides, herbicides, and fertilizers, may have been used and stored onsite and as a result, residual concentrations of pesticides and arsenic may be present in surficial soil.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from Environmental Data Resources, Inc. (EDR) and Nationwide Environmental Title Research (NETR) online on February 12, 2017. The following observations were noted to be visible on the subject property and adjacent properties during the aerial photograph review:

Date: 1938	*Scale: 1"=500'*
Subject Property:	Appears to be developed with several residential and farming-related structures on the northwestern corner; animal corrals appear to be present just south to the residential and farming-related structures; ridges of trees appear along the northern property boundary and through the northwestern portion; and agricultural land (potato farms per an interview with Mr. Hettinga) on the remaining portions
North:	Appears to be woodland and agricultural land across an unimproved road (Eucalyptus Avenue or its predecessor)

Date: 1938	Scale: 1"=500'
Northwest:	Appears to be agricultural land across the intersection of South Grove Avenue and Eucalyptus Avenue (or their predecessors)
South:	Appears to be developed with several residential and farming-related structures and agricultural land across Merrill Avenue or its predecessor and a ridge of trees
Southwest:	Appears to be developed with several residential and/or farming-related structures and agricultural land (include an orchard) across Merrill Avenue or its predecessor
East:	Appears to be developed with several residential and/or farming-related structures and agricultural land beyond a ridge of trees
West:	Appears to be developed with several residential and/or farming-related structures and agricultural land across South Grove Avenue (or its predecessor) and a ridge of trees

Date: 1946	Scale: 1"=500'
Subject Property:	No significant changes are noted
North:	No significant changes are noted
Northwest:	No significant changes are noted
South:	No significant changes are noted
Southwest:	Appears to be developed with a plane runway, several associated airport structures and several parked planes across Merrill Avenue
East:	No significant changes are noted
West:	No significant changes are noted

Date: 1948	Scale: 1"=500'
Subject Property:	No significant changes are noted
North:	No significant changes are noted
Northwest:	No significant changes are noted
South:	No significant changes are noted
Southwest:	Appears to be vacant land across Merrill Avenue beyond which is developed with a plane runway and associated airport structures
East:	No significant changes are noted
West:	No significant changes are noted

Date: 1953	Scale: 1"=500'
Subject Property:	No significant changes are noted
North:	No significant changes are noted
Northwest:	No significant changes are noted
South:	No significant changes are noted
Southwest:	Appears to be agricultural land across Merrill Avenue beyond which no other significant changes are noted
East:	No significant changes are noted
West:	No significant changes are noted

Date: 1966	Scale: 1"=500'
Subject Property:	Appears to be developed with additional corrals on the northwestern portion; developed with an additional residential structure and presumably a milk barn with

Date: 1966	Scale: 1"=500'
	corrals along the western property boundary; a ridge of trees remains present along the northeastern property boundary; and agricultural land on the remaining portions with no other significant changes noted
North:	Appears to be developed with a dairy farm and related structures and corrals; and agricultural and vacant land across Eucalyptus Avenue
Northwest:	No significant changes are noted
South:	Appears to be developed with a dairy farm and related structures and corrals with no other significant changes noted across Merrill Avenue
Southwest:	No significant changes are noted
East:	Appears to be developed with a dairy farm and related structures and corrals with no other significant changes noted
West:	Appears to be developed with additional residential and/or farming related structures with no other significant changes noted across South Grove Avenue

Date: 1975	Scale: 1"=500'
Subject Property:	Appears to be developed with additional dairy farm structures on the northwestern portion; a detention pond appears to be developed just south of the corrals; an additional dairy farm with related structures and corrals is developed on the northeastern portion; and agricultural land on the remaining portions with no other significant changes noted
North:	Appears to be developed with additional dairy farm related structures and corrals; and agricultural land across Eucalyptus Avenue
Northwest:	Appears to be developed with a dairy farm and related structures and corrals across the intersection of South Grove Avenue and Eucalyptus Avenue
South:	Appears to be developed with an additional dairy farm and related structures and corrals; and agricultural land across Merrill Avenue
Southwest:	Appears to be agricultural land across Merrill Avenue beyond which is developed with the Chino Airport
East:	No significant changes are noted
West:	Appears to be developed with a dairy farm and related structures and corrals with no other significant changes noted across South Grove Avenue

Date: 1985	Scale: 1"=500'
Subject Property:	Additional corrals and dairy farm structures are now located on the western and eastern portions; at least two what appear to be dry detention ponds on the southeastern portion; and agricultural land on the remaining portions with no other significant changes noted
North:	No significant changes are noted
Northwest:	No significant changes are noted
South:	No significant changes are noted
Southwest:	No significant changes are noted
East:	No significant changes are noted
West:	Appears to be developed with additional dairy farm related structures with no other significant changes noted across South Grove Avenue

Date: 1989	***Scale: 1"=500'***
Subject Property:	Developed with additional dairy farm structures including the current commodities barn and maintenance shop on the northern central portion (the scale building is visible but the resolution does not allow for the determination if the current ASTs are present to the south); pasture land on the southwestern portion; potential former manure piles on the southern central portion; and at least two detention ponds (one dry) on the southeastern portion with no other significant changes noted
North:	Appears to be developed with several detention ponds with no other significant changes noted across Eucalyptus Avenue
Northwest:	Appears to be developed with a detention pond with no other significant changes noted across the intersection of South Grove Avenue and Eucalyptus Avenue
South:	No significant changes are noted
Southwest:	No significant changes are noted
East:	No significant changes are noted
West:	Appears to be developed with additional dairy farm related structures with no other significant changes noted across South Grove Avenue

Date: 1990	***Scale: 1"=500'***
Subject Property:	Appears to be developed with additional corrals and additional dairy farm structures on the northern central portion; pasture land on the southwestern portion; potential former manure piles on the southern central portion; and at least two detention ponds on the southeastern portion with no other significant changes noted
North:	Appears to be developed with a dairy farm and related structures and corrals; agricultural land and at least one detention pond across Eucalyptus Avenue
Northwest:	Appears to be developed with a dairy farm and related structures and corrals across the intersection of South Grove Avenue and Eucalyptus Avenue
South:	No significant changes are noted
Southwest:	No significant changes are noted
East:	No significant changes are noted
West:	No significant changes are noted

Date: 1994	***Scale: 1"=500'***
Subject Property:	Appears to be developed with pasture land on the southwestern portion and at least two detention ponds on the southeastern portion with no other significant changes noted
North:	No significant changes are noted
Northwest:	No significant changes are noted
South:	No significant changes are noted
Southwest:	No significant changes are noted
East:	No significant changes are noted
West:	No significant changes are noted

Date: 2005	***Scale: 1"=500'***
Subject Property:	Appears to be vacant land/additional corrals on the central portion; pasture land on the southwestern portion; possible manure piles on the southern central portion; and

Date: 2005	Scale: 1”=500’
	at least two active detention ponds and at least two dry detention ponds on the southeastern portion with no other significant changes noted
North:	Appears to be developed with a dairy farm and related structures and corrals; agricultural land and several detention ponds across Eucalyptus Avenue
Northwest:	No significant changes are noted
South:	No significant changes are noted
Southwest:	No significant changes are noted
East:	No significant changes are noted
West:	No significant changes are noted

Date: 2006	Scale: 1”=500’
Subject Property:	No significant changes are noted
North:	No significant changes are noted
Northwest:	No significant changes are noted
South:	Appears to be sod farms (per an interview with Mr. Hettinga) with no other significant changes noted across Merrill Avenue
Southwest:	Appears to be agricultural land/sod farms across Merrill Avenue beyond which is the Chino Airport
East:	No significant changes are noted
West:	No significant changes are noted

Date: 2009	Scale: 1”=500’
Subject Property:	Appears to be developed with the majority of the current dairy farm operations including residential and barn structures, a maintenance and commodities barn on the northern central portion, calf bassinets along the eastern portion, pasture land on the southwestern portion; and at least six (five dry) detention ponds on the southeastern portion
North:	No significant changes are noted
Northwest:	No significant changes are noted
South:	Appears to be vacant land (former dairy farm) to the southeast with no other significant changes noted across Merrill Avenue
East:	No significant changes are noted
West:	No significant changes are noted

Date: 2010	Scale: 1”=500’
Subject Property:	Developed with additional calf bassinets on the southeastern portion and at least two additional detention ponds on the southeastern portion with no other significant changes noted
North:	No significant changes are noted
Northwest:	Appears to be developed as a dairy farm and related structures and corrals; and at least two detention ponds across the intersection of South Grove Avenue and Eucalyptus Avenue
South:	Appears to be vacant land (former dairy) to the southeast with no other significant changes noted across Merrill Avenue
East:	No significant changes are noted

Date: 2010	Scale: 1"=500'
West:	No significant changes are noted

Date: 2012	Scale: 1"=500'
Subject Property:	Appears to be developed with additional calf bassinets on the southeastern portion with no other significant changes noted
North:	No significant changes are noted
Northwest:	No significant changes are noted
South:	No significant changes are noted
Southwest:	No significant changes are noted
East:	No significant changes are noted
West:	No significant changes are noted

Copies of the aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Partner requested Sanborn Fire insurance maps from EDR. EDR responded on February 10, 2017 that Sanborn map coverage was not available for the subject property.

A copy of the Sanborn Fire insurance map no coverage documentation is included in Appendix B of this report.

3.3 City Directories

Partner reviewed historical city directories obtained from EDR, Haines and Company, Inc. and Sherman Public Library on February 13, 2017 for past names and businesses that were listed for the subject property and adjacent properties. The findings are presented in the following table:

City Directory Search for 14525, 14545, 14651 and 14715 South Grove Avenue and 8321, 8477, 8521 and 8551 Eucalyptus Avenue (Subject Property)	
Year(s)	**Occupant Listed**
1922, 1923, 1936, 1930, 1931, 1934, 1936, 1938, 1940, 1941, 1942, 1945, 1946, 1949, 1950, 1951, 1955	No Listings
1956	Johnny Borba (14545 South Grove Avenue)
1960	Johnny Borba (14545 South Grove Avenue)
1961, 1963, 1964	No Listings
1965	Antonio Teixiera, Joe Borba (14545 South Grove Avenue)
1968	No Listings
1970	Joe Borba Dairy (14545 South Grove Avenue), Joe Borba (14651 South Grove Avenue)
1972, 1973	No Listings
1975	Joe Borba Dairy (14545 South Grove Avenue), Joe Borba Jr (14525 South Grove Avenue), Joe Borba (14651 South Grove Avenue)
1977	Manuel Coelho (8551 Eucalyptus Avenue)

City Directory Search for 14525, 14545, 14651 and 14715 South Grove Avenue and 8321, 8477, 8521 and 8551 Eucalyptus Avenue (Subject Property)	
Year(s)	**Occupant Listed**
1980	John Santos, Joe Borba Dairy (14545 South Grove Avenue), Hector Garcia (14525 South Grove Avenue), Joe Borba (14651 South Grove Avenue)
1981, 1983	No Listings
1985	Joe Borba Dairy (14545 South Grove Avenue), Hector Garcia (14525 South Grove Avenue), Joe Borba (14651 South Grove Avenue)
1988	Abel Avila, John Avila, Noren Avila (8521 Eucalyptus Avenue)
1990	Joe Borba Dairy (14545 South Grove Avenue), Hector Garcia (14525 South Grove Avenue), Joe Borba (14651 South Grove Avenue)
1991	No Listings
1993	Abel Avila, John Avila, Noren Avila (8521 Eucalyptus Avenue), Maria Quezada (8551 Eucalyptus Avenue)
1995	No Listings
1996	Joe Borba Dairy (14545 South Grove Avenue), Marguerite Hardisty, Half and Half Dairy (14651 South Grove Avenue)
2002	No Listings
2003	Joe Borba Dairy (14545 South Grove Avenue), M Hardisty, J Hardisty, Half and Half Dairy (14651 South Grove Avenue)
2008	Joe Borba Dairy (14545 South Grove Avenue), M Hardisty, J Hardisty (14651 South Grove Avenue), Israel Gonzalez (8551 Eucalyptus Avenue)
2013	GH Dairy (14651 South Grove Avenue)

According to the city directory review, the subject property has been occupied by several residential occupants (from at least 1956 to at least 2008) and various dairy farms including Joe Borba Dairy (from at least 1970 to at least 2008); Half and Half Dairy (from at least 1996 to at least 2003); and GH Dairy (in at least 2013). Potential environmental concerns associated with the current or former use of the subject property are further discussion in Sections 3.0, 4.0 and 6.0.

City Directory Search for Adjacent Properties	
Year(s)	**Occupant Listed**
1922, 1923, 1936, 1930, 1931, 1934, 1936, 1938, 1940, 1941, 1942, 1945, 1946, 1949, 1950, 1951, 1955, 1956, 1960, 1961, 1963, 1964, 1965, 1968	No Listings
1970	Wilbur Vander Veen (14474 South Grove Avenue)
1972	Dave Haagsma (8643 Eucalyptus Avenue), Ralph Vanderhoek (14333 Walker Avenue)
1973	Dave Haagsma Dairy (8643 Eucalyptus Avenue), Ralph Vanderhoek (14333 Walker Avenue), Fred Nydam (14350 Walker Avenue)
1975	Harry Miersma (14474 South Grove Avenue)
1977	Dave Haagsma Dairy (8643 Eucalyptus Avenue), Various airport related businesses (7000 Merrill Avenue), Rosalea Woodard (8191 Merrill Avenue), Harm Wiersema (8375 Merrill Avenue), Ray Albers (8649

City Directory Search for Adjacent Properties	
Year(s)	**Occupant Listed**
	Merrill Avenue), Ralph Vanderhoek (14333 Walker Avenue), Ronald Labrucherie (14350 Walker Avenue)
1980	Harlan Miersma (14474 South Grove Avenue), Richaro Silva (14544 South Grove Avenue)
1981	No Listings
1983	Richard Haagsma, Dave Haasgsma Dairy (8643 Eucalyptus Avenue), Chino Airport and associated businesses (7000 Merrill Avenue), Harm Wiersema (8375 Merrill Avenue), Ray Albers (8649 Merrill Avenue), Henry Struikmans (14333 Walker Avenue), Ronald Labrucherie (14350 Walker Avenue)
1985	Harlan Miersma (14474 South Grove Avenue), Paul Silva (14544 South Grove Avenue)
1988	Richard Haagsma, Dave Haasgsma Dairy (8643 Eucalyptus Avenue), Chino Airport and associated businesses (7000 Merrill Avenue), Harm Wiersema (8375 Merrill Avenue), Ray Albers (8649 Merill Avenue), Henry Struikmans (14333 Walker Avenue), Dale R Swager (14350 Walker Avenue)
1990	Harlan Miersma (14474 South Grove Avenue), Paul Silva (14544 South Grove Avenue)
1991	No Listings
1993	Richard Haagsma, Dave Haasgsma Dairy (8643 Eucalyptus Avenue), Chino Airport and associated businesses (7000 Merrill Avenue), Harm Wiersema (8375 Merrill Avenue), Ray Albers (8649 Merrill Avenue), Henry Struikmans, J Struikmans, Nick Struikmans (14333 Walker Avenue), Dale R Swager (14350 Walker Avenue)
1995	No Listings
1996	Harlan Miersma (14474 South Grove Avenue)
2002	No Listings
2003	Joe Ferreira (14400 South Grove Avenue), Harlan Miersma (14474 South Grove Avenue), Norma Campos (14544 South Grove Avenue)
2008	Travis N Mouw (14474 South Grove Avenue), Carmen Ornellas (14544 South Grove Avenue), Jennel Sandoval (14746 South Grove Avenue), Richard Haagsma, Dave Haasgsma Dairy (8643 Eucalyptus Avenue), Chino Airport and associated businesses (7000 Merrill Avenue), Geoffrey Vandenheuvel (8315 Merrill Avenue), James Lagestee (8375 Merrill Avenue), Jim Albers, Ray Albers (8649 Merrill Avenue), J Struikmans, Nick Struikmans (14333 Walker Avenue)
2013	No Listings

According to the city directory review, the adjacent properties have been occupied by various residential tenants, dairy farms and the Chino Airport. Please refer to Section 4.2.3 for further discussion on the adjacent tenants identified in the regulatory database report.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from EDR on February 10, 2017. No pits, ponds, lagoons, or areas of obvious fill were observed in the mapping. The following observations were noted to be depicted on the subject property and adjacent properties during the topographic map review:

Date:	***1942***
Subject Property:	Depicted as vacant land sloping gently to the southwest (the western edge of the subject property is not depicted)
North:	Depicted as shaded green indicating woodland and vacant land across an unimproved road
Northwest:	No Coverage
South:	Depicted as developed with two small structures and vacant land across Merrill Avenue
Southwest:	No Coverage
East:	Depicted as developed with a small structure and vacant land
West:	No Coverage

Date:	***1947***
Subject Property:	Depicted as developed with several small structures on the northwestern portion and along the western property boundary; unimproved road intersect the northwestern corner and eastern portion
North:	Depicted as shaded green indicating woodland or shrubland and vacant land across an unimproved road
Northwest:	Depicted as shaded green indicating woodland or shrubland and vacant land across the intersection of South Grove Avenue and Eucalyptus Avenue
South:	Depicted as developed with several small structures and vacant land across Merrill Avenue
Southwest:	Depicted as developed with several small structures and vacant land across the intersection of South Grove Avenue and Merrill Avenue
East:	Depicted as developed with two small structures and vacant land
West:	Depicted as developed with several small structures and dotted green indicating orchards across South Grove Avenue

Date:	***1950 and 1954***
Subject Property:	Depicted as developed with several small structures on the northwestern portion and along the western property boundary
North:	Depicted as shaded green (woodland) and vacant land across Eucalyptus Avenue
Northwest:	Depicted as vacant land across the intersection of South Grove Avenue and Eucalyptus Avenue
South:	Depicted as developed with several small structures and vacant land across Merrill Avenue
Southwest:	Depicted as developed with Cal-Aero Flight Academy (deactivated) across the intersection of South Grove Avenue and Merrill Avenue
East:	Depicted as developed with several small structures and vacant land
West:	Depicted as dotted green indicating orchards and vacant land across South Grove Avenue

Date: 1967	
Subject Property:	Depicted as developed with additional structures (presumably dairy farm) related along the western portion and two water wells along the northeastern portion
North:	Depicted as developed with several structures and vacant land across Eucalyptus Avenue
Northwest:	No significant changes are noted.
South:	Depicted as developed with several structures presumably dairy farm related across Merrill Avenue
Southwest:	Depicted as developed with a runway and several structures as part of the Chino Airport across the intersection of South Grove Avenue and Merrill Avenue
East:	Depicted as developed with several small structures and vacant land
West:	Depicted as developed with several structures and vacant land across South Grove Avenue

Date: 1973	
Subject Property:	Depicted as developed with several additional structures presumably dairy farm related on the western and northeastern portions; the two northern wells are still pictured
North:	Depicted as developed with additional structures presumably dairy farm related with no other significant changes noted across Eucalyptus Avenue
Northwest:	Depicted as developed with several structures presumably dairy farm related across the intersection of South Grove Avenue and Eucalyptus Avenue
South:	Depicted as developed with several additional structures presumably dairy farm related with no other significant changes noted across Merrill Avenue
Southwest:	Depicted as developed with several additional structures as part of the Chino Airport with no other significant changes noted across the intersection of South Grove Avenue and Merrill Avenue
East:	Depicted as developed with additional structures presumably dairy farm related with no other significant changes noted
West:	Depicted as developed with several additional structures presumably dairy farm related across South Grove Avenue

Date: 1981	
Subject Property:	Depicted as developed with additional dairy farm related structures and features on the northwestern and northeastern portions with no other significant changes noted
North:	No significant changes are noted
Northwest:	Depicted as developed with additional presumably dairy farm related structures with no other significant changes noted across the intersection of South Grove Avenue and Eucalyptus Avenue
South:	Depicted as developed with additional presumably dairy farm related structures with no other significant changes noted
Southwest:	No significant changes are noted
East:	Depicted as developed with presumably dairy farm related structures
West:	Depicted as paved with an unimproved road with no other significant changes noted across South Grove Avenue

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

4.1.1 Department of Toxic Substances Control

Regulatory Agency Data	
Name of Agency:	California Department of Toxic Substances Control (DTSC)
Source:	http://www.envirostor.dtsc.ca.gov/public/ http://hwts.dtsc.ca.gov/report_list.cfm
Agency Phone Number:	(800) 728-3618
Date of Contact:	February 10, 2017
Method of Communication:	Online
Summary of Communication:	

No records regarding hazardous substance use, storage, or releases, or the presence of USTs on the subject property were identified in the DTSC's online EnviroStor database.

According to DTSC's on-line Hazardous Waste Tracking System (HWTS) database, the subject property identified as Joe Borba Dairy #2 at 14545 South Grove Avenue under EPA ID No. CAL000319704. In 2007 the following materials were generated/removed from the subject property: 0.33 tons of off-specification, aged or surplus inorganics; 4.59 tons of unspecified oil-containing waste; and 0.20 tons of off-specification, aged or surplus organics in 2007 and is listed as inactive as of June 30, 2008. The hazardous waste was likely generated from onsite dairy farm equipment/tractor maintenance activities.

Hein Hettinga at 8451 Eucalyptus Avenue of the subject property is also listed in the HWTS online database under EPA ID No. CAL000357007. No hazardous waste manifests were reported. This facility is listed as active as of September 22, 2010. In addition, GH Dairy #1 at 8541 Eucalyptus Avenue of the subject property is listed under EPA ID No. CAL000337707. No hazardous waste manifests were reported. This facility is listed as active as of November 4, 2008.

A copy of pertinent documents is included in Appendix B of this report.

4.1.2 Regional Water Quality Agency

Regulatory Agency Data	
Name of Agency:	Santa Ana Regional Water Quality Control Board (RWQCB)
Point of Contact:	Ed Kashak (Dairy Program) and Kamron Saremi (South Archibald TCE Plume Caseworker)
Source:	http://geotracker.waterboards.ca.gov/default.asp
Agency Address:	3737 Main Street, Suite 500, Riverside, California 92501
Agency Phone Number:	(916) 341-5791
Date of Contact:	February 10, 2017
Method of Communication:	Online / Telephone / E-mail
Summary of Communication:	

No records regarding hazardous substance use, storage, or releases, or the presence of USTs on the subject property were identified in the RWQCB's online GeoTracker database.

According to Mr. Kashak, who was interviewed by Partner via telephone, Joe Borba Dairies submitted an Engineering Waste Management Plan in June 2005. GH Dairy No. 1 submitted a Notice of Intent (NOI) for the discharge of waste at 14651 South Grove Avenue. In 2008, the RWQCB authorized GH Dairy to discharge waste under the provisions that:

- Prohibit the land application of manure anywhere in the Santa Ana Region for disposal purposes
- Prohibit the land application of manure as fertilizer in certain areas of the Region, and limit the land application of manure as fertilizer in the remainder of the Region
- Require all facility operations to develop and implement an Engineered Waste Management Plan
- Require all manure scraped from corrals be removed from the facility within 180 days
- Require large CAFOs (greater than 70 cows) that transfer manure to a third party to provide that party with a chemical analysis of the manure for nitrogen components
- Require to inspect facilities on at least a weekly basis, and record the findings in the enclosed log form
- Require the tracking of all manure removed from the facility
- Require to submit the following reports by January 15th of each year:
    - Annual Summary Report
    - Annual Summary Report of Storm Water Management Structure Inspections
    - New Manure Tracking Manifest

In a letter dated October 8, 2011, Mr. John Godinho of Godinho Equipment Inc. inspected GH Dairy No. 1 and concluded that all improvements are in compliance in accordance with the recommendations stated in the Engineered Waste Management Plan.

Mr. Kashak of the RWQCB also stated that no sampling of the discharge or detention ponds is required unless there is a discharge off the property. According to Mr. Kashak, no off-site discharges have been reported from the subject property.

In addition, according to RWQCB records reviewed and telephone interviews with Mr. Saremi, the subject property and surrounding area are located within the South Archibald Trichloroethylene (TCE) Plume, which is an area of contaminated groundwater located in the City of Ontario. The contaminated groundwater, which underlies an area of approximately 2,000 acres, contains TCE and nitrates, according to various subsurface investigations conducted by the Metropolitan Water District of Southern California and Santa Ana RWQCB, as well as numerous local government agencies. Several private domestic wells located north (upgradient) of the subject property exceeded the Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for TCE of 5 micrograms per liter (µg/L). According to a plume map on file with the RWQCB, an area of groundwater beneath the northeastern and eastern portions of the subject property is depicted with concentrations of TCE less than 5 µg/L. The plume is being managed by the Chino Basin Desalter Authority, Inland Empire Utilities Agency, and the City of Ontario.

According to the *Private Property Sampling Report* prepared by Environmental Engineering and Contracting, Inc. and dated May 27, 2014, five rounds of water sampling were conducted between 2007 and 2014 at the subject property. For privacy purposes, the address of the on-site well sampled was not provided by RWQCB. The samples were analyzed for volatile organic compounds (VOCs) including TCE, tetrachloroethylene (PCE), 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA), 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroehtene (c-1,2-DCE), trans-1,2-dichloroethene (t-1,2-DCE), 1,1,1-trichloroethane (1,1,1-TCA), 1,1,2-trichloroethane (1,1,2-TCA) and vinyl chloride. According to this report, the kitchen tap in one of the single-family residences, identified as W32, on the subject property was sampled. According to the laboratory analytical results, TCE was detected at a concentration as high as 3.1 μg/L in 2007 and a concentration as high as 1.8 μg/L in 2013. 1,1-DCA, 1,2-DCA, 1,1-DCE, c-1,2-DCE, t-1,2-DCE, PCE, 1,1,1-TCA, 1,1,2-TCA and vinyl chloride were not detected above laboratory detection limits in any of the samples collected at the subject property well in Rounds 1 through 4. This well was not sampled during Round 5 in 2014.

Partner notes that a total of five water wells (two irrigation wells and three drinking wells) are located on the subject property. Groundwater from the onsite wells is reportedly used for domestic use within the primary residences and for cleaning the milk barns, as well as for irrigation of the pasture land. The construction details of the wells has not been established in the materials reviewed as part of this report.

A copy of pertinent documents is included in Appendix B of this report.

4.1.3 Fire Department

Regulatory Agency Data	
Name of Agency:	San Bernardino County Fire Department (SBCFD)
Point of Contact:	Maria Molina
Agency Address:	620 South E Street, San Bernardino, California 92415
Agency Phone Number:	(909) 386-8468
Date of Contact:	February 10, 2017 / May 2, 2017
Method of Communication:	Faxed Request
Summary of Communication:	Partner submitted an information request on February 10, 2017 and obtained copies of the available files in person on May 2, 2017. A file was available for 8521 Eucalyptus Avenue for a May 10, 2007 inspection of the B&B Dairy, which indicated that the dairy was nonoperational for 2 to 3 years before the inspection, and no hazardous wastes were observed, although hazardous materials were noted (bactericide, acid and detergent). It was noted that a hazardous material handler permit had not been obtained or contingency plan put in place for the dairy. A July 27, 2007 reinspection form confirmed that no hazardous waste or materials were present, and it was determined that no permits were necessary for the property. A file was available for Half and Half Dairy at 14651 Grove Avenue, which included an inspection report dated April 17, 2007 that indicated that the dairy had not been operational since February 2005, and that drums of waste oil, usable products, and empty

Regulatory Agency Data	
	containers were observed (no releases noted). It was noted that a hazardous material handler permit had not been obtained or contingency plan put in place. A follow-up inspection dated July 28, 2007 that indicated drums of waste oil, usable products, and empty containers there were noted during previous inspection had been removed, and it was determined that no permits were necessary for the property. An inspection file for 8451 Eucalyptus Avenue was also provided to Partner. The file included an inspection dated April 1, 2009 of G H Dairy# 1, in which it was noted that a 200-gallon new oil AST, acetylene cylinders, 100-gallon hydraulic fuel ASTs, drums of gear oil, oxygen cylinders, and open containers of waste used oil were present at the site; it was noted that permitting was needed. Inspections dated April 1, 2009 and August 12, 2009 noted similar findings, with the addition of copper noted on the property (and anhydrous copper sulfate). An inspection dated January 30, 2013 of G H Dairy# 1 included notation that a fueling area was present that consisted of a 10,000-gallon tank and three 1,000-gallon tanks containing diesel fuel (observed by Partner during the site visit), as well as sodium hypochlorite, iodine solution, used oil (in a 550-gallon tank), and six 55-gallon drums of new. It was noted in the inspection that CERS notifications and planning was needed. Annual Permit FA0011764 for G H Dairy # 1 at 8451 Eucalyptus Avenue dated 2008, 2009 and 2015 were available in the file. In addition, Annual Permit FA0012185 at 8643 Eucalyptus Avenue was available in the file for hazardous materials use dated 2016 at the G H Dairy # 3; this property appears to be present in error and relates to the eastern property abutter.

A copy of pertinent documents is included in Appendix B of this report.

4.1.4 Air Pollution Control Agency

Regulatory Agency Data	
Name of Agency:	South Coast Air Quality Management District (AQMD)
Source:	http://www3.aqmd.gov/webappl/fim/prog/search.aspx
Agency Phone Number:	(909) 396-2000
Date of Contact:	February 10, 2017
Method of Communication:	Online
Summary of Communication:	According to records reviewed, the subject property identified as Joe Borba Dairy at 8477 Eucalyptus Avenue is listed in the AQMD under Facility ID 144827. This facility was granted Permits to Operate (PTO) for a diesel fueled emergency generator and agricultural operations in 2007. Both permits are listed as inactive. No Notices of Violation

Regulatory Agency Data	
	(NOV) or Notices to Comply (NTC) were issued. Potential environmental concerns associated with long-term use of the subject property as a dairy farm are further discussion in Sections 3.0, 4.0 and 6.0.

A copy of pertinent documents is included in Appendix B of this report.

4.1.5 Building Department

Regulatory Agency Data	
Name of Agency:	Ontario Building Department (OBD)
Point of Contact:	Tina Fernandez
Agency Address:	303 East B Street, Ontario, California 91764
Agency Phone Number:	(909) 395-2023
Date of Contact:	February 10 and 16, 2017
Method of Communication:	Email
Summary of Communication:	Records were available for review, as further discussed in the following table.

Building Records Reviewed for 14525, 14545, 14651 and 14715 South Grove Avenue and 8321, 8477, 8521 and 8551 Eucalyptus Avenue (Subject Property)		
Year(s)	**Owner/Applicant**	**Description**
2002	Joe Borba	Building permit to demo house and cap off private sewer (14651 South Grove Avenue)
2008	GH Dairy	Electrical permit for electric meter for milk barn (8541 Eucalyptus Avenue)

A copy of pertinent documents is included in Appendix B of this report.

4.1.6 Planning Department

Regulatory Agency Data	
Name of Agency:	Ontario Planning Department (OPD)
Agency Address:	303 East B Street, Ontario, California 91764
Agency Phone Number:	(909) 395-2036
Date of Contact:	February 10, 2017
Method of Communication:	Online
Summary of Communication:	According to records reviewed, the subject property is zoned AG for agricultural development by the City of Ontario.

A copy of pertinent documents is included in Appendix B of this report.

4.1.7 Oil & Gas Exploration

Regulatory Agency Data	
Name of Agency:	California Division of Oil, Gas and Geothermal Resources (DOGGR)
Source:	http://maps.conservation.ca.gov/doggr/#close
Agency Phone Number:	(916) 322-1080

Regulatory Agency Data	
Date of Contact:	February 10, 2017
Method of Communication:	Online
Summary of Communication:	According to DOGGR, no oil or gas wells are located on or adjacent to the subject property.

A copy of pertinent documents is included in Appendix B of this report.

4.1.8 Assessor's Office

Regulatory Agency Data	
Name of Agency:	San Bernardino County Assessor (SBCA)
Agency Address:	172 West Third Street, San Bernardino, California 92415
Agency Phone Number:	(909) 387-8307
Date of Contact:	February 10, 2017
Method of Communication:	Online
Summary of Communication:	According to records reviewed, the subject property is identified by Assessor's Parcel Numbers (APNs) 1054-111-01 (Parcel A); 1054-111-02 (Parcel B); 1054-121-01 (Parcel C); 1054-121-02 (Parcel D); 1054-131-01 (Parcel E); 1054-131-02 (Parcel F); 1054-141-01 (Parcel G); 1054-141-02 (Parcel H); 1054-151-01 (Parcel I); 1054-161-01 (Parcel J); 1054-201-01 (Parcel K); 1054-211-01 (Parcel L); 1054-211-02 (Parcel M); 1054-221-01 (Parcel N); 1054-221-02 (Parcel O); 1054-331-01 (Parcel P); 1054-331-02 (Parcel Q); 1054-341-01 (Parcel R); 1054-341-02 (Parcel S); and 1054-351-01 (Parcel T) and is currently owned by Joseph and Doleen Borba Administrative Trust since 2009.

A copy of pertinent documents is included in Appendix B of this report.

4.2 Mapped Database Records Search

Information from standard federal, state, county, and city environmental record sources was provided by Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

Radius Report Data				
Database	**Search Radius (mile)**	**Subject Property**	**Adjacent Properties**	**Sites of Concern**
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	**Y**	N

Radius Report Data				
Database	**Search Radius (mile)**	**Subject Property**	**Adjacent Properties**	**Sites of Concern**
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N/A	N/A
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	**Y**	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	**Y**	N
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	N	**Y**	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills, Leaks, Investigations and Cleanups	0.50	N	**Y**	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
San Bern Co Permit	0.25	**Y**	**Y**	N
ENF	Varies	**Y**	**Y**	N
EMI	Varies	N	**Y**	N
WDS	Varies	N	**Y**	N
PRP	Varies	N	**Y**	N
Cortese	0.50	N	**Y**	N
HazNet	Varies	N	**Y**	N
EDR MGP	Varies	N	N	N
EDR US Hist Auto Station	Varies	N	N	N
EDR US Hist Cleaner	Varies	N	N	N

4.2.2 Subject Property Listings

The subject property is identified as ENF and San Bern Co Permit sites in the regulatory database report, as discussed below:

- The subject property, identified as GH Dairy #1 at 8451 Eucalyptus Avenue, is listed with three active San Bernardino County permits for Hazardous Materials, expired in August 2016, noted in the following categories:
    - Hazardous materials 4-10 chemicals;
    - Small Quantity Generator; and
    - APSA Farm/Construction Conditionally Exempt permit.

No other pertinent information is provided in the regulatory database report pertaining to these permits. Please refer to Section 4.1 for further discussion on permitted hazardous material uses on the subject property.

- The subject property, identified as B&B Dairy at 8521 Eucalyptus Avenue, is listed with two inactive San Bernardino County permits for HazMat Handler (zero to 10 employees) and a Special Generator. No other pertinent information is provided in the regulatory database report. Please refer to Sections 3.0 and 4.1 for further discussion on the former subject property tenants.
- The subject property, identified as Joe Borba Dairy #2 at 14545 South Grove Avenue, is listed with several inactive San Bernardino County permits for AST Operating Permits, HazMat Handler (11 to 25 employees) with generator permit, Hazardous Waste Generator (11 to 25 employees) and Aboveground Petroleum Storage SPCCs. No other pertinent information is provided in the regulatory database report. Please refer to Sections 3.0 and 4.1 for further discussion on the former subject property tenants.
- The subject property, identified as Half & Half Dairy at 14651 South Grove Avenue, is listed with two inactive San Bernardino County permits for Hazardous Waste Generator (zero to 10 employees) and HazMat Handler (zero to 10 employees) with generator permit. This subject property address is also listed in the ENF database. According to the ENF database, Joe and Lindsey Borba is identified as producing animal waste and generating solid waste and storm water runoff from 1982 to 2006. In 2005, Joe Borba was issued an enforcement action for the prohibited disposal of manure on pastureland not previously used to grow crops. The violation was corrected and terminated the same year. Additionally, Gerben Hettinga is identified as producing animal waste and generator solid waste and storm water runoff from 2008 to the present. One unspecified notice of violation regarding the animal waste program was issued and terminated in 2009.

4.2.3 Adjacent Property Listings

The adjacent properties to the north across Eucalyptus Avenue are identified as ENF and San Bern Co Permit sites; the adjacent property to the northwest across the intersection of Eucalyptus Avenue and South Grove Avenue is identified as a LUST and San Bern Co Permit sites; the adjacent properties to the south across Merrill Avenue are identified as EMI, San Bern Co Permit and WDS sites; the adjacent property to the southwest across Merrill Avenue is identified as a SEMS, PRP, AST, SWEEPS UST, HIST UST, CA FID UST, Cortese, EMI, San Bern Co Permit, SLIC, HazNet and an EnviroStor site; the adjacent property to the east is identified as an ENF and San Bern Co Permit site; and the adjacent properties to the west are identified as San Bern Co Permit sites in the regulatory database report, as discussed below:

- The property, identified as O&M Dairy at 14474 South Grove Avenue, is located adjacent to the north (hydrologically upgradient) of the subject property across Eucalyptus Avenue. This facility is listed with three inactive San Bernardino County permits for HazMat Handler (zero to 10 employees), a Special Handler and a Special Generator. This facility is also listed in the ENF database as producing animal waste and producing solid waste and storm water runoff since 2010. Based on the lack of a documented release and regulatory oversight, this adjacent property is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.

- The property, identified as Majestic Farms #1 at 14333 Walker Avenue, is located adjacent to the north (hydrologically upgradient) of the subject property across Eucalyptus Avenue. This facility is listed with one inactive San Bernardino County permits for HazMat Handler (zero to 10 employees). This facility is also listed in the ENF database as producing animal waste and producing solid waste and storm water runoff since 1978. Based on the lack of a documented release and regulatory oversight, this adjacent property is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.
- The property, identified as Joe Ferreira Jr Dairy at 14400 South Grove Avenue, is located adjacent to the northwest (hydrologically cross-gradient) of the subject property across the intersection of South Grove Avenue and Eucalyptus Avenue. This facility is listed with one inactive San Bernardino County permit for HazMat Handler (agricultural). Ferreira Dairy was formerly equipped with one 1,000-gallon gasoline UST and one 1,000-gallon diesel UST. The tanks were removed in December 1994. This site reported a release of diesel in 2004, which reportedly impacted soil only. The release occurred as a result of the former onsite USTs and was reported to the lead agency (Santa Ana RWQCB) in 2004. Subsurface investigations conducted between 2004 and 2005 indicated concentrations of total petroleum hydrocarbons as diesel (TPH-d) as high as 7,400 milligrams per kilogram (mg/kg), toluene as high as 88 mg/kg, ethyl benzene as high as 69 mg/kg and total xylenes as high as 1,300 mg/kg. In 2004, approximately 500 cubic yards of soil was excavated and transported off-site. Confirmatory soil sampling conducted after the soil excavation indicated TPH-d at a concentration as high as 32 mg/kg. No other constituents of concern were detected above laboratory detection limits. The responsible party is identified as Mr. Joe Ferreira, and regulatory closure was obtained on October 18, 2006. Based on the removal of the USTs and impacted-soil, medium impacted (soil only), the regulatory closure, and the inferred direction of groundwater flow, this adjacent property is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.
- The property, identified as J&D Star Dairy #1 at 8315 Merrill Avenue, is located adjacent to the south (hydrologically downgradient) of the subject property across Merrill Avenue. This facility is listed with one inactive San Bernardino County permit for a HazMat Handler (agricultural). This facility is also listed in the WDS database as an active facility permitted to generate and discharge agricultural waste streams. According to the EMI database, this facility emitted several tons of total organic hydrocarbon gases, reactive organic gases, carbon monoxide emissions, oxides of nitrogen (NOX), oxides of sulphur (SOX), particulate matter and particulate matter (10 micrometers and smaller) between 2006 and 2014. Based on the lack of a documented release or violation and the inferred direction of groundwater flow, this adjacent property is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.

- The property, identified as Heritage Dairy #2 at 8649 Merrill Avenue, is located adjacent to the south (hydrologically downgradient) of the subject property across Merrill Avenue. This facility is listed with two inactive San Bernardino County permits for a HazMat Handler (zero to 10 employees) and a Special Generator. Based on the lack of a documented release or violation and the inferred direction of groundwater flow, this adjacent property is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.
- The property, identified as GH Dairy #2 at 8643 Eucalyptus Avenue, is located adjacent to the east (hydrologically up- to cross-gradient) of the subject property. This facility is listed with one active and two inactive San Bernardino County permits. The active permit was issued for Hazardous Materials (four to 10 chemicals). The two inactive permits were issued for a HazMat Handler (zero to 10 employees) and a Special Generator. This facility is also listed in the ENF database as producing animal waste and producing solid waste and storm water runoff since 2010. Based on the lack of a documented release and regulatory oversight, this adjacent property is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.
- The property, identified as Harry Boersma Dairy at 14746 South Grove Avenue, is located adjacent to the west (hydrologically down- to cross-gradient) of the subject property across South Grove Avenue. This facility is listed with one inactive San Bernardino County permit for a HazMat Handler (agricultural). Based on the lack of a documented release, regulatory oversight and the inferred direction of groundwater flow, this adjacent property is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.
- The property, identified as Haringa Farms at 14848 South Grove Avenue, is located adjacent to the west (hydrologically down- to cross-gradient) of the subject property across South Grove Avenue. This facility is listed with two inactive San Bernardino County permits for a HazMat Handler (zero to 10 employees) and a Special Generator. Based on the lack of a documented release, regulatory oversight and the inferred direction of groundwater flow, this adjacent property is not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.
- The property, identified as Chino Airport at 7000 Merrill Avenue, is located adjacent to the southwest (hydrologically downgradient) of the subject property across Merrill Avenue. It should be noted that immediately across Merrill Avenue to the southwest is a sod farm beyond which is the Chino Airport. The airport consists of over 1,100 acres and has been occupied by an airfield since the early 1940s. Current and former uses include flight academies, aircraft sales and storage, military aircraft modification facilities, manufacturing facilities, crop dusting, aircraft restoration, maintenance and repair shops, a United States Forest Service facility for mixing and loading of fire retardant chemicals for firefighting, aircraft storage and maintenance and aircraft museums. According to the *Historical Site Assessment* prepared by Tetra Tech and dated May 2013, the airport

was equipped with various hazardous materials drums and storage areas, solvent tanks, and USTs. Subsurface investigations began as early as 1989 to identify the potential presence of VOCs including TCE and PCE underlying the airport. Based on the downgradient orientation with respect to the subject property, regulatory oversight, on-going remediation being conducted by the responsible party, the inferred direction of groundwater flow and the relative distance from the subject property to the groundwater plume, this adjacent property is not expected to represent a significant environmental concern at this time.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.4 Sites of Concern Listings

No sites of concern are identified in the regulatory database report that warrant discussion in this section.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.5 Orphan Listings

One orphan listing was identified in the regulatory database report; this listing does not appear to be related to the subject property or any adjacent properties.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM E1527-13, Partner requested the following site information from Prologis (User of this report).

User Responsibilities				
Item	**Provided By User**	**Not Provided By User**	**Discussed Below**	**Does Not Apply**
Environmental Pre-Survey Questionnaire			**X**	
Title Records, Environmental Liens, and AULs			**X**	
Specialized Knowledge		**X**		
Actual Knowledge		**X**		
Valuation Reduction for Environmental Issues		**X**		
Identification of Key Site Manager	**Section 5.1.3**			
Reason for Performing Phase I ESA	**Section 1.1**			
Prior Environmental Reports		**X**		
Other			**X**	

5.1 Interviews

5.1.1 Interview with Owner

Mr. James Borba, subject property owner co-trustee, was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

According to Mr. Borba, the previous dairy (Joe Borba Dairy) was equipped with ASTs for vehicle fueling. Mr. Borba stated that at one point the San Bernardino Fire Department identified the ASTs as "underground tanks" because they were not contained within a vault (as noted in the attached Phase I Environmental Site Assessment Questionnaire, noted below). In the early 1990s, a concrete bermed enclosure was installed at the subject property in order to reduce the potential for any releases from the ASTs. According to Mr. Borba, no sampling has been conducted in the area of the ASTs due to the lack of a release from the tanks.

Ms. Joan Borba, subject property owner co-trustee, completed the Phase I Environmental Site Assessment Questionnaire and indicated that the subject property was formerly equipped with underground gas tanks. Partner reached out to Mr. James Borba for additional information regarding these potential former underground gas tanks, as discussed above. No evidence of current or former USTs was observed during Partner's onsite reconnaissance and no records of any current or former USTs was found during Partner's research of available agency databases.

5.1.2 Interview with Report User

Please refer to Section 5.2 below for information requested from the Report User. The information requested was not received prior to the issuance of this report. It is understood that the Report User would not have knowledge of the property that would significantly impact our ability to satisfy the objectives of this assessment. The lack of this information is not considered to represent a significant data gap.

5.1.3 Interview with Key Site Manager

Mr. Gerben Hettinga, operator of GH Dairy, indicated that he had no information pertaining to any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

According to Mr. Hettinga, the subject property was developed as a dairy farm in the 1950s/1960s. Prior to that, the subject property was utilized as a potato farm. Mr. Hettinga further stated that there are no USTs, clarifiers, oil/water separators, or groundwater monitoring wells on the subject property to the best of his knowledge.

Additional information provided by Mr. Hettinga regarding onsite operations and dairy farm features/structures is further discussed in Section 6.0.

5.1.4 Interviews with Past Owners, Operators and Occupants

Interviews with past owners, operators, and occupants were not reasonably ascertainable and thus constitute a data gap.

5.1.5 Interview with Others

As the subject property is not an abandoned property as defined in ASTM 1527-13, interview with others were not performed.

5.2 User Provided Information

5.2.1 Title Records, Environmental Liens, and AULs

Partner reviewed Environmental Lien & AUL Search Reports prepared by AFX Research, LLC and dated February 4, 2017. No environmental liens or AULS were identified for the subject property.

A copy of the reports is included in Appendix B of this report.

5.2.2 Specialized Knowledge

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

5.2.3 Actual Knowledge of the User

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

5.2.4 Valuation Reduction for Environmental Issues

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

5.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide information that is commonly known or *reasonably ascertainable* within the local community about the subject property at the time of the assessment.

5.2.6 Previous Reports and Other Provided Documentation

Partner was provided with an *Engineered Waste Management Plan* (EWMP) prepared by Nolte for Joe Borba Dairies and dated November 2003. According to the plan, the EWMP was developed for three dairies identified as B&B Dairy (8521 Eucalyptus Avenue), Joe Borba Dairy #2 (14651 Eucalyptus Avenue) and Half and Half Dairy (14651 South Grove Avenue). According to the EWMP, the wastewater management plans for each dairy generally consist of two or three lagoons, two to four catch basins, two evaporation basins, and/or an application basin. In general, wash water generated from the milk barns is discharged to the lagoons. Small pipes connected each of the lagoons to allow for excess water to flow to the next lagoon in order as they fill up. Storm water from the corrals is discharged to the catch basins, as well as runoff from the feed lanes. Berms are constructed along Merrill Avenue and South Grove Avenue to contain additional waste water onsite and to restrict off-site movement. According to Mr. Hettinga, GH Dairy utilizes this EWMP.

Partner was also provided with a SBCFD Hazardous Waste Generator and Hazardous Materials Handler Inspection Report for Joe Borba Dairy #2 at 14545 South Grove Avenue and dated August 12, 2008. According to the inspection report, Joe Borba Dairy operations ceased in May 2008 and GH Dairy relocated to this address. During the inspection, several containers of abandoned hazardous waste ranging in capacities from five-gallon containers to 55-gallon drums were observed to be left at the property from Joe Borba Dairy #2. The contents of the hazardous waste containers appeared to be located at the "old repair shop" and "old community barn" (assumed to be the maintenance area) and included used oil, oily sludge, aerosols, permethrin, fly spray, spent lead-acid automotive battery and diesel. In addition, several containers were not labelled and the contents of the drums could not be determined. Several violations were issued for failure to make hazardous waste determination; facility not operated/maintained to prevent release/fire; hazardous waste containers not sound, leaking and not closed; failure to lawfully manage hazardous waste, used oil, used oil filters and used batteries; not properly labelling hazardous waste tanks/containers; exceeding hazardous waste accumulation time; and for the abandonment of hazardous waste. Partner has required San Bernardino Fire Department records to understand the status of these violations.

At the time of the inspection, a receipt was provided documenting the removal of a 500-gallon gasoline AST. According to the inspection report, three approximately 1,000-gallon ASTs were also observed at the subject property. According to Mr. Gus DeMelo, two of the ASTs were empty and one potentially contained diesel fuel. No Certificate of Compliance was provided to Partner for the previously mentioned violations. As of this date, Partner has not received a response from the SBCFD for inclusion in this report.

Copies of pertinent pages reviewed are included in Appendix B of this report.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was overcast. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

Site Assessment Data	
Site Assessment Performed By:	Brittney Eugenio
Site Assessment Conducted On:	February 21, 2017

The table below provides the subject property personnel interviewed during the field reconnaissance:

Site Visit Personnel for 14545 South Grove Avenue (Subject Property)			
Name	**Title/Role**	**Contact Number**	**Site Walk* Yes/No**
Gerben Hettinga	GH Dairy Operator	(909) 218-1994	Yes

* Accompanied Partner during the field reconnaissance activities and provided information pertaining to the current operations and maintenance of the subject property

Environmental concerns were identified during the onsite reconnaissance related to the storage, use, and generation of hazardous substances/waste and evidence of staining, as further discussed in Sections 6.1 and 6.2.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

Solid waste generated at the subject property is disposed of in commercial dumpsters located throughout subject property primarily near the single-family residences and office building and is removed by the City of Ontario on a regular basis. No evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance.

The majority of the manure that is generated on the subject property is located within the corrals. Manure is picked up and hauled off-site by a licensed hauler. According to Mr. Hettinga, no manure is stockpiled on the subject property.

6.1.2 Sewage Discharge and Disposal

Sanitary discharges from the subject property are directed to at least six onsite septic systems, as further discussed in Section 6.1.7.

6.1.3 Surface Water Drainage

Storm water is designed to flow to the onsite detention ponds located on the southeastern portion of the subject property. According to Mr. Hettinga, berms located along Merrill Avenue and South Grove Avenue contain any storm or waste water onsite and restrict any off-site flow.

Based on information obtained from the United States Fish & Wildlife Service, the subject property appears to be mapped with 0.62 acres of a riverine on the southwestern portion; 14.99 acres of freshwater ponds of various classifications (PUSCx, PUBFx and PUSA) located on the northern central, western central and southern portions of the subject property; and 2.63 acres of freshwater emergent wetlands of various classifications (PEMA1Ax and PEM1Cx) located on the southern portion of the subject property. During Partner's onsite reconnaissance, seven detention ponds were observed on the southeastern portion of the subject property. No other surface impoundments, wetlands, natural catch basins, settling ponds, or lagoons are located on the subject property. No drywells were identified on the subject property.

6.1.4 Source of Heating and Cooling

Heating and cooling systems as well as domestic hot water equipment are fueled by electricity provided by Southern California Edison (SCE). The majority of the single-family residences were gated and the mechanical systems were not observed from the exteriors. The milk barn has a chiller system for the storage of milk.

6.1.5 Wells and Cisterns

Partner observed two irrigation wells and three domestic water wells (two active and one inactive) during the onsite reconnaissance. The two irrigation wells are located along northern property boundary near the scale building and hay barns. The inactive domestic water well is located near the single-family residence identified at 14525 South Grove Avenue. The two active domestic water wells are located near the single-family residences identified at 8477 Eucalyptus Avenue and 8521 Eucalyptus Avenue. Groundwater from the onsite wells is reportedly used for domestic use within the primary residences and for cleaning the milk barns. Please refer to Section 4.1 for further discussion on groundwater beneath the subject property.

No aboveground evidence of cisterns was observed during the site reconnaissance.

6.1.6 Wastewater

Domestic wastewater generated at the subject property is disposed by means of at least six septic systems, as further discussed in Section 6.1.7.

Wastewater generated on the subject property consists of the following:

- Cows enter a staging area where their under bellies and udders are rinsed with water;
- Upon entering the milking station, their feet are rinsed in a "foot bath", a 2 to 5% formaldehyde solution;
- The udders are rinsed again prior to being attached to the automatic milking machine;
- After the milking is complete, the teats are dipped into an iodine solution; and
- After the milk silos have been emptied, the piping and silos are cleaned with a chlorinated alkaline cleaning solution.

The wastewater generated from the above activities, including the formaldehyde bath, is collected in drains located within the active milk barn. The drains are then directed to a sump and gravity fed through piping which discharges to the pastures to provide irrigation water.

Based on RWQCB files, an upgradient TCE plume has impacted on-site groundwater at concentrations below EPA MCLs. Since groundwater beneath the site is pumped via the combined drinking water/irrigation well system, used as washwater, and ultimately discharged on on-site fields, Partner considered the potential for on-site soil contamination from TCE. However, due to the low levels of TCE detected and high agitation of the permitted pump and discharge system, it has been concluded that the presence of TCE in groundwater beneath the site does not have the potential to impact site soils.

6.1.7 Septic Systems

The subject property is equipped with at least six septic systems. The septic systems are reportedly connected to all the single-family residences, office and scale buildings, and are used solely for domestic waste. Mr. Hettinga was unware of the exact locations of the septic systems and reported that the septic systems have not been serviced throughout the time of his occupancy at the subject property. In addition, no building permits or plans were on file indicating the installation dates or locations of the septic systems. Based on the use of the septic system solely for domestic waste, the septic systems are not expected to represent a significant environmental concern.

6.1.8 Additional Site Observations

Several piles of concrete and rubble were observed just south of the calf bassinets on the southern portion of the subject property. According to Mr. Hettinga, these piles were generated from the demolition of former hay storage concrete foundations. Mr. Hettinga stated that the piles will be removed from the subject property. Based on onsite observations and the lack of identified concerns, the concrete and rubble piles are not expected to represent a significant environmental concern at this time. However, as a best management practice, the piles should be properly removed and disposed off-site.

A vehicle equipment staging area was observed at the center of the property, where vehicles/equipment are stored along with used tires and parts in dumpsters and trailers. No staining was observed in the area during the site visit, although it is noted that due to the size of the area and the long grass, the visual survey was conducted via truck. This area should be re-inspected when stored materials are removed.

No other additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site

Partner identified hazardous substances used, stored, and/or generated on the subject property as noted in the following table:

Hazardous Substances and/or Petroleum Products Noted Onsite

Substance	Container Size	Location	Nature of Use	Disposal Method
Non-Iodine Teat Dip	2-6 x 55-gallon drums	Milk Barn	Cow Treatment Activities	Used until depleted
Iodine Barrier Teat Dip	2-6 x 55-gallon drums	Milk Barn	Cow Treatment Activities	Used until depleted
Pivodine Scrub; Povidone-Iodine Topical Solution	5-10 x 1-gallon containers	Milk Barn	Cow Treatment Activities	Used until depleted

Hazardous Substances and/or Petroleum Products Noted Onsite				
Substance	**Container Size**	**Location**	**Nature of Use**	**Disposal Method**
Heavy Duty Non-Chlorinated Alkaline Cleaner	2-6 x 55-gallon drums	Milk Barns	Equipment Cleaning	Used until depleted
Chlorinated Alkaline Powder	2-6 x 55-gallon drums	Milk Barns	Equipment Cleaning	Used until depleted
Acid Cleaner	2-6 x 55-gallon drums	Milk Barns	Equipment Cleaning	Used until depleted
CIP Acid Sanitizer	2-6 x 55-gallon drums	Milk Barn	Equipment Cleaning	Used until depleted
MultiClor	1 x 55-gallon drum	Milk Barns	Equipment Cleaning	Used until depleted
Hydraulic Oil	5-10 x 5-gallon containers; 1 x 275-gallon AST	Irrigation Well Pump House and Maintenance Shop	Equipment and Vehicle Maintenance	Used until depleted
Diesel	1 x 10,000-gallon AST; 3 x 1,000-gallon ASTs; 1 x 500-gallon AST; and 1 x 100-gallon AST	South of Scale Building and Emergency Generator Room (100-gallon AST)	Farm Equipment Fueling and Emergency Generator	Used until depleted
Diesel Exhaust Fluid	2 x 55-gallon drums	Maintenance Shop	Vehicle Maintenance	Used until depleted
Heavy Duty Antifreeze	1 x 55-gallon drum	Maintenance Shop	Vehicle Maintenance	Used until depleted
Heavy Duty Emulsifying Cleaner	1 x 55-gallon drum	Maintenance Shop	Vehicle Maintenance	Spent cleaner is added to the 500-gallon waste oil AST
New Motor Oil	1 x 275-gallon AST	Maintenance Shop	Vehicle Maintenance	Used until depleted
Used Oil	1 x 500-gallon AST; and 1 x 275-gallon AST	Maintenance Shop	Vehicle Maintenance	Picked up and transported off-site by AES
Used Filters	3 x 55-gallon drums	Maintenance Shop	Vehicle Maintenance	Picked up and transported off-site by AES
Heavy Duty Automotive Gear Oil	1 x 55-gallon drum	Maintenance Shop	Vehicle Maintenance	Used until depleted
Heavy Duty Multi-Purpose Grease	2 x 30-gallon drums	Maintenance Shop	Vehicle Maintenance	Used until depleted
Automatic Transmission Fluid	Several retail-sized containers	Maintenance Shop	Vehicle Maintenance	Used until depleted

Hazardous Substances and/or Petroleum Products Noted Onsite				
Substance	**Container Size**	**Location**	**Nature of Use**	**Disposal Method**
(ATF), Gear Oil, Gear Oil Additive				

The majority of the materials appeared to be properly labeled at the time of the assessment. Secondary containment was not provided for all hazardous substances drums and ASTs. Evidence of staining was noted around the materials in the maintenance shop and near the fueling ASTs, as further discussion in Section 6.2.3.

As part of herd care, cows are washed with two separate treatments; a foot bath consisting of a 2 to 5% formaldehyde solution and iodine for rinsing the udders. In addition, a chlorinated alkaline cleaning solution is used to clean the milk silos and other areas of the milk barns. Waste water from these processes is discharged to the pastures to provide irrigation water. Based on this information, the use of these chemicals and subsequent discharge to the pastures is considered an environmental issue.

6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)

No evidence of current or former USTs was observed during the site reconnaissance.

Partner observed one 10,000-gallon diesel AST, three 1,000-gallon diesel ASTs, one 500-gallon diesel AST, one 275-gallon new motor oil AST, one 275-gallon hydraulic oil AST, one 500-gallon waste oil AST and one 275-gallon waste oil AST during the onsite reconnaissance. The five diesel ASTs are located just south of the scale building and are used for vehicle fueling. Secondary containment consisting of concrete enclosures and a metal bin is provided for the diesel ASTs. The new motor oil, hydraulic oil, and waste oil ASTs are located within the maintenance shop. Secondary containment is not provided for these ASTs. Evidence of staining, leaks, and spills was observed in the area of the ASTs, as further discussed in Section 6.2.3.

Partner also observed one 100-gallon diesel AST for the emergency generator located near the northwestern portion of the milk barn. Secondary containment is not provided. No staining, leaks, or spills were noted in the vicinity of the AST. Based on the observed conditions, the AST for the emergency generator is not expected to represent a significant environmental concern at this time.

6.2.3 Evidence of Releases

Evidence of staining was noted on the concrete floor at the maintenance shop ASTs and drummed materials. In addition, heavy oil staining was observed at the base of the fuel pump and fuel hose for the diesel refueling ASTs within the berm, and at the 500-gallon diesel AST located outside of the bermed areas. The staining at the diesel pump appeared to be both on concrete paved and unpaved areas.

In addition, Partner noted oil staining at the pumps in the well pump houses for the wells, although the staining did not appear indicative of a significant release in association with any of these areas.

No other spills, stains, or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 Polychlorinated Biphenyls (PCBs)

Older transformers and other electrical equipment could contain PCBs at a level that subjects them to regulation by the U.S. EPA. PCBs in electrical equipment are controlled by United States Environmental Protection Agency regulations 40 CFR, Part 761. Under the regulations, there are three categories into which electrical equipment can be classified: 1) Less than 50 parts per million (ppm) of PCBs – "*Non-PCB;*" 2) 50 ppm-500 ppm – "*PCB-Contaminated;*" and, 3) Greater than 500 ppm – "*PCB-Containing.*" The manufacture, process, or distribution in commerce or use of any PCB in any manner other than in a totally enclosed manner was prohibited after January 1, 1977.

The on-site reconnaissance addressed indoor and outdoor transformers that may contain PCBs. Six pole-mounted transformers were observed on the subject property near the single-family residences located at 8477 and 8521 Eucalyptus Avenue. The transformers are not labeled indicating PCB content. No staining or leakage was observed in the vicinity of the transformers. SCE maintains ownership and operational responsibility for the transformers and that the units do not contain PCBs. Based on the good condition of the equipment, the transformers are not expected to represent a significant environmental concern.

Partner observed two active feed compressors located near the northern central portion just south of the scale building. No signs of a significant release of fluids was noted from this equipment; however, the ground around the equipment appeared muddy and covered with cardboard boxes and feed. These materials would need to be removed to fully assess the conditions of the equipment located within the feed compressing area.

No other potential PCB-containing equipment (interior transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, balers, etc.) was observed on the subject property during Partner's reconnaissance.

6.2.5 Strong, Pungent or Noxious Odors

Strong manure odor typical of a dairy farm operations was evident during the site reconnaissance. No other odors, including petroleum or solvents, were detected during the site reconnaissance.

6.2.6 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 Drains, Sumps and Clarifiers

Drains were observed in the two milk barns for collection of rinse water. The rinse water flows to one main sump that is located outside each milk barn which is equipped with a pump to divert the excess water to the pasture area. No chemical storage was observed near the sumps aside from the alkaline cleaners. No staining was observed associated with the sumps. No clarifiers were observed on the subject property during the site reconnaissance.

6.2.8 Pits, Ponds and Lagoons

Partner observed seven detention ponds located on the southeastern portion of the subject property. According to Mr. Hettinga, the detention ponds are designed to catch excess wash water from the milk barns as well as storm water from the corrals. Mr. Hettinga stated that the detention ponds were constructed in accordance with a EWMP. No pits, ponds, or lagoons were observed on the subject property.

6.2.9 Stressed Vegetation

No stressed vegetation was observed on the subject property.

6.2.10 Additional Potential Environmental Hazards

A scrap metal area is located on the northwestern portion of the subject property. Several drums, three ASTs, farming equipment, and vehicles were stored throughout this area, with equipment/vehicles also stored throughout other areas of the subject property. According to Mr. Hettinga, the ASTs were transported empty from other farms to be accumulated in this area for later sale as scrap. Additionally, Mr. Hettinga indicated that the drums were used to transport feed material onto the subject property (which is obtained as waste from local food manufacturers). Partner inspected the three abandoned ASTs and approximately 20 drums and confirmed that they were empty (and the drums labelled as food products); however it is noted that not all stored materials were readily visible or accessible for inspection. Although no staining or evidence of release was noted in the accessible areas of the scrap metal storage, Partner recommends that this area is inspected for evidence of release and sampled if necessary when the materials have been removed.

No other additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 Asbestos-Containing Materials (ACMs)

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be *presumed* to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been appropriately tested are "presumed asbestos-containing material" (PACM).

The subject property buildings were constructed at various times between 1958 and 1980. Partner has conducted a limited, visual evaluation of accessible areas for the presence of suspect ACMs at the subject property in the commercial areas (the single family homes were not accessible). The objective of this visual survey was to note the presence and condition of suspect ACM observed. Please refer to the table below for identified suspect ACMs:

Suspect ACMs			
Suspect ACM	**Location**	**Friable Yes/No**	**Physical Condition**
Drywall Systems	Throughout Office Interior (14651 South Grove Avenue)	No	Good

Suspect ACMs			
Suspect ACM	**Location**	**Friable Yes/No**	**Physical Condition**
Spray-Applied Acoustical Material	Throughout Office Interior (14651 South Grove Avenue)	Yes	Good
Stucco	Throughout Building Exteriors (single family residential)	Yes	Good

The limited visual survey consisted of noting observable materials (materials which were readily accessible and visible during the course of the site reconnaissance) that are commonly known to potentially contain asbestos. This activity was not designed to discover all sources of suspect ACM, PACM, or asbestos at the site; or to comply with any regulations and/or laws relative to planned disturbance of building materials such as renovation or demolition, or any other regulatory purpose. Rather, it is intended to give the User an indication if significant (significant due to quantity, accessibility, or condition) potential sources of ACM or PACM are present at the subject property. Additional sampling, assessment, and evaluation will be warranted for any other use.

Partner was not provided building plans or specifications for review, which may have been useful in determining areas likely to have used ACM.

According to the US EPA, ACM and PACM that is intact and in good condition can, in general, be managed safely in-place under an Operations and Maintenance (O&M) Program until removal is dictated by renovation, demolition, or deteriorating material condition. Prior to any disturbance of the construction materials within this facility, a comprehensive ACM survey is recommended.

6.3.2 Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm^2 (or 5,000 µg/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X," to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

Based on the age of the subject property buildings (pre-1978), there is a potential that LBP is present. Interior and exterior painted surfaces were observed in good condition and therefore not expected to represent a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated.

Actual material samples would need to be collected in order to determine if LBP is present.

6.3.3 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA Radon Zones		
EPA Zones	**Average Predicted Radon Levels**	**Potential**
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the US EPA Map of Radon Zones places the subject property in Zone 2. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

6.3.4 Lead in Drinking Water

On-site drinking water wells provide drinking water for the subject property. The status of lead in the drinking water is not known at this time. Please refer to Section 4.1.3 for further discussion on groundwater beneath the subject property.

6.3.5 Mold

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g., in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

Partner observed accessible, interior areas for the subject property buildings for significant evidence of mold growth with the exceptions detailed in Section 1.5 of this report; however, this ESA should not be used as a mold survey or inspection. Additionally, this limited assessment was not designed to assess all areas of potential mold growth that may be affected by mold growth on the subject property. Rather, it is intended to give the client an indication as to whether or not conspicuous (based on observed areas) mold growth is present at the subject property. This evaluation did not include a review of pipe chases, mechanical systems, or areas behind enclosed walls and ceilings.

No obvious indications of water damage or mold growth were observed during Partner's visual assessment.

6.4 Adjacent Property Reconnaissance

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises. No items of environmental concern were identified on the adjacent properties during the site assessment, including hazardous substances, petroleum products, ASTs, USTs, evidence of releases, PCBs, strong or noxious odors, pools of liquids, sumps or clarifiers, pits or lagoons, stressed vegetation, or any other potential environmental hazards.

7.0 FINDINGS AND CONCLUSIONS

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- The subject property has been utilized as a dairy farm since as early as the 1960s. In general, dairy farms generate and store large amounts of manure from the livestock, which typically results in elevated concentrations of nitrates, urea, methane, and ammonia in shallow soil. Currently, the majority of the manure is reportedly hauled off-site. Dairy farm operations have remained relatively consistent; however, the long term use of the subject property as a dairy farm (at least 60 years) represents a REC. Soils removed from the subject property during development activities should be handled appropriately in accordance with a soil management plan.
- Farm equipment including tractors, loaders, trucks, and feed packers used at the subject property, as well as used at nearby farms that operated by the site contact, is repaired at the onsite maintenance area, located on the northern/central portion of the subject property. The maintenance shop contains numerous drums and small containers of virgin automotive fluids as well as two 275-gallon new oil aboveground storage tanks (AST) and one 500-gallon waste oil AST and one 275-gallon waste oil AST. Evidence of staining was noted on the concrete floor at the maintenance shop ASTs. In addition, staining was observed on the concrete floor beneath virgin materials, including a 55-gallon drum of heavy duty emulsifier equipped with a hand pump (reportedly used to clean parts and disposed of in the waste oil AST).

  In addition, a 2008 San Bernardino County Fire Department (SBCFD) Hazardous Waste Generator and Hazardous Materials Handler Inspection Report reviewed as part of this assessment indicated that when Joe Borba Dairy operations ceased in May 2008 and GH Dairy relocated to this address, a SBCFD inspection revealed several containers of abandoned hazardous waste ranging in capacities from five-gallon containers to 55-gallon drums left at the property. In general, the contents of the hazardous waste containers appeared to be located at the "old repair shop" and "old community barn" (assumed to be the maintenance area) and included used oil, oily sludge, aerosols, permethrin, fly spray, spent lead-acid automotive battery and diesel. In addition, several containers were not labeled and the contents of the drums could not be determined. Several violations were issued including hazardous waste containers not sound, leaking and not closed; and the abandonment of hazardous waste. Partner has requested SBCFD records to understand the status of these violations and to determine if the materials and any associated contamination have since been removed.
- An exterior vehicle/equipment refueling area is located west of the maintenance area. The following five ASTs were observed to be used for fueling operations to the south of the scale building in this area: one 10,000-gallon diesel AST, three 1,000-gallon diesel ASTs and one 500-gallon diesel AST.

Oil staining was observed at the base of the fuel pump for the 10,000-gallon diesel AST and a pump/hose attached to the 1,000-gallon diesel ASTs, as well as at the 500-gallon diesel AST located outside of the bermed area. The staining appeared to be both on concrete paved and unpaved areas.

- A scrap metal storage area is located on the northwestern portion of the subject property. Several drums, three ASTs, farming equipment, and vehicles were stored throughout this area during the site visit. According to Mr. Hettinga, the ASTs were transported empty from other farms to be accumulated in this area for later sale as scrap. Additionally, Mr. Hettinga indicated that the drums were used to transport feed material onto the subject property (which is obtained as waste from local food manufacturers). Partner inspected the three abandoned ASTs and approximately 20 drums and confirmed that they were empty (and the drums labeled as food products); however, it is noted that not all stored materials were readily visible or accessible for inspection. Oil staining was observed on the ground near one of the pieces of farm equipment.
- According to RWQCB records reviewed and interviews with a RWQCB representative, the subject property and surrounding area are located within the South Archibald Trichloroethylene (TCE) Plume, which is an area of contaminated groundwater located in the City of Ontario. The contaminated groundwater plume, which underlies an area of approximately 2,000 acres, contains TCE and nitrates. The concentrations of TCE detected in drinking water wells located north (upgradient) of the subject property exceed the Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for TCE of 5 micrograms per liter (µg/L). According to a 2014 plume map on file with the RWQCB and available sample data for the subject property, an area of groundwater beneath the northeastern and eastern portions of the subject property is depicted with concentrations of TCE less than 5 µg/L. The plume is being managed by the Chino Basin Desalter Authority, Inland Empire Utilities Agency, and the City of Ontario.

  The presence of the TCE plume beneath the subject property is considered a REC. However, groundwater is greater than 100 feet bgs in the vicinity of the subject property and therefore vapor intrusion is not considered an environmental issue at this time.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- As part of herd care, cows are washed with two separate treatments; a foot bath consisting of a 2 to 5% formaldehyde solution and iodine for rinsing the udders. In addition, a chlorinated alkaline cleaning solution is used to clean the milk silos and other areas of the milk barns. Waste water from these processes is discharged to the pastures to irrigate the fields. Based on this information, the use of these chemicals and subsequent discharge to the pastures is considered an environmental issue.
- Partner visually assessed the 189-acre active dairy farm via a vehicular tour lead by the tenant, Mr. Hettinga. In addition to the scrap metal storage area and maintenance/fueling area noted above, Partner observed other storage areas on the property that appeared to be *de minimis* in nature. These areas included a vehicle equipment staging area at the center of the property (where vehicles/equipment are stored along with used tires and parts in dumpsters and trailers), concrete rubble piles on the southern border of the site (reportedly from the on-site demolition of concrete pads for hay storage), oil staining at the pumps in the well pump houses for the wells, and dairy barns containing one or more compressors, an emergency generator, and milk storage silos with disinfectant/cleaners added to the lines. During review of these areas, Partner did not observe staining indicative of a significant release in association with any of these areas.
- The subject property is equipped with at least six septic systems. The septic systems are reportedly connected to the single-family residences, office and scale buildings, and are used solely for domestic waste disposal. Mr. Hettinga was unware of the exact locations of the septic systems and reported that the septic systems have not been serviced throughout the time of his occupancy at the subject property. In addition, no building permits or plans were on file indicating the installation dates or locations of the septic systems. Based on the use of the septic system solely for domestic waste, the septic systems are not expected to represent a significant environmental concern.
- Due to the age of the subject property buildings, there is a potential that asbestos-containing materials (ACMs) and/or lead-based paint (LBP) are present. Overall, all suspect ACMs and painted surfaces in the accessible structures were observed in good condition and do not pose a health and safety concern to the occupants of the subject property at this time. A demolition-level survey will be required prior to building demolition activities to prevent potential exposure to workers and/or building occupants.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 14545 South Grove Avenue in the City of Ontario, San Bernardino County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed evidence of recognized environmental conditions and/or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends the following:

- A limited subsurface investigation should be conducted in order to determine the presence or absence of soil contamination due to the presence of scrap metal storage, maintenance activities, and refueling operations.
- A soil management plan should be put in place to address any contaminated soils encountered during property redevelopment (specifically the potential for nitrates).
- A methane survey should be conducted in the footprint of the proposed building pad prior to building construction.
- A demolition-level ACM and LBP survey should be performed in order identify suspect ACMs and LBP to prepare for the safe removal of the suspect materials prior to building demolition.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at 14545 South Grove Avenue in the City of Ontario, San Bernardino County, California in general conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:

Brittney Eugenio
Environmental Scientist

Reviewed By:

Kathy Lehnus
Senior Author

9.0 REFERENCES

Reference Documents

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13

Environmental Data Resources (EDR), Radius Report, Certified Sanborn Map Report, Aerial Photo Decade Package, Historical Topo Map Report, City Directory Abstract, February 2017

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via the internet, February 2017

United States Department of Agriculture, Natural Resources Conservation Service, accessed via the internet, February 2017

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, February 2017

United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, February 2017

United States Geological Survey, accessed via the internet, February 2017

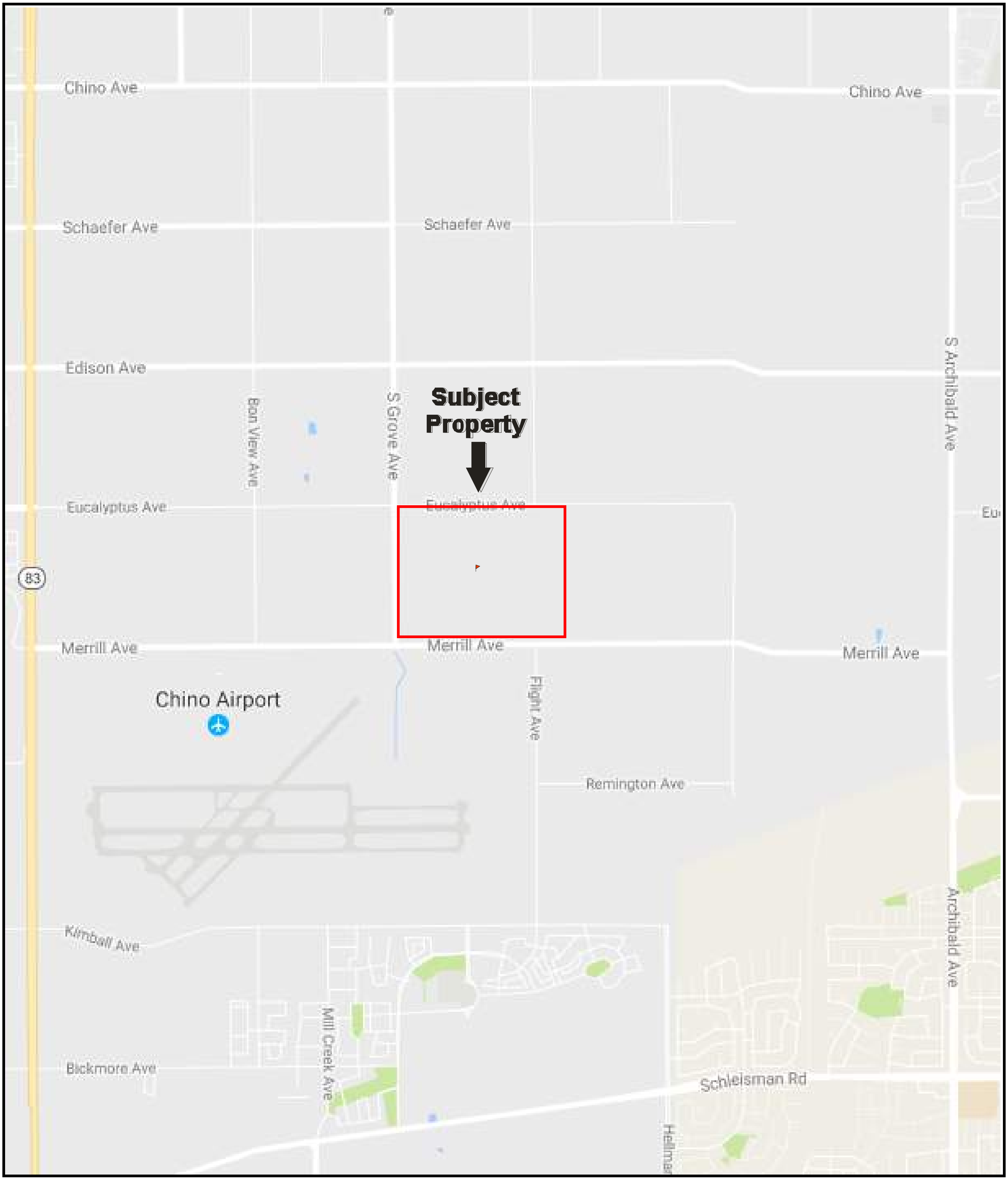
United States Geological Survey Topographic Maps, accessed via the internet, February 2017

FIGURES

1 SITE LOCATION MAP

2 SITE PLAN

3 TOPOGRAPHIC MAP



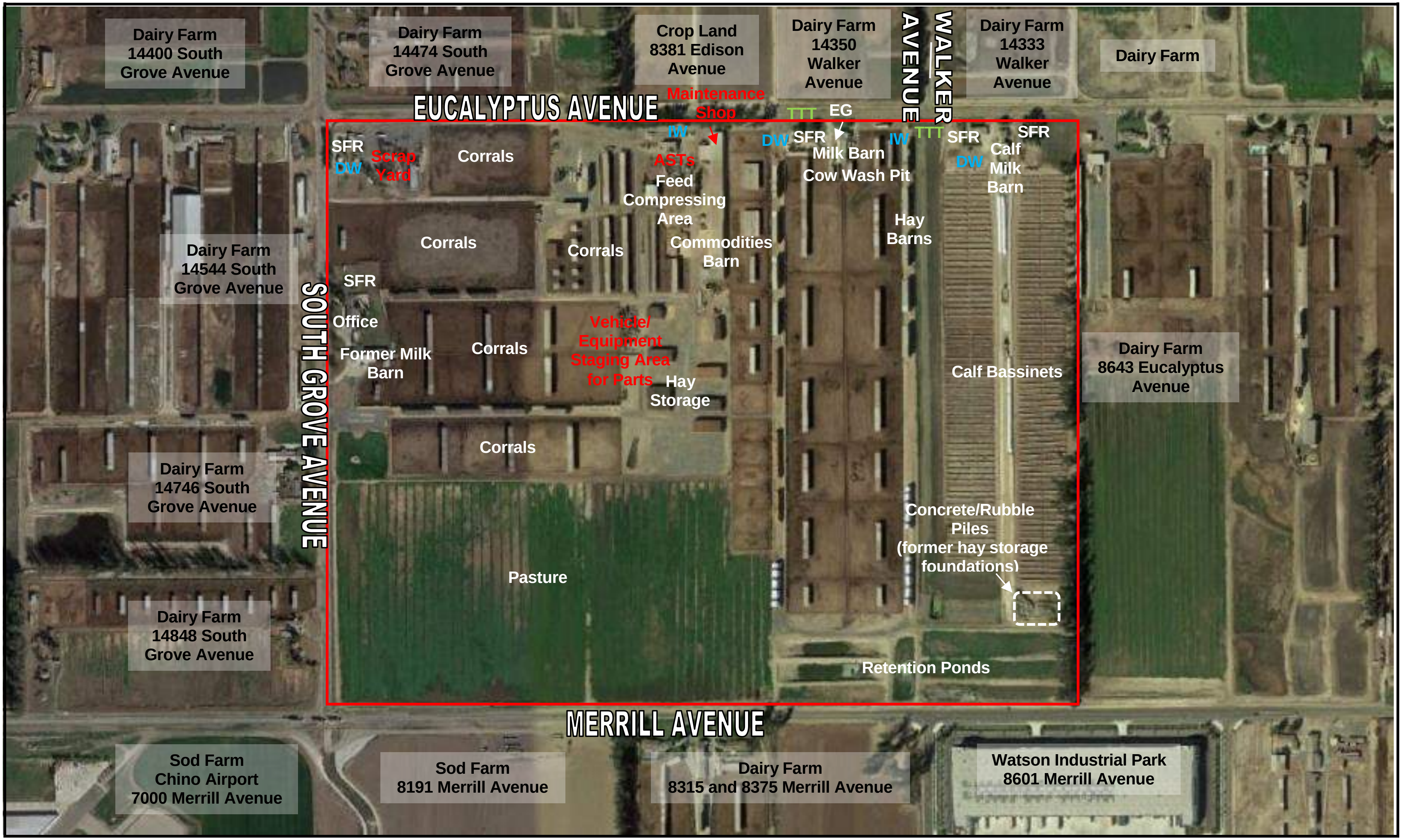
N

Drawing Not To Scale

KEY:
Subject Property

FIGURE 1: SITE LOCATION MAP
Project No. 17-180354.1

PARTNER



KEY:

Subject Property		Aboveground Storage Tanks	**ASTs**
Domestic Well	**DW**	Emergency Generator	**EG**
Irrigation Well	**IW**	Single Family Residence	**SFR**

FIGURE 2B: SITE PLAN

Project No. 17-180354.1

PARTNER

N

GROUNDWATER FLOW

KEY:
Subject Property
Domestic Well **DW**
Irrigation Well **IW**

Aboveground Storage Tanks **ASTs**
-1x 10,000-gallon diesel ; 3x 1,000-gallon diesel; 1x 500-gallon diesel
-Oil staining around base of the diesel fuel pump

Maintenance Shop
-Several 1- to 5-gallon containers and 55-gallon drums of automotive fluids; 1x 500-gallon waste oil AST; 1x 275-gallon waste oil AST; 1x 275-gallon new motor oil AST; 1x 275-gallon hydraulic oil AST with staining on the concrete floor around the ASTs

FIGURE 2B: SITE DETAIL MAP
Project No. 17-180354.1

PARTNER

N

USGS 7.5 Minute *Corona North and Prado Dam, California* Quadrangle
Created: 2012

KEY:
Subject Property

FIGURE 3: TOPOGRAPHIC MAP
Project No. 17-180354.1

PARTNER

APPENDIX A: SITE PHOTOGRAPHS

1. View of the western portion of the office building located at 14651 South Grove Avenue of the subject property.

2. View of a typical office located in the office building of the subject property.

3. View of the kitchen located in the office building of the subject property.

4. View of additional office equipment and storage located in the office building of the subject property.

5. View of a typical single-family residence located on the subject property.

6. View of an additional typical single-family residence located on the subject property.

7. View of a typical corral located on the subject property.

8. View of a typical calf corral located on the subject property.

9. View of typical calf bassinets located along the eastern portion of the subject property.

10. View of the pasture located on the southwestern portion of the subject property.

11. View of the western portion of the calf milk barn located on the northeastern portion of the subject property.

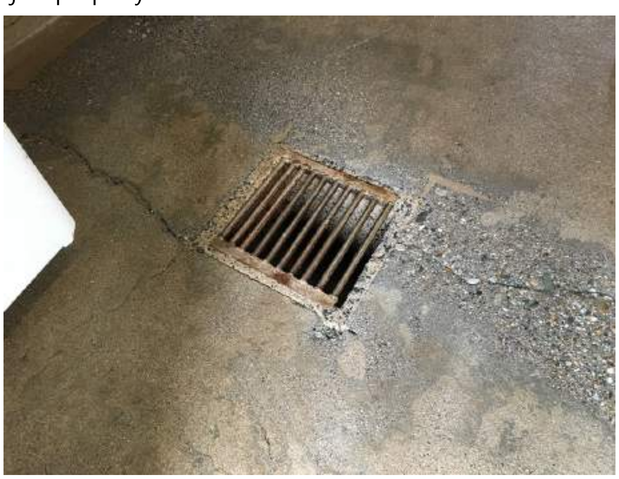
12. View of the milk mixing room located in the calf milk barn of the subject property.

13. View of the milk bottle and other milking equipment cleaning area located in the calf milk barn of the subject property.

14. View of a typical drain located in the calf milk barn of the subject property.

15. View of the northeastern portion of the main milk barn located on the northern central portion of the subject property.

16. View of typical milking stands located in the main milk barn of the subject property.



17. View of a typical drain located in the main milk barn of the subject property.

18. View of the emergency generator located near the northwestern portion of the main milk barn of the subject property.

19. View of the 100-gallon diesel AST for the emergency generator located on the subject property.

20. View of typical cow treatment chemicals stored at the main milk barn of the subject property.

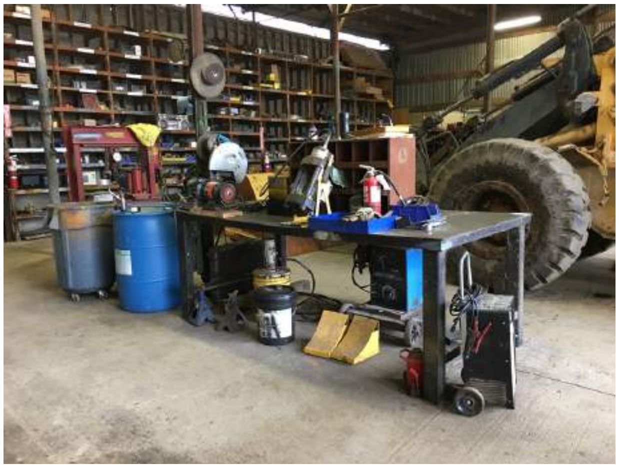
21. View of typical equipment cleaning chemicals stored at the main milk barn of the subject property.

22. View of the cow wash pit located to the south of the main milk barn of the subject property.

23. View of a typical sump located in the cow wash pit located to the south of the main milk barn of the subject property.

24. View of the maintenance shop located on the northern central portion of the subject property.

PARTNER



25. View of typical vehicle and equipment maintenance supplies stored in the maintenance shop of the subject property.

26. View of the 55-gallon drum of heavy emulsifying cleaner, 275-gallon new oil AST and 275-gallon hydraulic oil AST located in the maintenance shop.

27. View of staining located near the new oil ASTs in the maintenance shop of the subject property.

28. View of the waste oil AST and used filer drums located in the maintenance shop of the subject property.

29. View of additional typical automotive fluids stored in the maintenance shop of the subject property.

30. View of the 10,000-gallon and three 1,000-gallon diesel ASTs for fueling located to the south of the scale building located on the northern central portion of the subject property.

31. View of the fuel pump for the 10,000-gallon diesel AST with staining around the base.

32. View of a 500-gallon diesel AST with staining around the base.

33. View of the commodities barn located to the south of the maintenance shop of the subject property.

34. View of typical feed silos located to the west of the commodities barn of the subject property.

35. View of the feed compressing area located on the northern central portion of the subject property.

36. Additional view of the feed compressing area of the subject property.

37. View of scrap metal storage located on the north-western portion of he subject property.

38. View of old equipment located in the scrap metal yard on the northwestern portion of the subject property.

39. View of three empty ASTs located in the scrap metal yard of the subject property.

40. View of several empty 55-gallon drums (previously contained food-based products located in the scrap metal yard of the subject property.

41. View of tractor storage located near the scrap metal yard of the subject property.

42. View of vehicle/equipment staging for parts located on the central portion of the subject property.

43. View of an abandoned milk barn located to the south of the office building of the subject property.

44. View of the interior of an abandoned milk barn of the subject property.

45. View of typical hay storage located on the central portion of the subject property.

46. View of concrete/rubble piles located to the south of the calf bassinets.

47. View of the detention ponds located on the south-eastern portion of the subject property.

48. View of a typical domestic water well located on the subject property.

49. View of the interior of an irrigation well pump house with staining noted around the pump.

50. View of the interior of the additional irrigation well pump house with staining noted around the pump.

51. View of typical trash dumpsters located on the subject property.

52. View of typical pole-mounted transformers located along the northern portion of the subject property.

53. View of the northern adjacent properties from across Eucalyptus Avenue.

54. View of the northwestern adjacent property from across the intersection of South Grove Avenue and Eucalyptus Avenue.

55. View of the southern adjacent properties.

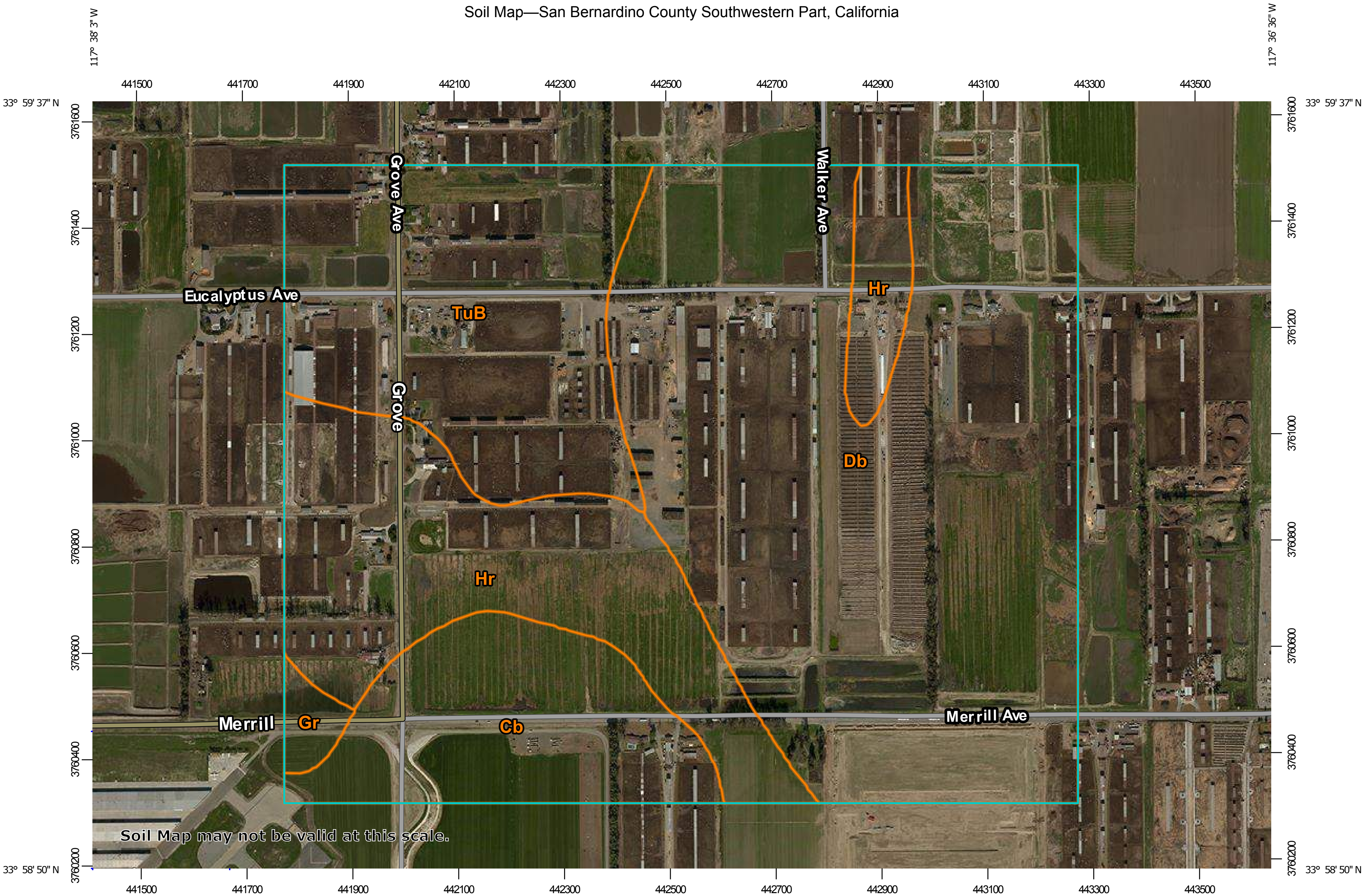
56. View of the southwestern adjacent property from across Merrill Avenue.

57. View of the eastern adjacent property from across Merrill Avenue.

58. View of the western adjacent properties from across South Grove Avenue.

APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION

PARTNER



Map Scale: 1:10,200 if printed on A landscape (11" x 8.5") sheet.

Meters: 0 150 300 600 900

Feet: 0 450 900 1800 2700

N

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County Southwestern Part, California
Survey Area Data: Version 8, Sep 30, 2016

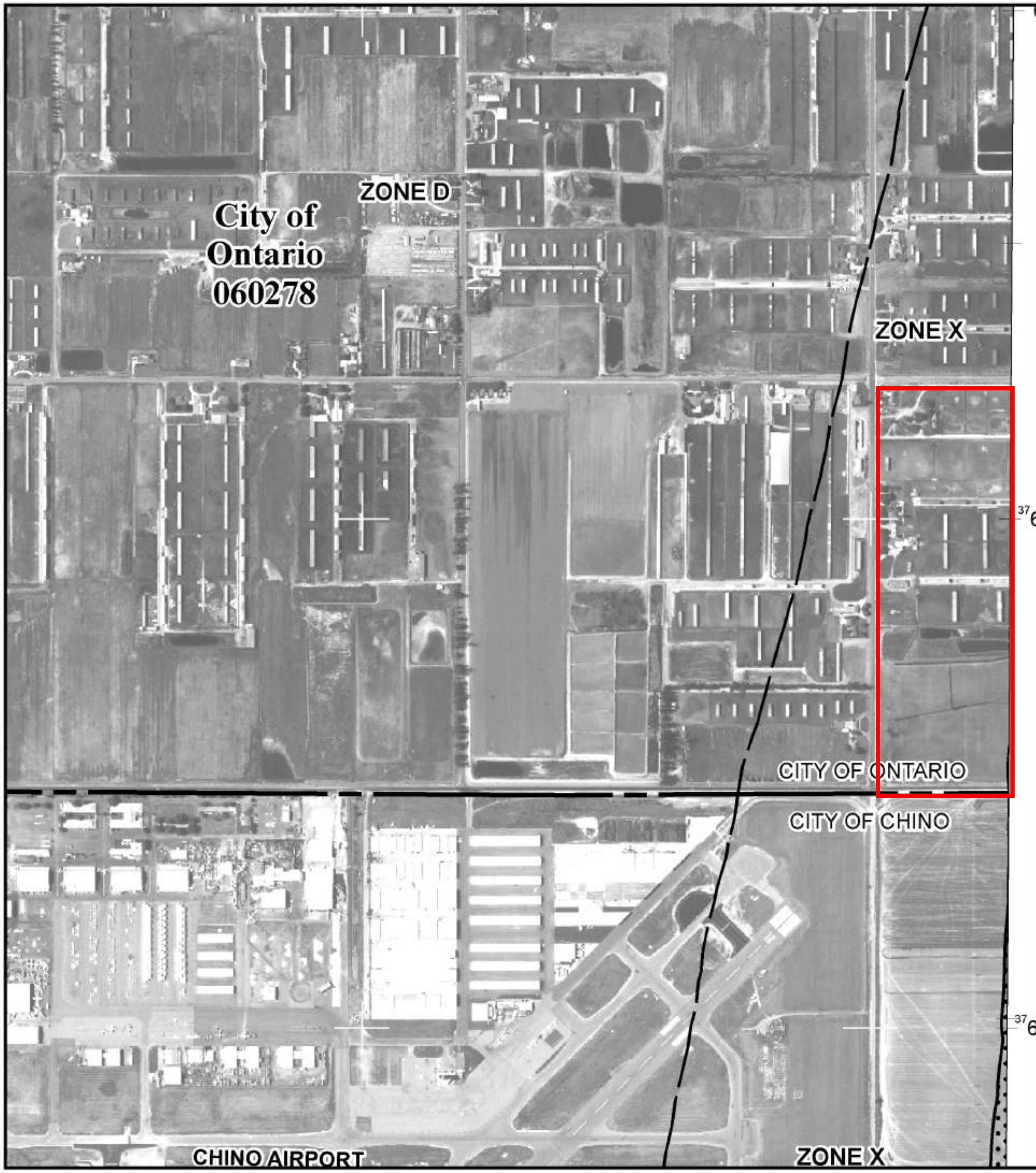
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 5, 2015—Jan 18, 2015

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

San Bernardino County Southwestern Part, California (CA677)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Cb	Chino silt loam	50.4	11.3%
Db	Delhi fine sand	217.3	48.6%
Gr	Grangeville fine sandy loam, warm MAAT, MLRA 19	4.3	1.0%
Hr	Hilmar loamy fine sand	87.9	19.7%
TuB	Tujunga loamy sand, 0 to 5 percent slopes	87.0	19.5%
Totals for Area of Interest		**446.8**	**100.0%**



tional Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

00 0 1000 2000 FEET

METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 9335H

FIRM
FLOOD INSURANCE RATE MAP

SAN BERNARDINO COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 9335 OF 9400

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CHINO HILLS, CITY OF	060754	9335	H
CHINO, CITY OF	060272	9335	H
ONTARIO, CITY OF	060278	9335	H

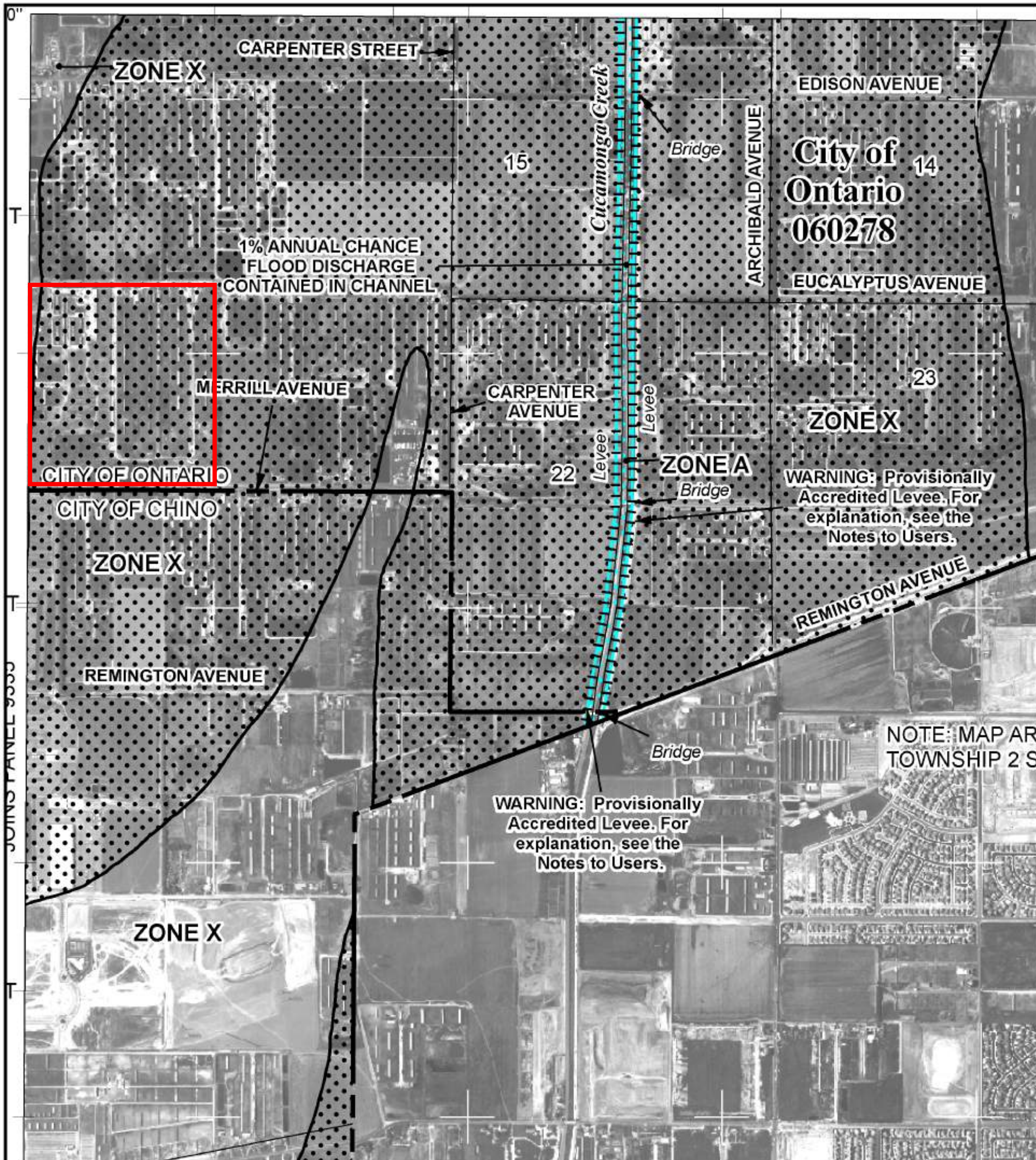
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06071C9335H

MAP REVISED
AUGUST 28, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



ational Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'

000 0 2000 4000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 9375H

FIRM

FLOOD INSURANCE RATE MAP

SAN BERNARDINO COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 9375 OF 9400

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CHINO, CITY OF	060272	9375	H
ONTARIO, CITY OF	060278	9375	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06071C9375H

MAP REVISED
AUGUST 28, 2008

Federal Emergency Management Agency

N

Date of Photograph: 1938

KEY:
Subject Property

N

Date of Photograph: 1946

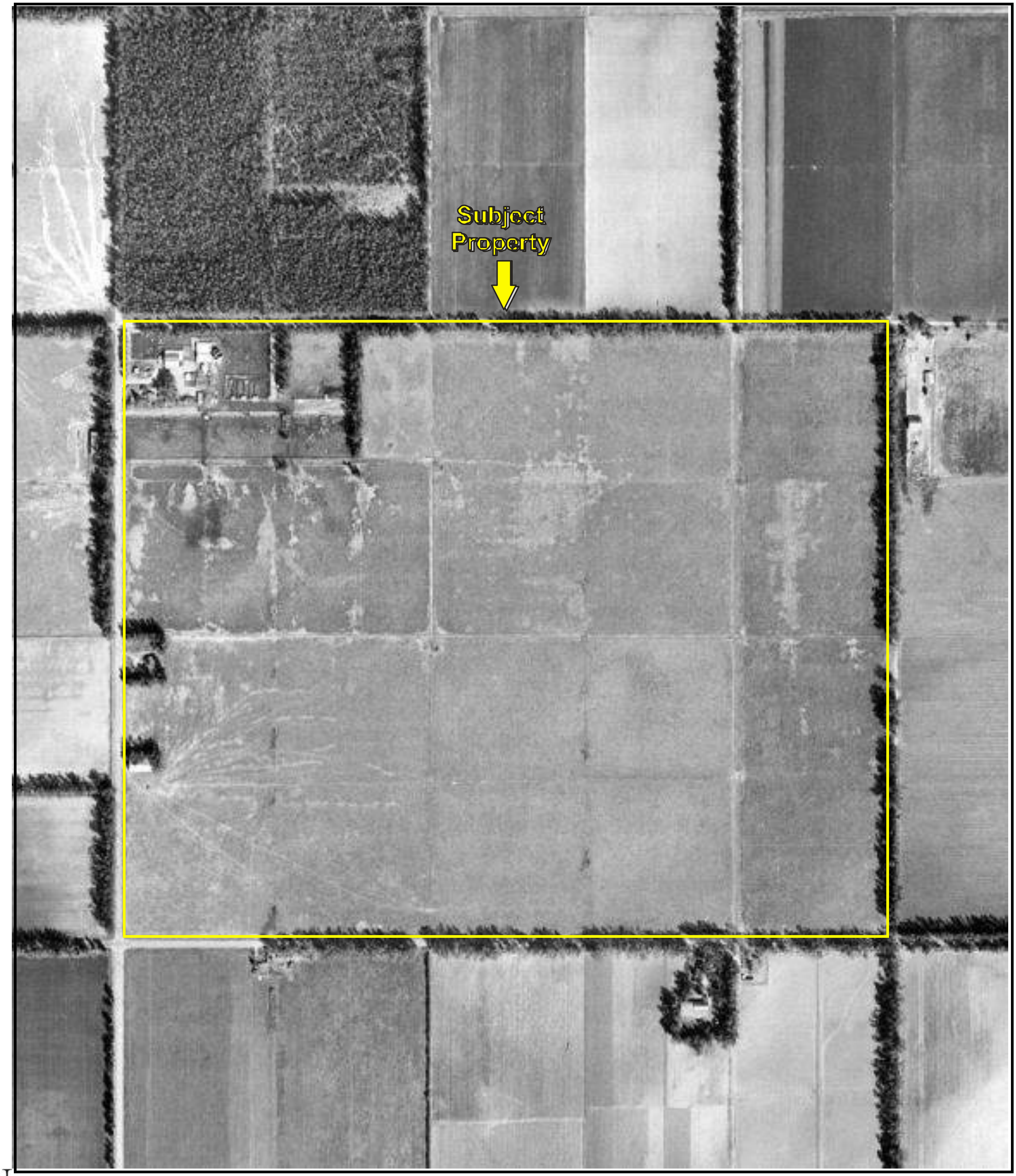
KEY:
Subject Property

N

Date of Photograph: 1948

KEY:
Subject Property

PARTNER



N

Date of Photograph: 1953

KEY:
Subject Property

N

Date of Photograph: 1966

KEY:
Subject Property

N

Date of Photograph: 1975

KEY:
Subject Property

Date of Photograph: 1985

KEY:
Subject Property

APPENDIX B: AERIAL PHOTOGRAPHS
Project No. 17-180354.1

PARTNER

N

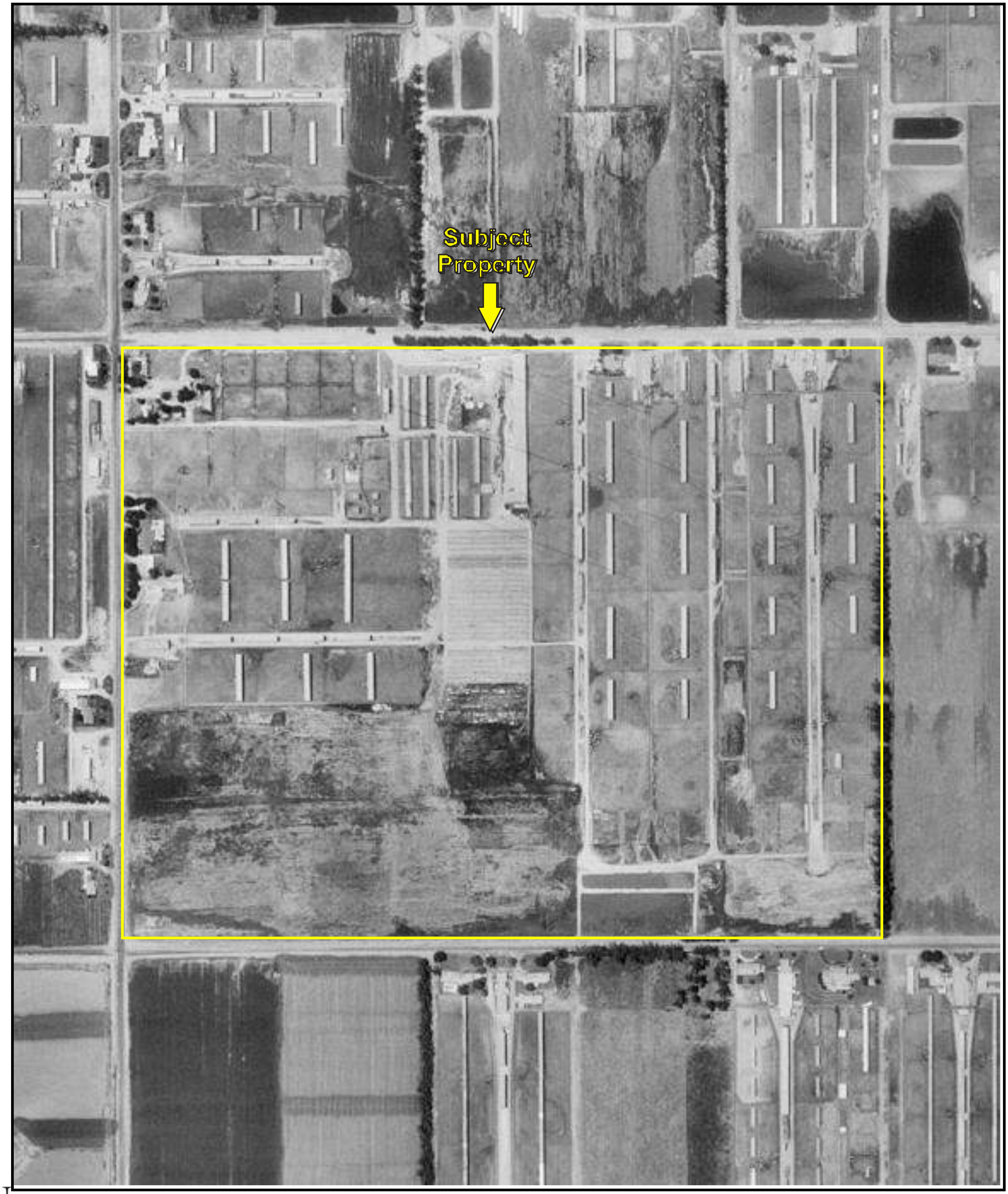
Date of Photograph: 1989

KEY:
Subject Property

N

Date of Photograph: 1990

KEY:
Subject Property



Date of Photograph: 1994

KEY:
Subject Property

N

Date of Photograph: 2005

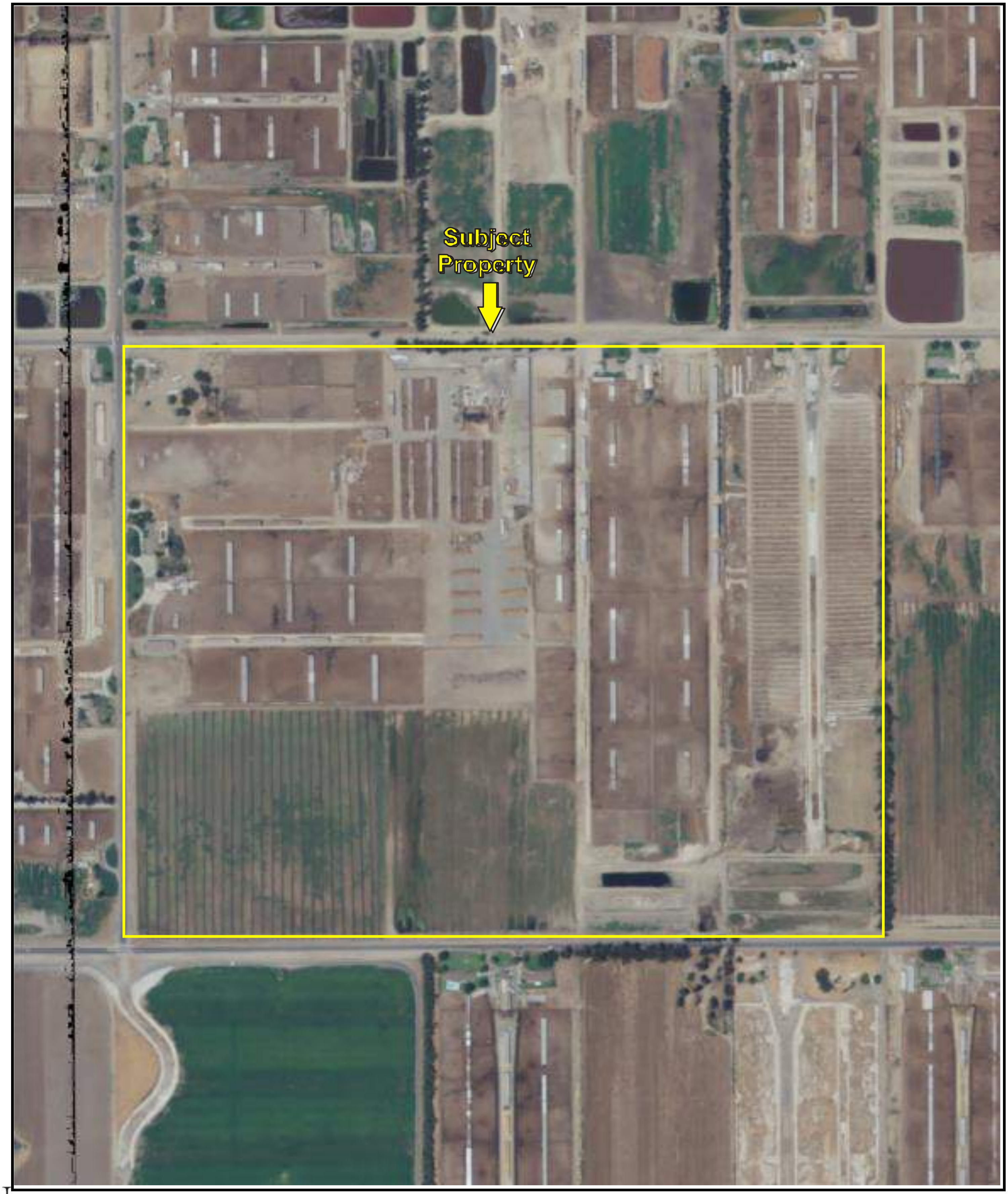
KEY:
Subject Property

Date of Photograph: 2006

KEY:
Subject Property

APPENDIX B: AERIAL PHOTOGRAPHS
Project No. 17-180354.1

PARTNER



N

Date of Photograph: 2009

KEY:
Subject Property

APPENDIX B: AERIAL PHOTOGRAPHS
Project No. 17-180354.1

PARTNER

N

Date of Photograph: 2010

KEY:
Subject Property

N

Date of Photograph: 2012

KEY:
Subject Property

Borba Land Phase II 189 Acres

14545 South Grove Avenue

Chino, CA 91710

Inquiry Number: 4851881.3

February 10, 2017

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

02/10/17

Site Name:

Borba Land Phase II 189 Acre
14545 South Grove Avenue
Chino, CA 91710
EDR Inquiry # 4851881.3

Client Name:

Partner Engineering and Science, Inc.
2154 Torrance Blvd, Suite 200
Torrance, CA 90501-0000
Contact: Colleen Tubridy

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Partner Engineering and Science, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 7921-477C-A4C1

PO # NA

Project 17-180354.1

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 7921-477C-A4C1

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Partner Engineering and Science, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Borba Land Phase II 189 Acres
14545 South Grove Avenue
Chino, CA 91710

Inquiry Number: 4851881.5
February 13, 2017

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	*Source*	*TP*	*Adjoining*	*Text Abstract*	*Source Image*
2013	Cole Information Services	-	X	X	-
2008	Haines Company, Inc.	-	X	X	-
	Haines Company, Inc.	X	X	X	-
2003	Haines & Co Publishers	-	X	X	-
	Haines & Co Publishers	X	X	X	-
2002	Cole Information Services	-	-	-	-
1996	GTE	-	X	X	-
	GTE	X	X	X	-
1995	GTE Directories	-	-	-	-
1991	GTE California Incorporated	-	-	-	-
1990	GTE	-	X	X	-
	GTE	X	X	X	-
	GTE California Incorporated	-	X	X	-
	GTE California Incorporated	X	X	X	-
1985	GTE	-	X	X	-
	GTE	X	X	X	-
1981	General Telephone Company of California	-	-	-	-
1980	GTE	-	X	X	-
	GTE	X	X	X	-
1975	GTE Directories	-	X	X	-
	GTE Directories	X	X	X	-
1970	General Telephone Company of California	-	X	X	-
	General Telephone Company of California	X	X	X	-

EXECUTIVE SUMMARY

Year	*Source*	*TP*	*Adjoining*	*Text Abstract*	*Source Image*
1965	GTE	-	X	X	-
1964	Luskey Brothers & Co	-	-	-	-
1961	Luskey Brothers& Co Publishers	-	-	-	-
1960	General Telephone Company Publishers	-	X	X	-
	General Telephone Company Publishers	X	X	X	-
1955	Luskey Brothers Co Publishers	-	-	-	-
1951	Los Angeles Directory Company Publishers	-	-	-	-
1950	The Pacific Telephone and Telegraph Co	-	-	-	-
1949	San Bernardino Directory Co. Publishers	-	-	-	-
1946	Los Angeles Directory Company Publishers	-	-	-	-
1945	Southern California Telephone Company	-	-	-	-
1942	San Bernardino Directory Co Publisher	-	-	-	-
1941	Associated Telephone Company Limited	-	-	-	-
1940	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Co.	-	-	-	-
1936	San Bernardino Directory Co Publisher	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1931	Los Angeles Directory Co.	-	-	-	-
1930	San Bernardino Directory Co Publisher	-	-	-	-
1926	Los Angeles Directory Co Publisher	-	-	-	-
1923	Los Angeles Directory Company	-	-	-	-
1922	R.L. Polk & Co Publishers	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

14545 South Grove Avenue
Chino, CA 91710

FINDINGS DETAIL

Target Property research detail.

GROVE AVE

14545 GROVE AVE

Year	*Uses*	*Source*
2008	BORBA JOE DAIRY	Haines Company, Inc.
2003	BORBA JOE DAIRY	Haines & Co Publishers
1996	BORBA JOE DAIRY	GTE
1990	Borba Joe Dairy	GTE
1985	9 BORBA JOE DAIRY	GTE
1980	+ SANTOS JOHN	GTE
	BORBA JOE DAIRY	GTE
1975	Borba Joe Dairy	GTE Directories
1970	a BORBA JOE DAIRY	General Telephone Company of California
1960	Borba Johnny	General Telephone Company Publishers
1956	Borba Johnny	General Telephone Company Publishers

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

ETIWANDA AVE

80336619 ETIWANDA AVE

Year	Uses	Source
1960	Stevens H Lee Mrs	General Telephone Company Publishers

87696871 ETIWANDA AVE

Year	Uses	Source
1960	Colombero Construction Co	General Telephone Company Publishers

EUCALYPTUS AVE

7955 EUCALYPTUS AVE

Year	Uses	Source
2003	BORBA George	Haines & Co Publishers
1996	Borba Geo	GTE
1990	BORBA GEO	GTE California Incorporated
1985	BORBA GEO	GTE
1980	BORBA GEO	GTE
1970	BORBA GEORGE	General Telephone Company of California

GROVE AV CHURCH N

14525 GROVE AV CHURCH N

Year	Uses	Source
1990	Garcia Hector	GTE

GROVE AVE

14361 GROVE AVE

Year	Uses	Source
2003	ALEWYN Jake J	Haines & Co Publishers
1980	ALEWYN JAKE J	GTE

14400 GROVE AVE

Year	Uses	Source
2003	FERREIRA Joe	Haines & Co Publishers

FINDINGS

14441 GROVE AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1980	MIERSMA BOB	GTE
1970	VANOERVEEN JOE	General Telephone Company of California

14474 GROVE AVE

Year	Uses	Source
2008	MOUW Travis N	Haines Company, Inc.
2003	MIERSMA Harlan	Haines & Co Publishers
1996	Miersma Harlan	GTE
1990	Miersma Harlan	GTE
1985	MIERSMA HARLAN	GTE
1980	MIERSMA HARLAN	GTE
1975	Miersma Harry	GTE Directories
1970	VANDER VEEN WILBUR	General Telephone Company of California

14525 GROVE AVE

Year	Uses	Source
2008	XXXX	Haines Company, Inc.
2003	XXXX	Haines & Co Publishers
1985	GARCIA HECTOR	GTE
1980	GARCIA HECTOR	GTE
1975	Borba Joe Jr	GTE Directories

14544 GROVE AVE

Year	Uses	Source
2008	ORNELLAS Carmen	Haines Company, Inc.
2003	CAMPOS Norma	Haines & Co Publishers
1990	Silva Paul	GTE
1985	+ SILVA PAUL	GTE
1980	SILVA RICHARO	GTE

14547 GROVE AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

14646 GROVE AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

FINDINGS

14651 GROVE AVE

Year	*Uses*	*Source*
2013	G H DAIRY	Cole Information Services
2008	HARDISTY M	Haines Company, Inc.
	HARDISTY J	Haines Company, Inc.
2003	HARDISTY M	Haines & Co Publishers
	HARDISTY J	Haines & Co Publishers
	HALF AND HALF DAIRY	Haines & Co Publishers
1996	Hardisty Marguerite	GTE
	HALF AND HALF DAIRY	GTE
1990	Borba Joe	GTE
1985	BORBA JOE	GTE
1980	BORBA JOE	GTE
1975	Borba Joe	GTE Directories
1970	BORBA JOE	General Telephone Company of California

14746 GROVE AVE

Year	*Uses*	*Source*
2008	SANDOVAL Jennel	Haines Company, Inc.

N GROVE AVE

14545 N GROVE AVE

Year	*Uses*	*Source*
1965	n TEIXIERA ANTONIO	GTE
	BORBA JOE 62 B 0132	GTE

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
14545 South Grove Avenue	2013, 2002, 1995, 1991, 1981, 1965, 1964, 1961, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

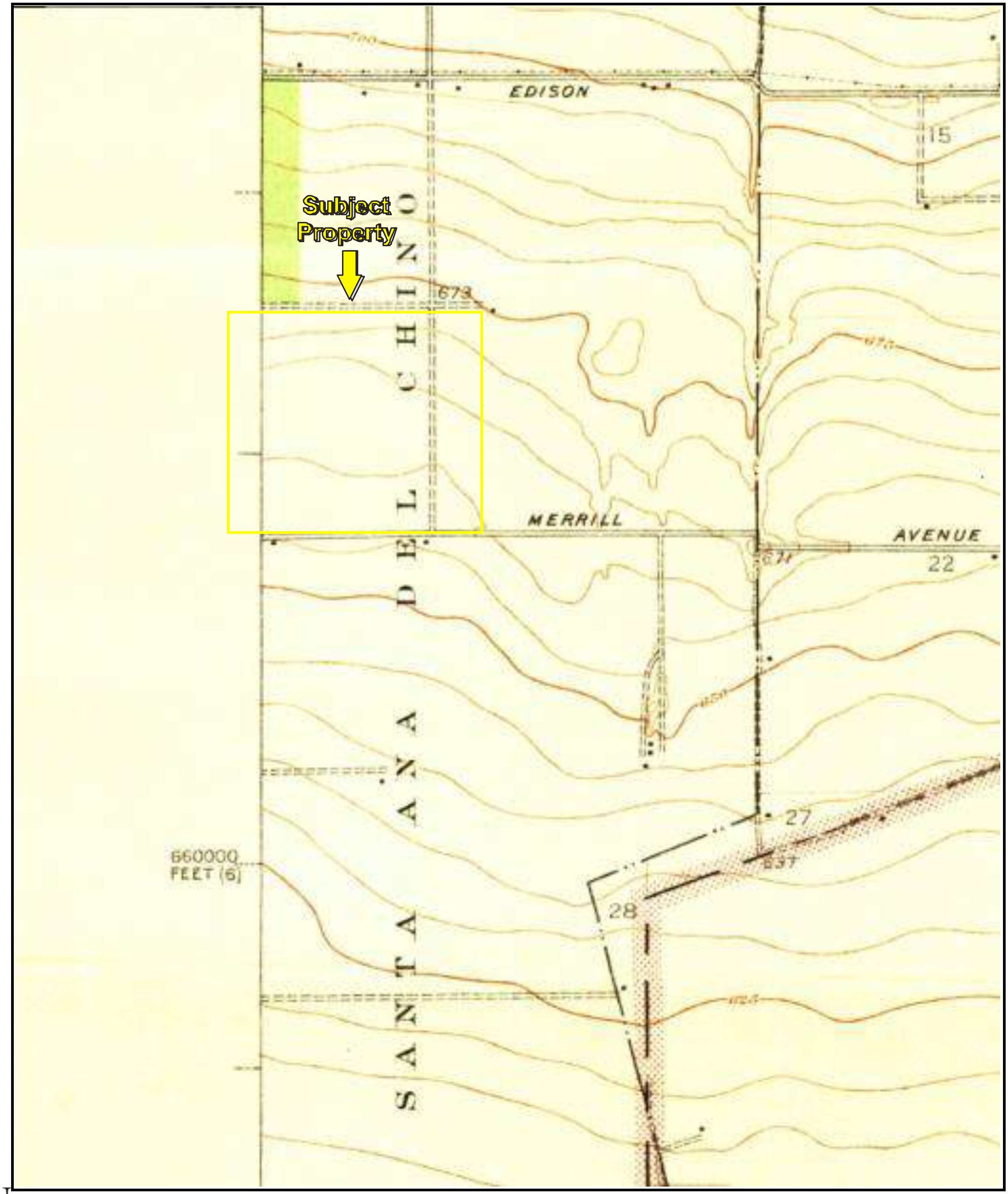
ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
14361 GROVE AVE	2013, 2008, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14400 GROVE AVE	2013, 2008, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14441 GROVE AVE	2013, 2008, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14474 GROVE AVE	2013, 2002, 1995, 1991, 1981, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14525 GROVE AV CHURCH N	2013, 2008, 2003, 2002, 1996, 1995, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14525 GROVE AVE	2013, 2002, 1996, 1995, 1991, 1990, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14544 GROVE AVE	2013, 2002, 1996, 1995, 1991, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14545 N GROVE AVE	2013, 2008, 2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14547 GROVE AVE	2013, 2008, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14646 GROVE AVE	2013, 2008, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14651 GROVE AVE	2013, 2002, 1995, 1991, 1981, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
14651 GROVE AVE	2008, 2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14746 GROVE AVE	2013, 2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
7955 EUCALYPTUS AVE	2013, 2008, 2002, 1995, 1991, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
80336619 ETIWANDA AVE	2013, 2008, 2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
87696871 ETIWANDA AVE	2013, 2008, 2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922



USGS 7.5 Minute *Corona and Vicinity, California* Quadrangle
Created: 1942

KEY:
Subject Property

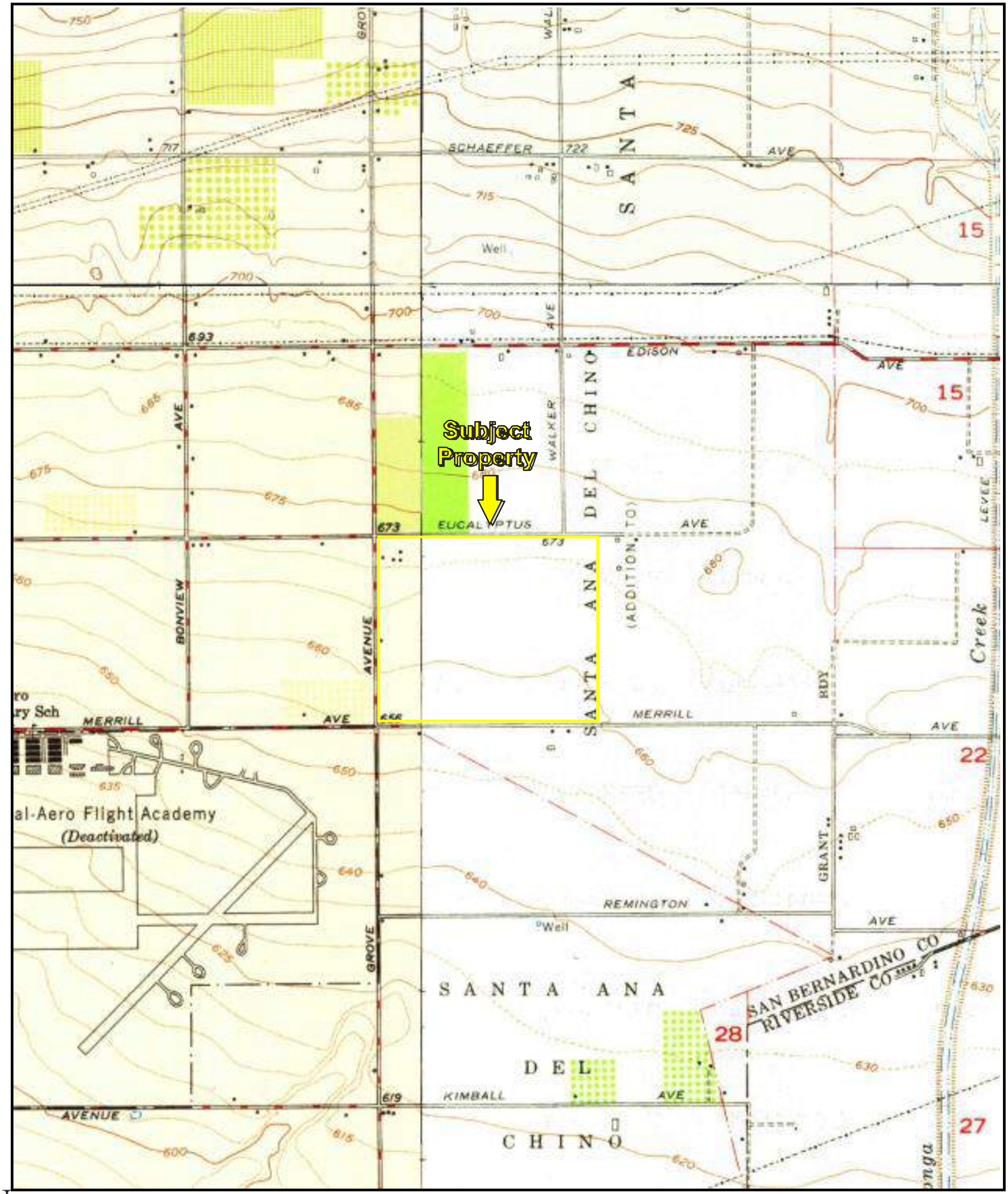
APPENDIX B: HISTORIC TOPOGRAPHIC MAPS
Project No. 17-180354.1

PARTNER

N

USGS 15 Minute *Corona, California* Quadrangle
Created: 1947

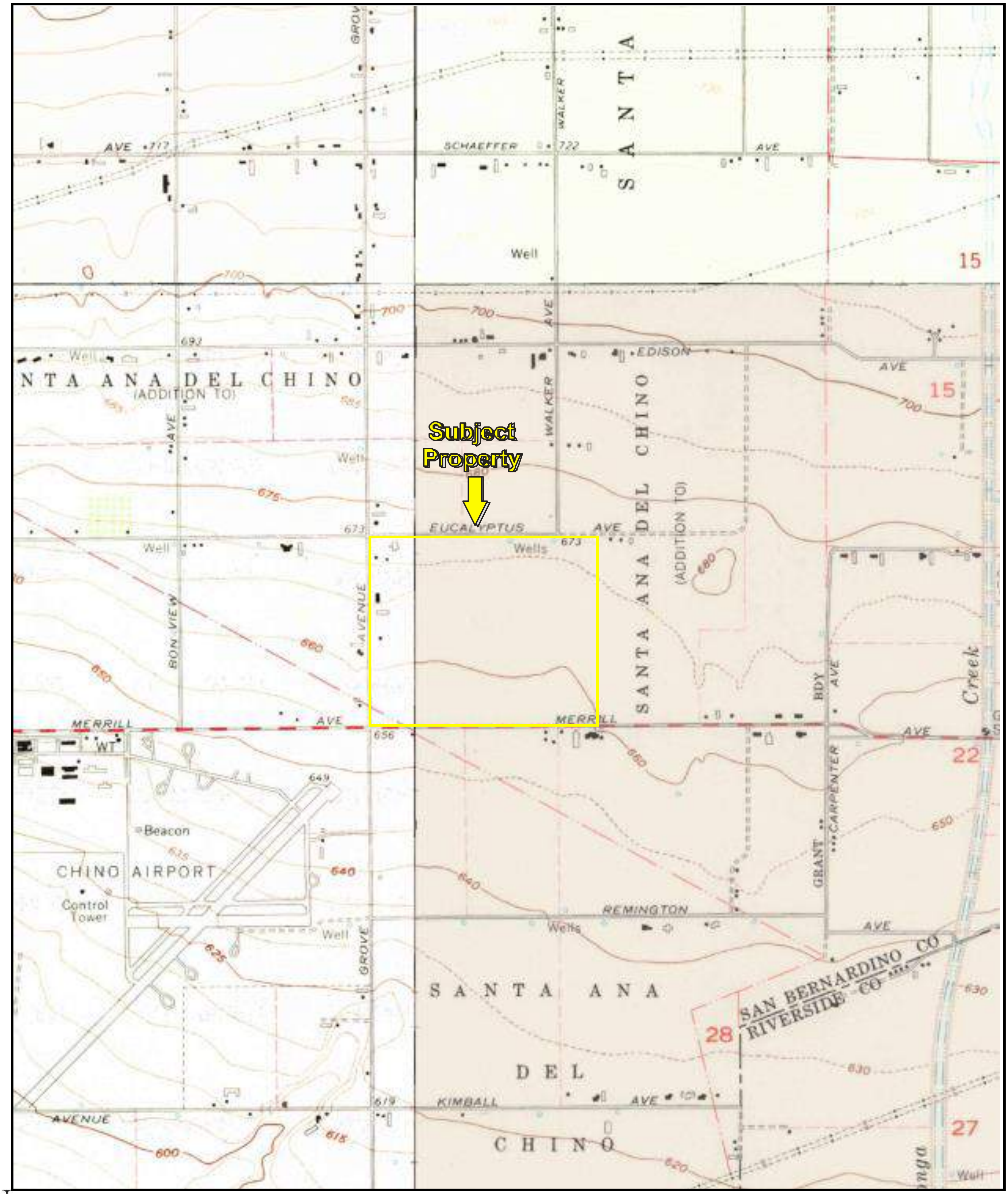
KEY:
Subject Property



USGS 7.5 Minute *Corona North and Prado Dam, California* Quadrangle
Created: 1954 (Corona North) and 1950 (Prado Dam)

KEY:
Subject Property

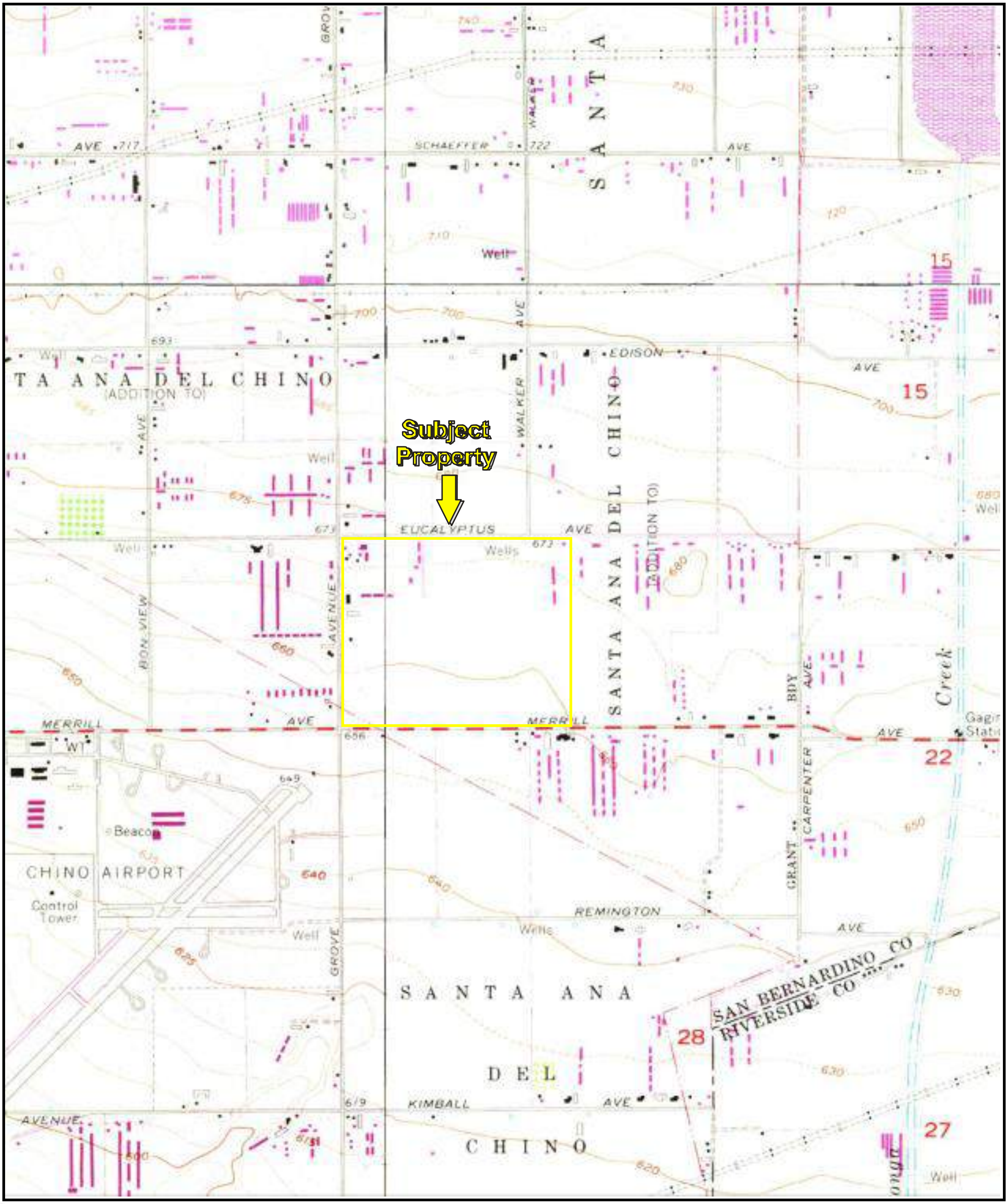
PARTNER



N

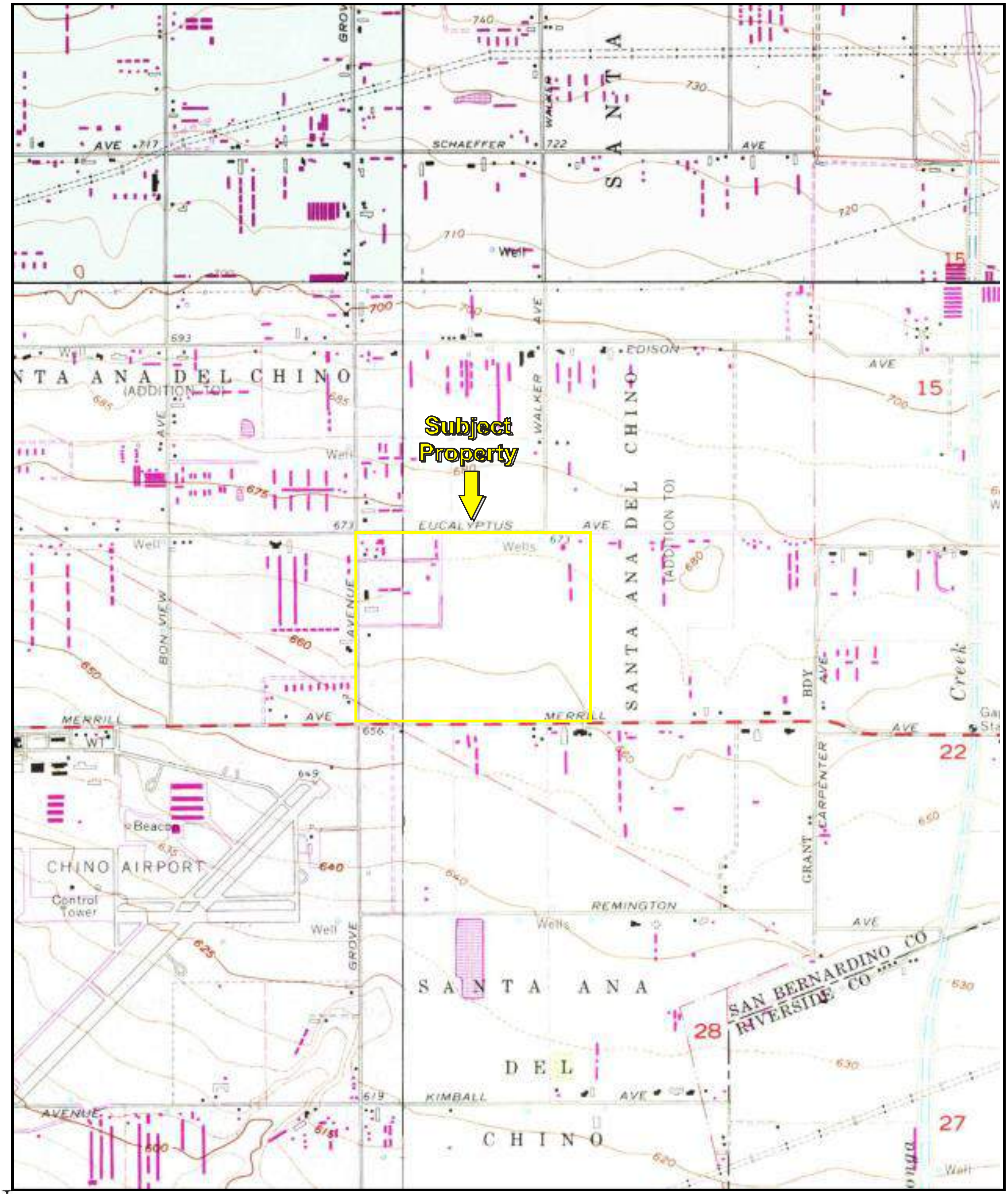
USGS 7.5 Minute *Corona North and Prado Dam, California* Quadrangle
Created: 1967

KEY:
Subject Property



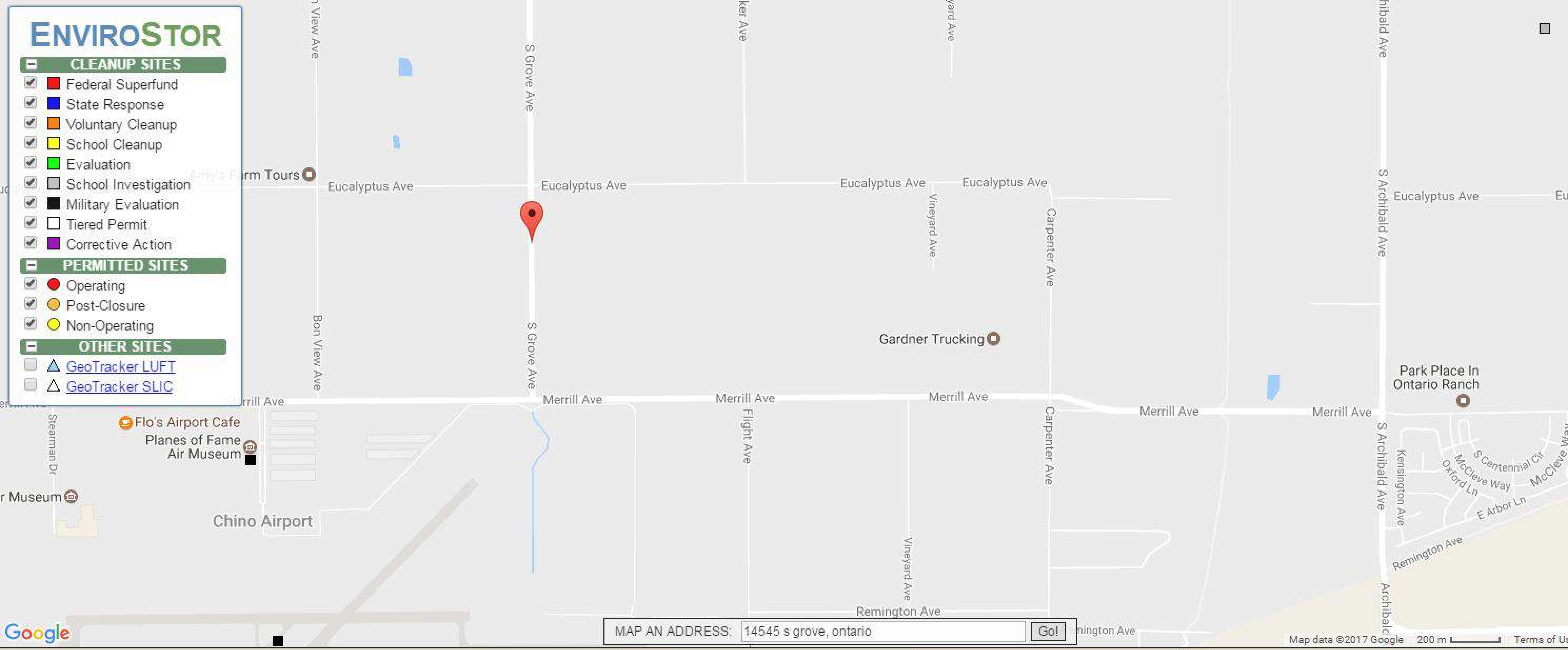
USGS 7.5 Minute *Corona North and Prado Dame, California* Quadrangle
Created: 1967/Revised: 1973

KEY:
Subject Property



USGS 7.5 Minute *Corona North and Prado Dam, California* Quadrangle
Created: 1967/Revised: 1981

KEY:
Subject Property



SHOW SITES WITHIN 1000 FEET OF THE FOLLOWING ADDRESS: Go

SITES CURRENTLY VISIBLE ON MAP

4 SITES LISTED

EXPORT T

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
ARCHIBALD ELEMENTARY SCHOOL NO. 4	NO FURTHER ACTION	SCHOOL INVESTIGATION	ARCHIBALD AND EUCALYPTUS AVENUE	ONTARIO
CAL-AERO AIRPORT	INACTIVE - NEEDS EVALUATION	MILITARY EVALUATION		CHINO
CAL-AERO FIELD / ACADEMY	INACTIVE - NEEDS EVALUATION	MILITARY EVALUATION		CHINO
CHAFFEY HIGH SCHOOL NO. 10	NO FURTHER ACTION	SCHOOL INVESTIGATION	EDISON AVENUE / HAVEN AVENUE	ONTARIO

Matthew Rodriquez
Secretary for
Environmental Protection

Department of Toxic Substances Control

Barbara A. Lee , Director
1001 I Street
P.O. Box 806
Sacramento , CA 958120806

Edmund G. Brown Jr.
Governor

EPA ID PROFILE

Map

ID Number:	CAL000319704	**Status:**	INACTIVE
Name:	JOE BORBA DAIRY #2	**Inactive Date:**	6/30/2008 12:00:00 AM
County:	SAN BERNARDINO	**Record Entered:**	5/17/2007 12:59:11 PM
NAICS:	11212	**Last Updated:**	5/12/2009 3:56:01 PM

	Name	Address	City	State	Zip Code	Phone
Location	JOE BORBA DAIRY #2	14545 S GROVE AVE	ONTARIO	CA	917627468	
Mailing		14545 S GROVE AVE	ONTARIO	CA	917627468	
Owner	JOSEPH A & DOLEEN BORBA TRUST	14545 GROVE AVE	ONTARIO	CA	917627468	9095972712
Operator/Contact	KAREN LARKIN	14545 GROVE AVE	ONTARIO	CA	917627468	9095972712

Based Only Upon ID Number: **CAL000319704**

Calif. Manifests?	Non Calif. Manifests?	Transporter Registration?
Yes	N/A	INACTIVE

California and Non California Manifest Tonnage Total and Waste Code by Year Matrix by Entity Type (if available) are on the next page

Calif. Manifest Counts and Total Tonnage

Top line represents Manifest Count and Bottom line represents Total Tonnage

Year	Generator	Trans. 1	Trans. 2	TSDF	ALT. TSDF
2007	**2** **5.11860**	**0** **0.00000**	**0** **0.00000**	**0** **0.00000**	**0** **0.00000**

Non California Manifest Total Tonnage

No Records Found

Waste Code Matrix					
California	Generator	Trans. 1	Trans. 2	TSDF	Alt. TSDF
RCRA	Generator	Trans. 1	Trans. 2	TSDF	Alt. TSDF

Waste Code Matrix as a spreadsheet

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Report Generation Date: 02/10/2017

California Waste Code by Year Matrix

ID Number: CAL000319704
Entity Type: Generator

2007 ▾ 2017 ▾ Select Years

Calif. Code	Description	2007
141	OFF-SPEC, AGED, OR SURPLUS INORGANICS	0.33360
223	UNSPECIFIED OIL-CONTAINING WASTE	4.58700
331	OFF-SPEC, AGED, OR SURPLUS ORGANICS	0.19800
	Grand Total	5.11860

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Report Generation Date: 02/10/2017

Matthew Rodriquez
Secretary for
Environmental Protection

Department of Toxic Substances Control

Barbara A. Lee , Director
1001 I Street
P.O. Box 806
Sacramento , CA 958120806

Edmund G. Brown Jr.
Governor

EPA ID PROFILE

Map

ID Number:	CAL000357007	**Status:**	ACTIVE
Name:	HEIN HETTINGA	**Inactive Date:**	
County:	SAN BERNARDINO	**Record Entered:**	9/22/2010 8:41:42 AM
NAICS:	112111	**Last Updated:**	9/22/2016 3:49:10 PM

	Name	Address	City	State	Zip Code	Phone
Location	HEIN HETTINGA	8451 EUCALYPTUS AVE	ONTARIO	CA	91762	
Mailing		14651 S GROVE AVE	ONTARIO	CA	917620000	
Owner	HEIN HETTINGA	14651 S GROVE AVE	ONTARIO	CA	917620000	9096066455
Operator/Contact	PATRICIA MOHR	14651 S GROVE AVE	ONTARIO	CA	917620000	9096066455

Based Only Upon ID Number: **CAL000357007**

Calif. Manifests?	Non Calif. Manifests?	Transporter Registration?
N/A	N/A	ACTIVE

California and Non California Manifest Tonnage Total and Waste Code by Year Matrix by Entity Type (if available) are on the next page

Calif. Manifest Counts and Total Tonnage

No Records Found

Non California Manifest Total Tonnage

No Records Found

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Report Generation Date: 02/10/2017

Matthew Rodriquez
Secretary for
Environmental Protection

Department of Toxic Substances Control

Barbara A. Lee , Director
1001 I Street
P.O. Box 806
Sacramento , CA 958120806

Edmund G. Brown Jr.
Governor

EPA ID PROFILE

Map

ID Number:	CAL000337707	**Status:**	ACTIVE
Name:	GH DAIRY #1	**Inactive Date:**	
County:	SAN BERNARDINO	**Record Entered:**	11/4/2008 1:56:11 PM
NAICS:	11212	**Last Updated:**	9/22/2016 3:29:02 PM

	Name	Address	City	State	Zip Code	Phone
Location	GH DAIRY #1	8541 EUCALYPTUS AVE	ONTARIO	CA	91762	
Mailing		14651 GROVE AVE	ONTARIO	CA	917627704	
Owner	GH DAIRY (GERBEN HETTINGA)	14651 GROVE AVE	ONTARIO	CA	917627704	9096066455
Operator/Contact	PATRICIA MOHR	14651 GROVE AVE	ONTARIO	CA	917627704	9096066455

Based Only Upon ID Number: **CAL000337707**

Calif. Manifests?	Non Calif. Manifests?	Transporter Registration?
N/A	N/A	ACTIVE

California and Non California Manifest Tonnage Total and Waste Code by Year Matrix by Entity Type (if available) are on the next page

Calif. Manifest Counts and Total Tonnage

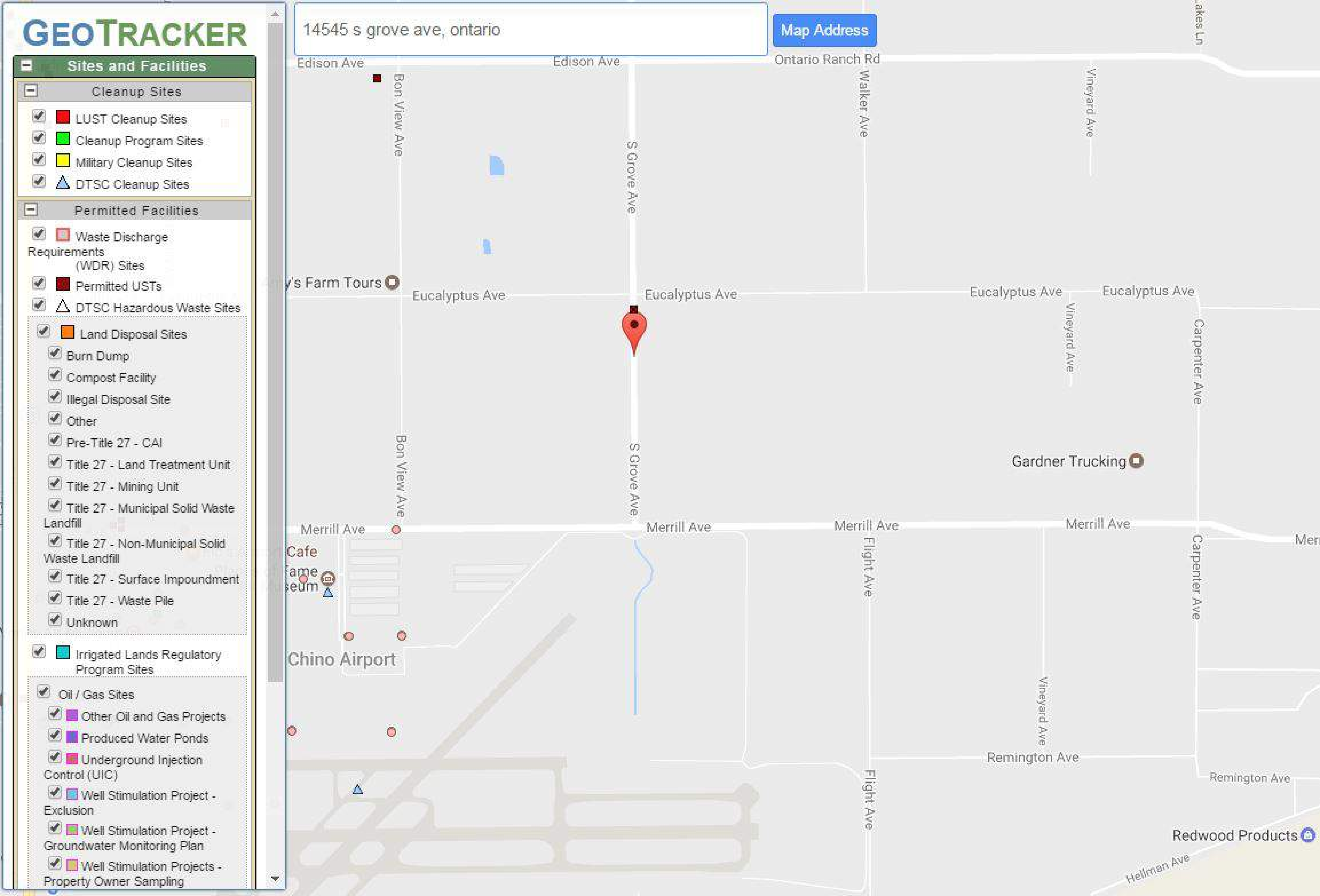
No Records Found

Non California Manifest Total Tonnage

No Records Found

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Report Generation Date: 02/10/2017


GEOTRACKER
Sites and Facilities
Cleanup Sites
LUST Cleanup Sites
Cleanup Program Sites
Military Cleanup Sites
DTSC Cleanup Sites
Permitted Facilities
Waste Discharge Requirements (WDR) Sites
Permitted USTs
DTSC Hazardous Waste Sites
Land Disposal Sites
Burn Dump
Compost Facility
Illegal Disposal Site
Other
Pre-Title 27 - CAI
Title 27 - Land Treatment Unit
Title 27 - Mining Unit
Title 27 - Municipal Solid Waste Landfill
Title 27 - Non-Municipal Solid Waste Landfill
Title 27 - Surface Impoundment
Title 27 - Waste Pile
Unknown
Irrigated Lands Regulatory Program Sites
Oil / Gas Sites
Other Oil and Gas Projects
Produced Water Ponds
Underground Injection Control (UIC)
Well Stimulation Project - Exclusion
Well Stimulation Project - Groundwater Monitoring Plan
Well Stimulation Projects - Property Owner Sampling
14545 s grove ave, ontario
Map Address
Edison Ave
Edison Ave
Ontario Ranch Rd
Bon View Ave
S Grove Ave
Walker Ave
Vineyard Ave
's Farm Tours
Eucalyptus Ave
Eucalyptus Ave
Eucalyptus Ave
Eucalyptus Ave
Carpenter Ave
Gardner Trucking
Merrill Ave
Merrill Ave
Merrill Ave
Merrill Ave
Flight Ave
Cafe
Chino Airport
Remington Ave
Remington Ave
Redwood Products
Hellman Ave

California Regional Water Quality Control Board
Santa Ana Region

Linda S. Adams
Secretary for Environmental Protection

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 • FAX (951) 781-6288 • TDD (951) 782-3221
www.waterboards.ca.gov/santaana

Arnold Schwarzenegger
Governor

September 4, 2008

Certified Mail
Return Receipt Requested

Mr. Gerben Hettinga
GH Dairy No. 1
17094 Cucamonga Ave
Corona, CA 92880

WASTE DISCHARGE REQUIREMENTS, ORDER NO. R8-2007-0001, NPDES NO. CAG018001, FOR GH DAIRY NO. 1, LOCATED AT 14651 S. GROVE AVENUE, ONTARIO

Mr. Hettinga:

On September 7, 2007, the Regional Board adopted General Waste Discharge Requirements for Concentrated Animal Feeding Operations (Dairies and Related Facilities) Within the Santa Ana Region, NPDES No. CAG018001 (Order No. R8-2007-0001). Section II, Part B.3, of Order No. R8-2007-0001, requires the submittal of a Notice of Intent and filing fee for the discharge of wastes. If the proposed discharge meets the requirements of Order R8-2007-0001, the Executive Officer will provide the discharger with a written authorization to discharge wastes in accordance with the terms and conditions specified in Order No. R8-2007-0001.

You have submitted a Notice of Intent and filing fee for the discharge of wastes from the above facility. With receipt of your Notice of Intent and filing fee, you have complied with Section II, Part B.3, of Order No. R8-2007-0001. Therefore you are hereby authorized to discharge waste from your facility in accordance with the terms and conditions specified in Order No. R8-2007-0001.

Order No. R8-2007-0001 includes provisions, in part, that:

1) Prohibit the land application of manure anywhere in the Santa Ana Region for disposal purposes.
2) Prohibit the land application of manure as fertilizer in certain areas of the Region, and limit the land application of manure as fertilizer in the remainder of the Region.
3) Require all facility operators to develop and implement an Engineered Waste Management Plan.
4) Require all manure scraped from corrals be removed from the facility within 180 days.
5) Require large CAFOs (greater than 700 cows) that transfer manure to a third party to provide that party with a chemical analysis of the manure for nitrogen compounds.

6) Require you to inspect your facilities on at least a weekly basis, and record the findings in the enclosed log form.
7) Require the tracking of all manure removed from the facility. Please use the enclosed form for all manure which is hauled from your facility.
8) Require you to submit the following reports by January 15 of each year:
   - Annual Summary Report (the form will be transmitted to you near year end)
   - Annual Summary Report of Storm Water Management Structure Inspections (i.e. a summary from the weekly inspection logs mentioned above. The form will be transmitted to you near year end)
   - New Manure Tracking Manifest (form enclosed)

Our records indicate that an Engineered Waste Management Plan (EWMP) for this facility was accepted on 7/1/05. After an accepted EWMP is implemented, a certification letter indicating that the EWMP was implemented must be submitted to our office. As of this date, we have not received a certification letter that the accepted EWMP was implemented.

As a new discharger at this location, Order No. R8-2007-0001 requires you to submit information regarding an EWMP for this facility. Therefore, by September 19, 2008 please notify us if you intend to use the current accepted EWMP; or, if you intend to develop a new EWMP or modify the accepted EWMP, please provide the name of the engineer or qualified individual who will develop the EWMP and a time schedule to develop or modify the EWMP.

Please note that failure to fully develop and implement an EWMP and submit an implementation certification for this facility is a violation of Order No. R8-2007-0001, which could subject you to an administrative civil liability penalty of $10,000 per day for each day the violation occurs.

As a reminder, a copy of the Order No. R8-2007-0001 can be downloaded from the Regional Board's website at: ***http://www.waterboards.ca.gov/santaana/pdf/07-01.pdf***. If you have any questions, I would encourage you to call Bill Norton at (951) 782-4381 or Gary Stewart at (951) 782-4379.

Sincerely,

G J Thibeault

Gerard J. Thibeault
Executive Officer

GODINHO EQUIPMENT INC.
GRADING & EXCAVATING
909-590-7255
Lic #847677

October 8, 2011

Mr. . Edward Kashak
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA. 92501-3348

CERTIFICATION LETTER FOR G.H. DAIRY, at GROVE AVE. ONTARIO, CA. 91762.

Dear Mr. Kashak,

This letter is to certify that G.H. Dairy #1 on Grove (the old Joe Borba Dairies). is in compliance with the Engineered Waste Management Plan prepared by Nolte & Associates. I inspected the dairy property on October 8, 2011, and concluded that all improvements are in substantial compliance in accordance with the recommendations of the plan. Depth markers to be installed as ponds are drained and cleaned.

Sincerely,

______________________.

John Godinho
Godinho Equipment Inc.
12881 Smoketree Ct.
Chino, Ca. 91710

Enclosures: Storm Water Management Structure Inspection Form
New Manure Tracking Manifest Form

cc w/o enclosure: Jim Griffin, Western United Dairymen, Bakersfield
Robert Vanden Heuvel, Milk Producers Council
Pat Boldt, Milk Producers Council
Lawyers for Clean Water
Orange County Coastkeeper
David Beckman, Natural Resources Defense Council
Min-Le Cheng, West Valley Mosquito & Vector Control District
Northwest Mosquito & Vector Control District

bcc w/o enclosure: Gary Stewart

O:\DAIRIES\BNorton\DAIRIES\DAL LTRS

PRIVATE PROPERTY SAMPLING REPORT
ONTARIO, CALIFORNIA

May 27, 2014

Prepared By:

Environmental Engineering and Contracting, Inc.
501 Parkcenter Drive
Santa Ana, California 92705
EEC Job S1958.03T

Jim Kolk
Senior Project Engineer

Mark Zeko, PG, CHG
Principal Hydrogeologist

TABLES OF CONTENTS

TABLES

FIGURES

APPENDICES

Private Property Sampling Report
Ontario, California

1.0 INTRODUCTION AND BACKGROUND

Five rounds of sampling have now been conducted for several volatile organic compounds (VOCs) including trichloroethylene (TCE) in the area south of Riverside Drive in the City of Ontario. Those sampling rounds are roughly described as follows:

- Sampling conducted between December 2007 and October 2008, with a small number of samples collected thereafter;
- Sampling conducted between February 2009 and March 2009, with a small number of samples collected thereafter;
- Sampling undertaken by the Chino Basin Water Master was conducted between August 2011 and December 2011, with a small number of samples collected thereafter;
- Sampling conducted between July 2013 and August 2013;
- Sampling conducted between March 2014 and May 2014.

A consulting firm conducted the first two rounds of sampling on behalf of private companies, and in cooperation with the Regional Water Board. The Chino Basin Water Master conducted the third round of sampling where split samples were collected by a consulting firm in conjunction with the Chino Basin Water Master. A consulting firm conducted the fourth and fifth rounds of sampling on behalf of public agencies and private companies, and in cooperation with the Regional Water Board.

The sampling protocol utilized is described in Appendix A. The split sampling undertaken in connection with the third round of sampling was also conducted in general conformance with this protocol.

2.0 SAMPLING RESULTS

The following tables and figures provide a summary of each sampling event. The TCE concentrations and sampling identification numbers are listed in Table 1. The sampling locations and TCE concentration ranges for each location are depicted in Figure 1. The results for all other constituents analyzed are listed in Table 2 through Table 11.

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	7.4	1	10-Mar-09	Dairy Tap	9.8	NS				NS				NS			
		1-D			7.1	1-D			10												
2	Unknown	2	25-Oct-08	House Tap	16	NS				NS				NS				NS			
		2-D			15																
3	W42	3	27-Jun-08	Kitchen Tap	16	3	19-Mar-09	Kitchen Tap	14	NS				3	17-Jul-13	Kitchen Tap	7.5	NS			
		3-D			16	3-D			14					3-D			7.5				
4	W37	4	4-Oct-08	Kitchen Tap	3.6	4	7-Mar-09	Kitchen Tap	3.5	4	21-Dec-11	Kitchen Tap	2.6	4	17-Jul-13	Kitchen Tap	3.2	NS			
		4-D			3.7	4-D			3.5	4-D			2.5	4-D			3.3				
5	W38	5	4-Oct-08	Dairy Tap	4.1	5	7-Mar-09	Hose Bib	3.3	NS				5	1-Aug-13	Kitchen Tap	2.6	NS			
		5-D			3.8	5-D			3.3					5-D			2.6				
6	W41	6	4-Oct-08	Dairy Tap	4.7	6	19-Mar-09	Restroom Tap	3.7	NS				6	17-Jul-13	Well supply	2.2	NS			
		6-D			4.9	6-D			3.8					6-D			2.2				
7		7	25-Oct-08	Outside Tap	4.5	7	7-Mar-09	Outside Tap	3.9	NS				NS				NS			
		7-D			4.1	7-D			4.2												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	2.4	NS				NS			
										9-D			2.2								
10		NS				NS				10	29-Aug-11	Kitchen Tap	2.3	NS				NS			
										10-D			2.3								
11		NS				NS				11	29-Aug-11	Kitchen Tap	2.2	NS				NS			
										11-D			2.2								
12	W7	12	7-Feb-08	Dairy Tap	3.3	12	6-Mar-09	Dairy Tap	3.4	12	24-Aug-11	Kitchen Tap	2.0	12	6-Aug-13	Well Supply	1.6	NS			
		12-D			3.3	12-D			3.6	12-D			2.1	12-D			1.5				
13	W6	13	25-Oct-08	House Tap	0.96	NS				NS				NS				NS			
		13-D			0.99																
14		14	25-Oct-08	Kitchen Tap	0.92	NS				NS				NS				NS			
		14-D			0.88																
15		15	11-Dec-07	House Tap	1.6	15	5-Mar-09	Kitchen Tap	0.72	NS				NS				NS			
		15-D			1.4	15-D			0.78												
17	W5	17	6-Feb-08	Kitchen Tap	0.95	17	5-Mar-09	Outside Tap	0.81	NS				NS				NS			
		17-D			0.95	17-D			0.79												
18	Unknown	18	27-Jun-08	Outside Tap	0.77	NS				NS				NS				NS			
		18-D			0.72																
19	W1	19	3-Dec-07	House Tap	1.2	19	5-Mar-09	House Tap	0.87	NS				NS				NS			
		19-D			1.1	19-D			0.88												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	1.3	NS				NS				NS			
		32-D			ND (0.50)	32-D			1.3												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	11	41	5-Mar-09	Kitchen Tap	7.7	NS				41	29-Jul-13	Well Supply	2.9	NS			
		41-D			12	41-D			7.7					41-D			2.7				
42		42	22-Feb-08	Kitchen Tap	9.7	42	5-Mar-09	Kitchen Tap	8.9	NS				NS				NS			
		42-D			9.6	42-D			8.9												
43		43	22-Feb-08	Kitchen Tap	10	43	5-Mar-09	Kitchen Tap	9	NS				NS				NS			
		43-D			9.6	43-D			9.1												
44	Unknown	44	27-Sep-08	Kitchen Tap	7.3	44	19-Mar-09	Kitchen Tap	5.9	NS				44	25-Jul-13	Well Supply	3.1	NS			
		44-D			8.3	44-D			5.6					44-D			3.4				
45	Unknown	45	27-Sep-08	House Tap	7.7	45	10-Mar-09	Kitchen Tap	4.4	NS				NS				NS			
		45-D			7.6	45-D			4.6												
46	Unknown	46	18-Apr-08	Kitchen Tap	21	NS				NS				NS				NS			
		46-D			22																
48	W48	48	16-Apr-08	Kitchen Tap	38	48	11-Mar-09	Kitchen Tap	25	NS				48	25-Jul-13	Well Supply	7.9	NS			
		48-D			38	48-D			25					48-D			8.5				
49	Unknown	49	25-Oct-08	Kitchen Tap	1.7	49	7-Mar-09	Kitchen Tap	1.4	49	22-Aug-11	Kitchen Tap	1.2	NS				NS			
		49-D			1.8	49-D			1.4	49-D			1.3								
50	W25	50	4-Feb-08	Outside Tap	1.7	50	7-Mar-09	Kitchen Tap	1.6	50	22-Aug-11	Kitchen Tap	1.6	NS				NS			
		50-D			1.6	50-D			1.6	50-D			1.6								
51	Unknown	51	27-Sep-08	Outside Tap	13	51	11-Mar-09	Kitchen Tap	7.9	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			13	51-D			8.6	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	15	52	11-Mar-09	Barn Tap	7.8	NS				NS				NS			
		52-D			15	52-D			8												
53	W24	53	27-Sep-08	Outside Tap	13	NS				NS				NS				NS			
		53-D			13																
		53	25-Oct-08	Kitchen Tap	13	NS				NS				NS				NS			
		53-D			13																
54		54	25-Oct-08	Kitchen Tap	11	54	10-Mar-09	Kitchen Tap	10	NS				NS				NS			
		54-D			11	54-D			9.6												
55		55	25-Oct-08	Kitchen Tap	10	55	10-Mar-09	Kitchen Tap	10	NS				NS				NS			
		55-D			9.3	55-D			11												
56		56	25-Oct-08	Outside Tap	12	56	10-Mar-09	Kitchen Tap	11	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			12	56-D			10					56-D			ND (0.50)				

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	80	57	11-Mar-09	Kitchen Tap	43	NS				NS				NS			
		57-D			72	57-D			44												
59	W59	59	1-Jul-08	Kitchen Tap	55	59	7-Mar-09	Outside Tap	70	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	36	59	28-Mar-14	Well Supply (outside hose bib)	45
		59-D			57	59-D			71	59-D			ND (0.50)[2]	59-D			36	59-D			45
61	Unknown	61	27-Sep-08	Kitchen Tap	91	61	11-Mar-09	Kitchen Tap	79	NS				NS				NS			
		61-D			85	61-D			63												
62	W62	62	1-May-08	Barn Tap	140	62	11-Mar-09	Kitchen Tap	72	NS				NS				NS			
		62-D			140	62-D			65												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	32	NS			
														63-D			32				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	29	NS			
														64-D			32				
65	Unknown	65	25-Jun-08	Kitchen Tap	20	65	7-Mar-09	Kitchen Tap	16	NS				NS				NS			
		65-D			19	65-D			15												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND (0.50)	66	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
						66-D			ND (0.50)	66-D			ND (0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	46	NS				68R	2-Apr-14	Well Sample Port	38
										68-D			46					68R-D			39
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	9.8	72	12-Mar-09	Kitchen Tap	8.1	NS				72	29-Jul-13	Well Supply	0.8	NS			
		72-D			9.8	72-D			7.9					72-D			1.1				
73		73	4-Oct-08	House Tap	9.0	73	12-Mar-09	Barn Tap	7.7	NS				NS				NS			
		73-D			9.1	73-D			8												
74	W14	74	25-Oct-08	Outside Tap	13	74	19-Mar-09	Outside Tap	12	NS				NS				NS			
		74-D			13	74-D			12												
75		75	25-Oct-08	Outside Tap	18	75	12-Mar-09	Kitchen Tap	13	NS				NS				NS			
		75-D			18	75-D			14												
76		76	25-Jun-08	Kitchen Tap	19	76	12-Mar-09	Kitchen Tap	13	NS				NS				NS			
		76-D			19	76-D			13												
77		77	25-Oct-08	Outside Tap	12	77	19-Mar-09	Outside Tap	17	NS				77	18-Jul-13	Outside Tap	0.89	NS			
		77-D			13	77-D			17					77-D			0.93				

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
78	W27	78	4-Oct-08	Outside Tap	50	78	12-Mar-09	Kitchen Tap	42	78	12-Sep-11	Kitchen Tap	11	NS				NS			
		78-D			49	78-D			44	78-D			11								
79		79	4-Feb-08	Kitchen Tap	37	79	11-Mar-09	Kitchen Tap	37	NS				NS				NS			
		79-D			37	79-D			38												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	0.55	86	11-Mar-09	Kitchen Tap	0.76	86	17-Aug-11	Kitchen Tap	2.2	86	1-Aug-13	Kitchen Tap	3.1	86	20-Mar-14	Kitchen Tap	4.9
		86-D			0.54	86-D			0.75	86-D			2.2	86-D			3.1	86-D			5.4
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	0.98	96	11-Mar-09	Kitchen Tap	0.87	NS				96	1-Aug-13	Kitchen Tap	13	96	20-Mar-14	Kitchen Tap	23
		96-D			1.1	96-D			0.89					96-D			14	96-D			24
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	18	NS				98	24-Mar-14	Well Supply (outside hose bib)	35
										98-D			18					98-D			39
99		NS				NS				99	26-Oct-11	Kitchen Tap	13	NS				NS			
										99-D			15								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	46	101	28-Mar-14	Well Supply (outside hose bib)	35
														101-D			45	101-D			49
102	W15	102	4-Dec-08	Kitchen Tap	26	102	19-Mar-09	Outside Tap	20	NS				NS				NS			
		102-D			26	102-D			20												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	25	105	12-Mar-09	Outside Tap	26	NS				NS				NS			
		105-D			24	105-D			24												
		105	17-Dec-08	Kitchen Tap (RO)	23	NS				NS				NS				NS			
		105-D			24																
106	Unknown	NS				106	1-Oct-09	Outside Tap	4.3	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			4.6	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	12	107	6-Mar-09	Kitchen Tap	6.9	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			11	107-D			6.8					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	5.9	108	5-Mar-09	Kitchen Tap	7.8	NS				NS				NS			
		108-D			5.8	108-D			7.6												

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	1.4	NS				NS				NS			
						109-D			1.4												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	4.5	111	6-Aug-13	Well Supply	2	NS			
										111-D			4.5	111-D			1.7				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	4.6	112	1-Aug-13	Kitchen Tap	3.1	NS			
										112-D			4.8	112-D			3.3				
113	W16	113	25-Jun-08	Kitchen Tap	3.8	113	5-Mar-09	Kitchen Tap	3.6	113	17-Aug-11	Kitchen Tap	3.1	113	13-Aug-13	Barn Tap	0.74	NS			
		113-D			3.6	113-D			3.4	113-D			3.0	113-D			0.72				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	0.65	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			0.61	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	0.74	117	19-Mar-09	House Tap	0.65	NS				NS				NS			
		117-D			0.71	117-D			0.62												
118	W18	118	24-Apr-08	Outside Tap	4.4	118	7-Mar-09	Kitchen Tap	3.5	NS				118	17-Jul-13	Kitchen Tap	1.9	NS			
		118-D			4.4	118-D			3.6					118-D			1.9				
119	W17	119	3-Dec-07	Kitchen Tap	3.7	119	5-Mar-09	Kitchen Tap	1.8	119	22-Aug-11	Kitchen Tap	3.3	119	17-Jul-13	Kitchen Tap	2.8	NS			
		119-D			3.7	119-D			1.8	119-D			3.2	119-D			3.4				
121		121	21-Dec-07	Kitchen Tap	3.8	121	5-Mar-09	Kitchen Tap	2	NS				NS				NS			
		121-D			3.9	121-D			1.9												
122		122	21-Dec-07	Kitchen Tap	3.6	122	5-Mar-09	Kitchen Tap	2.4	NS				NS				NS			
		122-D			3.6	122-D			2.2												
127	W19	127	16-Apr-08	Kitchen Tap	4.1	127	7-Mar-09	Kitchen Tap	2.7	NS				127	17-Jul-13	Well Supply	0.71	NS			
		127-D			3.9	127-D			2.4					127-D			0.74				
128	W32	128	6-Feb-08	Kitchen Tap	3.1	128	7-Mar-09	Kitchen Tap	2.4	128	18-Oct-11	Kitchen Tap	1.7	128	6-Aug-13	Kitchen Tap	1.4	NS			
		128-D			3.1	128-D			2.4	128-D			1.6	128-D			1.8				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	0.74	NS			
														129-D			0.78				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	2.5	130	19-Jul-13	Kitchen Tap	3.7	NS			
										130-D			2.4	130-D			3.7				
131	W30	131	24-Apr-08	Kitchen Tap	2.0	131	6-Mar-09	Kitchen Tap	3.4	131	23-Aug-11	Kitchen Tap	0.75	131	19-Jul-13	Kitchen Tap	3.5	NS			
		131-D			2.0	131-D			3.4	131-D			0.61	131-D			3.5				
134	W33	134	7-Feb-08	Kitchen Tap	5.3	134	26-Feb-09	Kitchen Tap	4.9	NS				134	1-Aug-13	Kitchen Tap	2.3	NS			
		134-D			5.1	134-D			4.8					134-D			2.4				

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	2.7	NS				135	19-Jul-13	Kitchen Tap	3.8	NS			
						135-D			3.0					135-D			3.9				
136	W63	NS				136	1-Apr-11	Kitchen Tap	5.8	NS				NS				NS			
						136-D			5.9												
137	W63	NS				137	1-Apr-11	Kitchen Tap	5.4	NS				137	19-Jul-13	Well Supply	6.7	NS			
						137-D			5.4					137-D			5.5				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	0.69	NS				NS			
										139-D			0.63								
140	W65	NS				NS				140	18-Aug-11	Kitchen Tap	0.53	NS				NS			
										140-D			0.59								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	0.68	NS			
														141-D			0.71				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	3.7
																		142-D			3.5
143	W35	143	3-Mar-08	Kitchen Tap	0.93	143	19-Feb-09	Kitchen Tap	0.98	143	18-Aug-11	Kitchen Tap	0.75	NS				NS			
		143-D			0.91	143-D			1	143-D			0.74								
144	W35	144	29-Feb-08	Kitchen Tap	0.97	144	19-Feb-09	Kitchen Tap	0.96	144	18-Aug-11	Kitchen Tap	0.76	NS				NS			
		144-D			0.97	144-D			0.95	144-D			0.70								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	1.6	145	19-Feb-09	Non-Residential Kitchen Tap	1.2	145	21-Dec-11	Non-Residential Kitchen Tap	ND (0.50)	NS				NS			
		145-D			1.7	145-D			1.2	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148	Unknown	NS				NS				NS				NS				148	25-Apr-14	Outside Tap	5.7
																		148-D			5.8
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	4.6
																		149-D			4.8
150	W131 (or W606 when needed)	150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	3.9
		150-D			ND (0.50)													150-D			4.4
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	3.7
																		151-D			3.7
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	6.5
																		152-D			6.4

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	1.6	162	1-Aug-13	Kitchen Tap	1.6	NS			
										165-D			1.5	162-D			1.5				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	0.92	222	26-Feb-09	Kitchen Tap	0.93	NS				NS				NS			
		222-D			0.91	222-D			0.85												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	0.9	227	18-Aug-11	Kitchen Tap	1.2	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			0.86	227-D			1.2	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	0.97	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			0.96	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	1.3	237	6-Mar-09	Kitchen Tap	1.4	NS				237	18-Jul-13	Kitchen Tap	1.5	NS			
		237-D			1.2	237-D			1.4					237-D			1.5				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	1.4	NS				NS				NS			
						239-D			1.4												
240		NS				240	1-Apr-11	Kitchen Tap	1.4	NS				NS				W147	25-Apr-14	Outside Tap	2.6
						240-D			1.4									W147-D			2.2
241		NS				241	1-Apr-11	Kitchen Tap	1.5	NS				NS				NS			
						241-D			1.5												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	1.4
																		242-D			1.7
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	0.79
																		244-D			0.78
245		245	29-Feb-08	Kitchen Tap	1.0	245	10-Mar-09	Kitchen Tap	1.2	245	18-Aug-11	Kitchen Tap	0.82	245	18-Jul-13	Kitchen Tap	0.88	245	21-Mar-14	Kitchen Tap	0.91
		245-D			1.0	245-D			1.1	245-D			0.80	245-D			0.95	245-D			0.90
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	6.0
																		250-D			6.1

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	1.0	254	5-Mar-09	Kitchen Tap	0.94	NS				NS				NS			
		254-D			1.1	254-D			1.1												
260	W135	260	5-Dec-07	Outside Tap	1.2	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	0.72
		260-D			1.1	260-D			ND (0.50)									260-D			0.71
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	1.6	300	12-Mar-09	Kitchen Tap	1.3	NS				NS				NS			
		300-D			1.6	300-D			1.4												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	2.0
																		604-D			1.8
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	4.2
																		606-D			4.3

Notes:
[(1)] Connection to private wells based on information provided by interviewed residents
[(2)] This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
[(3)] This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied by the City

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				NS				NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
																		68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[(3)]
										68-D			ND (0.50)					68-D			ND (0.50) [(3)]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[6]	NS				NS			
										69-D			ND (0.50)[6]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS	NS	NS	NS	NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)	150-D												150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)					44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			0.51	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
						116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS								139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	30				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
109	Unknown	109				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	111				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	112				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	1.8	115	6-Mar-09	Kitchen Tap	0.53	NS				NS				NS			
		115-D			1.8	115-D			0.63												
116	W9	116	15-Apr-08	Kitchen Tap	1.4	116	6-Mar-09	Kitchen Tap	0.88	NS				NS				NS			
		116-D			1.5	116-D			0.70												
		116(A)				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)					118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240	W64 (CBWM W147)	NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241	W64 (CBWM W147)	NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245	W35	245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	0.75	NS				NS				NS				NS			
		2-D			0.74																
3	W42	3	27-Jun-08	Kitchen Tap	0.71	3	19-Mar-09	Kitchen Tap	0.64	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			0.72	3-D			0.61					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	0.71	41	5-Mar-09	Kitchen Tap	0.67	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			0.86	41-D			0.67					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	0.81	42	5-Mar-09	Kitchen Tap	0.69	NS				NS				NS			
		42-D			0.81	42-D			0.69												
43		43	22-Feb-08	Kitchen Tap	0.77	43	5-Mar-09	Kitchen Tap	0.73	NS				NS				NS			
		43-D			0.75	43-D			0.74												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	0.56	NS				NS				NS				NS			
		46-D			0.58																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	0.58	NS			
														63-D			0.58				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	0.62	NS			
														64-D			0.62				
65	Unknown	65	25-Jun-08	Kitchen Tap	0.83	65	7-Mar-09	Kitchen Tap	0.8	NS				NS				NS			
		65-D			0.89	65-D			0.76												
66	Unknown	66				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	0.57	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			0.57	101-D			0.55
102	W15	102	4-Dec-08	Kitchen Tap	0.63	102	19-Mar-09	Outside Tap	0.60	NS				NS				NS			
		102-D			0.77	102-D			0.6												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	0.61	105	12-Mar-09	Outside Tap	0.69	NS				NS				NS			
		105-D			0.59	105-D			0.56												
		105	17-Dec-08	Kitchen Tap (RO)	0.63	NS				NS				NS				NS			
		105-D			0.62																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS								NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	S				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		140				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)									NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239		NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240	W64 (CBWM W147)	NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS								NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	1.1	61	11-Mar-09	Kitchen Tap	0.89	NS				NS				NS			
		61-D			1.1	61-D			0.99												
62	W62	62	1-May-08	Barn Tap	0.81	62	11-Mar-09	Kitchen Tap	1	NS				NS				NS			
		62-D			0.76	62-D			1.1												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64	W126	NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73	W12	73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75	W14	75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76	W14	76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77	W14	77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)					NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		116(A)				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	166								166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS								NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS								NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)					NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	S				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		116(A)				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	66				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				S				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID(1)	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
1	W26	NS						
2	Unknown	NS						
3	W42	NS						
4	W37	NS						
5	W38	NS						
6	W41	NS						
7		NS						
9	W66	NS						
10		NS						
11		NS						
12	W7	NS						
13	W6	NS						
14		NS						
15		NS						
17	W5	NS						
18	Unknown	NS						
19	W1	NS						
21	W40	NS						
28	W2	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID(1)	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
30	W3	NS						
32		NS						
40	Unknown	NS						
41	W4	NS						
42		NS						
43		NS						
44	Unknown	NS						
45	Unknown	NS						
46	Unknown	NS						
48	W48	NS						
49	Unknown	NS						
50	W25	NS						
51	Unknown	NS						
52	W22	NS						
53	W24	NS						
		NS						
54		NS						
55		NS						
56		NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID(1)	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
57	Unknown	NS						
59	W59	59	28-Mar-14	Well Supply (outside hose bib)	ND (0,0050)	5.7	260	1000
		59-D			ND (0,0050)	5.7	260	990
61	Unknown	NS						
62	W62	NS						
63	W126	NS						
64		NS						
65	Unknown	NS						
66	Unknown	NS						
67	Unknown	NS						
68	W59	68R	2-Apr-14	Well Sample Port	ND (0.0050)	5.9	260	980
		68R-D			ND (0.0050)	5.4	260	1000
68 (aka 700)	NA	68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.0050)(2)	ND (1.0)(2)	14(2)	250(2)
		68-D			ND (0.0050)(2)	ND (1.0)(2)	14(2)	250(2)
69	Unknown	NS						
72	W12	NS						
73		NS						
74	W14	NS						
75		NS						
76		NS						
77		NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
78	W27	NS						
79	W27	NS						
81	Unknown	NS						
84	W13	NS						
86	W28	86	20-Mar-14	Kitchen Tap	ND (0.0050)	2.2	94	520
		86-D			ND (0.0050)	2.0	92	530
95	W29	NS						
96	W137	96	20-Mar-14	Kitchen Tap	ND (0.0050)	ND (1.0)	22	310
		96-D			ND (0.0050)	ND (1.0)	23	330
98	W124	98	24-Mar-14	Well Supply (outside hose bib)	0.0067	1.5	56	430
		98-D			0.0082	1.6	53	420
99	W124	NS						
100	W125	NS						
101	W125	101	28-Mar-14	Well Supply (outside hose bib)	0.0082	1.5	40	380
		101-D			0.0082	1.6	40	390
102	W15	NS						
		NS						
104	W15	NS						
105	W15	NS						
		NS						
106	Unknown	NS						
107	Unknown	NS						
108	Unknown	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID(1)	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
109	Unknown	NS						
111	Unknown	NS						
112	Unknown	NS						
113	W16	NS						
114	W10	NS						
115		NS						
116	W9	NS						
		NS						
117	W39	NS						
118	W18	NS						
119	W17	NS						
121		NS						
122		NS						
127	W19	NS						
128	W32	NS						
129	Unknown	NS						
130	Unknown	NS						
131	W30	NS						
134	W33	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
135	Unknown	NS						
136	W63	NS						
137	W63	NS						
138	Unknown	NS						
139	W65	NS						
140	W65	NS						
141	Unknown	NS						
142	W130	NS						
143	W35	NS						
144	W35	NS						
145	Unknown	NS						
146	W139	NS						
147	Unknown	NS						
148	Unknown	NS						
149	W131 (or W606 when needed)	NS						
150	W131 (or W606 when needed)	NS						
150	W131 (or W606 when needed)	NS						
151	W130	NS						
152	Unknown	NS						

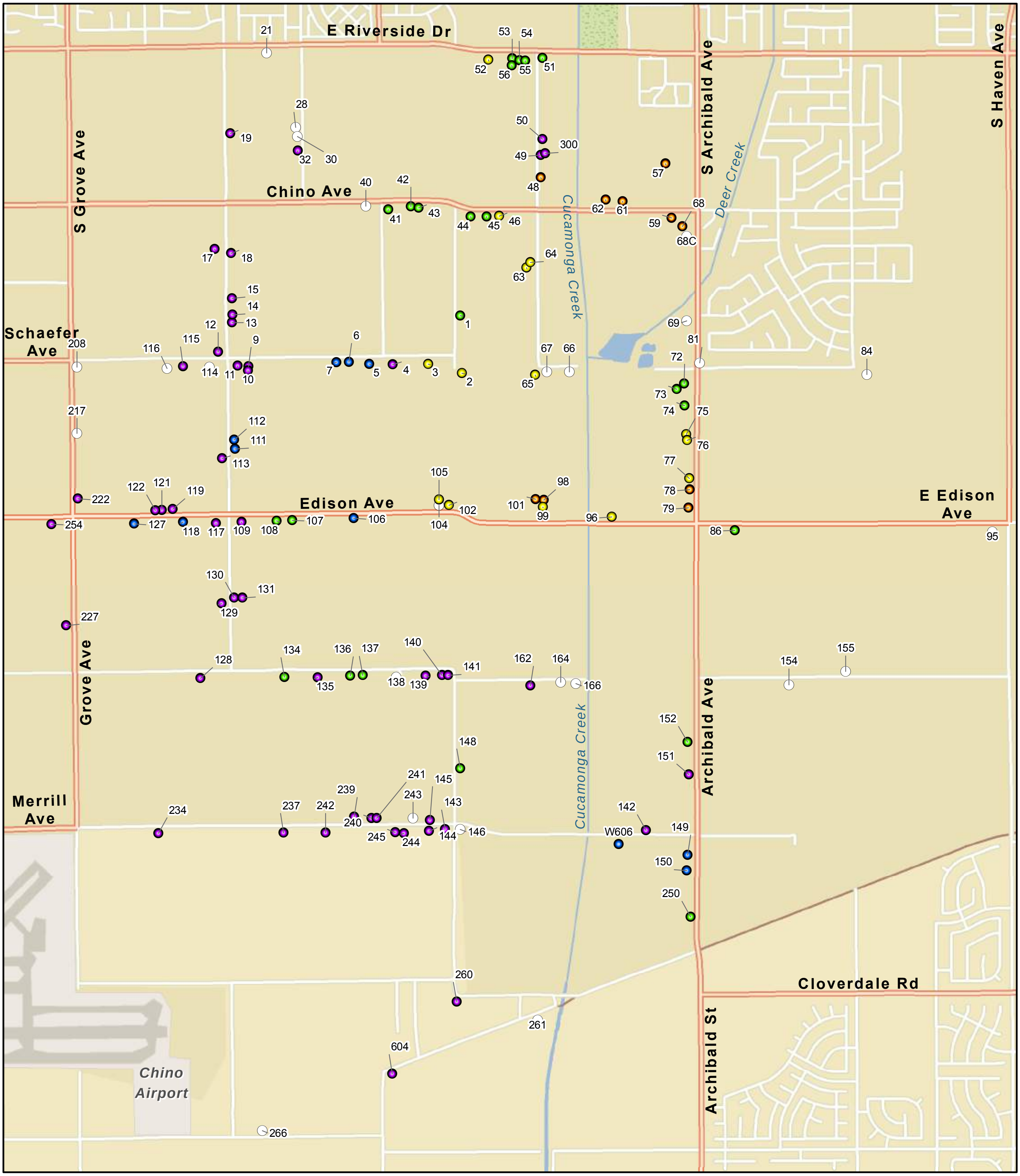
Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
154	W132	NS						
155	W133	NS						
162	Unknown	NS						
164	Unknown	NS						
166	W134	NS						
208	W8	NS						
217	W11	NS						
222	W20	NS						
227	W31	NS						
234	Unknown	NS						
237	W34	NS						
239	W64 (CBWM W147)	NS						
240		NS						
241		NS						
242	Unknown	NS						
243	W138	NS						
244	W35	NS						
245		NS						
250	Unknown	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
254	W21	NS						
260	W135	NS						
261	W136	NS						
266	W36	NS						
300	Unknown	NS						
604	Unknown	NS						
606	W606	NS						

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied



ENVIRONMENTAL ENGINEERING & CONTRACTING, INC.

File: Hi-Sample_Rounds

PM: JK

PM: RG

PW Sampling Location

Maximum TCE result in µg/L

- < 4.0
- ≥ 4.0 < 5.0
- ≥ 5 < 15.0
- ≥ 15.0 < 35.0
- ≥ 35.0
- ND (0.50)

0 2,200 4,400 Feet

PRIVATE WELL SAMPLING
MAXIMUM TCE RESULTS
NOVEMBER 2007 - MAY 2014

CENTRAL CHINO BASIN
ONTARIO, CALIFORNIA

Project Number: S1958.18

Date: 5/27/2014

Figure 1

APPENDIX A
GENERAL SAMPLING PROTOCOL

A study area was established to identify properties with private water supply wells that may contain trichloroethylene (TCE). The study area consists of an approximately five square mile region, which is bounded approximately by Riverside Drive to the North, Archibald Avenue to the East, Merrill Avenue to the South, and Grove Avenue to the West in Ontario, California. The study area is located in the City of Ontario, California that has been annexed by the City and is part of future redevelopment plans. Much of this area does not currently have public infrastructure, including municipal water supply. Current land use in this area is primarily agricultural.

1. Field Mobilization

A sampling team of two field staff was deployed. Prior to sampling, field staff was briefed on the project and trained on the sampling protocol.

Prior to field mobilization, the field sampling team received a folder for each residence scheduled for sampling. The folder contained the following site-specific information:

- Site location map;
- Detailed location map of the specific location;
- Copies of well logs of nearby wells;
- Copy of the RWQCB sampling offer letter;
- Water sample collection form;
- Sample-completed chain-of-custody form; and
- Blank chain-of-custody form.

An example water sample collection form is provided in Appendix B.

The sampling team received equipment consisting of sample bottles, nitrile gloves, a temperature probe, a pH probe, self-sealing plastic bags, and coolers for each resident packed with wet ice in self-sealing plastic bags.

2. Sample Collection

Most of the sample locations included residences supplied by groundwater wells. For these locations, sampling personnel asked the resident questions to obtain information regarding their source of water. A sample collection form is provided in Appendix B. With the assistance of the resident, sampling personnel identified a faucet or tap, preferably indoors and without an aerator, to obtain a water sample. Unless directed otherwise by the resident, the selected sample location was a location representative of water the resident would commonly use (e.g., kitchen sink). Once a location was identified, the water was allowed to run for five to ten minutes. During this time, measurements for temperature and pH were collected. When the temperature and pH measurements stabilized, changing less than 0.1 degree Celsius and less than 0.1 unit respectively between readings, and after a minimum of five minutes, a water sample was collected. Temperature and pH measurements were recorded on the Sample Collection Form (Appendix B).

Several of the sampling locations do not supply water to a residence (e.g., irrigation wells) and required that samples be collected directly from the groundwater pumping system. For these locations, sampling personnel identified a sample port, preferably upstream of storage tanks, to obtain water samples. Once the sampling location was identified, the well pump were actuated and allowed to operate between five and ten minutes to purge the pipeline/sample port. During this time, temperature and pH measurements were collected. When the temperature and pH measurements stabilized, changing less than 0.1 degree Celsius and less than 0.1 pH unit, respectively between readings, and after a minimum of five minutes, water samples were collected.

To avoid inadvertent contamination, the sampling team observed the following personal hygiene guidelines:

- No smoking while collecting samples;
- No hairspray/mousse;
- No cologne/perfume; and
- No breath spray or mouthwash when collecting samples.

After the sample faucet or tap had been run and temperature readings stabilized, flow was reduced to a trickle for sample collection.

- For volatile organic compounds (VOC) samples, sample containers were held at a 45 degree angle, with the cap from each container removed. The container was positioned as close as possible to make sure the stream contacted the side of the vial as it filled. The vial was slowly filled until a convex meniscus was observed, and a small amount of water was added to the cap, as well. The cap was carefully flipped over the top of the vial and screwed tight. The sampling team then observed the sample to verify that no bubbles were present in the sample. If bubbles were observed, the cap was removed, and vial closure was repeated. Once all six vials were filled (three for the sample and three for the duplicate), the faucet was turned off.

- For non-VOC samples (i.e., perchlorate, nitrate, total dissolved solids (TDS)), the tap flow was adjusted to an even flow and each sample bottle held at a 45 degree angle during collection. Once all sample bottles were filled, the faucet was turned off.

Two sets of samples were collected from each location, one sample and one duplicate. For confidentiality, collected samples were identified with a location ID number only, for example, as follows:

- First Sample: **"99";** and
- Duplicate Sample: **"99-D"**.

Sample labels and chain-of-custody (COC) forms were completed immediately after sample collection. Sample containers were packaged in disposable self-sealing plastic bags and preserved in a chilled environment. In addition, as a quality assurance measure, a trip blank consisting of deionized water filled at the laboratory was analyzed for every ten samples. Two additional trip blanks were included for each location requiring 1,2,3- Trichloropropane analysis.

3. Analysis Method

Collected samples were submitted to Test America, an analytical laboratory certified by the State of California, for analysis. Samples were analyzed for select VOCs by Environmental Protection Agency (EPA) Method 524.2. The select VOC list consisted of the following compounds:

- 1,1-Dichloroethane (1,1-DCA);
- 1,2-Dichloroethane (1,2-DCA);
- 1,1,1-Trichloroethane (1,1,1-TCA);
- 1,1,2-Trichloroethane (1,1,2-TCA);
- 1,1-Dichloroethene (1,1-DCE);
- Cis-1,2-Dichloroethene (Cis-1,2-DCE);
- Trans-1,2-Dichloroethene (Trans-1,2-DCE);
- Tetrachloroethene (PCE);
- Trichloroethene (TCE); and
- Vinyl Chloride.

A select group of sampling locations was also analyzed as follows:

- 1,2,3- Trichloropropane (1,2,3-TCP) by SRL524M-TCP
- Perchlorate by EPA 314.0 LL
- Nitrates by EPA 300.0 (Nitrate as NO3)
- TDS by SM 2540C

4. Data Management

The laboratory provided the analytical results by e-mail in PDF format with standard QA/QC laboratory backup. Sample results are subsequently transmitted to the residents. Transmittal of the Round 3 sampling results was completed by Chino Basin Water Master staff.

5. Split Sampling (Round 3)

The Chino Basin Water Master indicated that it intended to sample locations in and near the study area during the summer, 2011. Split samples were collected at most of the locations sampled during Round 3. At the outset of Round 3, Water Master sampling personnel sampled several residences before split sampling efforts were coordinated. At those locations, follow-up sampling was conducted where possible. At the end of Round 3, Water Master indicated that it preferred that its sampling personnel conduct sampling separate from split sampling personnel. Samples at the end of Round 3 were not coordinated. Dates of samples are provided in tables 1 and 2. The sampling results reported for Round 3 are the results of the split sampling. The sampling results obtained by the Chino Basin Water Master closely agreed with these reported results.

6. Sample Documentation

Field notes and/or preprinted field forms were utilized to document where, when, how, and from whom many vital project information was obtained. The following information was recorded during the collection of each sample:

- Sample location and description
- Field instrument readings
- Field observations and details related to analysis or integrity of samples (e.g., weather conditions, noticeable odors, colors, etc.)
- Preliminary sample description
- Sample preservation
- Sample identification numbers and any explanatory codes
- Name, date and time of delivery to laboratory

Appendix B
Water Sample Collection Form

Sampling Personnel: ____________________ **Date:** ____________________

Location Name: ____________________ **Location ID:** ____________________

Address: ____

Name: ____________________ **Phone Number:** ____________________

Well on Property?: ________ **CBWM ID#:** ____________ **How many homes served by well?:** ________

How long has well been in place/use? ____________________

Well used for drinking? ________ **Cooking?** ________ **Bathing?** ________

Well used for irrigation? ________ **Is water treated?** ____________

Where is the Treatment? ____________ **Treatment Type:** ____________

Previously sampled by CBWM? ________ **Chlorination?** ____________

If yes, how? ____

Separate faucet for drinking water? ____________________

House on Septic system? ________ **How often Maintained?** ____________

Using bottled water? ____

Sample Collected **Indoors with aerator:** **Indoors without aerator:** **Outdoors:**

Purging & Sampling

Time	Temperature	pH	Comments

Sample ID: ____________________ **Time:** ____________

Duplicate ID: ____________________ **Time:** ____________

Temperature/ pH Probe SN#:

Additional Notes ____

Photo/GPS @ Well? ________

Erler &
Kalinowski,
Inc.

Supplemental Data Report
Trichloroethene Plume

Central Chino Basin
Ontario, California

Prepared for:

Aerojet Rocketdyne, Boeing,
General Electric, and Lockheed Martin

Prepared by:

Erler & Kalinowski, Inc.
1870 Ogden Drive
Burlingame, California 94010
www.ekiconsult.com

19 November 2014

EKI A80039.02

Consulting engineers and scientists

Erler & Kalinowski, Inc.
Consulting Engineers and Scientists
1870 Ogden Drive
Burlingame, CA 94010
(650) 292-9100
Fax (650) 552-9012

19 November 2014

Kurt Berchtold, Executive Officer
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Region 8 - Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501

Subject: Trichloroethylene Plume
Central Chino Basin, Ontario, California
(EKI A80039.00)

Dear Mr. Berchtold:

Attached is the Supplemental Data Report for the TCE Plume located in the central Chino Basin, in Ontario, California. The Report was prepared by Erler & Kalinowski, Inc. ("EKI") on behalf of Aerojet Rocketdyne, Inc., Boeing Company, General Electric Company, and Lockheed Martin Corporation. The Report constitutes formal submittal of groundwater data, generally collected from 2011 to the present.

Please call if you have any questions regarding the Report or any other aspect of this matter.

Very truly yours,

ERLER & KALINOWSKI, INC.

Vera Nelson

Vera H. Nelson, P.E. C47418
Vice President

Supplemental Data Report
Trichloroethene Plume

Central Chino Basin
Ontario, California

19 November 2014

Prepared for:

Aerojet Rocketdyne, Boeing,
General Electric, and Lockheed Martin

Prepared by:

Erler & Kalinowski, Inc.
1870 Ogden Drive
Burlingame, California

EKI A80039.02

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ACRONYMS AND ABBREVIATIONS

μg/L	micrograms per liter
AWS	alternative water supply
CBWM	Chino Basin Watermaster
CCWF	Chino Creek Well Field
CDA	Chino Basin Desalter Authority
CFR	Code of Federal Regulations
City	City of Ontario
EEC	Environmental Engineering and Contracting, Inc.
EKI	Erler & Kalinowski, Inc.
FS	feasibility study
ft bgs	feet below ground surface
GE	General Electric Company
gpm	gallons per minute
HSC	Health and Safety Code
IEUA	Inland Empire Utilities Agency
JCSD	Jurupa Community Services District
MCL	Maximum Contaminant Level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OANGS	Ontario Air National Guard Station
OIA	Ontario International Airport
RI Report	Remedial Investigation Report Trichloroethene Plume (EKI, 2011)
RP-1	Regional Treatment Plant No. 1

RWQCB	Regional Water Quality Control Board, Santa Ana Region, formerly Santa Ana River Basin Regional Water Pollution Control Board
SARWC	Santa Ana River Water Company
TCE	trichloroethene or trichloroethylene
TDS	total dissolved solids
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compound
WEI	Wildermuth Environmental, Inc.
WMWD	Western Municipal Water District

1 INTRODUCTION

Erler & Kalinowski, Inc. ("EKI") prepared the *Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California* ("RI Report") on behalf of Aerojet Rocketdyne Inc., The Boeing Company, General Electric Company ("GE"), and Lockheed Martin Corporation, collectively referred to herein as "the Companies." The RI Report addresses trichloroethene ("TCE") detected in groundwater in the central Chino Basin and was submitted to the Regional Water Quality Control Board, Santa Ana Region ("RWQCB") in October 2011 (EKI, 2011). A vicinity map is included as Figure 1-1.

The RI Report and this Supplemental Data Report have been prepared consistent with requirements of Section 25350 et seq. of Chapter 6.8 of the California Health and Safety Code ("HSC") and the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), set forth in Part 300, Title 40 of the Code of Federal Regulations ("CFR"). The RI Report and Supplemental Data Report also conform to the United States Environmental Protection Agency's ("U.S. EPA's") *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (U.S. EPA, 1988).

1.1 Ontario TCE Plume

TCE in groundwater that is the subject of the RI Report and this Supplemental Data Report is generally located south of Pomona Freeway, west of Archibald Avenue, east of Grove Avenue, and north of Remington Avenue; and is referred to as the "TCE Plume." The current plume configuration is shown on Figure 1-2. The distribution and extent of the TCE Plume are based upon data collected between 2010 and 2014, which are discussed in this Supplemental Data Report.

1.2 Purpose of Supplemental Data Report

The purpose of this Supplemental Data Report is to present updated information on:

(1) Groundwater hydraulic conditions in the central Chino Basin;

(2) Recent sampling results from additional rounds of private well/residence sampling conducted from 2011 to 2014, and

(3) The alternative water supply program that was initiated by the Companies as an interim removal action in 2008.

2 GROUNDWATER HYDRAULIC CONDITIONS IN CHINO BASIN

Alluvial sediments comprise the water-bearing aquifer zones in the central Chino Basin. The water table is approximately 180 feet below ground surface ("ft bgs") in the central portion of the basin (i.e., near Riverside Drive). The natural direction of groundwater flow within the central and southern portions of the basin is to the south-southwest consistent with the land surface slope and surface water drainage. However, artificial recharge and groundwater extraction locally influence the magnitude and direction of groundwater flow. As discussed in the RI Report, recharge at the Ely Ponds creates southeasterly groundwater gradients in upper aquifer zone in the vicinity of RP-1 (Appendix A - Figure 3-20 from the RI Report).

In addition, the regional direction of groundwater flow within the central portion of the Chino Basin has gradually shifted from a south-southwesterly direction to a southeasterly direction over the last 10 years. Figure 2-1 shows the hydraulic gradient in the central Chino Basin over time. The figure depicts the change or shift in gradient through a series of groundwater level maps from Chino Basin Watermaster ("CBWM") State of the Basin Reports (Wildermuth Environmental, Inc. ["WEI"], 2009, 2011, 2013). The maps show groundwater levels (i.e., equipotential contours) in 2000, 2003, 2006, 2008, 2010, and 2012. Superimposed on CBWM groundwater level maps are inferred hydraulic gradient direction arrows, drawn perpendicular to the equipotential contours.

The change in the groundwater gradient has caused a corresponding east/southeast shift in the boundaries of the TCE Plume. In addition, increases in the magnitude of the hydraulic gradient are causing the distal edges of the TCE Plume to move southward. The potentiometric surface as mapped by CBWM in 2010 is presented on Figure 2-2. As shown on this figure, hydraulic gradients in this portion of the basin are to the south and southeast.

The approximate directions of hydraulic gradients mapped in the vicinity of the TCE Plume in 2010 on the basis of these data are presented on Figure 2-3. Large scale water level maps prepared by CBWM in 2012 indicate that the hydraulic gradient may be shifting further to the east (see Figure 2-1). Additional discussions regarding the effects of changing hydraulic gradients on the TCE Plume are provided in Section 3.

2.1 Chino Basin Desalter Authority Wells

The recent changes in the direction and magnitude of the natural hydraulic gradient and groundwater flow within the central and southern portions of the Chino Basin have occurred due to groundwater extraction by the Chino Basin Desalter Authority ("CDA"). The CDA has operated groundwater extraction wells in the southern portion of the Chino Basin since 2000. These wells, known as desalter wells, extract groundwater from both the upper and lower aquifer zones for treatment and subsequent delivery to CDA's member agencies.

Extracted groundwater ("raw water") is conveyed and treated at two desalter facilities, designated Desalter I and Desalter II. Figure 2-4, adapted from Exhibit 11 of CBWM 2012 State of the Basin Atlas (WEI, 2013), depicts the locations of Desalters I and II and the desalter wells, and the years in which the wells became operational. Desalter I nominally treats water from desalter wells I-1 through I-11, wells I-13 through I-15, and the Chino Creek Well Field ("CCWF") wells I-16 through I-21. Desalter II nominally treats water from desalter wells II-1 through II-9a. However, desalter wells I-12, I-19, and II-5 were never constructed.

Groundwater extraction began in 2000 from wells I-1 through I-11 in the south-central and southwestern portions of the basin. When wells I-13 through I-15 became operational in 2003, the center of desalter pumping began to shift to the east. This eastward shift increased in 2006 when wells II-1 through II-9a in the southeastern portion of the basin began operating, which nearly doubled the total groundwater extraction rate of the desalter system.[1] CDA intends to construct additional high capacity desalter wells, which are expected to extract groundwater at rates of 2,000 gallons per minute ("gpm") in the southeastern portion of the basin as part of its Phase III expansion plan. Modeling conducted by CBWM's technical consultant indicates these new wells will intensify southeasterly gradients in this portion of the basin and these gradients will persist into the future (WEI, 2014).

[1] CCWF wells I-16 through I-21 were constructed in the southwestern portion of the basin in 2012. The CCWF is not anticipated to significantly influence the groundwater gradients in the Central Chino Basin because these wells are screened entirely in the upper aquifer zone, and groundwater extraction rates achievable from these wells have been lower than anticipated (Kennedy/Jenks, 2013).

3 RECENT GROUNDWATER DATA

Sampling activities performed since submittal of the RI Report to the RWQCB consist mostly of private well/private residence sampling that has been conducted as part of an interim removal action.

3.1 Private Well/Private Residence Sampling

Public water system infrastructure is lacking south of Riverside Drive. Water for domestic use is obtained from private wells. In 2006, with RWQCB oversight, the Companies began an investigation of the area with private water wells that might be impacted by the TCE Plume. The area of investigation is bounded by Riverside Drive to the north, Archibald Avenue to the east, Remington Avenue to the south, and Grove Avenue to the west. The purpose of this investigation was two-fold: (1) identify residences that were candidates for the alternative water supply program implemented by the Companies as an interim removal action, and (2) obtain information to better delineate and characterize changes in the TCE Plume. The results of this investigation, including sampling through April 2011, were presented in the RI Report.

Since completion of the RI Report, four additional rounds of water sampling have been performed:

- Round 3: Conducted between August 2011 and January 2012,
- Round 4: Conducted between July and August 2013,
- Round 5: Conducted between March and May 2014,[2] and
- Round A: Conducted in July 2014.

Round 3 was performed by CBWM with split samples collected by the Companies. Rounds 4 and 5 were implemented jointly by the Companies and the City of Ontario ("City"), and Round A was performed by the Companies.

[2] Selected samples collected during Round 5 were analyzed for additional constituents including 1,2,3-trichloropropane, perchlorate, nitrate, and total dissolved solids ("TDS"). These additional analyses were conducted to evaluate overall water quality in selected locations to help inform the feasibility study ("FS") process. The results of these analyses are summarized in Environmental Engineering and Contracting, Inc.'s ("EEC's") 27 May 2014 report included in Appendix B.

Since initiation of private residence sampling in 2007, water samples have been collected from a total of 132 private residences. Each private residence location has been sampled between one and five times. Each round of sampling was intended to provide additional information for locations that were either: (1) previously not sampled, (2) exhibiting a potential trend that required verification, or (3) located in an area where changes in plume conditions were suspected. Water samples were obtained primarily from faucets or hose bibs, although at certain residences, the samples were obtained directly from the well. Appendix B of this Supplemental Data Report includes:

- EEC's *Private Property Sampling Report, Ontario, California,* dated 27 May 2014, which includes a discussion of sampling methods and a summary table of all data collected since the start of the private residence sampling program through May 2014; and

- EEC's *Private Property Sampling Report, Ontario, California,* dated 6 October 2014, which includes a discussion and summary of results of additional sampling conducted by the Companies in July 2014 (Round A).

Figure 1-2 depicts the current estimated distribution of TCE in groundwater based upon analytical data from groundwater samples collected from 2011 to July 2014[3]. The groundwater data presented on Figure 1-2 include TCE results from:

- Private well/private residence sampling conducted by EEC on behalf of the Companies and the City;

- Sampling of Company monitoring wells MW-1, MW-2, MW-3 and MW-4 (RI Report);

- Sampling of CDA desalter wells (obtained through the City's consultant, Dudek, Inc., on 22 November 2013)

- CBWM sampling of private wells (obtained through the City's consultant, Dudek, Inc., on 22 November 2013)

[3] Location IDs of private residence locations presented in EEC's report have been identified with a "p" in front of the location ID on figures in the Supplemental Data Report to distinguish these as private residence samples. For example, private residence location ID "250" is identified as "p250" on figures in the Supplemental Data Report.

TCE data indicate the following changes to the TCE Plume since submittal of the RI Report:

- TCE concentrations in samples collected from private wells/private residences on the western side of the plume have decreased (see Figure 3-1). As a result, the western boundary of the TCE Plume, defined by the location of the 5 microgram per liter ("µg/L") TCE contour, has shifted to the east. Certain private wells/private residences that were once inside of the plume are now outside of the plume (see Figure 3-2).

- TCE concentrations in the southern distal portion of the plume, particularly east of Cucamonga Creek between Eucalyptus Avenue and Remington Avenue, have increased (see Figure 3-3). As a result, the southern boundary of the plume has shifted further south.

These results are consistent with the southeasterly shift in hydraulic gradient caused by CDA's operation of its desalter wells, which are also drawing the distal portion of the plume further south. The center of mass and head of the TCE Plume do not appear to be migrating significantly.

The City also installed two groundwater monitoring wells and two soil vapor monitoring wells between OIA and the TCE Plume in 2013. The City wells are adjacent to Cucamonga Creek, as depicted on Figure 3-4. The plotted locations of City wells are based on field observations of the wellhead enclosures. Figure 3-4 also identifies the locations of five other monitoring wells that have been installed between OIA and the TCE Plume including:

- The Companies monitoring wells MW-1A, MW-1B, and MW-1C, sampled in 2008, 2009, and 2010 (RI Report); and

- Ontario Air National Guard Station ("OANGS") monitoring wells MW-2 and MW-3, sampled in 1993 and 1994 (Booz-Allen & Hamilton, Inc., 1999).

No TCE has been detected in groundwater samples collected from these five wells during any of the sampling rounds conducted (1995 through 2013). Results of groundwater and soil gas samples collected from the City wells are not available.

4 INTERIM REMOVAL ACTIONS

Alternative water supplies have been provided to private residences where groundwater samples were found to contain TCE at a concentration greater than 4 μg/L (“AWS location”). This concentration was selected to provide a margin of safety and represents 80 percent of the Maximum Contaminant Level (“MCL”) of 5 μg/L for TCE, which is the drinking water standard for public water systems. Over the course of seven years, water samples from a total of 57 locations were found to contain TCE concentrations greater than 4 μg/L (see Appendix B).[4]

As discussed in Section 3 above, the TCE Plume boundaries have shifted in response to changing hydraulic conditions within the central Chino Basin. TCE concentrations measured at many locations on the western side of the TCE Plume where alternative water supplies are being provided have decreased (see Figure 4-1) and are currently below 4 μg/L, or 80 percent of the MCL.[5] Graphs depicting trends in TCE concentrations at each of these AWS locations are provided in Appendix C.

Conversely, TCE concentrations measured at certain locations in the southern distal portion of the TCE Plume have increased. As shown on Figure 4-1 and summarized in Table 4-1, six locations have been identified as candidates for addition to the alternative water supply program through tank systems, bottled water, or eventual connection to the to the City of Ontario’s Francis Water Loop, which is part of the New Model Colony (“NMC”) Builders Project. These six locations are currently receiving bottled water as an interim removal action. The Francis Water Loop is currently under construction and includes a section of pipeline that extends along South Archibald Avenue from Riverside Drive to approximately Bellegrave Avenue (see Figure 4-1). This portion of the line is complete and has been charged with City water. Testing of the line is scheduled to occur soon and the City has initiated discussions with selected residents that

[4] In addition to these 57 AWS locations, five other residences were included in the alternative water supply program due to their association with AWS locations (i.e., known to share the same well water source), even though TCE was not detected above 4 μg/L in water samples obtained from these residences. Table 4-1 provides a summary of all 62 locations.

[5] Well sampling conducted by CBWM indicates that elevated nitrate and TDS concentrations still exist in groundwater and exceed primary and secondary MCLs, respectively, in this area (CBWM, 2013). Similar to TCE, nitrate and TDS were historically released at RP-1 through percolation ponds and discharges to Cucamonga Creek. Agricultural and dairy operations have added to nitrate and TDS impacts to groundwater in the southern portion of the Chino Basin. Figures depicting historic and recent nitrate and TDS concentrations in the southern portion of the Chino Basin are presented in the RI Report and included in Appendix D hereto.

are part of the AWS program regarding connection to this pipeline (personal communication by Nancy Heffernan with City of Ontario Utilities Department, 23 October 2014).

5 CONCLUSIONS

Recent water level data and groundwater sampling conducted in the vicinity of the TCE Plume indicate that the construction and operation of CDA desalter wells have resulted in a shift of the hydraulic gradient in the central Chino Basin from a generally south-southwest direction in 2000 to its current southeast direction. The TCE Plume boundaries have shifted in response to changing hydraulic conditions within the central Chino Basin. TCE concentrations measured on the western side of the TCE Plume appear to be decreasing. TCE concentrations have increased in the southern distal portion of the TCE Plume.

6 REFERENCES

Booz-Allen & Hamilton, Inc., 1999, *Decision Document to Support No Further Response Action Planned at Installation Restoration Program Site SS-01*, prepared for 148 Combat Communications Squadron Ontario Air National Guard Station, Ontario, California, dated 15 December 1999.

CBWM, 2013, *TCE Data Request*, includes CBWM data for private wells from 1 January 2010 through 2 November 2010, and CDA wells from 1 January 2010 through 11 December 2012, obtained from Dudek.

EEC, 2014a, *Private Property Sampling Report, Ontario, California*, dated 27 May 2014.

EEC, 2014b, *Private Property Sampling Report, Ontario, California*, dated 6 October 2014.

EKI, 2011, *Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California*, dated 13 October 2011.

Kennedy/Jenks Consultants, 2013, *Technical Report, Chino III Desalter Project*, prepared for: Western Municipal Water District, dated February 2013.

U.S. EPA, 1988, *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final*, Office of Emergency and Remedial Response, EPA/540/G-89/004, dated October 1988.

WEI, 2009, *Chino Basin Optimum Basin Management Program 2008 State of the Basin Report*, prepared for Chino Basin Watermaster, dated November 2009.

WEI, 2011, *2010 State of the Basin Exhibits*, prepared for Chino Basin Watermaster, dated December 2011.

WEI, 2013, *2012 State of the Basin Atlas*, prepared for Chino Basin Watermaster, dated June 2013.

WEI, 2014, *Analysis of Hydraulic Control as Agricultural Land Uses Convert to Urban Uses per the Requirement in the Regional Board Letter dated January 23, 2014*, dated 22 May 2014

TABLE 4-1
SUMMARY AND STATUS OF LOCATIONS UNDER THE ALTERNATIVE WATER SUPPLY PROGRAM
Central Chino Basin, California

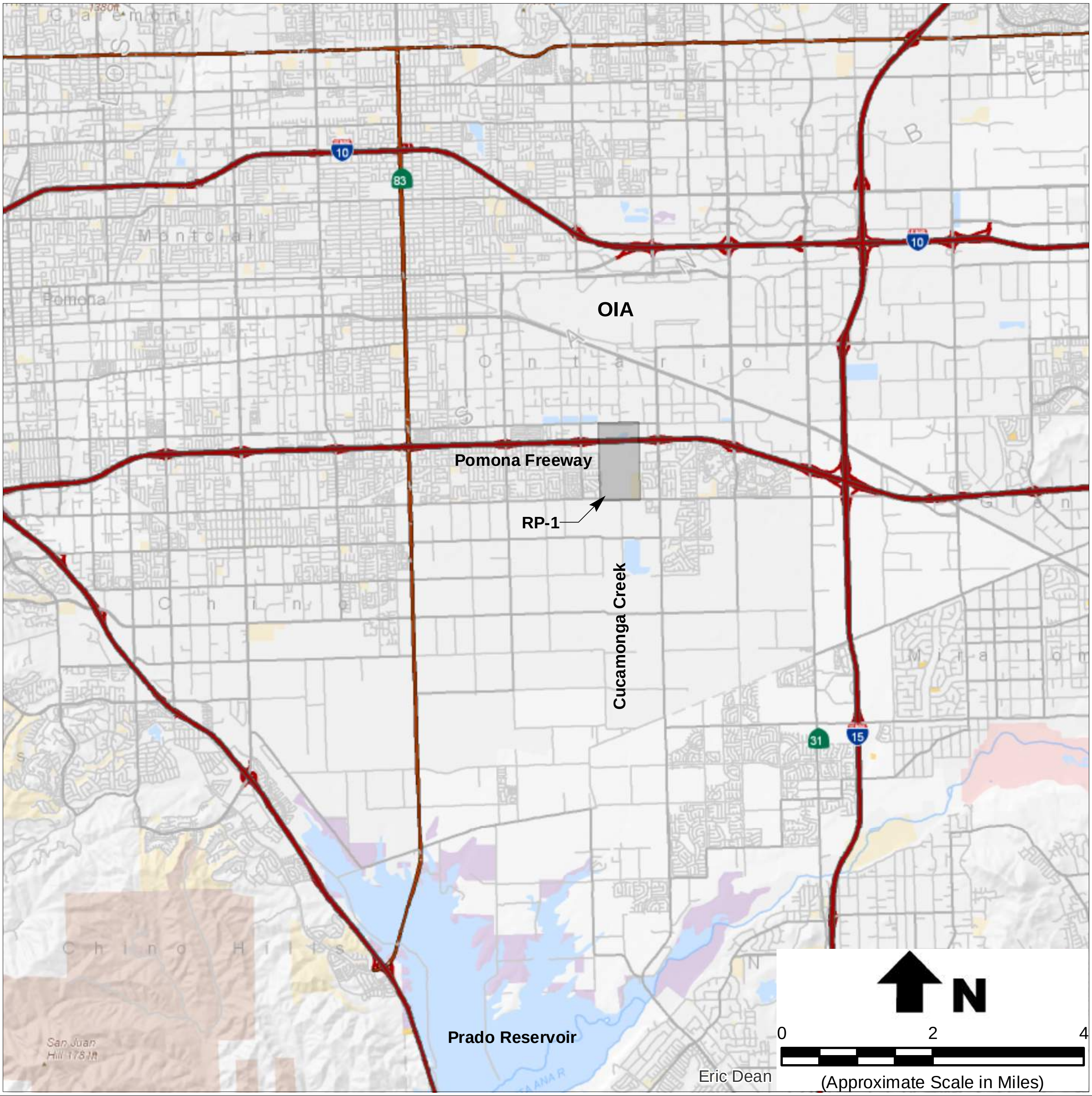
Location ID [1]	Location Type	Location Status	Well ID [2]	TCE First Detected Greater Than 4 µg/L [3]	Bottled Water Provided [4]	Tank Offered [5]	Tank Status	Tank System ID
1	Residential/Dairy	Occupied	W26	Round 1	Yes	Yes	Declined	
2	Residential	Occupied	unknown	Round 1		Yes	Active	T10
3	Residential/Dairy	Occupied	W42	Round 1	Yes	Yes	Declined	
5	Residential	Occupied	W38	Round 1	Private	No		
6	Residential/Dairy	Occupied	W41	Round 1		Yes	Active	T20
7	Residential/Dairy	Occupied	W41	Round 1		Yes	Active	T20
41	Residential/Dairy	Occupied	W4	Round 1		Yes	Active	T15
42	Residential	Occupied	W4	Round 1		Yes	Active	T16
43	Residential	Abandoned	W4	Round 1		No, abandoned		
44	Residential	Occupied	unknown	Round 1		Yes	Active	T17
45	Residential	Occupied	unknown	Round 1		Yes	Active	T18
46	Residential/Dairy	Abandoned	unknown	Round 1		No, abandoned		
48	Residential	Occupied	W48	Round 1	Yes (Dairy)	Yes	Active	T2
51	Residential/Dairy	Abandoned	W114	Round 1		Yes	Abandoned	T13
52	Residential	Occupied	W22	Round 1		Yes	Active	T11
53	Residential	Abandoned	W24, W23	Round 1		Yes	Abandoned	T12
54	Unknown	Abandoned	W24, W23	Round 1		Yes	Abandoned	T12
55	Unknown	Abandoned	W24, W23	Round 1		Yes	Abandoned	T12
56	Unknown	Abandoned	W24, W23	Round 1		Yes	Abandoned	T12
57	Residential	Occupied	unknown	Round 1	Yes	Yes	Declined	
59	Residential	Occupied	W59	Round 1		Yes	Active	T1
61	Residential/Commercial	Occupied	unknown	Round 1		Yes	Active	T4
62	Residential	Abandoned	W62	Round 1		Yes	Abandoned	T3
63	Commercial	Occupied	W126	Round 4		Yes	Active	T23
64	Commercial	Occupied	W126	Round 4		Yes	Active	T23
65	Residential	Occupied	unknown	Round 1		Yes	Active	T6
68	Residential	Occupied	W59	Round 3	Yes	No		
72	Residential	Occupied	W12	Round 1	Yes (Dairy)	Yes	Active	T7
73	Residential	Occupied	W12	Round 1		Yes	Active	T7
74	Residential	Occupied	W14	Round 1		Yes	Active	T5
75	Residential	Occupied	W14	Round 1		Yes	Active	T5
76	Residential	Occupied	W14	Round 1		Yes	Active	T5
77	Residential/Dairy	Abandoned	W14	Round 1		Yes	Active	T5
78	Residential	Occupied	W27	Round 1	Yes	Yes	Declined	
79	Residential/Dairy	Occupied	W27	Round 1	Yes	Yes	Declined	
86	Residential/Dairy	Occupied	W28	Round 5	yes	TBD		
96	Residential	Occupied	W137	Round 4	Yes	Yes	Active	T26
98	Residential	Occupied	W124	Round 3		Yes	Active	T24
99	Residential	Occupied	W124	Round 3		Yes	Active	T24
100	Residential	Occupied	W125	not sampled		Yes	Active	T25
101	Residential	Occupied	W125	Round 4		Yes	Active	T25
102	Residential	Occupied	W15	Round 1	Private	Yes	Declined	

TABLE 4-1
SUMMARY AND STATUS OF LOCATIONS UNDER THE ALTERNATIVE WATER SUPPLY PROGRAM
Central Chino Basin, California

Location ID [(1)]	Location Type	Location Status	Well ID [(2)]	TCE First Detected Greater Than 4 µg/L [(3)]	Bottled Water Provided [(4)]	Tank Offered [(5)]	Tank Status	Tank System ID
103	Residential	Occupied	W15	not sampled	Private	Yes	Declined	
104	Residential	Occupied	W15	Never	Private	Yes	Declined	
105	Residential	Occupied	W15	Round 1	Private	Yes	Declined	
106	Residential	Occupied	unknown	Round 2		Yes	Active	T8
107	Residential/Dairy	Occupied	unknown	Round 1	Yes (Office+Dairy)			
108	Residential/Dairy	Occupied	unknown	Round 1		Yes	Active	T9
111	Residential	Occupied	unknown	Round 3	Private			
112	Residential	Occupied	unknown	Round 3	Private			
118	Residential	Occupied	W18	Round 1	Yes	Yes	Declined	
124	Residential	Unoccupied	W19	Never		Yes	Active	T19
127	Residential/Dairy	Occupied	W19	Round 1		Yes	Active	T14
134	Residential/Dairy	Unoccupied	W33	Round 1		No, unoccupied		
136	Residential	Unoccupied	W63	Round 2		Yes	Active	T21
137	Residential	Occupied	W63	Round 2		Yes	Active	T22
147	Residential/Dairy	Occupied	unknown	not sampled	Yes	TBD		
148	Residential/Dairy	Occupied	unknown	Round 5	Yes	Yes	Pending	
149	Residential/Dairy	Occupied	W606, W131	Round 5	Yes	TBD		
150	Residential/Dairy	Occupied	W606, W131	Round 5	Yes	TBD		
152	Commercial	Occupied	unknown	Round 5	Yes	TBD		
250	Residential	Occupied	unknown	Round 5	Yes	TBD		

Abbreviations:
ID = identification
µg/L = micrograms per liter
TBD = to be determined

Notes:
(1) Location ID corresponds to the Private Residence ID, or "P" prefix for locations shown on Figures.
(2) Well ID is shown for locations where the well serving the private residence is known. Otherwise, Well ID is "unknown".
(3) Sampling rounds were as follows: Round 1 = 2007/08, Round 2 = 2009/10, Round 3 = 2011/12, Round 4 = 2013, Round 5 = spring 2014, Round 6 = summer 2014.
(4) Locations where Bottled Water Service is indicated as "Private?" are locations where the resident is believed to be providing their own bottled water.
(5) Locations where Tank Offered is indicated as "TBD" are locations where the decision on what type of long-term Alternative Water Supply will be offered has not yet been made. In the meantime, these locations are receiving bottled water through the Alternative Water Supply program.



Abbreviations

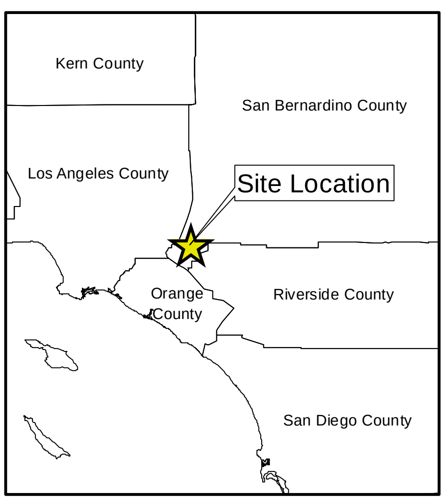
OIA = Ontario International Airport
RP-1 = Regional Plant 1

Notes

1. All locations are approximate.
2. Shaded area labeled RP-1 includes the associated areas of Whispering Lakes Golf Course and Westwind Park.

Reference

Basemap obtained from Cal Atlas, http://projects.atlas.ca.gov/projects/basemap/ http://www.calands.org.



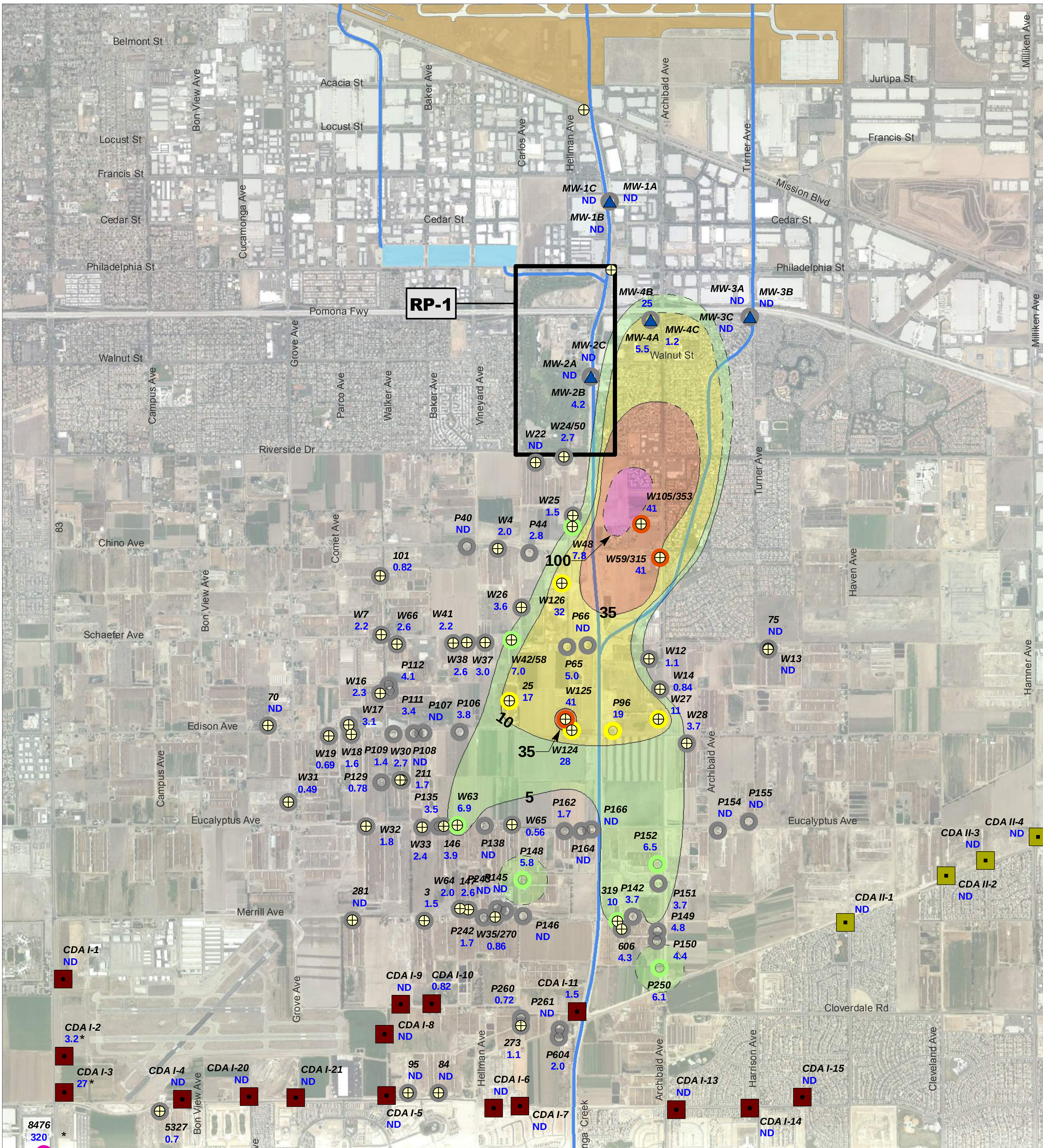
Erler & Kalinowski, Inc.

Vicinity Map

Central Chino Basin
Ontario, CA
November 2014
A80039.00

Figure 1-1

Path: X:\A80039\Maps\2014\10\Figure 1-1 - Vicinity Map.mxd



Legend

Ontario International Airport

Ely Basins

Artificial Channel

Monitoring Well Cluster

Well

Private Residence Location Where No Well was Identified (note 4)

ND Not Detected at a Detection Limit of 0.5 µg/L

0.6 Average TCE Concentration (note 3)

W36 Well ID

P109 Private Residence ID

Chino I Desalter Wells

Chino II Desalter Wells

Trichloroethene ("TCE") Concentration (µg/L)

- 100.01 - 150
- 35.001 - 100
- 10.001 - 35
- 5.001 - 10
- ≤ 5 or Not Detected ("ND")

Abbreviations

µg/L = micrograms per liter

* = TCE associated with the Chino Airport Plume

0 2,500 5,000

(Approximate Scale in Feet)

N

Notes

1. All locations are approximate.
2. Samples were collected between 1 January 2010 and 16 July 2014.
3. Concentrations shown are the average TCE concentrations detected during sampling events between 1 January 2010 and 16 July 2014. When multiple Private Residence locations are known to correspond to a single well, data from each Private Residence is used in calculating the average for a given sampling event. When duplicate samples were collected from the same location during a given event, the average is calculated using the higher of the values. When a sample result is non-detect ("ND"), a value of half the detection limit is used in calculating the average.
4. Where samples were collected from a residence with an identified well, TCE concentrations are posted at the identified well location. Where no well was identified, TCE concentrations are posted at the sample collection location.
5. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.

References

Chino Basin Watermaster, 2011 (private residence split sampling results).

City of Ontario, email communication, 6 September 2011 (Chino Desalter Authority well sampling results).

Environmental Engineering and Contracting, Inc. ("EEC"), 2014, Private Property Sampling Report, Ontario, California, 15 May 2014.

Erler & Kalinowski, Inc., 2011, Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California, 13 October 2011.

Wildermuth Environmental, Inc. ("WEI"), 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010. No laboratory reports included.

Dudek, 2013. TCE Data Request, includes Chino Basin Watermaster data for private wells from 1 January 2010 through 2 November 2010, CDA wells from 1 January 2010 through 11 December 2012.

Erler & Kalinowski, Inc.

Average TCE Concentration, 2010-2014

Central Chino Basin
Ontario, CA
November 2014
EKI A80039.02

Figure 1-2

Path: X:\A80039\Maps\2014\11\Figure 1-2 - Average TCE Concentration 2010-2014.mxd

Fall 2000

Fall 2003

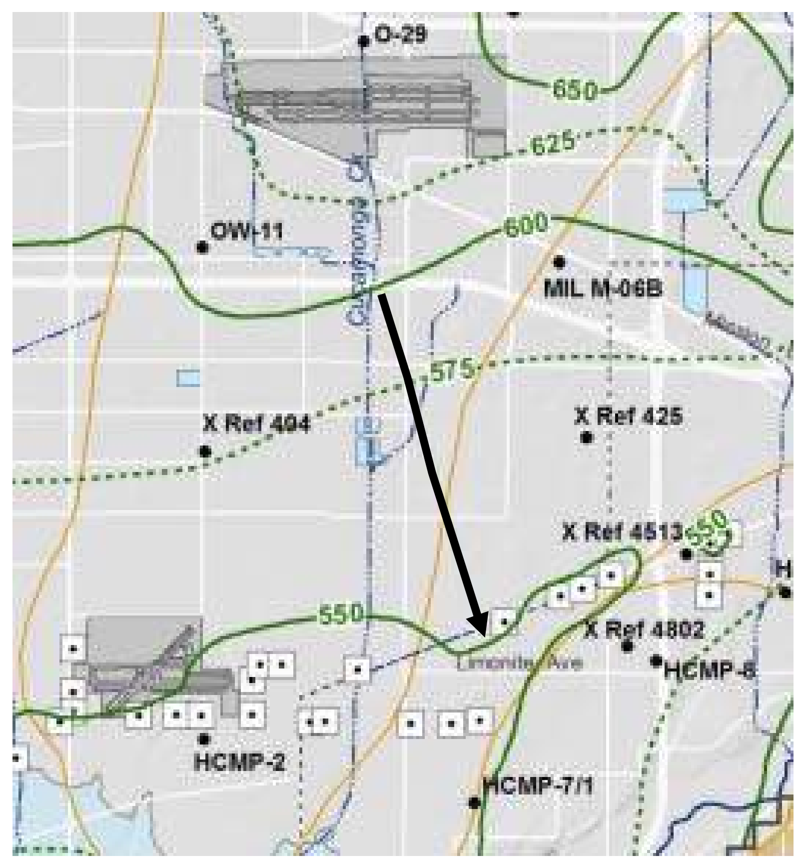
Fall 2006

Fall 2008

Spring 2010

Sources for 2000 through 2010 maps:
Chino Basin Water Master State of the Basin Reports, 2008 and 2010

Spring 2012



Source for 2012 map:
Chino Basin Water Master State of the Basin Briefing, 10 January 2013

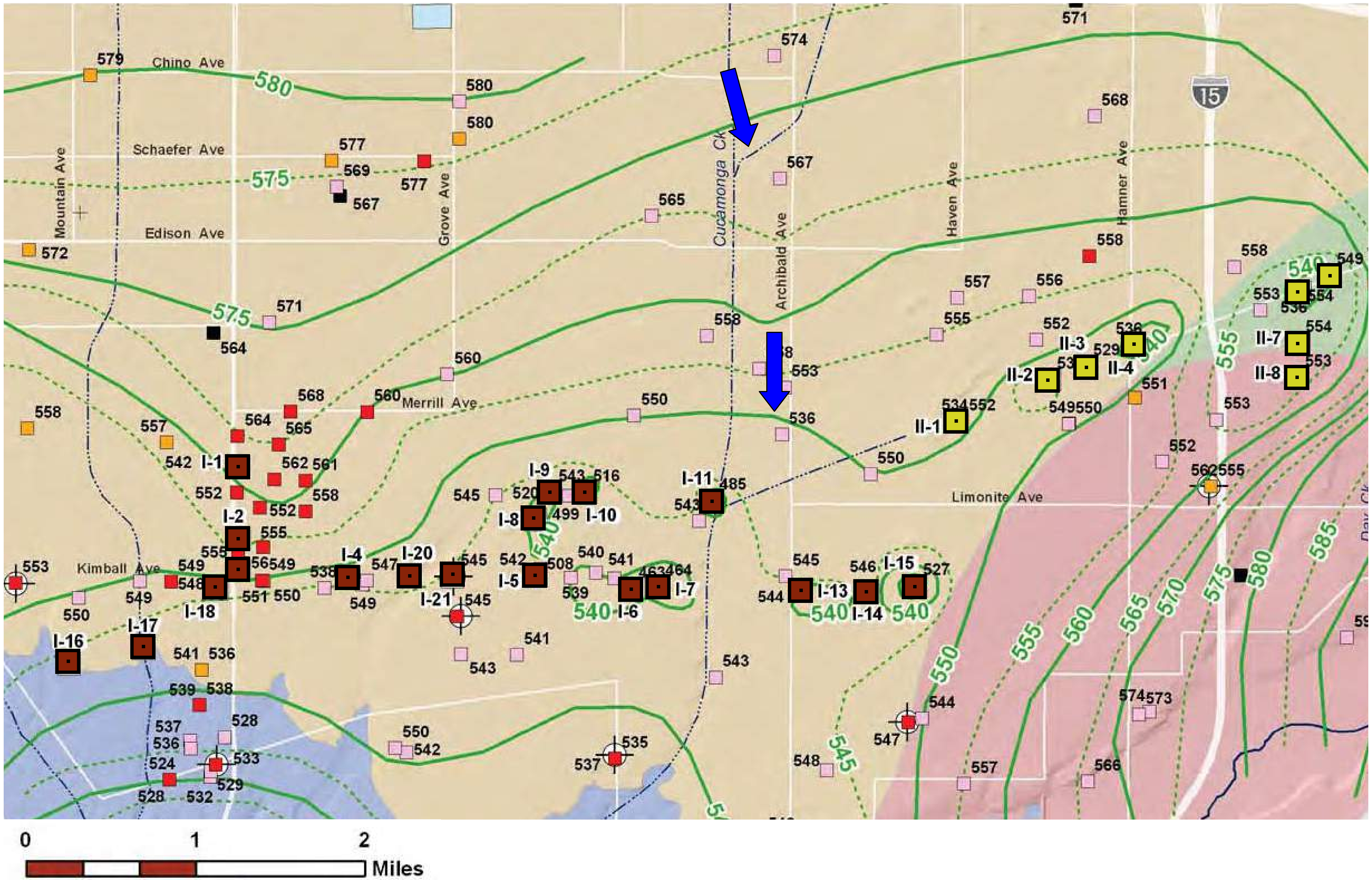
Notes
1. Figures show groundwater elevation contours as depicted by Chino Basin Water Master in their 2008 and 2010 State of the Basin Reports (CBWM, 2009 and 2011) and State of the Basin Briefing (10 January 2013).
2. Black arrows depict groundwater flow directions perpendicular to the groundwater elevation contours.

Erler & Kalinowski, Inc.

Shifting Hydraulic Gradients in the Central Chino Basin

Central Chino Basin
Ontario, CA
November 2014
EKI A80039.02

Figure 2-1



Legend:

- Groundwater Elevation Contour
- Chino I Desalter Well
- Chino II Desalter Well
- Hydraulic Gradient Direction

Notes:

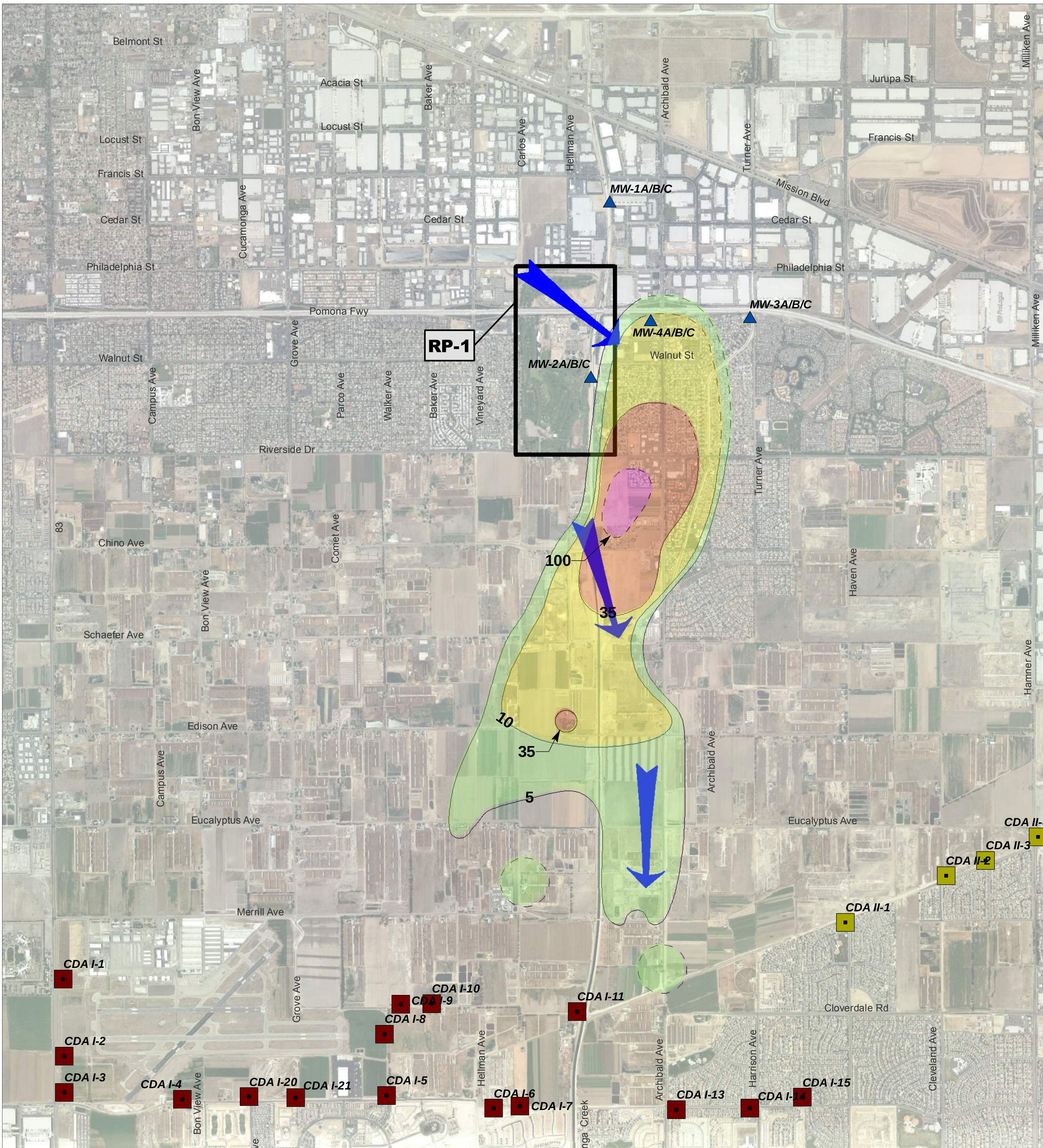
1. Figures shows groundwater elevation contours in the southern Chino Basin in spring 2012 witrh hydraulic gradient direction added.
2. Adapted from Exhibit 22 of the 2012 Chino Basin Water Master State of the Basin Atlas (WEI, 2013).

Erler & Kalinowski, Inc.

Hydraulic Gradients in the Vicinity Of CDA Desalter Wells

Central Chino Basin
Ontario, CA
November 2014
EKI A80039.02

Figure 2-2



Legend

- Ontario International Airport
- Ely Basins
- Artificial Channel
- Approximate Groundwater Gradient Direction
- Monitoring Well Cluster
- Chino I Desalter Wells
- Chino II Desalter Wells

Trichloroethene ("TCE") Concentration (µg/L)

- 100.01 - 150
- 35.001 - 100
- 10.001 - 35
- 5.001 - 10
- ≤ 5 or Not Detected ("ND")

Abbreviations

fl msl = feet above mean sea level
µg/L = micrograms per liter
* = TCE associated with the Chino Airport Plume

0 2,500 5,000
(Approximate Scale in Feet)

N

Notes

1. All locations are approximate.
2. Samples were collected between 1 January 2010 and 16 July 2014.
3. Concentrations shown are the average TCE concentrations detected during sampling events between 1 January 2010 and 16 July 2014. When multiple Private Residence locations are known to correspond to a single well, data from each Private Residence is used in calculating the average for a given sampling event. When duplicate samples were collected from the same location during a given event, the average is calculated using the higher of the values. When a sample result is non-detect ("ND"), a value of half the detection limit is used in calculating the average.
4. Where samples were collected from a residence with an identified well, TCE concentrations are posted at the identified well location. Where no well was identified, TCE concentrations are posted at the sample collection location.
5. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.
6. Hydraulic gradient arrows are based on (a) the Upper Zone potentiometric surface in June 2009 (see Figure 3-20 of the RI Report; EKI, 2011). Upper Zone wells are screened between approximately 600 feet msl and 400 feet msl; and (b) hydraulic gradients in the vicinity of CDA wells (see Figure 2-2).

References

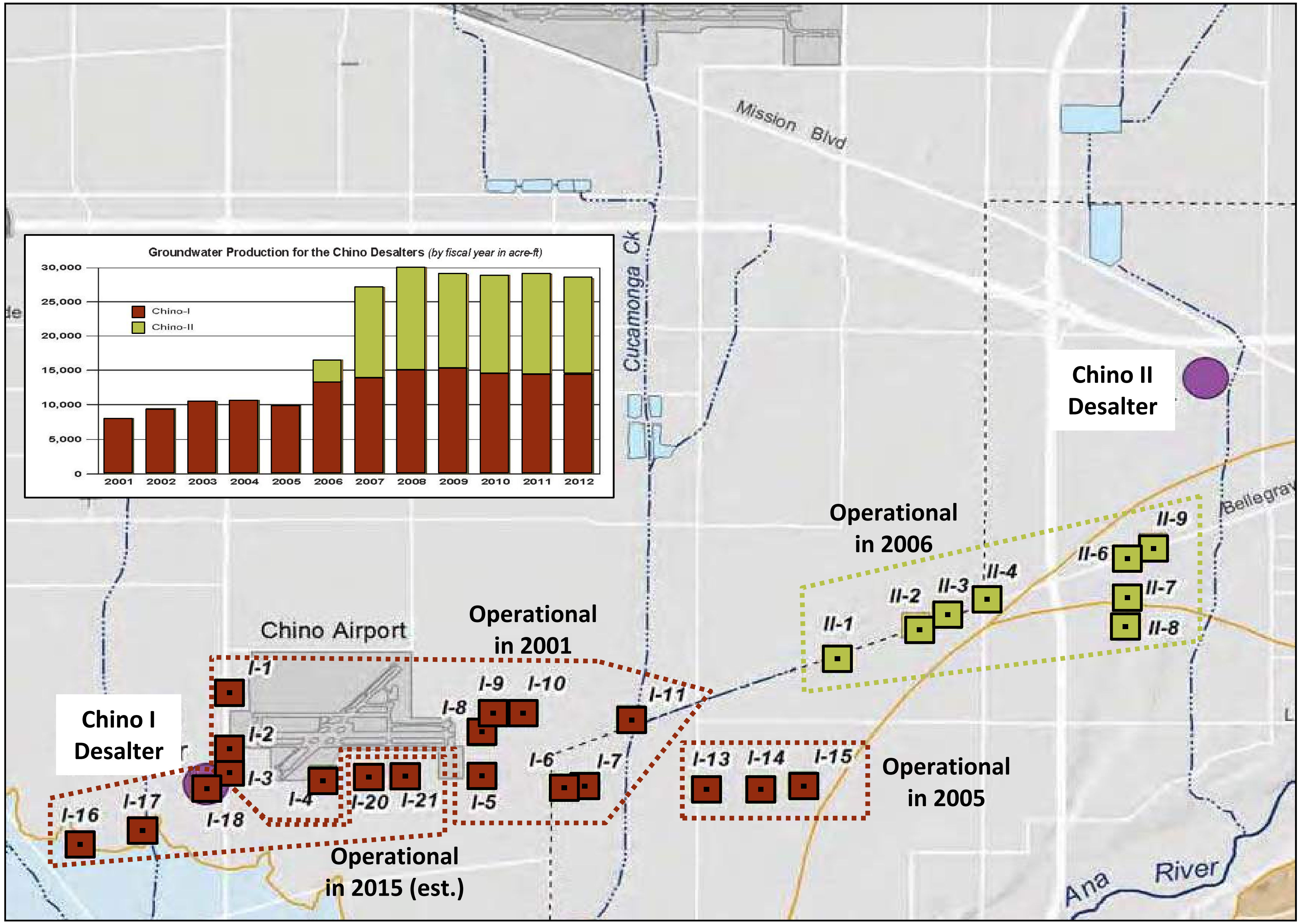
Chino Basin Watermaster, 2011 (private residence split sampling results).
City of Ontario, email communication, 6 September 2011 (Chino Desalter Authority well sampling results).
Environmental Engineering and Contracting, Inc. ("EEC"), 2014, Private Property Sampling Report, Ontario, California, 15 May 2014.
Erler & Kalinowski, Inc., 2011, Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California, 13 October 2011.
Wildermuth Environmental, Inc. ("WEI"), 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010. No laboratory reports included.
Dudek, 2013. TCE Data Request, includes Chino Basin Watermaster data for private wells from 1 January 2010 through 2 November 2010, CDA wells from 1 January 2010 through 11 December 2012.
Erler & Kalinowski, Inc. ("EKI"), 2011, Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California, 13 October 2011.

Erler & Kalinowski, Inc.

2010 Hydraulic Gradient Directions in Vicinity of TCE Plume

Central Chino Basin
Ontario, CA
November 2014
EKI A80039.02
Figure 2-3

Path: X:\A80039\Maps\2014\11\Figure 2-3 - Hydraulic Gradient in Vicinity of TCE Plume.mxd



Legend

Desalter Treatment Facility

Desalter Wells

Chino-I Desalter Well

Chino-II Desalter Well

Notes

1. Figure adapted from Exhibit 11 of Chino Basin Water Master 2012 State of the Basin Atlas (Wildermuth, 2013).
2. Operational year information from Chino Basin Desalter Authority 2010 Urban Water Management Plan (CDA/IEUA/WMWD, 2011).

Erler & Kalinowski, Inc.

Operational Year and Total Production of CDA Desalter Wells

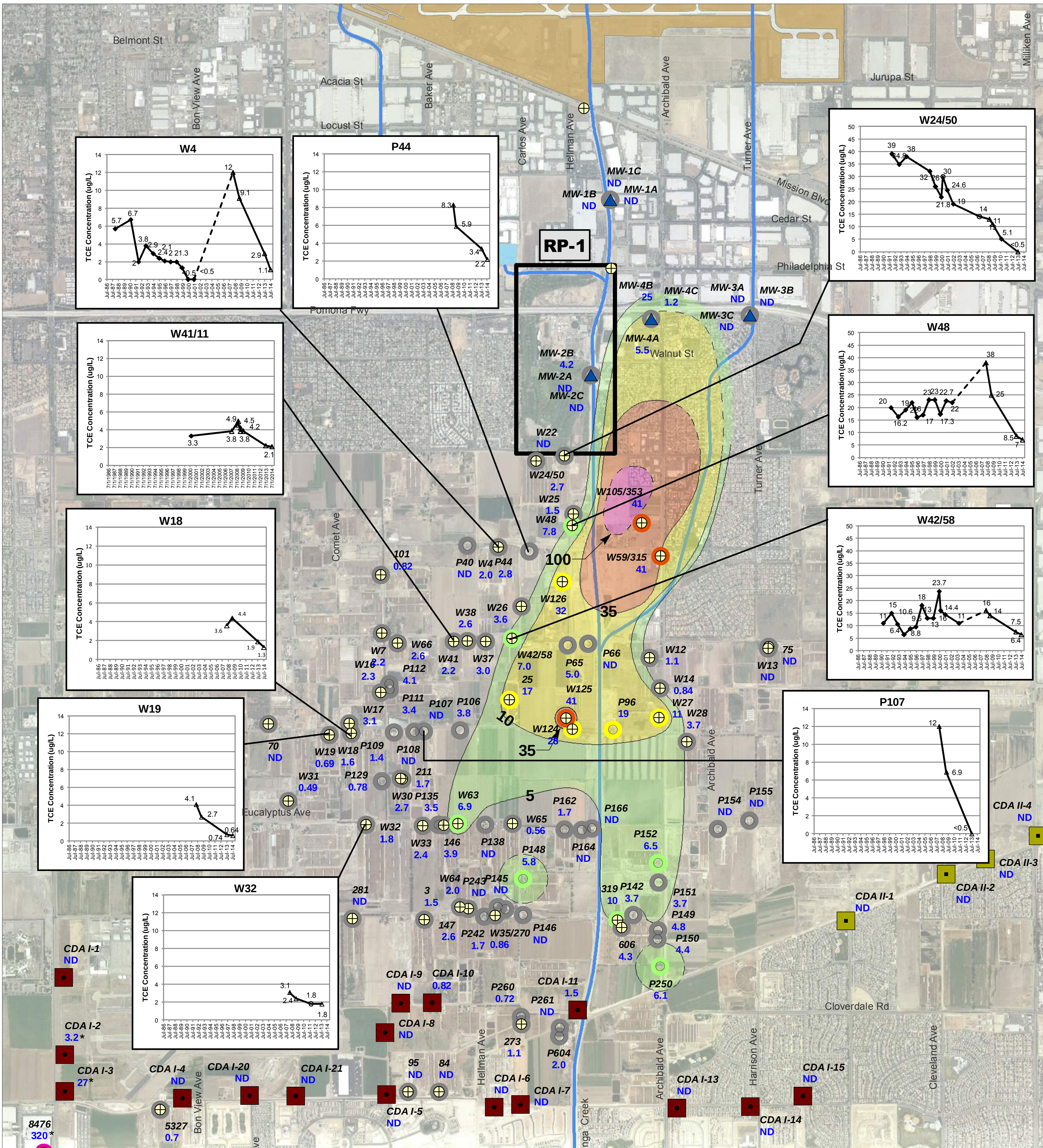
Central Chino Basin

Ontario, CA

November 2014

EKI A80039.02

Figure 2-4



Legend

Ontario International Airport

Ely Basins

Artificial Channel

Monitoring Well Cluster

Well

Private Residence Location Where No Well was Identified (note 4)

ND Not Detected at a Detection Limit of 0.5 µg/L

0.6 Average TCE Concentration (note 3)

W36 Well ID

P109 Private Residence ID

Chino I Desalter Wells

Chino II Desalter Wells

Trichloroethene ("TCE") Concentration (µg/L)

- 100.01 - 150
- 35.001 - 100
- 10.001 - 35
- 5.001 - 10
- ≤ 5 or Not Detected ("ND")

Abbreviations

µg/L = micrograms per liter

* = TCE associated with the Chino Airport Plume

0 2,500 5,000

(Approximate Scale in Feet)

N

Notes

1. All locations are approximate.
2. Samples were collected between 1 January 2010 and 16 July 2014.
3. Concentrations shown are the average TCE concentrations detected during sampling events between 1 January 2010 and 16 July 2014. When multiple Private Residence locations are known to correspond to a single well, data from each Private Residence is used in calculating the average for a given sampling event. When duplicate samples were collected from the same location during a given event, the average is calculated using the higher of the values. When a sample result is non-detect ("ND"), a value of half the detection limit is used in calculating the average.
4. Where samples were collected from a residence with an identified well, TCE concentrations are posted at the identified well location. Where no well was identified, TCE concentrations are posted at the sample collection location.
5. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.
6. Symbols on graphs indicate the data source as follows: empty circle = CBWM, empty diamond = Dudek, empty triangle = EEC, filled diamond = RWQCB.

References

Chino Basin Watermaster, 2011 (private residence split sampling results).

City of Ontario, email communication, 6 September 2011 (Chino Desalter Authority well sampling results).

Environmental Engineering and Contracting, Inc. ("EEC"), 2014, Private Property Sampling Report, Ontario, California, 15 May 2014.

Erler & Kalinowski, Inc., 2011, Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California, 13 October 2011.

Wildermuth Environmental, Inc. ("WEI"), 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010. No laboratory reports included.

Dudek, 2013. TCE Data Request, includes Chino Basin Watermaster data for private wells from 1 January 2010 through 2 November 2010, CDA wells from 1 January 2010 through 11 December 2012.

Erler & Kalinowski, Inc.

Average TCE Concentration, 2010-2014 with TCE Trends at Selected Locations on the West Side of the TCE Plume

Central Chino Basin

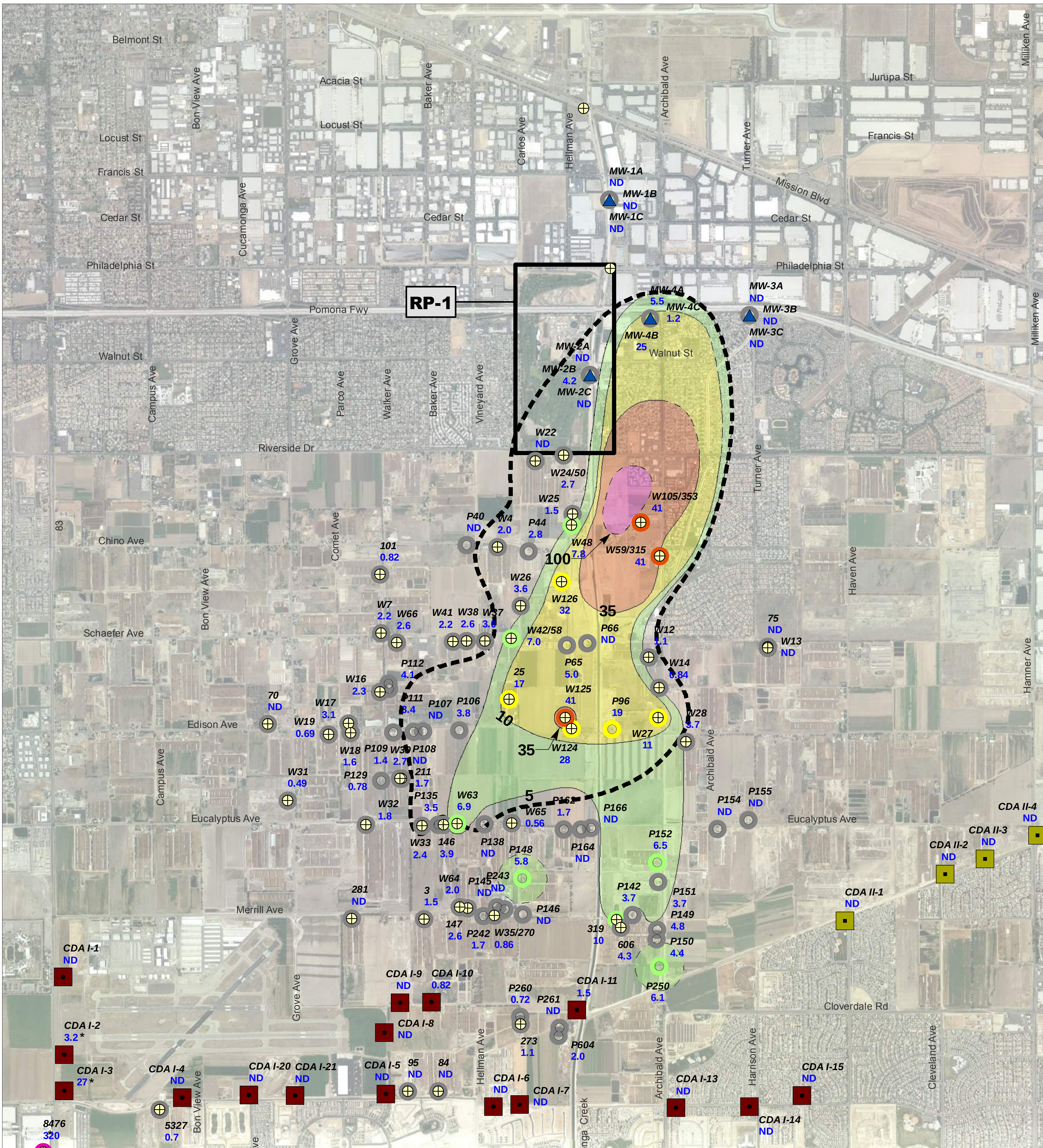
Ontario, CA

November 2014

EKI A80039.02

Figure 3-1

Path: X:\A80039\Maps\2014\11\Figure 3-1 - Average TCE Concentration 2010-2014 w Trend graphs W side.mxd



Legend

Ontario International Airport

Ely Basins

Artificial Channel

Monitoring Well Cluster

Well

Private Residence Location Where No Well was Identified (note 4)

ND Not Detected at a Detection Limit of 0.5 µg/L

0.6 Average TCE Concentration (note 3)

W36 Well ID

P109 Private Residence ID

Chino I Desalter Wells

Chino II Desalter Wells

Trichloroethene ("TCE") Concentration (µg/L)

- 100.01 - 150
- 35.001 - 100
- 10.001 - 35
- 5.001 - 10
- ≤ 5 or Not Detected ("ND")

5 µg/L TCE Contour in 2006-2009

Abbreviations

µg/L = micrograms per liter

* = TCE associated with the Chino Airport Plume

0 2,500 5,000

(Approximate Scale in Feet)

N

Notes

1. All locations are approximate.
2. Samples were collected between 1 January 2010 and 16 July 2014.
3. Concentrations shown are the average TCE concentrations detected during sampling events between 1 January 2010 and 16 July 2014. When multiple Private Residence locations are known to correspond to a single well, data from each Private Residence is used in calculating the average for a given sampling event. When duplicate samples were collected from the same location during a given event, the average is calculated using the higher of the values. When a sample result is non-detect ("ND"), a value of half the detection limit is used in calculating the average.
4. Where samples were collected from a residence with an identified well, TCE concentrations are posted at the identified well location. Where no well was identified, TCE concentrations are posted at the sample collection location.
5. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.

References

Chino Basin Watermaster, 2011 (private residence split sampling results).

City of Ontario, email communication, 6 September 2011 (Chino Desalter Authority well sampling results).

Environmental Engineering and Contracting, Inc. ("EEC"), 2014, Private Property Sampling Report, Ontario, California, 15 May 2014.

Erler & Kalinowski, Inc., 2011, Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California, 13 October 2011.

Wildermuth Environmental, Inc. ("WEI"), 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010. No laboratory reports included.

Dudek, 2013. TCE Data Request, includes Chino Basin Watermaster data for private wells from 1 January 2010 through 2 November 2010, CDA wells from 1 January 2010 through 11 December 2012.

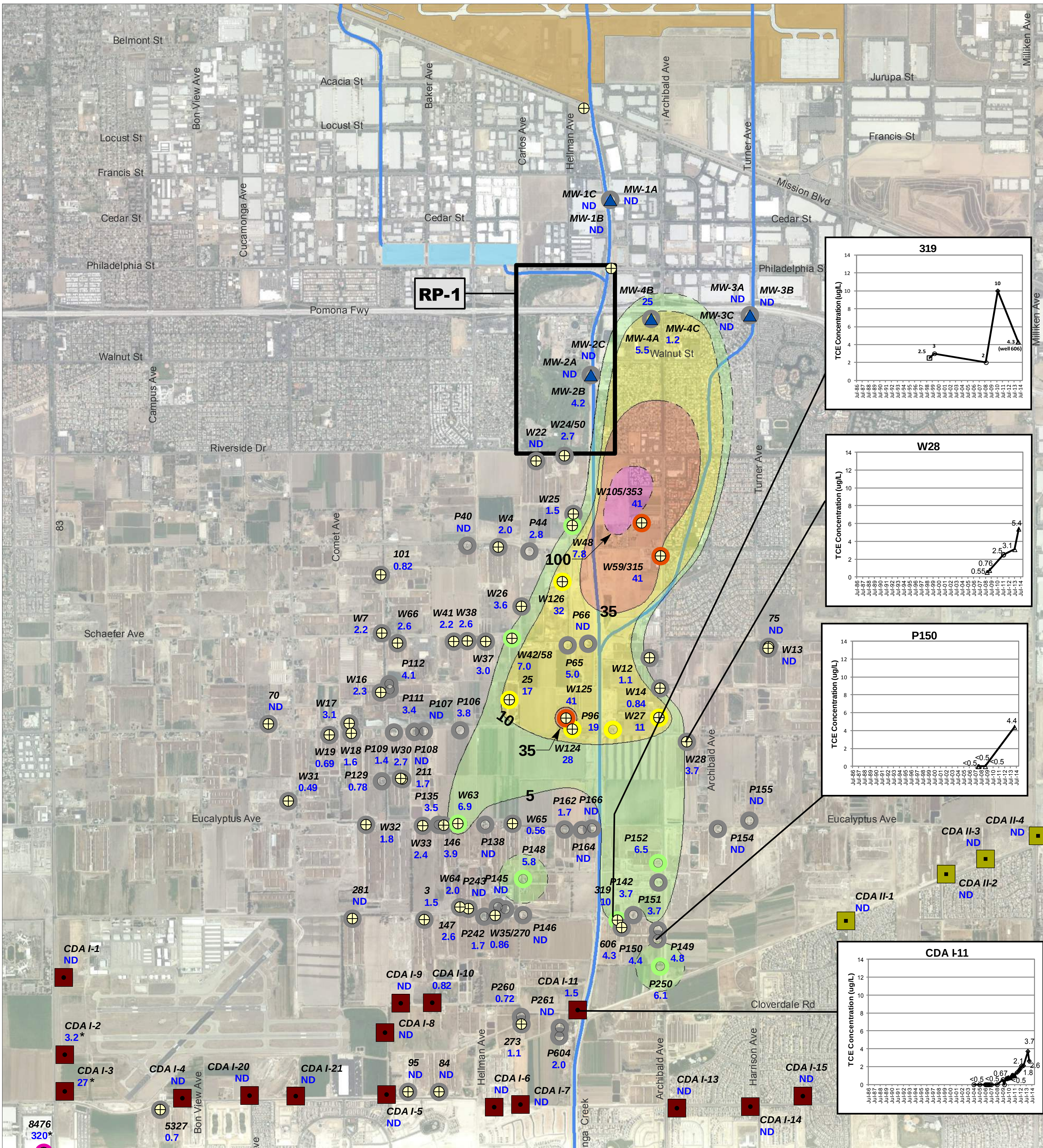
Erler & Kalinowski, Inc.

Average TCE Concentration, 2010-2014 with 2006-2009 5 ug/L Contour Overlain

Central Chino Basin
Ontario, CA
November 2014
EKI A80039.02

Figure 3-2

Path: X:\A80039\Maps\2014\11\Figure 3-2 - Average TCE Concentration 2010-2014 w 2006-09 contour.mxd



0 2,500 5,000
(Approximate Scale in Feet)

N

Legend

Ontario International Airport
Ely Basins
Artificial Channel
Monitoring Well Cluster
Well
Private Residence Location Where No Well was Identified (note 4)
ND Not Detected at a Detection Limit of 0.5 µg/L
0.6 Average TCE Concentration (note 3)
W36 Well ID
P109 Private Residence ID
Chino I Desalter Wells
Chino II Desalter Wells

Trichloroethene ("TCE") Concentration (µg/L)

100.01 - 150
35.001 - 100
10.001 - 35
5.001 - 10
≤ 5 or Not Detected ("ND")

Abbreviations

µg/L = micrograms per liter
* = TCE associated with the Chino Airport Plume

Notes

1. All locations are approximate.
2. Samples were collected between 1 January 2010 and 16 July 2014.
3. Concentrations shown are the average TCE concentrations detected during sampling events between 1 January 2010 and 16 July 2014. When multiple Private Residence locations are known to correspond to a single well, data from each Private Residence is used in calculating the average for a given sampling event. When duplicate samples were collected from the same location during a given event, the average is calculated using the higher of the values. When a sample result is non-detect ("ND"), a value of half the detection limit is used in calculating the average.
4. Where samples were collected from a residence with an identified well, TCE concentrations are posted at the identified well location. Where no well was identified, TCE concentrations are posted at the sample collection location.
5. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.
6. Symbols on graphs indicate the data source as follows: empty circle = CBWM, empty diamond = Dudek, empty triangle = EEC, empty square = Geotrans, Inc..

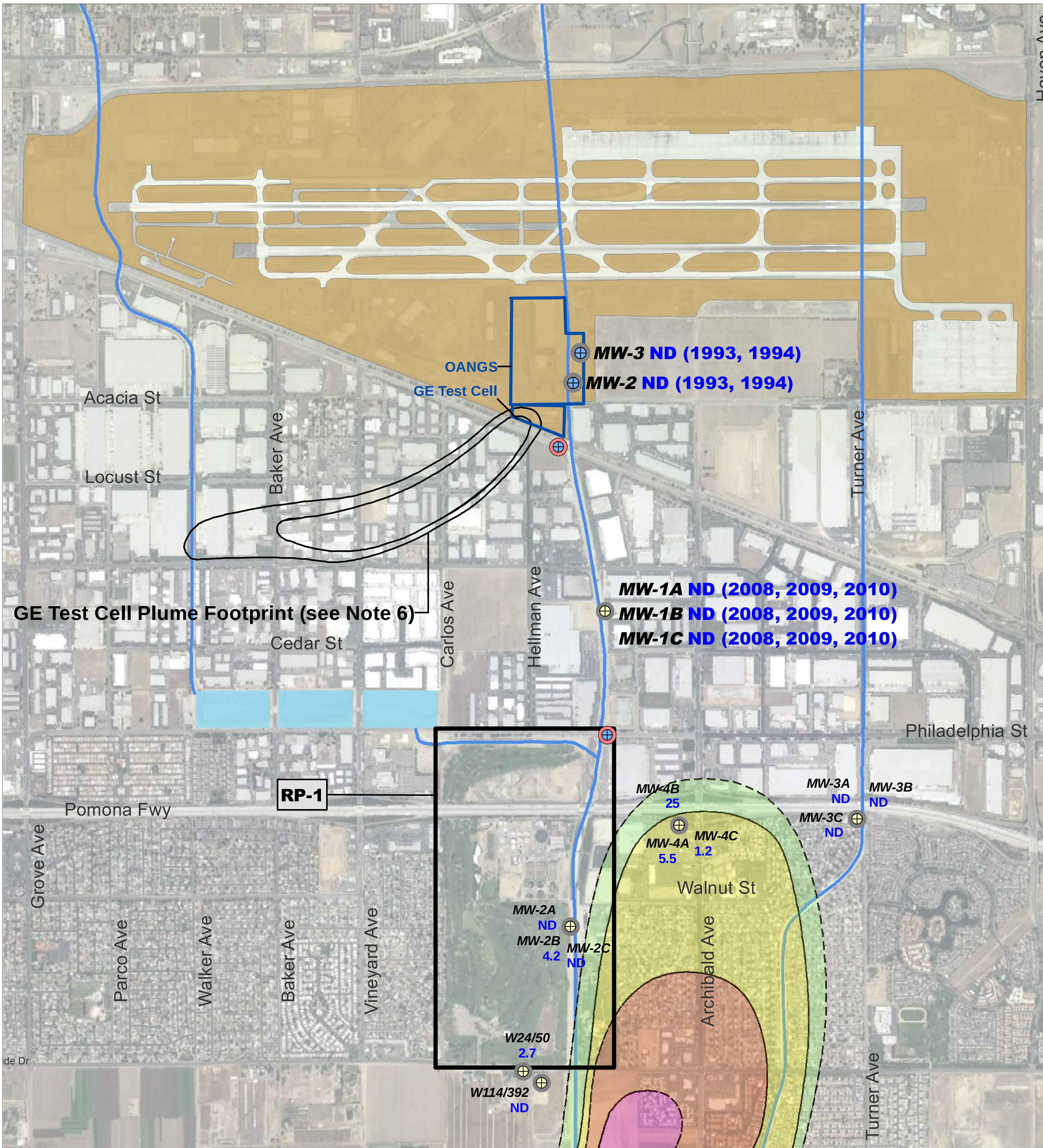
References

Chino Basin Watermaster, 2011 (private residence split sampling results).
City of Ontario, email communication, 6 September 2011 (Chino Desalter Authority well sampling results).
Environmental Engineering and Contracting, Inc. ("EEC"), 2014, Private Property Sampling Report, Ontario, California, 15 May 2014.
Erler & Kalinowski, Inc., 2011, Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California, 13 October 2011.
Wildermuth Environmental, Inc. ("WEI"), 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010. No laboratory reports included.
Dudek, 2013. TCE Data Request, includes Chino Basin Watermaster data for private wells from 1 January 2010 through 2 November 2010, CDA wells from 1 January 2010 through 11 December 2012.

Erler & Kalinowski, Inc.

Average TCE Concentration, 2010-2014 with TCE Trends at Selected Locations on the South Side of the TCE Plume
Central Chino Basin
Ontario, CA
November 2014
EKI A80039.02
Figure 3-3

Path: X:\A80039\Maps\2014\11\Figure 3-3 - Average TCE Concentration 2010-2014 w Trend graphs S side.mxd



Legend

	Ontario International Airport
	Ely Basins
	Artificial Channel
▲	Monitoring Well Cluster
⊕	Well
⊕	Well Between OIA and TCE Plume
⊕	City of Ontario Well Installed in Early 2013; Data not available
ND	Not Detected at a Detection Limit of 0.5 µg/L
0.6	Average TCE Concentration (note 3)
W36	Well ID

Trichloroethene ("TCE") Concentration (µg/L)

- 100.01 - 150
- 35.001 - 100
- 10.001 - 35
- 5.001 - 10
- ≤ 5 or Not Detected ("ND")

Abbreviations

µg/L	=	micrograms per liter
OANGS	=	Ontario Air National Guard Station
*	=	TCE Associated with the Chino Airport Plume

0 2,500 5,000

(Approximate Scale in Feet)

N

Notes

1. All locations are approximate.
2. Samples were collected between 1 January 2010 and 16 July 2014.
3. Concentrations shown are the average TCE concentrations detected during sampling events between 1 January 2010 and 12 May 2014. When multiple Private Residence locations are known to correspond to a single well, data from each Private Residence is used in calculating the average for a given sampling event. When duplicate samples were collected from the same location during a given event, the average is calculated using the higher of the values. When a sample result is non-detect ("ND"), a value of half the detection limit is used in calculating the average.
4. Where samples were collected from a residence with an identified well, TCE concentrations are posted at the identified well location. Where no well was identified, TCE concentrations are posted at the sample collection location.
5. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.
6. GE Test Cell plume is delineated on the southern side by monitoring wells OW-5 and OW-7 in which average TCE concentrations have been less than 0.5 ug/L since 2010.

References

Chino Basin Watermaster, 2011 (private residence split sampling results).
City of Ontario, email communication, 6 September 2011 (Chino Desalter Authority well sampling results).
Environmental Engineering and Contracting, Inc. ("EEC"), 2014, Private Property Sampling Report, Ontario, California, 15 May 2014.
Erler & Kalinowski, Inc., 2011, Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California, 13 October 2011.
Wildermuth Environmental, Inc. ("WEI"), 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010. No laboratory reports included.
Dudek, 2013. TCE Data Request, includes Chino Basin Watermaster data for private wells from 1 January 2010 through 2 November 2010, and CDA wells from 1 January 2010 through 11 December 2012.

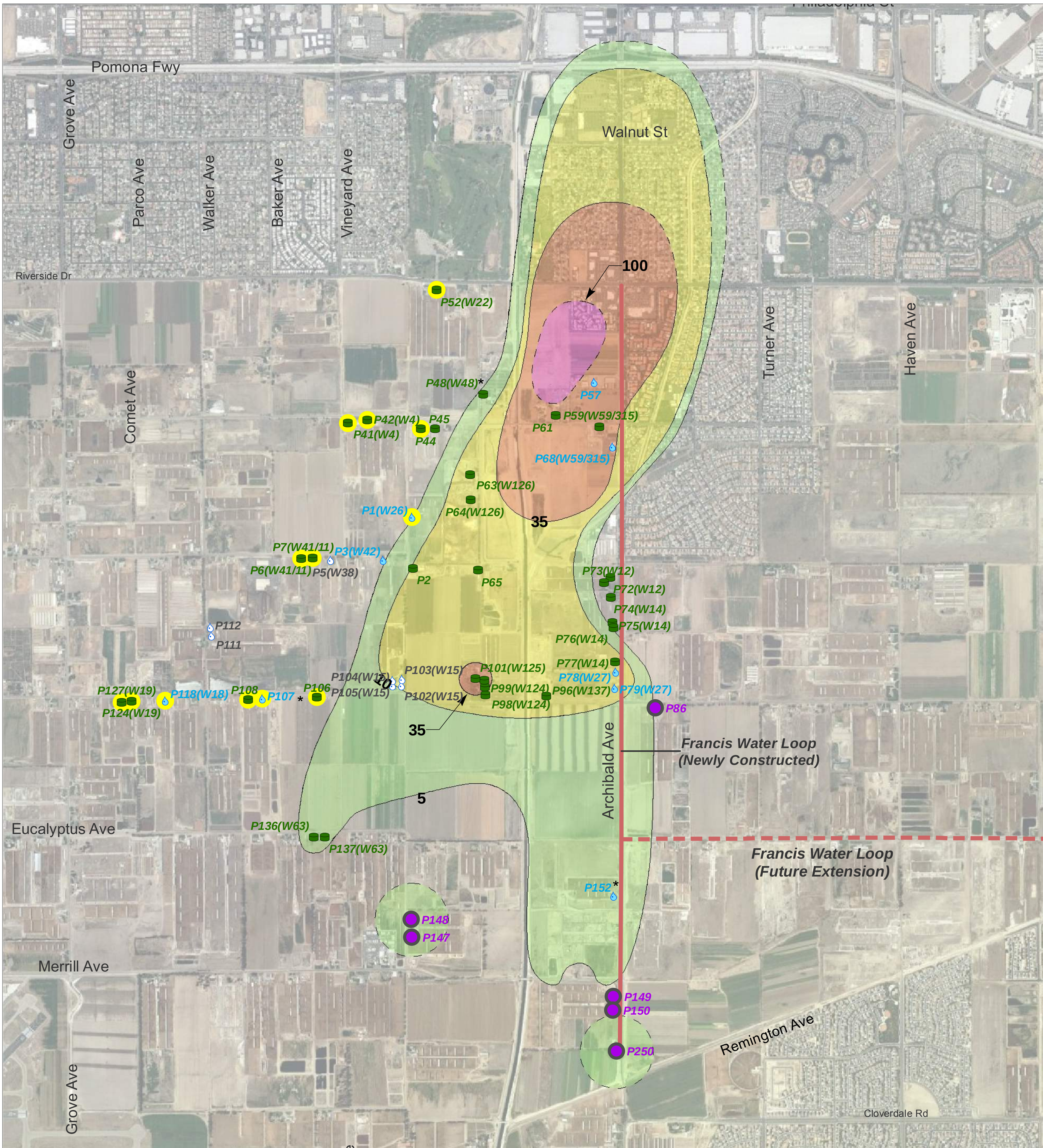
Erler & Kalinowski, Inc.

Groundwater Monitoring Wells Between OIA and TCE Plume

Central Chino Basin
Ontario, CA
November 2014
EKI A80039.02

Figure 3-4

Path: X:\A80039\Maps\2014\11\Figure 3-4 - GW_mon_wells_between_OIA_and_plume.mxd



Legend

	Ontario International Airport
	Ely Basins
	Artificial Channel
	City of Ontario Francis Water Loop (Dashed = Future Extension) (see Note 3)
	Chino I Desalter Wells
	Chino II Desalter Wells

Trichloroethene ("TCE") Concentration (µg/L)

	100.01 - 150
	35.001 - 100
	10.001 - 35
	5.001 - 10
	≤ 5 or Not Detected ("ND")

Alternative Water Supplies ("AWS")

- Location with Bottled Water Through AWS Program
- Location with Private Bottled Water
- Location with Tank System (may be shared)
- Location where Final AWS is To-Be-Determined or Pending, Currently Receiving Bottled Water
- Location on West Side of Plume with Tank System or Bottled Water Through AWS Program with Downward Trend in TCE and Current TCE Concentration Less than 4 ug/L

P52(W22)
Private Residence Location ID (see Note 4)
Associated Well ID (if known)

Abbreviations

µg/L = micrograms per liter

Notes

1. All locations are approximate.
2. Locations P42, P72, and P96 have tank systems and bottled water.
3. Location of City of Ontario Francis Water Loop based on personal communication, City of Ontario Utilities Department.
4. Locations with an asterisk (*) are commercial locations.

0 2,500 5,000

(Approximate Scale in Feet)

N

Erler & Kalinowski, Inc.

Status of Alternative Water Supply Program

Central Chino Basin
Ontario, CA
November 2014
EKI A80039.02

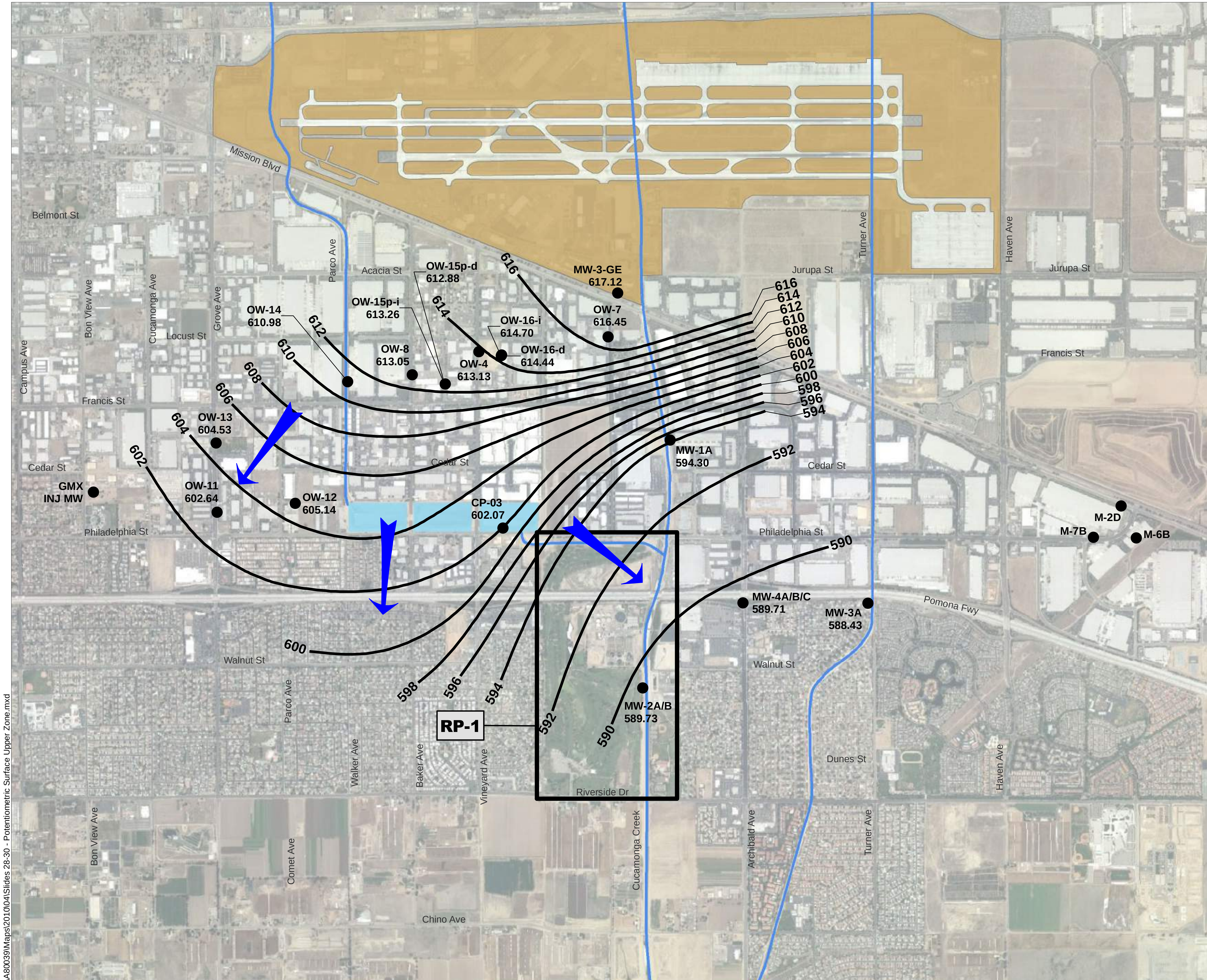
Figure 4-1

Path: X:\A80039\Maps\2014\11\Figure 4-1 - Average TCE Concentration 2010-2014_AWS.mxd

Appendix A

Figure 3-20 – Upper Zone Potentiometric Surface, June 2009

From EKI, 2011, Remedial Investigation Report Trichloroethene Plume, Central Chino Basin, Ontario, California, dated 13 October 2011



N

0 2,000 4,000

(Approximate Scale in Feet)

Legend

- Ontario International Airport
- Ely Basins
- Artificial Channel
- Water Elevation Contours
- Approximate Groundwater Gradient Direction

MW-3A 591.58

Water Level Gauging Location

Water Elevation (feet msl)

Abbreviation

msl = mean sea level

Notes

1. All locations are approximate.
2. Basemap obtained from Google Earth Pro., 2007.
3. All water level elevations are calculated based on measured depth to water and top of casing elevations resurveyed in April 2009.
4. The water level value posted for well MW-2 is an average of the water levels measured in wells MW-2A and MW-2B.
5. The water level value posted for well MW-4 is an average of the water levels measured in wells MW-4A, MW-4Band MW-4C.
6. Upper Zone wells are screened between approximately 600 feet msl and 400 feet msl.
7. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.

References

Geologic Associates, 2009, County of San Bernadino Water Quality Monitoring Report First Quarter 2009 Team B Volume I, April 2009.
Geosyntec Consultants, 2009, Fourth Quarter 2008 Groundwater Monitoring Report GE Engine Services Test Cell Facility, 2264 Avion Place, Ontario, California, 20 January 2009.

Erler & Kalinowski, Inc.

Upper Zone Potentiometric Surface, June 2009

Central Chino Basin
Ontario, CA
October 2011
EKI A80039.00
Figure 3-20

X:\A80039\Maps\2010041\Slides 28-30 - Potentiometric Surface Upper Zone.mxd

Appendix B

Private Property Sampling Report, Ontario, California

Environmental Engineering and Contracting, Inc., dated 27 May 2014

And

Private Property Sampling Report, Ontario, California

Environmental Engineering and Contracting, Inc., dated 6 October 2014

PRIVATE PROPERTY SAMPLING REPORT
ONTARIO, CALIFORNIA

May 27, 2014

Prepared By:

Environmental Engineering and Contracting, Inc.
501 Parkcenter Drive
Santa Ana, California 92705
EEC Job S1958.03T

Jim Kolk
Senior Project Engineer

Mark Zeko, PG, CHG
Principal Hydrogeologist

TABLES OF CONTENTS

TABLES

FIGURES

APPENDICES

Private Property Sampling Report
Ontario, California

1.0 INTRODUCTION AND BACKGROUND

Five rounds of sampling have now been conducted for several volatile organic compounds (VOCs) including trichloroethylene (TCE) in the area south of Riverside Drive in the City of Ontario. Those sampling rounds are roughly described as follows:

- Sampling conducted between December 2007 and October 2008, with a small number of samples collected thereafter;
- Sampling conducted between February 2009 and March 2009, with a small number of samples collected thereafter;
- Sampling undertaken by the Chino Basin Water Master was conducted between August 2011 and December 2011, with a small number of samples collected thereafter;
- Sampling conducted between July 2013 and August 2013;
- Sampling conducted between March 2014 and May 2014.

A consulting firm conducted the first two rounds of sampling on behalf of private companies, and in cooperation with the Regional Water Board. The Chino Basin Water Master conducted the third round of sampling where split samples were collected by a consulting firm in conjunction with the Chino Basin Water Master. A consulting firm conducted the fourth and fifth rounds of sampling on behalf of public agencies and private companies, and in cooperation with the Regional Water Board.

The sampling protocol utilized is described in Appendix A. The split sampling undertaken in connection with the third round of sampling was also conducted in general conformance with this protocol.

2.0 SAMPLING RESULTS

The following tables and figures provide a summary of each sampling event. The TCE concentrations and sampling identification numbers are listed in Table 1. The sampling locations and TCE concentration ranges for each location are depicted in Figure 1. The results for all other constituents analyzed are listed in Table 2 through Table 11.

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	7.4	1	10-Mar-09	Dairy Tap	9.8	NS				NS				NS			
		1-D			7.1	1-D			10												
2	Unknown	2	25-Oct-08	House Tap	16	NS				NS				NS				NS			
		2-D			15																
3	W42	3	27-Jun-08	Kitchen Tap	16	3	19-Mar-09	Kitchen Tap	14	NS				3	17-Jul-13	Kitchen Tap	7.5	NS			
		3-D			16	3-D			14					3-D			7.5				
4	W37	4	4-Oct-08	Kitchen Tap	3.6	4	7-Mar-09	Kitchen Tap	3.5	4	21-Dec-11	Kitchen Tap	2.6	4	17-Jul-13	Kitchen Tap	3.2	NS			
		4-D			3.7	4-D			3.5	4-D			2.5	4-D			3.3				
5	W38	5	4-Oct-08	Dairy Tap	4.1	5	7-Mar-09	Hose Bib	3.3	NS				5	1-Aug-13	Kitchen Tap	2.6	NS			
		5-D			3.8	5-D			3.3					5-D			2.6				
6	W41	6	4-Oct-08	Dairy Tap	4.7	6	19-Mar-09	Restroom Tap	3.7	NS				6	17-Jul-13	Well supply	2.2	NS			
		6-D			4.9	6-D			3.8					6-D			2.2				
7		7	25-Oct-08	Outside Tap	4.5	7	7-Mar-09	Outside Tap	3.9	NS				NS				NS			
		7-D			4.1	7-D			4.2												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	2.4	NS				NS			
										9-D			2.2								
10		NS				NS				10	29-Aug-11	Kitchen Tap	2.3	NS				NS			
										10-D			2.3								
11		NS				NS				11	29-Aug-11	Kitchen Tap	2.2	NS				NS			
										11-D			2.2								
12	W7	12	7-Feb-08	Dairy Tap	3.3	12	6-Mar-09	Dairy Tap	3.4	12	24-Aug-11	Kitchen Tap	2.0	12	6-Aug-13	Well Supply	1.6	NS			
		12-D			3.3	12-D			3.6	12-D			2.1	12-D			1.5				
13	W6	13	25-Oct-08	House Tap	0.96	NS				NS				NS				NS			
		13-D			0.99																
14		14	25-Oct-08	Kitchen Tap	0.92	NS				NS				NS				NS			
		14-D			0.88																
15		15	11-Dec-07	House Tap	1.6	15	5-Mar-09	Kitchen Tap	0.72	NS				NS				NS			
		15-D			1.4	15-D			0.78												
17	W5	17	6-Feb-08	Kitchen Tap	0.95	17	5-Mar-09	Outside Tap	0.81	NS				NS				NS			
		17-D			0.95	17-D			0.79												
18	Unknown	18	27-Jun-08	Outside Tap	0.77	NS				NS				NS				NS			
		18-D			0.72																
19	W1	19	3-Dec-07	House Tap	1.2	19	5-Mar-09	House Tap	0.87	NS				NS				NS			
		19-D			1.1	19-D			0.88												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	1.3	NS				NS				NS			
		32-D			ND (0.50)	32-D			1.3												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	11	41	5-Mar-09	Kitchen Tap	7.7	NS				41	29-Jul-13	Well Supply	2.9	NS			
		41-D			12	41-D			7.7					41-D			2.7				
42		42	22-Feb-08	Kitchen Tap	9.7	42	5-Mar-09	Kitchen Tap	8.9	NS				NS				NS			
		42-D			9.6	42-D			8.9												
43		43	22-Feb-08	Kitchen Tap	10	43	5-Mar-09	Kitchen Tap	9	NS				NS				NS			
		43-D			9.6	43-D			9.1												
44	Unknown	44	27-Sep-08	Kitchen Tap	7.3	44	19-Mar-09	Kitchen Tap	5.9	NS				44	25-Jul-13	Well Supply	3.1	NS			
		44-D			8.3	44-D			5.6					44-D			3.4				
45	Unknown	45	27-Sep-08	House Tap	7.7	45	10-Mar-09	Kitchen Tap	4.4	NS				NS				NS			
		45-D			7.6	45-D			4.6												
46	Unknown	46	18-Apr-08	Kitchen Tap	21	NS				NS				NS				NS			
		46-D			22																
48	W48	48	16-Apr-08	Kitchen Tap	38	48	11-Mar-09	Kitchen Tap	25	NS				48	25-Jul-13	Well Supply	7.9	NS			
		48-D			38	48-D			25					48-D			8.5				
49	Unknown	49	25-Oct-08	Kitchen Tap	1.7	49	7-Mar-09	Kitchen Tap	1.4	49	22-Aug-11	Kitchen Tap	1.2	NS				NS			
		49-D			1.8	49-D			1.4	49-D			1.3								
50	W25	50	4-Feb-08	Outside Tap	1.7	50	7-Mar-09	Kitchen Tap	1.6	50	22-Aug-11	Kitchen Tap	1.6	NS				NS			
		50-D			1.6	50-D			1.6	50-D			1.6								
51	Unknown	51	27-Sep-08	Outside Tap	13	51	11-Mar-09	Kitchen Tap	7.9	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			13	51-D			8.6	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	15	52	11-Mar-09	Barn Tap	7.8	NS				NS				NS			
		52-D			15	52-D			8												
53	W24	53	27-Sep-08	Outside Tap	13	NS				NS				NS				NS			
		53-D			13																
		53	25-Oct-08	Kitchen Tap	13	NS				NS				NS				NS			
		53-D			13																
54		54	25-Oct-08	Kitchen Tap	11	54	10-Mar-09	Kitchen Tap	10	NS				NS				NS			
		54-D			11	54-D			9.6												
55		55	25-Oct-08	Kitchen Tap	10	55	10-Mar-09	Kitchen Tap	10	NS				NS				NS			
		55-D			9.3	55-D			11												
56		56	25-Oct-08	Outside Tap	12	56	10-Mar-09	Kitchen Tap	11	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			12	56-D			10					56-D			ND (0.50)				

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	80	57	11-Mar-09	Kitchen Tap	43	NS				NS				NS			
		57-D			72	57-D			44												
59	W59	59	1-Jul-08	Kitchen Tap	55	59	7-Mar-09	Outside Tap	70	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	36	59	28-Mar-14	Well Supply (outside hose bib)	45
		59-D			57	59-D			71	59-D			ND (0.50)[2]	59-D			36	59-D			45
61	Unknown	61	27-Sep-08	Kitchen Tap	91	61	11-Mar-09	Kitchen Tap	79	NS				NS				NS			
		61-D			85	61-D			63												
62	W62	62	1-May-08	Barn Tap	140	62	11-Mar-09	Kitchen Tap	72	NS				NS				NS			
		62-D			140	62-D			65												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	32	NS			
														63-D			32				
64	W126	NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	29	NS			
														64-D			32				
65	Unknown	65	25-Jun-08	Kitchen Tap	20	65	7-Mar-09	Kitchen Tap	16	NS				NS				NS			
		65-D			19	65-D			15												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND (0.50)	66	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
						66-D			ND (0.50)	66-D			ND (0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	46	NS				68R	2-Apr-14	Well Sample Port	38
										68-D			46					68R-D			39
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	9.8	72	12-Mar-09	Kitchen Tap	8.1	NS				72	29-Jul-13	Well Supply	0.8	NS			
		72-D			9.8	72-D			7.9					72-D			1.1				
73	W12	73	4-Oct-08	House Tap	9.0	73	12-Mar-09	Barn Tap	7.7	NS				NS				NS			
		73-D			9.1	73-D			8												
74	W14	74	25-Oct-08	Outside Tap	13	74	19-Mar-09	Outside Tap	12	NS				NS				NS			
		74-D			13	74-D			12												
75	W14	75	25-Oct-08	Outside Tap	18	75	12-Mar-09	Kitchen Tap	13	NS				NS				NS			
		75-D			18	75-D			14												
76	W14	76	25-Jun-08	Kitchen Tap	19	76	12-Mar-09	Kitchen Tap	13	NS				NS				NS			
		76-D			19	76-D			13												
77	W14	77	25-Oct-08	Outside Tap	12	77	19-Mar-09	Outside Tap	17	NS				77	18-Jul-13	Outside Tap	0.89	NS			
		77-D			13	77-D			17					77-D			0.93				

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
78	W27	78	4-Oct-08	Outside Tap	50	78	12-Mar-09	Kitchen Tap	42	78	12-Sep-11	Kitchen Tap	11	NS				NS			
		78-D			49	78-D			44	78-D			11								
79		79	4-Feb-08	Kitchen Tap	37	79	11-Mar-09	Kitchen Tap	37	NS				NS				NS			
		79-D			37	79-D			38												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	0.55	86	11-Mar-09	Kitchen Tap	0.76	86	17-Aug-11	Kitchen Tap	2.2	86	1-Aug-13	Kitchen Tap	3.1	86	20-Mar-14	Kitchen Tap	4.9
		86-D			0.54	86-D			0.75	86-D			2.2	86-D			3.1	86-D			5.4
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	0.98	96	11-Mar-09	Kitchen Tap	0.87	NS				96	1-Aug-13	Kitchen Tap	13	96	20-Mar-14	Kitchen Tap	23
		96-D			1.1	96-D			0.89					96-D			14	96-D			24
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	18	NS				98	24-Mar-14	Well Supply (outside hose bib)	35
										98-D			18					98-D			39
99		NS				NS				99	26-Oct-11	Kitchen Tap	13	NS				NS			
										99-D			15								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	46	101	28-Mar-14	Well Supply (outside hose bib)	35
														101-D			45	101-D			49
102	W15	102	4-Dec-08	Kitchen Tap	26	102	19-Mar-09	Outside Tap	20	NS				NS				NS			
		102-D			26	102-D			20												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	25	105	12-Mar-09	Outside Tap	26	NS				NS				NS			
		105-D			24	105-D			24												
		105	17-Dec-08	Kitchen Tap (RO)	23	NS				NS				NS				NS			
		105-D			24																
106	Unknown	NS				106	1-Oct-09	Outside Tap	4.3	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			4.6	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	12	107	6-Mar-09	Kitchen Tap	6.9	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			11	107-D			6.8					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	5.9	108	5-Mar-09	Kitchen Tap	7.8	NS				NS				NS			
		108-D			5.8	108-D			7.6												

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	1.4	NS				NS				NS			
						109-D			1.4												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	4.5	111	6-Aug-13	Well Supply	2	NS			
										111-D			4.5	111-D			1.7				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	4.6	112	1-Aug-13	Kitchen Tap	3.1	NS			
										112-D			4.8	112-D			3.3				
113	W16	113	25-Jun-08	Kitchen Tap	3.8	113	5-Mar-09	Kitchen Tap	3.6	113	17-Aug-11	Kitchen Tap	3.1	113	13-Aug-13	Barn Tap	0.74	NS			
		113-D			3.6	113-D			3.4	113-D			3.0	113-D			0.72				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	0.65	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			0.61	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	0.74	117	19-Mar-09	House Tap	0.65	NS				NS				NS			
		117-D			0.71	117-D			0.62												
118	W18	118	24-Apr-08	Outside Tap	4.4	118	7-Mar-09	Kitchen Tap	3.5	NS				118	17-Jul-13	Kitchen Tap	1.9	NS			
		118-D			4.4	118-D			3.6					118-D			1.9				
119	W17	119	3-Dec-07	Kitchen Tap	3.7	119	5-Mar-09	Kitchen Tap	1.8	119	22-Aug-11	Kitchen Tap	3.3	119	17-Jul-13	Kitchen Tap	2.8	NS			
		119-D			3.7	119-D			1.8	119-D			3.2	119-D			3.4				
121		121	21-Dec-07	Kitchen Tap	3.8	121	5-Mar-09	Kitchen Tap	2	NS				NS				NS			
		121-D			3.9	121-D			1.9												
122		122	21-Dec-07	Kitchen Tap	3.6	122	5-Mar-09	Kitchen Tap	2.4	NS				NS				NS			
		122-D			3.6	122-D			2.2												
127	W19	127	16-Apr-08	Kitchen Tap	4.1	127	7-Mar-09	Kitchen Tap	2.7	NS				127	17-Jul-13	Well Supply	0.71	NS			
		127-D			3.9	127-D			2.4					127-D			0.74				
128	W32	128	6-Feb-08	Kitchen Tap	3.1	128	7-Mar-09	Kitchen Tap	2.4	128	18-Oct-11	Kitchen Tap	1.7	128	6-Aug-13	Kitchen Tap	1.4	NS			
		128-D			3.1	128-D			2.4	128-D			1.6	128-D			1.8				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	0.74	NS			
														129-D			0.78				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	2.5	130	19-Jul-13	Kitchen Tap	3.7	NS			
										130-D			2.4	130-D			3.7				
131	W30	131	24-Apr-08	Kitchen Tap	2.0	131	6-Mar-09	Kitchen Tap	3.4	131	23-Aug-11	Kitchen Tap	0.75	131	19-Jul-13	Kitchen Tap	3.5	NS			
		131-D			2.0	131-D			3.4	131-D			0.61	131-D			3.5				
134	W33	134	7-Feb-08	Kitchen Tap	5.3	134	26-Feb-09	Kitchen Tap	4.9	NS				134	1-Aug-13	Kitchen Tap	2.3	NS			
		134-D			5.1	134-D			4.8					134-D			2.4				

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	2.7	NS				135	19-Jul-13	Kitchen Tap	3.8	NS			
						135-D			3.0					135-D			3.9				
136	W63	NS				136	1-Apr-11	Kitchen Tap	5.8	NS				NS				NS			
						136-D			5.9												
137		NS				137	1-Apr-11	Kitchen Tap	5.4	NS				137	19-Jul-13	Well Supply	6.7	NS			
						137-D			5.4					137-D			5.5				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	0.69	NS				NS			
										139-D			0.63								
140		NS				NS				140	18-Aug-11	Kitchen Tap	0.53	NS				NS			
										140-D			0.59								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	0.68	NS			
														141-D			0.71				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	3.7
																		142-D			3.5
143	W35	143	3-Mar-08	Kitchen Tap	0.93	143	19-Feb-09	Kitchen Tap	0.98	143	18-Aug-11	Kitchen Tap	0.75	NS				NS			
		143-D			0.91	143-D			1	143-D			0.74								
144		144	29-Feb-08	Kitchen Tap	0.97	144	19-Feb-09	Kitchen Tap	0.96	144	18-Aug-11	Kitchen Tap	0.76	NS				NS			
		144-D			0.97	144-D			0.95	144-D			0.70								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	1.6	145	19-Feb-09	Non-Residential Kitchen Tap	1.2	145	21-Dec-11	Non-Residential Kitchen Tap	ND (0.50)	NS				NS			
		145-D			1.7	145-D			1.2	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	5.7
																		148-D			5.8
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	4.6
																		149-D			4.8
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	3.9
		150-D			ND (0.50)													150-D			4.4
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	3.7
																		151-D			3.7
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	6.5
																		152-D			6.4

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	1.6	162	1-Aug-13	Kitchen Tap	1.6	NS			
										165-D			1.5	162-D			1.5				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	0.92	222	26-Feb-09	Kitchen Tap	0.93	NS				NS				NS			
		222-D			0.91	222-D			0.85												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	0.9	227	18-Aug-11	Kitchen Tap	1.2	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			0.86	227-D			1.2	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	0.97	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			0.96	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	1.3	237	6-Mar-09	Kitchen Tap	1.4	NS				237	18-Jul-13	Kitchen Tap	1.5	NS			
		237-D			1.2	237-D			1.4					237-D			1.5				
239		NS				239	1-Apr-11	Kitchen Tap	1.4	NS				NS				NS			
						239-D			1.4												
240	W64 (CBWM W147)	NS				240	1-Apr-11	Kitchen Tap	1.4	NS				NS				W147	25-Apr-14	Outside Tap	2.6
						240-D			1.4									W147-D			2.2
241		NS				241	1-Apr-11	Kitchen Tap	1.5	NS				NS				NS			
						241-D			1.5												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	1.4
																		242-D			1.7
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	0.79
																		244-D			0.78
245		245	29-Feb-08	Kitchen Tap	1.0	245	10-Mar-09	Kitchen Tap	1.2	245	18-Aug-11	Kitchen Tap	0.82	245	18-Jul-13	Kitchen Tap	0.88	245	21-Mar-14	Kitchen Tap	0.91
		245-D			1.0	245-D			1.1	245-D			0.80	245-D			0.95	245-D			0.90
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	6.0
																		250-D			6.1

Table 1
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	1.0	254	5-Mar-09	Kitchen Tap	0.94	NS				NS				NS			
		254-D			1.1	254-D			1.1												
260	W135	260	5-Dec-07	Outside Tap	1.2	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	0.72
		260-D			1.1	260-D			ND (0.50)									260-D			0.71
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	1.6	300	12-Mar-09	Kitchen Tap	1.3	NS				NS				NS			
		300-D			1.6	300-D			1.4												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	2.0
																		604-D			1.8
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	4.2
																		606-D			4.3

Notes:
[1] Connection to private wells based on information provided by interviewed residents
[2] This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
[3] This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied by the City

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				NS				NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
																		68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
										68-D			ND (0.50)					68-D			ND (0.50) [3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[6]	NS				NS			
										69-D			ND (0.50)[6]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137	W63	NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140	W65	NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144	W35	144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148	Unknown	NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150	W131 (or W606 when needed)	150	3-Dec-07	Outside Tap	ND (0.50)	NS	NS	NS	NS	NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)	150-D												150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 2
Private Property Sampling Results - 1,1-Dichloroethane (1,1-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCA (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)					44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			0.51	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79	W27	79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99	W124	NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101	W125	NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
102	W15	102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104	W15	104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105	W15	105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
105	W15	105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
						116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137	W63	NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS								139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140	W65	NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144	W35	144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148	Unknown	NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150	W131 (or W606 when needed)	150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240	W64 (CBWM W147)	NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241	W64 (CBWM W147)	NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245	W35	245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 3
Private Property Sampling Results - 1,2-Dichloroethane (1,2-DCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)	Sample ID	Sample Date	Sample Location	1,2-DCA (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	30				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64	W126	NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73	W12	73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75	W14	75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76	W14	76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77	W14	77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
109	Unknown	109				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	111				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	112				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	1.8	115	6-Mar-09	Kitchen Tap	0.53	NS				NS				NS			
		115-D			1.8	115-D			0.63												
116	W9	116	15-Apr-08	Kitchen Tap	1.4	116	6-Mar-09	Kitchen Tap	0.88	NS				NS				NS			
		116-D			1.5	116-D			0.70												
		116(A)				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)					118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 4
Private Property Sampling Results - 1,1-Dichloroethene (1,1-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)	Sample ID	Sample Date	Sample Location	1,1-DCE (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	0.75	NS				NS				NS				NS			
		2-D			0.74																
3	W42	3	27-Jun-08	Kitchen Tap	0.71	3	19-Mar-09	Kitchen Tap	0.64	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			0.72	3-D			0.61					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	0.71	41	5-Mar-09	Kitchen Tap	0.67	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			0.86	41-D			0.67					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	0.81	42	5-Mar-09	Kitchen Tap	0.69	NS				NS				NS			
		42-D			0.81	42-D			0.69												
43		43	22-Feb-08	Kitchen Tap	0.77	43	5-Mar-09	Kitchen Tap	0.73	NS				NS				NS			
		43-D			0.75	43-D			0.74												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	0.56	NS				NS				NS				NS			
		46-D			0.58																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	0.58	NS			
														63-D			0.58				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	0.62	NS			
														64-D			0.62				
65	Unknown	65	25-Jun-08	Kitchen Tap	0.83	65	7-Mar-09	Kitchen Tap	0.8	NS				NS				NS			
		65-D			0.89	65-D			0.76												
66	Unknown	66				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	0.57	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			0.57	101-D			0.55
102	W15	102	4-Dec-08	Kitchen Tap	0.63	102	19-Mar-09	Outside Tap	0.60	NS				NS				NS			
		102-D			0.77	102-D			0.6												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	0.61	105	12-Mar-09	Outside Tap	0.69	NS				NS				NS			
		105-D			0.59	105-D			0.56												
		105	17-Dec-08	Kitchen Tap (RO)	0.63	NS				NS				NS				NS			
		105-D			0.62																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS								NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	S				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		140				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
154	W132	NS				NS				NS				NS				154 154-D	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50) ND (0.50)
155	W133	NS				NS				NS				NS				155 155-D	25-Apr-14	Kitchen Tap	ND (0.50) ND (0.50)
162	Unknown	NS				NS				165 165-D	17-Aug-11	Kitchen Tap	ND (0.50) ND (0.50)	162 162-D	1-Aug-13	Kitchen Tap	ND (0.50) ND (0.50)	NS			
164	Unknown	NS				NS				NS				166A 166A-D	19-Jul-13	Kitchen Tap	ND (0.50) ND (0.50)	NS			
166	W134	NS				NS				166 166-D	31-Aug-11	Kitchen Tap	ND (0.50) ND (0.50)	NS				166 166-D	20-Mar-14	Kitchen Tap	ND (0.50) ND (0.50)
208	W8	208 208-D	3-Dec-07	Kitchen Tap	ND (0.50) ND (0.50)	208 208-D	5-Mar-09	Kitchen Tap	ND (0.50) ND (0.50)	NS				NS				NS			
217	W11	217 217-D	11-Dec-07	Kitchen Tap	ND (0.50) ND (0.50)	217 217-D	26-Feb-09	Kitchen Tap	ND (0.50) ND (0.50)	NS				NS				NS			
222	W20	222 222-D	6-Dec-07	Kitchen Tap	ND (0.50) ND (0.50)	222 222-D	26-Feb-09	Kitchen Tap	ND (0.50) ND (0.50)	NS				NS				NS			
227	W31	227 227-D	6-Feb-08	Kitchen Tap	ND (0.50) ND (0.50)	227 227-D	7-Mar-09	Kitchen Tap	ND (0.50) ND (0.50)	227 227-D	18-Aug-11	Kitchen Tap	ND (0.50) ND (0.50)	227 227-D	6-Aug-13	Kitchen Tap	ND (0.50) ND (0.50)	NS			
234	Unknown	234 234-D	6-Dec-07	Dairy Sink	ND (0.50) ND (0.50)	234 234-D	19-Feb-09	Kitchen Tap	ND (0.50) ND (0.50)	234 234-D	8-Sep-11	Kitchen Tap	ND (0.50)[3] ND (0.50)[3]	234 234-D	18-Jul-13	Outside Tap	ND (0.50) ND (0.50)	NS			
237	W34	237 237-D	22-Apr-08	Kitchen Tap	ND (0.50) ND (0.50)	237 237-D	6-Mar-09	Kitchen Tap	ND (0.50) ND (0.50)	NS				237 237-D	18-Jul-13	Kitchen Tap	ND (0.50) ND (0.50)	NS			
239	W64 (CBWM W147)	NS				239 239-D	1-Apr-11	Kitchen Tap	ND (0.50) ND (0.50)	NS				NS				NS			
240	W64 (CBWM W147)	NS				240 240-D	1-Apr-11	Kitchen Tap	ND (0.50) ND (0.50)	NS				NS				W147 W147-D	25-Apr-14	Outside Tap	ND (0.50) ND (0.50)
241	W64 (CBWM W147)	NS				241 241-D	1-Apr-11	Kitchen Tap	ND (0.50) ND (0.50)	NS				NS				NS			
242	Unknown	NS				NS				NS				NS				242 242-D	25-Apr-14	Outside Tap	ND (0.50) ND (0.50)
243	W138	NS				NS				NS				NS				243 243-D	21-Mar-14	Kitchen Tap	ND (0.50) ND (0.50)
244	W35	NS				NS				NS				NS				244 244-D	2-Apr-14	Non-Residential Outside Tap	ND (0.50) ND (0.50)
245	W35	245 245-D	29-Feb-08	Kitchen Tap	ND (0.50) ND (0.50)	245 245-D	10-Mar-09	Kitchen Tap	ND (0.50) ND (0.50)	245 245-D	18-Aug-11	Kitchen Tap	ND (0.50) ND (0.50)	245 245-D	18-Jul-13	Kitchen Tap	ND (0.50) ND (0.50)	245 245-D	21-Mar-14	Kitchen Tap	ND (0.50) ND (0.50)
250	Unknown	NS				NS				NS				NS				250 250-D	25-Apr-14	Kitchen Tap	ND (0.50) ND (0.50)

Table 5
Private Property Sampling Results - cis-1,2-Dichloroethene (c-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	c-1,2-DCE (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)									NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239		NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240	W64 (CBWM W147)	NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 6
Private Property Sampling Results - trans-1,2-Dichloroethene (t-1,2-DCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	t-1,2-DCE (ug/L)	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE	Sample ID	Sample Date	Sample Location	t-1,2-DCE
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS								NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	1.1	61	11-Mar-09	Kitchen Tap	0.89	NS				NS				NS			
		61-D			1.1	61-D			0.99												
62	W62	62	1-May-08	Barn Tap	0.81	62	11-Mar-09	Kitchen Tap	1	NS				NS				NS			
		62-D			0.76	62-D			1.1												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)					NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		116(A)				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137	W63	NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140	W65	NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144	W35	144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148	Unknown	NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150	W131 (or W606 when needed)	150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	166								166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 7
Private Property Sampling Results - Tetrachloroethylene (PCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)	Sample ID	Sample Date	Sample Location	PCE (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS								NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS								NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115	W10	115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121	W17	121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122	W17	122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)					NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 8
Private Property Sampling Results - 1,1,1-Trichloroethane (1,1,1-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,1-TCA (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64		NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	NS				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	S				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73		73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75		75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76		76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77		77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		116(A)				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137		NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140		NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144		144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148		NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150		150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 9
Private Property Sampling Results - 1,1,2-Trichloroethane (1,1,2-TCA)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)	Sample ID	Sample Date	Sample Location	1,1,2-TCA (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	ND (0.50)	1	10-Mar-09	Dairy Tap	ND (0.50)	NS				NS				NS			
		1-D			ND (0.50)	1-D			ND (0.50)												
2	Unknown	2	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		2-D			ND (0.50)																
3	W42	3	27-Jun-08	Kitchen Tap	ND (0.50)	3	19-Mar-09	Kitchen Tap	ND (0.50)	NS				3	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		3-D			ND (0.50)	3-D			ND (0.50)					3-D			ND (0.50)				
4	W37	4	4-Oct-08	Kitchen Tap	ND (0.50)	4	7-Mar-09	Kitchen Tap	ND (0.50)	4	21-Dec-11	Kitchen Tap	ND (0.50)	4	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)	4-D			ND (0.50)				
5	W38	5	4-Oct-08	Dairy Tap	ND (0.50)	5	7-Mar-09	Hose Bib	ND (0.50)	NS				5	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		5-D			ND (0.50)	5-D			ND (0.50)					5-D			ND (0.50)				
6	W41	6	4-Oct-08	Dairy Tap	ND (0.50)	6	19-Mar-09	Restroom Tap	ND (0.50)	NS				6	17-Jul-13	Well supply	ND (0.50)	NS			
		6-D			ND (0.50)	6-D			ND (0.50)					6-D			ND (0.50)				
7		7	25-Oct-08	Outside Tap	ND (0.50)	7	7-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		7-D			ND (0.50)	7-D			ND (0.50)												
9	W66	NS				NS				9	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										9-D			ND (0.50)								
10		NS				NS				10	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										10-D			ND (0.50)								
11		NS				NS				11	29-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										11-D			ND (0.50)								
12	W7	12	7-Feb-08	Dairy Tap	ND (0.50)	12	6-Mar-09	Dairy Tap	ND (0.50)	12	24-Aug-11	Kitchen Tap	ND (0.50)	12	6-Aug-13	Well Supply	ND (0.50)	NS			
		12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)	12-D			ND (0.50)				
13	W6	13	25-Oct-08	House Tap	ND (0.50)	NS				NS				NS				NS			
		13-D			ND (0.50)																
14		14	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		14-D			ND (0.50)																
15		15	11-Dec-07	House Tap	ND (0.50)	15	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		15-D			ND (0.50)	15-D			ND (0.50)												
17	W5	17	6-Feb-08	Kitchen Tap	ND (0.50)	17	5-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		17-D			ND (0.50)	17-D			ND (0.50)												
18	Unknown	18	27-Jun-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		18-D			ND (0.50)																
19	W1	19	3-Dec-07	House Tap	ND (0.50)	19	5-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		19-D			ND (0.50)	19-D			ND (0.50)												
21	W40	21	1-May-08	Outside Tap	ND (0.50)	21	19-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		21-D			ND (0.50)	21-D			ND (0.50)												
28	W2	28	18-Apr-08	Kitchen Tap	ND (0.50)	28	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		28-D			ND (0.50)	28-D			ND (0.50)												

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
30	W3	30	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		30-D			ND (0.50)																
32		32	3-Dec-07	Outside Tap	ND (0.50)	32	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		32-D			ND (0.50)	32-D			ND (0.50)												
40	Unknown	NS				NS				NS				40	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														40-D			ND (0.50)				
41	W4	41	4-Feb-08	Kitchen Tap	ND (0.50)	41	5-Mar-09	Kitchen Tap	ND (0.50)	NS				41	29-Jul-13	Well Supply	ND (0.50)	NS			
		41-D			ND (0.50)	41-D			ND (0.50)					41-D			ND (0.50)				
42		42	22-Feb-08	Kitchen Tap	ND (0.50)	42	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		42-D			ND (0.50)	42-D			ND (0.50)												
43		43	22-Feb-08	Kitchen Tap	ND (0.50)	43	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		43-D			ND (0.50)	43-D			ND (0.50)												
44	Unknown	44	27-Sep-08	Kitchen Tap	ND (0.50)	44	19-Mar-09	Kitchen Tap	ND (0.50)	NS				44	26-Jul-13	Well Supply	ND (0.50)	NS			
		44-D			ND (0.50)	44-D			ND (0.50)					44-D			ND (0.50)				
45	Unknown	45	27-Sep-08	House Tap	ND (0.50)	45	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		45-D			ND (0.50)	45-D			ND (0.50)												
46	Unknown	46	18-Apr-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		46-D			ND (0.50)																
48	W48	48	16-Apr-08	Kitchen Tap	ND (0.50)	48	11-Mar-09	Kitchen Tap	ND (0.50)	NS				48	25-Jul-13	Well Supply	ND (0.50)	NS			
		48-D			ND (0.50)	48-D			ND (0.50)					48-D			ND (0.50)				
49	Unknown	49	25-Oct-08	Kitchen Tap	ND (0.50)	49	7-Mar-09	Kitchen Tap	ND (0.50)	49	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		49-D			ND (0.50)	49-D			ND (0.50)	49-D			ND (0.50)								
50	W25	50	4-Feb-08	Outside Tap	ND (0.50)	50	7-Mar-09	Kitchen Tap	ND (0.50)	50	22-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		50-D			ND (0.50)	50-D			ND (0.50)	50-D			ND (0.50)								
51	Unknown	51	27-Sep-08	Outside Tap	ND (0.50)	51	11-Mar-09	Kitchen Tap	ND (0.50)	51	8-Sep-11	Kitchen Tap	ND (0.50)[2]	NS				NS			
		51-D			ND (0.50)	51-D			ND (0.50)	51-D			ND (0.50)[2]								
52	W22	52	27-Sep-08	Kitchen Tap	ND (0.50)	52	11-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		52-D			ND (0.50)	52-D			ND (0.50)												
53	W24	53	27-Sep-08	Outside Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
		53	25-Oct-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		53-D			ND (0.50)																
54		54	25-Oct-08	Kitchen Tap	ND (0.50)	54	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		54-D			ND (0.50)	54-D			ND (0.50)												
55		55	25-Oct-08	Kitchen Tap	ND (0.50)	55	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		55-D			ND (0.50)	55-D			ND (0.50)												
56		56	25-Oct-08	Outside Tap	ND (0.50)	56	10-Mar-09	Kitchen Tap	ND (0.50)	NS				56	25-Jul-13	Outside Tap	ND (0.50)	NS			
		56-D			ND (0.50)	56-D			ND (0.50)					56-D			ND (0.50)				

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
57	Unknown	57	27-Sep-08	Kitchen Tap	ND (0.50)	57	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		57-D			ND (0.50)	57-D			ND (0.50)												
59	W59	59	1-Jul-08	Kitchen Tap	ND (0.50)	59	7-Mar-09	Outside Tap	ND (0.50)	59	12-Sep-11	Kitchen Tap	ND (0.50)[2]	59	25-Jul-13	Well Supply	ND (0.50)	59	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
		59-D			ND (0.50)	59-D			ND (0.50)	59-D			ND (0.50)[2]	59-D			ND (0.50)	59-D			ND (0.50)
61	Unknown	61	27-Sep-08	Kitchen Tap	ND (0.50)	61	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		61-D			ND (0.50)	61-D			ND (0.50)												
62	W62	62	1-May-08	Barn Tap	ND (0.50)	62	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		62-D			ND (0.50)	62-D			ND (0.50)												
63	W126	NS				NS				NS				63	29-Jul-13	Kitchen Tap	ND (0.50)	NS			
														63-D			ND (0.50)				
64	W126	NS				NS				NS				64	29-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
														64-D			ND (0.50)				
65	Unknown	65	25-Jun-08	Kitchen Tap	ND (0.50)	65	7-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		65-D			ND (0.50)	65-D			ND (0.50)												
66	Unknown	66				66	8-Oct-09	Kitchen Tap	ND(0.50)	66	17-Aug-11	Kitchen Tap	ND(0.50)	NS				NS			
						66-D			ND(0.50)	66-D			ND(0.50)								
67	Unknown	67	1-Jul-08	Bathroom Tap	ND (0.50)	67	11-Mar-09	Bathroom Tap	ND (0.50)	NS				NS				NS			
		67-D			ND (0.50)	67-D			ND (0.50)												
68	W59	NS				NS				68	12-Sep-11	Non-Residential Kitchen Tap	ND (0.50)	NS				68R	2-Apr-14	Well Sample Port	ND (0.50)
										68-D			ND (0.50)					68R-D			ND (0.50)
68 (aka 700)	NA	NS				NS				NS				NS				68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)[3]
																		68-D			ND (0.50)[3]
69	Unknown	NS				NS				69	8-Sep-11	Non-Residential Kitchen Tap	ND (0.50)[3]	NS				NS			
										69-D			ND (0.50)[3]								
72	W12	72	1-Jul-08	Kitchen Tap	ND (0.50)	72	12-Mar-09	Kitchen Tap	ND (0.50)	NS				72	29-Jul-13	Well Supply	ND (0.50)	NS			
		72-D			ND (0.50)	72-D			ND (0.50)					72-D			ND (0.50)				
73	W12	73	4-Oct-08	House Tap	ND (0.50)	73	12-Mar-09	Barn Tap	ND (0.50)	NS				NS				NS			
		73-D			ND (0.50)	73-D			ND (0.50)												
74	W14	74	25-Oct-08	Outside Tap	ND (0.50)	74	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		74-D			ND (0.50)	74-D			ND (0.50)												
75	W14	75	25-Oct-08	Outside Tap	ND (0.50)	75	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		75-D			ND (0.50)	75-D			ND (0.50)												
76	W14	76	25-Jun-08	Kitchen Tap	ND (0.50)	76	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		76-D			ND (0.50)	76-D			ND (0.50)												
77	W14	77	25-Oct-08	Outside Tap	ND (0.50)	77	19-Mar-09	Outside Tap	ND (0.50)	NS				77	18-Jul-13	Outside Tap	ND (0.50)	NS			
		77-D			ND (0.50)	77-D			ND (0.50)					77-D			ND (0.50)				

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID(1)	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
78	W27	78	4-Oct-08	Outside Tap	ND (0.50)	78	12-Mar-09	Kitchen Tap	ND (0.50)	78	12-Sep-11	Kitchen Tap	ND (0.50)	NS				NS			
		78-D			ND (0.50)	78-D			ND (0.50)	78-D			ND (0.50)								
79		79	4-Feb-08	Kitchen Tap	ND (0.50)	79	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		79-D			ND (0.50)	79-D			ND (0.50)												
81	Unknown	81	18-Apr-08	Outside Tap	ND (0.50)	81	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		81-D			ND (0.50)	81-D			ND (0.50)												
84	W13	84	24-Apr-08	Kitchen Tap	ND (0.50)	84	12-Mar-09	Kitchen Tap	ND (0.50)	NS				84	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		84-D			ND (0.50)	84-D			ND (0.50)					84-D			ND (0.50)				
86	W28	86	4-Oct-08	House Tap	ND (0.50)	86	11-Mar-09	Kitchen Tap	ND (0.50)	86	17-Aug-11	Kitchen Tap	ND (0.50)	86	1-Aug-13	Kitchen Tap	ND (0.50)	86	20-Mar-14	Kitchen Tap	ND (0.50)
		86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)	86-D			ND (0.50)
95	W29	95	4-Feb-08	Dairy Tap	ND (0.50)	95	11-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		95-D			ND (0.50)	95-D			ND (0.50)												
96	W137	96	4-Oct-08	Kitchen Tap	ND (0.50)	96	11-Mar-09	Kitchen Tap	ND (0.50)	NS				96	1-Aug-13	Kitchen Tap	ND (0.50)	96	20-Mar-14	Kitchen Tap	ND (0.50)
		96-D			ND (0.50)	96-D			ND (0.50)					96-D			ND (0.50)	96-D			ND (0.50)
98	W124	NS				NS				98	26-Oct-11	Kitchen Tap	ND (0.50)	NS				98	24-Mar-14	Well Supply (outside hose bib)	ND (0.50)
										98-D			ND (0.50)					98-D			ND (0.50)
99		NS				NS				99	26-Oct-11	Kitchen Tap	ND (0.50)	NS				NS			
										99-D			ND (0.50)								
100	W125	NS				NS				NS				NS				NS			
101		NS				NS				NS				101	18-Jul-13	Kitchen Tap	ND (0.50)	101	28-Mar-14	Well Supply (outside hose bib)	ND (0.50)
														101-D			ND (0.50)	101-D			ND (0.50)
102	W15	102	4-Dec-08	Kitchen Tap	ND (0.50)	102	19-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		102-D			ND (0.50)	102-D			ND (0.50)												
		102	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		102-D			ND (0.50)																
104		104	25-Jun-08	Kitchen Tap	ND (0.50)	NS				NS				NS				NS			
		104-D			ND (0.50)																
105		105	25-Oct-08	Outside Tap	ND (0.50)	105	12-Mar-09	Outside Tap	ND (0.50)	NS				NS				NS			
		105-D			ND (0.50)	105-D			ND (0.50)												
		105	17-Dec-08	Kitchen Tap (RO)	ND (0.50)	NS				NS				NS				NS			
		105-D			ND (0.50)																
106	Unknown	NS				106	1-Oct-09	Outside Tap	ND (0.50)	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply	ND (0.50)	NS			
						106-D			ND (0.50)	106-D			ND (0.50)[2]	106-D			ND (0.50)				
107	Unknown	107	5-Dec-07	Kitchen Tap	ND (0.50)	107	6-Mar-09	Kitchen Tap	ND (0.50)	NS				107	19-Jul-13	Non-Residential Kitchen Tap	ND (0.50)	NS			
		107-D			ND (0.50)	107-D			ND (0.50)					107-D			ND (0.50)				
108	Unknown	108	25-Oct-08	Kitchen Tap	ND (0.50)	108	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		108-D			ND (0.50)	108-D			ND (0.50)												

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
109	Unknown	NS				109	5-Jan-10	Kitchen Tap	ND (0.50)	NS				NS				NS			
						109-D			ND (0.50)												
111	Unknown	NS				NS				111	27-Sep-11	Kitchen Tap	ND (0.50)	111	6-Aug-13	Well Supply	ND (0.50)	NS			
										111-D			ND (0.50)	111-D			ND (0.50)				
112	Unknown	NS				NS				112	18-Oct-11	Kitchen Tap	ND (0.50)	112	13-Aug-13	Kitchen Tap	ND (0.50)	NS			
										112-D			ND (0.50)	112-D			ND (0.50)				
113	W16	113	25-Jun-08	Kitchen Tap	ND (0.50)	113	5-Mar-09	Kitchen Tap	ND (0.50)	113	17-Aug-11	Kitchen Tap	ND (0.50)	113	13-Aug-13	Barn Tap	ND (0.50)	NS			
		113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)	113-D			ND (0.50)				
114	W10	114	1-Jul-08	Kitchen Tap	ND (0.50)	114	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		114-D			ND (0.50)	114-D			ND (0.50)												
115		115	7-Feb-08	Kitchen Tap	ND (0.50)	115	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		115-D			ND (0.50)	115-D			ND (0.50)												
116	W9	116	15-Apr-08	Kitchen Tap	ND (0.50)	116	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		116-D			ND (0.50)	116-D			ND (0.50)												
		NS				116-W	6-Mar-09	Drinking Water Tap	ND (0.50)	NS				NS				NS			
						116-WD			ND (0.50)												
117	W39	117	24-Apr-08	Outside Tap	ND (0.50)	117	19-Mar-09	House Tap	ND (0.50)	NS				NS				NS			
		117-D			ND (0.50)	117-D			ND (0.50)												
118	W18	118	24-Apr-08	Outside Tap	ND (0.50)	118	7-Mar-09	Kitchen Tap	ND (0.50)	NS				118	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		118-D			ND (0.50)	118-D			ND (0.50)					118-D			ND (0.50)				
119	W17	119	3-Dec-07	Kitchen Tap	ND (0.50)	119	5-Mar-09	Kitchen Tap	ND (0.50)	119	22-Aug-11	Kitchen Tap	ND (0.50)	119	17-Jul-13	Kitchen Tap	ND (0.50)	NS			
		119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)	119-D			ND (0.50)				
121		121	21-Dec-07	Kitchen Tap	ND (0.50)	121	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		121-D			ND (0.50)	121-D			ND (0.50)												
122		122	21-Dec-07	Kitchen Tap	ND (0.50)	122	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		122-D			ND (0.50)	122-D			ND (0.50)												
127	W19	127	16-Apr-08	Kitchen Tap	ND (0.50)	127	7-Mar-09	Kitchen Tap	ND (0.50)	NS				127	17-Jul-13	Well Supply	ND (0.50)	NS			
		127-D			ND (0.50)	127-D			ND (0.50)					127-D			ND (0.50)				
128	W32	128	6-Feb-08	Kitchen Tap	ND (0.50)	128	7-Mar-09	Kitchen Tap	ND (0.50)	128	18-Oct-11	Kitchen Tap	ND (0.50)	128	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)	128-D			ND (0.50)				
129	Unknown	NS				NS				NS				129	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														129-D			ND (0.50)				
130	Unknown	NS				NS				130	1-Sep-11	Kitchen Tap	ND (0.50)	130	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
										130-D			ND (0.50)	130-D			ND (0.50)				
131	W30	131	24-Apr-08	Kitchen Tap	ND (0.50)	131	6-Mar-09	Kitchen Tap	ND (0.50)	131	23-Aug-11	Kitchen Tap	ND (0.50)	131	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
		131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)	131-D			ND (0.50)				
134	W33	134	7-Feb-08	Kitchen Tap	ND (0.50)	134	26-Feb-09	Kitchen Tap	ND (0.50)	NS				134	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
		134-D			ND (0.50)	134-D			ND (0.50)					134-D			ND (0.50)				

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
135	Unknown	NS				135	1-Apr-11	Kitchen Tap	ND (0.50)	NS				135	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
						135-D			ND (0.50)					135-D			ND (0.50)				
136	W63	NS				136	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						136-D			ND (0.50)												
137	W63	NS				137	1-Apr-11	Kitchen Tap	ND (0.50)	NS				137	19-Jul-13	Well Supply	ND (0.50)	NS			
						137-D			ND (0.50)					137-D			ND (0.50)				
138	Unknown	NS				NS				138	11-Jan-12	Kitchen Tap	ND (0.50)	NS				NS			
										138-D			ND (0.50)								
139	W65	NS				NS				139	17-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										139-D			ND (0.50)								
140	W65	NS				NS				140	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
										140-D			ND (0.50)								
141	Unknown	NS				NS				NS				141	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
														141-D			ND (0.50)				
142	W130	NS				NS				NS				NS				142	24-Mar-14	Outside Tap	ND (0.50)
																		142-D			ND (0.50)
143	W35	143	3-Mar-08	Kitchen Tap	ND (0.50)	143	19-Feb-09	Kitchen Tap	ND (0.50)	143	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		143-D			ND (0.50)	143-D			ND (0.50)	143-D			ND (0.50)								
144	W35	144	29-Feb-08	Kitchen Tap	ND (0.50)	144	19-Feb-09	Kitchen Tap	ND (0.50)	144	18-Aug-11	Kitchen Tap	ND (0.50)	NS				NS			
		144-D			ND (0.50)	144-D			ND (0.50)	144-D			ND (0.50)								
145	Unknown	145	4-Feb-08	Non-Residential Kitchen Tap	ND (0.50)	145	19-Feb-09	Non-Residential Kitchen Tap	ND (0.50)	145	21-Dec-11	Office Kitchen Tap	ND (0.50)	NS				NS			
		145-D			ND (0.50)	145-D			ND (0.50)	145-D			ND (0.50)								
146	W139	NS				NS				NS				NS				146	12-May-14	Outside Tap	ND (0.50)
																		146-D			ND (0.50)
147	Unknown	NS				NS				NS				NS				NS			
148	Unknown	NS				NS				NS				NS				148	25-Apr-14	Outside Tap	ND (0.50)
																		148-D			ND (0.50)
149	W131 (or W606 when needed)	NS				NS				NS				NS				149	24-Mar-14	Outside Tap	ND (0.50)
																		149-D			ND (0.50)
150	W131 (or W606 when needed)	150	3-Dec-07	Outside Tap	ND (0.50)	NS				NS				NS				150	24-Mar-14	Outside Tap	ND (0.50)
		150-D			ND (0.50)													150-D			ND (0.50)
		150(I)	4-Feb-08	Kitchen Tap	ND (0.50)	150(I)	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		150(I)-D			ND (0.50)	150(I)-D			ND (0.50)												
151	W130	NS				NS				NS				NS				151	25-Apr-14	Outside Tap	ND (0.50)
																		151-D			ND (0.50)
152	Unknown	NS				NS				NS				NS				152	21-Mar-14	Non-Residential Outside Tap	ND (0.50)
																		152-D			ND (0.50)

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[(1)]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
154	W132	NS				NS				NS				NS				154	20-Mar-14	Non-Residential Kitchen Tap	ND (0.50)
																		154-D			ND (0.50)
155	W133	NS				NS				NS				NS				155	25-Apr-14	Kitchen Tap	ND (0.50)
																		155-D			ND (0.50)
162	Unknown	NS				NS				165	17-Aug-11	Kitchen Tap	ND (0.50)	162	1-Aug-13	Kitchen Tap	ND (0.50)	NS			
										165-D			ND (0.50)	162-D			ND (0.50)				
164	Unknown	NS				NS				NS				166A	19-Jul-13	Kitchen Tap	ND (0.50)	NS			
														166A-D			ND (0.50)				
166	W134	NS				NS				166	31-Aug-11	Kitchen Tap	ND (0.50)	NS				166	20-Mar-14	Kitchen Tap	ND (0.50)
										166-D			ND (0.50)					166-D			ND (0.50)
208	W8	208	3-Dec-07	Kitchen Tap	ND (0.50)	208	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		208-D			ND (0.50)	208-D			ND (0.50)												
217	W11	217	11-Dec-07	Kitchen Tap	ND (0.50)	217	26-Feb-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		217-D			ND (0.50)	217-D			ND (0.50)												
222	W20	222	6-Dec-07	Kitchen Tap	ND (0.50)	222	26-Feb-09	Kitchen Tap	ND (0.50)	NS				S				NS			
		222-D			ND (0.50)	222-D			ND (0.50)												
227	W31	227	6-Feb-08	Kitchen Tap	ND (0.50)	227	7-Mar-09	Kitchen Tap	ND (0.50)	227	18-Aug-11	Kitchen Tap	ND (0.50)	227	6-Aug-13	Kitchen Tap	ND (0.50)	NS			
		227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)	227-D			ND (0.50)				
234	Unknown	234	6-Dec-07	Dairy Sink	ND (0.50)	234	19-Feb-09	Kitchen Tap	ND (0.50)	234	8-Sep-11	Kitchen Tap	ND (0.50)[3]	234	18-Jul-13	Outside Tap	ND (0.50)	NS			
		234-D			ND (0.50)	234-D			ND (0.50)	234-D			ND (0.50)[3]	234-D			ND (0.50)				
237	W34	237	22-Apr-08	Kitchen Tap	ND (0.50)	237	6-Mar-09	Kitchen Tap	ND (0.50)	NS				237	18-Jul-13	Kitchen Tap	ND (0.50)	NS			
		237-D			ND (0.50)	237-D			ND (0.50)					237-D			ND (0.50)				
239	W64 (CBWM W147)	NS				239	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						239-D			ND (0.50)												
240		NS				240	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				W147	25-Apr-14	Outside Tap	ND (0.50)
						240-D			ND (0.50)									W147-D			ND (0.50)
241		NS				241	1-Apr-11	Kitchen Tap	ND (0.50)	NS				NS				NS			
						241-D			ND (0.50)												
242	Unknown	NS				NS				NS				NS				242	25-Apr-14	Outside Tap	ND (0.50)
																		242-D			ND (0.50)
243	W138	NS				NS				NS				NS				243	21-Mar-14	Kitchen Tap	ND (0.50)
																		243-D			ND (0.50)
244	W35	NS				NS				NS				NS				244	2-Apr-14	Non-Residential Outside Tap	ND (0.50)
																		244-D			ND (0.50)
245		245	29-Feb-08	Kitchen Tap	ND (0.50)	245	10-Mar-09	Kitchen Tap	ND (0.50)	245	18-Aug-11	Kitchen Tap	ND (0.50)	245	18-Jul-13	Kitchen Tap	ND (0.50)	245	21-Mar-14	Kitchen Tap	ND (0.50)
		245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)	245-D			ND (0.50)
250	Unknown	NS				NS				NS				NS				250	25-Apr-14	Kitchen Tap	ND (0.50)
																		250-D			ND (0.50)

Table 10
Private Property Sampling Results - Vinyl Chloride
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (2014)			
		Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)	Sample ID	Sample Date	Sample Location	Vinyl Chloride (ug/L)
254	W21	254	6-Feb-08	Kitchen Tap	ND (0.50)	254	5-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		254-D			ND (0.50)	254-D			ND (0.50)												
260	W135	260	5-Dec-07	Outside Tap	ND (0.50)	260	10-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				260	28-Mar-14	Outside Tap	ND (0.50)
		260-D			ND (0.50)	260-D			ND (0.50)									260-D			ND (0.50)
261	W136	NS				NS				NS				NS				261	24-Mar-14	Kitchen Tap	ND (0.50)
																		261-D			ND (0.50)
266	W36	266	4-Feb-08	Outside Tap	ND (0.50)	266	6-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		266-D			ND (0.50)	266-D			ND (0.50)												
300	Unknown	300	25-Oct-08	Kitchen Tap	ND (0.50)	300	12-Mar-09	Kitchen Tap	ND (0.50)	NS				NS				NS			
		300-D			ND (0.50)	300-D			ND (0.50)												
604	Unknown	NS				NS				NS				NS				604	25-Apr-14	Outside Tap	ND (0.50)
																		604-D			ND (0.50)
NA	W606	NS				NS				NS				NS				606	28-Mar-14	Well Sample Port	ND (0.50)
																		606-D			ND (0.50)

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence
3 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID(1)	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
1	W26	NS						
2	Unknown	NS						
3	W42	NS						
4	W37	NS						
5	W38	NS						
6	W41	NS						
7		NS						
9	W66	NS						
10		NS						
11		NS						
12	W7	NS						
13	W6	NS						
14		NS						
15		NS						
17	W5	NS						
18	Unknown	NS						
19	W1	NS						
21	W40	NS						
28	W2	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
30	W3	NS						
32	W3	NS						
40	Unknown	NS						
41	W4	NS						
42	W4	NS						
43	W4	NS						
44	Unknown	NS						
45	Unknown	NS						
46	Unknown	NS						
48	W48	NS						
49	Unknown	NS						
50	W25	NS						
51	Unknown	NS						
52	W22	NS						
53	W24	NS						
53	W24	NS						
54	W24	NS						
55	W24	NS						
56	W24	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
57	Unknown	NS						
59	W59	59	28-Mar-14	Well Supply (outside hose bib)	ND (0,0050)	5.7	260	1000
		59-D			ND (0,0050)	5.7	260	990
61	Unknown	NS						
62	W62	NS						
63	W126	NS						
64		NS						
65	Unknown	NS						
66	Unknown	NS						
67	Unknown	NS						
68	W59	68R	2-Apr-14	Well Sample Port	ND (0.0050)	5.9	260	980
		68R-D			ND (0.0050)	5.4	260	1000
68 (aka 700)	NA	68	20-Mar-14	Non-Residential Kitchen Tap	ND (0.0050)[2]	ND (1.0)[2]	14[2]	250[2]
		68-D			ND (0.0050)[2]	ND (1.0)[2]	14[2]	250[2]
69	Unknown	NS						
72	W12	NS						
73		NS						
74	W14	NS						
75		NS						
76		NS						
77		NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
78	W27	NS						
79	W27	NS						
81	Unknown	NS						
84	W13	NS						
86	W28	86	20-Mar-14	Kitchen Tap	ND (0.0050)	2.2	94	520
		86-D			ND (0.0050)	2.0	92	530
95	W29	NS						
96	W137	96	20-Mar-14	Kitchen Tap	ND (0.0050)	ND (1.0)	22	310
		96-D			ND (0.0050)	ND (1.0)	23	330
98	W124	98	24-Mar-14	Well Supply (outside hose bib)	0.0067	1.5	56	430
		98-D			0.0082	1.6	53	420
99	W124	NS						
100	W125	NS						
101	W125	101	28-Mar-14	Well Supply (outside hose bib)	0.0082	1.5	40	380
		101-D			0.0082	1.6	40	390
102	W15	NS						
		NS						
104	W15	NS						
105	W15	NS						
		NS						
106	Unknown	NS						
107	Unknown	NS						
108	Unknown	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
109	Unknown	NS						
111	Unknown	NS						
112	Unknown	NS						
113	W16	NS						
114	W10	NS						
115		NS						
116	W9	NS						
		NS						
117	W39	NS						
118	W18	NS						
119	W17	NS						
121		NS						
122		NS						
127	W19	NS						
128	W32	NS						
129	Unknown	NS						
130	Unknown	NS						
131	W30	NS						
134	W33	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
135	Unknown	NS						
136	W63	NS						
137	W63	NS						
138	Unknown	NS						
139	W65	NS						
140	W65	NS						
141	Unknown	NS						
142	W130	NS						
143	W35	NS						
144	W35	NS						
145	Unknown	NS						
146	W139	NS						
147	Unknown	NS						
148	Unknown	NS						
149	W131 (or W606 when needed)	NS						
150	W131 (or W606 when needed)	NS						
150	W131 (or W606 when needed)	NS						
151	W130	NS						
152	Unknown	NS						

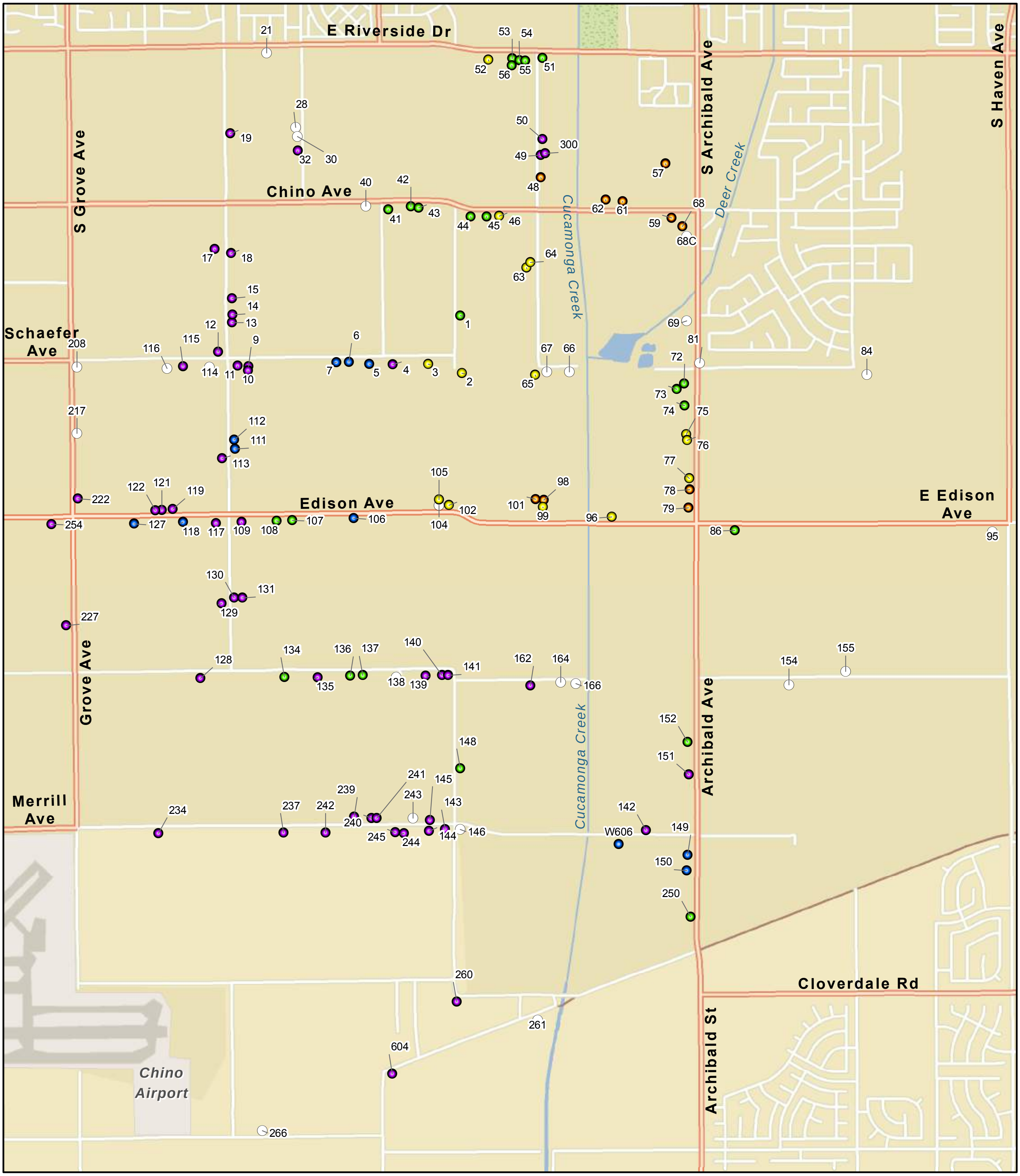
Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[1]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
154	W132	NS						
155	W133	NS						
162	Unknown	NS						
164	Unknown	NS						
166	W134	NS						
208	W8	NS						
217	W11	NS						
222	W20	NS						
227	W31	NS						
234	Unknown	NS						
237	W34	NS						
239	W64 (CBWM W147)	NS						
240		NS						
241		NS						
242	Unknown	NS						
243	W138	NS						
244	W35	NS						
245		NS						
250	Unknown	NS						

Table 11
Private Property Sampling Results
1,2,3-Trichloropropane (1,2,3-TCP), Perchlorate, Nitrate, Total Disolved Solids (TDS)
Ontario, California

Location ID	Private Well ID[(1)]	Round 5 (2014)						
		Sample ID	Sample Date	Sample Location	1,2,3-TCP (ug/L)	Perchlorate (ug/L)	Nitrate as NO3 (mg/L)	TDS (mg/L)
254	W21	NS						
260	W135	NS						
261	W136	NS						
266	W36	NS						
300	Unknown	NS						
604	Unknown	NS						
606	W606	NS						

Notes:
Data Protected as Trade Secrets/Secret Processes – California Water Code §13267(b)(2)
1 Connection to private wells based on information provided by interviewed residents.
2 This location is served by water from the City of Ontario system; this sample result reflects concentrations of constituents in water supplied



EEC ENVIRONMENTAL ENGINEERING & CONTRACTING, INC.

File: Hi-Sample_Rounds

PM: JK

PM: RG

PW Sampling Location

Maximum TCE result in µg/L

- < 4.0
- ≥ 4.0 < 5.0
- ≥ 5 < 15.0
- ≥ 15.0 < 35.0
- ≥ 35.0
- ND (0.50)

0 2,200 4,400 Feet

PRIVATE WELL SAMPLING
MAXIMUM TCE RESULTS
NOVEMBER 2007 - MAY 2014

CENTRAL CHINO BASIN
ONTARIO, CALIFORNIA

Project Number: S1958.18

Date: 5/27/2014

Figure 1

APPENDIX A
GENERAL SAMPLING PROTOCOL

A study area was established to identify properties with private water supply wells that may contain trichloroethylene (TCE). The study area consists of an approximately five square mile region, which is bounded approximately by Riverside Drive to the North, Archibald Avenue to the East, Merrill Avenue to the South, and Grove Avenue to the West in Ontario, California. The study area is located in the City of Ontario, California that has been annexed by the City and is part of future redevelopment plans. Much of this area does not currently have public infrastructure, including municipal water supply. Current land use in this area is primarily agricultural.

1. Field Mobilization

A sampling team of two field staff was deployed. Prior to sampling, field staff was briefed on the project and trained on the sampling protocol.

Prior to field mobilization, the field sampling team received a folder for each residence scheduled for sampling. The folder contained the following site-specific information:

- Site location map;
- Detailed location map of the specific location;
- Copies of well logs of nearby wells;
- Copy of the RWQCB sampling offer letter;
- Water sample collection form;
- Sample-completed chain-of-custody form; and
- Blank chain-of-custody form.

An example water sample collection form is provided in Appendix B.

The sampling team received equipment consisting of sample bottles, nitrile gloves, a temperature probe, a pH probe, self-sealing plastic bags, and coolers for each resident packed with wet ice in self-sealing plastic bags.

2. Sample Collection

Most of the sample locations included residences supplied by groundwater wells. For these locations, sampling personnel asked the resident questions to obtain information regarding their source of water. A sample collection form is provided in Appendix B. With the assistance of the resident, sampling personnel identified a faucet or tap, preferably indoors and without an aerator, to obtain a water sample. Unless directed otherwise by the resident, the selected sample location was a location representative of water the resident would commonly use (e.g., kitchen sink). Once a location was identified, the water was allowed to run for five to ten minutes. During this time, measurements for temperature and pH were collected. When the temperature and pH measurements stabilized, changing less than 0.1 degree Celsius and less than 0.1 unit respectively between readings, and after a minimum of five minutes, a water sample was collected. Temperature and pH measurements were recorded on the Sample Collection Form (Appendix B).

Several of the sampling locations do not supply water to a residence (e.g., irrigation wells) and required that samples be collected directly from the groundwater pumping system. For these locations, sampling personnel identified a sample port, preferably upstream of storage tanks, to obtain water samples. Once the sampling location was identified, the well pump were actuated and allowed to operate between five and ten minutes to purge the pipeline/sample port. During this time, temperature and pH measurements were collected. When the temperature and pH measurements stabilized, changing less than 0.1 degree Celsius and less than 0.1 pH unit, respectively between readings, and after a minimum of five minutes, water samples were collected.

To avoid inadvertent contamination, the sampling team observed the following personal hygiene guidelines:

- No smoking while collecting samples;
- No hairspray/mousse;
- No cologne/perfume; and
- No breath spray or mouthwash when collecting samples.

After the sample faucet or tap had been run and temperature readings stabilized, flow was reduced to a trickle for sample collection.

- For volatile organic compounds (VOC) samples, sample containers were held at a 45 degree angle, with the cap from each container removed. The container was positioned as close as possible to make sure the stream contacted the side of the vial as it filled. The vial was slowly filled until a convex meniscus was observed, and a small amount of water was added to the cap, as well. The cap was carefully flipped over the top of the vial and screwed tight. The sampling team then observed the sample to verify that no bubbles were present in the sample. If bubbles were observed, the cap was removed, and vial closure was repeated. Once all six vials were filled (three for the sample and three for the duplicate), the faucet was turned off.

- For non-VOC samples (i.e., perchlorate, nitrate, total dissolved solids (TDS)), the tap flow was adjusted to an even flow and each sample bottle held at a 45 degree angle during collection. Once all sample bottles were filled, the faucet was turned off.

Two sets of samples were collected from each location, one sample and one duplicate. For confidentiality, collected samples were identified with a location ID number only, for example, as follows:

- First Sample: **"99";** and
- Duplicate Sample: **"99-D"**.

Sample labels and chain-of-custody (COC) forms were completed immediately after sample collection. Sample containers were packaged in disposable self-sealing plastic bags and preserved in a chilled environment. In addition, as a quality assurance measure, a trip blank consisting of deionized water filled at the laboratory was analyzed for every ten samples. Two additional trip blanks were included for each location requiring 1,2,3- Trichloropropane analysis.

3. Analysis Method

Collected samples were submitted to Test America, an analytical laboratory certified by the State of California, for analysis. Samples were analyzed for select VOCs by Environmental Protection Agency (EPA) Method 524.2. The select VOC list consisted of the following compounds:

- 1,1-Dichloroethane (1,1-DCA);
- 1,2-Dichloroethane (1,2-DCA);
- 1,1,1-Trichloroethane (1,1,1-TCA);
- 1,1,2-Trichloroethane (1,1,2-TCA);
- 1,1-Dichloroethene (1,1-DCE);
- Cis-1,2-Dichloroethene (Cis-1,2-DCE);
- Trans-1,2-Dichloroethene (Trans-1,2-DCE);
- Tetrachloroethene (PCE);
- Trichloroethene (TCE); and
- Vinyl Chloride.

A select group of sampling locations was also analyzed as follows:

- 1,2,3- Trichloropropane (1,2,3-TCP) by SRL524M-TCP
- Perchlorate by EPA 314.0 LL
- Nitrates by EPA 300.0 (Nitrate as NO3)
- TDS by SM 2540C

4. Data Management

The laboratory provided the analytical results by e-mail in PDF format with standard QA/QC laboratory backup. Sample results are subsequently transmitted to the residents. Transmittal of the Round 3 sampling results was completed by Chino Basin Water Master staff.

5. Split Sampling (Round 3)

The Chino Basin Water Master indicated that it intended to sample locations in and near the study area during the summer, 2011. Split samples were collected at most of the locations sampled during Round 3. At the outset of Round 3, Water Master sampling personnel sampled several residences before split sampling efforts were coordinated. At those locations, follow-up sampling was conducted where possible. At the end of Round 3, Water Master indicated that it preferred that its sampling personnel conduct sampling separate from split sampling personnel. Samples at the end of Round 3 were not coordinated. Dates of samples are provided in tables 1 and 2. The sampling results reported for Round 3 are the results of the split sampling. The sampling results obtained by the Chino Basin Water Master closely agreed with these reported results.

6. Sample Documentation

Field notes and/or preprinted field forms were utilized to document where, when, how, and from whom many vital project information was obtained. The following information was recorded during the collection of each sample:

- Sample location and description
- Field instrument readings
- Field observations and details related to analysis or integrity of samples (e.g., weather conditions, noticeable odors, colors, etc.)
- Preliminary sample description
- Sample preservation
- Sample identification numbers and any explanatory codes
- Name, date and time of delivery to laboratory

Appendix B
Water Sample Collection Form

Sampling Personnel: ______________________ **Date:** ______________________

Location Name: ______________________ **Location ID:** ______________________

Address: ______________________

Name: ______________________ **Phone Number:** ______________________

Well on Property?: ________ **CBWM ID#:** ______________ **How many homes served by well?:** ________

How long has well been in place/use? ______________________

Well used for drinking? ________ **Cooking?** ________ **Bathing?** ________

Well used for irrigation? ________ **Is water treated?** ______________

Where is the Treatment? ______________ **Treatment Type:** ______________

Previously sampled by CBWM? ________ **Chlorination?** ______________

If yes, how? ______________________

Separate faucet for drinking water? ______________________

House on Septic system? ________ **How often Maintained?** ______________

Using bottled water? ______________________

Sample Collected **Indoors with aerator:** **Indoors without aerator:** **Outdoors:**

Purging & Sampling

Time	Temperature	pH	Comments

Sample ID: ______________________ **Time:** ______________

Duplicate ID: ______________________ **Time:** ______________

Temperature/ pH Probe SN#:

Additional Notes ______________________

____

____

____

____

____

____

Photo/GPS @ Well? ________

PRIVATE PROPERTY SAMPLING REPORT
ONTARIO, CALIFORNIA

October 6, 2014

Prepared By:

Environmental Engineering and Contracting, Inc.
501 Parkcenter Drive
Santa Ana, California 92705
EEC Job S1958.03T

Jim Kolk
Senior Project Engineer

Mark Zeko, PG, CHG
Principal Hydrogeologist

TABLES OF CONTENTS

TABLES

FIGURES

APPENDICES

Private Property Sampling Report
Ontario, California

1.0 INTRODUCTION AND BACKGROUND

The Chino Basin Watermaster (CBWM) and other parties have conducted groundwater sampling in the Chino Basin from existing private and municipal wells for groundwater quality since the mid-1980s. Among the water quality findings, volatile organic compounds (VOCs), consisting primarily of trichloroethene (TCE), were identified in the southern portion of the Chino Basin. This plume of TCE is referred to as the "South Archibald TCE Plume" and is generally bounded by Riverside Drive to the North, Archibald Avenue to the East, Merrill Avenue to the South, and Grove Avenue to the West.

To further characterize the nature of this plume, private well sampling was conducted in July/2014 at select locations along the western fringe of the plume. Environmental Engineering and Contracting, Inc. (EEC) conducted this round of sampling on behalf of private companies, and in cooperation with the Regional Water Quality Control Board. The sampling protocol utilized is set forth in Appendix A.

2.0 SAMPLING RESULTS

The following tables and figure provide a summary of the results for this sampling event. All VOC results for these locations are listed in Table 1. The TCE concentrations for this round, along with other historic results from prior private well sampling efforts at these locations, are listed in Table 2. The sampling locations and TCE concentration ranges for each location are depicted in Figure 1.

Table 1
Private Property Sampling Results - Volatile Organic Compounds (VOCs)
Ontario, California

Location ID	Private Well ID[1]	July/2014 Sampling												
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	1,1-DCE (ug/L)	c-1,2-DCE (ug/L)	t-1,2-DCE (ug/L)	PCE (ug/L)	1,1,1-TCA (ug/L)	1,1,2-TCA (ug/L)	Vinyl Chloride (ug/L)
1	W26	1	11-Jul-14	Dairy Tap	3.5	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		1-D			3.6	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
3	W42	3	11-Jul-14	Outside Tap	6.1	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		3-D			6.4	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
7	W41	7	11-Jul-14	Well Supply Sample Port	2.1	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		7-D			2.0	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
42	W4	42	11-Jul-14	Well Supply Sample Port	1.0	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		42-D			1.1	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
44	W140	44	11-Jul-14	Well Supply Sample Port	1.8	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		44-D			2.2	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
48	W48	48	16-Jul-14	Outside Tap	7.0	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		48-D			6.9	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
52	W22	52	16-Jul-14	Well Supply Sample Port	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		52-D			ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
65	Unknown	65	9-Jul-14	Outside Tap	4.7	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		65-D			5.0	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
106	W141	106	11-Jul-14	Well Supply Sample Port	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		106-D			ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
108		108	9-Jul-14	Outside Tap	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		108-D			ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
118	W18	118	11-Jul-14	Outside Tap	1.3	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		118-D			1.3	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
124	W19	124	9-Jul-14	Dairy Tap	0.64	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		124-D			0.60	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
136	W63	136	9-Jul-14	Outside Tap	8.0	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
		136-D			8.3	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)

Notes:
[1] Connection to private wells based on information provided by interviewed residents

Table 2
Private Property Sampling Results - Trichloroethene (TCE)
Ontario, California

Location ID	Private Well ID[1]	Round 1 (2007/2008)				Round 2 (2009/2010)				Round 3 (2011/2012)				Round 4 (2013)				Round 5 (March/April 2014)				July/2014 Sampling			
		Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)	Sample ID	Sample Date	Sample Location	TCE (ug/L)
1	W26	1	24-Apr-08	Dairy Tap	7.4	1	10-Mar-09	Dairy Tap	9.8	NS				NS				NS				1	11-Jul-14	Dairy Tap	3.5
		1-D			7.1	1-D			10													1-D			3.6
3	W42	3	27-Jun-08	Kitchen Tap	16	3	19-Mar-09	Kitchen Tap	14	NS				3	17-Jul-13	Kitchen Tap	7.5	NS				3	11-Jul-14	Outside Tap	6.1
		3-D			16	3-D			14					3-D			7.5					3-D			6.4
7	W41	7	25-Oct-08	Outside Tap	4.5	7	7-Mar-09	Outside Tap	3.9	NS				NS				NS				7	11-Jul-14	Well Supply Sample Port	2.1
		7-D			4.1	7-D			4.2													7-D			2.0
42	W4	42	22-Feb-08	Kitchen Tap	9.7	42	5-Mar-09	Kitchen Tap	8.9	NS				NS				NS				42	11-Jul-14	Well Supply Sample Port	1.0
		42-D			9.6	42-D			8.9													42-D			1.1
44	W140	44	27-Sep-08	Kitchen Tap	7.3	44	19-Mar-09	Kitchen Tap	5.9	NS				44	25-Jul-13	Well Supply Sample Port	3.1	NS				44	11-Jul-14	Well Supply Sample Port	1.8
		44-D			8.3	44-D			5.6					44-D			3.4					44-D			2.2
48	W48	48	16-Apr-08	Kitchen Tap	38	48	11-Mar-09	Kitchen Tap	25	NS				48	25-Jul-13	Well Supply	7.9	NS				48	16-Jul-14	Outside Tap	7.0
		48-D			38	48-D			25					48-D			8.5					48-D			6.9
52	W22	52	27-Sep-08	Kitchen Tap	15	52	11-Mar-09	Barn Tap	7.8	NS				NS				NS				52	16-Jul-14	Well Supply Sample Port	ND (0.50)
		52-D			15	52-D			8													52-D			ND (0.50)
65	Unknown	65	25-Jun-08	Kitchen Tap	20	65	7-Mar-09	Kitchen Tap	16	NS				NS				NS				65	9-Jul-14	Outside Tap	4.7
		65-D			19	65-D			15													65-D			5.0
106	W141	NS				106	1-Oct-09	Outside Tap	4.3	106	8-Sep-11	Kitchen Tap	ND (0.50)[2]	106	19-Jul-13	Well Supply Sample Port	ND (0.50)	NS				106	11-Jul-14	Well Supply Sample Port	ND (0.50)
						106-D			4.6	106-D			ND (0.50)[2]	106-D			ND (0.50)					106-D			ND (0.50)
108		108	25-Oct-08	Kitchen Tap	5.9	108	5-Mar-09	Kitchen Tap	7.8	NS				NS				NS				108	9-Jul-14	Outside Tap	ND (0.50)
		108-D			5.8	108-D			7.6													108-D			ND (0.50)
118	W18	118	24-Apr-08	Outside Tap	4.4	118	7-Mar-09	Kitchen Tap	3.5	NS				118	17-Jul-13	Kitchen Tap	1.9	NS				118	11-Jul-14	Outside Tap	1.3
		118-D			4.4	118-D			3.6					118-D			1.9					118-D			1.3
124	W19	NS				NS				NS				NS				NS				124	9-Jul-14	Dairy Tap	0.64
																						124-D			0.60
136	W63	NS				136	1-Apr-11	Kitchen Tap	5.8	NS				NS				NS				136	9-Jul-14	Outside Tap	8.0
						136-D			5.9													136-D			8.3

Notes:
[1] Connection to private wells based on information provided by interviewed residents
[2] This location is currently served by an alternative water supply; this sample result reflects concentrations of constituents in the alternative water supplied to the residence

ENVIRONMENTAL ENGINEERING & CONTRACTING, INC.

File: Hi-Sample_Rounds

PM: JK

PM: AN

PW Sampling Location

Maximum TCE result in µg/L

- < 4.0
- ≥ 4.0 < 5.0
- ≥ 5 < 15.0
- ≥ 15.0 < 35.0
- ≥ 35.0
- ND (0.50)

0 2,200 4,400 Feet

PRIVATE WELL SAMPLING
MAXIMUM TCE RESULTS
JULY 2014

CENTRAL CHINO BASIN
ONTARIO, CALIFORNIA

Project Number: S1958.20

Date: 9/29/2014

Figure 1

APPENDIX A
SAMPLING PROTOCOL

1. Field Mobilization

A sampling team of two field staff was deployed. Prior to sampling, field staff was briefed on the project and trained on the sampling protocol.

Prior to field mobilization, the field sampling team received a folder for each residence scheduled for sampling. The folder contained the following site-specific information:

- Site location map;
- Detailed location map of the specific location;
- Copies of well logs of nearby wells;
- Copy of the RWQCB sampling offer letter;
- Water sample collection form;
- Sample-completed chain-of-custody form; and
- Blank chain-of-custody form.

An example water sample collection form is provided in Appendix B.

The sampling team received equipment consisting of sample bottles, nitrile gloves, a temperature probe, a pH probe, self-sealing plastic bags, and coolers for each resident packed with wet ice in self-sealing plastic bags.

2. Sample Collection

Most of the sample locations included residences supplied by groundwater wells. For these locations, sampling personnel asked the resident questions to obtain information regarding their source of water. A sample collection form is provided in Appendix B. With the assistance of the resident, sampling personnel identified a faucet or tap, preferably indoors and without an aerator, to obtain a water sample. Unless directed otherwise by the resident, the selected sample location was a location representative of water the resident would commonly use (e.g., kitchen sink). Once a location was identified, the water was allowed to run for five to ten minutes. During this time, measurements for temperature and pH were collected. When the temperature and pH measurements stabilized, changing less than 0.1 degree Celsius and less than 0.1 unit respectively between readings, and after a minimum of five minutes, a water sample was collected. Temperature and pH measurements were recorded on the Sample Collection Form (Appendix B).

Several of the sampling locations do not supply water to a residence (e.g., irrigation wells) and required that samples be collected directly from the groundwater pumping system. For these locations, sampling personnel identified a sample port, preferably upstream of storage tanks, to obtain water samples. Once the sampling location was identified, the well pump were actuated and allowed to operate between five and ten minutes to purge the pipeline/sample port. During this time, temperature and pH measurements were collected. When the temperature and pH measurements stabilized, changing less than 0.1 degree Celsius and less than 0.1 pH unit, respectively between readings, and after a minimum of five minutes, water samples were collected.

To avoid inadvertent contamination, the sampling team observed the following personal hygiene guidelines:

- No smoking while collecting samples;
- No hairspray/mousse;
- No cologne/perfume; and
- No breath spray or mouthwash when collecting samples.

After the sample faucet or tap had been run and temperature readings stabilized, flow was reduced to a trickle for sample collection. Sample containers were held at a 45 degree angle, with the cap from each container removed. The container was positioned as close as possible to make sure the stream contacted the side of the vial as it filled. The vial was slowly filled until a convex meniscus was observed, and a small amount of water was added to the cap, as well. The cap was carefully flipped over the top of the vial and screwed tight. The sampling team then observed the sample to verify that no bubbles were present in the sample. If bubbles were observed, the cap was removed, and vial closure was repeated. Once all six vials were filled (three for the sample and three for the duplicate), the faucet was turned off.

Two sets of samples were collected from each location, one sample and one duplicate. For confidentiality, collected samples were identified with a location ID number only, for example, as follows:

- First Sample: **"99";** and
- Duplicate Sample: **"99-D"**.

Sample labels and chain-of-custody (COC) forms were completed immediately after sample collection. Sample containers were packaged in disposable self-sealing plastic bags and preserved in a chilled environment. In addition, as a quality assurance measure, a trip blank consisting of deionized water filled at the laboratory was analyzed for every ten samples.

3. Analysis Method

Collected samples were submitted to Test America, an analytical laboratory certified by the State of California, for analysis. Samples were analyzed for select VOCs by Environmental Protection Agency (EPA) Method 524.2. The select VOC list consisted of the following compounds:

- 1,1-Dichloroethane (1,1-DCA);
- 1,2-Dichloroethane (1,2-DCA);
- 1,1,1-Trichloroethane (1,1,1-TCA);
- 1,1,2-Trichloroethane (1,1,2-TCA);
- 1,1-Dichloroethene (1,1-DCE);
- Cis-1,2-Dichloroethene (Cis-1,2-DCE);

- Trans-1,2-Dichloroethene (Trans-1,2-DCE);
- Tetrachloroethene (PCE);
- Trichloroethene (TCE); and
- Vinyl Chloride.

4. Data Management

The laboratory provided the analytical results by e-mail in PDF format with standard QA/QC laboratory backup. Sample results are subsequently transmitted to the residents.

5. Sample Documentation

Field notes and/or preprinted field forms were utilized to document where, when, how, and from whom many vital project information was obtained. The following information was recorded during the collection of each sample:

- Sample location and description
- Field instrument readings
- Field observations and details related to analysis or integrity of samples (e.g., weather conditions, noticeable odors, colors, etc.)
- Preliminary sample description
- Sample preservation
- Sample identification numbers and any explanatory codes
- Name, date and time of delivery to laboratory

Appendix B
Water Sample Collection Form

Sampling Personnel: ____________________ **Date:** ____________________

Location Name: ____________________ **Location ID:** ____________________

Address: ____

Name: ____________________ **Phone Number:** ____________________

Well on Property?: ________ **CBWM ID#:** ____________ **How many homes served by well?:** ________

How long has well been in place/use? ____________________

Well used for drinking? ________ **Cooking?** ________ **Bathing?** ________

Well used for irrigation? ________ **Is water treated?** ____________________

Where is the Treatment? ____________ **Treatment Type:** ____________________

Previously sampled by CBWM? ________ **Chlorination?** ____________________

If yes, how? ____

Separate faucet for drinking water? ____________________

House on Septic system? ________ **How often Maintained?** ____________________

Using bottled water? ____

Sample Collected **Indoors with aerator:** **Indoors without aerator:** **Outdoors:**

Purging & Sampling

Time	Temperature	pH	Comments

Sample ID: ____________________ **Time:** ____________________

Duplicate ID: ____________________ **Time:** ____________________

Temperature/ pH Probe SN#:

Additional Notes ____

Photo/GPS @ Well? ________

Appendix C

TCE Trend Graphs for Private Residence Wells That Are Part of the Alternative Water Supply Program and Located in the Western Portion of the Plume Where TCE Has Declined Below 4 μg/L

Data Sources Identified By Symbol:

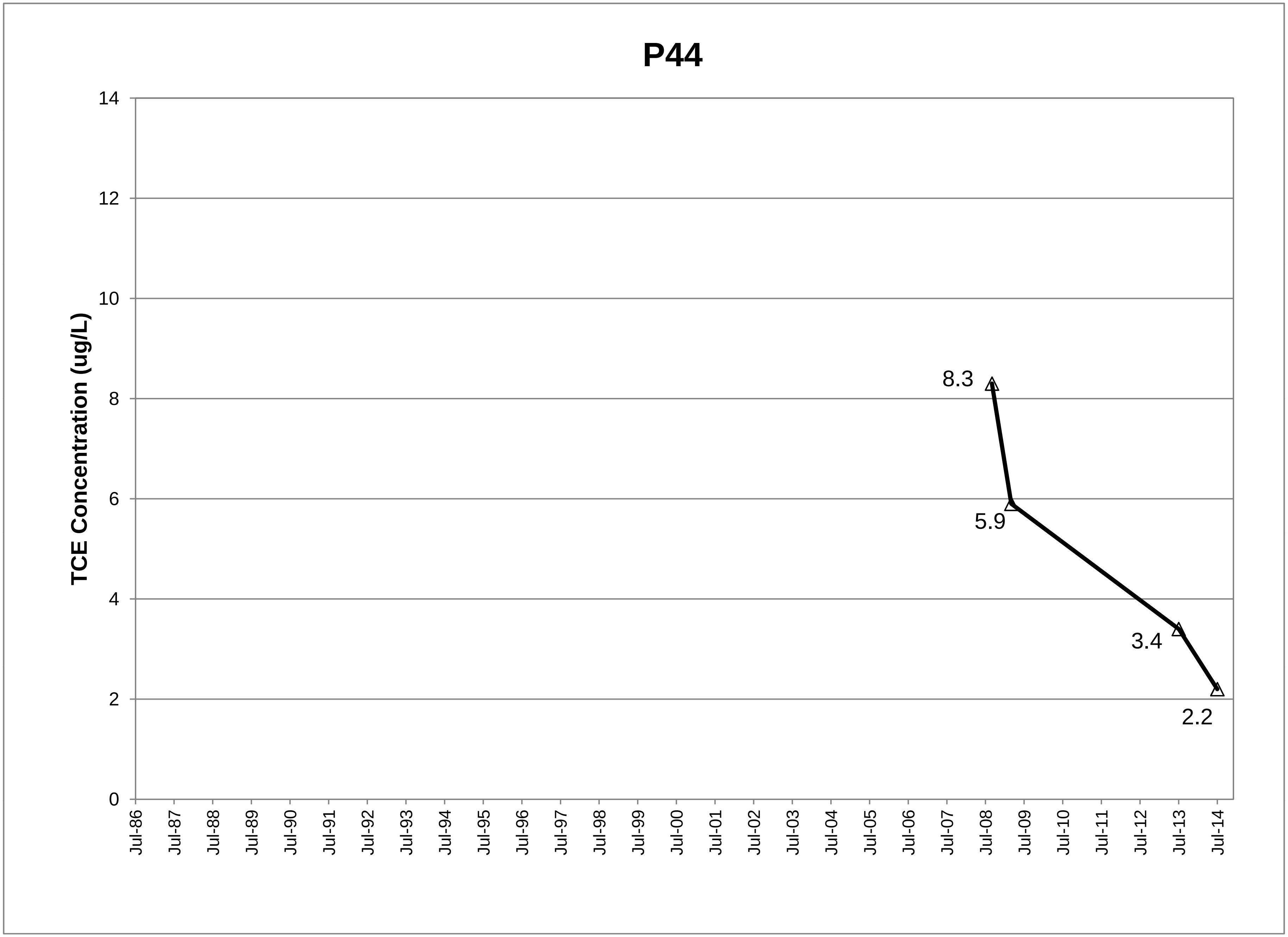
Open Triangle [Δ] = EEC,Inc.

Open Square [□] = Geotrans, Inc.

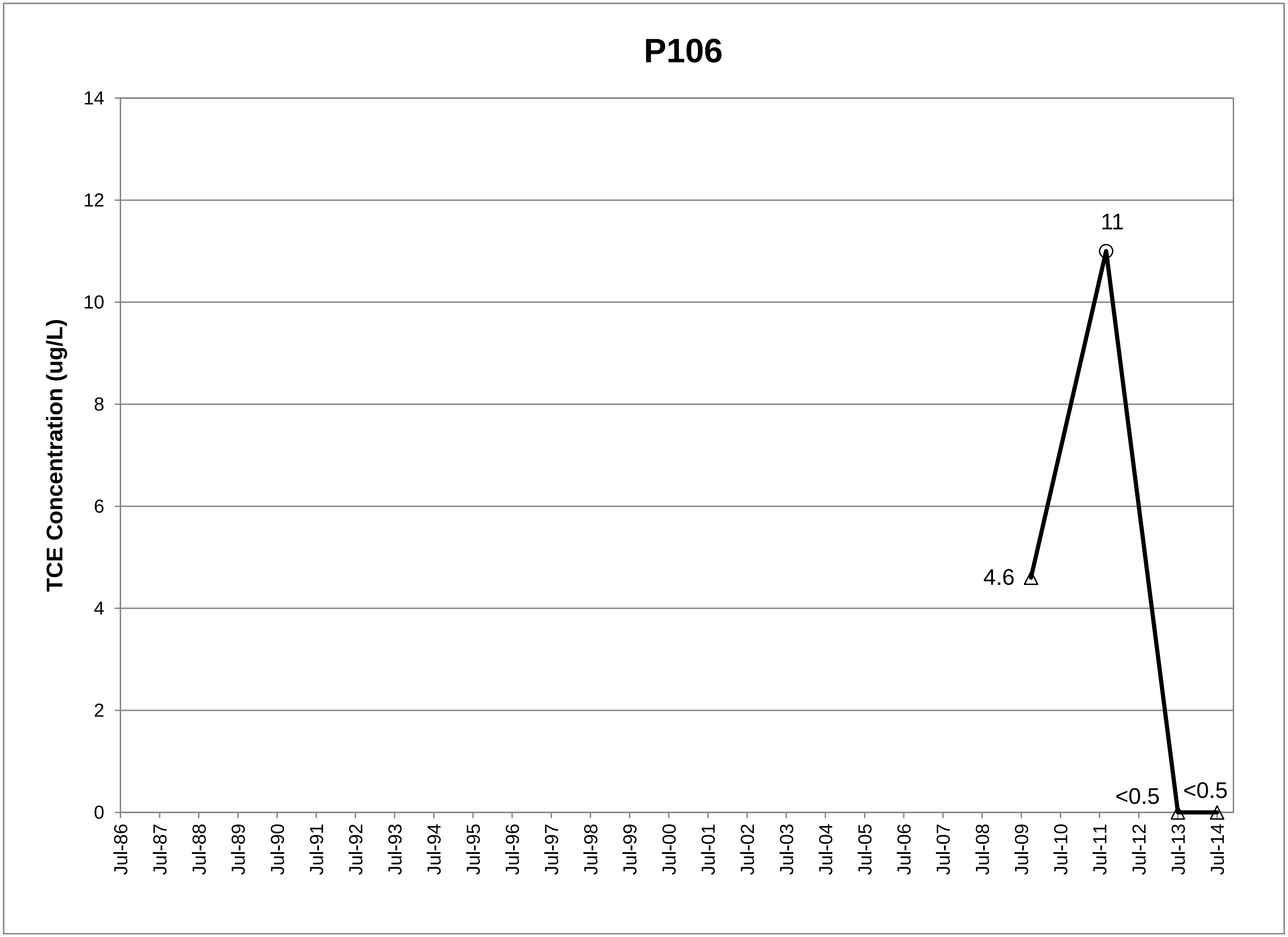
Open Circle [○] = Chino Basin Water Master

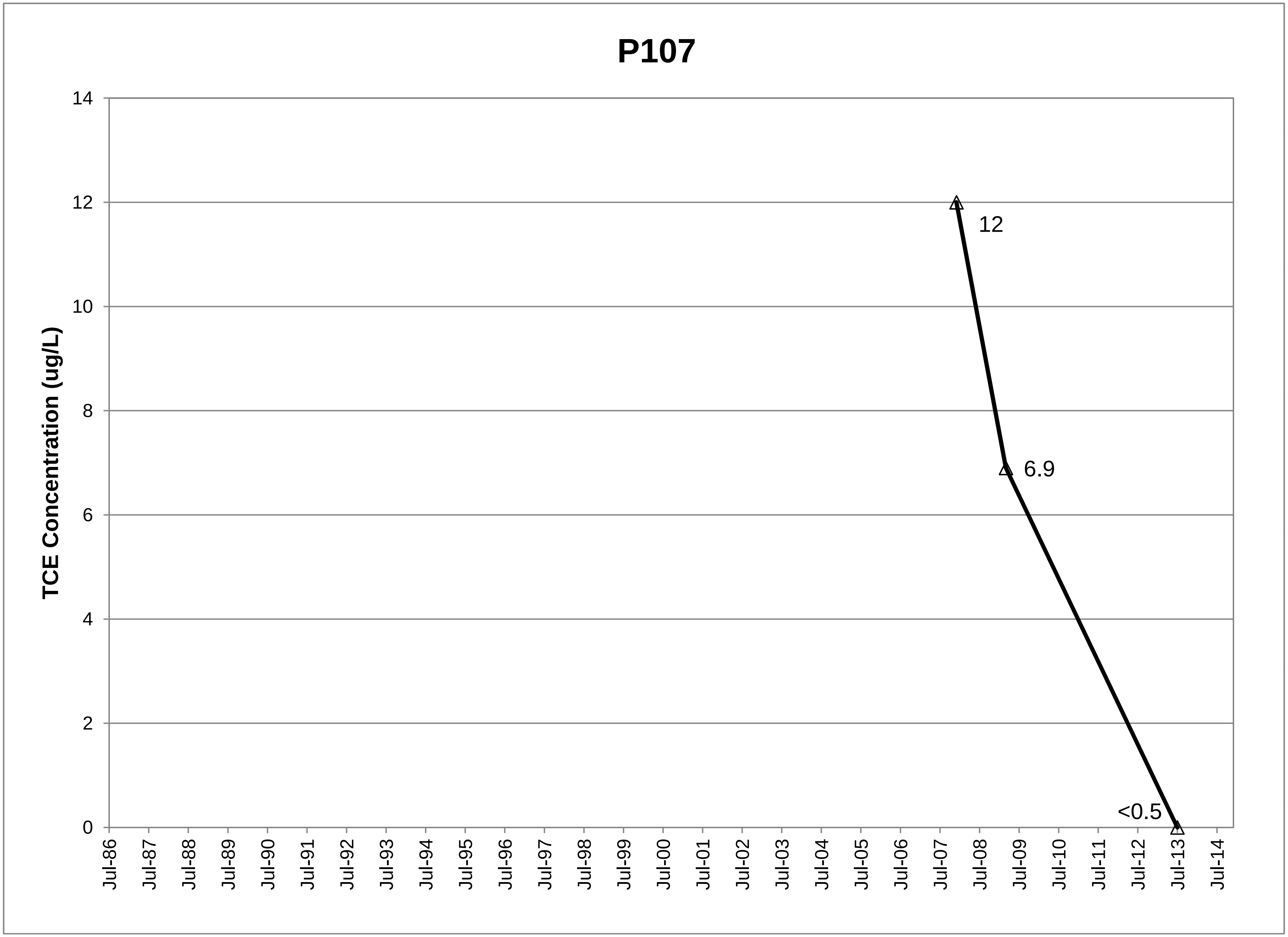
Open Diamond [◊] = Dudek, Inc.

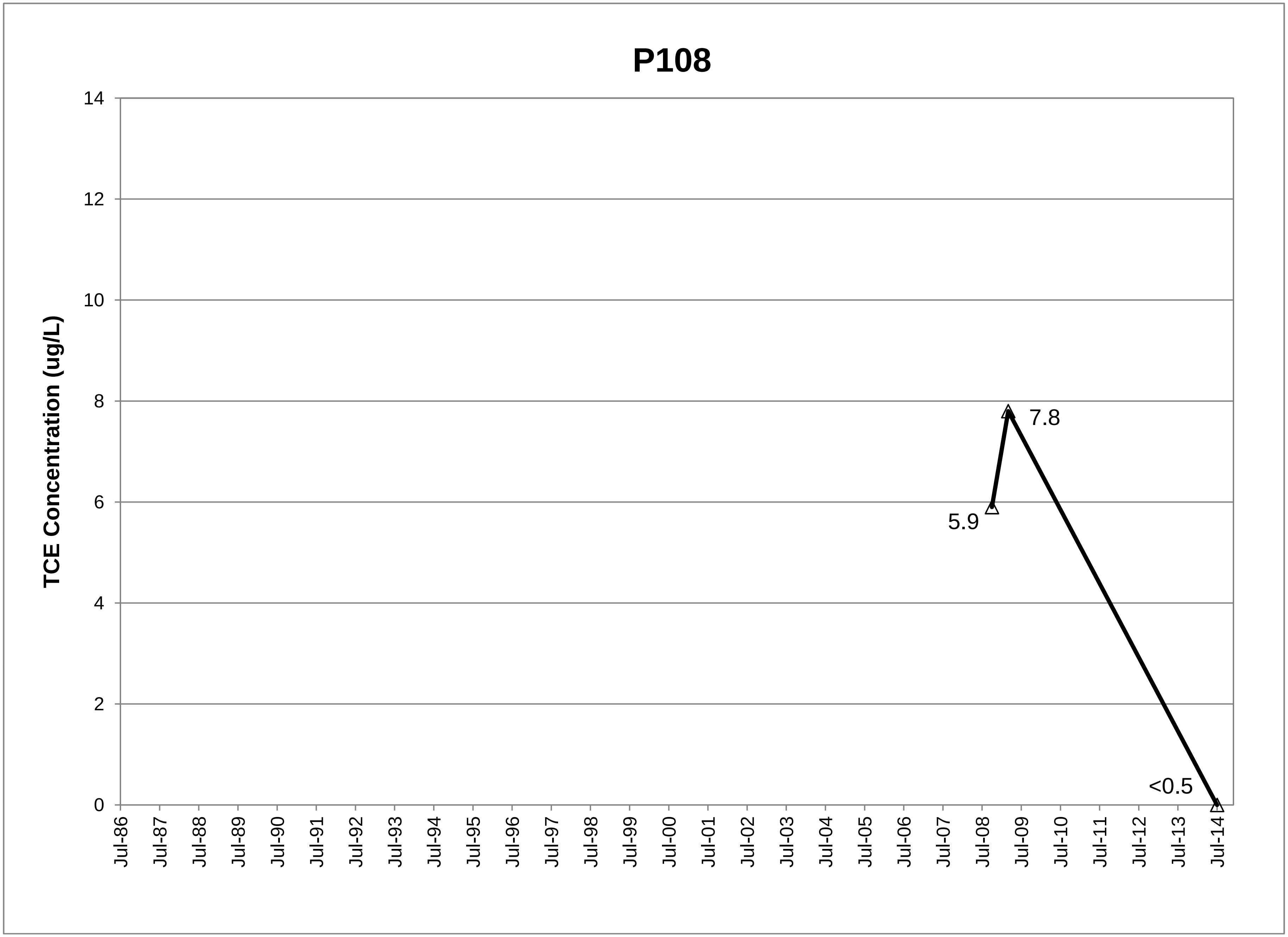
Filled Diamond [♦] = Regional Water Quality Control Board



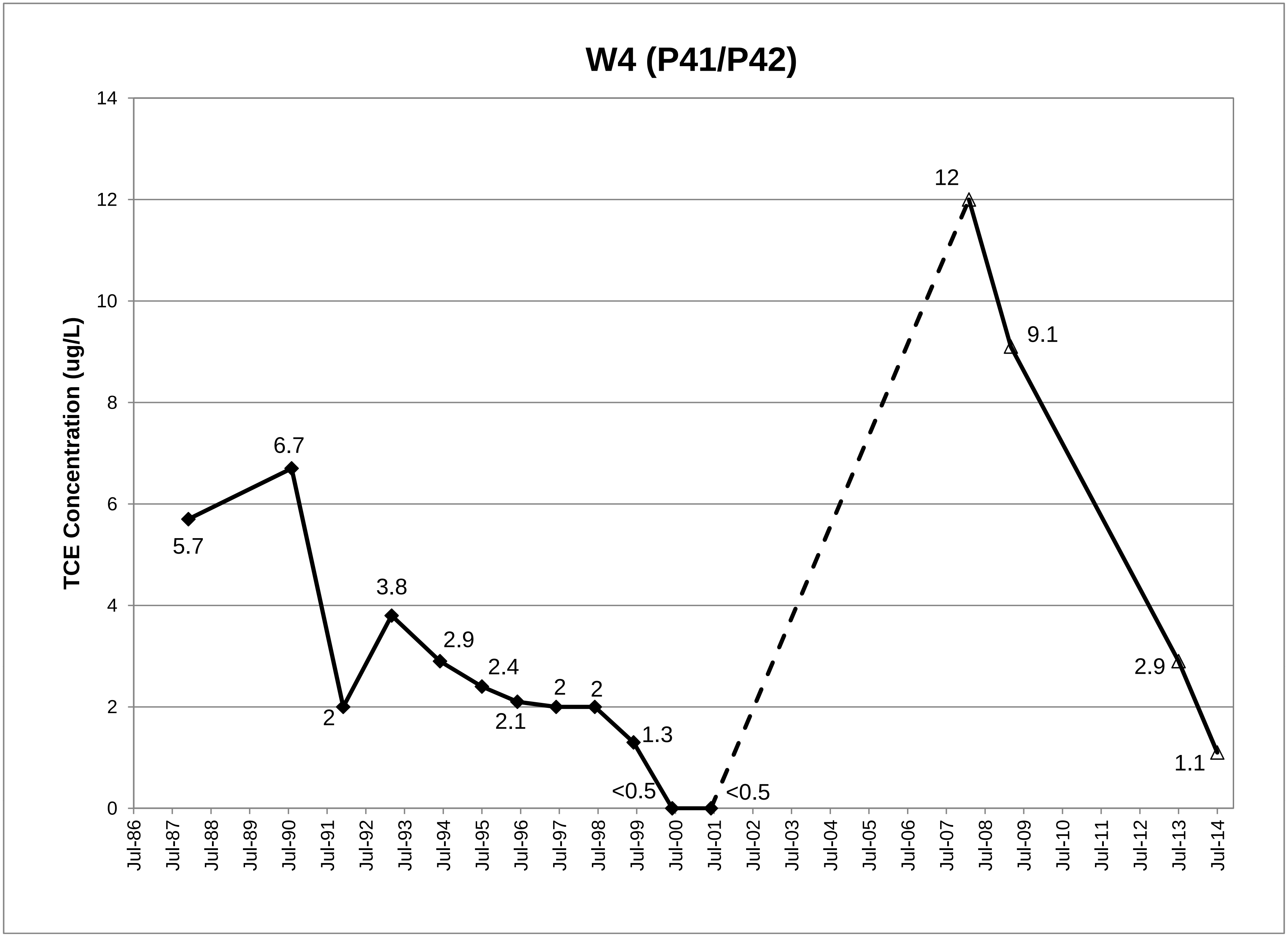
P44
TCE Concentration (ug/L)
14
12
10
8
6
4
2
0
8.3
5.9
3.4
2.2
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14


P106
TCE Concentration (ug/L)
14
12
10
8
6
4
2
0
11
4.6
<0.5
<0.5
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14

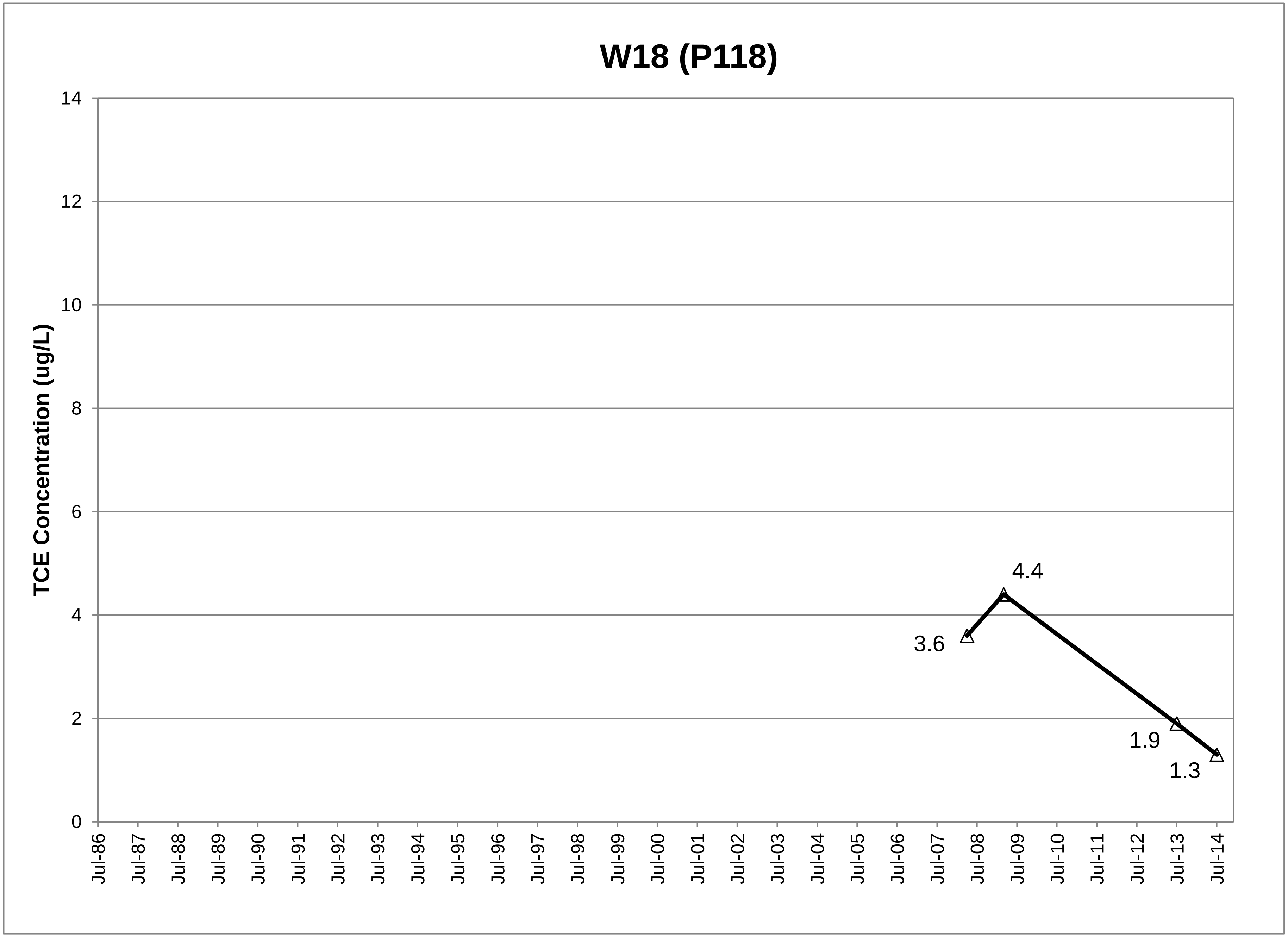

P107
TCE Concentration (ug/L)
14
12
10
8
6
4
2
0
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14
12
6.9
<0.5



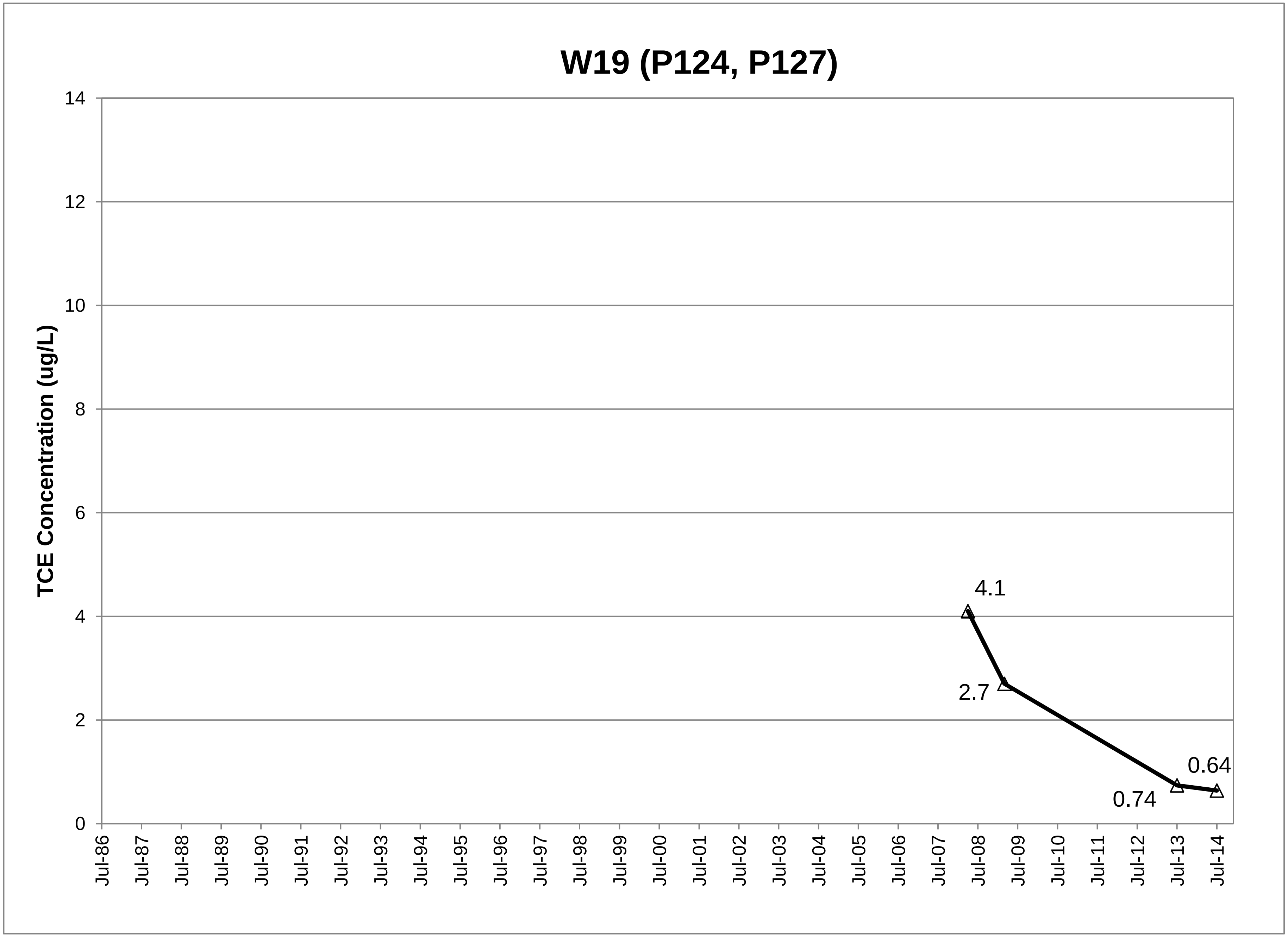
P108
TCE Concentration (ug/L)
14
12
10
8
6
4
2
0
7.8
5.9
<0.5
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14



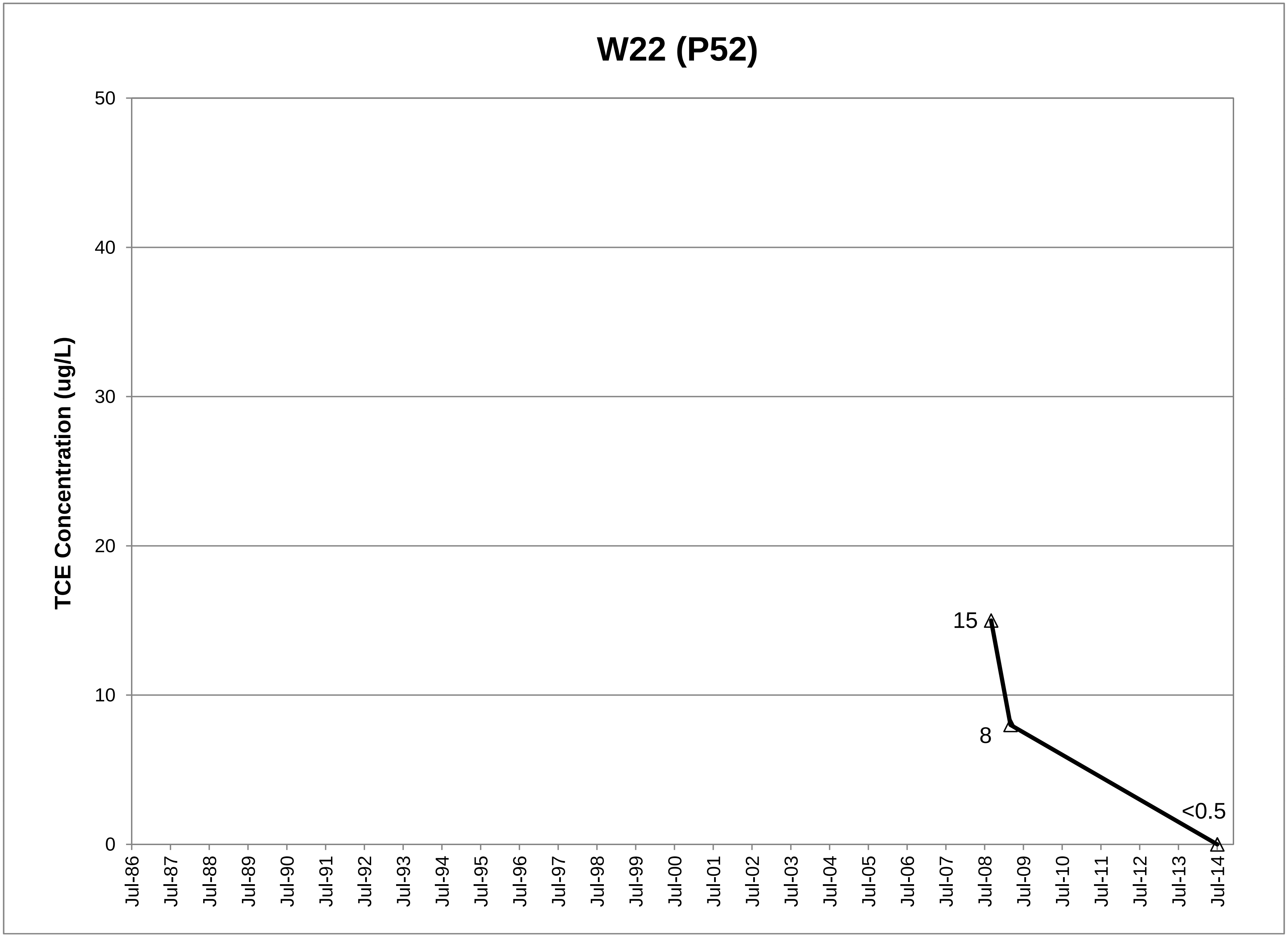
W4 (P41/P42)
TCE Concentration (ug/L)
14
12
10
8
6
4
2
0
5.7
6.7
2
3.8
2.9
2.4
2.1
2
2
1.3
<0.5
<0.5
12
9.1
2.9
1.1
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14



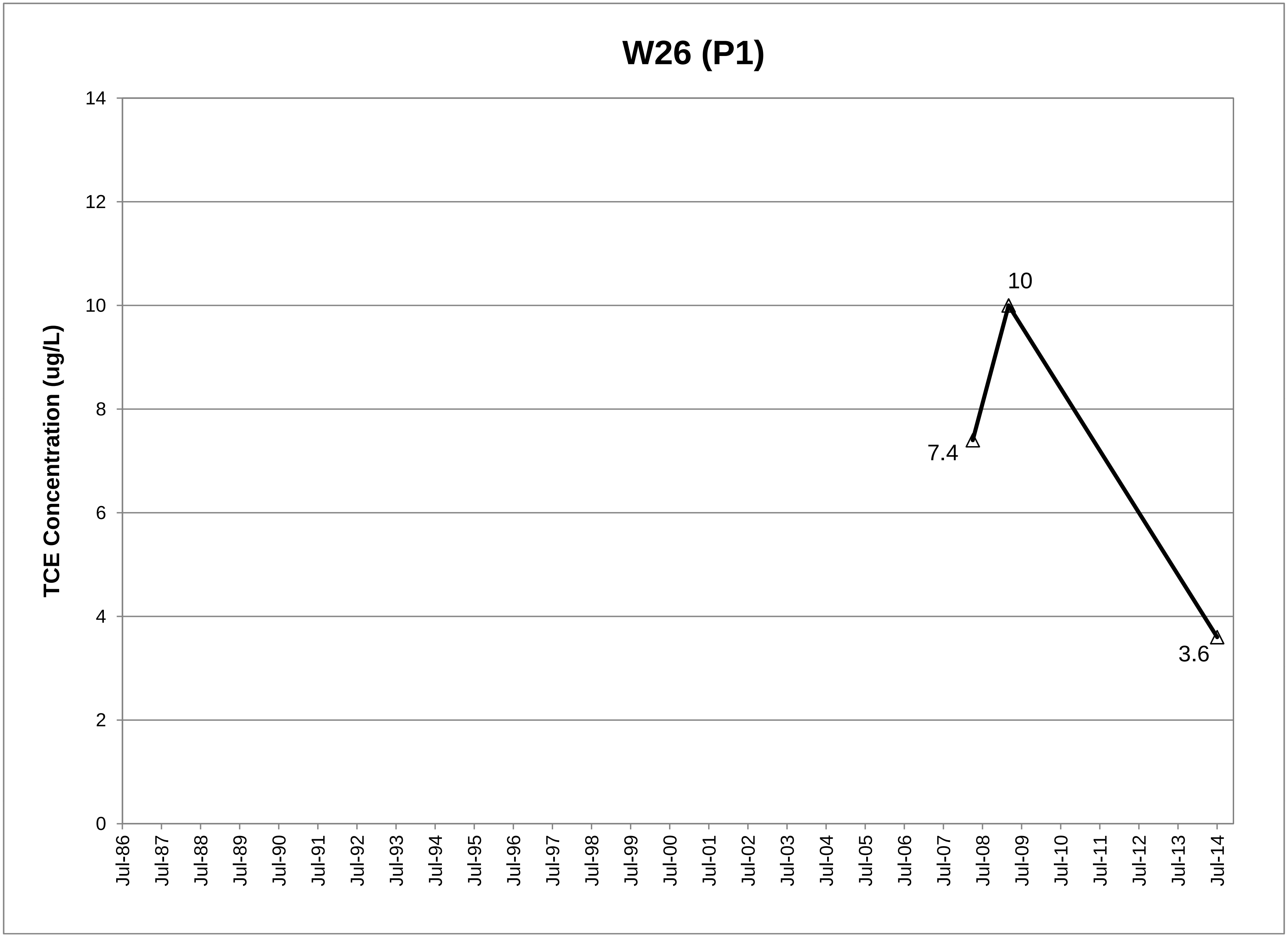
W18 (P118)
TCE Concentration (ug/L)
14
12
10
8
6
4
2
0
4.4
3.6
1.9
1.3
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14



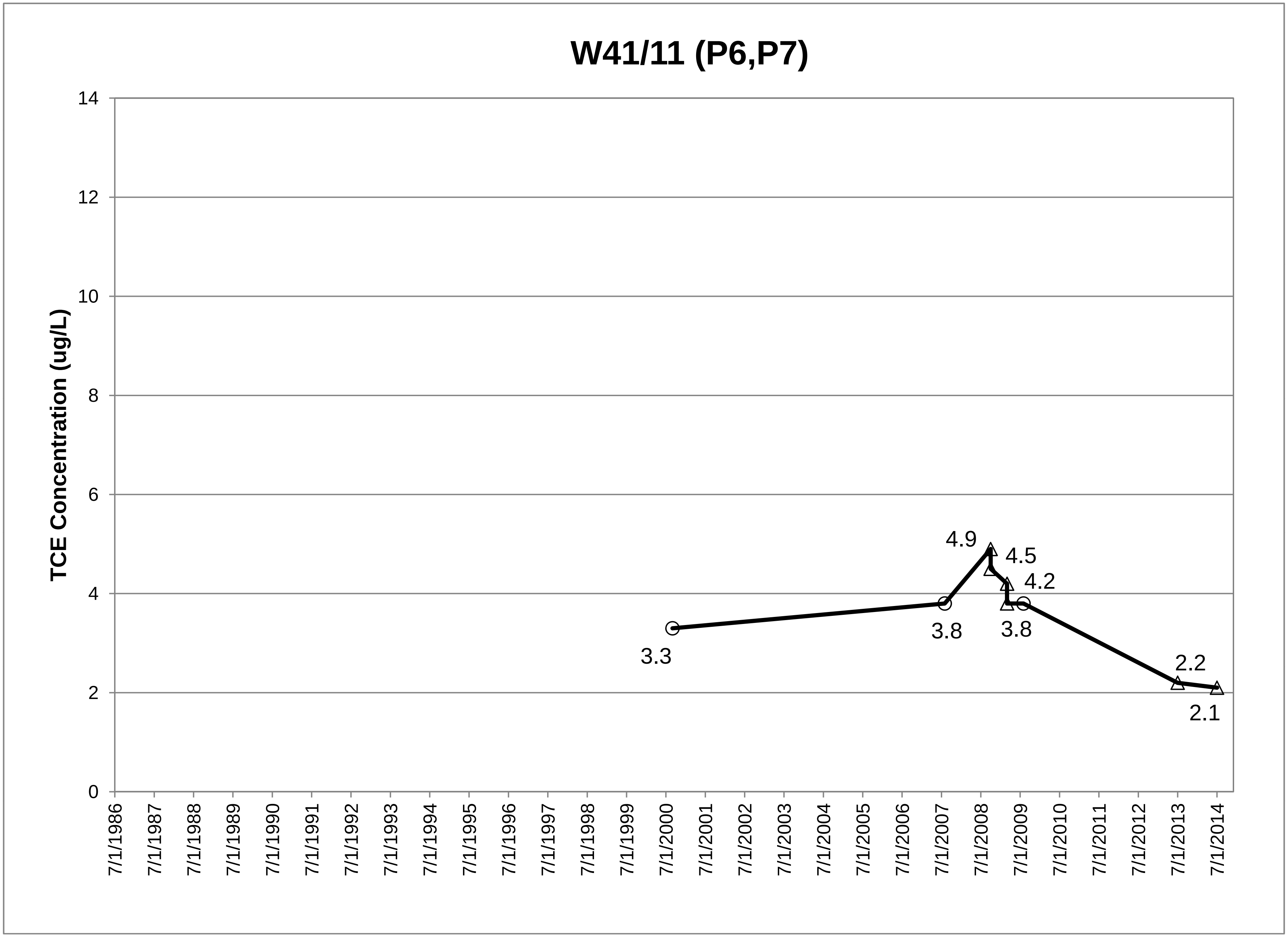
W19 (P124, P127)
TCE Concentration (ug/L)
14
12
10
8
6
4
2
0
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14
4.1
2.7
0.74
0.64



W22 (P52)
TCE Concentration (ug/L)
50
40
30
20
10
0
15
8
<0.5
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14



W26 (P1)
TCE Concentration (ug/L)
14
12
10
8
6
4
2
0
Jul-86
Jul-87
Jul-88
Jul-89
Jul-90
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14
7.4
10
3.6


W41/11 (P6,P7)
TCE Concentration (ug/L)
0
2
4
6
8
10
12
14
7/1/1986
7/1/1987
7/1/1988
7/1/1989
7/1/1990
7/1/1991
7/1/1992
7/1/1993
7/1/1994
7/1/1995
7/1/1996
7/1/1997
7/1/1998
7/1/1999
7/1/2000
7/1/2001
7/1/2002
7/1/2003
7/1/2004
7/1/2005
7/1/2006
7/1/2007
7/1/2008
7/1/2009
7/1/2010
7/1/2011
7/1/2012
7/1/2013
7/1/2014
3.3
3.8
4.9
4.5
4.2
3.8
2.2
2.1

Appendix D

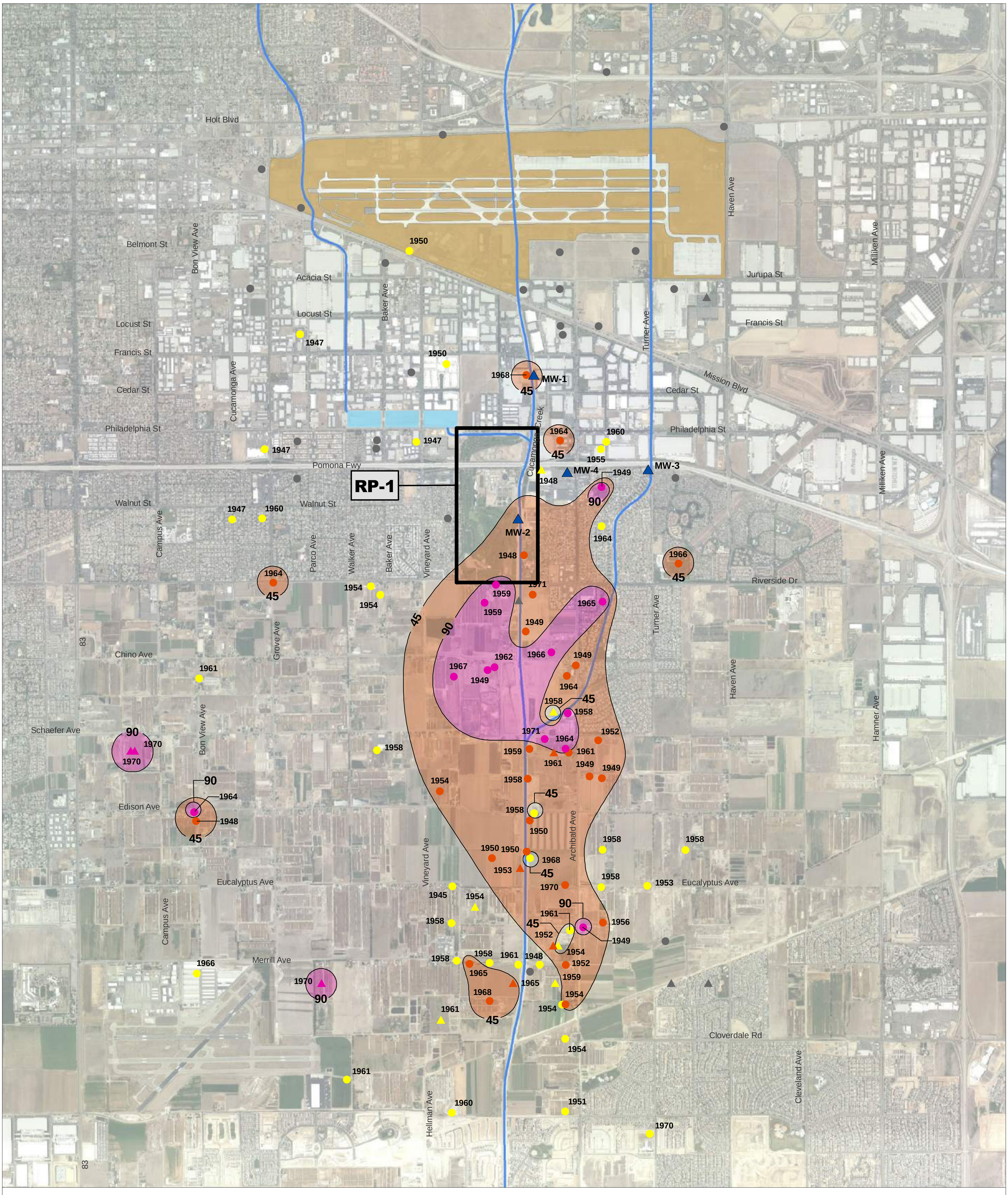
Figure 4-5 – Maximum Nitrate Concentrations, 1948 through 1972

Figure 4-6 – Maximum TDS Concentrations, 1948 through 1972

Figure 4-11 – Maximum Nitrate Concentrations, 2000 through 2010

Figure 4-12 – Maximum TDS Concentrations, 2000 through 2010

From EKI, 2011, Remedial Investigation Report Trichloroethene Plume,
Central Chino Basin, Ontario, California, dated 13 October 2011



Legend

Ontario International Airport

Ely Basins

Artificial Channel

Monitoring Well Cluster

1954 Year in which the Maximum Concentration was Detected

Data obtained from WEI, 2010 (mg/L)
- 90 - 180
- 45 - 90
- 22.5 - 45
- < 22.5 and ND

Data obtained from DWR, 1972 (mg/L)
- 90 - 180
- 45 - 90
- 22.5 - 45
- < 22.5 and ND

Nitrate Concentration (mg/L)
- 90 - 180
- 45 - 90

0 3,500 7,000

(Approximate Scale in Feet)

N

Abbreviations

DWR = California Department of Water Resources
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
ND = Not Detected
OIA = Ontario International Airport
WEI = Wildermuth Environmental, Inc.

Notes

1. All locations are approximate.
2. MCL for Nitrate as Nitrate is 45 mg/L.
3. Data taken from several sources and may reflect duplicate well locations.
4. For well locations that had data records in both the DWR and CBWM datasets, the maximum concentration values shown are calculated based on the complete set of data for that location.
5. Where the maximum concentration was detected from multiple sample events, the earliest date is shown.
6. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.

References

DWR, 1972, Water Quality Investigation Ontario Area Memorandum Report, January 1972.
WEI, 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010.

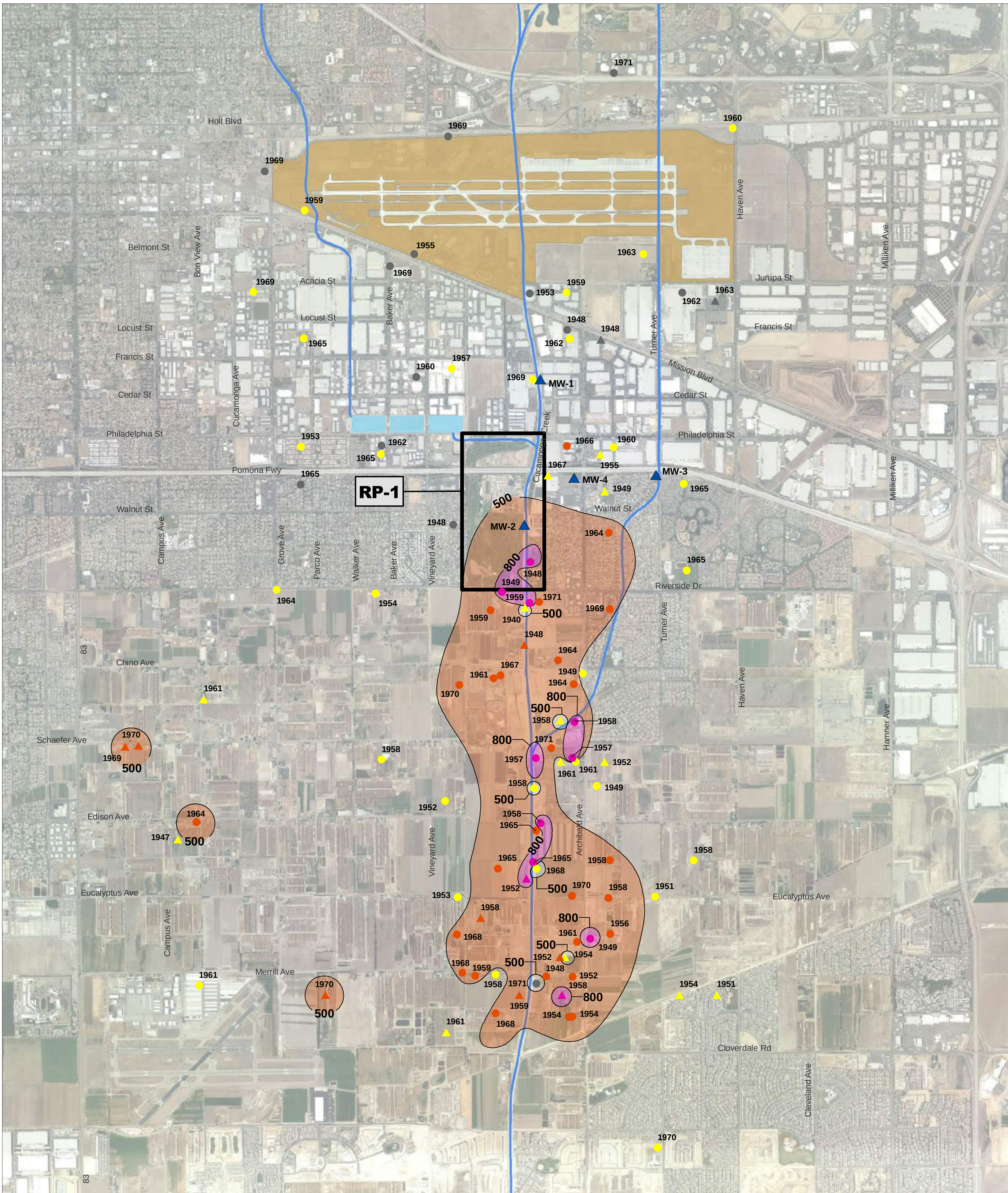
Erler & Kalinowski, Inc.

Maximum Nitrate Concentrations, 1948 through 1972

Central Chino Basin
Ontario, CA
October 2011
EKI A80039.00

Figure 4-5

Path: X:\A80039\Maps\2011\10\Report\Figure 4-5 - Maximum Nitrate Concentration, 1948-1972.mxd



Legend

Ontario International Airport

Ely Basins

Artificial Channel

Monitoring Well Cluster

1954 Year in which the Maximum Concentration was Detected

Data obtained from WEI, 2010 (mg/L)
- 800 - 2,000
- 500 - 800
- 250 - 500
- 125 - 250

Data obtained from DWR, 1972 (mg/L)
- 800 - 2,000
- 500 - 800
- 250 - 500
- 125 - 250

TDS Concentration (µg/L)
- 800 - 2,000
- 500 - 800

Abbreviations

DWR = California Department of Water Resources
mg/L = milligrams per liter
OIA = Ontario International Airport
TDS = Total Dissolved Solids
WEI = Wildermuth Environmental, Inc.

Notes

1. All locations are approximate.
2. Data taken from several sources and may reflect duplicate well locations.
3. For well locations that had data records in both the DWR and CBWM datasets, the maximum concentration values shown are calculated based on the complete set of data for that location.
4. Where the maximum concentration was detected from multiple sample events, the earliest date is shown.
5. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.

References

DWR, 1972, Water Quality Investigation Ontario Area Memorandum Report, January 1972.
WEI, 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010.

0 3,500 7,000

(Approximate Scale in Feet)

N

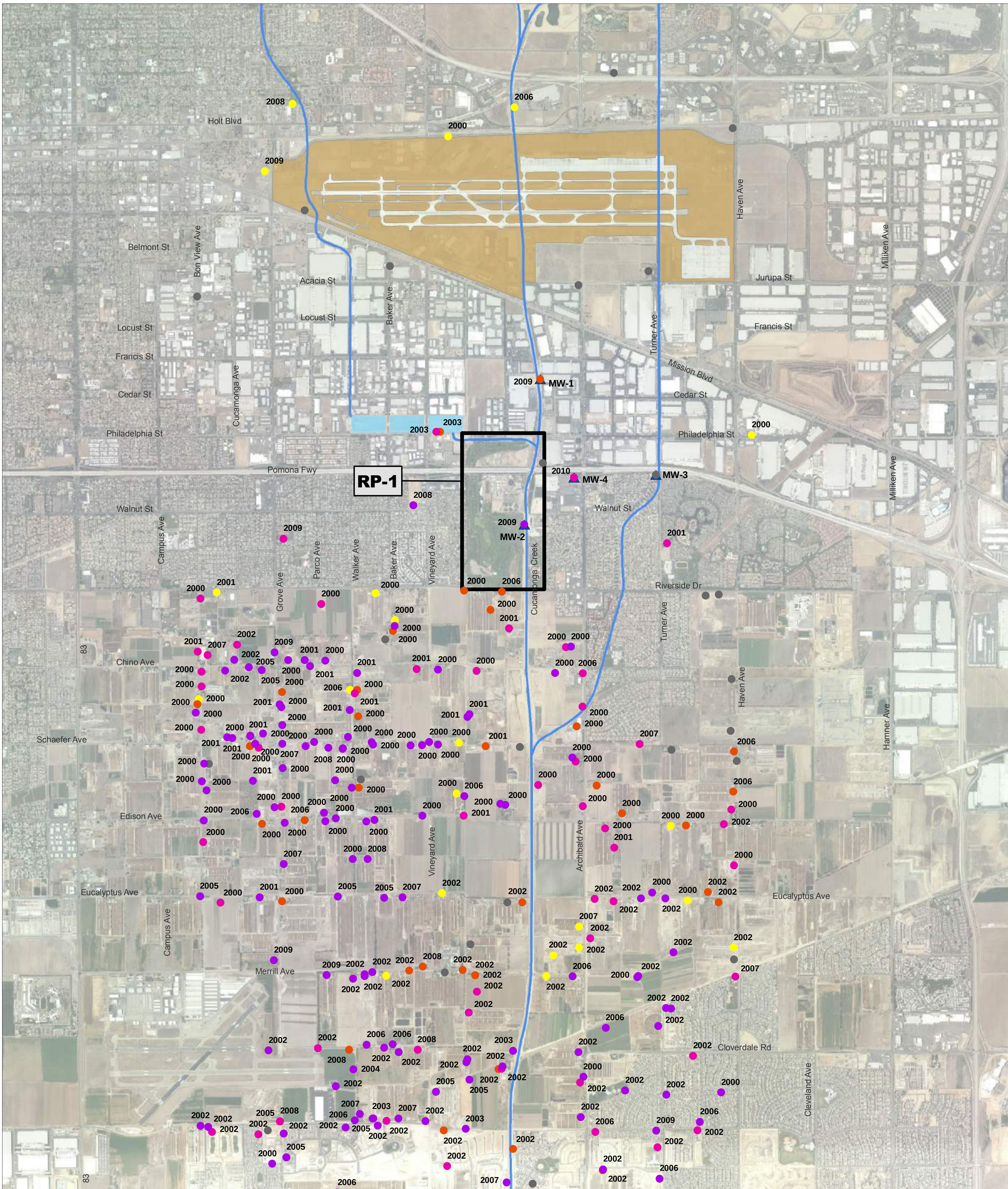
Erler & Kalinowski, Inc.

Maximum TDS Concentrations, 1948 through 1972

Central Chino Basin
Ontario, CA
October 2011
EKI A80039.00

Figure 4-6

Path: X:\A80039\Maps\2011\10\Report\Figure 4-6 - Maximum TDS Concentration, 1948-1972.mxd



Legend

Ontario International Airport

Ely Basins

Artificial Channel

Monitoring Well Cluster (See Note 4)

2006 Year in which the Maximum Concentration was Detected

Data obtained from WEI, 2010 (mg/L)

- ≥ 180
- 90 - 180
- 45 - 90
- 22.5 - 45
- < 22.5 and ND

Abbreviations

EEC = Environmental Engineering & Contracting, Inc.
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
ND = Not Detected
OIA = Ontario International Airport
WEI = Wildermuth Environmental, Inc.

Notes

1. All locations are approximate.
2. MCL for Nitrate as Nitrate is 45 mg/L.
3. Where the maximum concentration was detected from multiple sample events, the earliest date is shown.
4. Monitoring well data were collected between 2008 and 2010 (GeoTrans, 2009; EEC, 2010a).
5. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.

References

EEC, 3 September 2010a, DRAFT Sampling and Analysis Report, Central Chino Basin, Ontario, California.

GeoTrans, Inc., 27 August 2009. Monitoring Well Installation Data Report, Central Chino Basin TCE Anomaly Project, San Bernardino County, California.

WEI, 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010.

0 3,500 7,000

(Approximate Scale in Feet)

N

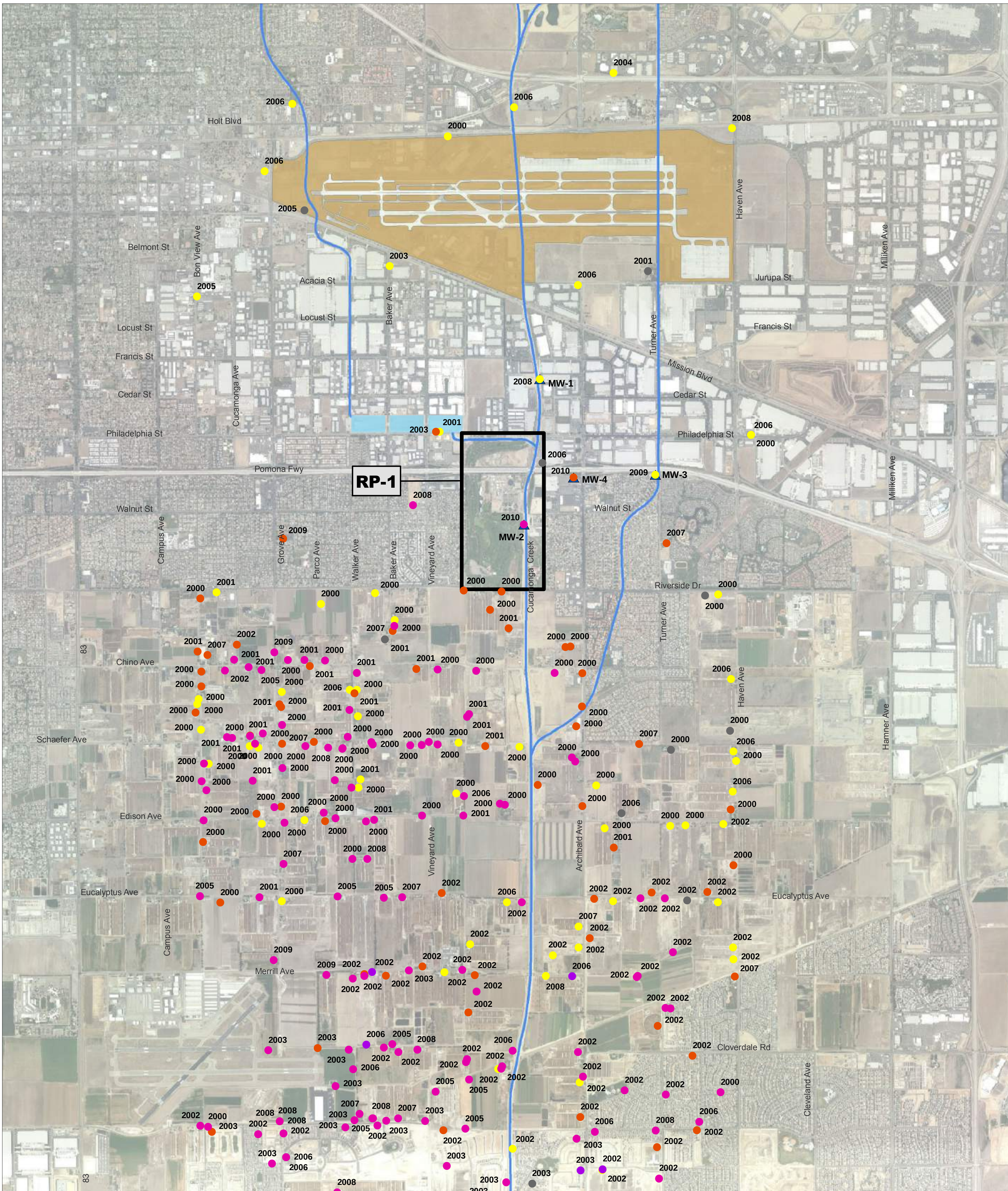
Erler & Kalinowski, Inc.

Maximum Nitrate Concentrations, 2000 through 2010

Central Chino Basin
Ontario, CA
October 2011
EKI A80039.00

Figure 4-11

Path: X:\A80039\Maps\2011\10\Report\Figure 4-11 - Maximum Nitrate Concentration, 2000 - 2010.mxd



Legend

Ontario International Airport

Ely Basins

Artificial Channel

Monitoring Well Cluster (See Note 3)

2006 Year in which the Maximum Concentration was Detected

Data obtained from WEI, 2010 (mg/L)

- ≥ 2,000
- 800 - 2,000
- 500 - 800
- 250 - 500
- 125 - 250

Abbreviations

EEC = Environmental Engineering & Contracting, Inc.
mg/L = milligrams per liter
OIA = Ontario International Airport
TDS = Total Dissolved Solids
WEI = Wildermuth Environmental, Inc.

Notes

1. All locations are approximate.
2. Where the maximum concentration was detected from multiple sample events, the earliest date is shown.
3. Monitoring well data were collected between 2008 and 2010 (GeoTrans, 2009; EEC, 2010a).
4. Area labeled RP-1 includes associated areas of Whispering Lakes Golf Course, West Winds Park, and former Percolation Ponds.

References

EEC, 3 September 2010a, DRAFT Sampling and Analysis Report, Central Chino Basin, Ontario, California.

GeoTrans, Inc., 27 August 2009. Monitoring Well Installation Data Report, Central Chino Basin TCE Anomaly Project, San Bernardino County, California.

WEI, 2010. OIA Plume Region Data Request Database, on behalf of the Chino Basin Watermaster, received 29 January 2010.

0 3,500 7,000

(Approximate Scale in Feet)

N

Erler & Kalinowski, Inc.

Maximum TDS Concentrations, 2000 through 2010

Central Chino Basin
Ontario, CA
October 2011
EKI A80039.00

Figure 4-12

Path: X:\A80039\Maps\2011\10\Report\Figure 4-12 - Maximum TDS Concentration, 2000 - 2010.mxd

DRAFT REMEDIAL ACTION PLAN

Mitigation of TCE Impacts to Groundwater
South Archibald Plume
Ontario, California

Prepared for:

City of Ontario
1425 South Bon View Ave
Ontario, California 91761

City of Upland
460 N. Euclid Ave
Upland, California 91786

Inland Empire Utilities Agency
P.O Box 9020
Chino Hills, California 91709

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024

Peter Quinlan, R.G.

Jill Weinberger, Ph.D., P.G.

Derek Reed, P.E.
Senior Engineer

NOVEMBER 2015

TABLE OF CONTENTS

Section **Page No.**

FIGURES

GLOSSARY OF TERMS AND ACRONYMS

1,2,3-TCP	1,2,3-trichloropropane
CDA	Chino Basin Desalter Authority
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
Cr(VI)	Hexavalent Chromium
COC	Constituent of Concern
DRAP	Draft Remedial Action Plan
EPA	United States Environmental Protection Agency
GAC	Granular Activated Carbon
MCL	Maximum Contaminant Level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
RAOs	Remedial Action Objectives
RWQCB	California Regional Water Quality Control Board, Santa Ana Region
TCE	Trichloroethylene
µg/L	microgram per liter

EXECUTIVE SUMMARY

This Draft Remedial Action Plan (DRAP) was prepared on behalf of the Cities of Ontario (Ontario) and Upland (Upland) and the Inland Empire Utilities Agency to support mitigation of trichloroethylene (TCE) impacts to groundwater in the South Archibald Plume (Plume). The Plume is generally located south of the Pomona Freeway, north of Bellegrave/ Remmington Avenues, east of Grove Avenue and west of Haven Avenue in Ontario. The southern edge of the Plume is migrating toward the Chino Basin Desalter Authority production wells located along Bellegrave Avenue.

A Remedial Investigation, Draft Feasibility Study and this DRAP were prepared under the oversight of the Santa Ana Regional Water Quality Control Board (RWQCB) to investigate the Plume and evaluate alternatives to mitigate the effects of the Plume. The Remedial Investigation, Draft Feasibility Study and DRAP were prepared consistent with applicable requirements of Section 25350 et seq. of Chapter 6.8 of the California Health and Safety Code and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), set forth in Part 300, Title 40 of the Code of Federal Regulations.

Two sets of mitigation alternatives were analyzed. The first set of alternatives, referred to as domestic water supply alternatives, addresses the delivery of replacement water to residences south of Riverside Drive with wells that are currently impacted by TCE. The second set of alternatives, referred to as plume remedial alternatives, addresses remediation of the Plume.

Nine domestic water supply alternatives were identified and, after an initial screening, six were selected for further evaluation in accordance with the United States Environmental Protection Agency (EPA) “Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA” (EPA 1988; referred to as “EPA Guidance”) and the NCP. The preferred domestic water supply alternative provides water to all affected residences via either tank systems or connection to the Ontario municipal water supply pipelines.

Thirteen Plume remedial alternatives were identified and, after an initial screening, six alternatives were selected for further evaluation in accordance with the EPA Guidance and the NCP. The selected Plume remedial alternative includes placement of an expansion well in an area of the Plume with higher TCE concentrations to increase the mass removal rate in the short term, along with remediating the TCE impacts to groundwater by removing TCE from the groundwater at the decarbonators of the Chino Basin Desalter Authority (CDA) Chino II Desalter facility. The preferred alternative is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, is cost effective, and utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable. This remedy also satisfies the statutory preference for treatment (including contaminant destruction) as a principal element of the remedy.

The Draft Feasibility Study and this DRAP will be finalized based upon regulatory input from the Santa Ana RWQCB, comments received from directly affected public entities/stakeholders (the Chino Basin Desalter Authority [CDA] and member agencies; and, the Chino Basin Watermaster and constituent groups) and the general public through the public comment process. This DRAP is intended to inform and invite the public to participate in selection of the remedial response to impacted groundwater conditions.

To inform the public, an information repository containing all relevant documents is available electronically at the website: http://tceplumecleanup.com/, and in hard copy at the Ontario City Hall. Additionally, public meetings were held on September 10 and September 24, 2015 to discuss this DRAP and the Draft Feasibility Study and solicit additional oral and/or written comments. Notice of these activities was provided to local and state agencies, the owners of property within the Plume area, and any other known interested parties.

1 BACKGROUND

This Draft Remedial Action Plan (DRAP) was prepared to support mitigation of trichloroethene (TCE) impacts to groundwater in the South Archibald Plume (Plume), which pose a risk to the future water quality in groundwater production wells operated by the Chino Basin Desalter Authority (CDA). The TCE impacts to groundwater occur beneath an approximately 2,000 acre area of primarily agricultural land located between Grove Avenue on the west, Haven Avenue on the east, Bellegrave/Remington Avenues on the south, and the 60 Freeway on the north in the City of Ontario (Ontario) (Figures 1 and 2).

There are several private domestic wells within the impacted area. These wells have been sampled on multiple occasions to determine the extent of the impacted area. Private residences where groundwater samples were found to contain TCE at a concentration greater than 4 μg/L have been provided with alternative water supplies. The Maximum Contaminant Level (MCL) for TCE, which is the drinking water standard for public water systems, is 5 μg/L. A concentration of 4 μg/L in private residential wells was selected to provide a margin of safety.

The CDA currently operates 22 groundwater production wells in the lower Chino Basin and is installing additional groundwater production wells along the Riverside/ San Bernardino County line (Figure 2). Groundwater produced by the CDA wells in the vicinity of the Plume is sent to both the Chino I and Chino II Desalters, via raw water pipelines. The water in these pipelines is directed to either the reverse osmosis (including decarbonation) or ion exchange treatment trains. Additionally, at Desalter II, some of the water is allowed through a raw-water bypass without treatment via either reverse osmosis or ion exchange. The capacity of the raw-water bypass is limited by water quality, under the terms of the CDA water supply permit from the California State Water Resources Control Board Division of Drinking Water (formerly the Department of Public Health).

Results of recent groundwater sampling events and groundwater flow modeling indicate that TCE is likely to be detected at concentrations exceeding the maximum contaminant level (MCL) of 5 μg/L in the CDA expansion wells proposed for Sites A and 2, as well as at CDA I-11 (Figure 2).

2 REMEDIAL INVESTIGATION

After TCE was detected in several wells in the western Chino Basin, the RWQCB initiated an investigation into the overall extent of the groundwater contamination. The RWQCB investigation found concentrations of TCE that exceeded the MCL in samples from 92 of 167 private wells (Wildermuth, 2009). Between 2007 and 2014 an extensive water quality data set was collected. During this period, 137 private wells were sampled in over 5 rounds of sampling, and 11 discretely screened monitoring wells were installed. A draft remedial investigation report and supplement, including a human health risk assessment and subsequent addendum (EKI 2011 and 2014) and a Draft Feasibility Study (Dudek 2015) were prepared based on these data.

The data collected between 2007 and 2014 indicate that the Plume is migrating toward CDA I-11, Site A and Site 2. TCE has not been detected at concentrations exceeding the MCL in CDA I-11, and the concentration of TCE in the groundwater at Site A and Site 2 will not be known until wells are installed at these locations. However, the concentration of TCE in CDA I-11 has increased from below detectable levels in 2007 to an average of 2.7 μg/L between January 2014 and January 2015. Additionally, concentrations of TCE in nearby wells up gradient of CDA I-11, Site A and Site 2 have exceed the MCL, indicating that the Plume has already reached some CDA wells and represents a risk to CDA I-11, the proposed CDA groundwater production wells at Site A and Site 2, and the use of the raw water bypass line at Desalter II.

3 SUMMARY OF SITE RISKS

The primary constituent of concern (COC) is TCE. The maximum concentration detected was 156 μg/L in 1990. Since 2005, the highest detected concentration was 49 μg/L (EEC 2014). TCE has been identified in groundwater at concentrations exceeding both the U.S. Environmental Protection Agency and California MCLs of 5 μg/L. TCE is a suspected human carcinogen that can affect several body organs and systems including the central nervous system, respiratory system, liver, kidneys and heart.

Although TCE is the primary COC, other potential constituents of concern have been detected in groundwater samples at concentrations close to or exceeding their respective MCLs or notification levels. These other potential COCs are: nitrate, total dissolved solids (TDS), 1,2,3-trichloropropane, perchlorate, and hexavalent chromium (Cr(VI)). Each of the other potential COCs is discussed below. The concentrations discussed were measured by the Chino Basin Watermaster between July 2009 and June 2014 in samples collected from private wells (Wildermuth, 2015). The Chino Basin Watermaster has not made exact concentration data from these wells publicly available, but has provided maps with concentration ranges for wells within the footprint of the plume.

Several private wells in the footprint of the plume had nitrate concentrations that exceeded 40 mg/L (Wildermuth, 2015). The MCL for nitrate as nitrogen is 10 mg/L. When ingested, nitrate can limit the ability of hemoglobin in the blood to carry oxygen. With sufficient exposure, left untreated, the lack of oxygen in the bloodstream can cause brain damage and eventual death. Infants up to six months are considered to be the most sensitive to the effects of nitrogen in drinking water.

The maximum concentration of TDS detected in samples collected within the footprint of the Plume was between 1,000 and 2,000 mg/L (Wildermuth, 2015). The secondary drinking water standard established by the EPA for TDS is 500 mg/L. TDS is not considered a health risk by the EPA, but at high concentrations TDS can affect the taste of the water. EPA established the secondary drinking water standard to provide guidance to public drinking water providers on managing their drinking water for aesthetic considerations such as taste, color, and odor.

The maximum concentration of 1,2,3-TCP detected in samples collected within the footprint of the Plume was greater than 0.02 μg/L, which is greater than the California State Notification Level of 0.005 μg/L. 1,2,3-TCP is a suspected human carcinogen.

The maximum concentration of perchlorate detected in samples collected within the footprint of the Plume was between 12 and 24 μg/L. The California MCL for perchlorate is 6 μg/L. Studies indicate that ingestion of perchlorate can reduce the thyroid's ability to produce thyroid hormone, because it can block the thyroid's ability to take in iodide, an integral component of thyroid hormone. The thyroid is involved in many critical body functions, including brain and neurological development.

The maximum concentration of Cr(VI) detected in groundwater samples collected within the footprint of the Plume was between 10 and 20 μg/L. The California MCL for Cr(VI) is 10 μg/L. Cr(VI) is a suspected human carcinogen and, when ingested can damage the liver and kidneys.

The Preferred Alternatives identified in this DRAP, or one of the other active measures considered in the DRAP, is necessary to protect public health and welfare and the environment from actual or threatened releases of hazardous substances into the environment.

4 MITIGATION ALTERNATIVES

A Feasibility Study was completed to evaluate alternatives to mitigate the Plume. Through the Feasibility Study process, remedial action objectives (RAOs) were developed as criteria against which the alternatives were evaluated. The RAOs are listed below:

4.1 Remedial Action Objectives

1. The numerical goal for TCE in groundwater is the MCL of 5 μg/L. The area of attainment is south of the 60 Freeway; to the west of Haven avenue; to the east of Grove Avenue; and north and west of Bellegrave/Remington Avenues (Figure 2).

2. Protect human health and the environment by mitigating the effects of the TCE groundwater Plume.
3. Supply uninterrupted replacement water service to all residences that are served by private domestic wells and public supply wells at which TCE has been detected above the MCL within the area of attainment.
4. Monitor TCE concentrations in private domestic wells and public supply wells that may contain TCE above the MCL within and down gradient of the area of attainment.
5. Minimize the migration of the TCE Plume in groundwater beyond the southern boundary of the area of attainment.
6. Minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas within the area of attainment.
7. To the extent reasonably practicable, decrease the length of time that TCE impairs the beneficial use of groundwater in the area of attainment.

RAOs 1, 2, 3 and 4 are addressed by the domestic water supply alternatives, while RAOs 1 and 2 and 4 through 7 are addressed by the Plume remedy alternatives. As such, alternatives addressing domestic water supplies for current and potential future affected residences and alternatives addressing remediation of the groundwater Plume were analyzed separately.

4.2 Domestic Water Supply Alternatives

The nine domestic water supply alternatives, identified, developed, and screened in the Feasibility Study are:

- No action - consists of no remedial action, no institutional controls, and no engineering controls. Water service to the currently affected residences would cease and the residences would go back to existing domestic wells for domestic water supply. This DWS alternative was included as a requirement of the NCP evaluation process (EPA 1988). Based on the known extent of groundwater impacts to residential wells, this alternative was determined not to meet the applicable RAOs and was not evaluated in detail.

- Whole house treatment system – consists of installation of whole house treatment systems to treat groundwater at each affected residential well for TCE, nitrate, and total dissolved solids. This domestic water supply alternative met the applicable RAOs and was retained for further consideration.

- Tank systems and bottled water delivery - consists supplying replacement water to residences via tank systems or bottled water delivery. Residences that currently have tank systems would remain on tank systems, and residences that currently receive bottled water would continue to receive bottled water. This domestic water supply alternative met the applicable RAOs and was retained for further consideration.

- Permanent pipeline - consists of constructing a permanent potable water distribution pipeline to all affected residences The potable water pipeline would be an extension of the existing Ontario distribution pipeline, and would be sized to meet anticipated eventual population growth. This domestic water supply alternative was found to be difficult to implement and had high costs over both a 10 and 20 year period. Therefore, it was not retained for further consideration.

- Temporary pipeline – consists of constructing 4- to 6-inch diameter temporary pipe, to provide potable water from Ontario to all affected residences. The temporary pipe would only be sized to meet the current demands of the existing residences, and its use would be discontinued once the area is eventually developed. This domestic water supply alternative was found to be difficult to implement and had high costs over both a 10 and 20 year period. Therefore, it was not retained for further consideration.

- New 600 feet deep domestic wells – consists of installing new, deeper, domestic water supply wells at the affected residences. Two variations on this domestic water supply alternative were evaluated: one in which each residence would receive a well, for a total of 40 new wells, and one in which one well would be constructed for every three residences, for a total of 14 new wells. Both variations on this domestic water supply alternative met the applicable RAOs and were retained for further consideration.

- Hybrid tank and temporary pipe and tank systems- consists of retaining existing tank systems and installing 4- to 6- inch temporary potable water pipeline. Two variations were considered: one in which the majority of the residences were served by a temporary pipeline and one in which half of the residences would be served by the temporary pipeline. Although both variations on this domestic water supply alternative met the applicable RAOs, only the second variation, in which half of the residences would be served by the temporary pipeline, was retained for further consideration. The first variation was not retained because of its high costs relative to the other domestic water supply alternatives considered.

The retained domestic water supply alternatives were:

Alternative 1 – No action (retained only for comparison with other alternatives)

Alternative 2 – Whole house treatment

Alternative 3 – Existing tank systems and bottled water delivery

Alternative 6A – New 600 feet deep domestic wells at each affected residence

Alternative 6B – One new 600 feet deep domestic well for every three affected residences

Alternative 7B – Hybrid temporary pipe and tank systems

The retained domestic water supply alternatives were evaluated in detail using the criteria identified by the NCP to address the U.S. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requirements and considerations. The criteria used to evaluate the alternatives were:

- Overall Protection of Human Health and the Environment
- Compliance with Applicable or Relevant and Appropriate Requirements
- Long-term Effectiveness and Permanence
- Reduction of Toxicity Mobility and Volume through Treatment
- Short-term Effectiveness
- Implementability
- Estimated Cost

The final two criteria, State acceptance and community acceptance, will be evaluated following agency and public participation, review, and comment on the Draft Feasibility Study and this DRAP. Although not specifically listed in the Feasibility Study, the California State Criteria were incorporated into the evaluation against the Federal Criteria listed above. The California State criteria are:

- Health and Safety Risks
- Beneficial Uses of Site Resources
- Effect of Remedial Action on Groundwater Resources
- Site Specific Characteristics
- Cost Effectiveness of Alternative Remedial Action Measures
- Potential Environmental Impacts of Remedial Action

4.3 Preferred Domestic Water Supply Alternative

Based on the detailed evaluation of the domestic water supply alternatives, Domestic Water Supply Alternative 7B (hybrid tank and temporary pipe) was recommended to ensure uninterrupted replacement water is supplied to all affected residences South of Riverside Dr. In this preferred domestic water supply alternative temporary pipeline will be installed to supply potable water from Ontario to serve 21 affected residences (Figure 3). Sixteen affected residences would remain on 15 existing tank systems, and three residences currently on bottled water service would be provided with tank systems (Figure 3).

This domestic water supply alternative also includes monitoring of 15 domestic water supply wells currently down gradient of the Plume to determine if replacement water will be required in the future. Samples will be collected from the wells and analyzed at laboratory accredited by the State of California to test drinking water samples. The results will be reported to the RWQCB and the residents. Replacement water will be provided to residences down gradient of the Plume if the concentration of TCE measured in samples collected during the monitoring events reaches 4 μg/L.

The preferred Domestic Water Supply Alternative will achieve all of the applicable RAOs. It will protect human health and the environment, comply with applicable or relevant and appropriate requirements and will prevent exposure to drinking water with TCE above the MCL from impacted domestic wells in the Area of Attainment. The selected Domestic Water Supply Alternative provides the best balance of tradeoffs as compared to the other options in terms of the five balancing criteria and two modifying criteria. This alternative utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable.

Domestic Water Supply Alternative 7B was determined to be highly effective at protecting human health by eliminating the exposure pathway. It can be implemented and its short and long term costs are moderate. Therefore, this domestic water supply alternative was found to provide the best balance of the criteria listed in the EPA guidance.

4.4 Remedial Alternatives

The thirteen Plume remedial alternatives identified, developed, and screened in the Feasibility Study are:

- No action - This Plume remedial alternative consists of no remedial actions, no institutional controls, and no engineering controls. This Plume remedial alternative was included for baseline comparison against other Plume remedial alternatives, as a requirement of the NCP evaluation process (EPA 1988). Based on the known extent of groundwater impacts, this Plume remedial alternative was determined not to meet the applicable RAOs and was not evaluated in detail.

- Limited Action / Monitored Natural Attenuation – This Plume remedial alternative is similar to the no action Plume remedial alternative, but included installation of four new dual-completion monitoring wells because this Plume remedial alternative does not involve active removal and treatment of TCE. The existing monitoring program would be supplemented with samples collected from the four new wells. Although this Plume remedial alternative was found not to minimize the migration of TCE into un-impacted or less impacted areas, it would be easy to implement and has a low cost. Therefore, this Plume remedial alternative was retained for detailed analysis.

- Wellhead treatment for TCE via Granular Activated Carbon (GAC) – This Plume remedial alternative removes TCE from the groundwater at the wellhead before it is directed to the CDA raw water pipeline using a GAC unit to be located at Site 1 (Figure 2). Four variations were proposed:

  - Treatment for CDA I-11
  - Treatment for CDA I-11 and Site A
  - Treatment for CDA I-11, Site A and Site 2
  - Treatment for CDA I-11, Site 2 and a northern well at Edison Avenue

  The first two variations did not provide sufficient treatment capacity to effectively remediate the Plume in the short-term or long-term. Therefore, they were not retained for further consideration. The last two variations, which treat water from wells CDA I-11, Site 2, and either Site A or a northern well at Edison Avenues were found to meet the applicable RAOs and be effective in the short-term and long-term. Therefore they were retained for further consideration.

- Wellhead treatment for TCE via air stripping – This Plume remedial alternative removes TCE from the groundwater at the wellhead before it is directed to the CDA raw water pipeline using an air stripper. Four variations were proposed:

  - Treatment for CDA I-11
  - Treatment for CDA I-11 and Site A
  - Treatment for CDA I-11, Site A and Site 2

  - o Treatment for CDA I-11, Site 2 and a northern well at Edison Avenue

  The first two variations did not provide sufficient treatment capacity to effectively remediate the Plume in the short-term or long-term. Therefore, they were not retained for further consideration. The last two variations, which treat water from wells CDA I-11, Site 2, and either Site A or a northern well at Edison Avenues were found to meet the applicable RAOs, however they were also found to be difficult to implement and among the least cost effective of the remedial alternatives identified. Therefore they were not retained for further consideration.

- Construction of a dedicated pipeline to Desalter II – This Plume remedial alternative modifies and expands upon the CDA expansion project by directing water from well CDA I-11 and the proposed expansion wells directly to the reverse osmosis/ decarbonator treatment train at Desalter II. Under this Plume remedial alternative all of the water from wells anticipated to be affected by TCE above the MCL will be treated at Desalter II.

  There are two variations of this Plume remedial alternative. The variations differ in the location of the northernmost well connected to the dedicated line. In the first variation, the CDA municipal water supply wells would be constructed at or near at currently proposed locations (Site 1, Site 2, and Site A) (Figure 2). In the second variation, the northernmost well would be constructed in the vicinity of the intersection of Edison Avenue and Archibald Avenue, instead of the well at Site A (Figure 2). Both variations of this Plume remedial alternative were found to be effective in both the short and long term, and met the applicable RAOs. Therefore, both variations were retained for further consideration.

- In situ remediation - In this Plume remedial alternative zero-valent iron would be injected into 190 boreholes to create a permeable reaction barrier in the aquifer. The barrier would be located in the vicinity of Edison Avenue, down gradient of the highest TCE concentrations, and oriented perpendicular to the direction of groundwater flow. As groundwater passes through the reactive barrier, the chlorinated compounds in the groundwater (e.g., TCE) would be dehalogenated via chemical reduction. Although this remedial alternative was found to be effective in both the short-term and long-term, it would be difficult to implement and had the highest cost of all the proposed remedial alternatives. Therefore, this remedial alternative was not retained for further consideration.

The retained Plume remedial alternatives were:

- Alternative 1 – No action (retained only for comparison with other Plume remedy alternatives)
- Alternative 2 – Limited Action / Monitored Natural Attenuation
- Alternative 3C – GAC wellhead treatment for well CDA I-11, Site 2, and Site A
- Alternative 3D – GAC wellhead treatment for well CDA I-11, Site 2, and a northern well at Edison Avenue
- Alternative 5A – Dedicated pipeline to Desalter II for well CDA I-11, Site 2 and Site A
- Alternative 5B – Dedicated pipeline to Desalter II for well CDA I-11, Site 2 and a northern well at Edison Avenue

The retained Plume remedial alternatives were evaluated in detail using the criteria identified by the NCP to address the CERCLA requirements and considerations. The criteria used to evaluate the alternatives were:

- Overall Protection of Human Health and the Environment
- Compliance with Applicable or Relevant and Appropriate Requirements
- Long-term Effectiveness and Permanence
- Reduction of Toxicity Mobility and Volume through Treatment
- Short-term Effectiveness
- Implementability
- Estimated Cost
- State Acceptance
- Community Acceptance

The final two criteria, State acceptance and community acceptance, will be evaluated following agency and public participation, review, and comment on the Draft Feasibility Study and this DRAP. Although not specifically listed in the Feasibility Study, the California State Criteria were incorporated into the evaluation against the Federal Criteria listed above. The California State criteria are:

- Health and Safety Risks
- Beneficial Uses of Site Resources
- Effect of Remedial Action on Groundwater Resources
- Site Specific Characteristics
- Cost Effectiveness of Alternative Remedial Action Measures

- Potential Environmental Impacts of Remedial Action

4.5 Preferred Plume Remedial Alternative

Based on the detailed comparative evaluation of the Plume remedial alternatives, Plume Remedial Alternative 5B is the preferred plume remedial alternative. This preferred Plume remedial alternative removes TCE affected groundwater from the aquifer using both CDA I-11 and three additional production wells that will be installed as part of the CDA Phase III expansion project. In the preferred Plume remedial alternative, the northernmost of the CDA expansion wells will be installed in the vicinity of the intersection of Edison Avenue and Archibald Avenue (Figure 4). This well would be located closer to higher measured concentrations of TCE in the groundwater and would, therefore, remove more TCE mass from the aquifer in the short term than many of the other alternatives considered.

The water from well CDA I-11 and the proposed expansion wells will go directly to the reverse osmosis/ decarbonator treatment train at Desalter II in a dedicated 24 inch pipeline that will run parallel to the existing CDA pipeline on Bellegrave Avenue. All of the water from wells anticipated to be affected by TCE above the MCL will be pumped to Desalter II in the 24 inch dedicated line.

TCE will be removed from the water via air stripping in the decarbonator towers at Desalter II. As the water travels down three new taller decarbonators air is blown past it. In the processes, TCE, a volatile organic compound, is transferred out of the water and into the air where it will be destroyed through photolysis and interaction with hydroxyl radicals. The new decarbonators to be installed at Desalter II will be capable of removing 95% of the TCE in the influent. A health risk assessment conducted using the South Coast Air Quality Management District (SCAQMD) risk assessment tool indicates that the TCE concentration emitted from the decarbonators is below the SCAQMD thresholds and, therefore, that the decarbonators will not require air pollution control equipment (Yorke, 2015).

The Preferred Plume Remedy will achieve all of the applicable RAOs. It will protect human health and the environment, comply with applicable or relevant and appropriate requirements and will clean up the TCE Plume in groundwater to below the MCL of 5 μg/L in the Area of Attainment. The use of a northern well will reduce the timeframe for remediating TCE-impairment of beneficial use of groundwater in the Area of Attainment. The selected remedy will remove TCE from groundwater; minimize migration of TCE groundwater contamination into less, or unimpacted areas and capture TCE contamination in groundwater at the southern edge of the Area of Attainment; and will treat extracted groundwater for TCE. In doing so, the selected remedy will reduce the volume and mobility of the TCE groundwater Plume. The Selected

Plume Remedy provides the best balance of tradeoffs as compared to the other options in terms of the five balancing criteria and two modifying criteria. This remedy also satisfies the statutory preference for treatment (including contaminant destruction) as a principal element of the remedy and utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable.

5 MONITORING AND REPORTING

The performance of this plume remedial alternative will be monitored by both the CDA and the Chino Basin Watermaster. The CDA routinely performs operational monitoring and water quality sampling to ensure that the water it serves to the member agencies complies with Federal and State drinking water standards. Additionally, the Chino Basin Watermaster measures water levels and takes water quality samples from wells throughout the Chino basin. These measurements will help to ensure that the CDA well field maintains hydraulic control of the Plume and that TCE impacts to groundwater will not migrate south of the CDA well field.

6 PUBLIC PARTICIPATION

A series of outreach activities has been conducted by several entities as part of the progression from the first groundwater TCE detections through the present time. An information repository containing all relevant documents was created and is available electronically at the website: http://tceplumecleanup.com/ and in hard copy at Ontario City Hall. The website has a fact sheet describing this matter. In addition, a community survey was sent to the public to determine the most effective way to communicate with the public. Finally, near the end of the public comment period, two public were held to discuss this DRAP and the Draft Feasibility Study and solicit additional oral and/or written public comments. Notice of these Activities was given to local and state agencies, the owners of properties within the Plume area, and any other known interested parties.

7 REFERENCES

Dudek. 2015. “Draft Feasibility Study Report South Archibald Plume.” July 2015.

EEC, 2014. *Private Property Sampling Report, Ontario, California.* Santa Ana, California: EEC. October 6, 2014.

EKI (Erler & Kalinowski). 2011.“Remedial Investigation Report, Trichloroethene Plume, Central Chino Basin, Ontario, California.” Prepared for Aerojet, Boeing, General Electric Company, and Lockheed Martin Corporation. October 13, 2011. Burlingame, California: Erler & Kalinowski.

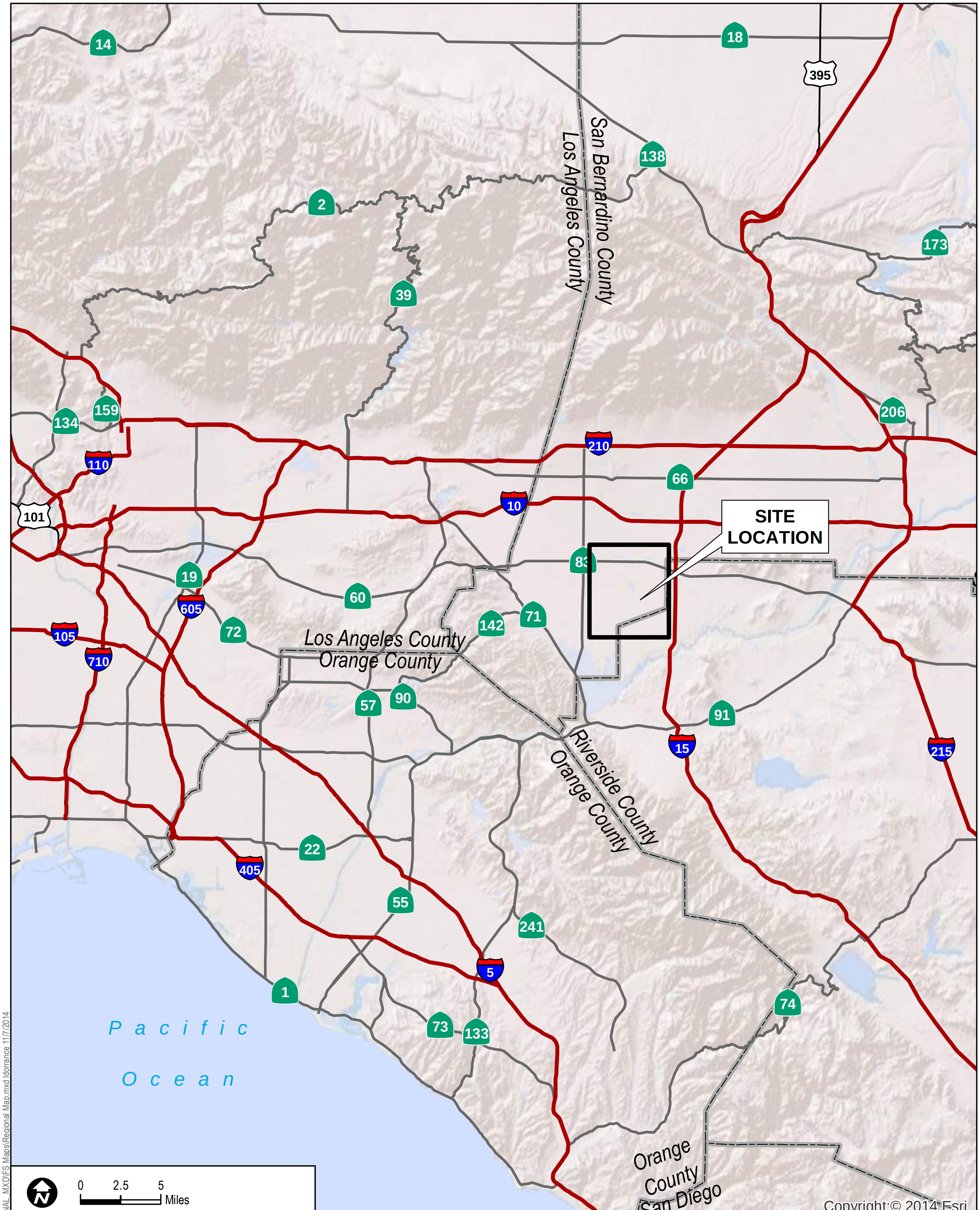
EKI. 2014. “Supplemental Data Report, Trichloroethene Plume, Central Chino Basin, Ontario, California.” Prepared for Aerojet Rocketdyne, Boeing, General Electric, and Lockheed Martin. November 19, 2014. Burlingame, California: Erler & Kalinowski.

EPA (U.S. Environmental Protection Agency). 1988. “Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA.” Interim Final. EPA/540/G-89/004. OSWER Directive 9355.3-01. October 1988.

Wildermuth Environmental. 2009. *Chino Basin Optimum Basin Management Program, 2008 State of the Basin Report.* Final Report. Prepared for Chino Basin Watermaster. November 2009.

Wildermuth Environmental. 2015. *Chino Basin Optimum Basin Management Program, 2014 State of the Basin Report.* Final Report. Prepared for Chino Basin Watermaster. June 2015.

Yorke Engineering. 2015. “Technical Report.” Prepared for Inland Empire Utilities Agency. February 2015.



Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Regional Map.mxd ldorrance 11/7/2014

DUDEK

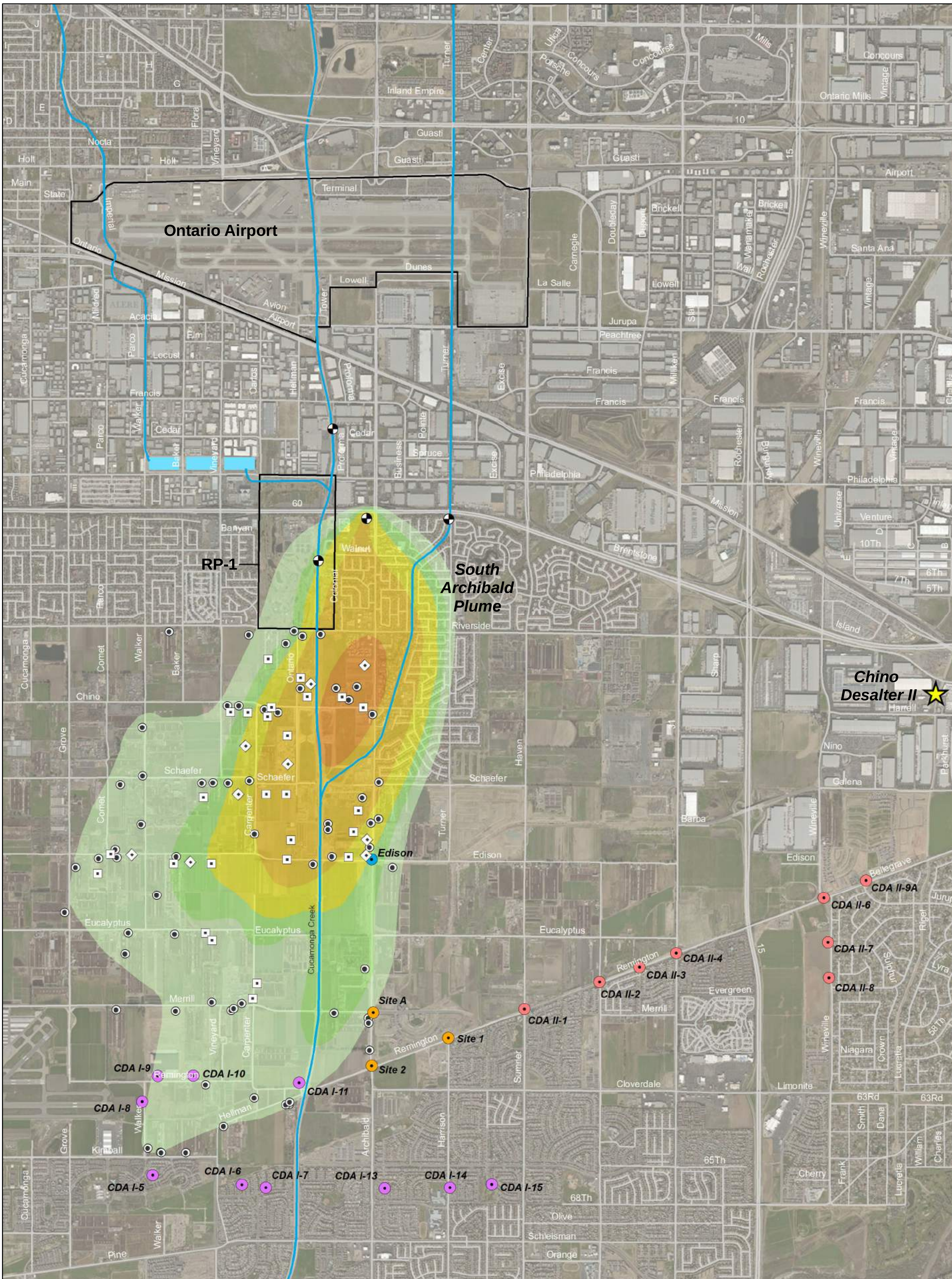
7318

NOVEMBER 2015

FIGURE 1

Regional Location

Remedial Action Plan: South Archibald Plume



Ely Basins
Drainage Channel
Well
Tank System Location
Bottled Water Service
Nested Monitor Well

CDA Wells
Edison Well
Existing Desalter I Well
Existing Desalter II Well
Proposed Desalter II Well

Groundwater TCE Concentration (ug/L)
> 0 and ≤ 5
>5 and ≤ 10
>10 and ≤ 20
>20 and ≤ 50
>50 and ≤ 100

Note:
All Locations Approximate

Basemap Source: Bing 2012, ESRI
Plume Source: Wildermuth, 2013. 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster

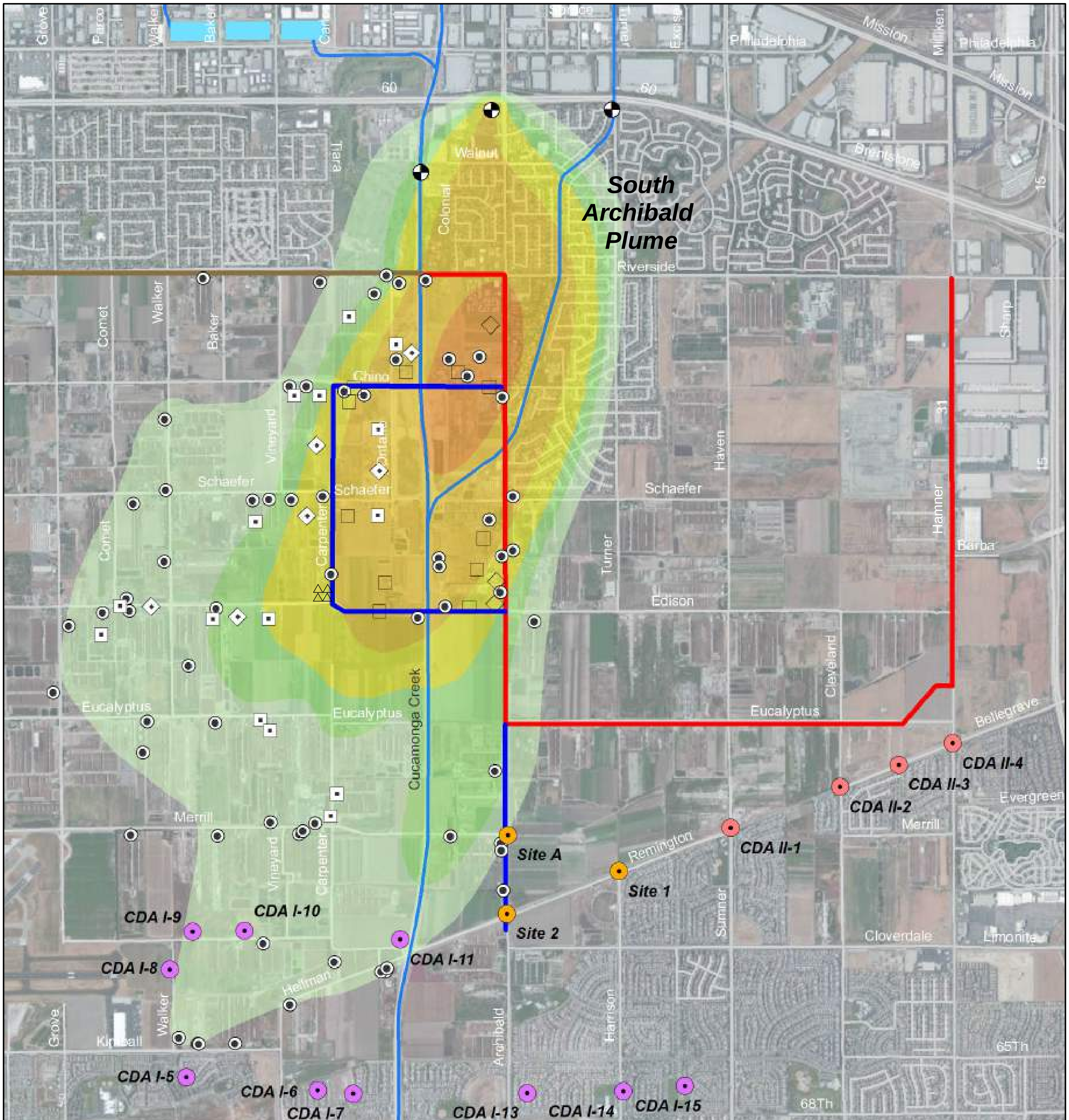
Path: Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Site Location Map RAP.mxd

DUDEK
7318
NOVEMBER 2015

0 2,000 4,000
Feet

FIGURE 2
South Archibald Plume Map

Draft Remedial Action Plan: South Archibald Plume



Ely Basins

Drainage Channel

Wells

Nested Monitor Well

Tank System Removed and Residence Connected to Temporary Pipeline

Tank System Remains

Bottled Water Service Removed and Residence Connected to Temporary Pipeline

Existing Bottled Water Converted to Tank System

Residences not receiving alternative water supplies that previously declined tank systems; to be connected to temporary pipeline

CDA wells

Existing Desalter I Well

Existing Desalter II Well

Proposed Desalter II Well

Groundwater TCE Concentration (ug/L)

> 0 and ≤ 5

>5 and ≤ 10

>10 and ≤ 20

>20 and ≤ 50

>50 and ≤ 100

Pipeline

Existing City Water Supply Pipeline

Francis Water Loop

Temporary Pipeline to Serve Potable Water to Residences in TCE-Affected Area

Basemap Source: Bing 2012, ESRI
Plume Source: Wildermuth, 2013

Note:

All Locations Approximate

0 2,000 4,000 Feet

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\DWS_Alt_6B.mxd

DUDEK

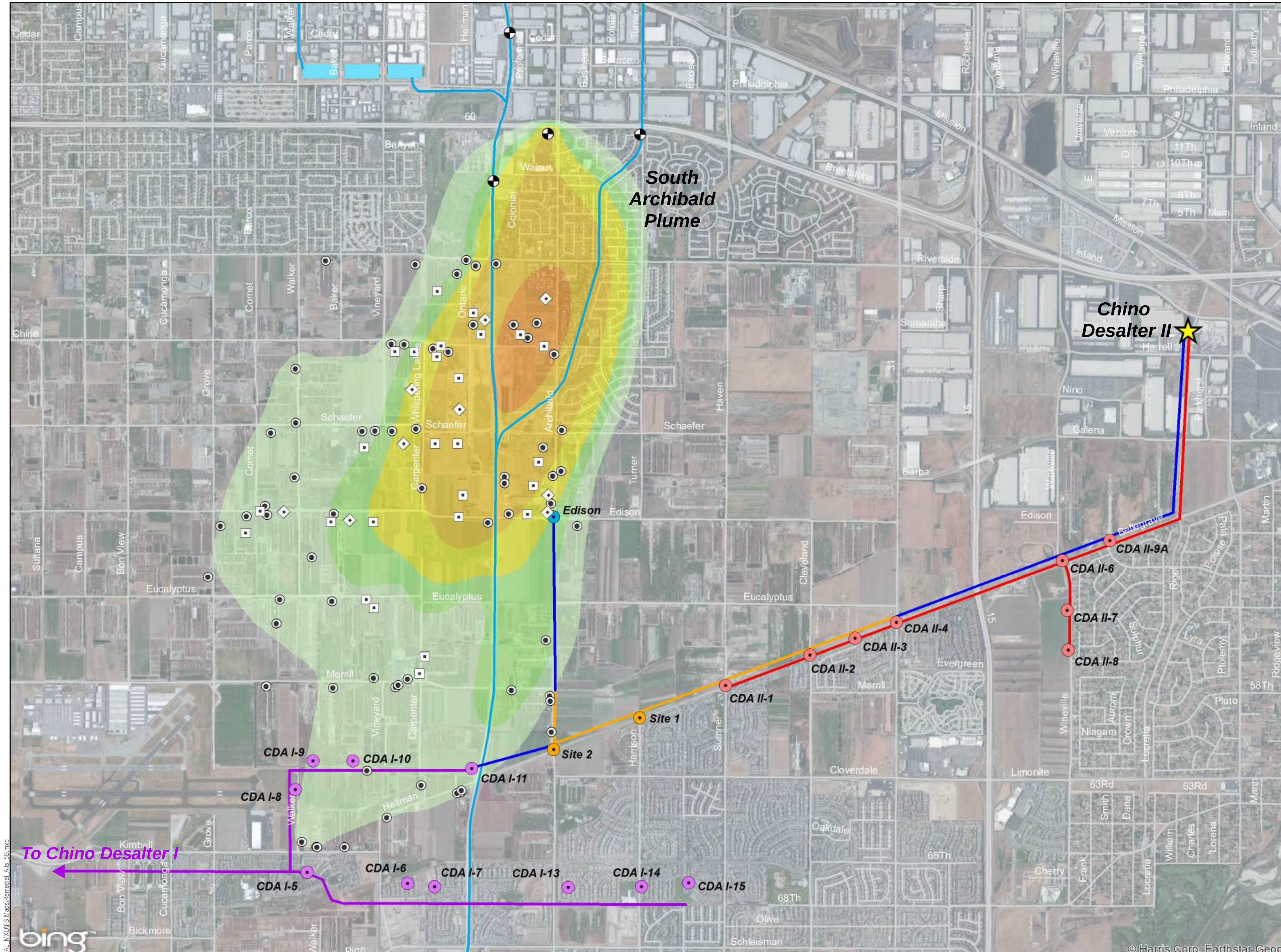
7318

NOVEMBER 2015

FIGURE 3

Domestic Water Supply Alternative 7B

Remedial Action Plan South Archibald Plume



- Ely Basins
- Drainage Channel
- Well
- Tank System Location
- Bottled Water Service
- Nested Monitor Well

CDA Wells

- Edison Well
- Proposed Desalter II Well
- Existing Desalter I Well
- Existing Desalter II Well

Pipeline

- CDA Phase III Expansion Pipeline
- Proposed Dedicated RO/Decarbonator Pipeline to Desalter II
- Existing CDA Raw Water Pipeline to Desalter I
- Existing CDA Raw Water Pipeline to Desalter II

Groundwater TCE Concentration (ug/L)

- > 0 and ≤ 5
- >5 and ≤ 10
- >10 and ≤ 20
- >20 and ≤ 50
- >50 and ≤ 100

Note:

All Locations Approximate

0 2,000 4,000 Feet

DUDEK

7318

NOVEMBER 2015

Basemap Source: Bing 2012, ESRI
Plume Source: Wildermuth, 2013

FIGURE 4

Remedial Alternative 5B

Remedial Action Plan: South Archibald Plume

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Remedial_Alts_5B.mxd

DRAFT FEASIBILITY STUDY REPORT

South Archibald Plume

Prepared for:

City of Ontario
1425 South Bon View Ave
Ontario, California 91761

City of Upland
460 N. Euclid Ave
Upland, California 91786

Inland Empire Utilities Agency
P.O Box 9020
Chino Hills, California 91709

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024

Peter Quinlan, R.G.
Vice President

Jill Weinberger, Ph.D., P.G.
Senior Hydrogeologist

Derek Reed, P.E.
Senior Engineer

NOVEMBER 2015

Printed on 30% post-consumer recycled material.

Printed on 30% post-consumer recycled material.

TABLE OF CONTENTS

Section **Page No.**

TABLE OF CONTENTS (CONTINUED)

Page No.

TABLE OF CONTENTS (CONTINUED)

Page No.

TABLE OF CONTENTS (CONTINUED)

Page No.

TABLE OF CONTENTS (CONTINUED)

Page No.

TABLES

FIGURES

TABLE OF CONTENTS (CONTINUED)

Page No.

APPENDICES

GLOSSARY OF TERMS AND ACRONYMS

1,2-DCA	1,2-dichloroethane
1,2-DCE	1,2-dichlotoethene
1,2,3-TCP	1,2,3-trichloropropane
AFY	Acre-feet per year
AMSL	Above Mean Sea Level
ARARs	Applicable or Relevant and Appropriate Requirements
BGS	Below Ground Surface
CAO	Cleanup and Abatement Order
CBWM	Chino Basin Watermaster
CCR	California Code of Regulations
CDA	Chino Basin Desalter Authority
CDPH	California Department of Public Health
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
Cis-1,2-DCE	cis-1,2 dichloroethene
Cr(VI)	Hexavalent Chromium
COC	Constituent of Concern
CWC	California Water Code
DOD	United States Department of Defense
DDW	Division of Drinking Water
DWS	Domestic Water Supply
EPA	United States Environmental Protection Agency
FS	Feasibility Study
g	Grams
GAC	Granular Activated Carbon
GPD	Gallons Per Day
GPM	Gallons Per Minute
GSSI	Geoscience Support Services, Inc.
IEUA	Inland Empire Utilities Agency
IX	Ion Exchange
L	Liter
LF	Linear Feet
MCL	Maximum Contaminant Level
MGD	Million Gallons Per Day
MNA	Monitored Natural Attenuation
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIOSH	National Institute for Occupational Safety and Health

OBMP	Optimum Basin Management Plan
OIA	Ontario International Airport
O&M	Operations and Maintenance
PCE	Tetrachloroethylene
RAOs	Remedial Action Objectives
REL	Recommended Exposure Limit
RI	Remedial Investigation
RO	Reverse Osmosis
RP-1	Regional Recycling Plant No. 1 (Formerly the Ontario-Upland Sewage Treatment Plant)
RWQCB	California Regional Water Quality Control Board, Santa Ana Region
SARI	Santa Ana Regional Interceptor
SAWPA	Santa Ana Watershed Project Authority
SCAQMD	South Coast Air Quality Management District
SWRCB	State Water Resources Control Board
TBC	To-Be-Considered
TCE	Trichloroethylene
TDS	Total Dissolved Solids
VOC	Volatile Organic Compound
µg/L	microgram per liter

EXECUTIVE SUMMARY

This Draft Feasibility Study Report (draft FS) was prepared on behalf of the Cities of Ontario (Ontario) and Upland (Upland) and the Inland Empire Utilities Agency (IEUA) for the South Archibald Plume (Plume) in Ontario, California. This draft FS is prepared in accordance with the National Contingency Plan (NCP). Analysis and selection of remedial alternatives is based on the United States Environmental Protection Agency (EPA) "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA 1988; referred to as "EPA Guidance"). Pursuant to these guidelines, the remedial alternatives are evaluated in the Draft FS according to their ability to meet the following criteria:

- Overall protection of human health and the environment.
- Compliance with federal and more stringent state standards, requirements, criteria, or limitations that are determined to be Applicable or Relevant and Appropriate Requirements (ARARs).
- Long-term effectiveness and permanence of the remedial action to minimize risks.
- Reduction of toxicity, mobility, and volume through treatment.
- Ability to meet short-term remediation goals, including minimization of adverse health, safety, and environmental impacts during remedial activities.
- Technical viability, reliability, and implementability.
- Cost-effectiveness and economic feasibility.
- Alternatives will be evaluated against two additional criteria, (8) state acceptance and (9) community acceptance, after state review of, and public comment on, the Draft FS Report and the proposed remedial alternative.

The primary constituent of concern in the Plume is trichloroethylene (TCE). Two sets of alternatives are analyzed to address the Plume. The first set of alternatives addresses the uninterrupted delivery of replacement water to residences south of Riverside Drive with wells that are currently impacted by TCE. The second set of alternatives addresses remediation of the Plume.

For the domestic water supply element of this draft FS, nine domestic water supply (DWS) alternatives were identified and evaluated according to site-specific Remedial Action Objectives (RAOs) and Applicable or Relevant and Appropriate Requirements (ARARs), which were developed as part of the FS process. An initial screening was performed and six domestic water supply alternatives were selected for further evaluation in accordance with the EPA Guidance and the NCP.

Water is currently being supplied to all affected residences either through tank systems or bottled water deliveries. This draft FS analyzes domestic water supply alternatives to ensure uninterrupted replacement water is supplied over the long-term. A domestic water supply alternative was selected based on evaluation following the EPA Guidance and NCP.

The selected domestic water supply alternative ensures that uninterrupted replacement water is supplied to all affected residences via either tank systems or connection to the Ontario municipal water supply pipelines. The selected domestic water supply alternative (Domestic Water Supply Alternative 7B) includes the following elements:

- Temporary pipe would be constructed to connect 25 affected residences to the Ontario water supply system.
- Sixteen affected residences would remain on 15 existing tank systems.
- Three residences currently on bottled water service would be provided with tank systems.

For the plume remedial element of this draft FS, data from hundreds of well sample locations throughout the approximate time period of 1987 to 2014 were evaluated as summarized in the *Private Property Sampling Report* (EEC 2014); *Remedial Investigation Report* (EKI 2011) and *Supplemental Data Report* (EKI 2014). Thirteen plume remedial alternatives were identified and evaluated according to site-specific RAOs and ARARs, which were developed as part of the FS process. An initial screening was performed on these plume remedial alternatives and six plume remedial alternatives were selected for further evaluation in accordance with the EPA Guidance and the NCP.

Based on the detailed evaluation, the selected plume remedial alternative (Plume Remedial Alternative 5B) will protect human health and the environment, is effective in both the short-term and the long-term, will reduce the toxicity, mobility and volume of TCE in the groundwater in the long-term and is readily implementable. This plume remedial alternative builds upon the Chino Basin Desalter Authority (CDA) proposed Phase III expansion project by:

- Adding pipeline to connect well CDA I-11, where TCE concentrations over the last three years have ranged from 1.4 to 3.7 micrograms per liter (µg/L), to the proposed Phase III expansion pipeline;
- Moving the proposed CDA expansion well from a location at Merrill Avenue and Archibald Avenue to the north, in the vicinity of Edison and Archibald Avenues;

- Connecting four CDA wells directly to the reverse osmosis (RO)/decarbonator treatment train at Desalter II;
- Replacing the existing three decarbonators at Desalter II with three new taller decarbonators capable of removing 95% of the TCE in the influent;
- Incorporating the TCE plume remedy into the existing Chino Basin Watermaster program for monitoring and demonstration of hydraulic control.

The proposed northern well at Edison and Archibald Avenues would be located closer to higher measured concentrations of TCE in the groundwater. Although the additional pipeline required to connect an Edison Avenue well to the existing CDA infrastructure along Bellegrave Avenue makes the preferred alternative cost more than a similar alternative with a well located close to Merrill Avenue, this preferred alternative will remove more mass from the aquifer in the short term and will better meet the RAO of minimizing the migration of TCE to un-impacted or less impacted areas within the existing Plume and decreasing the timeframe to remediate TCE impacts to groundwater in the area of attainment.

This draft FS report will be subject to public, public agency, and State agency review and input. A final remedy will only be selected with concurrence from the CDA, the Santa Ana Regional Water Quality Control Board (RWQCB) and input from the public, thereby completing the NCP process. This draft FS will be finalized after solicitation of input. The final remedies to be implemented will be described in a remedial action plan, which will be prepared concurrently with the final FS, and will serve as the remedy decision document.

1 INTRODUCTION

1.1 Regulatory Basis

Dudek has prepared this Draft Feasibility Study Report (draft FS) for the South Archibald groundwater trichloroethylene (TCE) plume (Plume), in Ontario, California. This draft FS was prepared on behalf of the Cities of Ontario (Ontario) and Upland (Upland), and the Inland Empire Utilities Agency (IEUA).

The Plume is generally east of Grove Avenue, north of Bellegrave/Remington Avenues, west of Haven Avenue and south of the 60 Freeway. This Plume is commonly known as "the South Archibald Plume."

RWQCB requested preparation of a FS for mitigating the effects of the Plume. This request was made pursuant to California Water Code (CWC) sections 13267 and 13304. This draft FS was prepared pursuant to the RWQCB's request and follows the general form of the United States Environmental Protection Agency (EPA) "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance)" (EPA1988; referred to as "EPA Guidance"). This draft FS is prepared in accordance with the National Contingency Plan (NCP).

1.2 Draft Feasibility Study Report Objectives

The objective of this draft FS is to identify, screen, and evaluate both domestic water supply alternatives and plume remedial action alternatives capable of achieving the Remedial Action Objectives (RAOs) set forth in Section 3.1 below. The domestic water supply alternatives were screened and evaluated separately from the Plume remedial action alternatives. The domestic water supply alternatives were screened for their ability to supply uninterrupted replacement water to all affected residences south of Riverside Drive. The plume remedial alternatives were screened for their ability to effectively remediate TCE in the groundwater. Through the screening and evaluation processes, the preferred domestic water supply alternative and the preferred plume remedial alternative were selected.

1.3 Draft Feasibility Study Report Organization

This draft FS is organized as follows:

- Section 2 provides the site background information;
- Section 3 presents the RAOs and the site specific cleanup goals;
- Section 4 identifies, assembles and screens the domestic water supply alternatives;

- Section 5 presents the detailed evaluation of the retained domestic water supply alternatives;
- Section 6 compares the domestic water supply alternatives to provide a basis for selection of the recommended alternative;
- Section 7 summarizes the preferred domestic water supply alternative;
- Section 8 identifies, assembles and screens the plume remedial alternatives;
- Section 9 presents the detailed evaluation of the retained plume remedial alternatives;
- Section 10 compares the plume remedial alternatives to provide the basis for selection of the recommended alternative;
- Section 11 summarizes the preferred plume remedial alternative.

2 SITE BACKGROUND INFORMATION

2.1 Site History

The Plume is approximately 19,000 feet long and 7,000 feet wide, covering an area of approximately 2,000 acres beneath primarily agricultural land located between Grove Avenue on the west, Haven Avenue on the east, Bellegrave/Remington Avenues on the south, and the 60 Freeway on the north (Figures 1 and 2). The Plume is generally east of Grove Avenue, north of Bellegrave/Remington Avenues, west of Haven Avenue and south of the 60 Freeway. This Plume is commonly known as “the South Archibald Plume.”

2.2 Regulatory Involvement

This draft FS has been developed based on approximately 30 years of investigations under the direction of the RWQCB. The Plume was first identified in 1986 when the Metropolitan Water District of Southern California (MWD) sampled wells in the Chino Basin as part of the environmental work for its proposed Chino Basin Groundwater Storage Program (MWD 1987). Several of the wells in the Chino Basin had detectable concentrations of volatile organic compounds (VOCs), with TCE detected at concentrations up to 75 µg/L. The MWD notified the RWQCB of its findings and the RWQCB initiated an investigation into the potential sources of the groundwater contamination. By 2005, concentrations of TCE greater than the maximum contaminant level (MCL) of 5 µg/L had been detected in samples from 92 of 167 private wells sampled (Wildermuth 2009a).

Between 2011 and the preparation of this draft FS, several documents and correspondence have been submitted to the RWQCB relating to the data set developed on concentrations of TCE in groundwater. This includes an extensive set of data from 2007 to 2014 representing several rounds of sampling of private wells (EEC 2014) and installation of eleven discretely screened monitoring wells. A draft remedial investigation (RI) report and supplement, including a human health risk assessment and subsequent addendum (EKI 2011 and 2014).

Beyond the specific TCE groundwater impacts that are the focus of this RI/FS process, the southwestern portion of the Chino Basin has long been impacted by total dissolved solids (TDS) and nitrates. One aspect of this is that the Chino Basin has a Watermaster and is one of the most actively managed basins in California, where the RWQCB has explicitly defined groundwater management zones and set water quality objectives primarily for TDS and nitrates (Wildermuth 2013). The most recent general operational guiding document for the Chino Basin Watermaster (CBWM) and by extension, CDA, is the Optimum Basin Management Program (OBMP) and/or OBMP Peace Agreement.

CDA was formed to treat TDS and nitrates. As described in the CDA Urban Water Management Plan (UWMP): "The CDA is a Joint Exercise of Powers Agency formed between Jurupa Community Services District, the Santa Ana River Water Company, the Cities of Chino, Chino Hills, Norco and Ontario, Western Municipal Water District and the IEUA. The CDA purifies brackish groundwater extracted from the lower Chino Basin with the Chino 1 and 2 Desalter facilities and distributes the drinking water to member agencies. The Chino 1 Desalter commenced operation in 2001 and was expanded in 2005. The Chino 2 Desalter became operational in 2006, and is currently undergoing an expansion which is estimated to add an extra 10.5-mgd capacity to the current facility with other Phase 3 Expansion project components" (IEUA 2011).

CDA is currently undertaking an expansion project, referred to herein as the Phase III Expansion, to bring the total production from CDA wells to 40,000 acre-feet per year (AFY) (Carollo 2010), in accordance with the OBMP (Wildermuth 2009a). The locations of the proposed wells were selected in order to help achieve hydraulic control of thegroundwater discharge from the Chino Basin to the Santa Ana River (Wildermuth 2009b) as mandated by the RWQCB (RWQCB 1995; RWQCB 2004). The RWQCB has required that CBWM and IEUA demonstrate how the implementation of the Phase III Expansion project will assure that hydraulic control is achieved and maintained in the future as agricultural groundwater production declines (RWQCB 2014).

2.3 Site Setting, Geology and Hydrogeology

2.3.1 Site Setting

The Plume is located in southeast Ontario, within the Chino subbasin, (referred to as either the Chino Basin or the Basin) of the Santa Ana Valley groundwater basin (Figure 3). The Plume, which is elongated in the north/south direction, is approximately 19,000 feet long and 7,000 feet wide. The Plume's elongation reflects the topography of the overlying land, which slopes to the south. Land surface elevation across the Plume ranges from approximately 850 feet above mean sea level (amsl) in the north to approximately 650 feet amsl in the south. Land use in the footprint of the Plume is primarily agricultural, with some residential development.

2.3.2 Geology

The Chino Basin was formed by the complex tectonics resulting from the compression and uplift associated with the restraining bend in the San Andreas fault system. The Basin covers approximately 154,000 acres (~240 square miles) and is bounded by the Cucamonga Fault on the north, the Rialto Colton Fault on the east, the Jurupa and Puente Hills on the south and the San Jose Fault on the west. The San Bernardino Mountains, which were uplifted in part due to thrust faulting on the Cucamonga Fault, reach elevations of greater than 9,000 feet amsl on the north side of the Basin and supply much of the alluvial fill in the Basin (Figure 4).

Alluvial sediments in the Chino Basin are primarily Pleistocene (2.5 million years old to ~12,000 years old) to Holocene (~12,000 years old to modern) in age. The younger alluvium is found along modern stream channels and alluvial fans, where it reaches a maximum thickness of approximately 150 feet (DWR 2003). The older alluvium covers the majority of the Basin and ranges from 200 to 1100 feet thick (DWR 2003; Wildermuth 2003). The older alluvium primarily comprises interfingered finer alluvial fan deposits and coarser fluvial deposits. Grain size ranges from gravel to clay. Beds are lenticular and discontinuous. Underlying the older alluvium are the Pliocene (2.5 to 5 million years ago) age semi-consolidated clays, sands and gravels of the Fernando Group (Eckis 1934), late Cretaceous to Miocene (100 to 5 million years ago) age marine sedimentary rocks interlayered with lava flows, and the early Cretaceous (150 to 100 million years ago) age and older granitic and metamorphic rocks of the basement complex.

2.3.3 Hydrology

The alluvial sediments of the Chino Basin are the primary water bearing units. The northern, eastern, and western boundaries of the Chino Basin aquifer are defined by the Cucamonga, Rialto-Colton, and San Jose faults, respectively. Low permeability zones along these fault systems limit the lateral flow of water across them. The southern boundary is defined by the Jurupa and Puente Hills, which comprise uplifted low permeability igneous and sedimentary rocks. The base of the aquifer is controlled by the depth of the contact between the alluvial sediments and the underlying Miocene to Cretaceous age consolidated marine sedimentary and igneous rock units. The depth of this contact exceeds 1100 feet below ground surface (bgs) in the central part of the Basin.

The groundwater flow direction in the Chino Basin generally follows the surface topography and drainage systems, flowing from the north/northeast to the south/southwest (CDM 1989; Wildermuth 2007). Between 1960 and 2000, the dominant flow direction in the Basin was to the southwest (Figure 5). Since 2000, however, the groundwater flow direction has been primarily to the south (Figure 6) and has been influenced by both the declining agricultural production and the addition of groundwater extraction associated with the operation of the CDA desalters. The groundwater elevation near the northern edge of the Plume is approximately 590 feet amsl and decreases to approximately 550 feet amsl at the southern edge of the plume near the San Bernardino/Riverside County line.

The groundwater flow direction in the vicinity of the Plume is affected, in part, by production from 22 groundwater wells operated by the CDA in the southern portion of the Chino Basin

(Figure 2). These wells were installed in order to assist with hydraulic control in the Basin, as mandated by the Peace and Peace II agreements, as well as to increase the yield of the Basin, remove contaminants from the groundwater and provide a local drinking water supply. Production from the first CDA wells began in 2000 (Carollo 2010). Currently, these wells produce a total of 24,600 AFY of water impaired with nitrate, TDS, and VOCs. The water is treated at the Chino I and Chino II Desalters.

As described in Section 2.2, the CDA Phase III Expansion includes installation of groundwater extraction wells along the Riverside/San Bernardino County line. The potential well locations are presented on Figure 2. Production from the proposed wells at Sites 1, 2, and A (Figure 2) has the potential to shift the groundwater flow direction to the southeast.

2.4 Constituents of Concern

2.4.1 Trichloroethylene

The primary constituent of concern (COC) in the Plume is TCE. The maximum concentration detected was 156 μg/L in 1990. Since 2005, the highest detected concentration was 49 μg/L (EEC 2014). TCE has been detected in well CDA I-10 since 2004. TCE has also been detected at increasing concentrations in well CDA I-11 since July 2009 when it was detected at a concentration of 0.57 μg/L. Since July 2009, the concentration of TCE in well CDA I-11 increased to a maximum of 3.7 μg/L, measured in October 2013. The average concentration of TCE in samples from well CDA I-11 between January 2014 and January 2015 was 2.7 μg/L.

Further, recent sampling of wells located between Eucalyptus and Merrill Avenues confirms increasing concentrations of TCE in areas that previously had concentrations of TCE close to, or below, the detection limit of 0.5 μg/L. The concentration of TCE detected in samples from a residential well near Eucalyptus Avenue increased from 0.55 μg/L in 2008 to 5.2 μg/L in 2014.[1] Near Merrill Avenue, the concentration of TCE detected in a residential well increased from <0.5 μg/L in 2008 to 4.2 μg/L in 2014[2] (EEC 2014). Also in the vicinity of Merrill Avenue, a residential well sampled by CBWM has had increasing concentrations of TCE. TCE was first reported in well 319 at a concentration of 3 μg/L in 1999 (Wildermuth 2010). In 2010, the

[1] Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were 0.55 and 0.54 μg/L, respectively. The sample and duplicate concentrations in 2014 were 4.9 and 5.4 μg/L, respectively.

[2] Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were both <0.5 μg/L. The sample and duplicate concentrations in 2014 were 3.9 and 4.4 μg/L, respectively.

concentration of TCE detected in well 319 was 10 μg/L (Wildermuth 2011). These results confirm that TCE is likely to be detected at concentrations exceeding the MCL of 5 μg/L in the CDA expansion wells proposed for Sites A and 2 as well as at well CDA I-11 (Figure 2).

2.4.2 Other Volatile Organic Compounds

Although TCE is the primary COC, other VOCs have been detected including: tetrachloroethylene (PCE; detected only at two sampling locations at a maximum of 1.1 μg/L); 1,2-Dichloroethane (1,2-DCA; detected at only one location at 0.51 μg/L); and 1,1-Dichloroethene (1,2-DCE; detected at two sampling locations at a maximum of 1.8 μg/L). The primary degradation product of TCE, cis-1,2 Dichloroethene (cis-1,2-DCE), was only detected in 11 of 252 samples collected between 2007 and 2014, with a maximum concentration of 0.89 μg/L.

2.4.3 Nitrate, TDS and Other Constituents of Potential Concern

In addition to TCE, groundwater in the Plume area is impacted by nitrate as nitrogen and TDS concentrations that exceed the California MCL of 10 mg/L and 500 mg/L, respectively. Other potential constituents of concern detected in groundwater samples collected from wells in the Plume include: 1,2,3-trichloropropane (1,2,3-TCP), perchlorate, and hexavalent chromium (Cr(VI)). The maximum concentration of 1,2,3-TCP detected in samples collected within the footprint of the Plume in 2014 was 0.0082 μg/L, which is greater than the California State Notification Level (NL) of 0.005 μg/L. The maximum concentration of perchlorate detected in samples collected within the footprint of the Plume in 2014 was 5.9 μg/L. The California MCL for perchlorate is 6 μg/L. The maximum concentration of Cr(VI) detected in groundwater samples collected between 2007 and 2012 within the footprint of the Plume was 12 μg/L. The California MCL for Cr(VI) is 10 μg/L (EEC 2014).

INTENTIONALLY LEFT BLANK

3 CLEANUP OBJECTIVES AND GOALS

3.1 Remedial Action Objectives

RAOs have been developed for the South Archibald groundwater plume. These RAOs are included in the evaluations in Sections 4, 5, 6, 8, 9 and 10 below, along with an analysis of economic and technological feasibility in accordance with the identified Applicable or Relevant and Appropriate Requirements (ARARs). The RAOs are listed below:

1. The numerical goal for TCE in groundwater is the MCL of 5 µg/L. The area of attainment is south of the 60 Freeway; to the west of Haven avenue; to the east of Grove Avenue; and north and west of Bellegrave/Remington Avenues (Figure 2).
2. Protect human health and the environment by mitigating the effects of the TCE groundwater plume.
3. Supply uninterrupted replacement water service to all residences that are served by private domestic wells and public supply wells at which TCE has been detected above the MCL within the area of attainment.
4. Monitor TCE concentrations in private domestic wells and public supply wells that may contain TCE above the MCL within and down-gradient of the area of attainment.
5. Minimize the migration of the TCE Plume in groundwater beyond the southern boundary of the area of attainment.
6. Minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas within the area of attainment.
7. To the extent reasonably practicable, decrease the length of time that TCE impairs the beneficial use of groundwater in the area of attainment.

3.2 Applicable or Relevant and Appropriate Requirements (ARARs)

Consistent with CERCLA and the NCP, both Federal and State ARARs and to-be-considered (TBC) criteria have been identified for the remedial actions discussed below. The complete list of identified Federal and State ARARs and TBCs is presented in Appendix A. The ARARs and TBCs are divided into three categories, described below:

- Chemical-specific ARARs establish numerical values for the acceptable concentration of specific hazardous substances, pollutants or contaminants in the environment and determine the degree to which any affected media must be cleaned or restored to protect human health and the environment. Typical chemical-specific ARARs are based on the MCL for a given hazardous substance, pollutant or contaminant.

- Location-specific ARARs are designed to protect the characteristics of the site and areas affected by the site during design, construction, and operation of the selected remedial action. These ARARs set restrictions on activities within specific locations, such as wetlands and floodplains. For the Plume, location specific ARARs and TBCs include requirements that groundwater be maintained at or above a water quality standard that allows it to be used for municipal or domestic water supply.
- Action-specific ARARs are those requirements or limitations that may prohibit the use of a specific technology for remediation of the site. These include prohibitions or restrictions on the discharge of chemicals or contaminants to the air, water or soil through the remediation process. These also include requirements for proper transfer, treatment, and storage of chemicals and contaminants.

The chemical specific ARARs considered include:

- California Department of Public Health (CDPH) California Code of Regulations (CCR) Title 22, Chapter 15, Article 5.5;
- RWQCB Water Quality Control Plan, Santa Ana River Basin (Basin Plan), Chapter 4 – Water Quality Objectives.

The location specific ARARs considered include:

- State Water Resources Control Board (SWRCB) Resolution No. 88-63 – Sources of Drinking Water as adopted in Regional Board Basin Plan;
- RWQCB Basin Plan, Chapter 3 – Beneficial Uses;
- SWRCB Resolution No. 68-16 – Statement of Policy with Respect to Maintaining High Quality of Waters in California as adopted in Regional Board Basin Plan; and
- Porter-Cologne Water Quality Control Act promulgated under the CWC, Section 13304.

The action specific ARARs considered include:

- SWRCB Resolution No. 92-49 – Policies and Procedures for Cleanup and Abatement of Discharges Under Water Code Section 13304 (as amended on April 21, 1994 and October 2, 1996);

- Health and Safety Code 116525 *et seq.*, 22 CCR, Division 4, Chapter 14 – sets requirements for technical reports, application reviews, public hearings and changes to domestic water supply permits;
- CDPH CCR Title 22, Chapter 15, Article 4 and Article 16 – MCLs;
- South Coast Air Quality Management District (SCAQMD) Regulations XIII and XIV – New Source Review and Toxics and other Non-Criteria Pollutants.

INTENTIONALLY LEFT BLANK

4 IDENTIFICATION AND SCREENING OF DOMESTIC WATER SUPPLY ALTERNATIVES

4.1 Identification of Preliminary Domestic Water Supply Alternatives

Ontario and Upland intend to provide uninterrupted replacement water service be provided to all residences south of Riverside Dr. with domestic water supply wells that have TCE concentrations greater than or equal to the MCL of 5 μg/L. Presently, all residences that would require replacement water are currently receiving replacement water either through tank systems or bottled water delivery service. In this section, nine domestic water supply alternatives are developed to ensure that uninterrupted replacement water is supplied to each affected residence over the long term. The nine domestic water supply alternatives are screened using the two step NCP screening process (EPA 1988).

In the initial screening process, the alternatives are evaluated for their effectiveness, implementability and cost. To be effective, the domestic water supply alternatives must meet a single criterion: they must supply uninterrupted replacement water to any affected residence south of Riverside Drive. The technologies evaluated in the proposed alternatives have been available and used effectively for decades. As a result, systems already exist to issue permits for implementing each technology. Therefore, in the initial screening, the domestic water supply alternatives are primarily evaluated for their effectiveness at supplying uninterrupted replacement water and cost. Based on the screening evaluation, six domestic water supply alternatives were selected for a more detailed evaluation.

In the detailed evaluation, the selected domestic water supply alternatives are first subject to screening based on the threshold criteria: overall protection of human health and the environment, and compliance with the ARARs. If the alternatives fail to meet these threshold criteria, no further evaluation is conducted. If an alternative meets the threshold criteria, it is then evaluated for its long term effectiveness, reduction of toxicity, mobility and volume through treatment, short-term effectiveness, implementability, and cost. Based on this evaluation, a single preferred domestic water supply alternative is identified. The final selected alternative may differ from the one presented at the end of the detailed evaluation process in this draft FS because public participation, review, and comment, and State participation, review and input will be incorporated into the analysis. After public and State participation, review and input, the final preferred domestic water supply alternative will be selected for implementation.

4.2 Assembly of Preliminary Domestic Water Supply Alternatives

Presently, there are 40 residences south of Riverside Drive that receive replacement water from a tank system or bottled water service (Figure 7). In some locations, a single tank system serves multiple residences. Tank systems supply the majority of the affected residences, with 31 residences being served by 24 tank systems. Nine residences are currently using bottled water.

Four residences within the current 5 μg/L contour of the plume that are eligible for alternative water supplies previously declined tank systems. These residences are included in the consideration of the domestic water supply alternatives although they do not receive bottled water and do not have a tank system through the current alternative water supply system.

An additional six residences were identified in 2014 as requiring alternative water supplies. These residences are not shown on the map because Ontario is in the process of connecting these residences to the Francis water loop pipeline, which is currently under construction along Archibald Avenue. These residences are temporarily being supplied with bottled water until they can be connected to the Francis water loop.

The domestic water supply alternatives discussed below describe potential methods to ensure that all affected residences continue to receive uninterrupted replacement water service.

4.2.1 DWS Alternative 1 – No Action Alternative

The no action alternative consists of no remedial actions, no institutional controls, and no engineering controls. Therefore, in this DWS alternative, water service to the currently affected residences would cease and the residences would go back to using existing domestic wells for domestic water supply. This DWS alternative is included as a requirement of the NCP evaluation process (EPA 1988) and is used only for comparison against other domestic water supply alternatives.

4.2.2 DWS Alternative 2 – Whole House Treatment Systems for Each Affected Residence

In this DWS alternative, all 44 residences would receive a treatment system to be installed at the well head of a domestic well affected by TCE. All the water entering the residence would be treated by the treatment system at the well, before it enters the residence. The treatment system would treat the water for TCE, using GAC, and nitrate and TDS, using a reverse osmosis (RO) unit at the well head. The existing tank systems would be removed and bottled water deliveries would cease after the whole house treatment systems are installed.

Monitoring of the treatment systems is included in DWS Alternative 2. Monitoring is required to ensure that the treatment systems are functioning properly. The systems will be sampled quarterly. Monitoring of 15 domestic water supply wells currently down-gradient of the Plume is also included in DWS Alternative 2. The wells will be sampled annually to determine if replacement water will be required in the future.

4.2.3 DWS Alternative 3 – Existing Tank Systems and Bottled Water Delivery

This DWS alternative maintains the current system of delivering replacement water. In this DWS alternative, the 31 residences that currently have tank systems supplying replacement water would keep those tank systems, and the nine residences that currently receive bottled water will continue to receive bottled water. Four residences that previously declined tank systems will continue to provide their own water. The existing tank systems will be filled, as needed, by a truck delivering potable water from the Ontario municipal water supply.

This DWS alternative also includes monitoring of 15 domestic water supply wells currently down-gradient of the Plume to determine if replacement water will be required in the future.

4.2.4 DWS Alternative 4 – Install Permanent Potable Water Distribution Pipeline

DWS Alternative 4 includes the installation of a permanent potable water distribution pipeline to all 44 affected residences (Figure 8). The potable water pipeline would be an extension of the existing Ontario distribution pipeline, and would include:

- 25,000 linear feet (LF) of 12-inch diameter (1,400 gallons per minute (GPM) capacity) pipe;
- 7,950 LF of 18-inch diameter (3,000 GPM capacity) pipe;
- 7,950 LF of 24-inch diameter (6,000 GPM capacity) pipe.

The permanent potable water distribution pipeline sizes above were chosen to meet anticipated eventual population growth in the area.

Each residence would receive a 2-inch diameter service connection (lateral). The anticipated time to build the pipeline is approximately two years. During this construction period, the residences would remain on tank systems or bottled water, depending on what they currently receive. After the pipeline is constructed, the tank systems would be removed and bottled water delivery would cease.

This DWS alternative also includes monitoring of 15 domestic water supply wells currently down-gradient of the Plume to determine if replacement water will be required in the future.

4.2.5 DWS Alternative 5 – Install Temporary Potable Water Distribution Pipeline

In this DWS alternative, 40,900 LF of temporary 4- to 6-inch diameter pipe, with an anticipated capacity of 600 GPM, would be constructed to provide potable water from Ontario to 44 affected residences (Figure 8). These residences would receive a 2-inch diameter lateral to connect to the temporary pipe. In contrast to DWS Alternative 4 above, the temporary pipe is only sized to meet the current demands of the 44 existing residences, and its use would be discontinued once the area is eventually developed. Bottled water deliveries would continue and existing tank systems would be maintained during the two years estimated to construct the temporary pipeline. Once the residences are connected to the pipeline, water deliveries would cease and the tank systems would be removed.

This DWS alternative also includes monitoring of 15 domestic water supply wells currently down-gradient of the Plume to determine if replacement water will be required in the future.

4.2.6 DWS Alternative 6 – Construct New Residential Wells

In this DWS alternative, new, deeper, domestic water supply wells would be installed at 44 affected residences. The deep wells would be screened below the anticipated depth of the TCE-impacted zone, as well as below the anticipated depth of the nitrate impacted zone. The existing tank systems would be removed and bottled water service would cease after the wells are installed.

A depth of 600 feet for the new wells was selected based on known well depths and TCE concentrations (EKI 2011). Wells screened below 600 feet bgs will provide a buffer between the groundwater produced in the new well and the deepest known detections of TCE.

Two alternatives are presented. In DWS Alternative 6A, each residence would receive a well, for a total of 44 new wells. In DWS Alternative 6B, one well would be constructed for every three residences, for a total of 14 new wells. For DWS Alternative 6B additional pipeline would be required to connect three residences to each well. A total of 45,000 LF of 2-inch diameter pipeline is estimated to be required to connect 44 residences to 15 new wells.

This DWS alternative also includes monitoring of 15 domestic water supply wells currently down-gradient of the Plume to determine if replacement water will be required in the future.

4.2.7 DWS Alternative 7 – Hybrid Partial Pipeline and Tank Systems

DWS Alternative 7 is a hybrid of DWS Alternatives 3 and 5 above. In this DWS alternative, either permanent or temporary pipeline will be installed to supply potable water from Ontario to some of the affected residences, while other affected residences would remain on existing tank systems or bottled water service. As with DWS Alternative 5 above, the existing tank systems and bottled water service would continue during construction of the pipeline. After affected residences are connected to the pipeline, the tank systems would be removed and bottled water service discontinued.

Two scenarios were investigated. In DWS Alternative 7A, 38,000 LF of temporary pipe would be constructed to serve 32 affected residences (Figure 9). Eight affected residences would remain on seven existing tank systems and four residences that currently receive bottled water would be provided with tank systems. In DWS Alternative 7B, 11,000 LF of temporary pipe would be constructed to serve 25 affected residences (Figure 10). Sixteen affected residences would remain on 15 existing tank systems, and three residences currently on bottled water service would be provided with tank systems.

This DWS alternative also includes monitoring of 15 domestic water supply wells currently down-gradient of the Plume to determine if replacement water will be required in the future.

4.3 Screening of Preliminary Domestic Water Supply Alternatives

The preliminary DWS alternatives assembled in Section 4.2 are screened in this section, using the three NCP screening criteria set forth by the EPA Guidance:

- Effectiveness
- Implementability
- Estimated cost

The effectiveness of the DWS alternatives encompasses the ability of an alternative to protect human health and meet the RAOs. An alternative is considered effective if it supplies uninterrupted replacement water to affected residences south of Riverside Drive. Each alternative is classified as being not effective, potentially effective, or highly effective based on its ability to protect human health and the environment and its ability to meet the RAOs over both the short and long term.

The evaluation of the implementability of the DWS alternatives includes both a technical and an administrative component. Assessment of the technical feasibility of an alternative examines whether the proposed alternative can be designed, constructed, operated and maintained. Assessment of the administrative feasibility examines whether the necessary permits can be obtained for the alternative, as well as the availability of staff, storage and disposal services required to implement the alternative. Each alternative is classified as easy, moderate, or difficult to implement based on its technical and administrative feasibility.

The estimated cost of each alternative is classified based on a relative comparison between the alternatives. The estimated costs are presented as low, moderate, or high. Estimated costs include both the capital and operations and maintenance (O&M) of the proposed alternative. O&M costs were estimated for 10 years and 20 years for each alternative. Cost estimates were compiled primarily from vendor information and costs guides. Other available information, including past project costs, were included where more specific information was not available. The cost summary for the drinking water supply alternatives is provided in Table 1. The justification for how the costs were derived is provided in Appendix B.

Table 1
Estimated Cost Summary – Domestic Water Supply Alternatives

	DWS Alternative 1 No Action Alternative	DWS Alternative 2 Whole House Treatment	DWS Alternative 3 Existing Tank Systems and Bottled Water Delivery	DWS Alternative 4 Install Permanent Potable Water Pipeline	DWS Alternative 5 Install Temporary Potable Water Pipeline	DWS Alternative 6A Construct New Residential Wells – One Well per Residence	DWS Alternative 6B Construct New Residential Wells – One Well per Every Three Residences	DWS Alternative 7A Hybrid Partial Pipeline and Tank Systems – Mostly Tank Systems	DWS Alternative 7B Hybrid Partial Pipeline and Tank Systems – Half Tank and Half Pipeline
Capital	-	$1,600,000	$0	$11,500,000	$9,000,000	$5,000,000	$4,200,000	$8,400,000	$2,900,000
O&M	-	$600,000	$400,000	$40,000	$40,000	$200,000	$100,000	$200,000	$300,000
10-Year Cost	-	$6,500,000	$3,000,000	$11,900,000	$9,400,000	$6,800,000	$4,900,000	$9,900,000	$5,300,000
10 Year Range (-30%/+50%)	-	$4,600,000 to $9,800,000	$2,100,000 to $4,600,000	$8,300,000 to $17,800,000	$6,600,000 to $14,100,000	$4,700,000 to $10,100,000	$3,400,000 to $7,300,000	$6,900,000 to $14,800,000	$3,700,000 to $7,900,000
20-Year Cost	-	$10,200,000	$5,300,000	$12,100,000	$9,600,000	$8,100,000	$5,400,000	$11,000,000	$7,000,000
20 Year Range (-30%/+50%)	-	$7,100,000 to $15,300,000	$3,700,000 to $8,000,000	$8,500,000 to $18,200,000	$6,700,000 to $14,400,000	$5,600,000 to $12,100,000	$3,800,000 to $8,000,000	$7,700,000 to $16,600,000	$4,900,000 to $10,500,000

INTENTIONALLY LEFT BLANK

4.3.1 DWS Alternative 1 – No Action Alternative

Effectiveness – not effective. This DWS alternative does not meet the RAO to supply uninterrupted replacement water to affected residences. Under this DWS alternative current replacement water deliveries would cease and the affected residences would receive water from domestic wells affected by TCE.

Implementability – N/A. There are no technological barriers to the implementation of this DWS alternative. Administratively, however, this DWS alternative cannot be implemented because it fails to provide replacement water to the affected residences.

Cost over 10 years – none. This DWS alternative would not cost anything and is, therefore, the least costly of the DWS alternatives over a 10 year period.

Cost over 20 years – none. This DWS alternative would not cost anything and is, therefore, the least costly of the DWS alternatives over a 20 year period.

Conclusion – retained. Although this DWS alternative is not effective and cannot be implemented it is retained for detailed evaluation as required by the NCP evaluation process (EPA 1988). It is retained solely for comparison against the other retained DWS alternatives.

4.3.2 DWS Alternative 2 – Whole House Treatment Systems for Each Affected Residence

DWS Alternative 2 is whole house treatment water produced from existing wells by installation of a treatment system at the well head of each affected residence. Existing tank systems would be removed and bottled water service would be discontinued after the treatment systems are installed.

Effectiveness – potentially effective. Over the short term, this DWS alternative meets the RAO to supply uninterrupted replacement water to affected residences because it treats the water for TCE, nitrate and TDS. The long term effectiveness of this DWS alternative is, however, dependent on rigorous monitoring and maintenance of the system.

Implementability – easy. The technological implementation of this DWS alternative is easy. The whole house treatment systems exist and can be purchased commercially. The systems will require extensive monitoring and maintenance to ensure that each one is functioning properly and the supply water meets all applicable federal, state and local standards. Implementation of this DWS alternative also entails the replacement and disposal of spent liquid phase carbon and brine from the RO unit. Facilities exist to recycle the carbon, so this should not pose a barrier to implementation.

Cost over 10 years – moderate. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is moderate over a 10 year period.

Cost over 20 years – moderate. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is moderate to high over a 20 year period.

Conclusion – retained. This DWS alternative has the potential to be effective at protecting human health and the environment, and is easy to implement technologically. Because of its effectiveness and ease of technological implementation, this DWS alternative is retained for further consideration in Section 5.0 below.

4.3.3 DWS Alternative 3 – Existing Tank Systems and Bottled Water Delivery

DWS Alternative 3 uses existing tank systems and bottled water delivery to supply water to each affected residence.

Effectiveness – high. The water supplied to the affected residences would come from Ontario and a bottled water service. The water supplied would, therefore, meet all applicable federal, state and local drinking water standards. Uninterrupted replacement water would be supplied under this DWS alternative, and this DWS alternative effectively protects human health by eliminating an exposure pathway.

Implementability – easy. The technological implementation of this DWS alternative is anticipated to be easy. The tank systems and bottled water service are commercially available, and both are currently being used in the area.

Cost over 10 years – low. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is low over a 10 year period.

Cost over 20 years – low. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is low over a 20 year period.

Conclusion – retained. This DWS alternative is highly effective at protecting human health and the environment. It is also technologically easy to implement, as shown through its current use in the area. Therefore, this DWS alternative is retained for further consideration in Section 5.0 below.

4.3.4 DWS Alternative 4 – Install Permanent Potable Water Distribution Pipeline

In DWS Alternative 4, uninterrupted replacement water is supplied via a permanent pipeline sized to meet the future anticipated needs of the area south of Riverside Dr. The pipeline is connected to the existing Ontario Municipal Utilities Company pipeline. After the residences are connected to the pipeline, existing tank systems would be removed and bottled water deliveries would cease.

Effectiveness – high. The water supplied to the affected residences would come from Ontario and would, therefore, meet all applicable federal, state and local drinking water standards. Uninterrupted replacement water would be supplied under this DWS alternative, and this DWS alternative effectively protects human health by eliminating the exposure pathway.

Implementability – difficult. The technological implementation of this DWS alternative is difficult because it requires the construction of permanent pipeline over a large area of Ontario. Should future growth predictions prove inaccurate, the pipeline may have to be re-sized, which would require digging up the permanent pipeline and replacing it. During the anticipated two year duration of the pipeline construction, this DWS alternative will be disruptive to traffic flow throughout the affected area.

Administratively, this DWS alternative will require permitting from several City departments. Permitting is not anticipated to pose a barrier to the implementation of this DWS alternative.

Cost over 10 years – high. This DWS alternative is the most costly alternative over a 10 year period.

Cost over 20 years – high. This DWS alternative is the most costly alternative over a 20 year period.

Conclusion – not retained. Although this DWS alternative is highly protective of human health and the environment, it will be difficult to implement and has the highest costs over both a 10 and 20 year period of all the alternatives considered. Therefore, this DWS alternative is not retained for further consideration in Section 5.0 below.

4.3.5 DWS Alternative 5 – Install Temporary Potable Water Distribution Pipeline

In DWS Alternative 5, uninterrupted replacement water is supplied via a temporary pipeline sized to meet the current needs of the area south of Riverside Dr. The pipeline is connected to the existing Ontario Municipal Utilities Company pipeline. After the residences are connected to the pipeline, existing tank systems would be removed, and bottled water deliveries would cease.

Effectiveness – high. The water supplied to the affected residences would come from Ontario and would, therefore, meet all applicable federal, state and local drinking water standards. Uninterrupted replacement water would be supplied under this DWS alternative, and this DWS alternative effectively protects human health by eliminating an exposure pathway.

Implementability – difficult. The technological implementation of this DWS alternative is difficult for similar reasons to those listed for DWS Alternative 4. Implementation of this DWS alternative requires the construction of a temporary pipeline system over a large area of Ontario, which will be disruptive to traffic throughout the affected area. Additionally, in the future, the pipeline will have to be re-sized, resulting in additional construction disruptions.

Cost over 10 years – moderate. Relative to the costs of the other domestic water supply alternatives, the cost of this DWS alternative is moderate to high over a 10 year period.

Cost over 20 years – moderate. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is moderate over a 20 year period.

Conclusion – not retained. Although this DWS alternative is highly protective of human health and the environment, it will be difficult to implement. Therefore, it is not retained for further consideration in Section 5.0 below.

4.3.6 DWS Alternative 6 – Construct New Residential Wells

DWS Alternative 6 is the installation of new residential wells at each affected residence (DWS Alternative 6A) or for every 3 affected residences (DWS Alternative 6B). The new wells would be drilled to a minimum of 600 feet bgs in order to install the well screens below the anticipated zone of TCE and nitrate contamination. Existing tank systems would be removed and bottled water service would be discontinued after the wells are installed.

4.3.6.1 DWS Alternative 6A

Effectiveness – potentially effective. Installation of wells to depths below the anticipated zone of TCE and nitrate contamination has the potential to provide uninterrupted replacement water to the affected residences. However, there is no guarantee that once a well is installed the water produced from the well will meet all applicable federal, state and local standards. Even if the water produced from the well immediately after installation does meet the federal, state and local standards, water quality in the well may change with time. This has been observed in domestic wells in the area south and east of the intersection of Cucamonga Creek and Eucalyptus Avenue, and north and west of the San Bernardino/Riverside County line (EEC 2014). The concentration of TCE detected in samples from a residential well near Eucalyptus Avenue increased from 0.55

μg/L in 2008 to 5.2 μg/L in 2014.[3] Near Merrill Avenue, the concentration of TCE detected in a residential well increased from <0.5 μg/L in 2008 to 4.2 μg/L in 2014[4] (EEC 2014). Also in the vicinity of Merrill Avenue, the concentration of TCE detected in Chino Basin Watermaster well 319 increased from 3 μg/L in 1999 (Wildermuth 2010) to 10 μg/L in 2010 (Wildermuth 2011). Therefore, based on observed water quality changes in the basin, this DWS alternative may be effective over the short term, but may not meet the RAOs and may not be protective of human health over the long term.

Implementability – easy. Technologically and administratively this DWS alternative is easy to implement. Several companies design and construct domestic water supply wells in the area and the County of San Bernardino has a permitting process in place to permit the construction of these wells.

Cost over 10 years – moderate. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is moderate over a 10 year period.

Cost over 20 years – moderate. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is moderate over a 20 year period.

Conclusion – retained. This DWS alternative is potentially effective at protecting human health and the environment, it is easy to implement and it has moderate short term and long term costs. Therefore it is retained for further consideration in Section 5.0 below.

4.3.6.2 DWS Alternative 6B

Effectiveness – potentially effective. The effectiveness of this DWS alternative is the same as that of DWS Alternative 6A. Installation of wells to depths below the anticipated zone of TCE and nitrate contamination has the potential to provide uninterrupted replacement water to the affected residences. However, there is no guarantee that once a well is installed, the water produced from the well will meet all applicable federal, state and local standards. Even if the water produced from the well immediately after installation does meet the federal, state and local standards, water quality in the well may change with time. This has been observed in domestic wells in the area south and east of the intersection of Cucamonga Creek and Eucalyptus Avenue,

---

3 Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were 0.55 and 0.54 μg/L, respectively. The sample and duplicate concentrations in 2014 were 4.9 and 5.4 μg/L respectively.

4 Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were both <0.5 μg/L. The sample and duplicate concentrations in 2014 were 3.9 and 4.4 μg/L respectively.

and north and west of the San Bernardino/Riverside County line (EEC 2014). The concentration of TCE detected in samples from a residential well near Eucalyptus Avenue increased from 0.55 µg/L in 2008 to 5.2 µg/L in 2014[5]. Near Merrill Avenue, the concentration of TCE detected in a residential well increased from <0.5 µg/L in 2008 to 4.2 µg/L in 2014[6] (EEC 2014). Also in the vicinity of Merrill Avenue, the concentration of TCE detected in Chino Basin Watermaster well 319 increased from 3µg/L in 1999 (Wildermuth 2010) to 10 µg/L in 2010 (Wildermuth 2011). Therefore, this DWS alternative may be effective over the short term, but may not meet the RAOs and may not be protective of human health over the long term.

Implementability – easy. Technologically and administratively this DWS alternative is easy to implement. Several companies design and construct domestic water supply wells in the area and the County of San Bernardino has a permitting process in place to permit the construction of these wells.

Cost over 10 years – moderate. Relative to the costs of the other domestic water supply alternatives, the cost of this DWS alternative is moderate over a 10 year period.

Cost over 20 years – low. Relative to the costs of the other domestic water supply alternatives, the cost of this DWS alternative is low over a 10 year period.

Conclusion – retained. This DWS alternative is potentially effective at protecting human health and the environment, easy to implement, has moderate short-term costs, and low-long term costs. Therefore it is retained for further consideration in Section 5.0 below.

4.3.7 DWS Alternative 7 – Hybrid Partial Pipeline and Tank Systems

DWS Alternative 7 is a hybrid of DWS Alternatives 3 and 5 with uninterrupted replacement water supplied to each affected residence by either a temporary pipeline connected to Ontario's existing water supply pipeline or by a tank system. In DWS Alternative 7A the majority of the affected residences would be served by the temporary pipeline with the remaining residences continuing on existing tank systems or bottled water service. In DWS Alternative 7B, approximately half the residences would be served by the temporary pipeline and the other half

5 Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were 0.55 and 0.54 µg/L, respectively. The sample and duplicate concentrations in 2014 were 4.9 and 5.4 µg/L respectively.

6 Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were both <0.5 µg/L. The sample and duplicate concentrations in 2014 were 3.9 and 4.4 µg/L, respectively.

would remain on existing tank systems or bottled water service. Tank systems would be removed and bottled water service discontinued after a residence was connected to the temporary pipeline.

4.3.7.1 DWS Alternative 7A – Majority of Residences on Temporary Pipeline

Effectiveness – high. The water supplied to the affected residences, whether via the temporary pipeline or the tank systems, would come from Ontario and would, therefore, meet all applicable federal, state and local drinking water standards. Uninterrupted replacement water would be supplied under this DWS alternative, and this DWS alternative effectively protects human health by eliminating an exposure pathway.

Implementability – moderate. The technological implementation of this DWS alternative is anticipated to be moderately difficult because of construction-related disruptions to the residences during the initial installation of the temporary pipeline and the subsequent replacement of the temporary pipeline with permanent pipeline at some point in the future. This DWS alternative, however, is easier to implement than DWS Alternative 5 (installation of temporary pipeline) because the pipeline will be installed over a smaller area, thereby causing less disruption to the residences. Additionally, this DWS alternative requires less operations and maintenance than Alternative 3 (existing tank systems and bottled water delivery).

Cost over 10 years – high. This DWS alternative is among the most costly of the domestic water supply alternatives over a 10 year period.

Cost over 20 years – high. This DWS alternative is among the most costly of the domestic water supply alternatives over a 20 year period.

Conclusion – not retained. Although this DWS alternative is highly effective at protecting human health and the environment, its implementation is more complex than some of the other domestic water supply alternatives discussed above and it has high short and long term costs as compared to other domestic water supply alternatives. Therefore, this DWS alternative is not retained for further consideration in Section 5.0 below.

4.3.7.2 DWS Alternative 7B – Half the Residences on Temporary Pipeline

Effectiveness – high. The water supplied to the affected residences, whether via the temporary pipeline or the tank systems, would come from Ontario and would, therefore, meet all applicable federal, state and local drinking water standards. Uninterrupted replacement water would be supplied under this DWS alternative, and this DWS alternative effectively protects human health by eliminating an exposure pathway.

Implementability – moderate. The technological implementation of this DWS alternative is anticipated to be moderately difficult because there will be construction-related disruptions to the residences during the initial installation of the temporary pipeline and the subsequent replacement of the temporary pipeline with permanent pipeline at some point in the future. This DWS alternative, however, is easier to implement than DWS Alternative 5 (installation of temporary pipeline) because the pipeline will be installed over a smaller area, thereby causing less disruption to the residences. Additionally, this DWS alternative requires less operations and maintenance than DWS Alternative 3 (existing tank systems and bottled water delivery) relative to DWS Alternative 7A, and there is no difference in implementability.

Cost over 10 years – moderate. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is low over a 10 year period.

Cost over 20 years – moderate. Relative to the costs of the other domestic water supply alternatives the cost of this DWS alternative is low over a 20 year period.

Conclusion – retained. This DWS alternative is highly effective at protecting human health and the environment, and has moderate short and long term costs. Therefore, it is retained for further consideration in Section 5.0 below.

4.4 Retained Domestic Water Supply Alternative

The ratings for each domestic water supply alternative are summarized in Table 2 below. The following domestic water supply alternatives were retained based on evaluation of effectiveness, implementability, and cost:

- Domestic Water Supply Alternative 1
- Domestic Water Supply Alternative 2
- Domestic Water Supply Alternative 3
- Domestic Water Supply Alternative 6A
- Domestic Water Supply Alternative 6B
- Domestic Water Supply Alternative 7B

The retained domestic water supply alternatives will undergo detailed evaluation in Section 5.

Table 2
Domestic Water Supply Alternatives Screening Evaluation Summary

	Effectiveness	Implementability	10 Year Cost	20 Year Cost	Conclusion
Alternative 1 – No Action	Not Effective	N/A	None	None	Retained
Alternative 2 Whole House Treatment	Potentially Effective	Easy	Moderate	Moderate	Retained
Alternative 3 Existing Tank Systems and Bottled Water Delivery	Highly Effective	Easy	Low	Low	Retained
Alternative 4 Install Permanent Pipe	Highly Effective	Difficult	High	High	Not Retained
Alternative 5 Install Temporary Pipe	Highly Effective	Difficult	Moderate	Moderate	Not Retained
Alternative 6A Construct New Wells; 1 Residence Per Well	Potentially Effective	Easy	Moderate	Moderate	Retained
Alternative 6B Construct New Wells; 3 Residences Per Well	Potentially Effective	Easy	Moderate	Low	Retained
Alternative 7A Hybrid Partial Pipeline and Tank Systems – Mostly Tank	Highly Effective	Moderate	High	High	Not Retained
Alternative 7B Hybrid Partial Pipeline and Tank Systems – Half Tank	Highly Effective	Moderate	Moderate	Moderate	Retained

INTENTIONALLY LEFT BLANK

5 DETAILED EVALUATION OF WATER SUPPLY ALTERNATIVES

5.1 General

In this section, the retained domestic water supply alternatives are subject to the detailed evaluation outlined in the NCP and EPA Guidance. An overview of the nine criteria used for the detailed evaluation is presented in Section 5.2 and the evaluation of the five retained domestic water alternatives is presented in Section 5.3. The analysis focuses on only those factors that differ among the alternatives.

5.2 Detailed Evaluation Criteria

The NCP and EPA Guidance identifies nine criteria on which the detailed evaluation of the retained alternatives should be based. The technical specifications for the remedy may be refined during the remedial design phase. The retained domestic water supply alternatives are not comprehensive remedial alternatives because they do not directly address the contamination in the aquifer. The purpose of the domestic water supply alternatives is to ensure that replacement water is supplied to all affected residences. Although the domestic water supply alternatives are not comprehensive remedial alternatives, the following nine criteria EPA Guidance are applied to the domestic water supply alternatives to determine the relative ranking of each retained domestic water supply alternative. The nine criteria examined are:

- Overall Protection of Human Health and the Environment
- Compliance with ARARs
- Long-term Effectiveness and Permanence
- Reduction of Toxicity, Mobility and Volume through Treatment
- Short-term Effectiveness
- Implementability
- Estimated Cost
- State Acceptance
- Community Acceptance

The first two criteria, overall protection of human health and the environment, and compliance with ARARs, are the threshold criteria that must be met by each alternative. The next five criteria, long-term effectiveness and permanence, reduction of toxicity, mobility and volume through treatment, short-term effectiveness, implementability, and estimated cost, are the balancing criteria upon which the primary analysis is based. The final two criteria, State acceptance and community acceptance, will be evaluated following agency and public participation, review, and comment on the draft FS. The nine criteria are discussed below based on these groupings.

5.2.1 Threshold Criteria

The two threshold criteria relate directly to findings that must be made in the remedy decision for the site. These criteria are outlined below.

5.2.1.1 Overall Protection of Human Health and the Environment

This criterion describes how the alternative as a whole achieves and maintains protection of human health and the environment. It serves as a final check on each alternative and draws on assessments conducted under other evaluation criteria. The other criteria on which this one draws are: long-term effectiveness and permanence, short-term effectiveness, and compliance with ARARs.

5.2.1.2 Compliance with ARARs

The assessment relative to this criterion describes if the alternative complies with ARARs and addresses other information from advisories, criteria and guidance that are to be considered. This evaluation criterion is used to determine whether the alternative meets all Federal and State ARARs, and describes how the alternative meets these requirements. If an ARAR is not met, the basis for justifying a waiver must be discussed. There are three types of ARARs that are considered: chemical specific, action specific, and location specific. A discussion of the differences between the types of ARARs can be found in Section 3.2. The complete list of identified ARARs and TBCs is presented in Appendix A.

5.2.2 Balancing Criteria

The balancing criteria represent the primary criteria upon which the detailed evaluation is based. These criteria are used to distinguish among the alternatives that meet the threshold requirements. The alternative that achieves the best balance among these five criteria and meets the threshold criteria above is the preferred alternative.

5.2.2.1 Long Term Effectiveness and Permanence

This criterion evaluates the long-term effectiveness and permanence of an alternative in maintaining protection of human health and the environment after the alternative has been implemented and the RAOs have been met.

5.2.2.2 Reduction of Toxicity, Mobility and Volume through Treatment

The anticipated performance of the remedial alternatives and their ability to reduce the toxicity, mobility and volume of the impacted materials through treatment is evaluated under this criterion.

5.2.2.3 Short Term Effectiveness

An assessment of the protection of human health and the environment during the construction and implementation of the remedial alternative until the RAOs are met is evaluated under this criterion. The short term factors addressed are: protection of the community during remedial actions, protection of workers during remedial actions, environmental impacts (e.g., plume migration), and time until RAOs are achieved.

5.2.2.4 Implementability

An assessment of the technical and administrative feasibility is conducted under this criterion.

5.2.2.5 Estimated Cost

An assessment of the anticipated capital and operation and maintenance costs of an alternative is considered under this criterion.

5.2.3 State and Community Acceptance

The state and community acceptance criteria will be considered following comment on this draft FS. The state acceptance allows for consideration of preferences or concerns by the RWQCB. The community acceptance allows for consideration of the community's preferences or concerns regarding the proposed domestic water supply alternatives.

5.3 Retained DWS Alternatives – Detailed Screening

5.3.1 DWS Alternative 1 – No Action

Under the no action alternative, water service to the currently affected residences would cease and the residences would go back to using existing domestic wells for domestic water supply.

5.3.1.1 Overall Protection of Human Health and the Environment

This DWS alternative fails to protect human health and the environment. Currently, all residences south of Riverside Drive with concentrations of TCE at or exceeding the MCL of 5 μg/L are provided with replacement water. Under this DWS alternative, replacement water delivery would cease and the residences would return to using the domestic water supply wells that have TCE concentrations exceeding the MCL.

5.3.1.2 Compliance with ARARs

This DWS alternative does not comply with the ARARs. because this DWS alternative does not supply replacement water to all residences where private domestic wells south of Riverside Dr. contain concentrations of TCE greater than the MCL of 5 μg/L.

5.3.1.3 No Further Evaluation

This DWS alternative does not meet the threshold requirements of providing overall protection of human health and the environment and compliance with the ARARs. Therefore, no further evaluation of this DWS alternative is performed.

5.3.2 DWS Alternative 2 – Whole House Treatment

Under this DWS alternative, treatment systems would be installed at the wellhead of each domestic water supply well at which TCE concentrations exceed the MCL. The treatment system would include both a GAC unit, to remove TCE, and an R/O unit to remove TDS and nitrate.

5.3.2.1 Overall Protection of Human Health and the Environment

This DWS alternative provides adequate protection of human health and the environment. Under this DWS alternative, replacement water will be provided to all affected residences south of Riverside Drive. In the short term, the affected residences are already receiving replacement water. In the long-term, the residences will be supplied with replacement water until the area is redeveloped and the affected domestic water supply wells are no longer used to supply water to individual residences.

5.3.2.2 Compliance with ARARs

This DWS alternative complies with the ARARs and TBCs. The primary ARAR/TBC considered for the water supply alternatives is providing replacement water to all residences where the TCE concentration in private domestic wells is equal to or greater than the MCL. Under this DWS alternative replacement water will be provided to the affected residences, thereby meeting ARARs.

5.3.2.3 Long-Term Effectiveness and Permanence

Of the retained DWS alternatives, this DWS alternative has a relatively high residual long-term risk to human health because the treatment systems are maintained at individual wells. Should a treatment system fail, the drinking water supplied to the residence will have concentrations of TCE that exceed the MCL of 5 µg/L.

This DWS alternative includes quarterly sampling of the treatment systems to ensure that the product water supplied by the system meets the definition of replacement water. However, the quarterly sampling interval means that residents could drink water that does not meet the federal, state and local requirements for up to three months at a time. Therefore this DWS alternative has the potential to expose residents to concentrations of TCE that exceed the MCL, and has a relatively high residual risk.

5.3.2.4 Reduction of Toxicity, Mobility and Volume Through Treatment

This is the only DWS alternative that provides some reduction in the volume of TCE in the groundwater. TCE is removed from the groundwater at each affected well via a GAC unit at the wellhead. This treatment method results in the destruction of TCE, as the spent liquid phase carbon is thermally reactivated in a furnace with an anoxic environment using steam as a selective oxidant. TCE is volatilized from the carbon and destroyed in the furnace afterburner. Remaining acid gases are removed by a chemical scrubber. This treatment and destruction is irreversible.

Although this DWS alternative does remove TCE from the aquifer, the amount of TCE removed and destroyed through individual wellhead treatment is small because the wells are used only to supply the needs of a single residence. The treatment systems are sized to supply up to 500 gallons per day (GPD) to each residence. This is assumed to meet the water demand for 4 to 5 people. Treatment will be provided at 40 wells that, cumulatively, can produce and treat a maximum of 20,000 GPD, or approximately 14 GPM. In contrast, each of the public water supply wells operated by the CDA is capable of producing water from the aquifer at a rate of up to 2,000 GPM. Therefore, the total water produced by all the domestic wells is less than 1% of the water produced by a single CDA public supply well.

The minor amount of mass removed in this DWS alternative is balanced by the potential increased toxicity relative to the current conditions. Should a treatment system fail, the water supplied to the residence will have a higher toxicity than the current water supplied to the residence. Therefore, this DWS alternative has the potential to increase the exposure to TCE relative to both current conditions and other retained DWS alternatives.

5.3.2.5 Short-Term Effectiveness

DWS Alternative 2 is anticipated to be highly effective in the short-term. Replacement water is being supplied to all currently affected residences, ensuring that the community will be protected while the treatment system is installed. Workers installing the treatment systems will not be exposed to concentrations of TCE that exceed the National Institute of Occupational Safety and Health (NIOSH) recommended exposure limit (REL) of 25 mg/L. All of the work will be conducted on previously disturbed land and no additional environmental impacts are anticipated as a result of the installation of the treatment systems. Because the treatment systems are readily available, they can be installed within a few months.

5.3.2.6 Implementability

Whole house treatment systems utilize existing technology. These systems are anticipated to be easy to install and easy to operate. Off-site treatment for the spent GAC and the brine produced by the RO unit is available.

5.3.2.7 Cost

Table 3
Cost of DWS Alternative 2 – Whole House Treatment

Category	Estimated Cost
Capital	$ 1,600,000
Annual Operations and Maintenance	$ 600,000
20 Year Net Present Value Costs	$ 10,200,000
20 Year Cost Range (-30%/+50%)	$7,100,000 to $15,300,000

Of the retained DWS alternatives, whole house treatment has the highest cost after 20 years of operation and the second highest cost after 10 years of operation. Because it also has a higher risk of potential TCE exposure at the affected residences, it is the least cost effective DWS alternative proposed.

5.3.3 DWS Alternative 3 – Existing Tank Systems and Bottled Water Service

DWS Alternative 3 uses existing tank systems and bottled water service to supply water to each affected residence.

5.3.3.1 Overall Protection of Human Health and the Environment

This DWS alternative provides adequate protection of human health and the environment. Under this DWS alternative, replacement water will be provided to all affected residences south of Riverside Drive. In the short term, the affected residences are already receiving replacement water. In the long-term, the residences will be supplied with replacement water until the area is redeveloped and the affected domestic water supply wells are no longer used to supply water to individual residences.

5.3.3.2 Compliance with ARARs

This DWS alternative complies with the ARARs and TBCs. The primary ARAR/TBC considered for the water supply alternatives is providing replacement water to all residences where the TCE concentration in private domestic wells is equal to or greater than the MCL. Under this DWS alternative replacement water will be provided to the affected residences, thereby meeting ARARs.

5.3.3.3 Long-Term Effectiveness and Permanence

DWS Alternative 3 has a low residual long-term risk to human health because replacement water supplied to the affected residences comes from the Ontario municipal water supply and a bottled water service. The municipal supply is subject to the most rigorous testing standards, and meets all relevant federal, state and local drinking water standards. Because the water supplied to the residences comes from Ontario, this DWS alternative provides a high level of control to ensure replacement water is supplied to the affected residences.

5.3.3.4 Reduction of Toxicity, Mobility and Volume Through Treatment

No mass will be removed, no materials will be destroyed, and no treatment will be provided in this DWS alternative. This DWS alternative does not reduce the volume of TCE in the aquifer. However, providing all the affected residences with water from the Ontario municipal water supply will ensure that the residents are not exposed to TCE in their domestic water supply, thereby reducing the toxicity relative to DWS Alternatives 1 and 2.

5.3.3.5 Short-Term Effectiveness

DWS Alternative 3 is anticipated to be highly effective in the short-term as it maintains the current system of delivering replacement water.

5.3.3.6 Implementability

DWS Alternative 3 maintains the currently selected method for providing replacement water. It does not require any additional construction and is easy to operate. This DWS alternative does not require off-site treatment, storage or disposal of wastes. Additional remedial actions can be undertaken if necessary, and the effectiveness of the remedy is already monitored by Ontario, which will supply the water to the tank systems.

5.3.3.7 Cost

Table 4
Cost of DWS Alternative 3 –Existing Tank Systems and Bottled Water Delivery

Category	Estimated Cost
Capital	$ 0
Annual Operations and Maintenance	$400,000
20 Year Net Present Value Costs	$ 5,300,000
20 Year Cost Range (-30%/+50%)	$3,700,000 to $8,000,000

This DWS alternative is among the least costly of the retained DWS alternatives. The low residual risk and low cost combine to make this a cost-effective alternative.

5.3.4 DWS Alternative 6A – New Residential Wells – 1 Well Per Residence

DWS Alternative 6A is the installation of new residential wells at each affected residence. The new wells would be drilled to a minimum of 600 feet bgs in order to install the well screens below the anticipated zone of TCE and nitrate contamination. Existing tank systems would be removed and bottled water service would be discontinued after the wells are installed.

The analysis of this DWS alternative is similar to that of DWS Alternative 6B, because the water supply technology is the same. The only difference between the two domestic water supply alternatives is that in DWS Alternative 6A a new well is constructed for each residence, whereas in DWS Alternative 6B each new well is constructed to meet the demands of three residences.

5.3.4.1 Overall Protection of Human Health and the Environment

This DWS alternative provides adequate protection of human health and the environment. Under this DWS alternative, replacement water will be provided to all affected residences south of Riverside Drive. In the short term, the affected residences are already receiving replacement water. In the long-term, the residences will be supplied with replacement water until the area is redeveloped and the affected domestic water supply wells are no longer used to supply water to individual residences.

5.3.4.2 Compliance with ARARs

This DWS alternative complies with the ARARs and TBCs. The primary ARAR/TBC considered for the water supply alternatives is providing replacement water to all residences where the TCE concentration in private domestic wells is equal to or greater than the MCL. Under this DWS alternative replacement water will be provided to the affected residences, thereby meeting the ARARs.

5.3.4.3 Long-Term Effectiveness and Permanence

Of the retained DWS alternatives, DWS Alternative 6A has a low residual long-term risk to human health, although this DWS alternative, along with DWS Alternative 6B, provides the lowest degree of permanence. The vertical distribution of TCE, nitrate, and TDS within the footprint of the plume is poorly defined. While it is anticipated that a well with a screen interval below 600 feet bgs will produce water that meets all applicable federal, state and local standards, there is no guarantee that it will. Even if the water produced from the well immediately after installation does meet the federal, state and local standards, water quality in the well may change with time. This has been observed in domestic wells in the area south and east of the intersection of Cucamonga Creek and Eucalyptus Avenue, and north and west of the San Bernardino/Riverside County line (EEC 2014). The concentration of TCE detected in samples from a residential well near Eucalyptus Avenue increased from 0.55 μg/L in 2008 to 5.2 μg/L in 2014[7]. Near Merrill Avenue, the concentration of TCE detected in a residential well increased from <0.5 μg/L in 2008 to 4.2 μg/L in 2014[8] (EEC 2014). Also in the vicinity of Merrill Avenue, the concentration of TCE detected in Chino Basin Watermaster well 319 increased from 3 μg/L in 1999 (Wildermuth 2010) to 10 μg/L in 2010 (Wildermuth 2011). Therefore, over the long-term this DWS alternative is the most likely to require additional remedial actions.

As with DWS Alternative 2, samples will be taken quarterly to monitor the water quality of the new domestic supply wells. Quarterly monitoring is anticipated to adequately protect human

---

7 Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were 0.55 and 0.54 μg/L, respectively. The sample and duplicate concentrations in 2014 were 4.9 and 5.4 μg/L, respectively.

8 Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were both <0.5 μg/L. The sample and duplicate concentrations in 2014 were 3.9 and 4.4 μg/L, respectively.

health in this DWS alternative because changes in water quality, if present, are expected to occur over several monitoring periods. Therefore, trends in concentration can be identified and an alternative replacement water supply can be obtained before residents are exposed to concentrations of constituents that exceed the federal, state and local standards.

5.3.4.4 Reduction of Toxicity, Mobility and Volume Through Treatment

No mass will be removed, no materials will be destroyed, and no treatment will be provided in this DWS alternative. This DWS alternative does not reduce the volume of TCE in the aquifer.

5.3.4.5 Short-Term Effectiveness

DWS Alternative 6A is anticipated to be highly effective in the short-term. Replacement water is being supplied to all currently affected residences, ensuring that the community will be protected while new wells are constructed. Workers installing the wells will not be exposed to concentrations of TCE that exceed the NIOSH REL of 25 mg/L. All of the work will be conducted on previously disturbed land. It is anticipated that it will take up to 1 year to construct the wells.

5.3.4.6 Implementability

DWS Alternative 6A will be easy to construct and operate. Wells that produce sufficient water for residential use have been drilled to 600 feet bgs elsewhere in the Basin and there are no anticipated barriers to constructing additional wells to that depth. Permitting processes already exist to construct domestic water supply wells, therefore agency approval is anticipated to be straightforward. This DWS alternative does not require off-site treatment, storage or disposal of wastes. All the necessary equipment is available commercially and additional remedial actions can be undertaken if necessary.

Although the wells can be drilled and operated without difficulty, the effectiveness of this DWS alternative will be more difficult to monitor than that of DWS Alternative 3 and 7B. Long-term monitoring of water quality is required for 40 wells because the water quality may change with time. It is generally more difficult to ensure quality control standards are met for several individual wells than it would be for a single municipal source.

5.3.4.7 Cost

Table 5
Cost of DWS Alternative 6A – New Residential Wells (1 residence per well)

Category	Estimated Cost
Capital	$5,000,000
Annual Operations and Maintenance	$200,000
20 Year Net Present Value Costs	$8,100,000
20 Year Cost Range (-30%/+50%)	$5,600,000 to $12,100,000

This DWS alternative is the most costly of the retained DWS alternatives. The water supplied to the residences in this DWS alternative will come from the groundwater aquifer without treatment. Therefore, there is a potential for long-term changes in the quality of the water supplied to the residences in this DWS alternative. Such changes may necessitate additional remedial actions be taken to supply replacement water. Any additional remedial action, such as supplying water through tank systems or connecting affected residences to the Ontario drinking water supply, would incur additional costs. The cost of any future action is not included in this analysis. Therefore, this DWS alternative, along with DWS Alternative 6B, has the highest long-term cost risk, and the potential to be among the least cost effective of the DWS alternatives.

5.3.5 DWS Alternative 6B – New Residential Wells – 1 Well Per 3 Residences

DWS Alternative 6B is the installation of one new residential well for every 3 affected residences. The new wells would be drilled to a minimum of 600 feet bgs in order to install the well screens below the anticipated zone of TCE and nitrate contamination. Existing tank systems would be removed and bottled water service would be discontinued after the wells are installed.

The analysis of this DWS alternative is similar to that of DWS Alternative 6A above, because the water supply technology is the same. The only difference between the two DWS alternatives is that in DWS Alternative 6B each new well is constructed to meet the demands of three residences, whereas in DWS Alternative 6A a new well is constructed for each residence.

5.3.5.1 Overall Protection of Human Health and the Environment

This DWS alternative provides adequate protection of human health and the environment. Under this DWS alternative, replacement water will be provided to all affected residences south of Riverside Drive. In the short term, the affected residences are already receiving replacement water. In the long-term, the residences will be supplied with replacement water until the area is redeveloped and the affected domestic water supply wells are no longer used to supply water to individual residences.

5.3.5.2 Compliance with ARARs

This DWS alternative complies with the ARARs and TBCs. The primary ARAR/TBC considered for the water supply alternatives is providing replacement water to all residences where the TCE concentration in private domestic wells is equal to or greater than the MCL. Under this DWS alternative replacement water will be provided to the affected residences, thereby meeting the ARARs.

5.3.5.3 Long-Term Effectiveness and Permanence

Of the retained DWS alternatives, DWS Alternative 6B has a low residual long-term risk to human health, although this DWS alternative, along with DWS Alternative 6A, provides the lowest degree of permanence. The vertical distribution of TCE, nitrate, and TDS within the footprint of the plume is poorly defined. While it is anticipated that a well with a screen interval below 600 feet bgs will produce water that meets all applicable federal, state and local standards, there is no guarantee that it will. Even if the water produced from the well immediately after installation does meet the federal, state and local standards, water quality in the well may change with time. This has been observed in domestic wells in the area south and east of the intersection of Cucamonga Creek and Eucalyptus Avenue, and north and west of the San Bernardino/Riverside County line (EEC 2014). The concentration of TCE detected in samples from a residential well near Eucalyptus Avenue increased from 0.55 μg/L in 2008 to 5.2 μg/L in 2014[9]. Near Merrill Avenue, the concentration of TCE detected in a residential well increased from <0.5 μg/L in 2008 to 4.2 μg/L in 2014[10] (EEC 2014). Also in the vicinity of Merrill Avenue, the concentration of TCE detected in Chino Basin Watermaster well 319 increased from 3 μg/L in 1999 (Wildermuth 2010) to 10 μg/L in 2010 (Wildermuth 2011). Therefore, over the long-term this DWS alternative is the most likely to require additional remedial actions.

As with DWS Alternative 2, samples will be taken quarterly to monitor the water quality of the new domestic supply wells. Quarterly monitoring is anticipated to adequately protect human

9 Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were 0.55 and 0.54 μg/L, respectively. The sample and duplicate concentrations in 2014 were 4.9 and 5.4 μg/L, respectively.

10 Reported concentrations are the average of the sample and duplicate sample taken each year. The sample and duplicate concentrations in 2008 were both <0.5 μg/L. The sample and duplicate concentrations in 2014 were 3.9 and 4.4 μg/L, respectively.

health in this DWS alternative because changes in water quality, if present, are expected to occur over several monitoring periods. Therefore, trends in concentration can be identified and an alternative replacement water supply can be obtained before residents are exposed to concentrations of constituents that exceed the federal, state and local standards.

5.3.5.4 Reduction of Toxicity, Mobility and Volume Through Treatment

No mass will be removed, no materials will be destroyed, and no treatment will be provided in this DWS alternative. This DWS alternative does not reduce the volume of TCE in the aquifer.

5.3.5.5 Short-Term Effectiveness

DWS Alternative 6B is anticipated to be highly effective in the short-term. Replacement water is being supplied to all currently affected residences, ensuring that the community will be protected while new wells are constructed. Workers installing the wells will not be exposed to concentrations of TCE that exceed the NIOSH REL of 25 mg/L. All of the work will be conducted on previously disturbed land. Additional environmental impacts may occur if the new wells allow TCE and other potential COCs to migrate from the shallower zone to the deeper zone in the aquifer. It is anticipated that it will take up to 1 year to construct the wells.

5.3.5.6 Implementability

DWS Alternative 6B will be easy to construct and operate. Wells that produce sufficient water for residential use have been drilled to 600 feet bgs elsewhere in the Basin and there are no anticipated barriers to constructing additional wells to that depth. Permitting processes already exist to construct domestic water supply wells, therefore agency approval is anticipated to be straightforward. This DWS alternative does not require off-site treatment, storage or disposal of wastes. All the necessary equipment is available commercially and additional remedial actions can be undertaken if necessary.

Although the wells can be drilled and operated without difficulty, the effectiveness of this DWS alternative will be harder to monitor than that of DWS Alternatives 3 or 7B. Under this DWS alternative, long-term monitoring of water quality is required for 14 wells because the water quality may change with time. It is generally more difficult to ensure quality control standards are met for several individual wells than it would be for a single municipal source.

5.3.5.7 Cost

Table 6
Cost of DWS Alternative 6B – New Residential Wells (1 well per 3 residences)

Category	Estimated Cost
Capital	$4,200,000
Annual Operations and Maintenance	$100,000
20 Year Net Present Value Costs	$5,400,000
20 Year Cost Range (-30%/+50%)	$3,800,000 to $8,000,000

This DWS alternative is among the least costly of the retained DWS alternatives. As with DWS Alternative 6A, the water supplied to the residences in this DWS alternative will come from the groundwater aquifer without treatment. Therefore, there is a potential for long-term changes in the quality of the water supplied to the residences in this DWS alternative. Such changes may necessitate additional remedial actions be taken to supply replacement water. Any additional remedial action, such as supplying water through tank systems or connecting affected residences to the Ontario drinking water supply, would incur additional costs. The cost of any future action is not included in this analysis. Therefore, this DWS alternative, along with DWS Alternative 6A, has the highest long-term cost risk, and the potential to be among the least cost effective of the DWS alternatives.

5.3.6 DWS Alternative 7B – Hybrid Partial Pipe/Partial Tank – Mostly Tank

Alternative 7B is a hybrid of DWS Alternatives 3 and 5 with uninterrupted replacement water supplied to each affected residence by either a temporary pipeline connected to Ontario's existing water supply pipeline or by a tank system. In this DWS alternative, approximately half the residences would be served by the temporary pipeline and the other half would remain on existing tank systems or bottled water service. Tank systems would be removed and bottled water service discontinued after a residence is connected to the temporary pipeline.

5.3.6.1 Overall Protection of Human Health and the Environment

This DWS alternative provides adequate protection of human health and the environment. Under this DWS alternative, replacement water will be provided to all affected residences south of Riverside Drive. In the short term, the affected residences are already receiving replacement water. In the long-term, the residences will be supplied with replacement water until the area is redeveloped and the affected domestic water supply wells are no longer used to supply water to individual residences.

5.3.6.2 Compliance with ARARs

This DWS alternative complies with the ARARs and TBCs. The primary ARAR/TBC considered for the water supply alternatives is providing replacement water to all residences where the TCE concentration in private domestic wells is equal to or greater than the MCL. Under this DWS alternative replacement water will be provided to the affected residences, thereby meeting ARARs.

5.3.6.3 Long-Term Effectiveness and Permanence

DWS Alternative 7B has a low residual long-term risk to human health because replacement water supplied to the affected residences comes from the Ontario municipal water supply. The municipal supply is subject to the most rigorous testing standards, and meets all relevant federal, state and local drinking water standards. Because the water supplied to the residences comes from Ontario, this DWS alternative provides the highest level of effectiveness and reliability of the controls to ensure replacement water is supplied to the affected residences.

5.3.6.4 Reduction of Toxicity, Mobility and Volume Through Treatment

As in DWS Alternative 3, no mass will be removed, no materials will be destroyed, and no treatment will be provided in DWS Alternative 7B. This DWS alternative does not reduce the volume of TCE in the aquifer. However, providing all the affected residences with water from the Ontario municipal water supply will ensure that the residents are not exposed to TCE in their domestic water supply, thereby reducing the toxicity relative to other retained DWS alternatives.

5.3.6.5 Short-Term Effectiveness

DWS Alternative 7B is anticipated to be highly effective in the short-term. Replacement water is currently being supplied to all currently affected residences, ensuring that the community will be protected while additional tank systems are installed. Workers installing the tank systems will not be exposed to concentrations of TCE that exceed the NIOSH REL of 25 mg/L. All of the work will be conducted on previously disturbed land and no additional environmental impacts are anticipated as a result of the installation of the tank systems. Because the tank systems are readily available, they can be installed within a few months.

5.3.6.6 Implementability

DWS Alternative 7B uses tank systems, the currently selected method for providing replacement water, and temporary pipe connections to the Ontario municipal water supply system. This DWS alternative is anticipated be easy to construct and operate. This DWS alternative does not require off-site treatment, storage or disposal of wastes. All the necessary equipment is available commercially and the tank systems are reliable. Additional remedial actions can be undertaken if necessary, and the effectiveness of the remedy is already monitored by Ontario, which will supply the water to the tank systems.

5.3.6.7 Cost

Table 7
Cost of DWS Alternative 7B – Hybrid Tank System and Temporary Pipeline

Category	Estimated Cost
Capital	$2,900,000
Annual Operations and Maintenance	$300,000
20 Year Net Present Value Costs	$7,000,000
20 Year Cost Range (-30%/+50%)	$4,900,000 to $10,500,000

This DWS alternative is in the middle of the cost range for the retained DWS alternatives. The water supplied to the residences in this DWS alternative will come from the Ontario municipal water supply. Therefore, there is little long term residual risk to human health from this DWS alternative. This DWS alternative has a low residual risk to human health and moderate long-term cost. This DWS alternative, along with Alternative 3, also has the lowest risk that additional replacement water supply will be necessary in the future. These factors combine to make this a highly cost-effective alternative.

6 COMPARATIVE EVALUATION OF THE DRINKING WATER SUPPLY ALTERNATIVES

A summary of the detailed evaluation of the drinking water supply alternatives is presented below in Table 8. In this section, the retained DWS alternatives are compared to each other for each criterion analyzed in the detailed analysis. This comparison is used to select a preferred DWS alternative.

6.1 Overall Protection of Human Health and the Environment

DWS Alternative 1, the no action alternative, does not adequately protect human health and the environment because replacement water would not be supplied to affected residences.

DWS Alternatives 2, 3, 6A, 6B and 7B protect human health and the environment because they all supply replacement water to the affected residences. The primary difference between the DWS alternatives is whether the replacement water is supplied through the Ontario municipal water supply, or directly from the groundwater aquifer. In DWS Alternatives 3 (existing tanks and bottled water delivery) and 7B (hybrid tanks and temporary pipeline) replacement water is served from the Ontario municipal utilities district water supply. In DWS Alternatives 2 (whole house treatment), 6A (1 well per residence) and 6B (3 residences per well), the replacement water comes from the groundwater aquifer. In DWS Alternative 2 the replacement water is treated at the wellhead. In DWS Alternatives 6A and 6B, the replacement water is not treated. This water is expected to meet federal, state and local drinking water standards immediately after the wells are installed because the replacement water supplied in DWS Alternatives 6A and 6B will come from wells that are screened deeper in the aquifer than the assumed current depth of TCE and nitrate contamination. The wells installed in DWS Alternatives 6A and 6B will need to be sampled quarterly to ensure that the water supplied meets federal, state and local drinking water standards over the long term.

6.2 Compliance with ARARs

The primary ARAR considered for the water supply alternatives is to supply replacement water to the affected residences . DWS Alternative 1, the no action alternative, does not meet this ARAR. Because this DWS alternative does not meet either of the threshold criteria, no further assessment or comparison with it is provided.

DWS Alternatives 2, 3, 6A, 6B, and 7B all supply replacement water to the affected residences, and therefore meet the ARARs.

6.3 Long-Term Effectiveness and Permanence

DWS Alternatives 3 (existing tanks and bottled water delivery) and 7B (hybrid tanks and temporary pipe) are anticipated to have the lowest magnitude of residual risk and the highest effectiveness and reliability of control. In these two alternatives, the replacement water supplied to the affected residences comes either directly from the Ontario municipal water supply or a commercial bottled water service. This water is subject to the highest standards of testing and must meet all federal, state and local drinking water standards.

In contrast, the replacement water supplied to the affected residences in DWS Alternatives 2, 6A and 6B, comes from either existing domestic wells, for DWS Alternative 2, or new domestic wells, for DWS Alternatives 6A and 6B. These alternatives do not provide replacement water from Ontario. Under DWS Alternative 2, the water produced by existing domestic wells will be treated at the wellhead. As long as the treatment systems function properly, the water supplied under this DWS alternative is anticipated to meet all federal, state and local drinking water standards. The controls on this DWS alternative are the least reliable of the retained DWS alternatives, because the treatment systems will be distributed over several wells and monitoring samples will be taken quarterly. In the event that a treatment system fails, the water supplied to the house will exceed the MCL for TCE. Because the water quality samples are taken quarterly, a problem with a treatment system may not be detected for up to 3 months. Therefore, the magnitude of the residual risk to human health is higher under DWS Alternative 2 than it is under DWS Alternatives 3 and 7B, and the controls are less adequate for DWS Alternative 2 than they are for DWS Alternatives 3 and 7B.

Under DWS Alternatives 6A and 6B, replacement water would be provided by drilling new, deeper domestic wells at the affected residences. These two DWS alternatives differ in the number of wells drilled, with each residence getting a new well in DWS Alternative 6A and every 3 residences sharing a well in DWS Alternative 6B. The deeper wells are anticipated to produce water that will meet the federal, state and local drinking water standards because they will be screened below the currently understood depth of contamination in the Basin. The water produced by the deeper wells will be sampled quarterly. There is a long term risk that with these DWS alternatives that the water quality may change with time. Should this occur, quarterly sampling is anticipated to detect increases in the concentration of contaminants of concern before the water supplied to the houses exceeds federal, state, or local standards. However, the potential change in water quality with time means that these DWS alternatives may provide a lower degree of permanence than DWS Alternatives 3 and 7B.

6.4 Reduction of Toxicity, Mobility and Volume Through Treatment

DWS Alternative 2 (whole house treatment) is the only alternative that reduces the mass of TCE in the aquifer because it is the only alternative that proposes to pump the affected groundwater and treat it via GAC units at the wellhead. Spent liquid phase carbon from the GAC unit is recycled in a furnace with an anoxic environment using steam as a selective oxidant. The TCE removed from the aquifer is volatilized from the carbon and destroyed in the furnace afterburner. While some mass is removed by DWS Alternative 2, this DWS alternative may increase the potential for exposure to TCE in the drinking water as compared with the other retained DWS alternatives, because the failure of a treatment system would expose residents to water known to contain TCE at concentrations above the MCL of 5 μg/L.

6.5 Short-Term Effectiveness

All of the DWS alternatives are anticipated to be equally effective in the short term. These DWS alternatives will protect the community because replacement water is currently being supplied and will continue to be supplied while the DWS alternatives are constructed. Workers will not be exposed to concentrations that pose a risk to their health and the projects are not anticipated to have a significant environmental impact.

6.6 Implementability

The DWS alternatives are all equally easy to construct and operate, they all leave open the possibility of undertaking additional remedial actions, and they all use technology that is readily available and reliable. They differ, however, in the ability to monitor their effectiveness.

Monitoring the effectiveness of DWS Alternatives 2, 6A, and 6B is more difficult than monitoring the effectiveness of DWS Alternatives 3 and 7B. In DWS Alternatives 3 (existing tank systems and bottled water delivery) and 7B (hybrid tank system and temporary pipe), the replacement water supplied comes from Ontario, a centralized drinking water source that is already subject to the most rigorous water quality controls, or a bottled water service that is also subject to water quality controls. In DWS Alternatives 2 (whole house treatment), 6A (one well per residence), and 6B (three residences per well) the groundwater quality must be monitored from individual wells or residences. This makes monitoring more difficult and may result in exposure to TCE at individual residences, particularly for DWS Alternative 2 which treats water from wells with known concentrations of TCE exceeding the MCL. An undetected failure of a treatment system would expose the residents to concentrations of TCE that exceed the MCL.

These considerations combine to make DWS Alternative 2 the least implementable of the domestic water supply alternatives.

6.7 Cost

DWS Alternative 2 (whole house treatment) has the highest cost of the retained alternatives, is the least implementable, and has a high residual risk to human health. Therefore, this is the least cost effective of the retained domestic water supply alternatives.

DWS Alternative 3 (existing tank and bottled water deliver) has a low cost, and maintains current replacement water supply system by maintaining existing tank systems and continuing to provide bottled water to affected residences that do not currently have tank systems. This DWS alternative effectively reduces the long term residual risk to human health. The low residual risk and low cost combine to make this a cost-effective domestic water supply alternative.

DWS Alternative 6A (one well per residence) has a high cost and carries a risk that a new replacement water source will be required in the future, leading to additional costs in the future. The long-term cost risk makes this DWS alternative one of the least cost effective domestic water supply alternatives.

DWS Alternative 6B (three residences per well) has a low cost but also carries a risk that a new replacement water source will be required in the future, leading to additional costs in the future. If additional sources are not required, this would be a cost effective DWS alternative, but the long-term cost risk reduces the cost effectiveness of this DWS alternative.

DWS 7B (hybrid tank system and temporary pipe) has a moderate cost and is highly effective at reducing the risk to human health and the environment. This DWS alternative, along with DWS Alternative 3, also has the lowest risk that additional replacement water supply will be necessary in the future. These factors combine to make this a highly cost-effective DWS alternative.

6.8 State Acceptance

This criterion will be evaluated following State agency review and comment on the draft FS.

6.9 Community Acceptance

This criterion will be evaluated following public participation, review and comment on the draft FS.

7 PREFERRED DOMESTIC WATER SUPPLY ALTERNATIVE

Based on the detailed evaluation of the domestic water supply alternatives presented in Sections 5 and 6 above, DWS Alternative 7B (hybrid tank and temporary pipe) is recommended to ensure uninterrupted replacement water is supplied to all affected residences South of Riverside Dr. DWS Alternative 7B is highly effective at protecting human health by eliminating the exposure pathway. It can be implemented and its short and long term costs are moderate.

Although not explicitly considered as part of the NCP screening evaluation, Alternative 7B is also one of the more flexible alternatives for effectively supplying uninterrupted replacement water. Existing tanks will be used until Ontario builds potable water pipeline in the area. This DWS alternative neither forces the premature installation of pipeline without adequate planning, nor dictates that all affected residences will stay on tank systems for a 20 year period. Therefore, this DWS alternative effectively protects human health while also providing the most flexibility for planning around the future growth of Ontario.

Based on these considerations, and the ones discussed in Sections 5 and 6 above, DWS Alternative 7B is the DWS alternative recommended for implementation to mitigate the effects of the Plume.

INTENTIONALLY LEFT BLANK

Table 8
Detailed Evaluation of the Retained Domestic Water Supply Alternatives

	Threshold Criteria		Balancing Criteria					State And Community Acceptance	
Alternative	*Overall Protection of Human Health and the Environment*	*Compliance with ARARs*	*Long-Term Effectiveness*	*Reduction of Toxicity, Mobility and Volume Through Treatment*	*Short-Term Effectiveness*	*Implementability*	*Cost*	*State Acceptance*	*Community Acceptance*
1 – No Action Alternative	Not Protective	Does Not Comply	-	-	-	-	None	-	-
2 – Whole House Treatment	Protective of Human Health and the Environment	Complies with ARARs	High residual risk: Water served from existing domestic wells Limited control through quarterly sampling	Removes a small amount of TCE mass from the groundwater Water served to residences may have TCE concentrations greater than 5 $\mu g/L$, this would increase toxicity relative to current	Effective	Implementable	Capital: $1,600,000 O&M: $600,000 10-Year Cost: $6,500,000 20-Year Cost: $10,200,000	Not Yet Evaluated	Not Yet Evaluated
3 – Existing Tank Systems and Bottled Water Delivery	Protective of Human Health and the Environment	Complies with ARARs	Low residual risk: Water served from Ontario Control through sampling of municipal supply and bottled water service	No TCE mass removed from the groundwater Toxicity to humans is reduced through long-term replacement water supply	Effective	Implementable	Capital: $0 O&M: $400,000 10-Year Cost: $3,000,000 20-Year Cost: $5,300,000	Not Yet Evaluated	Not Yet Evaluated
6A – New Residential Wells (1 Residence per Well)	Protective of Human Health and the Environment	Complies with ARARs	Moderate residual risk: Water served from new domestic well Lower degree of permanence: TCE could migrate to lower aquifer Good control through quarterly sampling	No TCE mass removed from the groundwater Toxicity to humans is reduced through long-term replacement water supply TCE could migrate to lower aquifer	Effective	Implementable	Capital: $5,000,000 O&M: $200,000 10-Year Cost: $6,800,000 20-Year Cost: $8,100,000 High long term cost risk	Not Yet Evaluated	Not Yet Evaluated
6B – New Residential Wells (3 Residences per Well)	Protective of Human Health and the Environment	Complies with ARARs	Moderate residual risk: Water served from new domestic well Lower degree of permanence: TCE could migrate to lower aquifer. Good control through quarterly sampling	No TCE mass removed from the groundwater Toxicity to humans is reduced through long-term replacement water supply TCE could migrate to the lower aquifer	Effective	Implementable	Capital: $4,200,000 O&M: $100,000 10-Year Cost: $4,900,000 20-Year Cost: $5,400,000 High long term cost risk	Not Yet Evaluated	Not Yet Evaluated
7B – Hybrid Temporary Pipe and Tank Systems (half tanks/half pipe)	Protective of Human Health and the Environment	Complies with ARARs	Low residual risk: Water served from Ontario Highest control through sampling of municipal supply	No TCE mass removed from the groundwater Toxicity to humans is reduced through long-term replacement water supply	Effective	Implementable	Capital: $2,900,000 O&M: $300,000 10-Year Cost: $5,300,000 20-Year Cost: $7,000,000	Not Yet Evaluated	Not Yet Evaluated

INTENTIONALLY LEFT BLANK

8 IDENTIFICATION AND SCREENING OF PLUME REMEDIAL ALTERNATIVES

8.1 Identification of Preliminary Alternatives

In this section, the preliminary remedial alternatives are defined and an initial screening is conducted to assess which alternatives represent effective approaches for the Plume. After the initial screening, some alternatives are rejected while others are retained. Only the retained alternatives are subjected to the detailed evaluation discussed in Section 9 of this draft FS.

The primary objectives of developing remedial alternatives to address the Plume are to identify options that (1) ensure the protection of human health and the environment, (2) reduce concentrations of hazardous substances to acceptable health-based levels, and (3) prevent exposure to hazardous substances via engineering or institutional controls (EPA 1988). The plume remedial alternatives discussed below use a variety of treatment technologies to address TCE in the groundwater. They were developed after taking into consideration the RAOs and ARARs, and the objectives of the multiple users and agencies controlling water production from the Chino Basin.

8.2 Collaboration with the CDA

Several of the plume remedial alternatives below rely on collaboration with the CDA to treat groundwater extracted from the Plume. Due to concerted engagement with the CDA, continued collaboration for the plume remedy appears likely at this point in time. Other plume remedial alternatives that do not include collaboration with the CDA would require significant capital investment and duplicative infrastructure to pipe, handle, treat and deliver post-treated groundwater. Because of the significantly higher cost and duplication of the non-CDA alternatives, these alternatives were not considered in the draft FS. If collaboration with the CDA is not possible these alternatives would need to be reconsidered.

As described in Section 2.3.3 above, the CDA currently operates 22 groundwater production wells in the southern portion of the Chino Basin. Groundwater produced by the wells in the vicinity of the Plume is sent to both the Chino I and Chino II Desalters, via raw water pipelines. The water in these pipelines is directed to either the RO (including decarbonation) or ion exchange (IX) treatment trains at the two desalters. Additionally, at Desalter II, some of the water is allowed through a raw-water bypass without treatment via either RO or IX. The capacity of the raw-water bypass is limited by water quality, under the terms of the CDA water supply permit from the CDPH. The CDA is currently undertaking an expansion project in order to produce 40,000 AFY of water from the Chino Basin, which is designed to assist in providing hydraulic control of the nitrate and TDS impaired groundwater in the Basin (Wildermuth 2009a; Carollo 2010; RWQCB 2014). Many of the existing CDA wells are equipped with variable frequency drives, allowing for flexibility in maintaining hydraulic control through variable pumping.

8.2.1 Concentrations of TCE in CDA Wells

As discussed in section 2.4.1 above, the concentration of TCE in groundwater samples collected from private and CDA wells south and east of the intersection of Cucamonga Creek and Eucalyptus Avenue, and north and west of the San Bernardino/Riverside County line has increased since 2008. TCE was detected in CBWM well 319, close to the location of CDA Site A, at a concentration of 2 μg/L in 2008 and at a concentration of 10 μg/L in 2010 (Wildermuth 2011). The TCE concentration in well CDA I-11 was below the detection limit in samples collected between 2006 and 2009, but has been greater than 2 μg/L since January 2013. Although no CDA well down-gradient of the Plume currently has a TCE concentration above the MCL for groundwater of 5 μg/L, the Plume is migrating toward the CDA well field and poses a threat to the future water quality in these wells (EKI 2014). The presence of the Plume has already impacted the CDA as it has considered source well locations for the Phase III expansion.

The potential concentrations of TCE in the Phase III expansion wells and well CDA I-11 have been estimated using a solute transport model that is a modified version of the model prepared for the CDA by Geoscience Support Services, Inc., (GSSI). The model was modified to introduce additional heterogeneity in hydraulic conductivity on a cell by cell basis, while maintaining the average hydraulic conductivity assigned to each area by GSSI.

Solute transport models are mathematical tools that are commonly used to predict the fate and transport of contaminants constituents in groundwater (NRC 2007). Because these models solve the underlying physical equations that govern groundwater flow, models incorporate data collected on the aquifer properties and distribution of contaminants in the groundwater. Where data are not available, assumptions must be made. The lack of complete knowledge of aquifer properties for all locations of the model introduces uncertainty into model predictions (NRC 2007). Uncertainty associated with model estimations of future concentrations of TCE in the Phase III expansion wells and well CDA I-11 is caused by imperfect knowledge of the distribution of TCE and qualitative calibration of the solute transport model. Approximately 10 simulations were conducted in order to address some of this uncertainty, and examine the potential range of concentrations predicted by the model. The simulations employed multiple distributions of hydraulic conductivity and two slightly different starting distributions of TCE. The migration of the TCE plume was simulated 20 years into the future using the same climatic conditions as GSSI (Appendix C).

Although the model incorporates the proposed production from the Phase III expansion wells, along with the current production from the existing CDA wells, it does not reproduce the observed shift in gradient from southwest to south or slightly south southeast that occurred between 2000 and 2012. As a result, the predicted concentrations for well CDA I-11 might actually better represent future concentrations in the well at Site A to the east of CDA I-11. Similarly the predicted concentrations in well CDA I-10 might better represent future conditions in well CDA I-11. Thus, the model estimates were adjusted to reflect the observed eastward shift in the gradient (EKI 2014). Additionally, in those locations where the model predicted initial concentrations substantially lower than the detected concentrations in the existing (shallower) irrigation wells, the upper range of predicted concentrations was increased in the estimates presented in Table 9, below (Appendix C).

Table 9
Estimated Future TCE Concentrations

		Estimated TCE Concentration Range (μg/L)
Existing Wells	CDA I-10	1 to 4
	CDA I-11	4 to 14
Proposed Expansion Wells	Site 1	<0.5
	Site 2	<0.5 to 20
	Site A	3 to 20
	Edison	10 to 25

Based on the results of the solute transport modeling and the estimated range of future TCE concentrations in both existing and proposed CDA wells, it is likely that at least three CDA wells will be impacted by TCE exceeding the MCL of 5 μg/L (Figure 11). The modeled concentration at the CDA wells differs, however, depending on the location of the northern well. The difference between anticipated concentrations is shown most clearly at Site 2, where the maximum modeled concentration of TCE exceeds the MCL of 5 μg/L with the northern well at Site A, but remains below 2 μg/L with the northern well at Edison Avenue (Figure 12). Additionally, with the northern well at Edison Avenue, approximately 2.3 times more TCE mass was removed from the model after 11 years, or half of the total model run, as was removed over the same time period with a northern well at Site A. After the total 22 year model run, the modeled mass removal with the northern well at Edison Avenue is 1.2 times higher than with the northern well at Site A.

As outlined in the RAOs, the plume remedial alternatives will be evaluated in part based on their effectiveness at: (1) minimizing the migration of the TCE impacts beyond the southern boundary of the area of attainment; (2) lessening the impacts of TCE to both CDA wells and private wells located in un-impacted or less impacted areas; and (3) decreasing the length of time that TCE impairs the beneficial use of groundwater in the area of attainment.

8.3 Assembly of Preliminary Plume Remedial Alternatives

The technologies considered below address remediation of TCE in the groundwater. In addition to utilizing different technologies to address the remediation of TCE, the plume remedial alternatives below also utilize different well configurations, including existing and proposed CDA wells, to mitigate the effects of TCE in the Plume. This is required, in part, by the large aerial extent of the Plume and uncertainty in the orientation of future groundwater gradients. As shown in Table 9 and Figure 13, four proposed CDA expansion well locations have been considered in this draft FS as part of various plume remedial alternatives. Placement of the northern well near the intersection of Edison and Archibald Avenues will address the highest concentration portions of the plume. Groundwater extraction at this northern well at Edison Avenue will likely result in a high degree of TCE mass removal, as compared with allowing indefinite, long-term migration of TCE to the proposed well locations at Site 1, Site 2, and Site A. The sections below present the plume remedial alternatives considered in the initial screening evaluation. Additional discussion of the retained alternatives follows in Section 9.

Plume treatment alternatives for extracted groundwater containing TCE include wellhead treatment for single and combined well scenarios; manifolding of extraction wells and construction of a dedicated pipeline to allow consolidated TCE removal at Desalter II. A dedicated pipeline will allow consideration of multiple potential future extraction well configurations while creating a high degree of flexibility to the CDA in potential well combination options.

8.3.1 Plume Remedial Alternative 1 – No Action Alternative

The no action alternative consists of no remedial actions, no institutional controls, and no engineering controls. It does, however, include continued monitoring of the Plume using existing wells. The monitoring program consists of a network of 25 wells that will be sampled annually. The results of the annual sampling will be provided to the RWQCB in an annual report. This plume remedial alternative, which is similar to the current procedure, is included for baseline comparison against other plume remedial alternatives.

8.3.2 Plume Remedial Alternative 2 – Limited Action Alternative/Monitored Natural Attenuation

The limited action plume remedial alternative is similar to the no action plume remedial alternative, but includes the installation of four new dual-completion monitoring wells. The vertical and aerial extent of the Plume is primarily defined by domestic and agricultural wells.

Information on the depths and screen intervals of these wells is limited. Because this plume remedial alternative does not involve active removal and treatment of TCE, the existing monitoring program will be supplemented with samples collected from four new dual-completion wells, with known depths and screen intervals to address the greater risk posed by this alternative. The wells will be sampled annually and the results of the sampling will be provided to the RWQCB in an annual report.

8.3.3 Plume Remedial Alternative 3 – GAC Wellhead Treatment

Plume Remedial Alternative 3 uses GAC to remove TCE from the groundwater at the wellhead before it is directed to the CDA raw water pipeline. The GAC unit will be located at Site 1, south of the Riverside/San Bernardino County line and west of Harrison Avenue, in the City of Eastvale (Figure 13). Four alternatives are proposed in which the location and number of wells treated, and the size of the required GAC unit varies. In Plume Remedial Alternative 3A the GAC unit is sized to treat up to 800 GPM of influent groundwater, from well CDA I-11 (Figure 13A). In Plume Remedial Alternative 3B, the GAC unit is sized to treat up to 2,800 GPM, which is the anticipated production from wells CDA I-11 and a new well at Site A (Figure 13B). In Plume Remedial Alternative 3C, the GAC unit is sized to treat up to 4,800 GPM, which is the anticipated production capacity of wells CDA I-11 and two new wells at Sites A and 2 (Figure 13C). Plume Remedial Alternative 3D also considers GAC treatment of 4,800 GPM, but in Plume Remedial Alternative 3D, the northernmost well is located in the vicinity of the intersection of Edison and Archibald Avenues, rather than at Site A (Figure 13D). After treatment for TCE via the GAC unit, the water would be directed to the Desalter II raw water pipeline. It is anticipated that under any of these plume remedial alternatives, treatment via the GAC unit will continue until sufficient TCE mass has been removed from the aquifer.

Plume Remedial Alternatives, 3A, 3B, 3C, and 3D, include sampling of the treatment system every other month and construction of a pipeline connecting well CDA I-11 to the proposed Phase III expansion pipeline at Site 2. Additional pipeline costs are included in Alternative 3D to connect the northern well in the vicinity of the intersection of Archibald and Edison Avenues to the proposed Phase III expansion pipeline at Site A.

8.3.4 Plume Remedial Alternative 4 – Air Stripping Wellhead Treatment

Plume Remedial Alternative 4 is similar to Plume Remedial Alternative 3, but TCE is removed from the groundwater via an air stripper, before being directed to the Desalter II raw water pipeline. The air stripper will be located at Site 1, south of the Riverside/San Bernardino County line and west of Harrison Avenue, in the City of Eastvale (Figure 13). Four alternatives are proposed in which the location and number of wells treated, and the size of the required air stripper, varies. In Plume Remedial Alternative 4A the stripping tower is sized to treat up to 800 GPM of influent groundwater, or the anticipated production capacity of well CDA I-11 (Figure 13A). In Plume Remedial Alternative 4B, the stripping tower is sized to treat up to 2,800 GPM, or the anticipated combined production capacity of wells CDA I-11 and a new well at Site A (Figure 13B). In Plume Remedial Alternative 4C, the stripping tower is sized to treat up to 4,800 GPM, or the anticipated production capacity of wells CDA I-11, and two new wells at Sites A and 2 (Figure 13C). Plume Remedial Alternative 4D also considers air stripping of 4,800 GPM, but in Alternative 4D, the northernmost well is located in the vicinity of the intersection of Edison and Archibald Avenues, rather than at Site A (Figure 13D). After treatment for TCE via the air stripper, the water would be directed to the Desalter II raw water pipeline. It is anticipated that under any of these plume remedial alternatives, treatment via an air stripper will continue until sufficient TCE mass has been removed from the aquifer.

Plume Remedial Alternatives, 4A, 4B, 4C, and 4D include sampling of the treatment system every other month, and construction of a pipeline connecting well CDA I-11 to the proposed Phase III expansion pipeline at Site 2. Additional pipeline is included in Alternative 4D to connect the northern well in the vicinity of the intersection of Archibald and Edison Avenues to the proposed Phase III expansion pipeline at Site A. These remedial alternatives also include both regular acid injections, and annual high dose acid treatment to remove calcium carbonate ($CaCO_3$) scale from the packing and pipelines of the air stripper.

8.3.5 Plume Remedial Alternative 5 – Dedicated Pipeline to the RO/ Decarbonator Unit at CDA Desalter II

This Plume Remedial Alternative incorporates the CDA Phase III expansion project. The Phase III expansion project entails:

- Construction of three wells, located at Sites 1, 2 and A (Figure 2);
- Construction of a pipeline to convey the groundwater from the wells at Sites 1, 2 and A to the existing 30-inch CDA pipeline at Hamner and Bellegrave Avenues (Figure 2);
- The addition of three new taller decarbonators at Desalter II.

Based on the results of the solute transport modeling (Section 8.2), several of the Phase III expansion wells may be impacted by TCE at concentrations exceeding the MCL of 5 µg/L in the future. With the currently designed Phase III expansion some of the TCE extracted from the Plume will likely go through the raw water bypass at Desalter II without treatment.

Plume Remedial Alternative 5 modifies and expands upon the Phase III expansion project by directing water from well CDA I-11and the proposed Phase III expansion wells directly to the

RO/decarbonator treatment train at Desalter II so that all of the water from wells anticipated to be affected by TCE above the MCL will be treated at Desalter II.

Plume Remedial Alternative 5:

- Adds pipeline to connect well CDA I-11 to the Phase III expansion pipeline at Site 2;
- Connects CDA I-11 and the three new wells at Sites 1, 2 and A directly to the RO/decarbonator treatment train at Desalter II via a 24-inch pipeline that runs parallel to the existing CDA pipeline on Bellegrave Avenue;
- Replaces the existing three decarbonators at Desalter II with three new taller decarbonators. The taller decarbonators are capable of removing 95% of the TCE in the influent.

There are two variations (5A and 5B) on the basic alternative described above:

In Plume Remedial Alternative 5A, the Phase III CDA municipal water supply wells would be constructed at or near at currently proposed locations (Site 1, Site 2, and Site A) (Figure 14). The planned Phase III 24-inch pipeline connecting the Phase III wells to the existing 30-inch raw water pipeline at Hamner Avenue that ties into Desalter II would also remain the same. At Hamner Avenue, the planned 24-inch pipeline would no longer connect to the existing 30-inch raw water pipeline. The 24-inch line would instead parallel the existing 30-inch line along Bellegrave Avenue, and ultimately along Day Creek, to Desalter II. The 24-inch line would carry the water from the wells potentially affected by TCE directly to the RO/decarbonator treatment train at Desalter II, without allowing this water to mix with water from the existing CDA Desalter II wells. No TCE-impaired groundwater from Site 1, Site 2, or Site A would go through the raw water bypass at Desalter II under this plume remedial alternative. It is anticipated that this plume remedial alternative will continue until sufficient TCE mass has been removed from the aquifer.

In Plume Remedial Alternative 5B, CDA would construct a northern well, in the vicinity of the intersection of Edison Avenue and Archibald Avenue, instead of the well at Site A (Figure 15). The northern well would be connected to the dedicated pipeline along Bellegrave Avenue by a pipeline along Archibald Avenue. The pipeline along Archibald Avenue is anticipated to be 16-inches in diameter. The planned Phase III 24-inch pipeline connecting the Phase III wells to the existing 30 inch raw water pipeline at Hamner Avenue that ties into Desalter II would remain the same. At Hamner Avenue, the planned 24-inch pipeline would no longer connect to the existing 30-inch raw water pipeline. The 24-inch line would instead parallel the existing 30-inch line along Bellegrave Avenue, and ultimately along Day Creek, to Desalter II. The 24-inch line would carry the water from the wells potentially affected by TCE directly to the RO/decarbonator treatment train at Desalter II, without allowing this water to mix with water from the existing CDA Desalter II wells. No TCE-impaired groundwater from Site 1, Site 2, or a northern well at Edison Avenue would go through the raw water bypass at Desalter II under this plume remedial alternative. It is anticipated that this plume remedial alternative will continue until sufficient TCE mass has been removed from the aquifer.

8.3.6 Plume Remedial Alternative 6 – In-Situ Remediation

In this plume remedial alternative zero-valent iron would be injected into 190 boreholes to create a permeable reaction barrier in the aquifer. The barrier would be located in the vicinity of Edison Avenue, down-gradient of the highest TCE concentrations. The barrier would be oriented perpendicular to the direction of groundwater flow. Wells would be spaced on 20 foot centers in a single line across the down-gradient edge of the 20 µg/L contour (Figure 16). As groundwater passes through the reactive barrier, the chlorinated compounds in the groundwater (e.g., TCE) would be dehalogenated via chemical reduction. For the purposes of the cost estimate, the barrier was assumed to be effective for 10 years, at which point more zero-valent iron would be injected in an additional 100 boreholes. Four new dual completion monitoring wells will be constructed to monitor both the up gradient and down-gradient TCE concentrations. The monitor wells will be sampled quarterly and an annual monitoring report will be provided to the RWQCB.

8.4 Screening of Preliminary Plume Remedial Alternatives

The preliminary plume remedial alternatives assembled in Section 8.3 are screened in this section, using the three NCP screening criteria set forth by the EPA Guidance:

- Effectiveness
- Implementability
- Estimated cost

The effectiveness of the plume remedial alternatives encompasses the ability of an alternative to protect human health and meet the RAOs. Both the short- and long-term effectiveness of the alternatives are considered. The short-term effectiveness is the effectiveness of the alternative during the construction and implementation period, until the RAOs are reached. The long-term effectiveness is the period after the remedial action is complete and evaluated according to achieving the permanence of the RAOs.

The ability of each plume remedial alternative to protect human health in both the short- and long-term is dependent on both the selected DWS alternative, discussed in Section 7 above, and the TCE treatment capacity provided. The selected DWS alternative is anticipated to protect human health and the environment in the short-term for private wells by providing uninterrupted replacement water to residences with wells affected by TCE. Because the selected DWS alternative is expected to be coupled to the remedy, regardless of the plume remedial alternative selected, the selected DWS alternative is anticipated to apply equally and is therefore not used as a differentiator throughout the plume remedial alternative screening process and detailed evaluation below.

The short-term effectiveness of the plume remedial alternatives is evaluated based on the effectiveness of the plume remedial alternatives at minimizing the time until the RAOs have been met. The effectiveness of the plume remedial alternatives in the long-term is evaluated based on the treatment capacity provided for TCE in each plume remedial alternative and the ability of the alternative to permanently satisfy the RAOs. Each alternative is classified qualitatively as being not effective, potentially effective, effective, or highly effective based on its ability to protect human health and the environment and its ability to meet the RAOs over both the short- and long-term.

The evaluation of the implementability of the plume remedial alternatives includes both a technical and an administrative component. Assessment of the technical feasibility of an alternative examines whether the proposed alternative can be designed, constructed, operated and maintained. Assessment of the administrative feasibility examines whether the necessary permits can be obtained for the alternative, as well as the availability of staff, storage and disposal services required to implement the alternative. Each alternative is classified as easy, moderate, difficult or very difficult to implement based on its technical and administrative feasibility.

The estimated cost of each plume remedial alternative is classified based on a relative comparison between the alternatives. The estimated costs are presented as low, moderate, or high. Estimated costs include both the capital and O&M of the proposed alternative. O&M costs were estimated for 30 years for each alternative. Estimated costs were compiled primarily from vendor information and cost guides. Other available information, including past project costs, were included where more specific information was not available. The cost summary for the plume remedial alternatives is shown in Table 10. The justification for how the costs were derived is provided in Appendix D.

INTENTIONALLY LEFT BLANK

Table 10
Estimated Cost Summary – Plume Remedial Alternatives

	Plume Remedial Alternative 1	Plume Remedial Alternative 2	Plume Remedial Alternative 3A	Plume Remedial Alternative 3B	Plume Remedial Alternative 3C	Plume Remedial Alternative 3D	Plume Remedial Alternative 4A	Plume Remedial Alternative 4B	Plume Remedial Alternative 4C	Plume Remedial Alternative 4D	Plume Remedial Alternative 5A	Plume Remedial Alternative 5B	Plume Remedial Alternative 6
	No Further Action	*Limited Action/ Monitored Natural Attenuation*	*GAC Wellhead Treatment at CDA I-11*	*GAC Wellhead Treatment at CDA I-11 and Site A*	*GAC Wellhead Treatment at CDA I-11, Site A and Site 2*	*GAC Wellhead Treatment at CDA I-11, Site 2, and a northern well at Edison Avenue*	*Air Stripping Wellhead Treatment at CDA I-11*	*Air Stripping Wellhead Treatment at CDA I-11 and Site A*	*Air Stripping Wellhead Treatment at CDA I-11, Site A and Site 2*	*Air Stripping Wellhead Treatment at CDA I-11, Site 2, and a northern well at Edison Avenue*	*CDA I-11 and Sites 1, 2, and A connected to Dedicated RO/ Decarbonator Treatment Line*	*CDA I-11 and Sites 1, 2, and northern Edison Well connected to Dedicated RO/ Decarbonator Treatment Line*	*In-situ Remediation*
Capital	$0	$1,100,000	$4,700,000	$4,700,000	$4,700,000	$6,000,000	$1,400,000	$1,900,000	$2,200,000	$3,400,000	$10,800,000	$11,300,000	$136,100,000
O&M	$50,000	$60,000	$150,000	$300,000	$440,000	$440,000	$270,000	$810,000	$1,430,000	$1,430,000	$60,000	$60,000	$50,000
30-Year Cost	$900,000	$2,300,000	$7,600,000	$10,500,000	$13,400,000	$14,600,000	$6,700,000	$17,700,000	$30,200,000	$31,400,000	$11,900,000	$12,500,000	$137,200,000
30 Year Range (-30%/+50%)	$630,000 to $1,400,000	$1,600,000 to $3,500,000	$5,300,000 to $11,400,000	$7,400,000 to $15,800,000	$9,400,000 to $20,100,000	$10,200,000 to $21,900,000	$4,700,000 to $10,000,000	$12,400,000 to $26,600,000	$21,100,000 to $45,300,000	$22,000,000 to $47,100,000	$8,300,000 to $17,900,000	$8,800,000 to $18,800,000	$96,000,000 to $205,800,000

INTENTIONALLY LEFT BLANK

8.4.1 Plume Remedial Alternative 1 – No Action Alternative

Plume Remedial Alternative 1 is the no-action alternative. No institutional or engineering controls are proposed. Monitoring would continue using existing wells. The plume would continue to be monitored using the existing network of groundwater wells.

Effectiveness – not effective (short-term); not effective (long-term).

Plume Remedial Alternative 1 will not be effective in the short term at minimizing the concentration of TCE in the groundwater in un-impacted or less impacted areas. Plume Remedial Alternative 1 will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment. The primary degradation product of TCE, cis-1,2 DCE, was only detected in 11 of 252 samples collected between 2007 and 2014, with a maximum concentration of 0.89 µg/L (Section 2.4.2). Therefore, degradation will be ineffective at mitigating the effects of the TCE Plume. Increasing concentrations of TCE have been detected in domestic wells in the area south and east of the intersection of Cucamonga Creek and Eucalyptus Avenue, and north and west of the San Bernardino/Riverside County line (EKI 2014). Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

This plume remedial alternative will not reduce the toxicity, mobility, or volume of TCE in the groundwater because it does not provide any treatment capacity for TCE. For these reasons, Plume Remedial Alternative 1 will not be effective at achieving the RAOs.

Implementability – easy. Plume Remedial Alternative 1 will be very easy to implement as it does not entail any remedial actions, institutional controls or engineering control.

Cost – low. The estimated cost of Plume Remedial Alternative 1 is low, with the only associated cost being the continued monitoring of several existing wells.

Conclusion – retained. Although this plume remedial alternative does not achieve the RAOs, it is retained for detailed evaluation. In the detailed evaluation Plume Remedial Alternative 1 will serve as the baseline alternative against which other plume remedial approaches are compared (EPA 1988).

8.4.2 Plume Remedial Alternative 2 – Limited Action Alternative/Monitored Natural Attenuation

Plume Remedial Alternative 2 is the limited action alternative in which four dual completion wells will be added to the existing network of domestic and agricultural wells to provide a better understanding of the vertical extent of the plume and, therefore, an improved understanding of plume migration and attenuation.

Effectiveness – not effective (short-term); not effective (long-term).

Plume Remedial Alternative 2 will not be effective in the short term at minimizing the concentration of TCE in the groundwater in un-impacted or less impacted areas. Plume Remedial Alternative 2 will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment. The primary degradation product of TCE, cis-1,2 DCE, was only detected in 11 of 252 samples collected between 2007 and 2014, with a maximum concentration of 0.89 µg/L (Section 2.4.2). Therefore, degradation will be ineffective at mitigating the effects of the TCE Plume. Increasing concentrations of TCE have been detected in domestic wells in the area south and east of the intersection of Cucamonga Creek and Eucalyptus Avenue, and north and west of the San Bernardino/Riverside County line (EKI 2014). Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

This plume remedial alternative will not reduce the toxicity, mobility, or volume of TCE in the groundwater because it does not provide any treatment capacity for TCE in the groundwater. For these reasons, Plume Remedial Alternative 2 will not be effective at achieving the RAOs.

Implementability – easy. The technical implementability of constructing, operating, and maintaining four dual-completion monitoring wells and designing a monitoring program for regular sample collection and analysis is easy. Existing technologies will be used and an extensive infrastructure exists in southern California to support well drilling and groundwater sampling activities. The administrative implementability is similarly easy, as the County of San Bernardino regularly issues well-construction permits and there are several facilities in southern California capable of accepting any construction derived waste.

Cost – low. This plume remedial alternative is among the least costly of the plume remedial alternatives considered.

Conclusion – retained. Although this plume remedial alternative will not minimize the migration of TCE into un-impacted or less impacted areas, and will not be effective in the long term, it is easy to implement and has a low cost. Therefore, this plume remedial alternative is retained for detailed analysis in Section 9 below.

8.4.3 Plume Remedial Alternative 3 – GAC Wellhead Treatment

Plume Remedial Alternative 3 uses GAC to remove TCE from the groundwater at one, two, or three CDA production wells. Four alternatives are considered: 3A, 3B, 3C, and 3D based on the number of wells receiving GAC treatment, the location of the wells, and the size of the GAC unit required. The well configurations for each alternative are as follows:

- Plume Remedial Alternative 3A: CDA I-11
- Plume Remedial Alternative 3B: CDA I-11 and Site A
- Plume Remedial Alternative 3C: CDA I-11, Site A and Site 2
- Plume Remedial Alternative 3D: CDA I-11, Edison Avenue, and Site 2

After GAC treatment, the water is directed to the Desalter II raw-water pipeline.

8.4.3.1 Plume Remedial Alternative 3A – GAC Wellhead Treatment for CDA I-11

Effectiveness – not effective (short-term); not effective (long-term).

Plume Remedial Alternative 3A will not be effective in the short term at minimizing the concentration of TCE in the groundwater in un-impacted or less impacted areas because it only provides treatment at well CDA I-11, which already has detectable concentrations of TCE. Plume Remedial Alternative 3A will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment because it does not treat TCE-impaired groundwater near the center of mass of the plume. Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

Alternative 3A will not be effective in the long term because it only provides TCE treatment for well CDA I-11. Plume Remedial Alternative 3A, will not provide treatment for TCE that will likely be present in the wells to be constructed at Site A and Site 2.

Plume Remedial Alternative 3A will be moderately protective of public health by ensuring that TCE currently present at well CDA I-11 will not be distributed through the CDA system to the larger population. However, this plume remedial alternative may not effectively protect public health if TCE is present at the proposed CDA Phase III expansion wells.

Implementability – moderate. Plume Remedial Alternative 3A is implementable. The CDA has already purchased a site, Site 1, that is large enough to house a GAC treatment unit. GAC treatment units are commercially available, from vendors that will assist with the design and installation of the system. A regular monitoring and maintenance schedule will be designed and implemented to ensure that the treatment system is functioning properly. Monitoring and maintenance are not anticipated to create a technical barrier to the implementation of this plume remedial alternative.

Administratively, permits may need to be obtained from the City of Eastvale to install and operate the system. These permits, if required, are not anticipated to be a barrier to the implementability of this plume remedial alternative.

Cost – low. Compared to the cost of the other plume remedial alternatives, the cost of Plume Remedial Alternative 3A is low.

Conclusion – not retained. Although this plume remedial alternative is moderately easy to implement, and has a low cost, it is not retained because it is not effective in either the short-term or the long-term.

8.4.3.2 Plume Remedial Alternative 3B – GAC Wellhead Treatment for CDA I-11 and Site A

Effectiveness –not effective (short-term); potentially effective (long-term).

Plume Remedial Alternative 3B will not be effective in the short term at minimizing the concentration of TCE in the groundwater in un-impacted or less impacted areas because it only provides treatment at wells CDA I-11 and Site A. CDA I-11 already has detectable concentrations of TCE, and the concentration of TCE in the groundwater in the vicinity of Site A has increased over the past 5 years. Plume Remedial Alternative 3B will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment because it does not treat TCE-impaired groundwater near the center of mass of the plume. Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

Alternative 3B will be potentially effective in the long term because it will provide TCE treatment capacity of 2,800 GPM to address TCE already detected in well CDA I-11 as well as the potential future TCE impacts to a well at Site A. Plume Remedial Alternative 3B will be protective of public health in the long-term by ensuring that TCE currently present at well CDA I-11 and any TCE present in the groundwater at Site A will not be distributed through the CDA system to the larger population. However, this plume remedial alternative may not effectively protect public health if TCE migrates to other proposed CDA Phase III expansion wells. Plume Remedial Alternative 3B mitigates the impact of TCE when the TCE arrives at the CDA wells in the vicinity of Bellegrave.

Implementability – moderate. The technical and administrative implementation considerations for Alternative 3B are similar to those for Plume Remedial Alternative 3A. The CDA has already purchased a site that is large enough to house a GAC treatment unit capable of treating 4,000 GPM, or the anticipated production from two CDA wells. GAC treatment units of this size are commercially available, from vendors that will assist with the design and installation of the system. As with Plume Remedial Alternative 3A, a monitoring and maintenance program can be implemented to ensure that the product water does not contain TCE.

Administratively, permits may need to be obtained from the City of Eastvale to install and operate the system. These permits, if required, are not anticipated to be a barrier to the implementability of this plume remedial alternative.

Cost – moderate. Compared to the cost of the other plume remedial alternatives, the cost of Plume Remedial Alternative 3B is moderate

Conclusion – Not retained. This plume remedial alternative is anticipated to be not effective in the short-term and potentially effective in the long-term. It is also technically and administratively implementable and a moderate cost. It is, not retained for detailed analysis because it is not effective in the short-term and only potentially effective in the long-term.

8.4.3.3 Plume Remedial Alternative 3C – GAC Wellhead Treatment for CDA I-11, Site A, and Site 2

Effectiveness – not effective (short-term); effective (long-term).

Plume Remedial Alternative 3C will not be effective in the short term at minimizing the concentration of TCE in the groundwater in un-impacted or less impacted areas because it only provides treatment at wells CDA I-11, Site A and Site 2. CDA I-11 already has detectable concentrations of TCE, and the concentration of TCE in the groundwater in the vicinity of Site A and Site 2 has increased over the past 5 years. Plume Remedial Alternative 3C will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment because it does not treat TCE-impaired groundwater near the center of mass of the plume. Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

Alternative 3C will be effective in the long term because it provides TCE treatment capacity of 4,800 GPM to address TCE already detected in well CDA I-11 as well as the potential future TCE impacts to wells at Site A and Site 2. Plume Remedial Alternative 3C will be protective of public health in the long-term by ensuring that TCE currently present at well CDA I-11 and any TCE present in the groundwater at Sites A and 2 will not be distributed through the CDA system to the larger population. Plume Remedial Alternative 3C is not highly effective because it does not satisfy the RAO of minimizing the migration of TCE from more impacted to less impacted or un-impacted areas. It mitigates the impact of TCE when the TCE arrives at the CDA wells in the vicinity of Bellegrave.

Implementability – moderate. The technical and administrative implementation considerations for Plume Remedial Alternative 3C are similar to those for Plume Remedial Alternatives 3A and B. The property already purchased by the CDA for the treatment system is large enough to house a 6,000 GPM GAC system capable of treating the groundwater produced from three CDA wells. A GAC unit of this size is commercially available. As with Plume Remedial Alternatives 3A and 3 B, a monitoring and maintenance program can be implemented to ensure that the product water does not contain TCE.

Administratively, permits may need to be obtained from the City of Eastvale to install and operate the system. These permits, if required, are not anticipated to be a barrier to the implementability of this plume remedial alternative.

Cost – moderate. Compared to the cost of the other plume remedial alternatives, the cost of Plume Remedial Alternative 3C is moderate

Conclusion – retained. This plume remedial alternative is anticipated to be not effective in the short-term and effective in the long-term. It is also technically and administratively implementable. Although the long term operations and maintenance costs are anticipated to be high, this plume remedial alternative is retained for detailed analysis in Section 9 below because it is anticipated to be effective in the long-term.

8.4.3.4 Plume Remedial Alternative 3D – GAC Wellhead Treatment for CDA I-11, Site 2, and a Northern Well at Edison Avenue

Effectiveness – effective (short-term); highly effective (long-term).

Plume Remedial Alternative 3D will be effective in the short-term at minimizing the concentrations of TCE in the groundwater in un-impacted or less impacted areas because Plume Remedial Alternative 3D includes a northern well at Edison Avenue, which will extract groundwater from the center of mass of the plume. Because the well at Edison Avenue is expected to extract greater TCE mass from the aquifer sooner, this plume remedial alternative is anticipated to decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.

Alternative 3D will be highly effective in the long term because it will provide TCE treatment capacity of 4,800 GPM to address TCE already detected in well CDA I-11 as well as potential future TCE impacts to the northern well at Edison Avenue as well as the one to be constructed at Site 2. Thus Plume Remedial Alternative 3D will be protective of public health by ensuring that TCE will not be distributed through the CDA system to the larger population. Plume Remedial Alternative 3D is highly effective in the long term because it permanently satisfies the RAO of minimizing the concentration of TCE in un-impacted and less impacted areas. Plume Remedial Alternative 3D removes the most mass of the Plume Remedial Alternative 3 series over the short-term, by moving a well to the north closer to the higher concentrations of TCE.

Implementability – moderate. The technical and administrative implementation considerations for Plume Remedial Alternative 3D are similar to those for Plume Remedial Alternatives 3A, 3B, and 3C. Under Plume Remedial Alternative 3D, pipeline will be constructed along Archibald Avenue between Edison Avenue and Site A. The property already purchased by the CDA for the treatment system is large enough to house a 4,800 GPM GAC treatment system capable of treating the groundwater produced from three CDA wells. A GAC unit of this size is commercially available. As with Plume Remedial Alternatives 3A, 3B and 3C, a monitoring and maintenance program can be implemented to ensure that the product water does not contain TCE.

Administratively, permits may need to be obtained from the City of Eastvale to install and operate the system. These permits, if required, are not anticipated to be a barrier to the implementability of this plume remedial alternative. Construction of the pipeline between Edison Avenue and Site A will also require permits that can be obtained from Ontario.

Cost – high. Compared to the cost of the other plume remedial alternatives, the cost of Plume Remedial Alternative 3C is high.

Conclusion – retained. This plume remedial alternative is anticipated to be effective in the short- and highly effective long-term at reducing the mobility, toxicity and volume of the TCE in the groundwater, meeting the RAOs, and protecting human health and the environment. It is also technically and administratively implementable. Although the long term operations and maintenance costs are anticipated to be high, this plume remedial alternative is retained for detailed analysis in Section 9 below based on its short-term and long-term effectiveness.

8.4.4 Plume Remedial Alternative 4 – Air Stripping Wellhead Treatment

Plume Remedial Alternative 4 is similar to Plume Remedial Alternative 3 except that TCE treatment is accomplished by an air stripper at CDA Site 1. Four plume remedial alternatives are considered: 4A, 4B, 4C, and 4D. The plume remedial alternatives differ based on the number of wells connected to the air stripper, the location of the wells connected to the air stripper, and the size of the air stripper required, which will increase as additional wells are connected. The well configurations for each alternative are as follows:

- Plume Remedial Alternative 4A: CDA I-11;
- Plume Remedial Alternative 4B: CDA I-11 and Site A;
- Plume Remedial Alternative 4C: CDA I-11, Site A and Site 2;
- Plume Remedial Alternative 4D: CDA I-11, Edison Avenue, and Site 2.

After treatment, the water is directed to the Desalter II raw-water pipeline.

8.4.4.1 Plume Remedial Alternative 4A – Air Stripping Wellhead Treatment for CDA I-11

Effectiveness – not effective (short-term); not effective (long-term).

The short and long term effectiveness of Plume Remedial Alternative 4A are the same as that of Plume Remedial Alternative 3A. Plume Remedial Alternative 4A will not be effective in the short term at minimizing the concentration of TCE in the groundwater in un-impacted or less impacted areas because it only provides treatment at well CDA I-11, which already has detectable concentrations of TCE. Plume Remedial Alternative 4A will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment because it does not treat TCE-impaired groundwater near the center of mass of the plume. Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

Alternative 4A will not be effective in the long term because it only provides TCE treatment for well CDA I-11. Plume Remedial Alternative 4A, will not provide treatment for TCE that will likely be present in the wells to be constructed at Site A and Site 2.

Plume Remedial Alternative 4A will be moderately protective of public health by ensuring that TCE currently present at well CDA I-11 will not be distributed through the CDA system to the larger population. However, this plume remedial alternative may not effectively protect public health if TCE migrates to the proposed CDA Phase III expansion wells. Plume Remedial Alternative 4A mitigates the impact of TCE at a well that has already been affected by TCE.

Implementability – difficult. The technical implementability of this plume remedial alternative is anticipated to be difficult to very difficult because the groundwater produced by well CDA I-11 had an average TDS concentration of 855 mg/L between 2008 and 2012. As this water passes through the air stripper the pH of the water will increase, causing calcium carbonate (CaCO3) to precipitate out of the water. This precipitate, commonly known as “scale”, has the potential to fill the interstices of the air stripper packing material as well as line the pipes from the air stripper to the Desalter II raw-water pipeline. As the air stripper packing and pipes fill with scale, the system will be less effective at removing TCE and less water will be treated. Therefore, the air stripper and pipeline will need extensive maintenance to prevent the accumulation of scale. Although a monitoring and maintenance program can be devised, the potential need for regular injections of high concentrations of acid, and the potential failure of the system as scale forms in the packing and pipes lessen the likelihood of successful treatment for TCE via air stripping. Therefore, the air stripper and pipeline will need extensive maintenance to prevent the accumulation of scale. Although a monitoring and maintenance program can be devised, the potential need for regular injections of high concentrations of acid, and the potential failure of the system as scale forms in the packing and pipes lessen the likelihood of successful treatment for TCE via air stripping.

Administratively, the implementability of this plume remedial alternative is anticipated to be similar to that of Plume Remedial Alternative 3A. Permits may be required by the City of Eastvale for the construction of the air stripper, although these permits are anticipated to be relatively simple to obtain. Residents may experience noise impacts from the blowers in the air strippers. These impacts may need to be mitigated as there are existing residences less than 100 feet from the eastern property boundary of Site 1.

Cost – low. The cost of Plume Remedial Alternative 4A is among the lowest of all the plume remedial alternatives considered.

Conclusion – not retained. Although this plume remedial alternative has a low cost, it will not be effective in either the short- or long-term, and is difficult to implement. As a result, it is not retained for detailed evaluation.

8.4.4.2 Plume Remedial Alternative 4B - Air Stripping Wellhead Treatment for CDA I-11 and Site A

Effectiveness – not effective (short-term); potentially effective (long-term).

The short and long term effectiveness of Plume Remedial Alternative 4B are the same as that of Plume Remedial Alternative 3B. Plume Remedial Alternative 4B will not be effective in the short term at minimizing the concentration of TCE in the groundwater in un-impacted or less impacted areas because it only provides treatment at wells CDA I-11 and Site A. CDA I-11 already has detectable concentrations of TCE, and the concentration of TCE in the groundwater in the vicinity of Site A has increased over the past 5 years. Plume Remedial Alternative 4B will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment because it does not treat TCE-impaired groundwater near the center of mass of the plume. Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

Plume Remedial Alternative 3B will be potentially effective in the long term because it will provide TCE treatment capacity of 2,800 GPM to address TCE already detected in well CDA I-11 as well as the potential future TCE impacts to a well at Site A. Plume Remedial Alternative 4B will be protective of public health in the long-term by ensuring that TCE currently present at well CDA I-11 and any TCE present in the groundwater at Site A will not be distributed through the CDA system to the larger population. However, this plume remedial alternative may not effectively protect public health if TCE migrates to other proposed CDA Phase III expansion wells. Plume Remedial Alternative 3B mitigates the impact of TCE when the TCE arrives at the CDA wells in the vicinity of Bellegrave.

Implementability – difficult. Similar to Alternative 4A, the technical implementability of this plume remedial alternative is anticipated to be difficult to very difficult because of the high concentrations of TDS produced by CDA I-11, and the similar anticipated TDS concentration at the proposed Site A well. Just as in Plume Remedial Alternative 4A, scale is anticipated to be a problem for the air stripper packing and pipes, rendering the system less effective at removing TCE and resulting in less water being treated. Therefore, the air stripper and pipeline will need extensive maintenance to prevent the accumulation of scale. Although a monitoring and maintenance program can be devised, the potential need for regular injections of high concentrations of acid, and the potential failure of the system as scale forms in the packing and pipes lessen the likelihood of successful treatment for TCE via air stripping. Therefore, the air stripper and pipeline will need extensive maintenance to prevent the accumulation of scale. Although a monitoring and maintenance program can be devised, the potential need for regular injections of high concentrations of acid, and the potential failure of the system as scale forms in the packing and pipes lessen the likelihood of successful treatment for TCE via air stripping.

Administratively, the implementability of this plume remedial alternative is anticipated to be similar to that of Alternative 4A. Permits may be required by the City of Eastvale for the construction of the air stripper, although these permits are anticipated to be relatively simple to obtain. Residents may experience noise impacts from the blowers in the air strippers. These impacts may need to be mitigated as there are existing residences less than 100 feet from the eastern property boundary of Site 1.

Cost – high. Compared to the cost of the other plume remedial alternatives, the cost of Plume Remedial Alternative 4B is high.

Conclusion – not retained. This plume remedial alternative is anticipated to be difficult to very difficult to implement, is not anticipated to be effective in the short-term and will only be potentially effective in the long-term. This plume remedial alternative also has a high cost. Therefore this plume remedial alternative is not retained for detailed evaluation.

8.4.4.3 Plume Remedial Alternative 4C – Air Stripping Wellhead Treatment for CDA I-11, Site A and Site 2

Effectiveness – not effective (short-term); effective (long-term).

The short and long term effectiveness of Plume Remedial Alternative 4C are the same as that of Plume Remedial Alternative 3C. Plume Remedial Alternative 4C will not be effective in the short term at minimizing the concentration of TCE in the groundwater in un-impacted or less impacted areas because it only provides treatment at wells CDA I-11, Site A and Site 2. CDA I-11 already has detectable concentrations of TCE, and the concentration of TCE in the groundwater in the vicinity of Site A and Site 2 has increased over the past 5 years. Plume Remedial Alternative 4C will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment because it does not treat TCE-impaired groundwater near the center of mass of the plume. Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

Alternative 4C will be effective in the long term because it provides TCE treatment capacity of 4,800 GPM to address TCE already detected in well CDA I-11 as well as the potential future TCE impacts to wells at Site A and Site 2. Plume Remedial Alternative 4C will be protective of public health in the long-term by ensuring that TCE currently present at well CDA I-11 and any TCE present in the groundwater at Sites A and 2 will not be distributed through the CDA system to the larger population. Plume Remedial Alternative 4C is not highly effective because it does not satisfy the RAO of minimizing the migration of TCE from more impacted to less impacted or un-impacted areas. It mitigates the impact of TCE when the TCE arrives at the CDA wells in the vicinity of Bellegrave.

Implementability – difficult. The technical implementability of this plume remedial alternative is anticipated to be difficult to very difficult because the groundwater produced by well CDA I-11 has high concentrations of TDS, and the concentration of TDS at the proposed Site A and Site 2 wells is anticipated to be similar to that at well CDA I-11.As in plume remedial alternatives 4A and 4B, scale is anticipated to pose a problem for the air stripper packing material and piping. As the air stripper packing and pipes fill with scale, the system will be less effective at removing TCE and less water will be treated. Therefore, the air stripper and pipeline will need extensive maintenance to prevent the accumulation of scale. Although a monitoring and maintenance program can be devised, the potential need for regular injections of high concentrations of acid, and the potential failure of the system as scale forms in the packing and pipes lessen the likelihood of successful treatment for TCE via air stripping. Therefore, the air stripper and pipeline will need extensive maintenance to prevent the accumulation of scale. Although a monitoring and maintenance program can be devised, the potential need for regular injections of high concentrations of acid, and the potential failure of the system as scale forms in the packing and pipes lessen the likelihood of successful treatment for TCE via air stripping.

Administratively, the implementability of this plume remedial alternative is anticipated to be similar to that of Plume Remedial Alternatives 4A and 4B. Permits may be required by the City of Eastvale for the construction of the air stripper, although these permits are anticipated to be relatively simple to obtain. Residents may experience noise impacts from the blowers in the air strippers. These impacts may need to be mitigated as there are existing residences less than 100 feet from the eastern property boundary of Site 1.

Cost – high. Plume Remedial Alternative 4C is among the most costly of the plume remedial alternatives considered.

Conclusion – not retained. This plume remedial alternative is anticipated to be not effective in the short-term and effective in the long-terms. It will also be difficult to very difficult to implement and is among the most costly plume remedial alternatives. Therefore this plume remedial alternative is not retained for detailed evaluation.

8.4.4.4 Plume Remedial Alternative 4D - Air Stripping Wellhead Treatment for CDA I-11, Site A, and a Northern Well at Edison Avenue

Effectiveness – effective (short-term); highly effective (long-term).

The short and long term effectiveness of Plume Remedial Alternative 4D are the same as that of Plume Remedial Alternative 3D. Plume Remedial Alternative 4D will be effective in the short-term at minimizing the concentrations of TCE in the groundwater in un-impacted or less impacted areas because Plume Remedial Alternative 4D includes a northern well at Edison Avenue, which will extract groundwater from the center of mass of the plume. Because the well at Edison Avenue is expected to extract greater TCE mass from the aquifer sooner, this plume remedial alternative is anticipated to decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.

Alternative 4D will be highly effective in the long term because it will provide TCE treatment capacity of 4,800 GPM to address TCE already detected in well CDA I-11 as well as potential future TCE impacts to the northern well at Edison Avenue as well as the one to be constructed at Site 2. Thus Plume Remedial Alternative 4D will be protective of public health by ensuring that TCE will not be distributed through the CDA system to the larger population. Plume Remedial Alternative 4D is highly effective in the long term because it permanently satisfies the RAO of minimizing the concentration of TCE in un-impacted and less impacted areas. Plume Remedial Alternative 4D removes the most mass of the Plume Remedial Alternative 4 series over the short-term, by moving a well to the north closer to the higher concentrations of TCE.

Implementability – difficult. The technical implementability of this plume remedial alternative is anticipated to be difficult to very difficult because the groundwater produced in the vicinity of well CDA I-11 has high concentrations of TDS. As in plume remedial alternatives 4A, 4B and 4C, scale is anticipated to pose a problem for the air stripper packing material and piping. As the air stripper packing and pipes fill with scale, the system will be less effective at removing TCE and less water will be treated. Therefore, the air stripper and pipeline will need extensive maintenance to prevent the accumulation of scale. Although a monitoring and maintenance program can be devised, the potential need for regular injections of high concentrations of acid, and the potential failure of the system as scale forms in the packing and pipes lessen the likelihood of successful treatment for TCE via air stripping.

Administratively, the implementability of this plume remedial alternative is anticipated to be similar to that of Plume Remedial Alternatives 4A, 4B, and 4B. Permits may be required by the City of Eastvale for the construction of the air stripper, although these permits are anticipated to be relatively simple to obtain. Residents may experience noise impacts from the blowers in the air strippers. These impacts may need to be mitigated as there are existing residences less than 100 feet from the eastern property boundary of Site 1.

Cost – high. Plume Remedial Alternative 4D is among the most costly of the plume remedial alternatives considered.

Conclusion – not retained. Though effective in the short-term and highly effective over the long-term, this plume remedial alternative is anticipated to be difficult to very difficult to implement and very costly. Therefore this plume remedial alternative is not retained for detailed evaluation.

8.4.5 Plume Remedial Alternative 5 – Dedicated Pipeline to the RO/Decarbonator Unit at CDA Desalter II

8.4.5.1 Plume Remedial Alternative 5A – Wells at Site A, Site 1, Site 2 and CDA I-11 Connected to the Dedicated RO/Decarbonator Pipeline

Effectiveness – not effective (short-term); effective (long-term)

Plume Remedial Alternative 5A will not be effective in the short term at minimizing the concentrations of TCE in the groundwater in un-impacted or less impacted areas because it only provides treatment at wells south of Merrill Avenue. CDA I-11 already has detectable concentrations of TCE, and the concentration of TCE in the groundwater in the vicinity of Site A and Site 2 has increased over the past 5 years. Plume Remedial Alternative 5A will not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment because it does not treat TCE-impaired groundwater near the center of mass of the plume. Under this plume remedial alternative, TCE concentrations are likely to continue to increase in un-impacted and less impacted areas as the center of mass of the Plume migrates down-gradient.

Alternative 5A will be effective in the long term because it will provide TCE treatment capacity of 6,800 GPM to address TCE already detected in well CDA I-11 as well as future TCE impacts to the well at Site A and the wells constructed at Sites 1 and 2, should they become impacted. Thus Plume Remedial Alternative 5A will be protective of public health by ensuring that TCE will not be distributed through the CDA system to the larger population. Plume Remedial Alternative 5A mitigates the impact of TCE when the TCE arrives at the CDA wells in the vicinity of Bellegrave.

Implementability – moderate. Alternative 5A is implementable. It would be a standard water infrastructure of the type routinely constructed by public water purveyors. Specifically it would become part of an already planned project being built by CDA.

Cost – moderate. Compared to the cost of the other plume remedial alternatives considered, the cost of Plume Remedial Alternative 5A is moderate.

Conclusion – retained. Plume Remedial Alternative 5A has a moderate cost, is administratively and technologically implementable, and is effective in both the short- and long-term. Therefore it is retained for detailed evaluation in Section 9 below.

8.4.5.2 Plume Remedial Alternative 5B - Wells at Site 1, Site 2, CDA I-11 and a Northern Well at Edison Avenue Connected to the Dedicated RO/Decarbonator Pipeline

Effectiveness – effective (short-term); highly effective (long-term)

Plume Remedial Alternative 5B will be effective in the short-term at minimizing the concentrations of TCE in the groundwater in un-impacted or less impacted areas because Plume Remedial Alternative 5B includes a northern well at Edison Avenue, which will extract groundwater with higher concentrations of TCE. Because the well at Edison Avenue is expected to extract greater TCE mass from the aquifer sooner, this plume remedial alternative is anticipated to decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.

Alternative 5B will be highly effective in the long term because it will provide TCE treatment capacity of 6,800 GPM to address TCE already detected in well CDA I-11 as well as potential future TCE impacts to the northern well at Edison Avenue and the ones to be constructed at Sites 1 and 2, should they become impacted. Thus Plume Remedial Alternative 5B will be protective of public health by ensuring that TCE will not be distributed through the CDA system to the larger population. Plume Remedial Alternative 5B is highly effective in the long term because it permanently satisfies the RAO of minimizing the concentration of TCE in un-impacted and less impacted areas. Plume Remedial Alternative 5B removes the most mass of the Plume Remedial Alternative 5 series over the short-term, by moving a well to the north, closer to the higher concentrations of TCE.

Implementability – moderate. Alternative 5B is implementable. It would be a standard water infrastructure of the type routinely constructed by public water purveyors. Specifically it would become part of an already planned project being built by CDA.

Cost – moderate. Compared to the cost of the other plume remedial alternatives considered, Plume Remedial Alternative 5B has a moderate cost.

Conclusion – retained. Plume Remedial Alternative 5B has a moderate cost, is administratively and technologically implementable, is effective in the short-term, and highly effective in the long-term. Therefore it is retained for detailed evaluation in Section 9 below.

8.4.6 Plume Remedial Alternative 6 – In-Situ Remediation

Alternative 6 is the in-situ remediation alternative in which 100 injection wells will be constructed to deliver zero-valent iron to the groundwater in the vicinity of Edison Avenue. These wells would create a permeable reaction barrier for groundwater flowing to the south/

southeast. As water from the Plume passes through the reaction barrier, TCE will be reduced to ethene. After 10 years, 50 new wells will be drilled to inject additional zero-valent iron into the groundwater and extend the in-situ treatment period for the groundwater plume.

Effectiveness – effective (short-term); effective (long-term).

Plume Remedial Alternative 6 will be effective in the short term at minimizing the concentrations of TCE in the groundwater in un-impacted or less impacted areas because the in-situ remedial injection wells will lower the concentration of TCE in the groundwater in the areas of the Plume with high TCE concentrations. Therefore this plume remedial alternative is anticipated to decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.

Plume Remedial Alternative 6 is not highly effective in the long-term because it does not provide TCE treatment capacity for either TCE already detected in well CDA I-11 or the TCE that will likely to be present in the Phase III expansion wells.

Implementability – very difficult. The technical implementability of constructing and destroying 100 injection wells is easy. The implementability of maintaining the in-situ reaction barrier is very difficult. Injection of zero-valent iron in to a natural setting is very different from a controlled laboratory setting. In the Plume there are several oxidized species in the groundwater that will be reduced by the zero valent iron in addition to TCE. Concentrations of nitrate in the Plume are 10 times, or more, greater than the concentration of TCE. Additionally, oxidized species are continuously introduced into the groundwater. Therefore extensive testing must be done to ensure that adequate quantities of zero-valent iron are injected into the formation to reduce all the oxidized species for a period of approximately 10 years after accounting for all the anticipated natural variability in the groundwater over that time period. Even with modeling and pilot studies, the effectiveness of the reaction barrier must be monitored with regular groundwater samples to ensure that TCE is not continuing to migrate toward the CDA expansion wells.

Cost – high. Plume Remedial Alternative 6 has the highest cost of all the plume remedial alternatives.

Conclusion – not retained. Although Plume Remedial Alternative 6 is effective in both the short-term and long-term, it is difficult to implement and has the highest cost of all the proposed plume remedial alternatives. Therefore, Plume Remedial Alternative 6 is not retained for detailed analysis.

INTENTIONALLY LEFT BLANK

Table 11
Plume Remedial Alternatives Screening Evaluation Summary

	Short Term Effectiveness	Long Term Effectiveness	Implementability	Cost	Conclusion
Plume Remedial Alternative 1 No Action	Not Effective	Not Effective	Easy	Low	Retained
Plume Remedial Alternative 2 Limited Action/ Monitored Natural Attenuation	Not Effective	Not Effective	Easy	Low	Retained
Plume Remedial Alternative 3A GAC Wellhead Treatment for Well CDA I-11	Not Effective	Not Effective	Moderate	Low	Not Retained
Plume Remedial Alternative 3B GAC Wellhead Treatment for Well CDA I-11 and Site A	Not Effective	Potentially Effective	Moderate	Moderate	Not Retained
Plume Remedial Alternative 3C GAC Wellhead Treatment for Well CDA I-11, Site A and Site 2	Not Effective	Effective	Moderate	Moderate	Retained
Plume Remedial Alternative 3D GAC Wellhead Treatment for Well CDA I-11, Site 2 and a northern well at Edison Ave.	Effective	Highly Effective	Moderate	High	Retained
Plume Remedial Alternative 4A Air Stripping Wellhead Treatment for Well CDA I-11	Not Effective	Not Effective	Difficult	Low	Not Retained
Plume Remedial Alternative 4B Air Stripping Wellhead Treatment for Well CDA I-11 and Site A	Not Effective	Potentially Effective	Difficult	High	Not Retained
Plume Remedial Alternative 4C Air Stripping Wellhead Treatment for Well CDA I-11, Site A and Site 2	Not Effective	Effective	Difficult	High	Not Retained
Plume Remedial Alternative 4D Air Stripping Wellhead Treatment for Well CDA I-11, Site 2 and a northern well at Edison Ave.	Effective	Highly Effective	Difficult	High	Not Retained

Table 11
Plume Remedial Alternatives Screening Evaluation Summary

	Short Term Effectiveness	Long Term Effectiveness	Implementability	Cost	Conclusion
Plume Remedial Alternative 5A Dedicated Pipeline to RO/Decarbonator at Desalter II; northern well at Merrill Ave	Not Effective	Effective	Moderate	Moderate	Retained
Plume Remedial Alternative 5B Dedicated Pipeline to RO/Decarbonator at Desalter II; northern well at Edison Ave	Effective	Highly Effective	Moderate	Moderate	Retained
Plume Remedial Alternative 6 In-Situ Remediation	Effective	Effective	Difficult	Very High	Not Retained

9 DETAILED EVALUATION OF PLUME REMEDIAL ALTERNATIVES

9.1 General

In this section, the retained remedial alternatives are subject to the detailed evaluation outlined in the NCP and EPA Guidance. An overview of the nine criteria used for the detailed evaluation is presented in Section 9.2 and the evaluation of the six retained plume remedial alternatives is presented in Section 9.3. The analysis focuses on only those factors that differ among the alternatives.

9.2 Detailed Evaluation Criteria

As discussed in Section 5 above, the EPA Guidance identifies nine criteria on which the detailed evaluation of the retained plume remedial alternatives should be based. The technical specifications for the remedy may be refined during the remedial design phase. The nine criteria for the detailed evaluation are:

- Overall Protection of Human Health and the Environment
- Compliance with ARARs
- Long-term Effectiveness and Permanence
- Reduction of Toxicity, Mobility and Volume through Treatment
- Short-term Effectiveness
- Implementability
- Estimated Cost
- State Acceptance
- Community Acceptance

The first two criteria above, overall protection of human health and the environment, and compliance with ARARs, are the threshold criteria that must be met by each alternative. The following five criteria, long-term effectiveness and permanence, reduction of toxicity, mobility and volume through treatment, short-term effectiveness, implementability, and estimated cost, are the balancing criteria upon which the primary analysis is based. The final two criteria, State acceptance and community acceptance, will be evaluated following agency and public participation, review and comment on the draft FS. The nine criteria are discussed below based on these groupings.

9.2.1 Threshold Criteria

The two threshold criteria relate directly to findings that must be made in the remedy decision for the site. These criteria are outlined below:

9.2.1.1 Overall Protection of Human Health and the Environment

This criterion describes how the plume remedial alternative as a whole achieves and maintains protection of human health and the environment. It serves as a final check on each plume remedial alternative and draws on assessments conducted under other evaluation criteria. The other criteria on which this one draws are: long-term effectiveness and permanence, short-term effectiveness, and compliance with ARARs.

9.2.1.2 Compliance with ARARs

The assessment relative to this criterion describes if the plume remedial alternative complies with ARARs and addresses other information from advisories, criteria and guidance that are to be considered. This evaluation criterion is used to determine whether the plume remedial alternative meets all federal and state ARARs, and describes how the plume remedial alternative meets these requirements. If an ARAR is not met, the basis for justifying a waiver must be discussed. There are three types of ARARs that are considered: chemical specific, action specific, and location specific. A discussion of the differences between the types of ARARs can be found in Section 3.2. The complete list of identified ARARs and TBCs is presented in Appendix A.

9.2.2 Balancing Criteria

The balancing criteria represent the primary criteria upon which the detailed evaluation is based. These criteria are used to distinguish among the plume remedial alternatives that meet the threshold requirements. The plume remedial alternative that achieves the best balance among these five criteria and meets the threshold criteria above is the preferred plume remedial alternative.

9.2.2.1 Long Term Effectiveness and Permanence

This criterion evaluates the long-term effectiveness and permanence of a plume remedial alternative in maintaining protection of human health and the environment after the plume remedial alternative has been implemented and the RAOs have been met.

9.2.2.2 Reduction of Toxicity, Mobility and Volume through Treatment

The anticipated performance of the plume remedial alternatives and their ability to reduce the toxicity, mobility and volume of the impacted materials through treatment is evaluated under this criterion.

9.2.2.3 Short-Term Effectiveness

An assessment of the protection of human health and the environment during the construction and implementation of the plume remedial alternative until the RAOs are met is evaluated under this criterion. The short term factors addressed are: protection of the community during remedial actions, protection of workers during remedial actions, environmental impacts (e.g., plume migration), and time until RAOs are achieved.

9.2.2.4 Implementability

An assessment of the technical and administrative feasibility is conducted under this criterion.

9.2.2.5 Estimated Cost

An assessment of the anticipated capital and operation and maintenance costs of a plume remedial alternative is considered under this criterion.

9.2.3 State and Community Acceptance

The State and community acceptance criteria will be considered following comment on this draft FS. The State acceptance allows for consideration of preferences or concerns by the RWQCB. The community acceptance allows for consideration of the community's preferences or concerns regarding the proposed plume remedial alternatives.

9.3 Retained Plume Remedial Alternatives – Detailed Evaluation

In this section the retained plume remedial alternatives are evaluated, separated according to the criteria listed above.

9.3.1 Plume Remedial Alternative 1 – No Action Alternative

Plume Remedial Alternative 1 is the no-action alternative.

9.3.1.1 Overall Protection of Human Health and the Environment

Plume Remedial Alternative 1 is not protective of human health and the environment. The primary degradation product of TCE, cis-1,2-DCA, was only detected in 11 of 252 samples collected between 2007 and 2014, with a maximum concentration of 0.89 µg/L. Therefore, degradation will be ineffective at mitigating the effects of the TCE Plume. The results of the modeling discussed in Section 8.2 above, suggest that up to three CDA wells will have concentrations of TCE that exceed the MCL of 5µg/L (Table 9). Some of the water produced by these wells will pass through either the raw-water bypass, with no treatment whatsoever, or the IX treatment train, with no treatment for TCE, at Desalter II.

Additionally, as this plume remedial alternative provides no treatment for the TCE-impaired groundwater, it would not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.

9.3.1.2 No Further Evaluation

This plume remedial alternative does not meet the threshold requirement of providing overall protection of human health and the environment. Therefore, no further evaluation of this alternative is performed.

9.3.2 Plume Remedial Alternative 2 – Limited Action Alternative/Monitored Natural Attenuation

This plume remedial alternative is the monitored natural attenuation alternative in which four new dual nested monitoring wells would be installed within the footprint of the Plume in order to monitor the migration of the plume with time.

9.3.2.1 Overall Protection of Human Health and the Environment

Plume Remedial Alternative 2 not protective of human health and the environment. The primary degradation product of TCE, cis-1,2-DCA, was only detected in 11 of 252 samples collected between 2007 and 2014, with a maximum concentration of 0.89 µg/L. Therefore, degradation will be ineffective at mitigating the effects of the TCE Plume. The results of the modeling discussed in Section 8.2 above, suggest that up to three CDA wells will have concentrations of TCE that exceed the MCL of 5µg/L (Table 9). Some of the water produced by these wells will pass through either the raw-water bypass, with no treatment whatsoever, or the IX treatment train, with no treatment for TCE, at Desalter II.

While the construction and monitoring of four new dual completion wells will provide a better understanding of the current vertical and lateral distribution of TCE in the Plume, this plume remedial alternative does not provide for any treatment, engineering, or institutional controls to reduce the risk of TCE from the Plume reaching the public drinking water supply. The lack of treatment also means that this alternative does not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.

9.3.2.2 No Further Evaluation

This plume remedial alternative does not meet the threshold requirement of providing overall protection of human health and the environment. Therefore, no further evaluation of this plume remedial alternative is performed.

9.3.3 Plume Remedial Alternative 3C – GAC Wellhead Treatment for CDA I-11, Site A and Site 2

In Plume Remedial Alternative 3C, three CDA wells will receive wellhead treatment for TCE, via a single GAC unit located at Site 1.

9.3.3.1 Overall Protection of Human Health and the Environment

Plume Remedial Alternative 3C is protective of human health and the environment because it removes TCE in the groundwater produced by three CDA wells. TCE will be removed from the groundwater via a single GAC unit located at Site 1. By limiting the potential distribution of TCE to a wider population via the CDA well-field, this plume remedial alternative mitigates the effects of the TCE plume. Therefore, this plume remedial alternative meets the threshold requirement of providing overall protection of human health and the environment.

9.3.3.2 Compliance with ARARs

Plume Remedial Alternative 3C complies with the identified chemical, location, and action specific ARARs.

The two chemical specific ARARs considered are §64444 of the California Department of Public Health (CDPH) CCR, in which the MCL for TCE is defined, and chapter 4 of the RWQCB Santa Ana River Basin Plan (Basin Plan), in which water quality objectives are established to protect the beneficial uses of the surface and groundwater. The current concentration of TCE in the groundwater exceeds the MCL and does not meet the Basin plan objectives. Under Plume Remedial Alternative 3C, however, all water served to the public will have concentrations of TCE below the MCL, and mass will be removed from the aquifer. The removal of TCE from the aquifer will, eventually, result in lowered concentrations of TCE in the aquifer, which will bring it in compliance with the groundwater quality objectives set forth in the Basin plan.

The primary location specific ARARs considered are SWRCB Resolutions Nos. 88-63 and 68-16, Chapter 3 of the Basin plan, and CWC §13304. Plume Remedial Alternative 3C meets these ARARs by actively removing and treating TCE mass from the aquifer in order to reduce the concentration of TCE in the groundwater.

The primary action specific ARARs considered are: 1) SWRCB No 92-49.; and, 2) the CDA's drinking water permit conditions and its operational use of the bypass line. Over the long term, Plume Remedial Alternative 3C reduces the concentration of TCE in the groundwater to below 5 µg/L, which is the MCL for TCE, and therefore will meet the requirements of SWRCB No. 92-49. The use of GAC for treatment will reduce the potential for any TCE-related issues for the CDA's operational use of the bypass line.

9.3.3.3 Long-Term Effectiveness and Permanence

Plume Remedial Alternative 3C is anticipated to be effective at reducing the magnitude of the residual TCE impacts posed by the Plume. Groundwater from well CDA I-11, Site 2, and Site A will be treated. Modeling suggests that these three wells are likely to have future concentrations of TCE that exceed the MCL of 5 µg/L (Table 9) and, under this plume remedial alternative a northern well would not be constructed at Edison Avenue, therefore, all the wells that are likely to have concentrations that exceed the MCL of 5 µg/L will be treated. Because the CDA wells are water supply wells, they are anticipated to be in service for at least 30 years. Treatment of the groundwater over the life of these wells will reduce the magnitude of the residual impacts to human health and the environment.

Use of these wells as water supply wells also ensures that there are adequate and reliable controls on the long-term effectiveness of this plume remedial alternative. The CDA will sample both the effluent from the GAC unit and the Desalter II product water according to DDW guidelines. This will ensure that the treatment system is functioning properly and that the exposure pathway is eliminated.

9.3.3.4 Reduction of Toxicity, Mobility and Volume Through Treatment

Plume Remedial Alternative 3C provides a higher degree of reduction in the toxicity, mobility and volume of TCE through treatment than either Plume Remedial Alternative 1 (the no action alternative) or Plume Remedial Alternative 2 (the MNA alternative). In Plume Remedial Alternative 3C, TCE will be removed from the groundwater produced at three wells via GAC. This treatment method results in the destruction of TCE, as the spent liquid phase carbon is thermally reactivated in a furnace with an anoxic environment using steam as a selective oxidant. TCE is volatilized from the carbon and destroyed in the furnace afterburner. Remaining acid gases are removed by a chemical scrubber. This treatment and destruction is irreversible.

9.3.3.5 Short-Term Effectiveness

The community will be protected during the implementation of Plume Remedial Action 3C because there are no anticipated community exposure pathways. Groundwater is the only media contaminated with TCE. Extracted groundwater will be treated with liquid phase carbon, which will not release TCE to the atmosphere. Workers constructing the CDA wells and pipelines will not be exposed to concentrations of TCE that exceed the NIOSH REL of 25 mg/L. Although the community and workers will be protected during implementation of this plume remedial alternative, Plume Remedial Alternative 3C is not effective in the short-term, because it will rely on the migration of TCE several thousand feet to the vicinity of Bellegrave/Remington Avenues before TCE is removed from the aquifer. As a result, the timeframe to achieve RAOs will not be substantially reduced.

9.3.3.6 Implementability

There are no anticipated barriers to the implementability of Plume Remedial Alternative 3C. GAC technology has been used reliably for decades to remediate TCE in groundwater. This technology is commercially available. Facilities exist to recycle the spent liquid phase carbon and destroy the TCE in the process. Samples of the treatment system effluent and CDA wells will allow the effectiveness of the remedy to be easily monitored. Remediating the groundwater at three wells via GAC will not pose a barrier to undertaking additional plume remedial actions should they become necessary.

Construction of the pipelines, wells, and treatment system proposed under this plume remedial alternative will require coordination with and permits from several cities and agencies. The cities considered in this draft FS are: Ontario, the City of Jurupa Valley (Jurupa Valley), and the City of Eastvale (Eastvale). These cities are anticipated to issue the necessary permits when the permit requests are received and processed. The agencies considered in this draft FS are: the CDA, the DDW, and the SCAQMD. It is anticipated that these agencies will approve components of the project that fall under their jurisdiction.

9.3.3.7 Cost

The cost estimate for Plume Remedial Alternative 3C is summarized in Table 12 below:

Table 12
Cost of Plume Remedial Alternative 3C - GAC Wellhead Treatment for CDA I-11, Site A and Site 2

Category	Estimated Cost
Capital	$ 4,700,000
Annual Operations and Maintenance	$ 440,000
Net Present Value Costs	$ 13,400,000
Cost Range (-30%/+50%)	$9,400,000 to $20,100,000

Plume Remedial Alternative 3C is not effective in the short-term, it is effective in the long-term, it reduces the toxicity, mobility and volume of TCE through treatment, and it is implementable. The long term cost of this plume remedial alternative is, however, higher than that of either Alternatives 5A or 5B.

9.3.4 Plume Remedial Alternative 3D – GAC Wellhead Treatment for CDA I-11, Site 2, and Northern, Edison Avenue Well

9.3.4.1 Overall Protection of Human Health and the Environment

Plume Remedial Alternative 3D will be effective in the short-term at minimizing the concentrations of TCE in the groundwater in un-impacted or less impacted areas because Plume Remedial Alternative 3D includes a northern well at Edison Avenue, which will extract groundwater from the center of mass of the plume. Because the well at Edison Avenue is expected to extract greater TCE mass from the aquifer sooner, this plume remedial alternative is anticipated to decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.

Plume Remedial Alternative 3D is also protective of human health and the environment in the long-term because it removes TCE in the groundwater produced by three CDA wells. TCE will be removed from the groundwater via a single GAC unit located at Site 1. By limiting the potential distribution of TCE to a wider population via the CDA well-field, this plume remedial alternative mitigates the effects of the TCE plume. Therefore, this plume remedial alternative meets the threshold requirement of providing overall protection of human health and the environment.

9.3.4.2 Compliance with ARARs

Plume Remedial Alternative 3D complies with the identified chemical, location, and action specific ARARs.

The two chemical specific ARARs considered are CCR §64444 and Chapter 4 of the Basin Plan. Under Plume Remedial Alternative 3D all water served to the public will have TCE concentrations below the MCL, and mass will be removed from the aquifer. By moving one well to the north, more mass will be removed from the aquifer in the short term under this plume remedial alternative than under Plume Remedial Alternatives 3C and 5A. The removal of TCE from the aquifer in the vicinity of Edison Avenue will reduce the concentration of TCE in the aquifer faster, thereby bringing it in compliance with the groundwater quality objectives set for in the basin plan.

The primary location specific ARARs considered are SWRCB Resolutions Nos. 88-63 and 68-16, Chapter 3 of the Basin plan, and CWC §13304. Plume Remedial Alternative 3D meets these ARARs by actively removing TCE mass from the aquifer in order to reduce the concentration of TCE in the groundwater.

The primary action specific ARARs considered are: 1) SWRCB No 92-49; and, 2) the CDA's drinking water permit conditions and its operational use of a bypass line. Over the long term, Plume Remedial Alternative 3D reduces the concentration of TCE in the groundwater to below 5 µg/L, which is the MCL for TCE, and therefore will meet the requirements of SWRCB No. 92-49. The use of GAC for treatment will reduce the potential for any TCE-related issues for the CDA's operational use of the bypass line

9.3.4.3 Long-Term Effectiveness and Permanence

Plume Remedial Alternative 3D is anticipated to be highly effective at reducing the magnitude of the residual TCE impacts posed by the Plume. Groundwater from well CDA I-11, Site 2, and a northern well at Edison Avenue will be treated. The northern well, at Edison Avenue will remove more mass from the aquifer in the short term than will be removed in Plume Remedial Alternatives 3C and 5A, by actively pumping groundwater with higher concentrations of TCE, closer to the center of mass of the Plume. This plume remedial alternative, is also more effective over the long-term at permanently satisfying the RAO of minimizing the concentration of TCE in un-impacted or less impacted areas (see Section 3.1).

Modeling suggests that all three wells in this plume remedial alternative are likely to have future concentrations of TCE that exceed the MCL of 5 µg/L (Table 9). Under this plume remedial alternative a well would not be constructed at Site A. Therefore, all the wells that are likely to have concentrations that exceed the MCL of 5 µg/L will be treated. Because the CDA wells are water supply wells, they are anticipated to be in service for at least 30 years. Treatment of the groundwater over the life of these wells will reduce the magnitude of the residual impacts to human health and the environment.

Use of these wells as water supply wells also ensures that there are adequate and reliable controls on the long-term effectiveness of this plume remedial alternative. The CDA will sample both the effluent from the GAC unit and the Desalter II product water according to DDW guidelines. This will ensure that the treatment system is functioning properly and that the exposure pathway is eliminated.

9.3.4.4 Reduction of Toxicity, Mobility and Volume Through Treatment

Plume Remedial Alternative 3D provides a higher degree of reduction in the toxicity, mobility and volume of TCE through treatment than Plume Remedial Alternative 1 (the no action alternative), Plume Remedial Alternative 2 (the MNA alternative) and Plume Remedial Alternative 3C. In Plume Remedial Alternative 3D, TCE will be removed from the groundwater produced at three wells via GAC. Although the number of wells treated in this plume remedial alternative is the same as in Alternative 3C, the northern well at Edison is closer to higher concentrations of TCE. Therefore, in the short term, this plume remedial alternative will remove and treat more TCE mass from the aquifer than will Plume Remedial Alternative 3C.

In this plume remedial alternative, TCE will be destroyed when the spent liquid phase carbon is thermally reactivated in a furnace with an anoxic environment using steam as a selective oxidant. TCE is volatilized from the carbon and destroyed in the furnace afterburner. Remaining acid gases are removed by a chemical scrubber. This treatment and destruction is irreversible.

9.3.4.5 Short-Term Effectiveness

The community will be protected during the implementation of Plume Remedial Action 3C because there are no anticipated community exposure pathways. Groundwater is the only media contaminated with TCE. Extracted groundwater will be treated with liquid phase carbon, which will not release TCE to the atmosphere. Workers constructing the CDA wells and pipelines will not be exposed to concentrations of TCE that exceed the NIOSH recommended exposure limit REL of 25 mg/L. Plume Remedial Alternative 3D will minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas; and, it will decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment. Therefore, Plume Remedial Alternative 3D will be effective in the short-term.

9.3.4.6 Implementability

There are no anticipated barriers to the implementability of Plume Remedial Alternative 3D. GAC technology has been used reliably for decades to remediate TCE in groundwater. This technology is commercially available. Facilities exist to recycle the spent liquid phase carbon and destroy the TCE in the process. Samples of the treatment system effluent and CDA wells will allow the effectiveness of the remedy to be easily monitored. Remediating the groundwater at three wells via GAC will not pose a barrier to undertaking additional plume remedial actions should they become necessary.

Construction of the pipelines, wells, and treatment system proposed under this plume remedial alternative will require coordination with and permits from several cities and agencies. The cities considered in this draft FS are: Ontario, Jurupa Valley, and Eastvale. These cities are anticipated to issue the necessary permits when the permit requests are received and processed. The agencies considered in this draft FS are: the CDA, the DDW, and the SCAQMD. It is anticipated that these agencies will approve components of the project that fall under their jurisdiction.

9.3.4.7 Cost

The cost estimate for Plume Remedial Alternative 3D is summarized in Table 13 below:

Table 13.
Cost of Plume Remedial Alternative 3D - GAC
Wellhead Treatment for CDA I-11, Site 2, and Edison Avenue Well

Category	Estimated Cost
Capital	$6,000,000
Operations and Maintenance	$440,000
Net Present Value Costs	$14,600,000
Cost Range (-30%/+50%)	$10,200,000 to $21,900,000

Alternative 3D has the highest cost of all the retained plume remedial alternatives. Plume Remedial Alternative 3D is effective in the short term, highly effective in the long term, it reduces the toxicity, mobility and volume of TCE through treatment, and it is implementable. In contrast to Plume Remedial Alternatives 3C and 5A, this plume remedial alternative removes more mass from the aquifer in the short-term, because the northern well at Edison Avenue will pump water with higher concentrations of TCE as compared to proposed wells farther south.

9.3.5 Plume Remedial Alternative 5A – Wells at Site A, Site 1, Site 2 and CDA I-11 Connected to the Dedicated RO/Decarbonator Pipeline

9.3.5.1 Overall Protection of Human Health and the Environment

Plume Remedial Alternative 5A is protective of human health and the environment because it removes TCE in the groundwater produced by up to four CDA wells. TCE will be removed from the groundwater via the RO and decarbonator treatment train at CDA Desalter II. The decarbonators at Desalter II will be replaced and will be capable of achieving 95% removal of the TCE in the influent. By limiting the potential distribution of TCE to a wider population via the CDA well-field, this plume remedial alternative mitigates the effects of the TCE plume. Therefore, this plume remedial alternative meets the threshold requirement of providing overall protection of human health and the environment.

9.3.5.2 Compliance with ARARs

Plume Remedial Alternative 5A complies with the identified chemical, location, and action specific ARARs.

The two chemical specific ARARs considered are CCR §64444 and Chapter 4 of the Basin Plan. Under Plume Remedial Alternative 5A all water served to the public will have TCE concentrations below the MCL, and mass will be removed from the aquifer. The removal of TCE from the aquifer will reduce the concentration of TCE in the aquifer, thereby bringing it in compliance with the groundwater quality objectives set for in the basin plan.

The primary location specific ARARs considered are SWRCB Resolutions Nos. 88-63 and 68-16, Chapter 3 of the Basin plan, and CWC §13304. Plume Remedial Alternative 5A meets these ARARs by actively removing TCE mass from the aquifer in order to reduce the concentration of TCE in the groundwater.

The primary action specific ARARs considered are: 1) SWRCB No 92-49; and, 2) the CDA's drinking water permit conditions and its operational use of the bypass line. Over the long term, Plume Remedial Alternative 5A reduces the concentration of TCE in the groundwater to below 5 µg/L, which is the MCL for TCE, and therefore will meet the requirements of SWRCB No. 92-49. The use of a dedicated pipeline will prevent the potential for any TCE-related issues for CDA's operational use of the bypass line.

9.3.5.3 Long-Term Effectiveness and Permanence

Plume Remedial Alternative 5A is anticipated to be effective at reducing the magnitude of the residual TCE impacts posed by the Plume. Groundwater from well CDA I-11, Site 2, and Site A will be treated. Modeling suggests that these three wells are likely to have concentrations of TCE that exceed MCL of 5 µg/L (Table 9) and under this plume remedial alternative all the wells likely to have concentrations that exceed the MCL of 5 µg/L will be treated. Because the CDA wells are water supply wells, they are anticipated to be in service for at least 30 years. Treatment of the groundwater over the life of these wells will reduce the magnitude of the residual impacts to human health and the environment.

Use of these wells as water supply wells also ensures that there are adequate and reliable controls on the long-term effectiveness of this plume remedial alternative. The CDA will sample the Desalter II product water according to DDW guidelines. This will ensure that the treatment system is functioning properly and that the exposure pathway is eliminated.

9.3.5.4 Reduction of Toxicity, Mobility and Volume Through Treatment

Plume Remedial Alternative 5A provides a higher degree of reduction in the toxicity, mobility and volume of TCE through treatment than either Plume Remedial Alternative 1 (the no action alternative) or Plume Remedial Alternative 2 (the MNA alternative). This plume remedial alternative may also provide a higher degree of reduction of the toxicity, mobility and volume of TCE through treatment than Plume Remedial Alternative 3C, because four wells will be treated in this plume remedial alternative and only three wells will be treated in Plume Remedial Alternative 3C.

In Plume Remedial Alternative 5A, TCE will be removed from the groundwater produced at four wells, including the well to be located at Site 1, via the RO and decarbonator treatment train at Desalter II. Alternatives 3C and 3D only treat water produced from three wells. The decarbonator is anticipated to remove the bulk of the TCE from the groundwater, with a smaller percentage removed by the RO unit. The TCE removed by the decarbonator will be released to the atmosphere, where it will be destroyed over a multi-week period through interaction with hydroxyl radicals and photolysis (USDHHS 1997). The TCE removed from the groundwater by the RO membranes will be discharged to the Pacific Ocean, via the Santa Ana Regional Interceptor (SARI) line operated by the SAWPA, where the discharge is diluted.

Plume Remedial Alternative 5A will not be effective in minimizing the migration, therefore the mobility, of TCE into un-impacted or less impacted areas as the center of mass of the Plume migrates down-gradient.

9.3.5.5 Short-Term Effectiveness

The community will be protected during the implementation of Plume Remedial Action 3C because there are no anticipated community exposure pathways. Groundwater is the only media contaminated with TCE. Extracted groundwater will be treated via the decarbonator at Desalter II. Atmospheric releases of TCE from the decarbonator were evaluated (Yorke 2015). The anticipated releases were found to comply with the health risk requirements set forth in South Coast Air Quality Management District Rule 1401, New Source Review for Air Toxics (Yorke 2015). Workers constructing the CDA wells and pipelines will not be exposed to concentrations of TCE that exceed the NIOSH recommended exposure limit REL of 25 mg/L. Although the community and workers will be protected during implementation of this plume remedial alternative, Plume Remedial Alternative 5A is not effective in the short-term, because it will rely on the migration of TCE several thousand feet to the vicinity of Bellegrave Avenue before TCE is removed from the aquifer. As a result, the timeframe to achieve the RAOs will not be substantially reduced.

9.3.5.6 Implementability

There are no anticipated barriers to the implementability of Plume Remedial Alternative 5A. Decarbonators (e.g., air strippers), have been used reliably for decades to remediate TCE in groundwater. This technology is commercially available. Samples of the Desalter II effluent and CDA wells will allow the effectiveness of the remedy to be easily monitored. Remediating the groundwater at four wells via a dedicated line to the RO/decarbonator treatment train at Desalter II will not pose a barrier to undertaking additional plume remedial actions should they become necessary.

Construction of the pipelines, wells, and treatment system proposed under this plume remedial alternative will require coordination with and permits from several cities and agencies. The cities considered in this draft FS are: Ontario, Jurupa Valley, and Eastvale. These cities are anticipated to issue the necessary permits when the permit requests are received and processed. The agencies considered in this draft FS are: the CDA, the DDW, the SCAQMD, and the Santa Ana Watershed Project Authority (SAWPA). It is anticipated that these agencies will approve components of the project that fall under their jurisdiction.

9.3.5.7 Cost

The cost estimate for Plume Remedial Alternative 5A is summarized in Table 14 below:

Table 14
Cost of Plume Remedial Alternative 5A - Wells at Site A, Site 1, Site 2 and CDA I-11 Connected to the Dedicated RO/Decarbonator Pipeline

Category	Estimated Cost
Capital	$10,800,000
Operations and Maintenance	$60,000
Net Present Value Costs	$11,900,000
Cost Range (-30%/+50%)	$8,300,000 to $17,900,000

Plume Remedial Alternative 5A is not effective in the short-term, it is effective in the long-term, it reduces the toxicity and volume of TCE through treatment, and it is implementable. All of the groundwater from four wells will be treated, at a lower cost than that to treat groundwater in three wells in Alternative 3D. This plume remedial alternative, however, does not remove as much mass as quickly as Alternatives 3D or 5B. The long-term cost of this plume remedial alternative is lower than that of either Alternatives 3C or 3D.

9.3.6 Plume Remedial Alternative 5B - Wells at Site 1, Site 2, CDA I-11 and Northern, Edison Avenue Connected to the Dedicated RO/Decarbonator Pipeline

9.3.6.1 Overall Protection of Human Health and the Environment

Plume Remedial Alternative 5B will be effective in the short-term at minimizing the concentrations of TCE in the groundwater in un-impacted or less impacted areas because Plume Remedial Alternative 5B includes a northern well at Edison Avenue, which will extract groundwater with higher concentrations of TCE. Because the well at Edison Avenue is expected to extract greater TCE mass from the aquifer sooner, this plume remedial alternative is anticipated to decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.

Plume Remedial Alternative 5B is also protective of human health and the environment in the long-term because it removes TCE in the groundwater produced by up to four CDA wells. TCE will be removed from the groundwater via the RO and decarbonator treatment train at CDA Desalter II. The decarbonator at Desalter II will be replaced and will be capable of achieving 95% removal of the TCE in the influent. By limiting the potential distribution of TCE to a wider population via the CDA well-field, this plume remedial alternative mitigates the effects of the TCE plume. Therefore, this plume remedial alternative meets the threshold requirement of providing overall protection of human health and the environment.

9.3.6.2 Compliance with ARARs

Plume Remedial Alternative 5B complies with the identified chemical, location, and action specific ARARs.

The two chemical specific ARARs considered are CCR §64444 and Chapter 4 of the Basin Plan. Under Plume Remedial Alternative 5B all water served to the public will have TCE concentrations below the MCL, and mass will be removed from the aquifer. Similar to Alternative 3D, by moving one well to the north, more mass will be removed from the aquifer in the short term under this plume remedial alternative than under Plume Remedial Alternatives 3C and 5A. The removal of TCE from the aquifer at the northern well at Edison Avenue will reduce the concentration of TCE in the aquifer faster, thereby bringing it in compliance with the groundwater quality objectives set for in the basin plan.

The primary location specific ARARs considered are SWRCB Resolutions Nos. 88-63 and 68-16, Chapter 3 of the Basin plan, and CWC §13304. Plume Remedial Alternative 5B meets these ARARs by actively removing TCE mass from the aquifer in order to reduce the concentration of TCE in the groundwater.

The primary action specific ARARs considered are: 1) SWRCB No 92-49; and, 2) the CDA's drinking water permit conditions and its operational use of the bypass line. Over the long term, Plume Remedial Alternative 5B reduces the concentration of TCE in the groundwater to below 5 µg/L, which is the MCL for TCE, and therefore will meet the requirements of SWRCB No. 92-49. The use of a dedicated pipeline will prevent the potential for any TCE-related issues for CDA's operational use of the bypass line.

9.3.6.3 Long-Term Effectiveness and Permanence

Plume Remedial Alternative 5B is anticipated to be highly effective at reducing the magnitude of the residual TCE impacts posed by the Plume. Groundwater from well CDA I-11, Site 2, and a northern well at Edison Avenue will be treated. The northern well at Edison Avenue and Archibald Avenue will remove more mass from the aquifer in the short term than will be removed in Plume Remedial Alternatives 3C and 5A, by actively pumping groundwater with higher concentrations of TCE, closer to the center of mass of the Plume. This plume remedial alternative, is also more effective over the long-term at permanently satisfying the RAO of minimizing the concentration of TCE in the groundwater into un-impacted or less impacted areas (see Section 3.1).

Modeling suggests that all three wells in this plume remedial alternative are likely to have concentrations of TCE that exceed the MCL of 5 µg/L (Table 9). Under this plume remedial alternative a well would not be constructed at Site A. Therefore, all the wells that are likely to have concentrations that exceed 5 µg/L will be treated. Because the CDA wells are water supply wells, they are anticipated to be in service for at least 30 years. Treatment of the groundwater over the life of these wells will reduce the magnitude of the residual risk to human health and the environment.

Use of these wells as water supply wells also ensures that there are adequate and reliable controls on the long-term effectiveness of this plume remedial alternative. The CDA will sample the Desalter II product water according to DDW guidelines. This will ensure that the treatment system is functioning properly and that the exposure pathway is eliminated.

9.3.6.4 Reduction of Toxicity, Mobility and Volume Through Treatment

Plume Remedial Alternative 5B provides the highest degree of reduction in the toxicity, mobility and volume of TCE through treatment in the short-term. Under this plume remedial alternative, four wells will be treated, and the northern well at Edison Avenue, will be closer to higher concentrations of TCE in the groundwater. Thus, this plume remedial alternative treats more wells than Alternatives 3C and 3D, and in the short term more mass will be removed and treated from the aquifer in this plume remedial alternative than in Plume Remedial Alternatives 3C and 5A.

Under Plume Remedial Alternative 5B, four wells will be connected directly to the RO/decarbonator treatment train at Desalter II. As in Alternative 5A, the decarbonator is anticipated to remove the bulk of the TCE from the groundwater, with a smaller percentage removed by the RO unit. The TCE removed by the decarbonator will be released to the atmosphere, where it will be destroyed over a multi-week period through interaction with hydroxyl radicals and photolysis (USDHHS 1997). The TCE removed from the groundwater by the RO membranes will be discharged to the Pacific Ocean, via the SARI line operated by the SAWPA, where the discharge is diluted.

Plume Remedial Alternative 5B will be effective in minimizing the migration of TCE into un-impacted or less impacted areas, by removing TCE mass up-gradient of Merrill Ave, thereby decreasing TCE mobility.

9.3.6.5 Short-Term Effectiveness

The community will be protected during the implementation of Plume Remedial Action 3C because there are no anticipated community exposure pathways. Groundwater is the only media contaminated with TCE. Extracted groundwater will be treated via the decarbonator at Desalter II. Atmospheric releases of TCE from the decarbonator were evaluated (Yorke 2015). The anticipated releases were found to comply with the health risk requirements set forth in South Coast Air Quality Management District Rule 1401, New Source Review for Air Toxics (Yorke 2015). Workers constructing the CDA wells and pipelines will not be exposed to concentrations of TCE that exceed the NIOSH recommended exposure limit REL of 25 mg/L. Plume Remedial Alternative 5B will minimize the concentration of TCE in the groundwater into un-impacted or less impacted areas and it will decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment. Therefore, Plume Remedial Alternative 5B will be highly effective in the short-term.

9.3.6.6 Implementability

There are no anticipated barriers to the implementability of Plume Remedial Alternative 5B. Decarbonators (e.g., air strippers) have been used reliably for decades to remediate TCE in groundwater. This technology is commercially available. Samples of the Desalter II effluent and CDA wells will allow the effectiveness of the remedy to be easily monitored. Remediating the groundwater at four wells via a dedicated line to the RO/decarbonator treatment train at Desalter II will not pose a barrier to undertaking additional plume remedial actions should they become necessary.

Construction of the pipelines, wells, and treatment system proposed under this plume remedial alternative will require coordination with and permits from several cities and agencies. The cities considered in this draft FS are: Ontario, Jurupa Valley, and Eastvale. These cities are anticipated to issue the necessary permits when the permit requests are received and processed. The agencies considered in this draft FS are: the CDA, the DDW, SCAQMD, and SAWPA. It is anticipated that these agencies will approve components of the project that fall under their jurisdiction.

9.3.6.7 Cost

The cost estimate for Plume Remedial Alternative 5B is summarized in Table 15 below:

Table 15
Cost of Plume Remedial Alternative 5B – Wells at Site 1, Site 2, CDA I-11 and Edison Avenue Connected to the Dedicated RO/Decarbonator Pipeline

Category	Estimated Cost
Capital	$11,300,000
Annual Operations and Maintenance	$60,000
Net Present Value Costs	$12,500,000
Cost Range (-30%/+50%)	$8,800,000 to $18,800,000

Plume Remedial Alternative 5B is effective in the short-term and highly effective in the long-term. Plume Remedial Alternative 5B reduces the toxicity, mobility and volume of TCE through treatment, and it is implementable. All of the groundwater from four wells will be treated, although the cost for treatment is higher than that of Plume Remedial Alternative 5A. The cost of this plume remedial alternative is lower than the cost of Plume Remedial Alternatives 3C and 3D. Although it costs more than Plume Remedial Alternative 5A, Plume Remedial Alternative 5B removes more TCE mass from the aquifer in the short-term, thereby decreasing the timeframe to achieve RAOs.

9.4 Summary of the Retained Plume Remedial Alternatives

The detailed evaluation of the retained plume remedial alternatives is summarized in Table 16 below.

INTENTIONALLY LEFT BLANK

Table 16
Detailed Evaluation of Retained Plume Remedial Alternatives

Plume Remedial Alternative	*Overall Protection of Human Health and the Environment*	*Compliance with ARARs*	*Long-Term Effectiveness*	*Reduction of Toxicity, Mobility and Volume Through Treatment*	*Short-Term Effectiveness*	*Implementability*	*Cost*	*State Acceptance*	*Community Acceptance*
1 – No Action Alternative	Not Protective	Does Not Comply	-	-	Not Effective	Implementable	None	-	-
2 – Limited Action Alternative Monitored Natural Attenuation	Not Protective	Does Not Comply	-	-	Not Effective	Implementable	Capital: $1,100,000 O&M: $60,000 30-Year Cost: $2,300,000	Not Yet Evaluated	Not Yet Evaluated
3C – TCE Wellhead Treatment via GAC at 3 CDA Wells; Northern Well at Merrill	Protective of Human Health and the Environment	Complies with ARARs	All the CDA wells with potential future TCE concentrations above the MCL will be treated Does not minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas in the long-term	Reduction in toxicity and volume through treatment of three wells Water from 1 or 2 wells may pass through the raw water bypass and ion exchange without treatment for TCE Higher reduction in toxicity, mobility and volume relative to Alternatives 1 and 2	Does not minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas. Does not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.	Implementable	Capital: $4,700,000 O&M: $440,000 30-Year Cost: $13,400,000	Not Yet Evaluated	Not Yet Evaluated
3D – TCE Wellhead Treatment via GAC at 3 CDA Wells; Northern Well at Edison	Protective of Human Health and the Environment Minimizes the migration of TCE to un-impacted or less impacted areas	Complies with ARARs	All the CDA wells with potential future TCE concentrations above the MCL will be treated Minimizes the concentration of TCE in the groundwater in un-impacted or less impacted areas in the long-term	Reduction in toxicity and volume through treatment of three wells Water from 1 or 2 wells may pass through the raw water bypass and ion exchange without treatment for TCE Higher reduction in toxicity, mobility and volume relative to Alternatives 1 and 2 Higher short-term reduction in toxicity, mobility and volume relative to Alternative 3C	Minimizes the concentration of TCE in the groundwater in un-impacted and less impacted areas in the short-term Decreases the timeframe to remediate TCE-impacts to groundwater in the area of attainment	Implementable	Capital: $6,000,000 O&M: $440,000 30-Year Cost: $14,600,000	Not Yet Evaluated	Not Yet Evaluated
5A – Four wells with dedicated line to RO/Decarbonator northern well is at Merrill	Protective of Human Health and the Environment	Complies with ARARs	All CDA wells with potential future TCE concentrations above the MCL will be treated Does not minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas in the long-term	Reduction in toxicity and volume through treatment of four wells Higher reduction in toxicity, mobility and volume relative to Alternatives 1 and 2	Does not minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas. Does not decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment.	Implementable	Capital: $10,800,000 O&M: $60,000 30-Year Cost: $11,900,000	Not Yet Evaluated	Not Yet Evaluated
5B – Four wells with dedicated line to RO/Decarbonator northern well is at Edison	Protective of Human Health and the Environment Minimizes the migration of TCE to un-impacted or less impacted areas	Complies with ARARs	All the CDA wells with potential future TCE concentrations above the MCL will be treated Minimizes the concentration of TCE in the groundwater in un-impacted or less impacted areas in the long-term	Reduction in toxicity and volume through treatment of four wells Higher reduction in toxicity, mobility and volume relative to Alternatives 1 and 2 Higher short-term reduction in toxicity, mobility and volume relative to	Minimizes the concentration of TCE in the groundwater in un-impacted or less impacted areas in the short-term.	Implementable	Capital: $11,300,000 O&M: $60,000 30-Year Cost: $12,500,000	Not Yet Evaluated	Not Yet Evaluated

Table 16
Detailed Evaluation of Retained Plume Remedial Alternatives

Plume Remedial Alternative	*Overall Protection of Human Health and the Environment*	*Compliance with ARARs*	*Long-Term Effectiveness*	*Reduction of Toxicity, Mobility and Volume Through Treatment*	*Short-Term Effectiveness*	*Implementability*	*Cost*	*State Acceptance*	*Community Acceptance*
				Alternative 3C and 5A	Decreases the timeframe to remediate TCE-impacts to groundwater in the area of attainment.				

10 COMPARATIVE EVALUATION OF PLUME REMEDIAL ALTERNATIVES

In this section the retained plume remedial alternatives are compared to each other under each of the criteria listed in the EPA Guidance.

10.1 Overall Protection of Human Health and the Environment

Plume Remedial Alternatives 1 (no action) and 2 (monitored natural attenuation) do not adequately protect human health and the environment. Because these alternatives do not meet this threshold criterion, no further assessment or comparison with these alternatives is provided.

Plume Remedial Alternatives 3C (three well GAC – northern well at Site A), 3D (three well GAC – northern well at Edison Avenue), 5A (dedicated line to the decarbonator – northern well at Site A), and 5B (dedicated line to the decarbonator – northern well at Edison Avenue) protect human health and the environment through treatment of TCE affected groundwater. Although the plume remedial alternatives use different methods for treatment, they all effectively eliminate the primary exposure pathway in the long-term.

The two primary differences between the plume remedial alternatives is the location of the wells in which TCE affected groundwater is being treated, and the technology used to treat the TCE. In Plume Remedial Alternatives 3C and 5A, the groundwater reaches the proposed CDA wells along Bellegrave Avenue because the northern-most CDA well is located at Site A, whereas in Plume Remedial Alternatives 3D and 5B, there is a northern well at Edison Avenue. Groundwater treated at the northern well at Edison Avenue is anticipated to have higher concentrations of TCE. This well will minimize the concentration of TCE in the groundwater in un-impacted and less impacted areas. This well will also help minimize the migration of TCE to less impacted, or un-impacted areas. In addition, the northern well at Edison Avenue is anticipated to extract greater TCE mass more quickly from the aquifer, which will decrease the timeframe to remediate TCE-impacts to groundwater in the area of attainment. Therefore, Plume Remedial Alternatives 3D and 5B better satisfy the RAOs than do Plume Remedial Alternatives 3C and 5A.

10.2 Compliance with ARARs

Plume Remedial Alternatives 3C, 3D, 5A, and 5B comply with the identified ARARs. They ensure that all water served to the public will have concentrations of TCE below the MCL, and remove TCE from the aquifer in order to ensure that in the long term the concentration of TCE in the aquifer itself will be below the MCL. Alternatives 3C and 3D remove TCE prior to the connection to the Desalter II raw water pipeline, and by extension, the bypass line. Plume Remedial Alternatives 5A and 5B use a dedicated pipeline that does not involve the bypass line.

10.3 Long Term Effectiveness

Plume Remedial Alternatives 3C, 3D, 5A, and 5B are all anticipated to be effective and permanent in the long term. They all reduce the magnitude of the residual TCE impacts by removing TCE from the groundwater and provide adequate and reliable controls on the effectiveness of the alternative through sampling and reporting. Plume Remedial Alternatives 3D and 5B, with a northern well at Edison Avenue, are highly effective in the long-term at minimizing the concentration of TCE in the groundwater in less impacted or un-impacted areas, whereas Plume Remedial Alternatives 3C and 5A, with a northern well at Site A, are not.

10.4 Reduction of Toxicity, Mobility and Volume through Treatment

Plume Remedial Alternatives 3C, 3D, 5A, and 5B provide a reduction of toxicity, mobility and volume through treatment of the affected groundwater. Comparison points for the alternatives follow.

1. Mass Removal:
   - The well configuration of Plume Remedial Alternatives 3D and 5B, with a northern well at Edison, will remove greater mass from the aquifer in a shorter period of time than Plume Remedial Alternatives 3C and 5A, with a northern well at Site A. This removal of TCE mass near the center of mass of the plume will decrease the volume of TCE remaining in the Plume. This may prevent and will lessen TCE impacts to private and CDA wells to the south in currently less impacted or un-impacted areas.
2. Number of Wells at Which TCE is Treated:
   - Plume Remedial Alternatives 3C and 3D treat the groundwater produced at 3 CDA wells. While the modeling predicts that these wells will be the only wells with concentrations that exceed 5 μg/L in the groundwater, it is possible that shifts in the groundwater gradient could result in detectable TCE concentrations at Site 1. TCE in the groundwater at Site 1 would not be treated in Plume Remedial Alternatives 3C and 3D.
   - Plume Remedial Alternatives 5A and 5B treat the groundwater produced at the same three wells, respectively, as Plume Remedial Alternatives 3C and 3D, plus the groundwater produced from Site 1. Therefore, if groundwater gradients shift and there are measureable concentrations of TCE at Site 1, this TCE will be treated under Plume Remedial Alternatives 5A and 5B.
3. Destruction of TCE:

- TCE is destroyed in a controlled process through Plume Remedial Alternatives 3C and 3D. TCE is removed from the groundwater via GAC, and the spent liquid phase carbon is thermally reactivated in a furnace with an anoxic environment using steam as a selective oxidant. TCE is volatilized from the carbon and destroyed in the furnace afterburner. Remaining acid gases are removed by a chemical scrubber.
- Under Plume Remedial Alternatives 5A and 5B, TCE will be removed from the groundwater via the RO/decarbonator treatment train at Desalter II. The bulk of the TCE will be released to the atmosphere, where it will be destroyed over a multi-week period through interaction with hydroxyl radicals and photolysis. This process will release some of the TCE removed from the groundwater to the Pacific Ocean, via the SARI line.

10.5 Short Term Effectiveness

Plume Remedial Alternatives 3C and 5A will require a longer time frame until the RAOs are achieved because the Plume will migrate farther down-gradient before TCE-impacted water is effectively extracted and treated. In the short-term, Plume Remedial Alternatives 3D and 5B remove greater TCE mass from the aquifer due to the configuration of the northern well at Edison Avenue, and thus decreases the timeframe to achieve RAOs.

10.6 Implementability

The plume remedial alternatives are anticipated to be comparably implementable. Construction of the pipelines, wells, and treatment system proposed under all the alternatives will require coordination with and permits from several cities and agencies.

10.7 Estimated Cost

The estimated cost of the plume remedial alternatives differs. The estimated cost range is summarized below:

- Plume Remedial Alternative 3C: $9.4 million to $20.1 million
- Plume Remedial Alternative 3D: $10.2 million to $21.9 million
- Plume Remedial Alternative 5A: $8.3 million to $17.9 million
- Plume Remedial Alternative 5B: $8.8 million to $18.8 million

The estimated cost of Plume Remedial Alternatives 5A and 5B are lower than those of Plume Remedial Alternatives 3C and 3D. At the same time, Plume Remedial Alternatives 5A and 5B treat the water at four wells, while Plume Remedial Alternatives 3C and 3D only treat the water at three wells. Therefore, Plume Remedial Alternatives 5A and 5B are more cost effective than either Plume Remedial Alternatives 3C or 3D.

The average estimated cost of Plume Remedial Alternative 5A is approximately $600,000 less than that of Plume Remedial Alternative 5B. Both alternatives treat four wells. The difference in the cost of the two alternatives is the additional pipeline required to connect the existing CDA infrastructure to a northern well at Edison Avenue in Plume Remedial Alternative 5B. Although there is a cost associated with moving the northernmost well to Edison Avenue, there is also a benefit to moving this well. Under Plume Remedial Alternative 5B more TCE mass will be removed from the aquifer in the short-term than it will under Plume Remedial Alternative 5A, thereby decreasing the timeframe to achieve the RAOs. Under Plume Remedial Alternative 5B, un-impacted and less-impacted areas down-gradient of the center of mass of the Plume are expected to have lower concentrations of TCE than under Plume Remedial Alternative 5A. Thus Plume Remedial Alternative 5B better satisfies the RAOs than Plume Remedial Alternative 5A (Section 3.1). The projected benefits of Plume Remedial Alternative 5B relative to the benefits of Plume Remedial Alternative 5A, as discussed, are believed to justify the additional cost of implementing this plume remedial alternative.

10.8 State Acceptance

This criterion will be evaluated following State agency review and comment on the draft FS.

10.9 Community Acceptance

This criterion will be evaluated following the public participation process, public review, and public comment on the draft FS.

11 PREFERRED PLUME REMEDIAL ALTERNATIVE

Based on the detailed comparative evaluation of the plume remedial alternatives presented in Section 10 Plume Remedial Alternative 5B is the preferred plume remedial alternative. This plume remedial alternative will minimize the migration of the TCE plume in groundwater beyond the southern boundary of the area of attainment; will reduce the timeframe to achieve RAOs by actively removing mass closer to the center of mass of the Plume; and will also by doing so, reduce the magnitude, severity and duration of TCE-related impacts to private wells, CDA wells, and CDA operations.

State and public participation, review, and input have not yet been incorporated into the analysis for this draft FS report. With the addition of this input, the final selected remedy may change. State and public input will be incorporated into the Final Feasibility Study Report.

INTENTIONALLY LEFT BLANK

12 REFERENCES

Bender, L.D. 1992. "A Brief History of Ontario's Sewer Farm, Treatment Plant and Golf Course." Prepared for the City of Ontario, California. July 1992.

Carollo Engineers. 2010. "Chino Desalter Phase 3 Comprehensive Predesign Report." Revised Final. Prepared for Jurupa Community Services District, City of Ontario, and Western Municipal Water District. December 2010.

CDM (Camp Dresser & McKee Inc.). 1989. "Investigation of Potential Sources of Groundwater Contamination South of Ontario International Airport." Prepared for City of Los Angeles Department of Airports. Irvine, California: Camp Dresser & McKee Inc. September 1989.

Doherty, R.E. 2000. "A History of the Production and Use of Carbon Tetrachloride, Tetrachloroethylene, Tricholoethylene and 1,1,1-Trichloroethane in the United States: Part 2 – Trichloroethylene and 1,1,1-Trichloroethane." *Journal of Environmental Forensics*1: 83–93. doi:10.1006/enfo.2000.0011.

Dudek. 2015. "Comments on the 'Remedial Investigation Report: Trichloroethene Plume, Central Chino Basin Ontario, California' and 'Supplemental Data Report: Trichloroethene Plume, Central Chino Basin, Ontario, California.'" Letter from P. Quinlan (Dudek) to G. Tanaka. February 10, 2015.

DWR (California Department of Water Resources). 2003. "California's Groundwater: Bulletin 118, Update 2003." October 2003. Accessed April 2015. http://www.water.ca.gov/pubs/groundwater/bulletin_118/california's_groundwater__bulletin_118_-_update_2003_/bulletin118_entire.pdf.

Eckis, R. 1934. *Geology and Groundwater Storage Capacity of Valley Fill*. South Coastal Basin Investigation: California Department of Public Works, Division of Water Resources Bulletin No. 45. Accessed April 2015. http://www.water.ca.gov/waterdatalibrary/docs/historic/Bulletins/Bulletin_45/Bulletin_45__1934.pdf.

EEC, 2014. *Private Property Sampling Report, Ontario, California*. Santa Ana, California: EEC. May 27, 2014.

EKI (Erler & Kalinowski). 2011."Remedial Investigation Report, Trichloroethene Plume, Central Chino Basin, Ontario, California." Prepared for Aerojet, Boeing, General Electric

Company, and Lockheed Martin Corporation. October 13, 2011. Burlingame, California: Erler & Kalinowski.

EKI. 2014. “Supplemental Data Report, Trichloroethene Plume, Central Chino Basin, Ontario, California.” Prepared for Aerojet Rocketdyne, Boeing, General Electric, and Lockheed Martin. November 19, 2014. Burlingame, California: Erler & Kalinowski.

EPA (U.S. Environmental Protection Agency). 1988. “Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA.” Interim Final. EPA/540/G-89/004. OSWER Directive 9355.3-01. October 1988.

IEUA (Inland Empire Utilities Agency). 2011. “Chino Basin Desalter Authority 2010 Urban Water Management Plan.” Prepared for Chino Basin Desalter Authority. June 2011.

Meredith/Boli (Meredith/Boli & Associates Inc.). 1992. “Information Search (Solvent Use and Potential Releases) Ontario International Airport. San Bernardino County, California.” Submitted to Regional Water Quality Control Board. Los Angeles California: Meredith/Boli & Associates Inc.

Montgomery Engineers. 1975. “Facilities Plan for Treatment Facilities at Regional Plant No. 1.” Prepared for Chino Basin Municipal Water District. Prepared by James M. Montgomery, Consulting Engineers, Inc. March 1975.

MWD (Metropolitan Water District of Southern California). 1987. “Results of Chino Basin Well Water Sampling and Testing.” Letter to J. Bennett, Water Quality Control Board, Santa Ana Region. From R. Atwater, Director of Resources, Metropolitan Water District of Southern California. May 21, 1987.

NRC (National Research Council). 2007. “Models in Environmental Regulatory Decision Making.” Prepared by Committee on Models in the Regulatory Decision Process Board on Environmental Studies and Toxicology, Division on Earth and Life Studies; National Research Council of the National Academies. Available at http://www.nap.edu/catalog/11972.html.

Peace Agreement, Chino Basin. SB 240104 v 1:08350.0001. June 29, 2000. http://www.cbwm.org/docs/legaldocs/Peace_Agreement.pdf.

Peace II Agreement: Party Support for Watermaster’s OBMP Implementation Plan – Settlement and Release of Claims Regarding Future Desalters. SB 447966 v 1:008350.0001. October 25, 2007. http://www.cbwm.org/docs/legaldocs/Peace_Agreement.pdf.

RWQCB (Regional Water Quality Control Board). 1995. "Water Quality Control Plan, Santa Ana River Basin (8)." Adopted by the Santa Ana Regional Water Quality Control Board, March 11, 1994, Resolution No. 94-1. Adopted by State Water Resources Control Board, July 21, 1994, Resolution 94-60. Approved by Office of Administrative Law, January 24, 1995. California RWQCB, Santa Ana Region.

RWQCB. 2004. "Resolution No R8-2004-0001: Resolution Amending the Water Quality Control Plan for the Santa Ana River Basin to Incorporate and Updated Total Dissolved Solids (TDS) and Nitrogen Management Plan for the Santa Ana Region Including Revised Groundwater Subbasin Boundaries, Revised TDS and Nitrogen Wasteload Allocations, and Revised Reach Designations, TDS and Nitrogen Objectives and Beneficial Uses for Specific Surface Waters." California RWQCB, Santa Ana Region.

RWQCB. 2005a. "Cleanup and Abatement Order No. R8-2005-xxxx for Aerojet-General Corporation (Former Aetron Facility), Ontario, San Bernardino County."

RWQCB. 2005b. "Cleanup and Abatement Order No. R8-2005-xxxx for The Boeing Corporation (Former Douglas Aircraft Corporation Facility), Ontario, San Bernardino County."

RWQCB. 2005c. "Cleanup and Abatement Order No. R8-2005-xxxx for Department of Defense (Former Ontario Army Airfield and California Air National Guard Facilities), Ontario, San Bernardino County."

RWQCB. 2005d. "Cleanup and Abatement Order No. R8-2005-xxxx for General Electric Company (G.E. Engine Services Test Cell Facility),_ Ontario, San Bernardino County."

RWQCB. 2005e. "Cleanup and Abatement Order No. R8-2005-xxxx for Lockheed Martin Corporation (Former Lockheed Aircraft Services Company Facility), Ontario, San Bernardino County."

RWQCB. 2005f. "Cleanup and Abatement Order No. R8-2005-xxxx for Northrop Grumman Corporation (Former Northrop Aircraft Company Facility), Ontario, San Bernardino County."

RWQCB. 2012. "Cleanup and Abatement Order No. R8-2012-00xx. City of Ontario, City of Upland and Inland Empire Utilities Agency Former Ontario-Upland Sewage Treatment Plant (Regional Recycling Plant No. 1), City of Ontario."

RWQCB. 2014. "Chino Basin Hydraulic Control." Letter from K. Burchtold (Executive Officer, RWQCB) to P. Kavounas (General Manager Chino Basin Watermaster) and J. Grindstaff (CEO IEUA). January 23, 2014.

USDHHS (U.S. Department of Health and Human Services). 2014. "Toxicological Profile for Trichloroethylene." USDHHS, Public Health Service Agency for Toxic Substances and Disease Registry. October 2014.

Wildermuth Environmental. 2003. *Optimum Basin Management Plan – Dry Year Yield Program Model Report Volume III*. Prepared for Chino Basin Watermaster and IEUA.

Wildermuth Environmental. 2007. *Chino Basin Optimum Basin Management Program, State of the Basin Report – 2006*. Prepared for Chino Basin Watermaster.

Wildermuth Environmental. 2009a. *Chino Basin Optimum Basin Management Program, 2008 State of the Basin Report*. Final Report. Prepared for Chino Basin Watermaster. November 2009.

Wildermuth Environmental. 2009b. *2009 Production Optimization and Evaluation of the Peace II Project Description, Final Report*. Prepared for Chino Basin Watermaster. November 25, 2009.

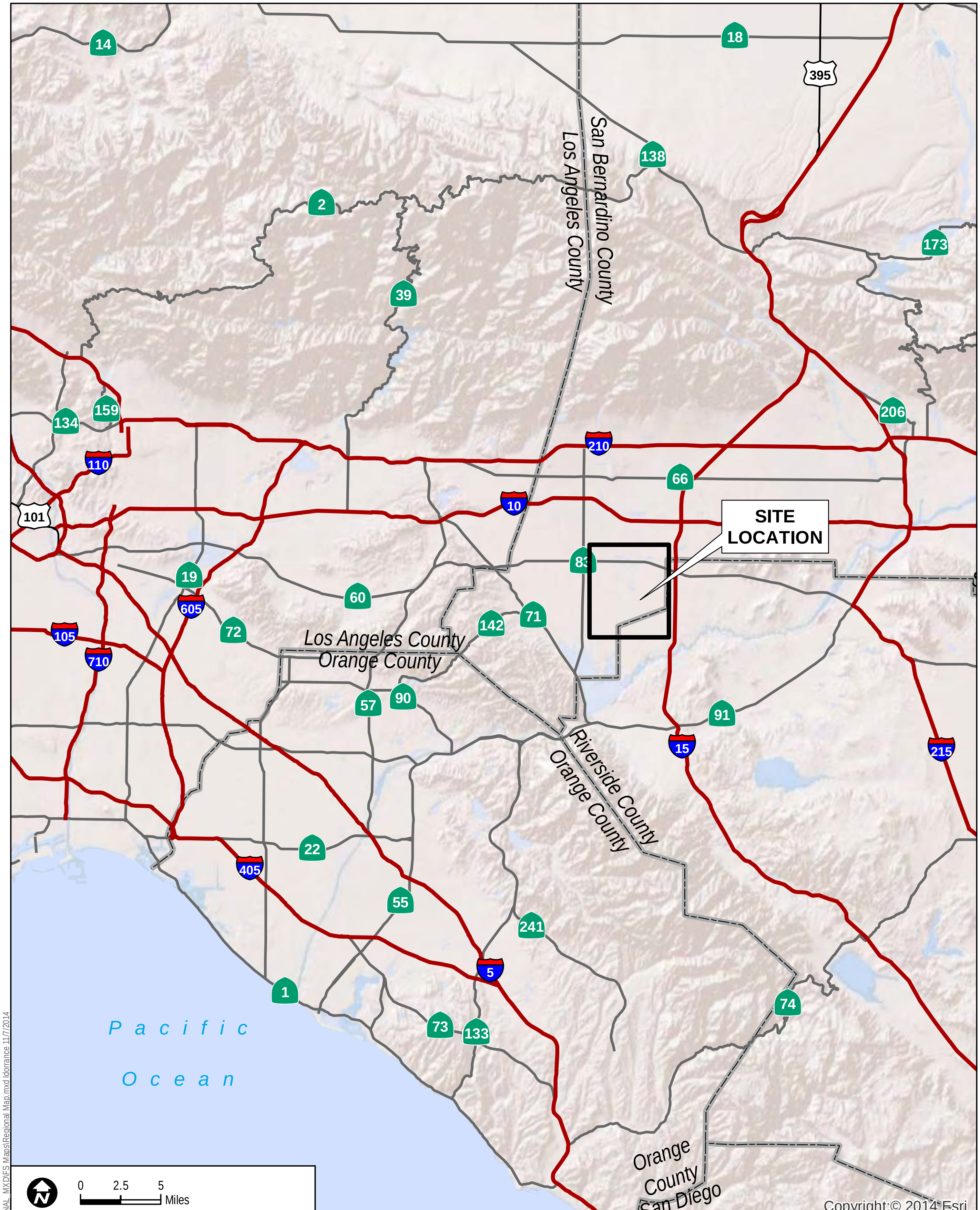
Wildermuth Environmental. 2010. "OIA Plume Region Data Request Database."

Wildermuth Environmental. 2011. "Appendix A HCMP Database." In *Optimum Basin Management Program: Chino Basin Maximum Benefit Monitoring Program, 2010 Annual Report*. Prepared for Chino Basin Watermaster and IEUA. April 2011.

Wildermuth Environmental. 2013. "2012 State of the Basin Atlas." Prepared for Chino Basin Watermaster. June 2013.

Yorke Engineering. 2015. "Technical Report." Prepared for Inland Empire Utilities Agency. February 2015.

FIGURES



DUDEK

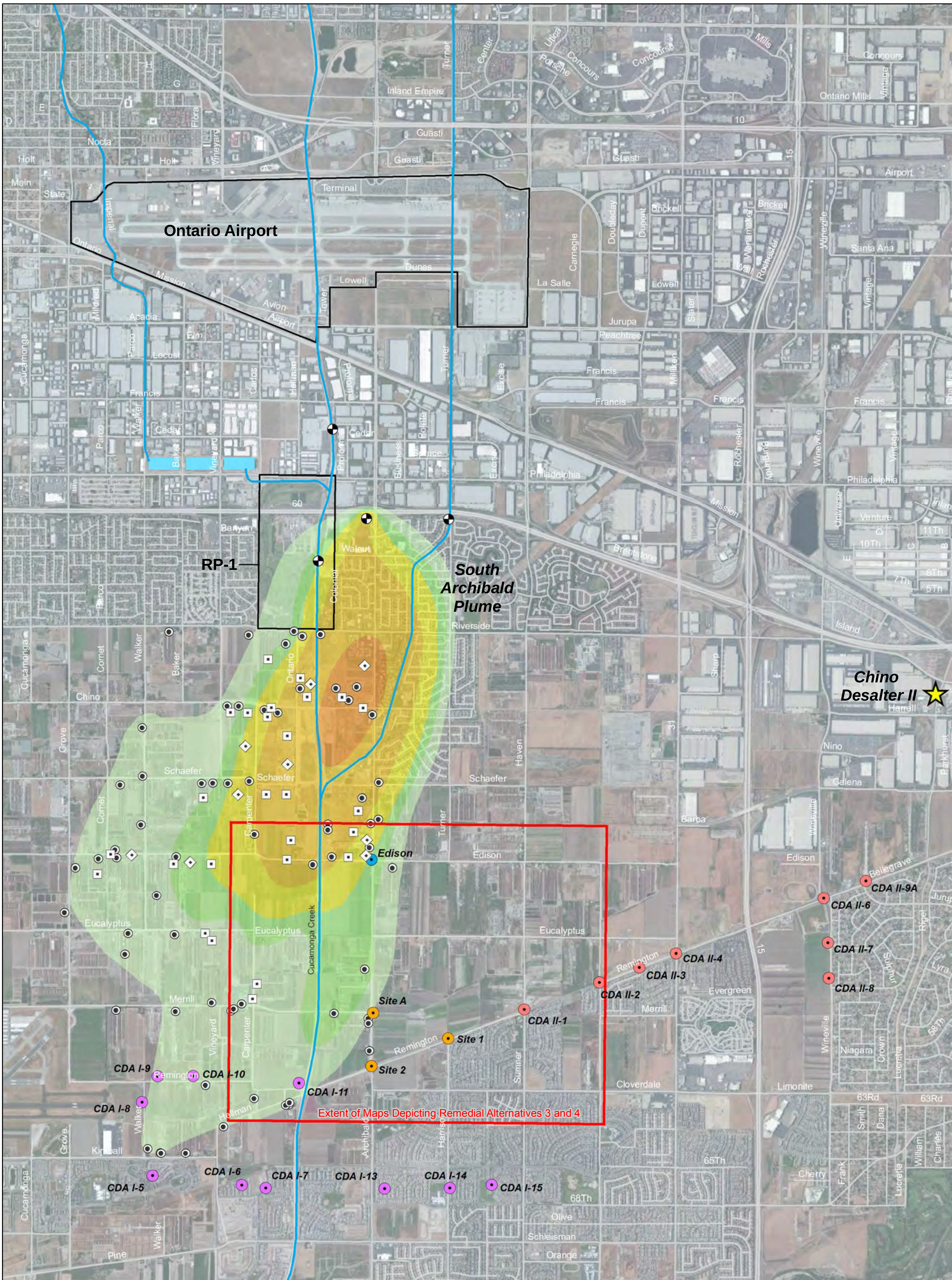
7318

NOVEMBER 2015

FIGURE 1

Regional Location

Draft Feasibility Study Report: South Archibald Plume



Ely Basins
Drainage Channel
Well
Tank System Location
Bottled Water Service
Nested Monitor Well

CDA Wells
Edison Well
Existing Desalter I Well
Existing Desalter II Well
Proposed Desalter II Well

Groundwater TCE Concentration (ug/L)
> 0 and ≤ 5
>5 and ≤ 10
>10 and ≤ 20
>20 and ≤ 50
>50 and ≤ 100

Note:
All Locations Approximate

Basemap Source: Bing 2012, ESRI
Plume Source: Wildermuth, 2013. 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster. Contours are based on maximum TCE concentrations measured from July 2007 - August 2012.

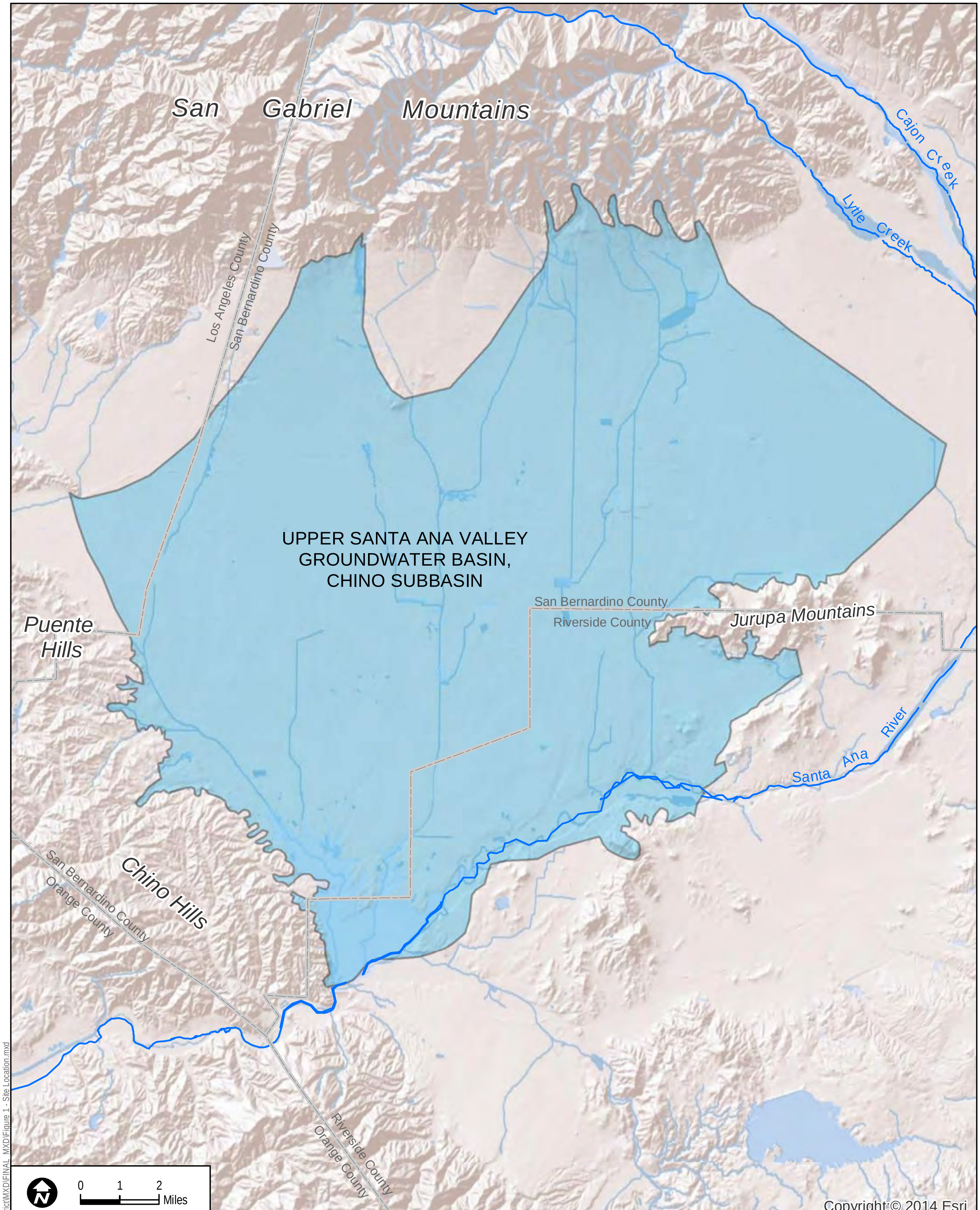
Path: Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Site Location Map.mxd

DUDEK
7318
NOVEMBER 2015

0 2,000 4,000
Feet

FIGURE 2
South Archibald Plume Map

Draft Feasibility Study Report: South Archibald Plume



Z:\Hydro\Projects\Helix Water District\MXD\FINAL_MXD\Figure 1 - Site Location.mxd

DUDEK

7318

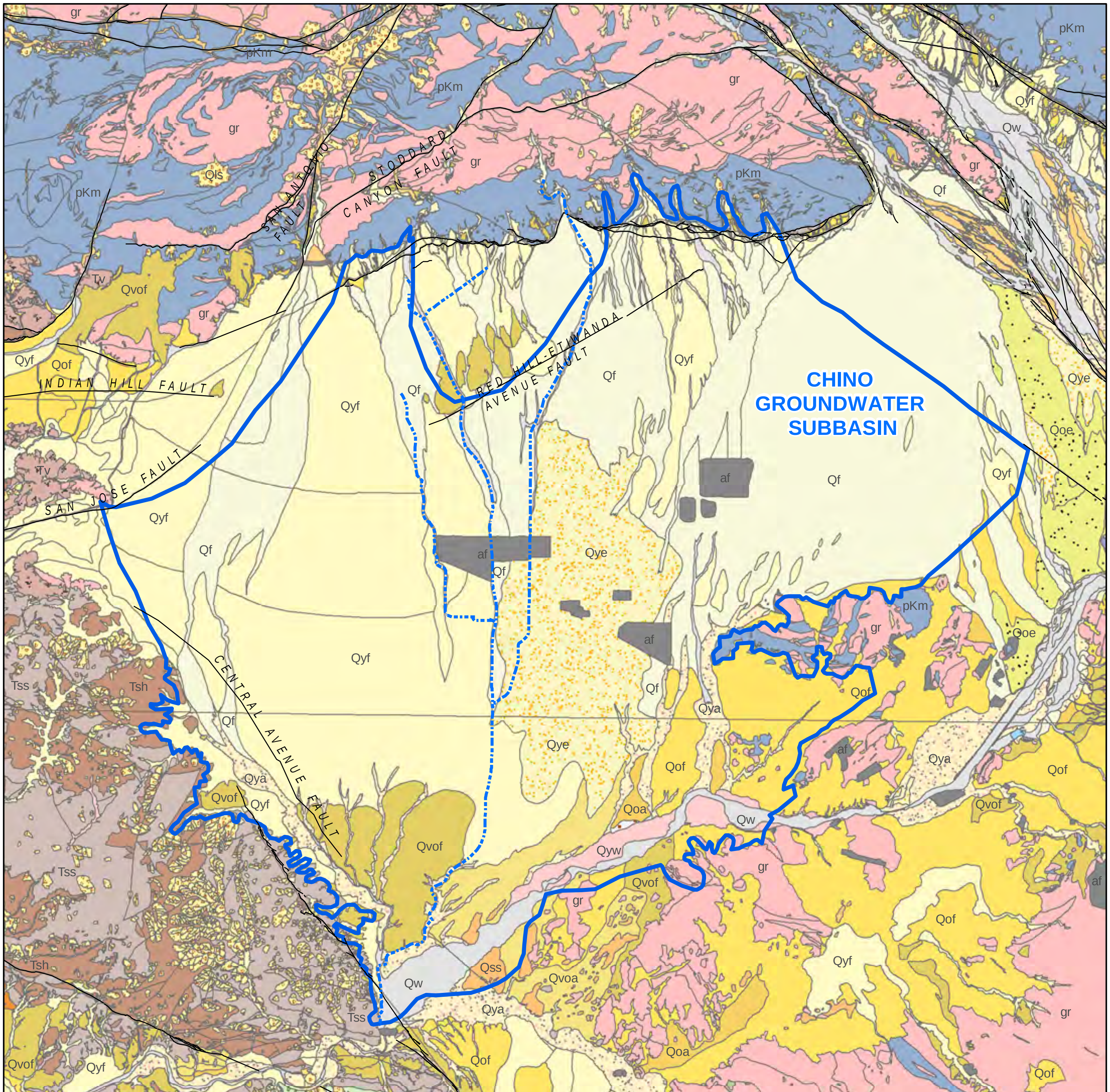
NOVEMBER 2015

Base Map Source: ESRI, Groundwater Basin Source: CA Department of Water Resources

FIGURE 3

Chino Basin Map

Draft Feasibility Study Report: South Archibald Plume



Select Geologic Units

- water
- af, Artificial

Late Holocene (Surficial Deposits)

- Qw, Alluvial Wash Deposits
- Qf, Alluvial Fan Deposits
- Qa, Alluvial Valley Deposits

Holocene to Late Pleistocene (Surficial Deposits)

- Qyw, Young Alluvial Wash Deposits
- Qyf, Young Alluvial Fan Deposits
- Qya, Young Alluvial Valley Deposits
- Qye, Young Eolian and Dune Deposits

Late to Middle Pleistocene (Surficial Deposits)

- Qof, Old Alluvial Fan Deposits
- Qoe, Old Eolian and Dune Deposits

Middle to Early Pleistocene

- Qvof, Very Old Alluvial Fan Deposits

Tertiary Units (Bedrock)

- Tss, Coarse-Grained Tertiary Age Formations
- Tsh, Fine-Grained Tertiary Age Formations

Mesozoic and Older Units (Bedrock)

- pKm, Cretaceous and Pre-Cretaceous Metamorphic Formations of Sedimentary and Volcanic Origin
- gr, Granitic and Other Intrusive Crystalline Rocks

- QuaternaryFaults
- Select Creeks/Drainage Channels
- Chino Groundwater Subbasin

Geologic Map Source: Morton, D.M. and Miller, F.K., 2006, Map of the San Bernardino and Santa Ana 30' x 60' Quadrangles, California

Groundwater Basin Source: CA Department of Water Resources

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Geology Map.mxd ldorrance 11/7/2014

DUDEK

7318

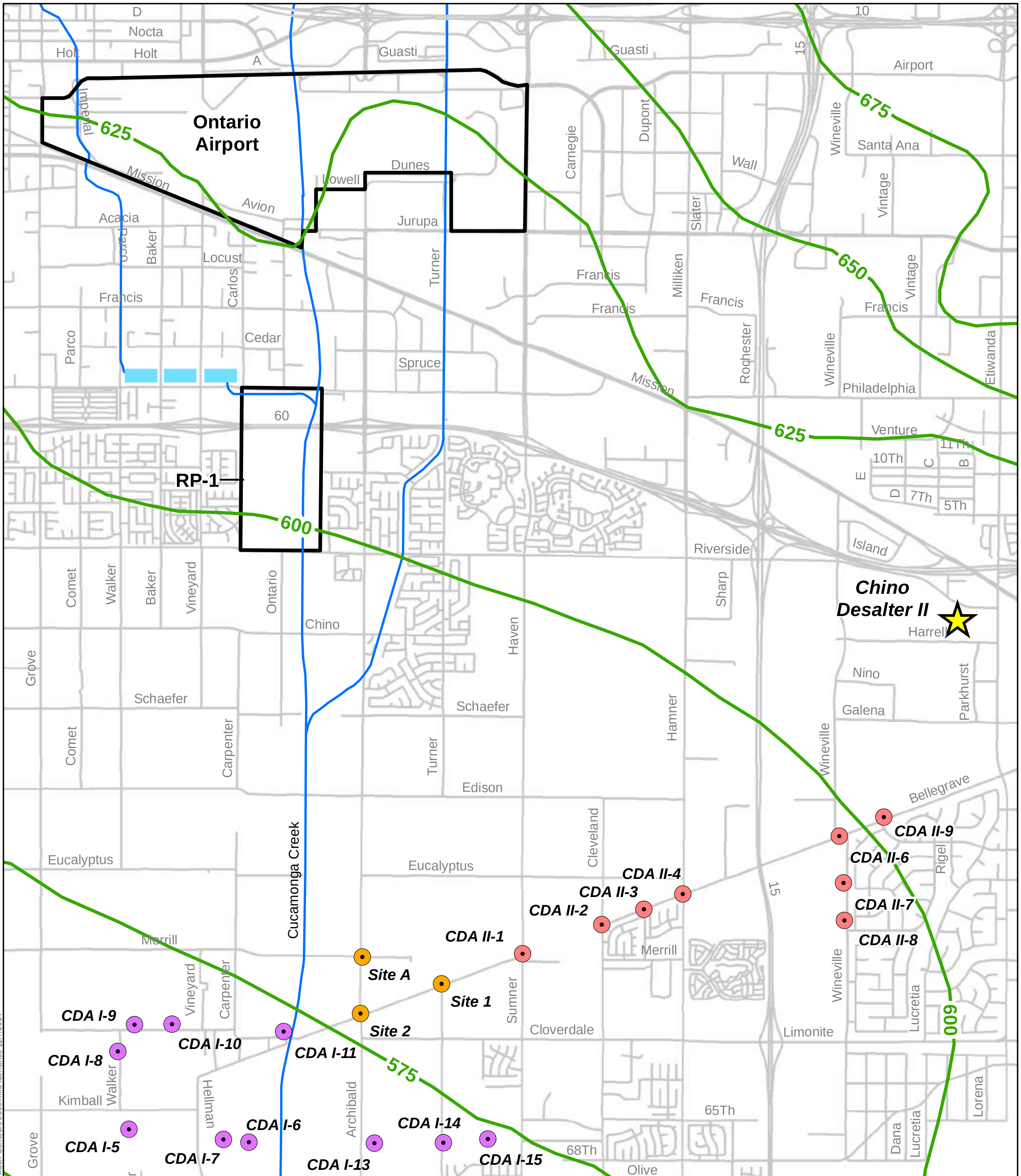
NOVEMBER 2015

0 1 2 Miles

FIGURE 4

Surface Geology of the Chino Basin

Draft Feasibility Study Report: South Archibald Plume



Ely Basins
Drainage Channel
Existing Desalter I Well
Existing Desalter II Well
Proposed Desalter II Well
600 Groundwater Elevation Contour, Sprng 2000

Note:

All Locations Approximate

Basemap Source - ESRI

Groundwater Elevation Contours Source - Wildermuth, 2013, 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster Exhibit 16

0 2,000 4,000 Feet

DUDEK

7318

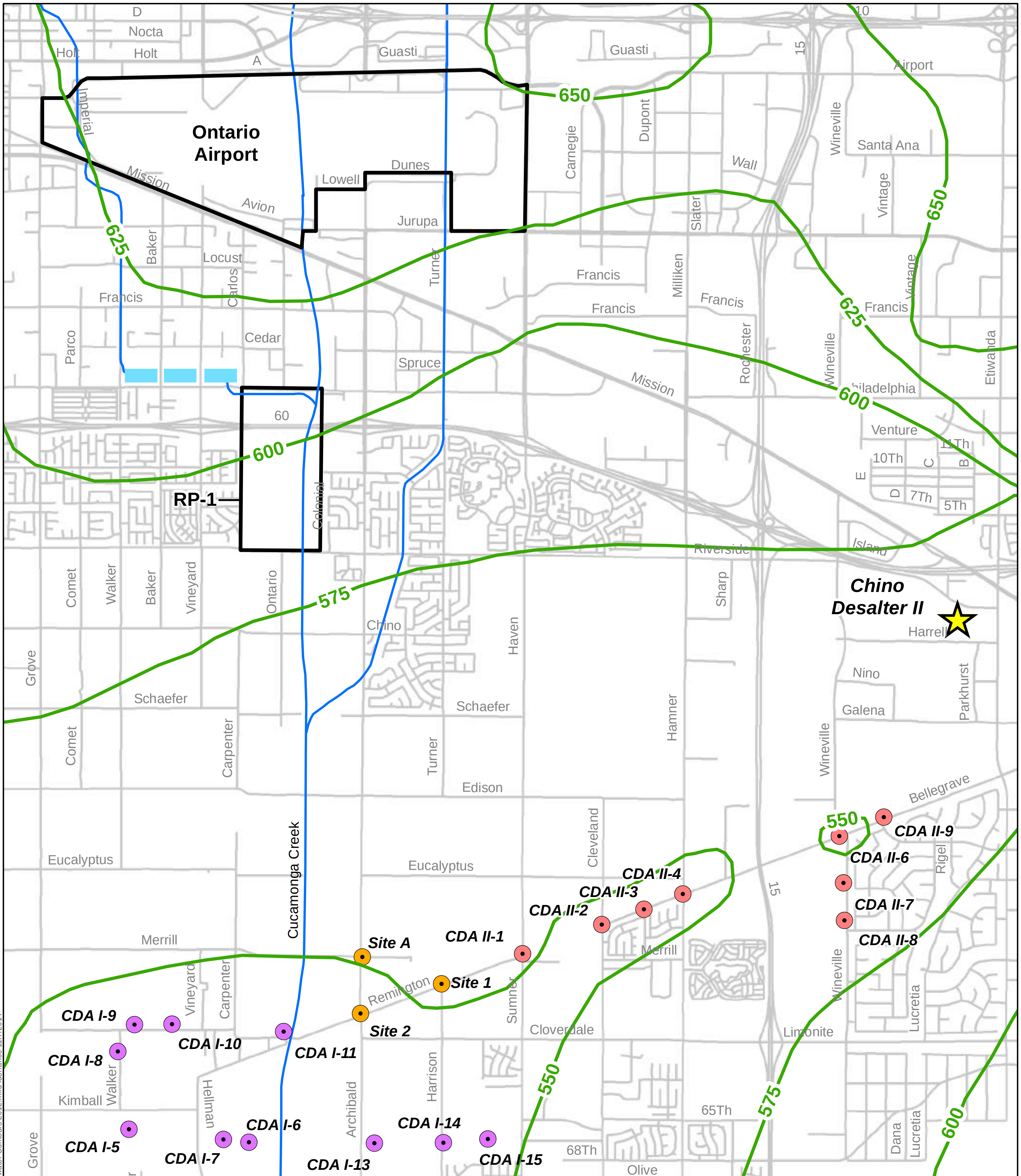
NOVEMBER 2015

FIGURE 5

Groundwater Elevation Contour Map, 2000

Draft Feasibility Study Report: South Archibald Plume

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Groundwater Contours 2000.mxd ldorrance 11/7/2014



Ely Basins
Drainage Channel
Existing Desalter I Well
Existing Desalter II Well
Proposed Desalter II Well
600 Groundwater Elevation Contour, Sprng 2012

Basemap Source - ESRI

Note:
All Locations Approximate

Groundwater Elevation Contours Source - Wildermuth, 2013, 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster Exhibit 18

0 2,000 4,000 Feet

DUDEK

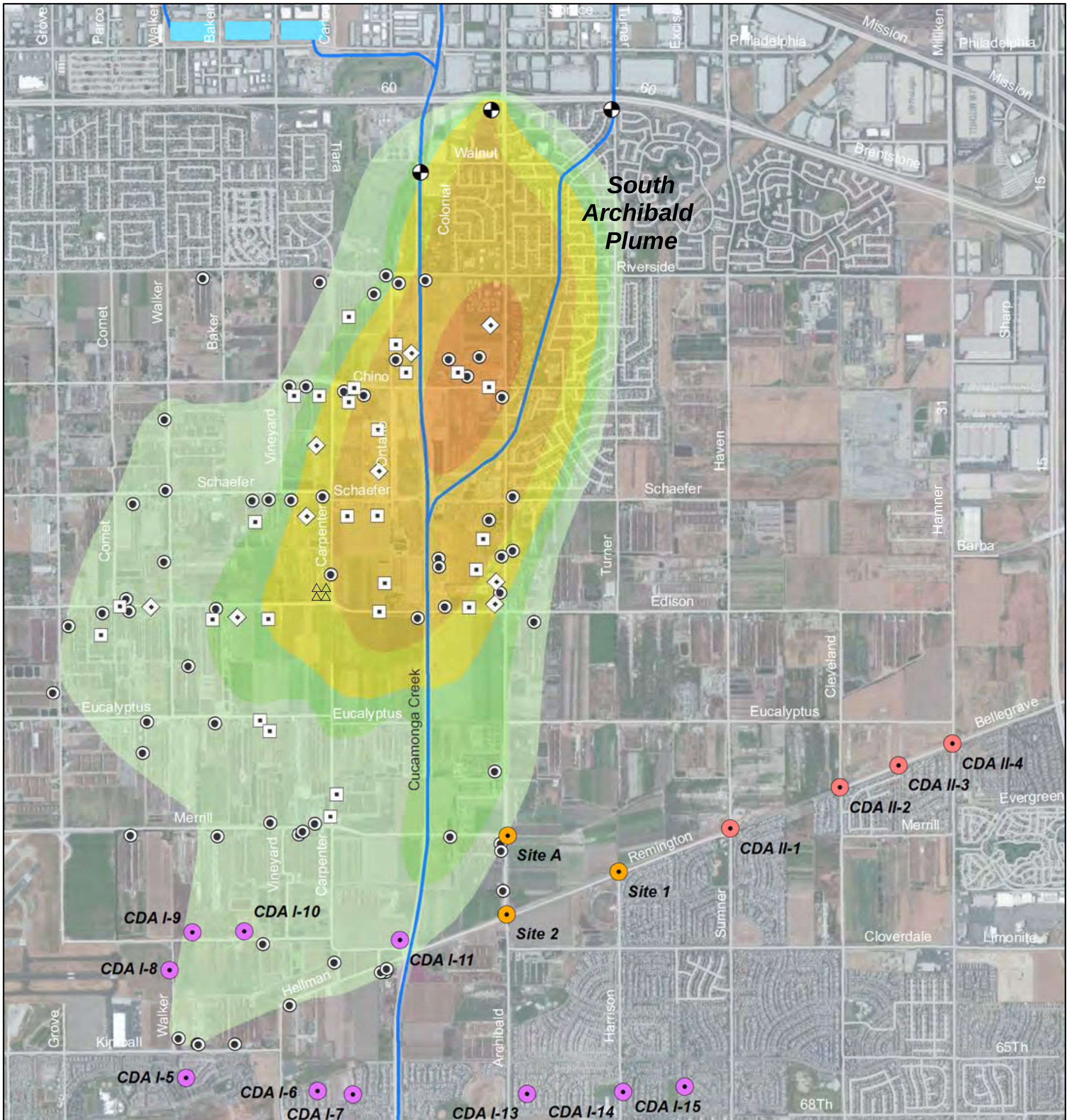
7318

NOVEMBER 2015

FIGURE 6
Groundwater Elevation Contour Map, 2012

Draft Feasibility Study Report: South Archibald Plume

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Groundwater Contours 2012.mxd ldorrance 11/7/2014



Ely Basins
Drainage Channel
Wells
Tank System Locations
Bottled Water Service
Nested Monitor Well
Declined tank system not on alternative water supply

Note:
All Locations Approximate

CDA wells
Existing Desalter I Well
Existing Desalter II Well
Proposed Desalter II Well

Groundwater TCE Concentration (ug/L)
> 0 and ≤ 5
>5 and ≤ 10
>10 and ≤ 20
>20 and ≤ 50
>50 and ≤ 100

Pipeline
Existing City Water Supply Pipeline
Francis Water Loop
Temporary Pipeline to Serve Potable Water to Residences in TCE-Affected Area

Basemap Source: Bing 2012, ESRI

Plume Source: Wildermuth, 2013. 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster. Contours are based on maximum TCE concentrations measured from July 2007-August 2012.

0 2,000 4,000
Feet

DUDEK

7318

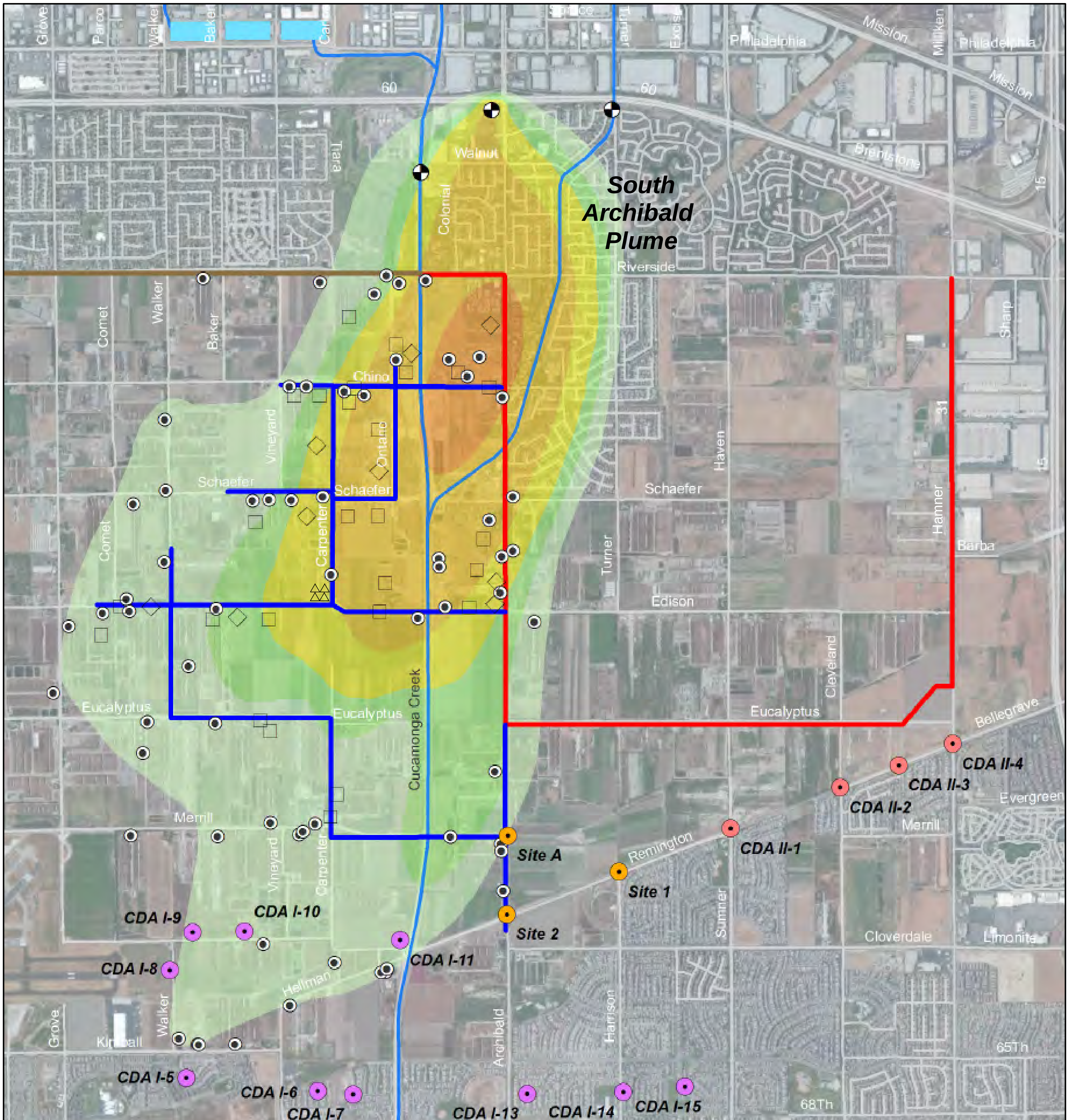
NOVEMBER 2015

FIGURE 7

Current Locations of Tank Systems and Bottled Water Service

Draft Feasibility Study Report: South Archibald Plume

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\F7_Current_DWS_n.mxd



Ely Basins
Drainage Channel
Wells
Nested Monitor Well

Tank System Removed and Residence Connected to Temporary Pipeline
Bottled Water Service Removed and Residence Connected to Temporary Pipeline
Declined tank system not on alternative water supply; Connected to Temporary Pipeline

CDA wells
Existing Desalter I Well
Existing Desalter II Well
Proposed Desalter II Well

Groundwater TCE Concentration (ug/L)
> 0 and ≤ 5
>5 and ≤ 10
>10 and ≤ 20
>20 and ≤ 50
>50 and ≤ 100

Pipeline
Existing City Water Supply Pipeline
Francis Water Loop
Temporary Pipeline to Serve Potable Water to Residences in TCE-Affected Area

Basemap Source: Bing 2012, ESRI

Note:

All Locations Approximate

Plume Source: Wildermuth, 2013. 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster. Contours are based on the maximum TCE concentration measured from July 2007 - August 2012

0 2,000 4,000 Feet

DUDEK

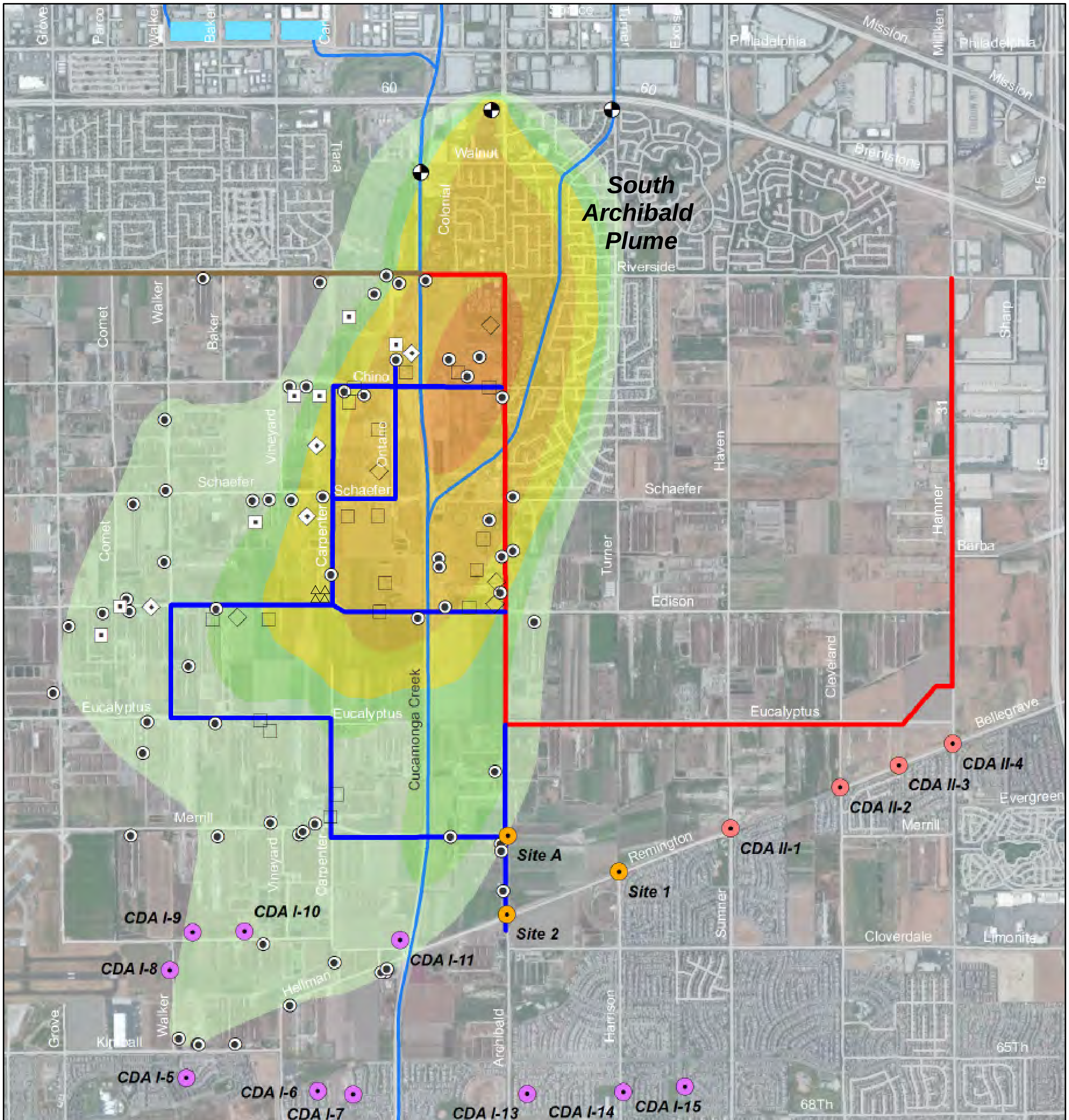
7318

NOVEMBER 2015

FIGURE 8

Domestic Water Supply Alternatives 4 and 5

Draft Feasibility Study Report: South Archibald Plume



Ely Basins

Drainage Channel

Wells

Nested Monitor Well

Note:

All Locations Approximate

Tank System Removed and Residence Connected to Temporary Pipeline

Tank System Remains

Bottled Water Service Removed and Residence Connected to Temporary Pipeline

Existing Bottled Water Converted to Tank System

Location not on alternative water supply; Connected to Temporary Pipeline

CDA wells

Existing Desalter I Well

Existing Desalter II Well

Proposed Desalter II Well

Groundwater TCE Concentration (ug/L)

> 0 and ≤ 5

>5 and ≤ 10

>10 and ≤ 20

>20 and ≤ 50

>50 and ≤ 100

Pipeline

Existing City Water Supply Pipeline

Francis Water Loop

Temporary Pipeline to Serve Potable Water to Residences in TCE-Affected Area

Basemap Source: Bing 2012, ESRI

0 2,000 4,000 Feet

Plume Source: Wildermuth, 2013. 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster. Contours are based on maximum TCE concentrations measured from July 2007 - August 2012.

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\DWS_Alt_6A.mxd

DUDEK

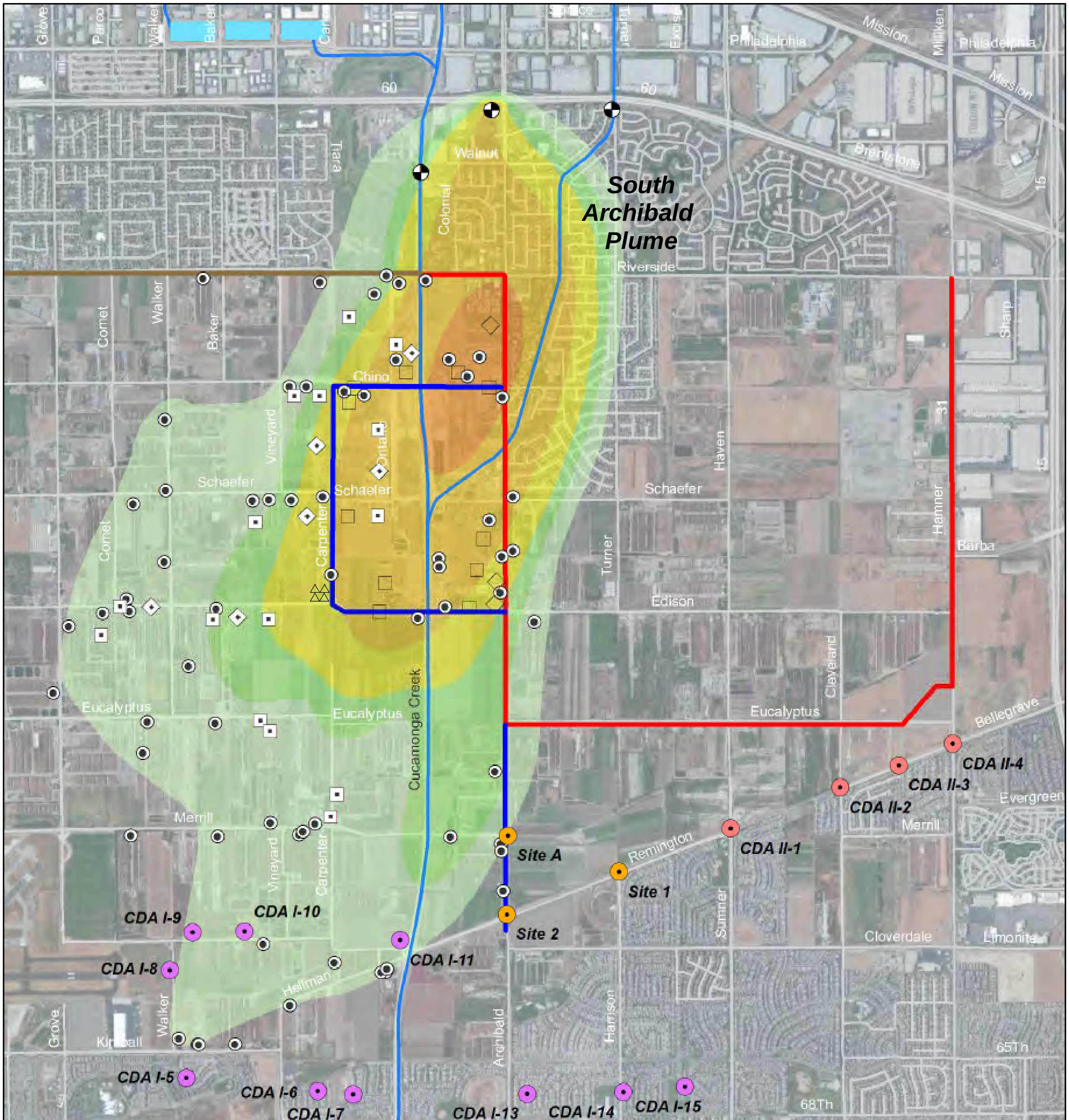
7318

NOVEMBER 2015

FIGURE 9

Domestic Water Supply Alternative 7A

Draft Feasibility Study Report: South Archibald Plume



Basemap Source: Bing 2012, ESRI .

Ely Basins

Drainage Channel

Wells

Nested Monitor Well

Note:

All Locations Approximate

Tank System Removed and Residence Connected to Temporary Pipeline

Tank System Remains

Bottled Water Service Removed and Residence Connected to Temporary Pipeline

Existing Bottled Water Converted to Tank System

Declined tank system not on alternative water supply; Connected to Temporary Pipeline

CDA wells

Existing Desalter I Well

Existing Desalter II Well

Proposed Desalter II Well

Groundwater TCE Concentration (ug/L)

> 0 and ≤ 5

>5 and ≤ 10

>10 and ≤ 20

>20 and ≤ 50

>50 and ≤ 100

Pipeline

Existing City Water Supply Pipeline

Francis Water Loop

Temporary Pipeline to Serve Potable Water to Residences in TCE-Affected Area

0 2,000 4,000 Feet

Plume Source: Wildermuth 2013. 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster. Contours are based on the maximum TCE concentration measured from July 2007 - August 2012

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\DWS_Alt_6B.mxd

DUDEK

7318

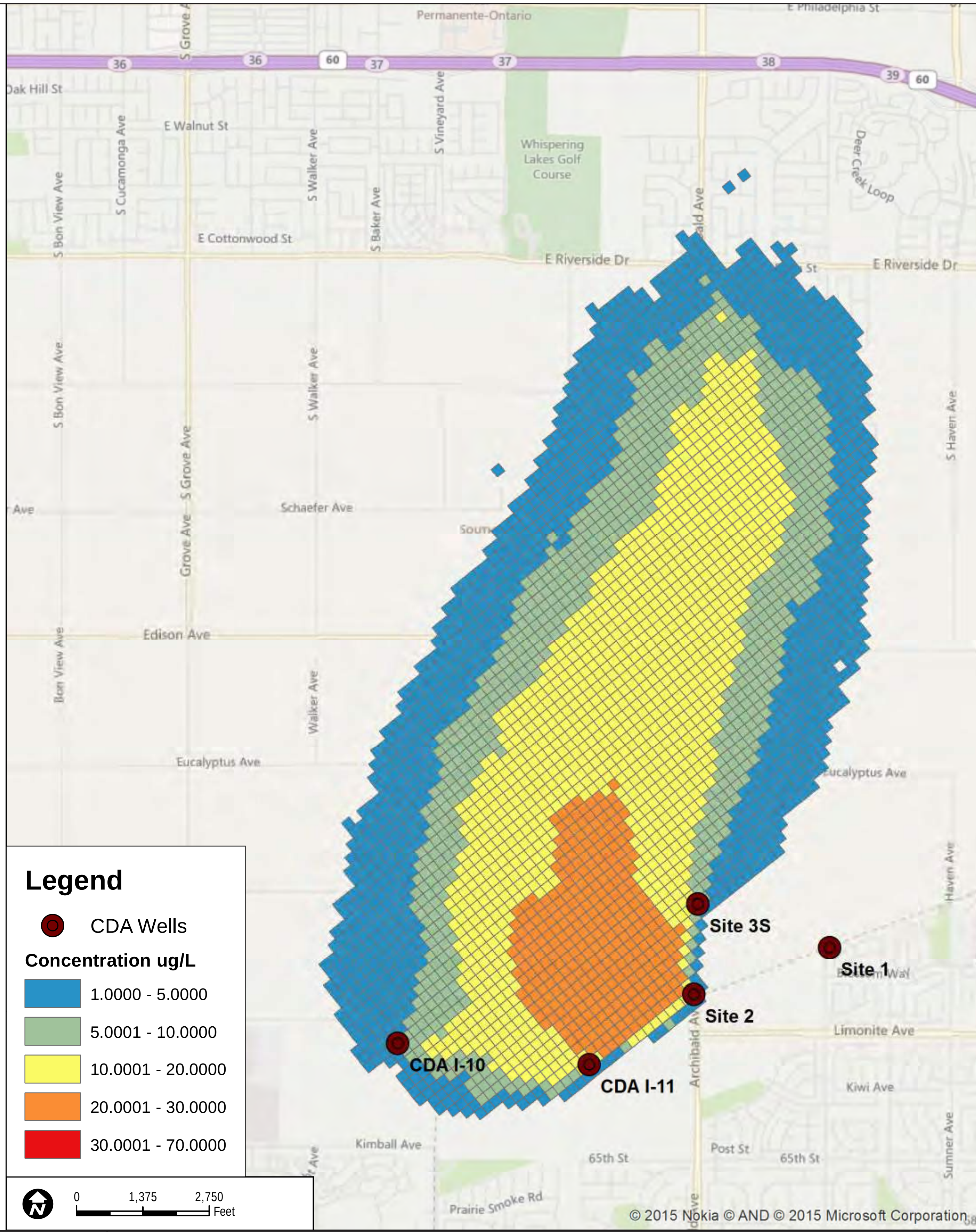
NOVEMBER 2015

FIGURE 10

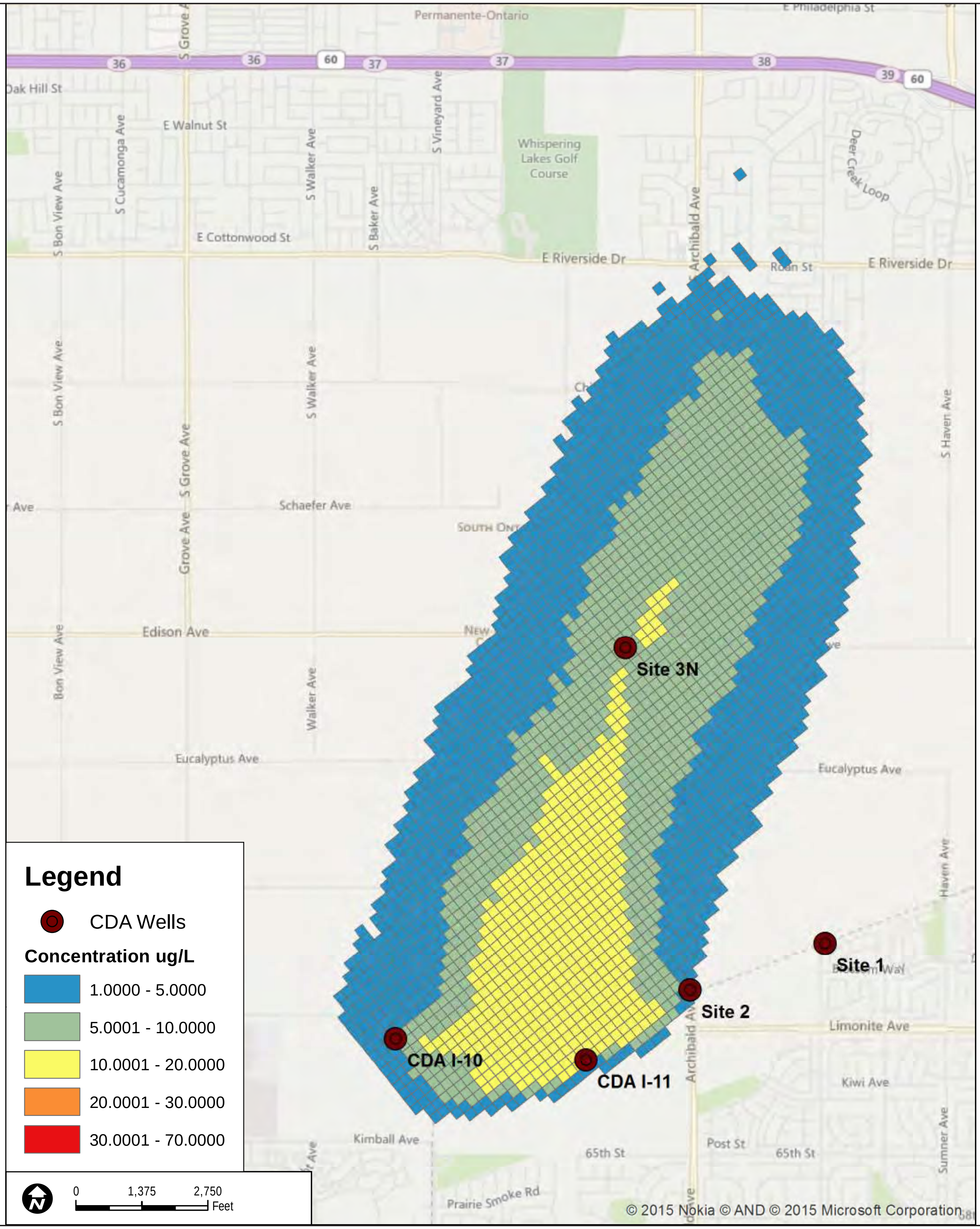
Domestic Water Supply Alternative 7B

Draft Feasibility Study Report: South Archibald Plume

A)



B)



DUDEK

7318

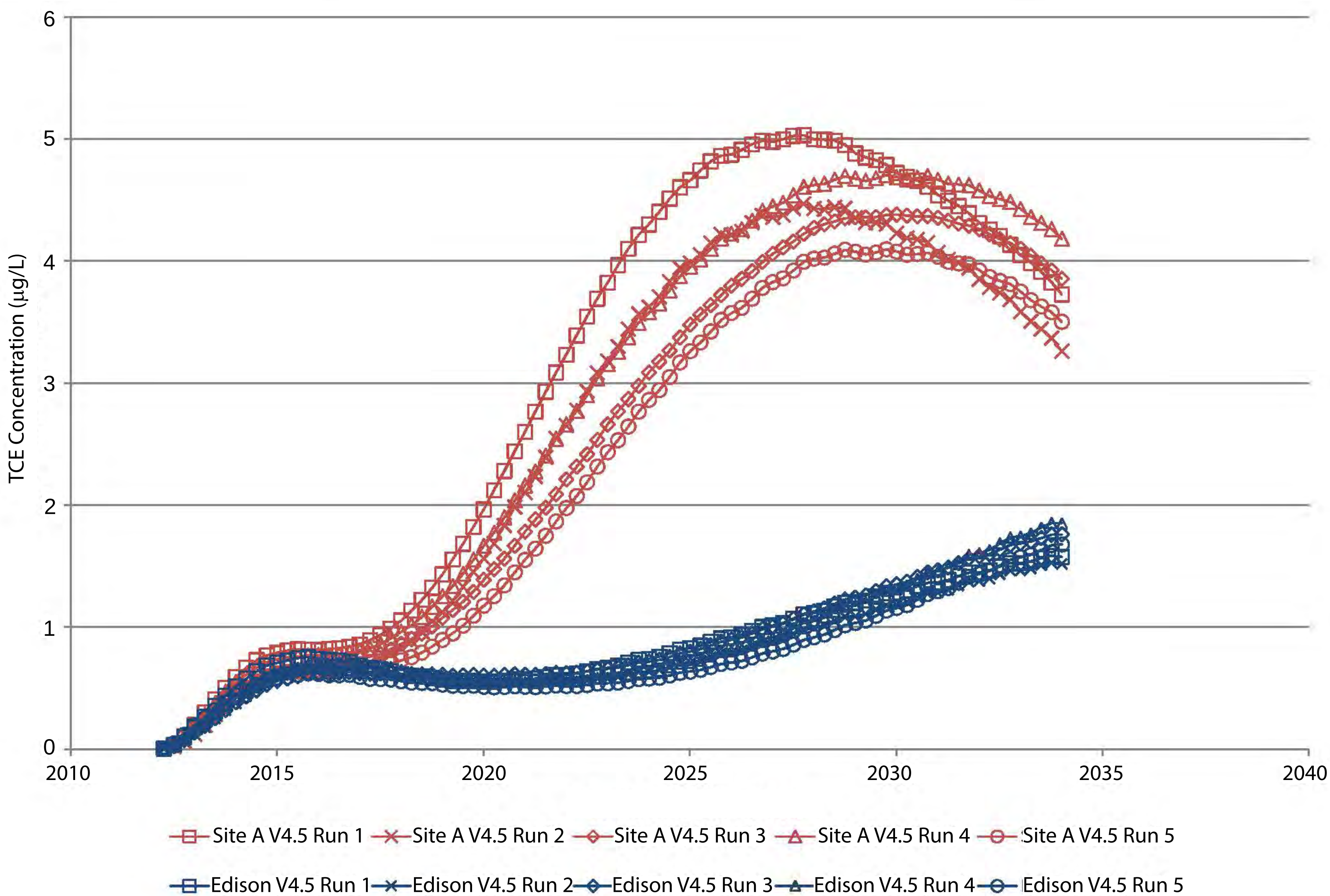
NOVEMBER 2015

SOURCE:

FIGURE 11

Modeled Plume Distribution for a Northern Well at Site A and a Northern Well at Edison Ave

Draft Feasibility Study Report: South Archibald Plume



DUDEK

7318

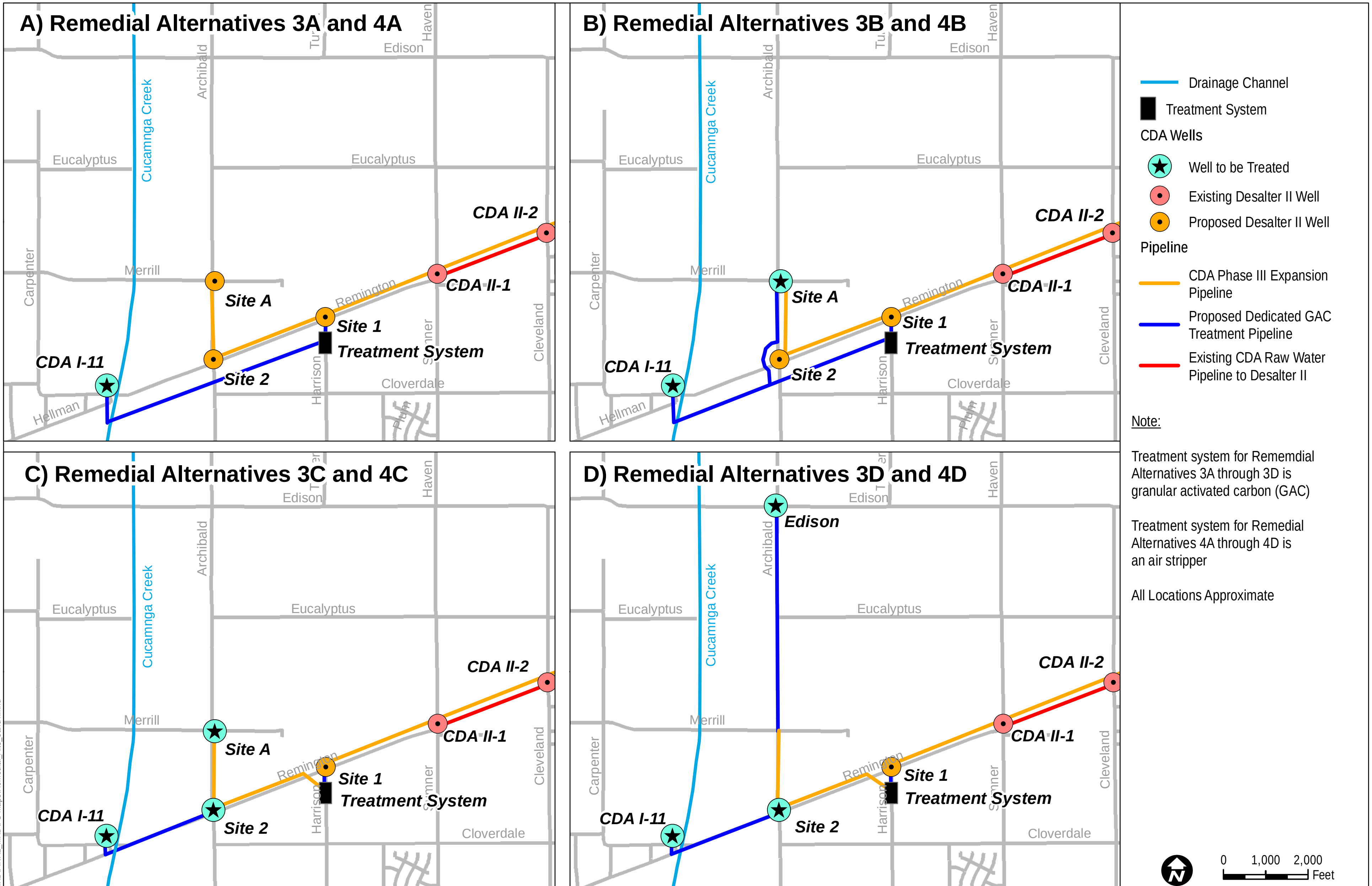
NOVEMBER 2015

SOURCE:

FIGURE 12

Flow Weighted Concentrations at Site 2 for a northern well at Edison and a northern well at Site A

Draft Feasibility Study Report: south Archibald Plume



DUDEK

7318

NOVEMBER 2015

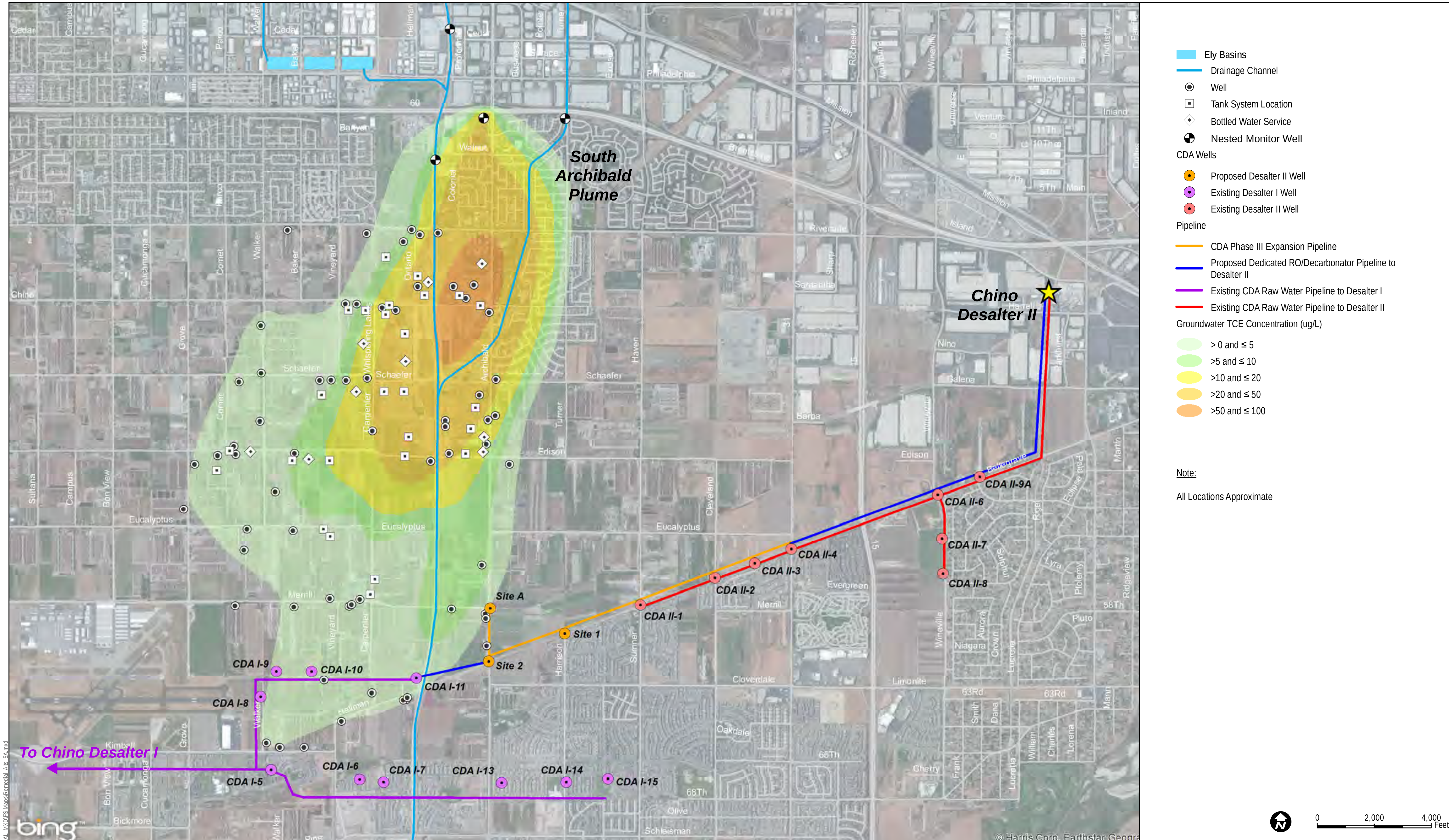
Basemap source: ESRI

FIGURE 13

Remedial Alternatives 3 and 4

Draft Feasibility Study Report: South Achibald Plume

Path: Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Remedial_Alts_3and4.mxd



Basemap Source: Bing 2012, ESRI
Plume Source: Wildermuth, 2013. 2012 State of teh Basin Atlas, prepared for the Chino Basin Watermaster. Contours are based on the maximum TCE concentration measured from July 2007 - August 2012.

DUDEK

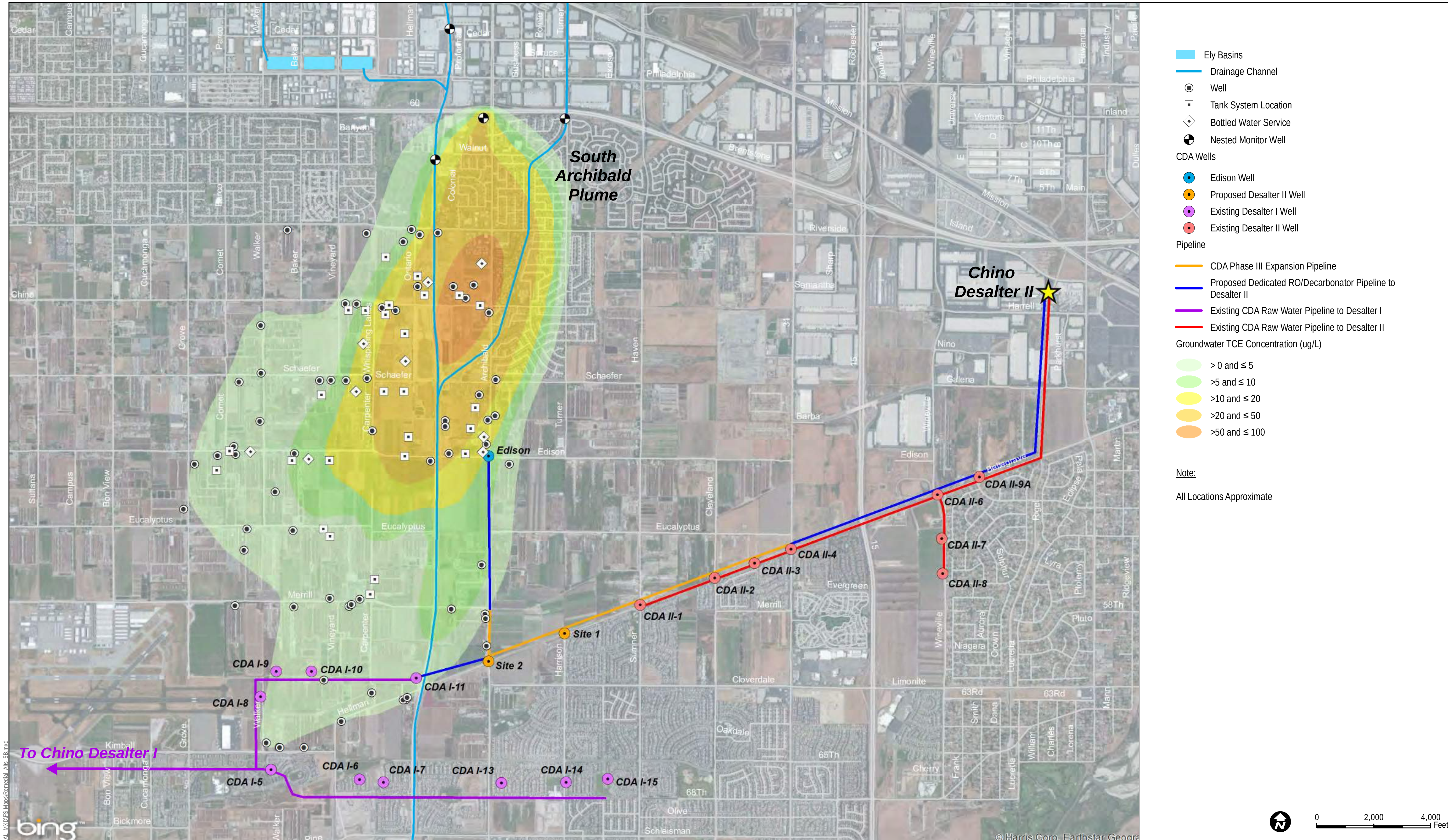
7318

NOVEMBER 2015

FIGURE 14

Remedial Alternative 5A

Draft Feasibility Study Report: South Archibald Plume



DUDEK

7318

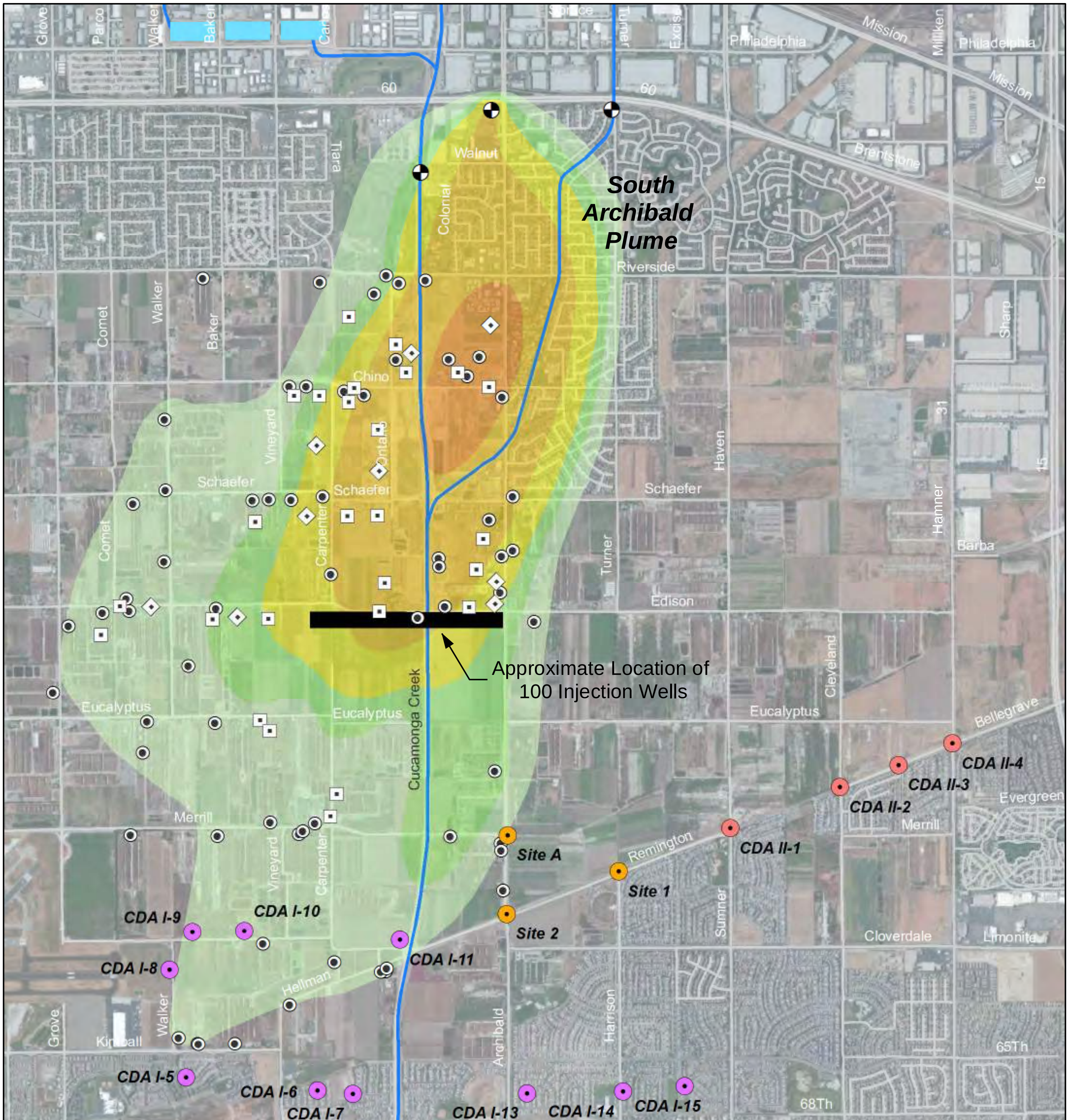
NOVEMBER 2015

Basemap Source: Bing 2012, ESRI
Plume Source: Wildermuth, 2013. 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster.
Contours are based on maximum TCE concentrations measured from July 2007-August 2012.

FIGURE 15

Remedial Alternative 5B

Draft Feasibility Study Report: South Archibald Plume



Ely Basins
Drainage Channel
Wells
Nested Monitor Well
Tank System Locations
Bottled Water Service

Note:

All Locations Approximate

CDA wells

Existing Desalter I Well
Existing Desalter II Well
Proposed Desalter II Well

Groundwater TCE Concentration (ug/L)

> 0 and ≤ 5
>5 and ≤ 10
>10 and ≤ 20
>20 and ≤ 50
>50 and ≤ 100

Basemap Source: Bing 2012, ESRI
Plume Source: Wildermuth, 2013. 2012 State of the Basin Atlas, prepared for the Chino Basin Watermaster. Contours based on maximum TCE concentrations measured from July 2007-August 2012.

0 2,000 4,000 Feet

DUDEK

7318

NOVEMBER 2015

FIGURE 16
Remedial Aternative 6

Draft Feasibility Study Report: South Archibald Plume

Z:\Hydro\Projects\Ontario\MXD\FINAL_MXD\FS Maps\Remedial_Alt 6.mxd

APPENDIX A

Applicable or Relevant and Appropriate Requirements

Requirement or Criterion	Description
	Potential Chemical-Specific ARARs or TBCs
California Department of Public Health ("CDPH") California Code of Regulations ("CCR") Title 22, Chapter 15, Article 5.5 – Maximum Contaminant Levels ("MCLs")	**Potential ARAR:** TCE concentrations in groundwater within the TCE groundwater plume are greater than MCLs promulgated in 22 CCR §64444. MCLs are health protective drinking water standards that must be met by public water supply systems.
California Regional Water Quality Control Board, Santa Ana Region ("Regional Board") Water Quality Control Plan, Santa Ana River Basin ("Basin Plan"), Chapter 4 – Water Quality Objectives	**Potential ARAR:** Chapter 4 of the Basin Plan describes water quality objectives that have been established for the reasonable protection of beneficial uses of surface and ground waters, or the prevention of nuisance within the region. The Basin Plan specifies narrative and numerical water quality objectives for various constituents.
EPA Comprehensive Environmental Response, Compensation, and Liability Act Policies for Groundwater Restoration, Office of Solid Waste and Emergency Response Directive 9283.1-33	**Potential TBC:** This directive clarifies that contaminants should be reduced to federal or state MCLs or non-zero maximum contaminant level goals ("MCLGs") in groundwater that is a current or potential municipal or domestic water supply. The appropriate groundwater cleanup level is the MCL for TCE of 5 micrograms per liter ("µg/L") because the MCLG for TCE is 0 µg/L.
	Potential Location-Specific ARARs or TBCs
State Water Resources Control Board ("SWRCB") Resolution No. 88-63 – Sources of Drinking Water as adopted in Regional Board Basin Plan	**Potential ARAR:** Resolution No. 88-63 establishes that all surface and ground waters of the State are considered to be suitable, or potentially suitable, for municipal or domestic water supply, unless those waters are contaminated, either by natural processes or by human activity, to the extent that they cannot be reasonably treated for potable use.
Regional Board Basin Plan, Chapter 3 – Beneficial Uses	**Potential ARAR:** Chapter 3 of the Basin Plan designates beneficial uses of surface and groundwater in the region. Beneficial uses of groundwater within the Chino Basin consist of municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
SWRCB Resolution No. 68-16 – Statement of Policy with Respect to Maintaining High Quality of Waters in California as adopted in Regional Board Basin Plan	**Potential ARAR:** Resolution No. 68-16 requires continued maintenance of existing high quality waters unless a demonstration is made that: (1) allowing some degradation is consistent with the maximum benefit to the people of the state, and (2) such degradation would not unreasonably affect existing or potential beneficial uses. At a minimum, discharge of pollutants shall not exceed the relevant water quality objectives specified in the Basin Plan.
Porter-Cologne Water Quality Control Act promulgated under the California Water Code, Section 13304	**Potential ARAR:** Section 13304 requires a discharger of waste that creates, or threatens to create, a condition of pollution or nuisance, to clean up the waste or abate the effects of the waste upon issuance of a Cleanup and Abatement Order ("CAO") by the Regional Board.
Regional Board Draft CAO – City of Ontario, City of Upland, and Inland Empire Utilities Agency, Former Ontario-Upland Sewage Treatment Plant (Regional Recycling Plant No. 1), City of Ontario	**Potential TBC:** The CAO requires that replacement water service be provided to all residences where private domestic wells contain TCE concentrations greater than the MCL of 5 µg/L. The CAO also requires preparation of a feasibility study for mitigating the effects of the TCE groundwater plume followed by preparation and implementation of a remedial action plan.
	Potential Action-Specific ARARs or TBCs
SWRCB Resolution No. 92-49 – Policies and Procedures for Cleanup and Abatement of Discharges Under Water Code Section 13304 (as amended on April 21, 1994 and October 2, 1996)	**Potential ARAR:** Resolution No. 92-4 is authorized by the Porter-Cologne Water Quality Control Act promulgated under the California Water Code. Section III.G of this policy defines the goal of pollution cleanup and abatement as achieving the best quality of water that is reasonable. Site-specific cleanup levels may be established where it is not reasonable to restore water quality to background levels. As stated on Page 5-200 of the Basin Plan, the Regional Board generally sets site-specific cleanup levels for groundwater contamination at drinking water standards. SWRCB may

Requirement or Criterion	Description
	determine that establishment of a containment zone is appropriate and consistent with the maximum benefit to the people of the state if applicable requirements in Section III.H are satisfied.
CDPH CCR Title 22, Chapter 15, Article 4 and Article 16 –MCLs	**Potential ARAR:** Groundwater within the TCE groundwater plume contains high nitrate and total dissolved solids ("TDS") concentrations. Extracted groundwater from the plume area may be treated by the Chino Basin Desalter Authority ("CDA") and subsequently provided to member agencies. Nitrate and TDS concentrations in finished water must be less than MCLs promulgated in 22 CCR §64431 and §64449.
South Coast Air Quality Management District ("SCAQMD") Regulation XIII – New Source Review	**Potential ARAR:** Air stripping may be employed to remove TCE from extracted groundwater. SCAQMD has adopted regulations that pertain to construction and operation of air strippers. New source review rules embodied in Regulation XIII may apply. SCAQMD policy requires the use of best available control technology ("BACT") when an increase of greater than one (1.0) pound per day of non-attainment air pollutants result from installation of new equipment or existing permitted equipment.
South Coast Air Quality Management District ("SCAQMD") Regulation XIV – Toxics and Other Non-Criteria Pollutants	**Potential ARAR:** Air stripping may be employed to remove TCE from extracted groundwater. SCAQMD has adopted regulations that pertain to construction and operation of air strippers, as well as modifications to existing permit units that emit toxic air contaminants. Control of toxic air contaminants from existing sources embodied in Regulation XIV may apply. This rule sets limits for maximum individual cancer risk, cancer burden and noncancer acute and chronic hazard index (HI) and establishes allowable risks for permit units requiring new permits.

APPENDIX B

Detailed Cost Estimate for the Domestic Water Supply Alternatives

Unit Costs and Other Cost Assumptions for Alternatives for Provision of Water to Affected Residences
TCE Groundwater Plume, Ontario, California

Item / Assumption	Cost / Value	Unit
Capital		
Treatment Systems		
VOC Treatment		
Treatment Equipment	$ 8,000	$/system
Pump	$ 1,200	$/system
Hydropneumatic Tank	$ 700	$/system
Chain Link Fence	$ 3,500	$/system
Concrete Pad	$ 2,500	$/system
Installation	$ 1,500	$/system
Piping, Valves, and Connections	$ 1,300	$/system
Nitrate Treatment		
Treatment Equipment	$ 3,900	$/system
Additional - Pump and Tank	$ 950	$/system
Additional - Chain Link Fence	$ 1,750	$/system
Additional - Concrete Pad	$ 1,250	$/system
Additional - Installation	$ 750	$/system
Additional - Piping, Valves, and Connections	$ 650	$/system
Engineering	$ 1,000	$/system
Sewer Connection	$ 1,500	$/system
Tank System, Installed	$ 30,000	$/system
Pipelines, Installed		
2 inch	$ 40	$/LF
6 inch (temporary)	$ 135	$/LF
12 inch	$ 157	$/LF
18 inch	$ 194	$/LF
24 inch	$ 234	$/LF
Provide Water During Construction		
Cost per residence per year	$ 8,500	$/residence/yr
Number of years	2	yr
Engineering & Permitting	15%	%
Contractor's Profit	8%	%
Residential Wells		$/system
Well Installation		
Cost per foot	$ 130	$/ft
Well Depth	$ 600	ft
Piping per residence when wells are shared between 3 residences	1000	ft
Pump for Well	$ 3,000	LS
Tank for Well	$ 1,200	LS
Construction Contingency, as a Fraction of Construction Costs	20%	%
Engineering, as a Fraction of Construction with Contingency	15%	%
O&M		
Treatment Systems		
VOC Treatment		
Regular Maintenance	$ 1,600	$/system
Non-Regular Maintenance	$ 1,400	$/system
Nitrate Treatment		
Regular Maintenance	$ 5,200	$/system
Tank System, Installed		
Routine O&M, Oversight, and Reporting	$ 1,850	$/system
Non-Routing O&M	$ 1,150	$/system
Water Delivery	$ 8,500	$/system
Water Cost from Municipal Supply	$ 2.51	$/ccf
Bottled Water Service	$2,300	residence
Water Usage Per Year	300	ccf
Residential Wells		
Routine O&M	$ 1,200	$/well
Private Residence Sampling	$ 660	residence
Operations & Maintenance Contingency	20%	%
Effective Discount Rate for O&M Costs	3%	%

Abbreviations:

ccf = hundred cubic feet
ft = feet
LF = lineal feet
LS = lump sum
VOC = volatile organic compounds
yr = years

Detailed Cost for Domestic Water Supply Alternative 1.No Action Alternative

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Construction Contingency	20%	percentage	$ -	$ -
Engineering	0%	percentage	$ -	$ -
TOTAL CAPITAL				**$ -**
Operations & Maintenance (per year)				
Operations & Maintenance Contingency	20%	percentage	$ -	$ -
TOTAL OPERATIONS & MAINTENANCE				**$ -**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Domestic Water Supply Alternative 2. Whole House Treatment

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Treatment Systems				
VOC Treatment				
System	44	system	$ 8,000	$ 352,000
Associated Infrastructure	44	system	$ 12,200	$ 536,800
Nitrate Treatment				
System	44	system	$ 3,900	$ 171,600
Associated Infrastructure	44	system	$ 5,350	$ 235,400
Treatment Engineering and Permitting	44	system	$ 1,000	$ 44,000
Construction Contingency	20%	percentage	$ 1,339,800	$ 267,960
Engineering	0%	percentage	$ 1,607,760	$ -
TOTAL CAPITAL				**$ 1,607,760**
Operations & Maintenance (per year)				
Treatment Systems				
VOC Treatment	44	system	$ 3,000	$ 132,000
Nitrate Treatment	44	system	$ 5,200	$ 228,800
Private Residence Sampling	180	well	$ 660	$ 118,800
Operations & Maintenance Contingency	20%	percentage	$ 479,600	$ 95,920
TOTAL OPERATIONS & MAINTENANCE				**$ 575,520**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Domestic Water Supply Alternative 3. Existing Tank Systems and Bottled Water Delivery

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Construction Contingency	20%	percentage	$ -	$ -
Engineering	0%	percentage	$ -	$ -
TOTAL CAPITAL				**$ -**
Operations & Maintenance (per year)				
Tank System				
Routine O&M, Oversight, and Reporting	24	system	$ 1,850	$ 44,400
Non-Routing O&M	24	system	$ 1,150	$ 27,600
Water Delivery	24	system	$ 8,500	$ 204,000
Bottled Water Service	9	residence	$2,300	$ 20,700
Operations & Maintenance Contingency	20%	percentage	$ 296,700	$ 59,340
TOTAL OPERATIONS & MAINTENANCE				**$ 356,040**

Abbreviations:
ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Domestic Water Supply Alternative 4. Permanent Potable Water Distribution Pipeline

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Pipeline				
Permanent				
2-inch	8,800	LF	$ 40	$ 352,000
12-inch	25,000	LF	$ 157	$ 3,925,000
18-inch	7,950	LF	$ 194	$ 1,542,300
24-inch	7,950	LF	$ 234	$ 1,860,300
Provide Water During Construction	40	residence	$ 17,000	$ 680,000
Residential Wells				
Construction Contingency	20%	percentage	$ 8,359,600	$ 1,671,920
Engineering	15%	percentage	$ 10,031,520	$ 1,504,728
TOTAL CAPITAL				**$ 11,536,248**
Operations & Maintenance (per year)				
Water Cost from Municipal Supply	44	residence	$ 753	$ 33,132
Operations & Maintenance Contingency	20%	percentage	$ 33,132	$ 6,626
TOTAL OPERATIONS & MAINTENANCE				**$ 39,758**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Domestic Water Supply Alternative 5. Temporary Potable Water Distribution Pipeline

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Pipeline				
Permanent				
2-inch	8,800	LF	$ 40	$ 352,000
Temporary				
6-inch	40,900	LF	$ 135	$ 5,521,500
Provide Water During Construction	40	residence	$ 17,000	$ 680,000
Construction Contingency	20%	percentage	$ 6,553,500	$ 1,310,700
Engineering	15%	percentage	$ 7,864,200	$ 1,179,630
TOTAL CAPITAL				**$ 9,043,830**
Operations & Maintenance (per year)				
Water Cost from Municipal Supply	44	residence	$ 753	$ 33,132
Operations & Maintenance Contingency	20%	percentage	$ 33,132	$ 6,626
TOTAL OPERATIONS & MAINTENANCE				**$ 39,758**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Domestic Water Supply Alternative 6A. New Residential Wells, One Residence per Well

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Well	44	well	$ 78,000	$ 3,432,000
Associated Infrastructure	44	well	$ 4,200	$ 184,800
Construction Contingency	20%	percentage	$ 3,616,800	$ 723,360
Engineering	15%	percentage	$ 4,340,160	$ 651,024
TOTAL CAPITAL				**$ 4,991,184**
Operations & Maintenance (per year)				
Residential Wells				
Routine O&M	44	well	$ 1,200	$ 52,800
Private Residence Sampling	180	well	$ 660	$ 118,800
Operations & Maintenance Contingency	20%	percentage	$ 171,600	$ 34,320
TOTAL OPERATIONS & MAINTENANCE				**$ 205,920**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Domestic Water Supply Alternative 6B. New Residential Wells, Three Residences per Well

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Pipeline				
Permanent				
2-inch	45,000	LF	$ 40	$ 1,800,000
Well	15	well	$ 78,000	$ 1,170,000
Associated Infrastructure	15	well	$ 4,200	$ 63,000
Construction Contingency	20%	percentage	$ 3,033,000	$ 606,600
Engineering	15%	percentage	$ 3,639,600	$ 545,940
TOTAL CAPITAL				**$ 4,185,540**
Operations & Maintenance (per year)				
Residential Wells				
Routine O&M	15	well	$ 1,200	$ 18,000
Private Residence Sampling	72	well	$ 660	$ 47,520
Operations & Maintenance Contingency	20%	percentage	$ 65,520	$ 13,104
TOTAL OPERATIONS & MAINTENANCE				**$ 78,624**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Domestic Water Supply Alternative 7A. Hybrid Partial Pipeline and Tank Systems, Most Pipe

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Tank System	4	system	$ 30,000	$ 120,000
Pipeline				
Permanent				
2-inch	6,400	LF	$ 40	$ 256,000
Temporary				
6-inch	38,000	LF	$ 135	$ 5,130,000
Provide Water During Construction	32	residence	$ 17,000	$ 544,000
Construction Contingency	20%	percentage	$ 6,050,000	$ 1,210,000
Engineering	15%	percentage	$ 7,260,000	$ 1,089,000
TOTAL CAPITAL				**$ 8,349,000**
Operations & Maintenance (per year)				
Tank System				
Routine O&M, Oversight, and Reporting	11	system	$ 1,850	$ 20,350
Non-Routing O&M	11	system	$ 1,150	$ 12,650
Water Delivery	11	system	$ 8,500	$ 93,500
Water Cost from Municipal Supply	32	residence	$ 753	$ 24,096
Operations & Maintenance Contingency	20%	percentage	$ 150,596	$ 30,119
TOTAL OPERATIONS & MAINTENANCE				**$ 180,715**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Domestic Water Supply Alternative 7B. Hybrid Partial Pipeline and Tank Systems, Most Tanks

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Tank System	3	system	$ 30,000	$ 90,000
Pipeline				
Permanent				
2-inch	5000	LF	$ 40	$ 200,000
Temporary				
6-inch	11000	LF	$ 135	$ 1,485,000
Provide Water During Construction	21	residence	$ 17,000	$ 357,000
Construction Contingency	20%	percentage	$ 2,132,000	$ 426,400
Engineering	15%	percentage	$ 2,558,400	$ 383,760
TOTAL CAPITAL				**$ 2,942,160**
Operations & Maintenance (per year)				
Tank System				
Routine O&M, Oversight, and Reporting	18	system	$ 1,850	$ 33,300
Non-Routing O&M	18	system	$ 1,150	$ 20,700
Water Delivery	18	system	$ 8,500	$ 153,000
Water Cost from Municipal Supply	25	residence	$ 753	$ 18,825
Operations & Maintenance Contingency	0	percentage	$ 225,825	$ 45,165
TOTAL OPERATIONS & MAINTENANCE				**$ 270,990**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Net Present Value Calculation of Domestic Water Supply Alternatives

	Feasibility Study Domestic Water Supply Alternatives								
	1.No Action Alternative	2. Whole House Treatment	3. Existing Tank Systems and Bottled Water Delivery	4. Permanent Potable Water Distribution Pipeline	5. Temporary Potable Water Distribution Pipeline	6A. New Residential Wells, One Residence per Well	6B. New Residential Wells, Three Residences per Well	7A. Hybrid Partial Pipeline and Tank Systems, Most Pipe	7B. Hybrid Partial Pipeline and Tank Systems, Most Tanks
Costs in 2015 Dollars (a)									
Capital Cost	$ -	$ 1,607,760	$ -	$ 11,536,248	$ 9,043,830	$ 4,991,184	$ 4,185,540	$ 8,349,000	$ 2,942,160
Annual Operations & Maintenance Cost	$ -	$ 575,520	$ 356,040	$ 39,758	$ 39,758	$ 205,920	$ 78,624	$ 180,715	$ 270,990
Net Present Value Costs (Discounted Dollars) (b)									
0	$ -	$ 1,607,760	$ -	$ 11,536,248	$ 9,043,830	$ 4,991,184	$ 4,185,540	$ 8,349,000	$ 2,942,160
1	$ -	$ 558,757	$ 345,670	$ 38,600	$ 38,600	$ 199,922	$ 76,334	$ 175,452	$ 263,097
2	$ -	$ 542,483	$ 335,602	$ 37,476	$ 37,476	$ 194,099	$ 74,111	$ 170,341	$ 255,434
3	$ -	$ 526,682	$ 325,827	$ 36,385	$ 36,385	$ 188,446	$ 71,952	$ 165,380	$ 247,994
4	$ -	$ 511,342	$ 316,337	$ 35,325	$ 35,325	$ 182,957	$ 69,856	$ 160,563	$ 240,771
5	$ -	$ 496,449	$ 307,123	$ 34,296	$ 34,296	$ 177,628	$ 67,822	$ 155,887	$ 233,758
6	$ -	$ 481,989	$ 298,178	$ 33,297	$ 33,297	$ 172,455	$ 65,846	$ 151,346	$ 226,950
7	$ -	$ 467,950	$ 289,493	$ 32,327	$ 32,327	$ 167,432	$ 63,929	$ 146,938	$ 220,340
8	$ -	$ 454,321	$ 281,061	$ 31,386	$ 31,386	$ 162,555	$ 62,067	$ 142,658	$ 213,922
9	$ -	$ 441,088	$ 272,875	$ 30,472	$ 30,472	$ 157,821	$ 60,259	$ 138,503	$ 207,691
10	$ -	$ 428,241	$ 264,927	$ 29,584	$ 29,584	$ 153,224	$ 58,504	$ 134,469	$ 201,642
11	$ -	$ 415,768	$ 257,211	$ 28,722	$ 28,722	$ 148,761	$ 56,800	$ 130,553	$ 195,769
12	$ -	$ 403,658	$ 249,719	$ 27,886	$ 27,886	$ 144,428	$ 55,145	$ 126,750	$ 190,067
13	$ -	$ 391,901	$ 242,446	$ 27,074	$ 27,074	$ 140,221	$ 53,539	$ 123,058	$ 184,531
14	$ -	$ 380,487	$ 235,384	$ 26,285	$ 26,285	$ 136,137	$ 51,980	$ 119,474	$ 179,156
15	$ -	$ 369,404	$ 228,529	$ 25,519	$ 25,519	$ 132,172	$ 50,466	$ 115,994	$ 173,938
16	$ -	$ 358,645	$ 221,872	$ 24,776	$ 24,776	$ 128,323	$ 48,996	$ 112,616	$ 168,872
17	$ -	$ 348,199	$ 215,410	$ 24,054	$ 24,054	$ 124,585	$ 47,569	$ 109,336	$ 163,953
18	$ -	$ 338,057	$ 209,136	$ 23,354	$ 23,354	$ 120,956	$ 46,183	$ 106,151	$ 159,178
19	$ -	$ 328,211	$ 203,045	$ 22,674	$ 22,674	$ 117,433	$ 44,838	$ 103,059	$ 154,542
20	$ -	$ 318,651	$ 197,131	$ 22,013	$ 22,013	$ 114,013	$ 43,532	$ 100,058	$ 150,041
Subtotal O&M (10 years):	$ -	$ 4,909,302	$ 3,037,093	$ 339,147	$ 339,147	$ 1,756,539	$ 670,679	$ 1,541,537	$ 2,311,600
Subtotal O&M (20 years):	$ -	$ 8,562,284	$ 5,296,976	$ 591,505	$ 591,505	$ 3,063,570	$ 1,169,727	$ 2,688,586	$ 4,031,647
Total (10 years):	**$ -**	**$ 6,517,062**	**$ 3,037,093**	**$ 11,875,395**	**$ 9,382,977**	**$ 6,747,723**	**$ 4,856,219**	**$ 9,890,537**	**$ 5,253,760**
Total (20 years):	**$ -**	**$ 10,170,044**	**$ 5,296,976**	**$ 12,127,753**	**$ 9,635,335**	**$ 8,054,754**	**$ 5,355,267**	**$ 11,037,586**	**$ 6,973,807**

Summary of Estimated Costs for Domestic Water Supply Alternatives

	Feasibility Study Domestic Water Supply Alternatives								
	1.No Action Alternative	2. Whole House Treatment	3. Existing Tank Systems and Bottled Water Delivery	4. Permanent Potable Water Distribution Pipeline	5. Temporary Potable Water Distribution Pipeline	6A. New Residential Wells, One Residence per Well	6B. New Residential Wells, Three Residences per Well	7A. Hybrid Partial Pipeline and Tank Systems, Most Pipe	7B. Hybrid Partial Pipeline and Tank Systems, Most Tanks
Estimated Capital Cost (2015 Dollars)	$ -	$ 1,610,000	$ -	$ 11,540,000	$ 9,040,000	$ 4,990,000	$ 4,190,000	$ 8,350,000	$ 2,940,000
Estimated Annual Operations & Maintenance Costs (2015 Dollars)	$ -	$ 576,000	$ 356,000	$ 40,000	$ 40,000	$ 206,000	$ 79,000	$ 181,000	$ 271,000
Estimated 10-year Operations & Maintenance Costs (Discounted Dollars)	$ -	$ 4,910,000	$ 3,040,000	$ 340,000	$ 340,000	$ 1,760,000	$ 670,000	$ 1,540,000	$ 2,310,000
Estimated 20-year Operations & Maintenance Costs (Discounted Dollars)	$ -	$ 8,560,000	$ 5,300,000	$ 590,000	$ 590,000	$ 3,060,000	$ 1,170,000	$ 2,690,000	$ 4,030,000
Estimated Total 10-year Costs (Discounted Dollars)	**$ -**	**$ 6,520,000**	**$ 3,040,000**	**$ 11,880,000**	**$ 9,380,000**	**$ 6,750,000**	**$ 4,860,000**	**$ 9,890,000**	**$ 5,250,000**
Estimated Total 20-year Costs (Discounted Dollars)	**$ -**	**$ 10,170,000**	**$ 5,300,000**	**$ 12,130,000**	**$ 9,630,000**	**$ 8,050,000**	**$ 5,360,000**	**$ 11,040,000**	**$ 6,970,000**

APPENDIX C

Simulation of the Migration of the South Archibald TCE Plume and Wellhead Concentrations at Existing and Proposed CDA Wells

DUDEK

MEMORANDUM

To:	Gene Tanaka
From:	Peter Quinlan, Laura Roll
Subject:	Simulation of the Migration of the South Archibald TCE Plume and Wellhead Concentrations at Existing and Proposed CDA Wells
Date:	March 6, 2015
cc:	
Attachment(s):	Figures 1 through 27

Dudek employed a numerical model to simulate TCE migration and estimate future wellhead concentrations of TCE in existing and proposed Chino Desalter Authority (CDA) wells within the South Archibald plume (the Plume). The model was first developed by Geoscience Support Services Inc. (GSSI) for the CDA (GSSI, 2013). The flow model was calibrated to observed water levels over the period 1982 – 2012 and then used to predict future hydraulic response from increased CDA pumping. Solute transport was not calibrated in the GSSI model. Dudek performed a qualitative solute transport calibration by entering the approximate distribution of TCE in 1990 and simulating its migration until 2012. Dudek also modified the model by using more heterogeneous hydraulic conductivity distributions in the vicinity of the Plume.

MODIFICATIONS TO GSSI MODEL

After initial results indicated that solute migration simulations using the GSSI model did not reproduce observed migration between 1990 and 2012, the hydraulic conductivity (K) of the original large, homogeneous blocks of cells in the GSSI model (Figure 1) was changed by randomly assigning K to individual cells using a log normal distribution and a variance of 5, yet maintaining the same average K as the K assigned in larger homogeneous blocks in the GSSI model (Figure 2). The nodes containing CDA wells as well as their 8 surrounding nodes were conditioned to equal the original GSSI K value. Additional distributions of randomly varied K were generated using a log normal distribution and a variance of 4 and 4.5 (Figures 3 and 4). A stochastic approach to incorporating heterogeneity and addressing uncertainty associated with sparse measurements of K in solute transport modeling has been proposed by numerous researchers (Dagan, 1989; Dagan and Neuman (Eds.), 1996; Gelhar, 1993; Rubin, 2003; and Tartakovsky, 2013).

QUALITATIVE SOLUTE TRANSPORT CALIBRATION

Model Initial Concentrations

Figure 5 shows the approximate distribution of TCE in 1990 based on samples collected from domestic and irrigation wells as presented in the Remedial Investigation report prepared by Erler Kalinowski Inc. (EKI). The well depths and screened intervals are not known for many of these wells. Consequently there is uncertainty regarding the vertical and, to a lesser extent, the horizontal extent of TCE in the South Archibald area. This distribution of TCE was entered into the model in Layer 1 during the stress period corresponding to the first quarter of 1990 and its migration simulated over the next 21 years.

Observed vs. Simulated Hydraulic Gradients

The gradient in the vicinity of the Plume has been observed to transition from generally being toward the southwest in the 1990s and earlier to being toward the south-southeast recently (CDM, 1989; Wildermuth, 2013). This change in azimuth appears to be in response to the decrease in agricultural pumping to the west and southwest of the Plume and an increase in CDA pumping to the south and southeast (Wildermuth, 2013). Future increases in groundwater withdrawals by the CDA expansion wells south and southeast of the Plume can be anticipated perpetuate the south-southeastern gradient. Comparison of the simulated water levels and observed water levels at the end of the simulation indicates that there is a difference between the simulated and observed gradients in the vicinity of the Plume. The observed gradient in spring of 2012 was 0.0025 to the southeast (165 degrees) whereas the simulated gradient was 0.0034 to the southwest (200 degrees). As a result the simulated concentrations are somewhat higher than observed in the southwestern part of the leading edge of the Plume and somewhat lower in the south-southeastern part of the Plume. Rather than attempting extensive modifications of the underlying flow model to better reproduce the observed gradient, we have taken into account the bias to the southwest in the evaluation of simulated concentrations in predictive runs presented later in this memo.

Results – Simulated TCE Concentrations

The simulated distribution of TCE for the unmodified GSSI model and heterogeneous log-normal arrays of hydraulic conductivity with variances of 4.0, 4.5, and 5.0 are presented in Figures 6 through 9. The simulated plumes extend farther to the southwest than the observed plume because the flow model does not reproduce the shift in gradient to the south in the later years of the simulation. Simulated TCE concentrations were compared to observed concentrations in 13 wells (Figure 10). The root mean square error between observed and simulated concentrations ranged from 16.5 to 23.9 (Table 1). The biases of the five different arrays of K for the variance 4.5 runs ranged from 17.8 to 19.0 (Table 1). The simulated concentrations throughout the Plume were generally lower than the observed concentrations. The simulated concentrations are particularly lower in the vicinity of Schaefer and Riverside Avenues where higher observed concentrations persisted, as shown in observed and simulated concentrations at wells W62 (Figure 11). This is attributed to underestimating the initial mass of TCE in the 1990 starting condition and the process of back diffusion of TCE from contaminated fine-grained sediment lenses into transmissive sand and gravel beds. In evaluating the predictive simulations that follow, it is necessary to bear in mind that the simulated concentrations are likely to be biased low and that higher concentrations will persist longer than simulated.

The results of the simulations of TCE migration indicate that the randomly assigned heterogeneous field of values for K with a log-normal distribution and a variance of 5 produced simulated concentrations that most closely matched the observed concentrations in 2012 because it preserved higher concentrations in the northern portion of the plume.

Examination of observed and simulated concentrations at wells W42 and CDA I-10 in the downgradient half of the plume indicate that simulations with a variance of 4.5 in K better recreate the observed migration of the plume (Figures 12 and 13). The simulation with a variance of 4.0 in K predicts migration that is too rapid and concentrations that are too high at the downgradient end of the plume, while the simulation with a variance of 5.0 in K produces slower migration and concentrations distinctly lower than observed.

Subsequently predictive simulations of the 2 proposed configurations of 3 new CDA wells were conducted with seven different randomly assigned heterogeneous arrays of values for K with a log-normal distribution and a variance ranging from 4.0 to 5.0.

PREDICTIVE SIMULATIONS

The CDA plans to add three production wells as part of the Desalter II expansion project. Configuration No. 1 includes 2 wells along Bellegrave Avenue (Sites 1 and 2) and a third well on Merrill Avenue west of Archibald Avenue (Site 3S). Configuration No. 2 includes the 2 wells on Bellegrave and a third on Edison Avenue west of Archibald Avenue (Site 3N). Twenty-two year simulations were performed to simulate TCE migration from 2012 to 2034 and predict concentrations at the proposed new wells as well as existing CDA wells I-10 and I-11.

The initial condition for these simulations was the approximate TCE distribution in 2012 as prepared by the Chino Basin Watermaster (Wildermuth, 2013; Figure 10). The hydrologic period from January 1982 to December 2003 in the calibration model were used in the predictive simulations (GSSI, 2013). Other inputs such as groundwater extraction, wastewater discharge, artificial recharge, and general head boundary water level projections were provided by the Chino Basin Watermaster (GSSI, 2013).

Simulated Wellhead Concentrations for Configuration No. 1

Figures 14 through 18 show simulated concentrations at wells CDA I-10, CDA I-11, Site 1, Site 2, and Site 3S for seven arrays of hydraulic conductivity. The peak concentration for each well and the year when it occurs is presented in Table 2. The concentrations in Table 2 represent the flow weighted combined concentration of TCE in Layers 1 and 2. Note that TCE migration into the deeper portions of the aquifer represented by Layer 2 of the model did not exceed 1 mg/L. Again, it should be remembered that the model predictions of 2012 TCE concentrations in the qualitative calibration runs were biased low and it is likely that these simulations are as well.

Figure 19 shows the simulated plume in 2029 (the year of approximate of peak concentrations in well CDA I-11) based on heterogeneous array of values for K with a log-normal distribution and a variance of 4.5. The simulated TCE plume probably extends farther to the southwest in the model simulation than it would actually because the flow model does not produce a southward gradient.

Based on the simulated concentrations of TCE and taking into consideration the low bias in simulated concentrations seen during the qualitative calibration, the TCE concentration in well CDA I-11 is expected to exceed the MCL for TCE. However, as discussed earlier, the flow model does not reproduce the shift in gradient to the south. If the predicted plume is rotated 35 degrees to the south, concentrations in wells at Site 2 and Site 3S would also likely exceed the MCL (Figure 20).

Simulated Wellhead Concentrations for Configuration No. 2

Figures 21 through 25 show simulated concentrations at wells CDA I-10, CDA I-11, Site 1, Site 2, and Site 3N for 7 arrays of hydraulic conductivity. The peak concentration for each well and the year when it occurs is presented in Table 3. The concentrations in Table 3 represent the flow weighted combined concentration of TCE in Layers 1 and 2. Note that TCE migration into the deeper portions of the aquifer represented by Layer 2 of the model did not exceed 1 mg/L. Again, it should be remembered that the model predictions of 2012 TCE concentrations in the qualitative calibration runs were biased low and it is likely that these simulations are as well.

Figure 26 shows the simulated plume in 2032 (the year of approximate of peak concentrations in well CDA I-11) based on heterogeneous array of values for K with a log-normal distribution and a variance of 4.5. The simulated TCE plume extends farther to the southwest in the model simulation than it would actually because the flow model does not produce a southward gradient.

Based on the simulated concentrations of TCE and taking into consideration the low bias in simulated concentrations seen during the qualitative calibration wells CDA I-11 and Site 3N are expected to exceed the MCL for TCE. However, as discussed earlier, the flow model does not reproduce the shift in gradient to the south. If the predicted plume is rotated 35 degree to the south, concentrations in well at Site 2 would also likely exceed the MCL (Figure 27).

REFERENCES

Camp Dresser & Mckee Inc (CDM), 1989. Investigation of Potential Sources of Groundwater contamination South of Ontario International Airport. Prepared for: City of Los Angeles Department of Airports. September 1989.

Dagan, G., 1989. Flow and Transport in Porous Formations. Springer-Verlag.

Dagan, G., and S. P. Neuman (Eds.), 1996. Subsurface Flow and Transport: The Stochastic Approach. Cambridge Univ. Press.

Gelhar, L. W., 1993. Stochastic Subsurface Hydrology, Prentice Hall.

Geoscience Support Services Inc (GSSI), 2013. "Chino Basin Ground Water Model Update and Evaluation of Potential Production Well Sites". Prepared for: Chino Basin Desalter Authority. Powerpoint Presentation. December 10, 2013.

Rubin, Y., 2003. Applied Stochastic Hydrogeology, Oxford Univ. Press.

Tartakovsky, D. M., 2013. Assessment and management of risk in subsurface hydrology: A review and perspective, *Advances in Water Resources*, 51, 247-260.

Wildermuth Environmental, 2013. "2012 State of the Basin Atlas". Prepared for Chino Basin Watermaster. June, 2013.

Table 1. Calibration Statistics

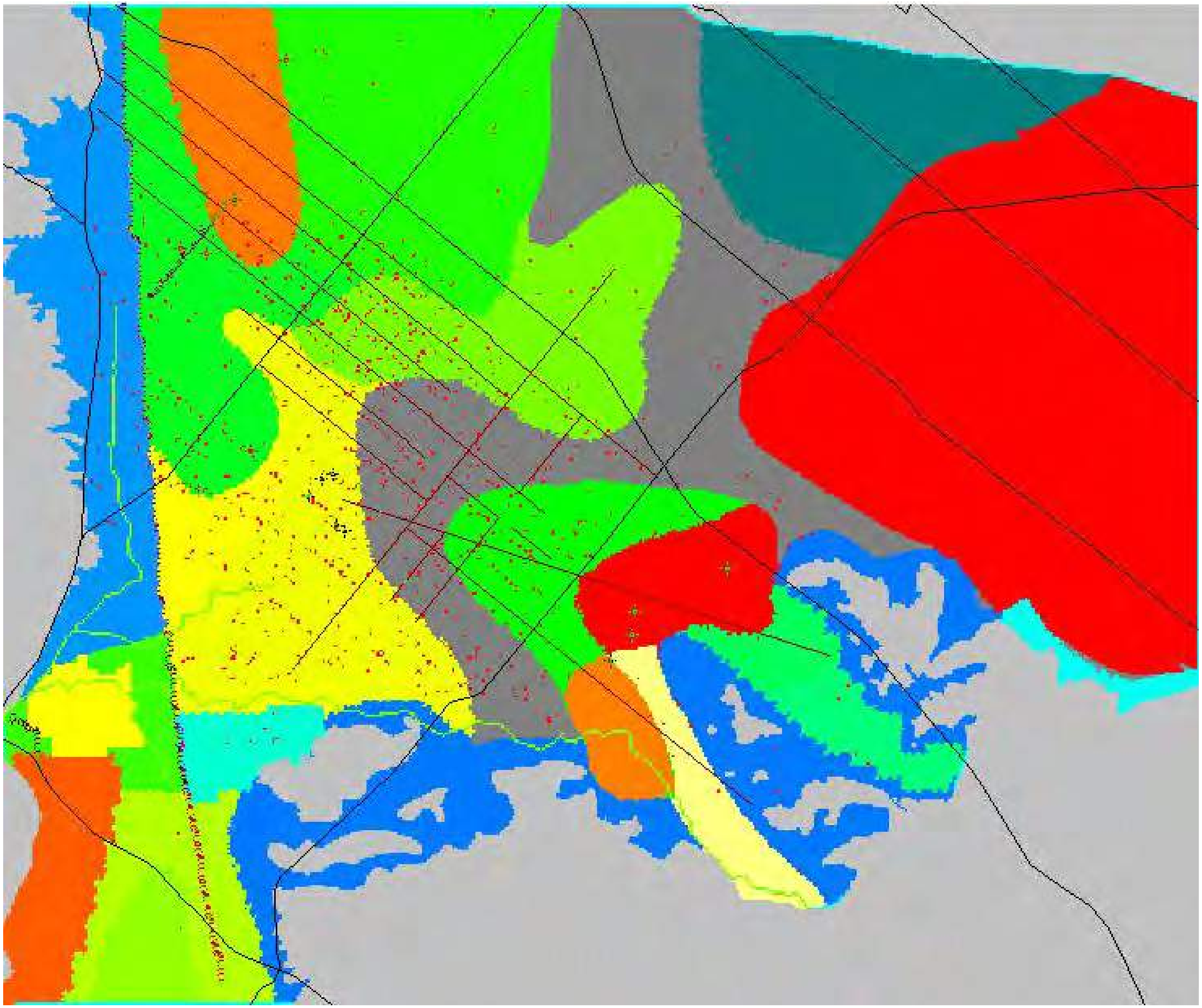
	Simulation Hydraulic Conductivity Field							
	Original	Variance 4	Variance 4.5 run 1	Variance 4.5 run 2	Variance 4.5 run 3	Variance 4.5 run 4	Variance 4.5 run 5	Variance 5
Residual Mean	10.673	8.130	7.340	7.323	6.826	7.445	7.352	6.984
Absolute Residual Mean	14.038	11.929	10.074	10.924	10.272	10.189	9.686	9.029
Residual Std. Deviation	21.144	19.593	16.001	17.317	16.541	16.116	15.960	14.709
Sum of Squares	1.264E+05	1.010E+05	7.019E+04	7.982E+04	7.215E+04	7.127E+04	6.981E+04	6.045E+04
RMS Error	23.911	21.381	17.821	19.004	18.068	17.958	17.773	16.538
Min. Residual	-24.598	-26.133	-28.533	-25.463	-27.218	-23.420	-25.966	-49.758
Max. Residual	139.848	132.884	107.245	117.203	113.150	108.508	109.231	82.156
Number of Observations	221	221	221	221	221	221	221	221
Range in Observations	140	140	140	140	140	140	140	140
Scaled Residual Std. Deviation	0.151	0.140	0.114	0.124	0.118	0.115	0.114	0.105
Scaled Absolute Residual Mean	0.100	0.085	0.072	0.078	0.073	0.073	0.069	0.064
Scaled RMS Error	0.171	0.153	0.127	0.136	0.129	0.128	0.127	0.118
Scaled Residual Mean	0.076	0.058	0.052	0.052	0.049	0.053	0.053	0.050

Table 2. Peak Concentrations of TCE for Configuration 1

Simulation	**CDA I-10** TCE (µg/L)	Year	**CDA I-11** TCE (µg/L)	Year	**Site 1** TCE (µg/L)	Year	**Site 2** TCE (µg/L)	Year	**Site 3S** TCE (µg/L)	Year
Variance 4	2.59	2025	14.87	2028	0.13	2034	6.16	2027	5.23	2027
Variance 4.5 run 1	3.30	2029	13.11	2028	0.06	2034	4.91	2027	3.02	2032
Variance 4.5 run 2	3.77	2029	13.36	2029	0.08	2034	4.36	2027	3.46	2031
Variance 4.5 run 3	3.68	2029	12.04	2030	0.08	2034	4.24	2029	3.58	2031
Variance 4.5 run 4	3.15	2028	12.31	2030	0.07	2034	4.70	2029	3.47	2032
Variance 4.5 run 5	3.04	2028	12.69	2030	0.11	2034	3.98	2028	3.77	2032
Variance 5	3.33	2029	9.01	2032	0.08	2034	3.04	2032	1.90	2034

Table 3. Peak Concentrations of TCE for Configuration 2

Simulation	CDA I-10		CDA I-11		Site 1		Site 2		Site 3N	
	TCE (µg/L)	Year	TCE (µg/L)	Year	TCE (µg/L)	Year	TCE (µg/L)	Year	TCE (µg/L)	Year
Variance 4	2.69	2026	14.49	2029	0.11	2034	3.70	2032	12.83	2017
Variance 4.5 run 1	3.36	2029	11.17	2030	0.03	2034	1.58	2033	11.53	2016
Variance 4.5 run 2	3.69	2029	10.76	2031	0.05	2034	1.53	2033	11.44	2016
Variance 4.5 run 3	3.61	2029	10.41	2032	0.04	2034	1.76	2033	11.11	2017
Variance 4.5 run 4	2.99	2028	10.40	2032	0.08	2034	1.85	2033	10.43	2016
Variance 4.5 run 5	2.87	2029	11.06	2032	0.04	2034	1.68	2034	10.89	2016
Variance 5	2.84	2030	5.41	2033	0.03	2034	0.61	2015	9.29	2016



Z:\Projects\

DUDEK

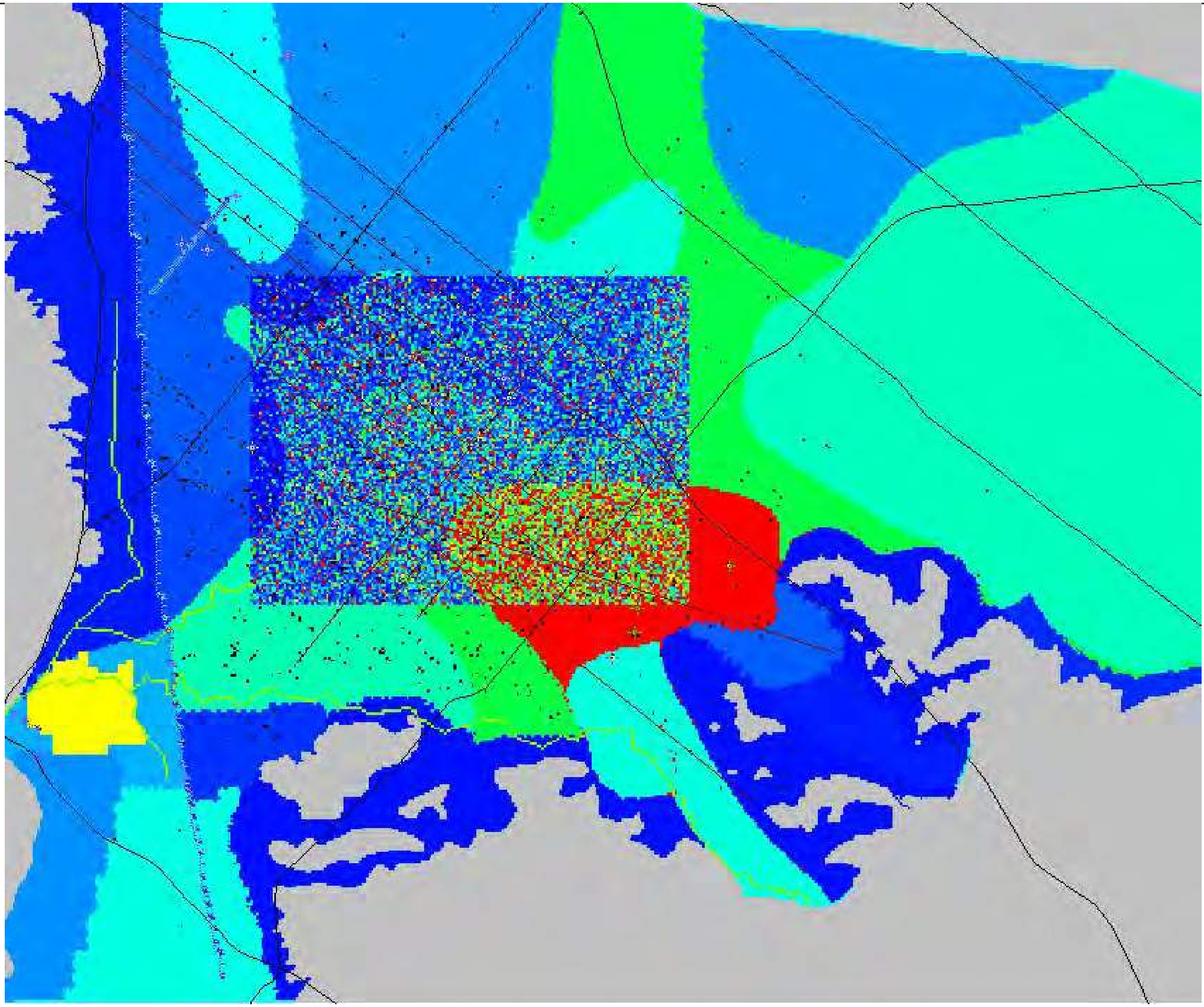
7318-01

MARCH 2015

FIGURE 1

Original Hydraulic Conductivity Distribution in Geoscience Model, Layer 1

Simulation of the Migration of the South Archibald TCE Plume and Wellhead Concentrations at Existing and Proposed CDA Wells



DUDEK

7318-01

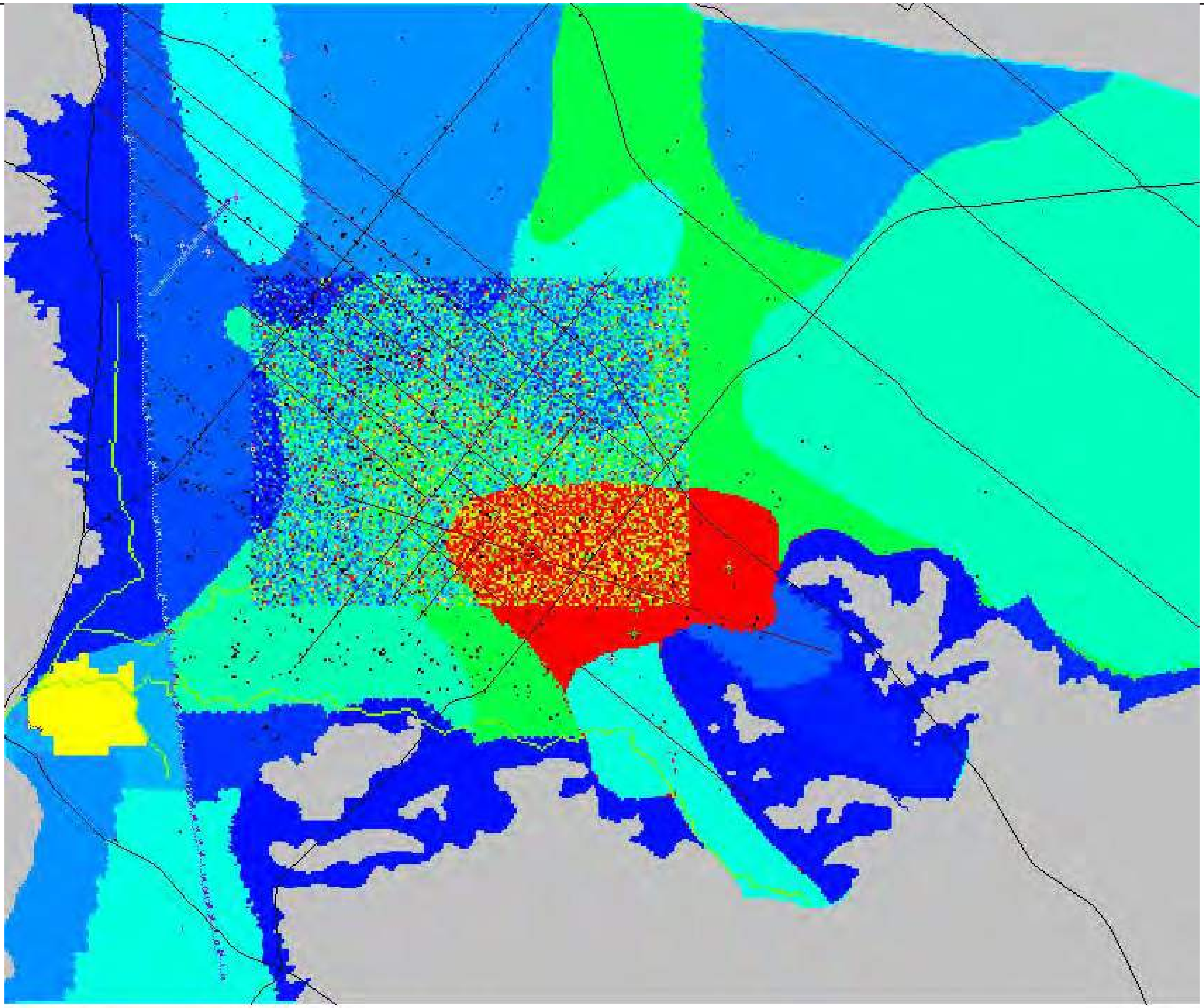
MARCH 2015

FIGURE 2

Variance of 5 Lognormal Distribution Hydraulic Conductivity Field, Layer 1

Simulation of the Migration of the South Archibald TCE Plume and Wellhead Concentrations at Existing and Proposed CDA Wells

Z:\Projects\



DUDEK

7318-01

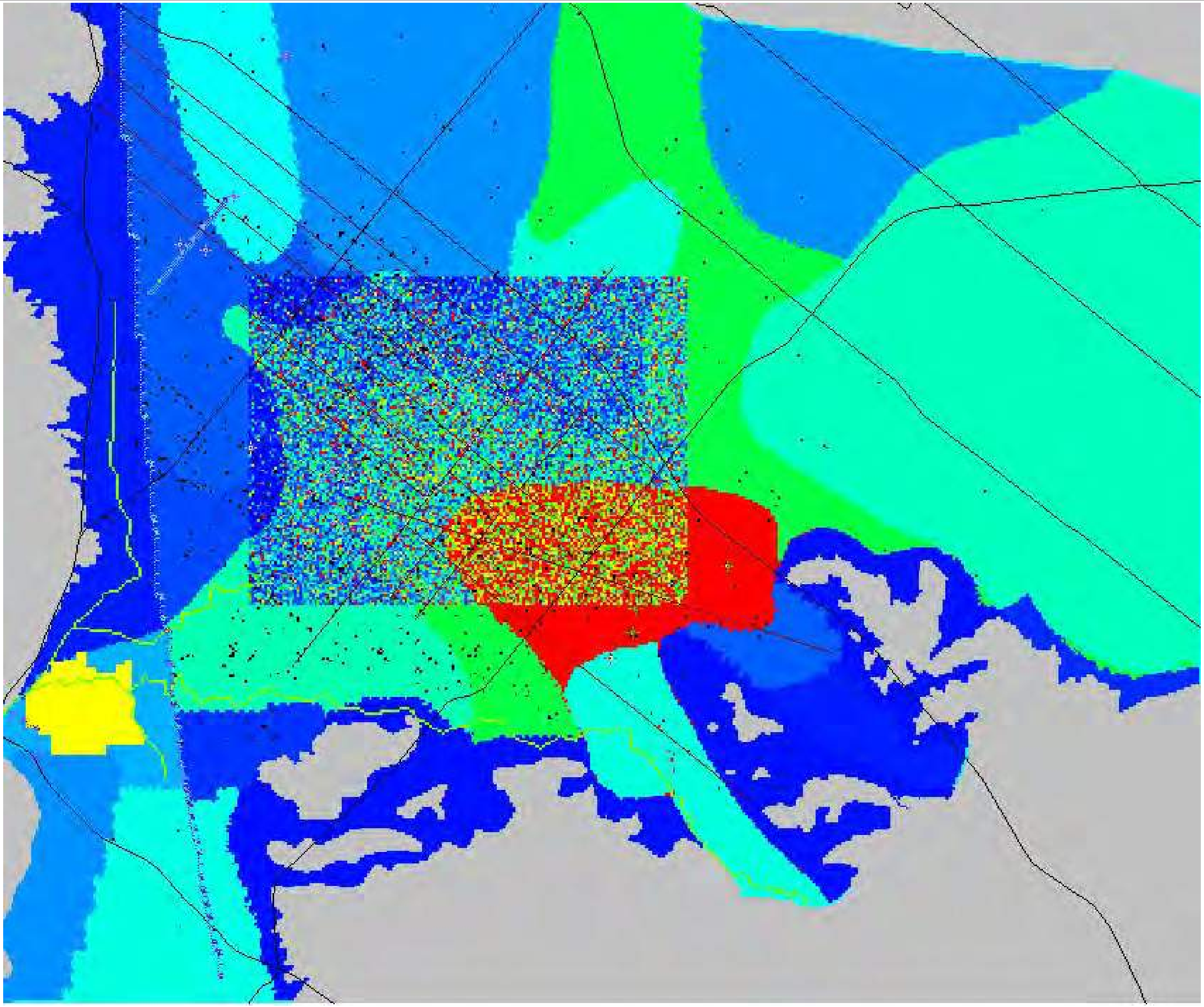
MARCH 2015

FIGURE 3

Variance of 4 Lognormal Distribution Hydraulic Conductivity Field, Layer 1

Simulation of the Migration of the South Archibald TCE Plume and Wellhead Concentrations at Existing and Proposed CDA Wells

Z:\Projects\



DUDEK

7318-01

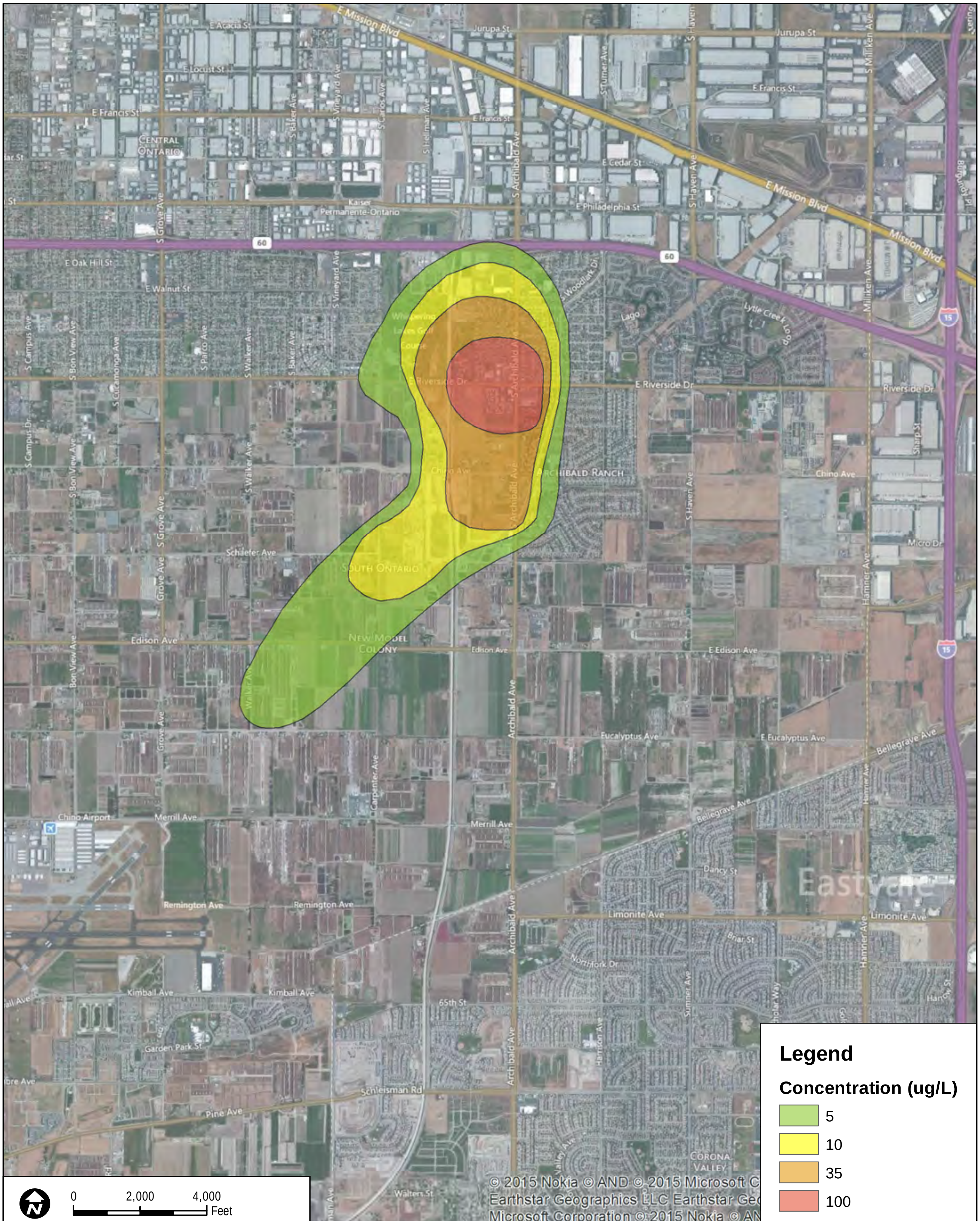
MARCH 2015

FIGURE 4

Variance of 4.5 Lognormal Distribution Hydraulic Conductivity Field, Layer 1

Simulation of the Migration of the South Archibald TCE Plume and Wellhead Concentrations at Existing and Proposed CDA Wells

Z:\Projects\



DUDEK

7318-1

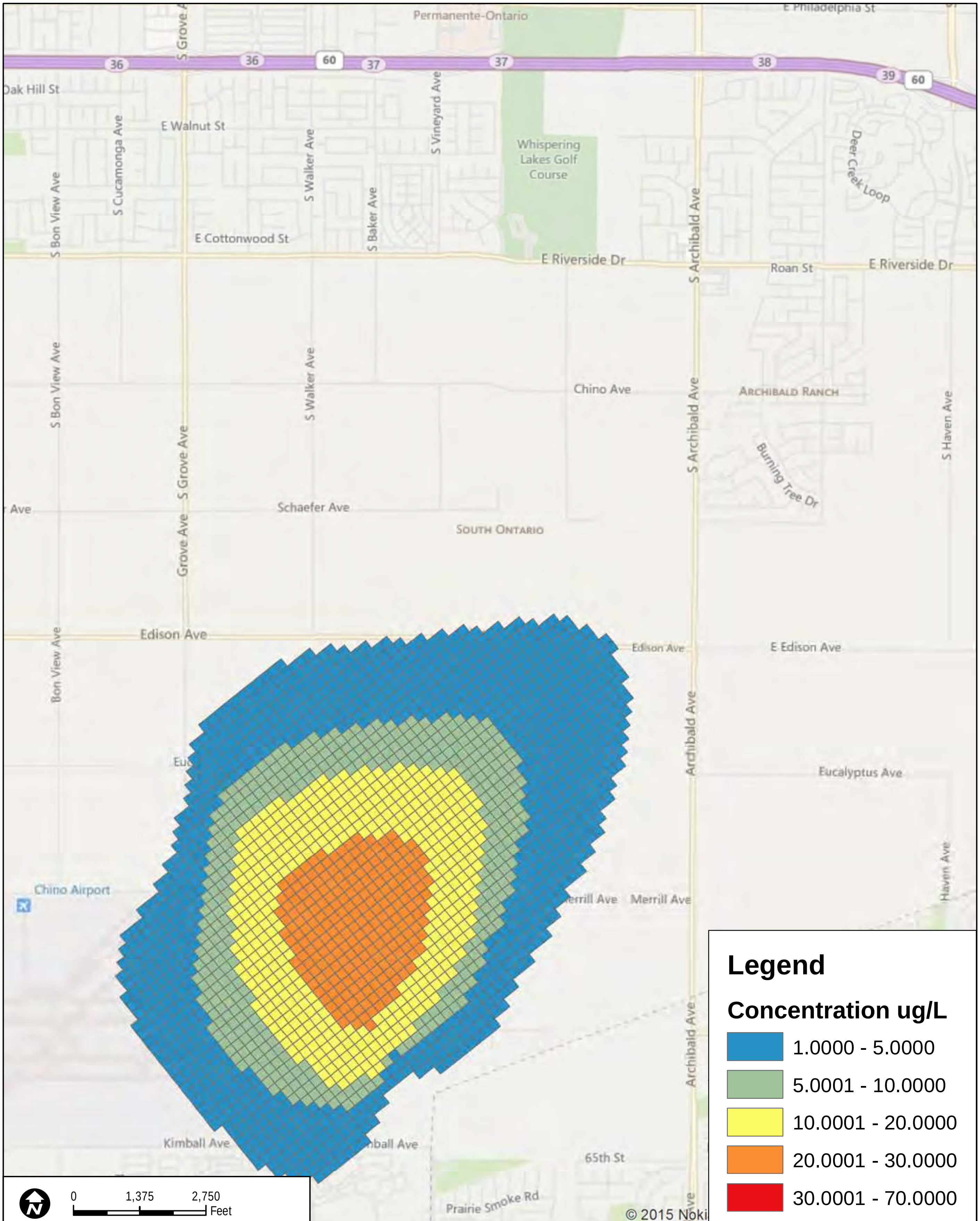
JANUARY 2015

SOURCE: RI Report prepared by EKI

Approximate Distribution of TCE Plume in 1990

Ontario

Figure 5



Legend

Concentration ug/L

- 1.0000 - 5.0000
- 5.0001 - 10.0000
- 10.0001 - 20.0000
- 20.0001 - 30.0000
- 30.0001 - 70.0000

DUDEK

7318-1

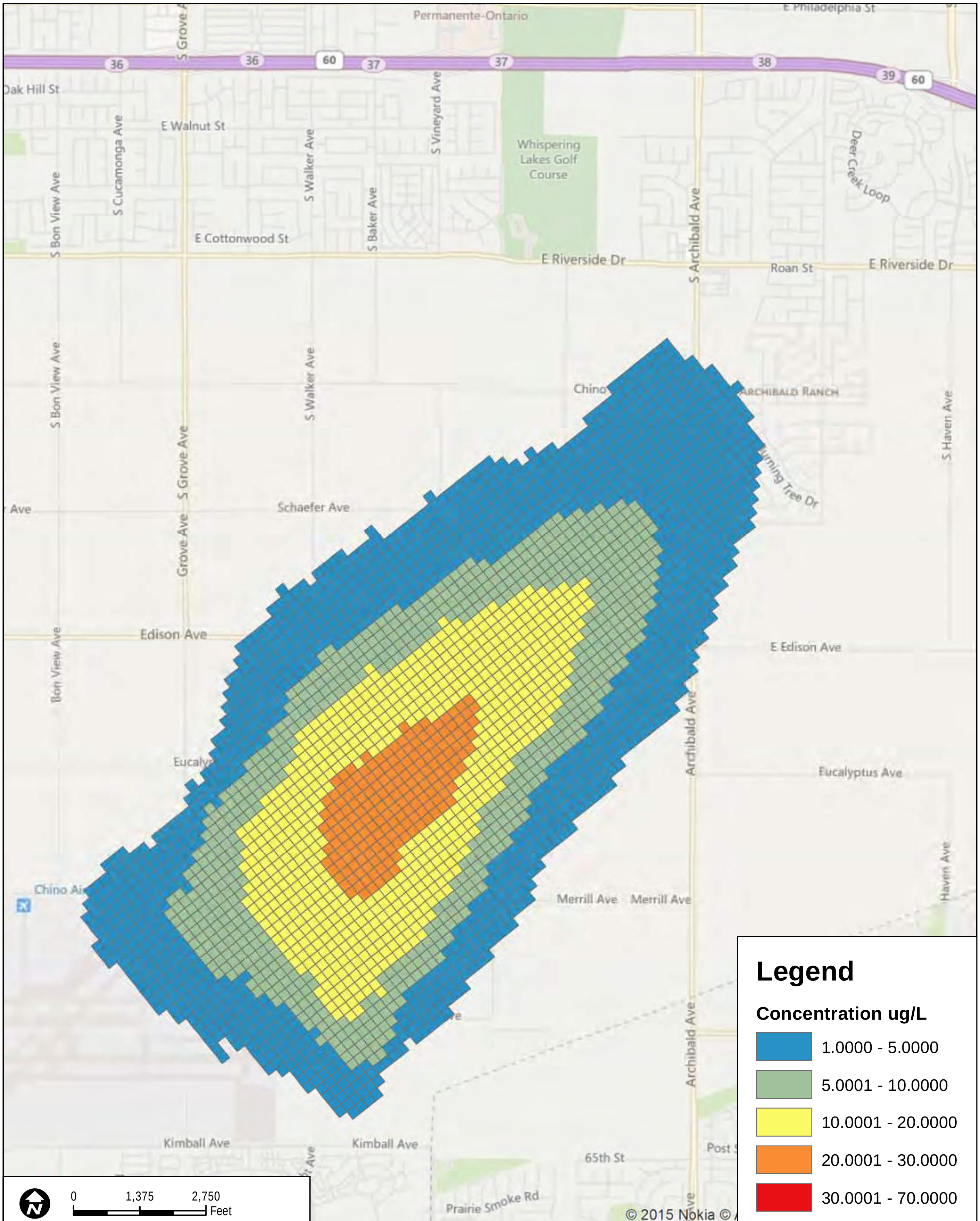
JANUARY 2015

SOURCE: Bing Maps

Calibration TCE Plume (ug/L) end of 4th Qtr 2012, Initial C = 1990 plume
Geoscience Model Flow and Transport Parameters

Ontario

Figure 6



DUDEK

7318-1

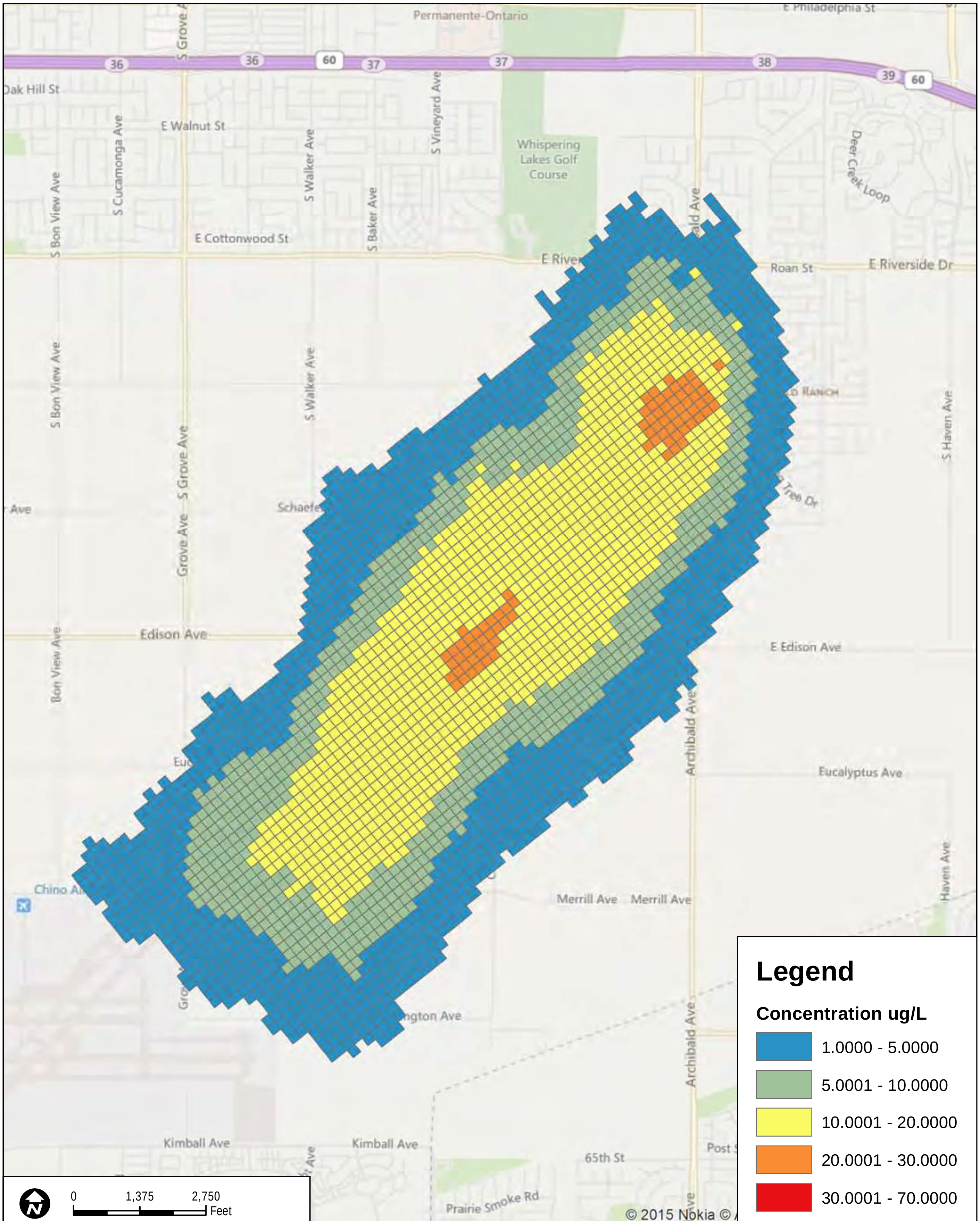
JANUARY 2015

Calibration TCE Plume (ug/L) end of 4th Qtr 2012, Initial C = 1990 plume
Variance 4 Lognormal K Field

SOURCE: Bing Maps

Ontario

Figure 7



DUDEK

7318-1

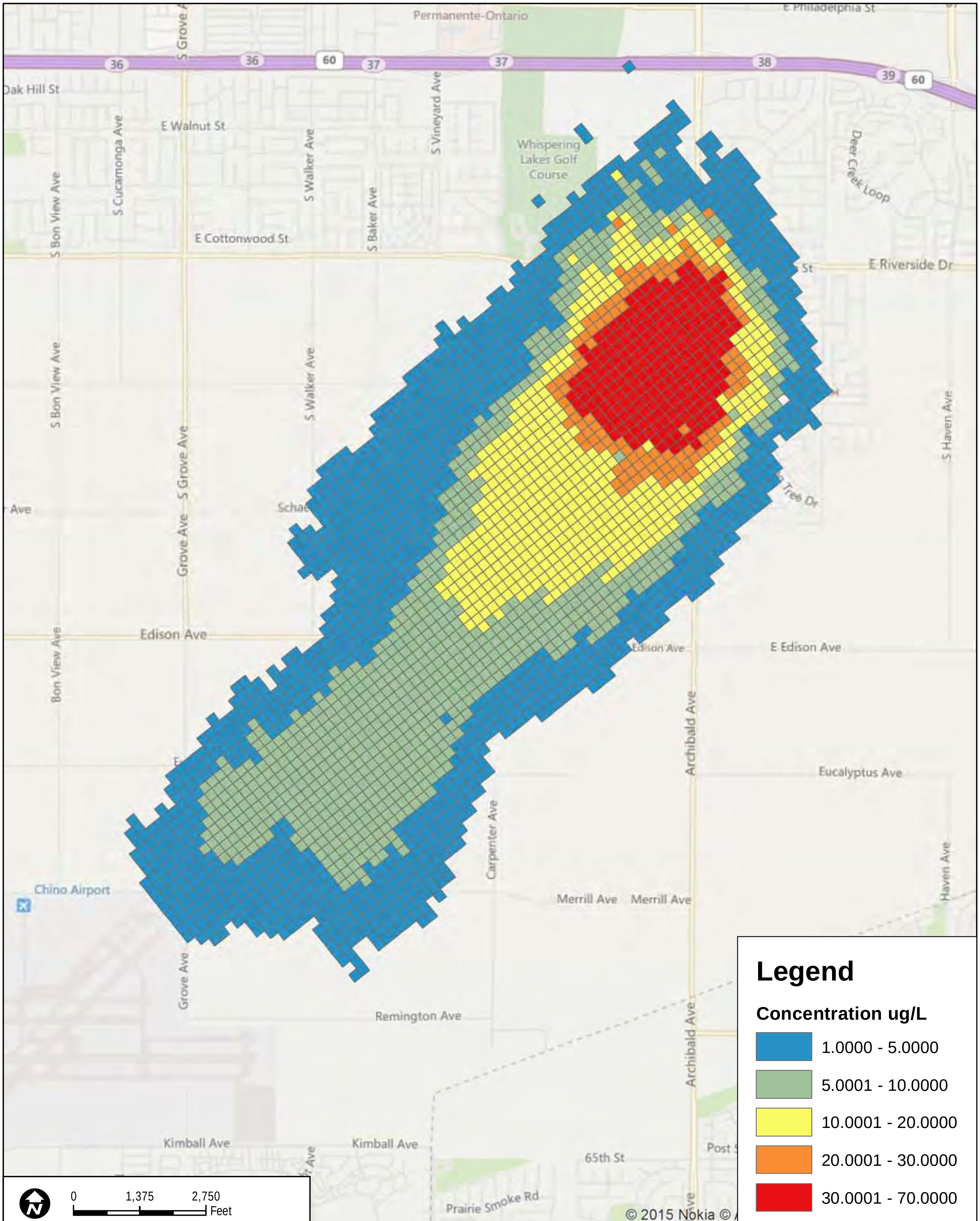
JANUARY 2015

Calibration TCE Plume (ug/L) end of 4th Qtr 2012, Initial C = 1990 plume
Variance 4.5 Lognormal K Field

SOURCE: Bing Maps

Ontario

Figure 8



DUDEK

7318-1

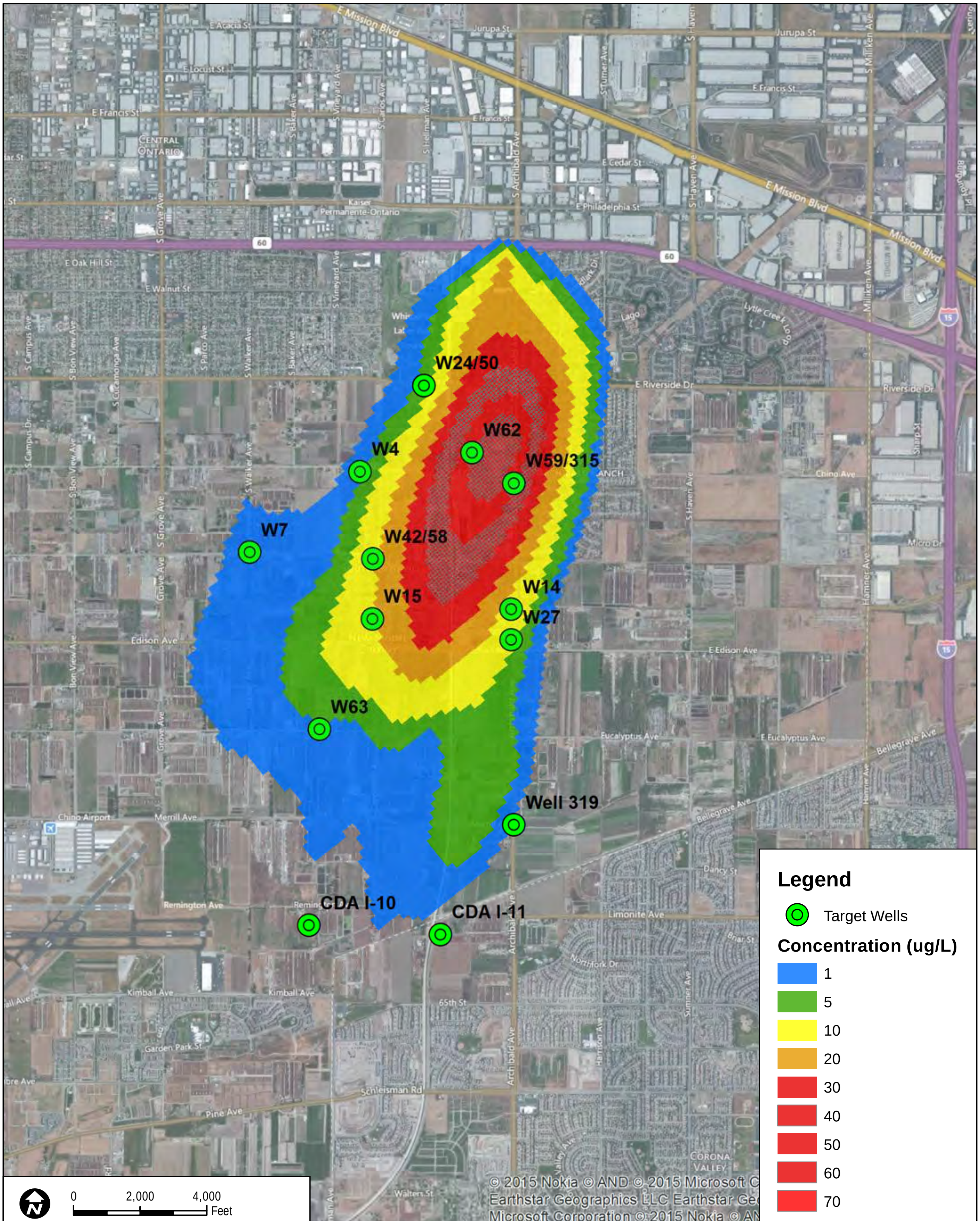
JANUARY 2015

Calibration TCE Plume (ug/L) end of 4th Qtr 2012, Initial C = 1990 plume Variance 5 Lognormal K Field

SOURCE: Bing Maps

Ontario

Figure 9



DUDEK

7318-1

JANUARY 2015

Target Wells Used to Compare Simulated and Observed TCE Concentrations. 2012 Observed Plume; Initial Condition for Predictive Runs

SOURCE: RI Report prepared by EKI

Ontario

Figure 10

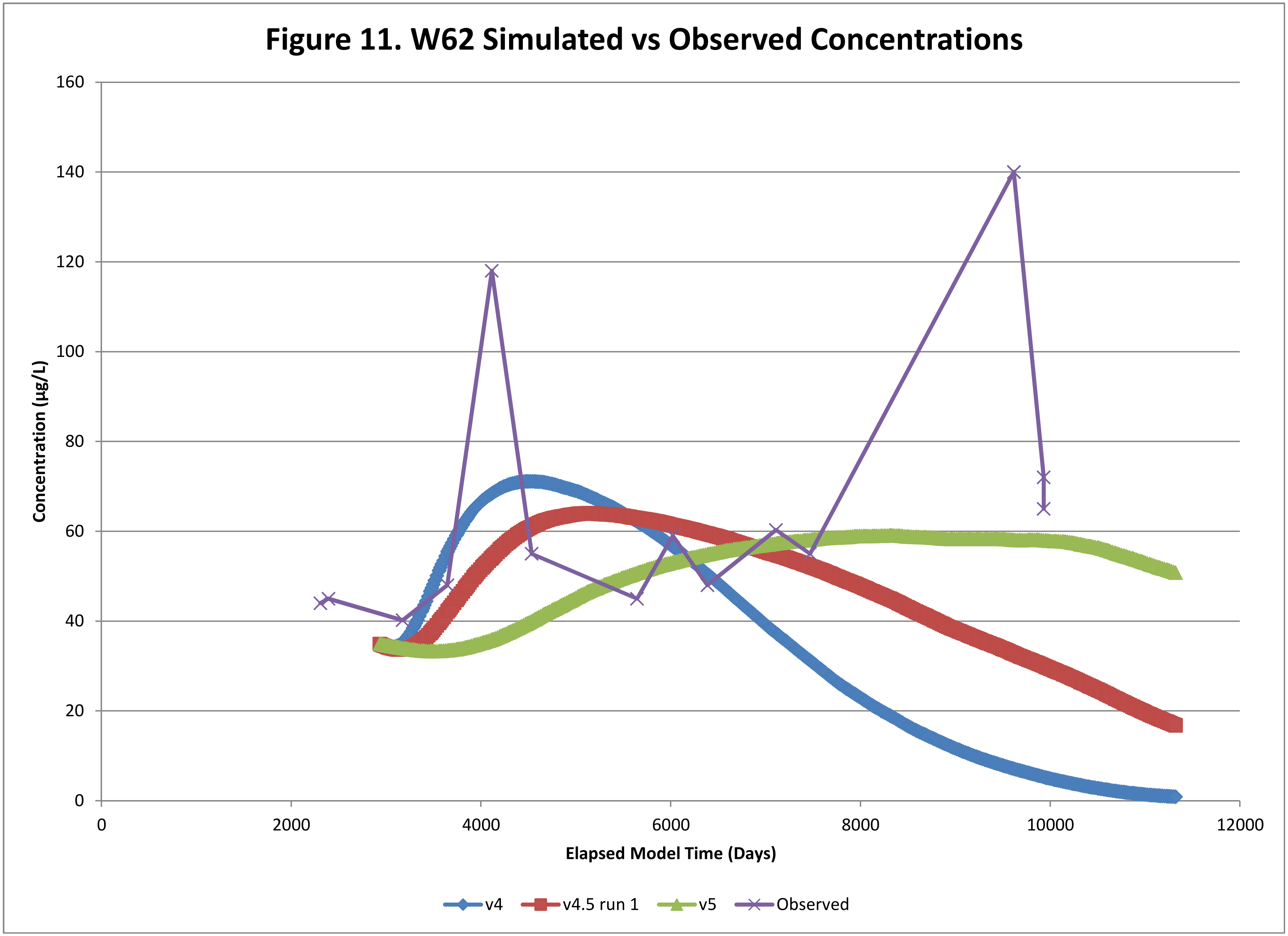


Figure 11. W62 Simulated vs Observed Concentrations
Concentration (µg/L)
160
140
120
100
80
60
40
20
0
0
2000
4000
6000
8000
10000
12000
Elapsed Model Time (Days)
v4
v4.5 run 1
v5
Observed

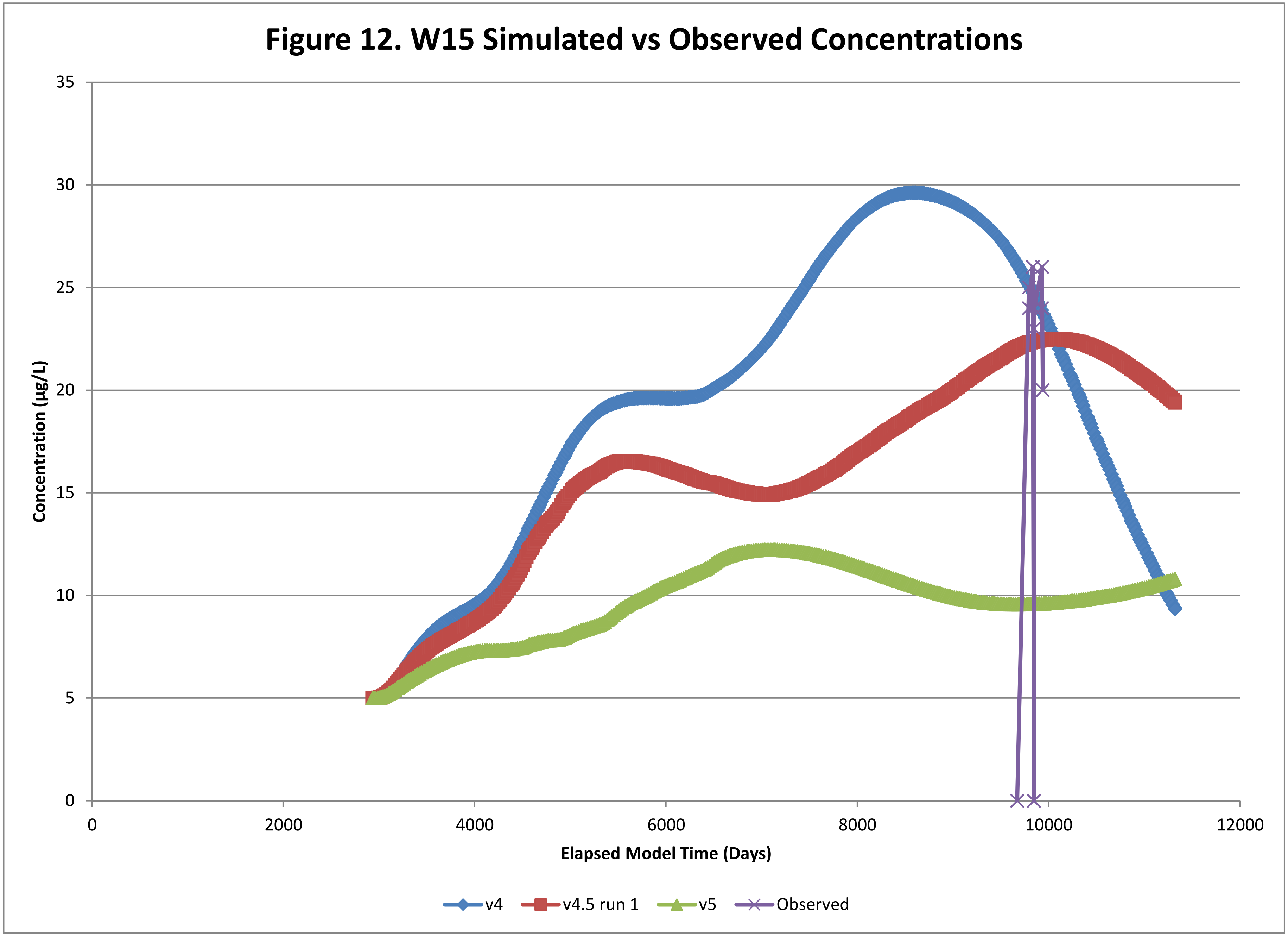


Figure 12. W15 Simulated vs Observed Concentrations
Concentration (µg/L)
35
30
25
20
15
10
5
0
0
2000
4000
6000
8000
10000
12000
Elapsed Model Time (Days)
v4
v4.5 run 1
v5
Observed

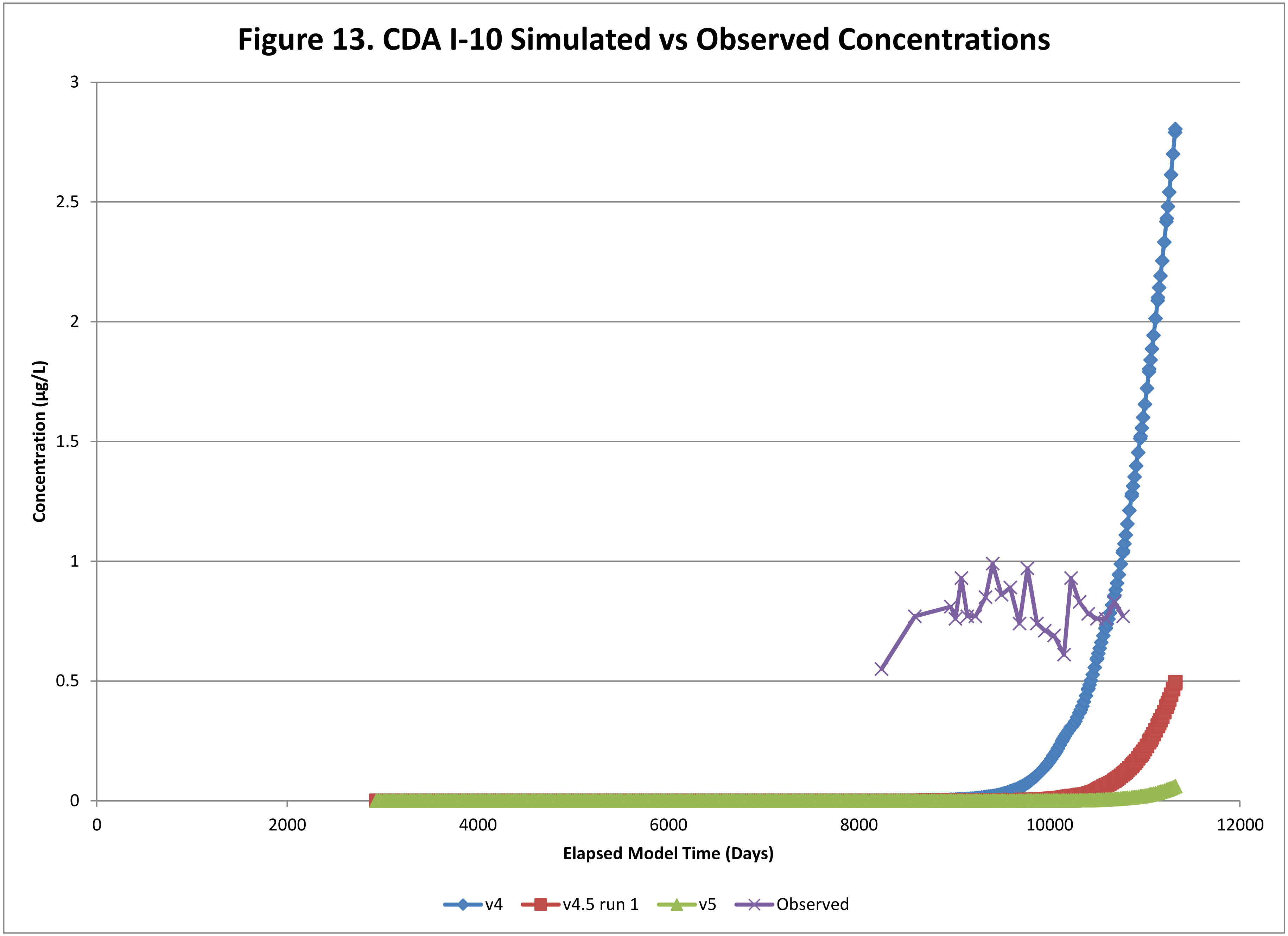


Figure 13. CDA I-10 Simulated vs Observed Concentrations
Concentration (µg/L)
3
2.5
2
1.5
1
0.5
0
0
2000
4000
6000
8000
10000
12000
Elapsed Model Time (Days)
v4
v4.5 run 1
v5
Observed

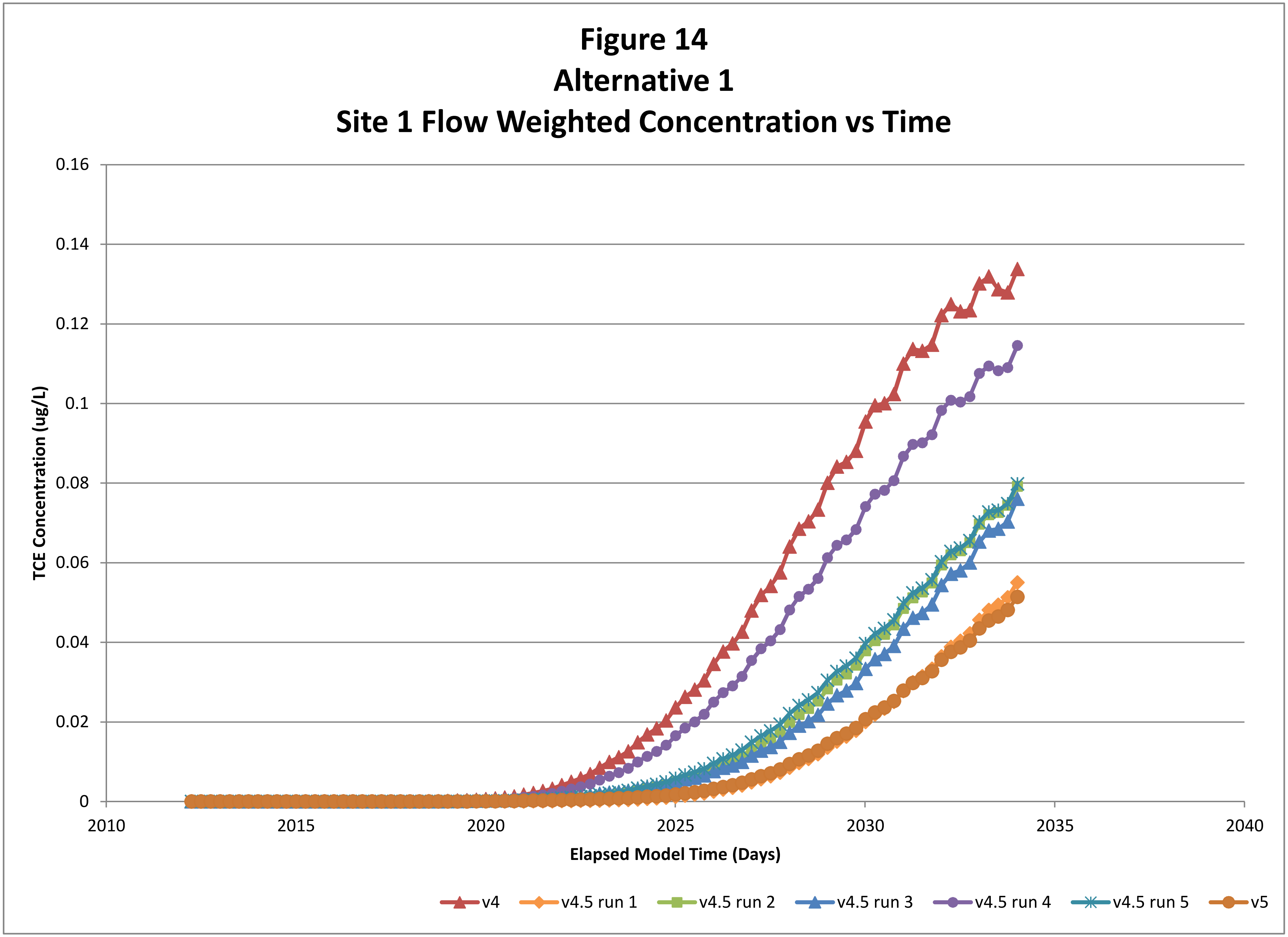


Figure 14
Alternative 1
Site 1 Flow Weighted Concentration vs Time
TCE Concentration (ug/L)
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5

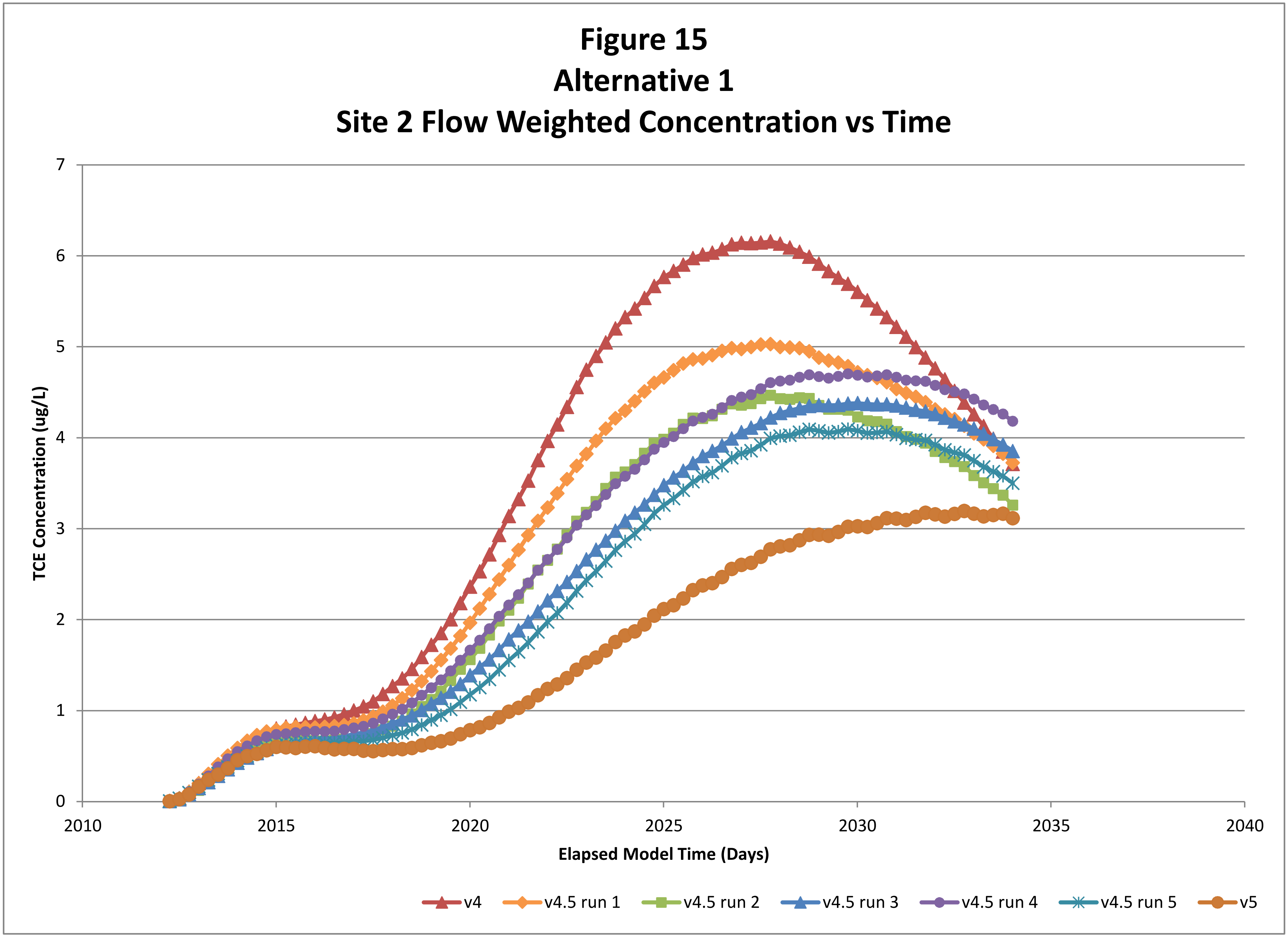


Figure 15
Alternative 1
Site 2 Flow Weighted Concentration vs Time
TCE Concentration (ug/L)
0
1
2
3
4
5
6
7
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5

Figure 16
Alternative 1
Site 3S Flow Weighted Concentration vs Time
TCE Concentration (ug/L)
0
1
2
3
4
5
6
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5

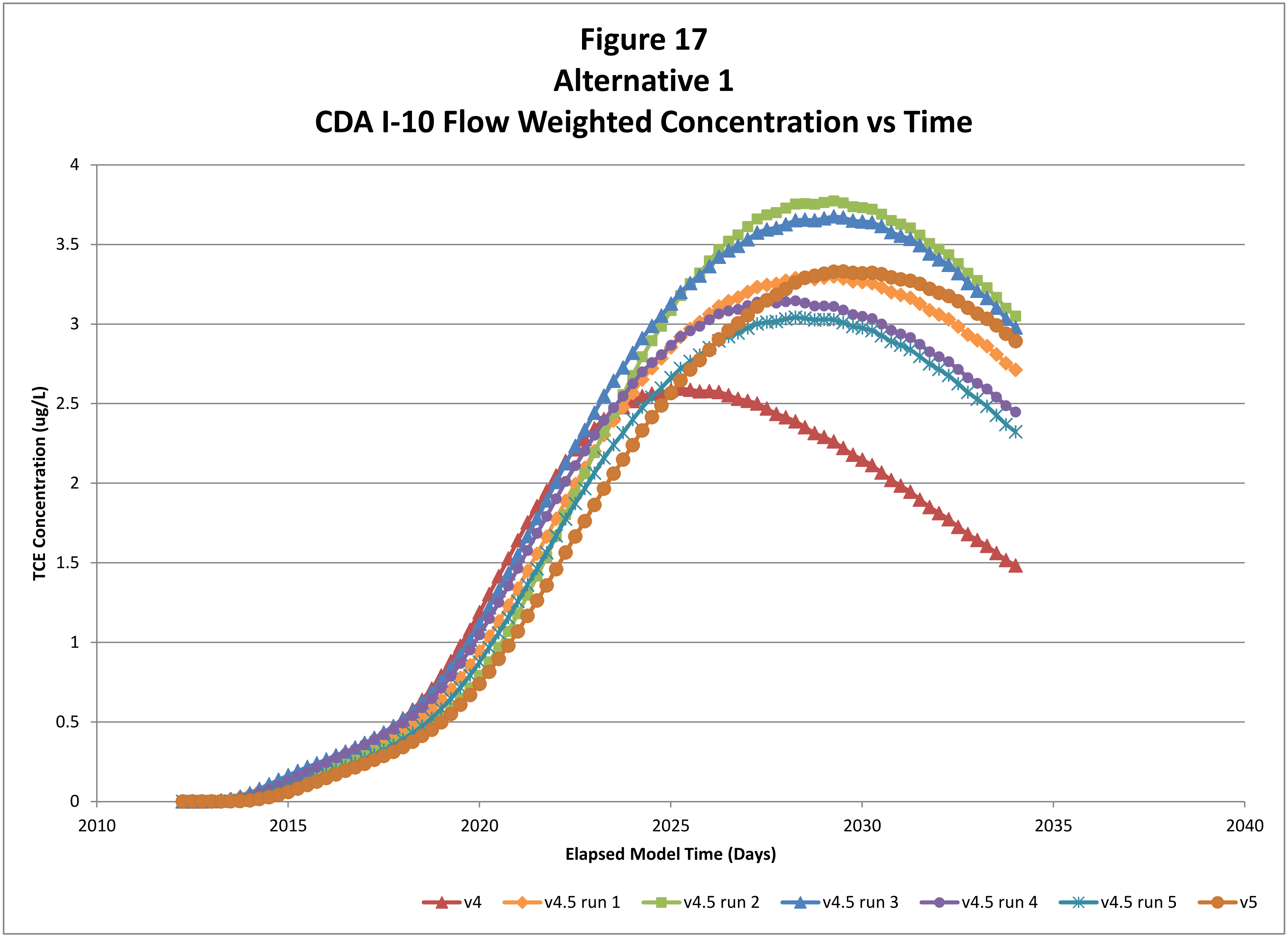


Figure 17
Alternative 1
CDA I-10 Flow Weighted Concentration vs Time
TCE Concentration (ug/L)
0
0.5
1
1.5
2
2.5
3
3.5
4
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5

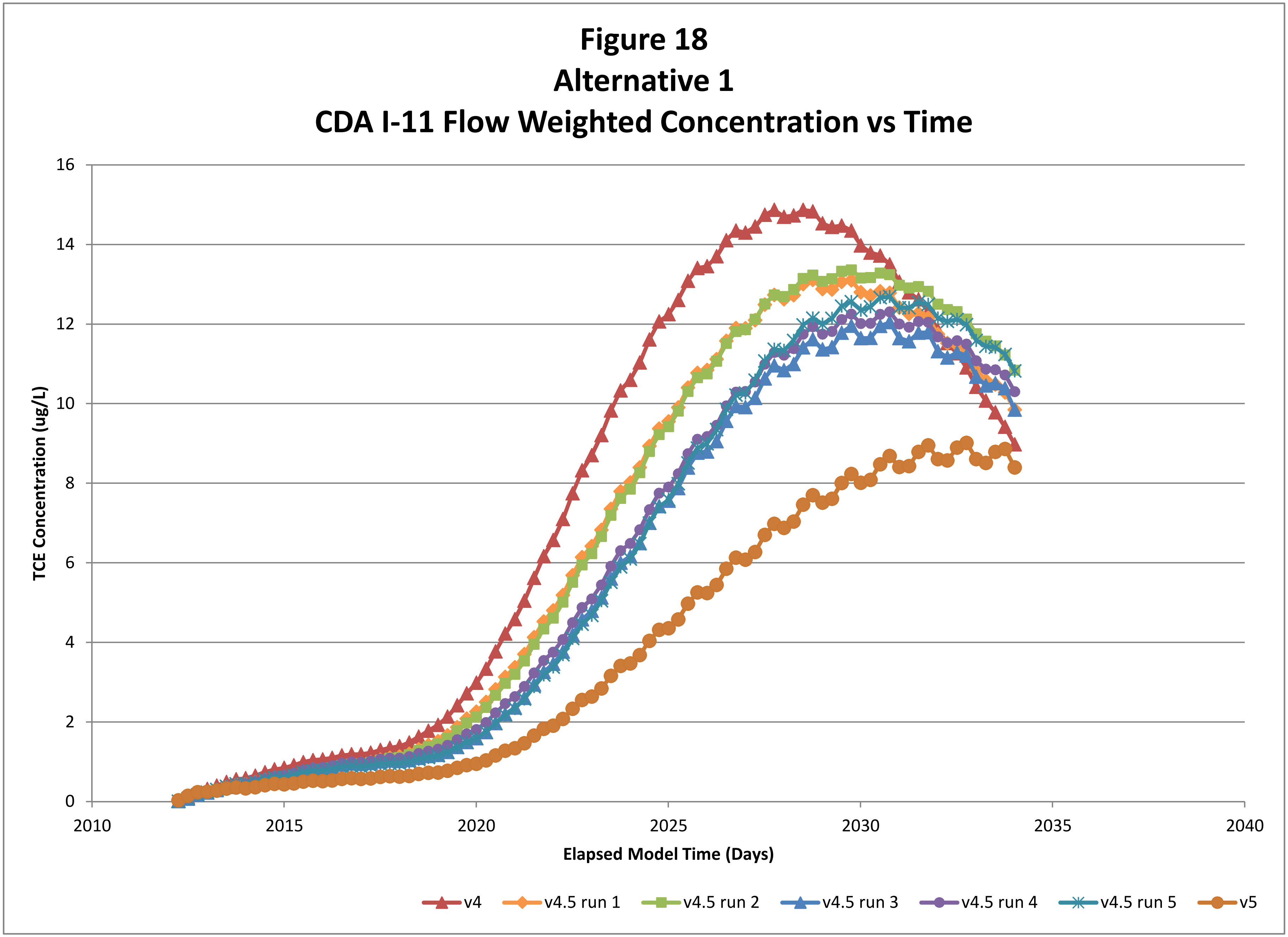
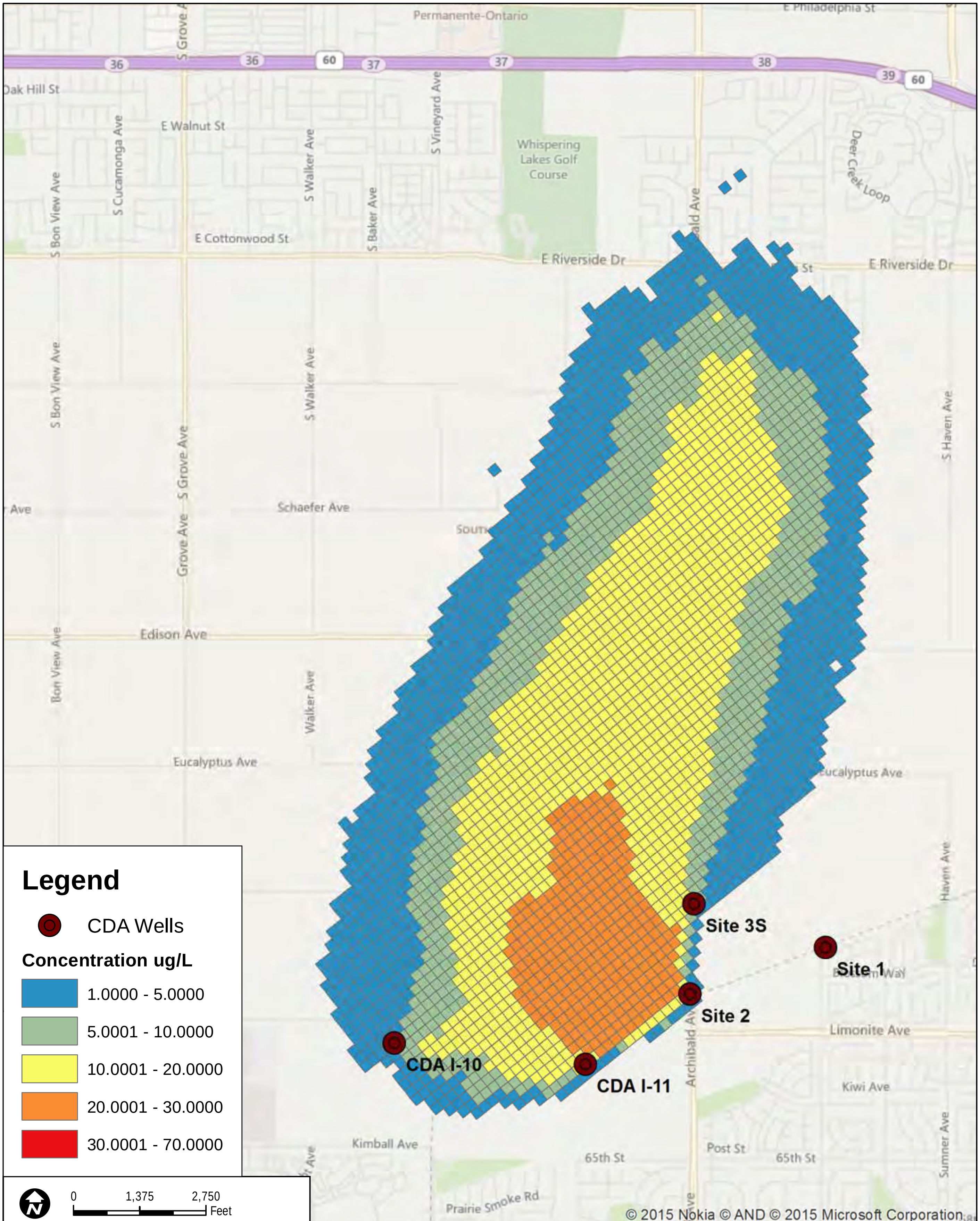


Figure 18
Alternative 1
CDA I-11 Flow Weighted Concentration vs Time
TCE Concentration (ug/L)
0
2
4
6
8
10
12
14
16
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5



DUDEK

7318-1

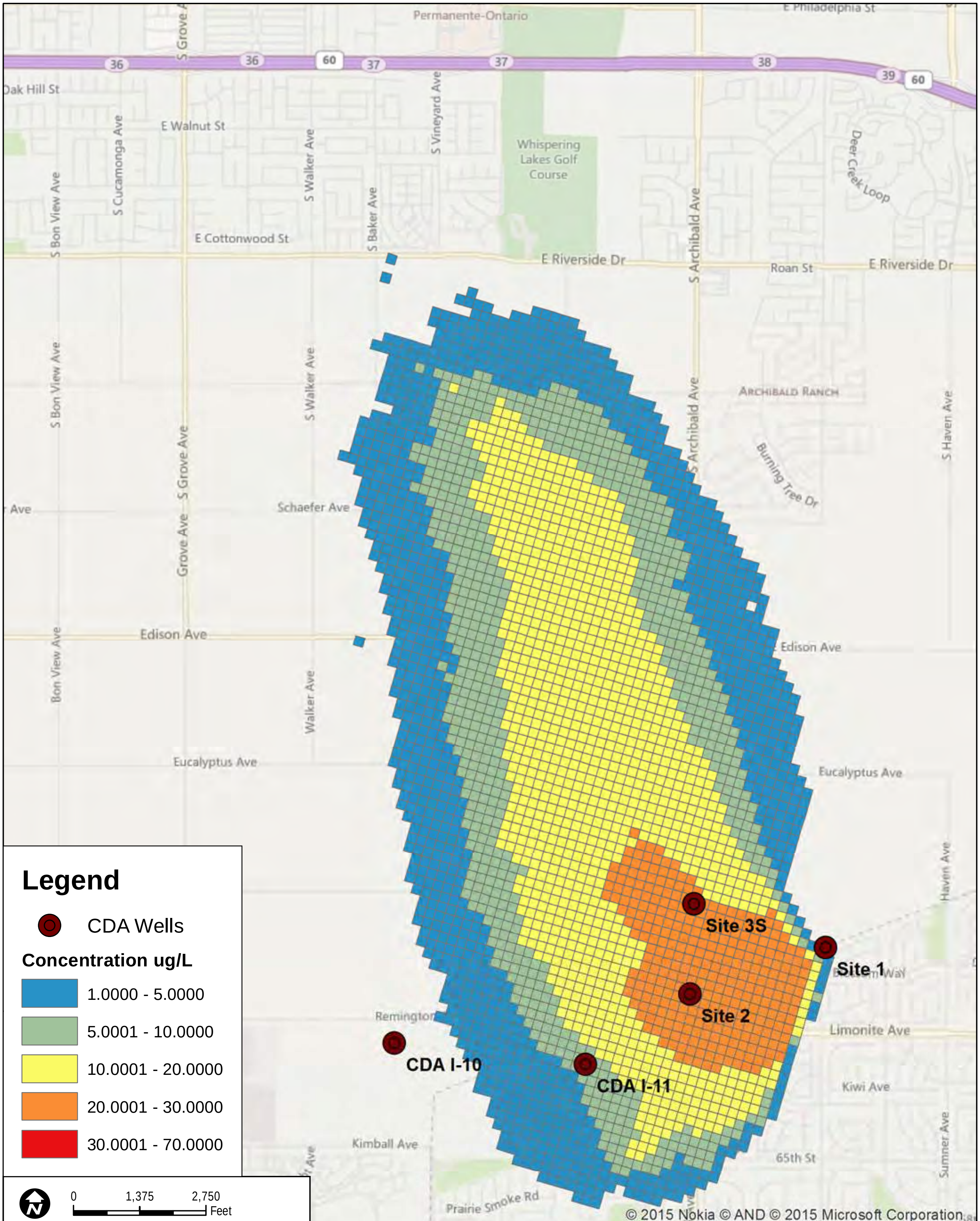
JANUARY 2015

SOURCE: Bing Maps

Ontario

Alternative 1 TCE Plume in 2029
Variance 4.5 Lognormal K Field

Figure 19



DUDEK

7318-1

JANUARY 2015

Alternative 1 TCE Plume in 2029 Rotated 35 Degrees to the South Variance 4.5 Lognormal K Field

SOURCE: Bing Maps

Ontario

Figure 20

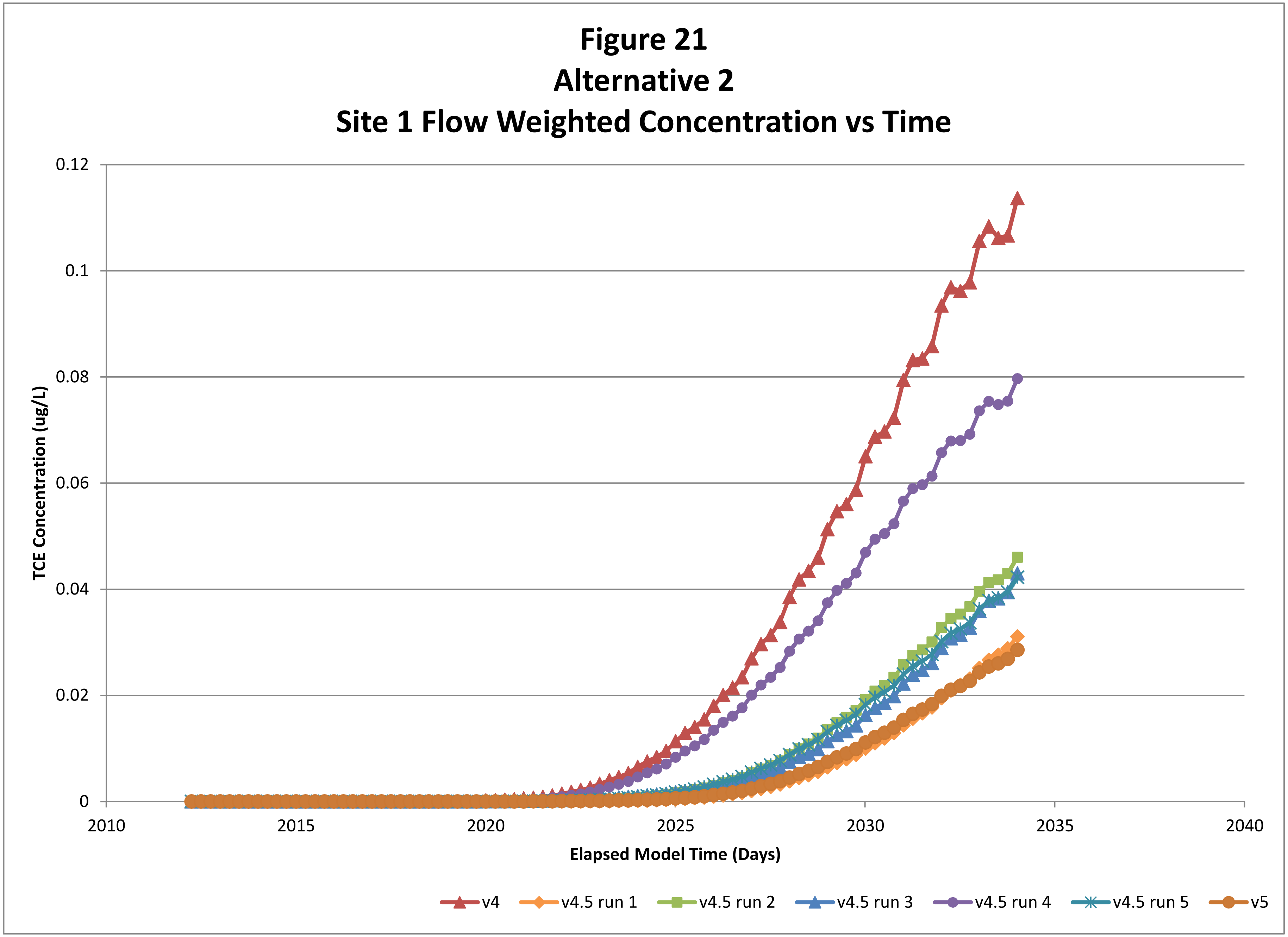


Figure 21
Alternative 2
Site 1 Flow Weighted Concentration vs Time
0.12
0.1
0.08
0.06
0.04
0.02
0
TCE Concentration (ug/L)
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5

Figure 22
Alternative 2
Site 2 Flow Weighted Concentration vs Time
TCE Concentration (ug/L)
0
0.5
1
1.5
2
2.5
3
3.5
4
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5

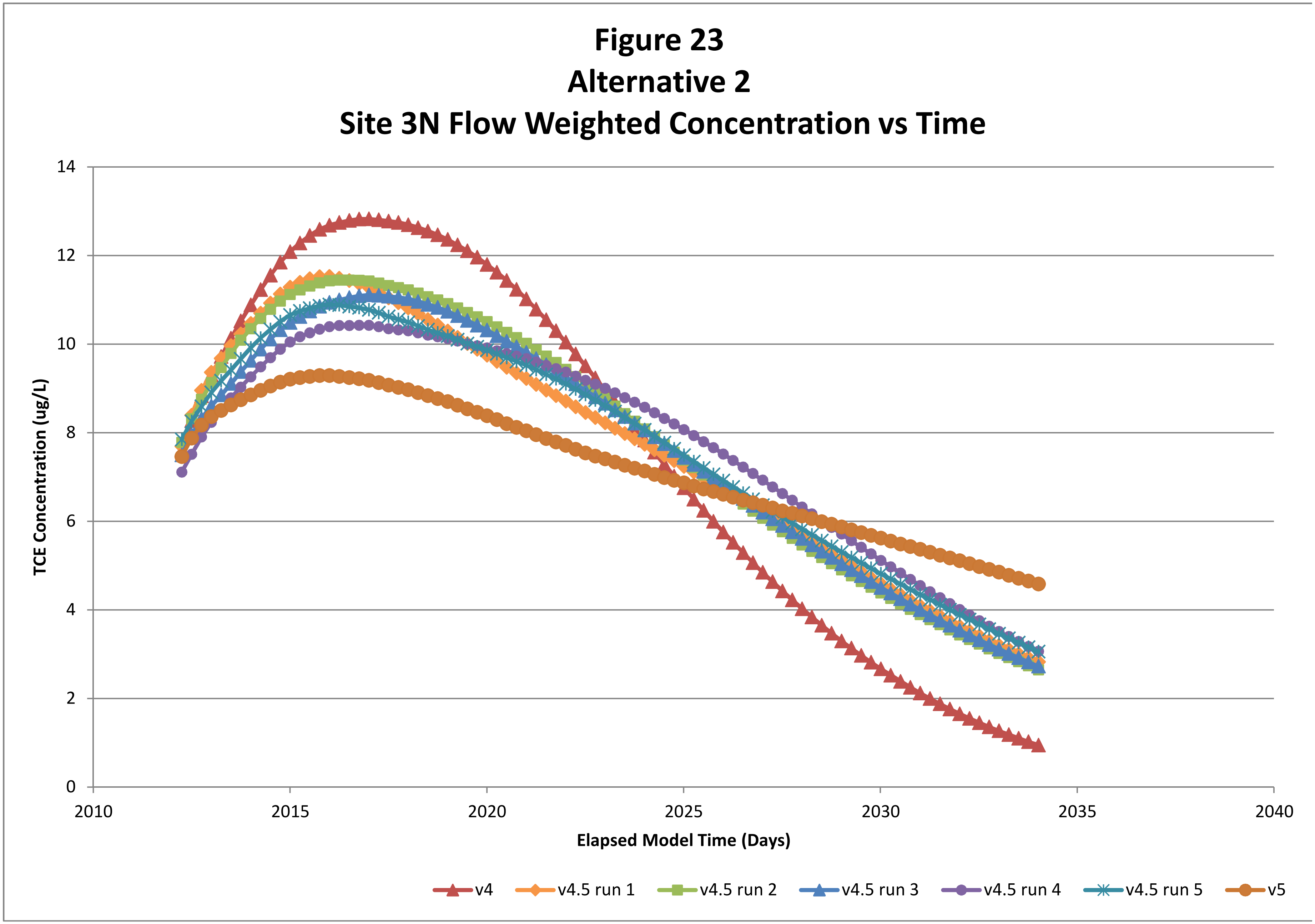
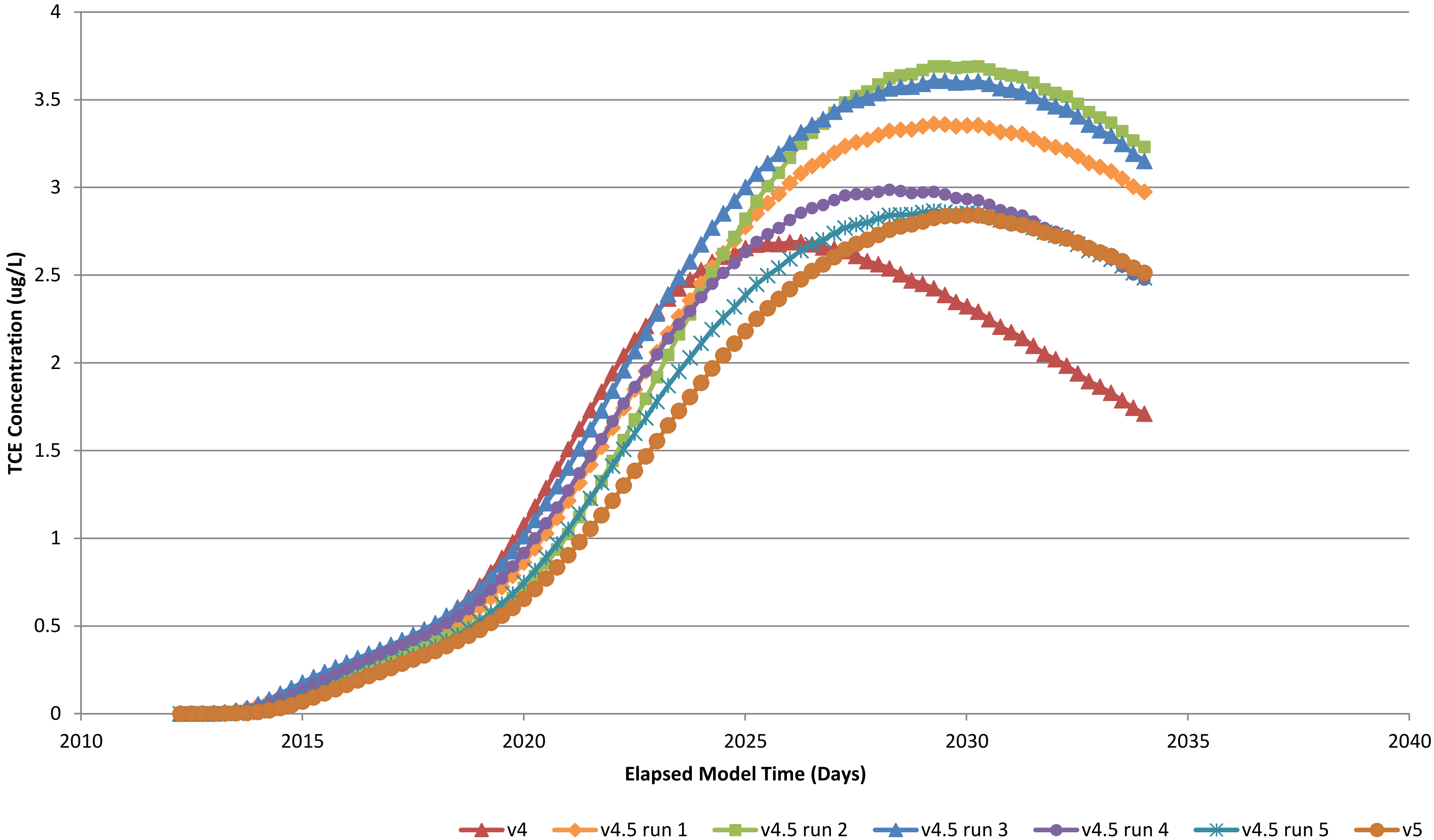


Figure 23
Alternative 2
Site 3N Flow Weighted Concentration vs Time
14
12
10
8
6
4
2
0
TCE Concentration (ug/L)
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5

Figure 24
Alternative 2
CDA I-10 Flow Weighted Concentration vs Time



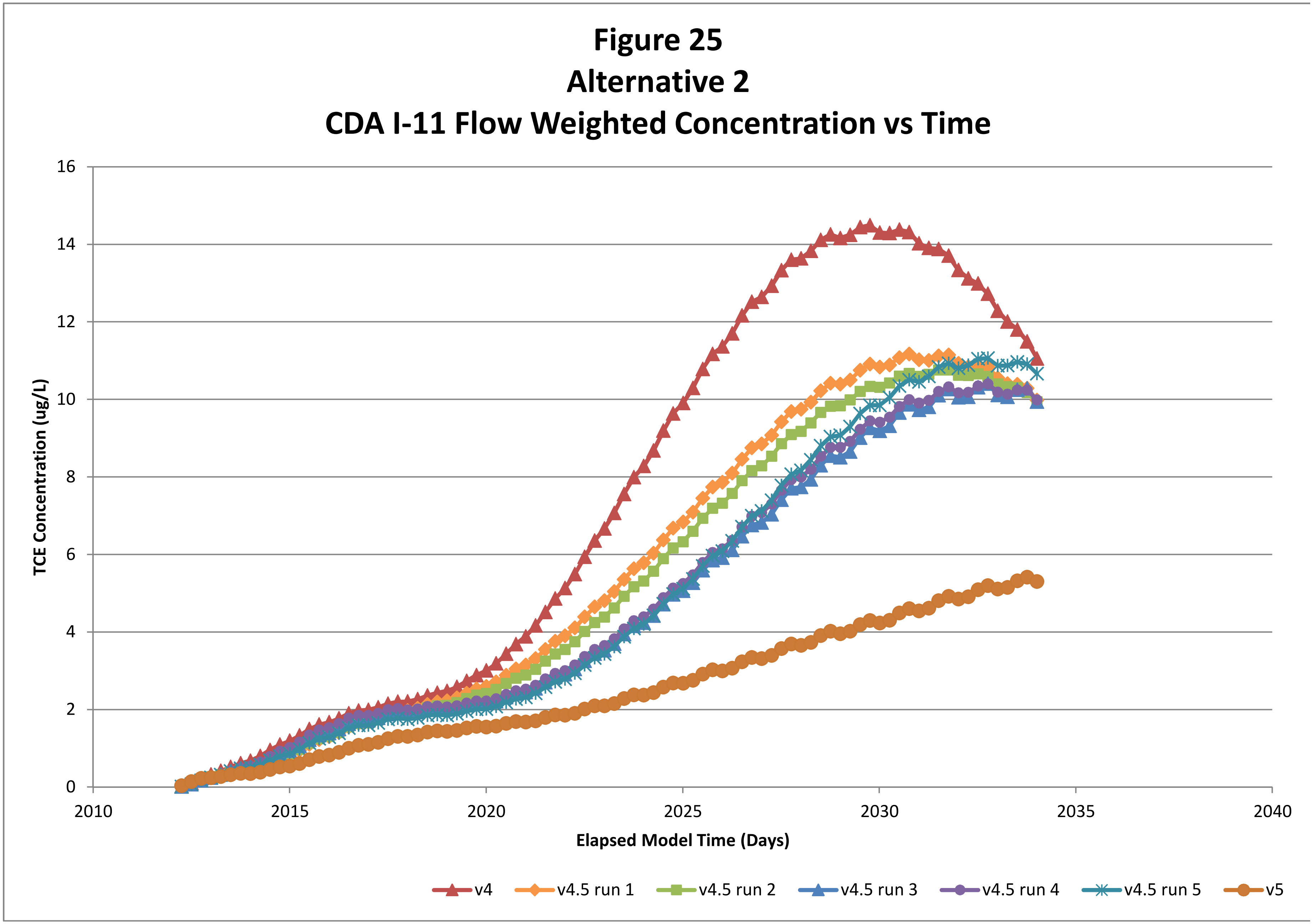
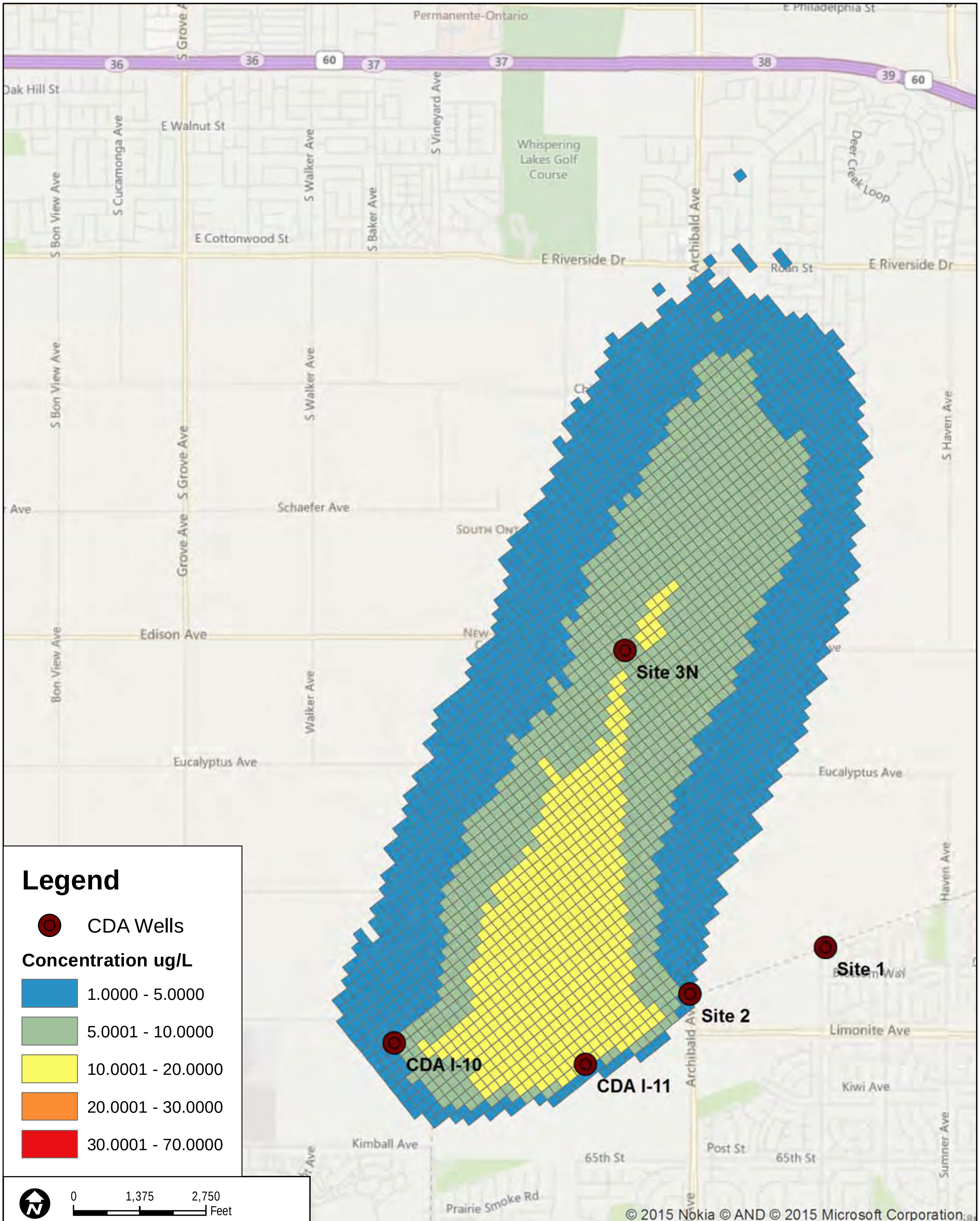


Figure 25
Alternative 2
CDA I-11 Flow Weighted Concentration vs Time
TCE Concentration (ug/L)
0
2
4
6
8
10
12
14
16
2010
2015
2020
2025
2030
2035
2040
Elapsed Model Time (Days)
v4
v4.5 run 1
v4.5 run 2
v4.5 run 3
v4.5 run 4
v4.5 run 5
v5



DUDEK

7318-1

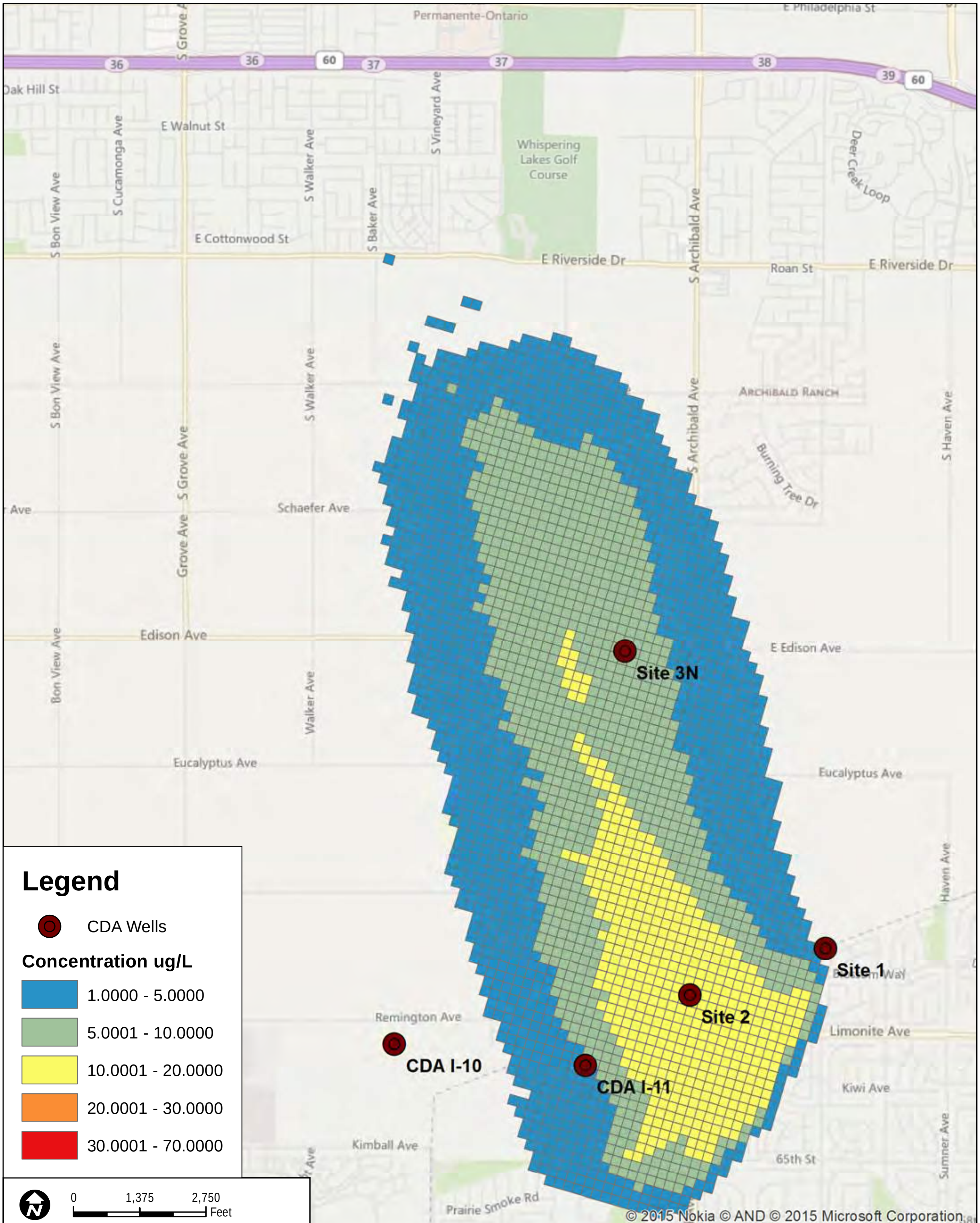
JANUARY 2015

SOURCE: Bing Maps

Ontario

Alternative 2 TCE Plume in 2032
Variance 4.5 Lognormal K Field

Figure 26



DUDEK

7318-1

JANUARY 2015

Alternative 2 TCE Plume in 2032 Rotated 35 Degrees to the South Variance 4.5 Lognormal K Field

SOURCE: Bing Maps

Ontario

Figure 27

APPENDIX D

Detailed Cost Estimate for the Plume Remedial Alternatives

Unit Costs and Other Cost Assumptions for Plume Remedial Alternatives

Item / Assumption	Cost / Value	Unit
Capital		
Land Acquisition		
Land Cost	$ 120,000	$/ac
Land Required		
Monitoring Well Site	0.25	ac
Extraction Well Site	0.25	ac
Treatment System Site	0.25	ac
Pipeline	0	sq ft/LF
Fraction of Pipeline Route on Non-City Owned Land	0%	%
Construction Costs - not including contingency or engineering		
Wells, Installed		
Monitoring Wells (Dual Completion)	$ 180,000	$/well
Monitoring Wells (Single Completion)	$ 80,000	$/well
Extraction Wells	$ 1,871,500	$/well
Injection Wells	$ 370,000	$/well
Modify Well I-11	$ 500,000	$/well
VFD and Motor	$ 84,000	$/unit
Treatment System, Installed		
Liquid Phase GAC System	$ 2,660,000	$/unit
Treatment Flow Capacity	2,000	gpm/unit
Decarbonator Upgrades	$ 300,000	LS
Pipelines, Installed		
14 inch	$ 165	$/LF
18 inch	$ 185	$/LF
20 inch	$ 203	$/LF
24 inch	$ 234	$/LF
30 inch	$ 297	$/LF
Construction Contingency, as a Fraction of Construction Costs	20%	%
Engineering, as a fraction of Construction + Contingency Costs	15%	%
Monitoring Program Development	$200,000	LS
O&M		
Energy		
Average Electricity Cost	$ 0.15	$/kWh
Average Combined Pump and Motor Efficiency		
Average Motor Efficiency	0.9	%
Average Pump Efficiency	0.75	%
Hazen-Williams Pipe Loss Coefficient	130	-
Pumping to Ground Surface		
Depth to Static Water Level	170	ft
Transmissivity (total)	16,500	ft2/d
Storativity	0.08	-
Pumping Duration at Steady State	180	d
Well Radius	0.75	ft
Well Efficiency	0.75	%
Pumping through Treatment System		
Pressure Drop through a Single Liquid Phase Carbon Unit	6.1	psi
Pressure Drop through Decarbonator	0	ft
Treatment Chemicals		
Liquid Phase Carbon	$ 2.50	$/lb Carbon
Carbon Used Per Mass of TCE Pumped Through System		lb Carbon/lb TCE
Influent Concentration	25	ug/L
Effluent Concentration	0	ug/L
Concentration Reduction	25	ug/L
Influent Concentration at CDA wells (Contingency)	10	ug/L
Effluent Concentration at CDA wells (Contingency)	0	ug/L
Concentration Reduction (Contingency)	10	ug/L
Freundlich Isotherm Parameter K	2,000	(ug/g)/[(ug/L)^(1/n)]
Freundlich Isotherm Parameter 1/n	0.482	-
GAC Usage Safety Factor	1.75	-
Laboratory Analysis		
Groundwater Sample Analysis	250	$/sample

Unit Costs and Other Cost Assumptions for Plume Remedial Alternatives

Item / Assumption	Cost / Value	Unit
Number of Samples, including DUPs		samples/yr
Number of Well Screens in Monitoring Network	10	wells
Frequency of Sampling	2	events/yr
Treatment System Samples	150	$/sample
Number of Samples, including DUPs		samples/yr
Number of Trains in Sampling Program		trains
Frequency of Sampling	24	events/yr
Labor Costs		
Groundwater Sample Collection		
Labor Rate	150	$/hr
Time to Collect Groundwater Sample	2	hr/well
Groundwater Sampling Events	10	wells/event
Groundwater Sampling Schedule	2	events/yr
Treatment System Sample Collection		
Labor Rate	150	$/hr
Time to Collect Treatment System Sample	2	hr/event
Treatment System Sampling Schedule		events/yr/train
Prepare Monitoring Reports		
Labor Rate	175	$/hr
Time to Prepare Reports	120	hr/report
Reporting Schedule	1	reports/yr
Additional (Year 1) Startup Reporting		hr
Prepare Treatment System Monitoring Reports		
Labor Rate	175	$/hr
Time to Prepare Reports	60	hr/report
Reporting Schedule	2	reports/yr
Maintenance		
Labor Rate		
Monitoring Wells	150	$/hr
Extraction Wells	150	$/hr
Treatment System	175	$/hr
Pipeline	175	$/hr
Maintenance Frequency		
Monitoring Wells	12	hr/yr
Extraction Wells	24	hr/yr
Treatment System	120	hr/yr
Pipeline	4	hr/yr/1000 ft
O&M Contingency, as a Fraction of Total O&M Costs	20%	%
Effective Discount Rate for O&M Costs	3%	%

Abbreviations:

ac = acres
d = days
DUP = duplicate sample
ft = feet
ft2/d = feet-squared per day
gpm = gallons per minute
hr = hours
kWh = kiloWatt-hours
lb = pounds
LF = lineal feet
LS = lump sum
psi = pounds per square inch
sq ft = square feet
TCE = trichloroethene
ug/L = micrograms per liter
yr = years

References:

(1) Siemens, HP® Series Liquid Phase Adsorption Systems (ASME code) - Data Sheet for model HP-1220
(2) Speth, T.F., and Miltner, R.J. 1990, Technical Note: Adsorption Capacity of GAC for Synthetic Organics, Journal of the American Water Works Association, February 1990.

Detailed Cost for Plume Remedial Alternative 1. No Action

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Construction Contingency	20%	percentage	$ -	$ -
Engineering, not including land acquisition	15%	percentage	$ -	$ -
TOTAL CAPITAL				**$ -**
Operations & Maintenance (per year)				
Labor & Materials				
Sample Collection				
Groundwater Samples	30	sample	$ 300	$ 9,000
Laboratory Analysis				
Groundwater Samples	30	sample	$ 250	$ 7,500
Reporting				
Groundwater Monitoring Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 37,500	$ 7,500
TOTAL OPERATIONS & MAINTENANCE				**$ 45,000**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 2. Limited Action: Monitored Natural Attenuation ("MNA")

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Land Acquisition				
Monitoring Well Sites	4	LS	$ 30,000	$ 120,000
Wells and Injection				
Monitoring Wells (Dual Completion)	4	LS	$ 180,000	$ 720,000
Construction Contingency	20%	percentage	$ 720,000	$ 144,000
Engineering, not including land acquisition	15%	percentage	$ 864,000	$ 129,600
TOTAL CAPITAL				**$ 1,113,600**
Operations & Maintenance (per year)				
Labor & Materials				
Sample Collection				
Groundwater Samples	52	sample	$ 300	$ 15,600
Laboratory Analysis				
Groundwater Samples	52	sample	$ 250	$ 13,000
Reporting				
Groundwater Monitoring Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 49,600	$ 9,920
TOTAL OPERATIONS & MAINTENANCE				**$ 59,520**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 3A. TCE Wellhead Treatment via GAC 1 CDA Well

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
VFD and Motor	3	LS	$ 84,000	$ 252,000
Treatment System				
Liquid Phase Absorption	1	LS	$ 2,660,000	$ 2,660,000
Pipeline (LF)				
2,000-gpm capacity	3,000	LF	$ 165	$ 495,000
Construction Contingency	20%	percentage	$ 3,407,000	$ 681,400
Engineering, not including land acquisition	15%	percentage	$ 4,088,400	$ 613,260
TOTAL CAPITAL				**$ 4,701,660**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Liquid Phase Absorption (gpm)	800	gpm	$ 10.34	$ 8,269
Treatment Chemicals				
For Liquid Phase Absorption	800	gpm	$ 50.84	$ 40,670
Labor & Materials				
Sample Collection				
Treatment System Samples				
Influent	24	sample	$ 300	$ 7,200
Intermediate	24	sample	$ 300	$ 7,200
Effluent	24	sample	$ 300	$ 7,200
Maintenance				
Treatment System	1	LS	$ 21,000	$ 21,000
Laboratory Analysis				
Treatment System Samples				
Influent	24	sample	$ 150	$ 3,600
Intermediate	24	sample	$ 150	$ 3,600
Effluent	24	sample	$ 150	$ 3,600
Reporting				
Treatment System Operations Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 197,640	$ 24,668
TOTAL OPERATIONS & MAINTENANCE				**$ 148,007**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 3B. TCE Wellhead Treatment via GAC 2 CDA Wells

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
VFD and Motor	3	LS	$ 84,000	$ 252,000
Treatment System				
Liquid Phase Absorption	1	LS	$ 2,660,000	$ 2,660,000
Pipeline (LF)				
2,000-gpm capacity	3,000	LF	$ 165	$ 495,000
Construction Contingency	20%	percentage	$ 3,407,000	$ 681,400
Engineering, not including land acquisition	15%	percentage	$ 4,088,400	$ 613,260
TOTAL CAPITAL				**$ 4,701,660**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Liquid Phase Absorption (gpm)	2,800	gpm	$ 10.34	$ 28,942
Treatment Chemicals				
For Liquid Phase Absorption	2,800	gpm	$ 50.84	$ 142,345
Labor & Materials				
Sample Collection				
Treatment System Samples				
Influent	24	sample	$ 300	$ 7,200
Intermediate	24	sample	$ 300	$ 7,200
Effluent	24	sample	$ 300	$ 7,200
Maintenance				
Treatment System	1	LS	$ 21,000	$ 21,000
Laboratory Analysis				
Treatment System Samples				
Influent	24	sample	$ 150	$ 3,600
Intermediate	24	sample	$ 150	$ 3,600
Effluent	24	sample	$ 150	$ 3,600
Reporting				
Treatment System Operations Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 510,290	$ 49,137
TOTAL OPERATIONS & MAINTENANCE				**$ 294,824**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 3C. TCE Wellhead Treatment via GAC 3 CDA Wells; Northern Well at Merrill

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
VFD and Motor	3	LS	$ 84,000	$ 252,000
Treatment System				
Liquid Phase Absorption	1	LS	$ 2,660,000	$ 2,660,000
Pipeline (LF)				
2,000-gpm capacity	3,000	LF	$ 165	$ 495,000
Construction Contingency	20%	percentage	$ 3,407,000	$ 681,400
Engineering, not including land acquisition	15%	percentage	$ 4,088,400	$ 613,260
TOTAL CAPITAL				**$ 4,701,660**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Liquid Phase Absorption (gpm)	4,800	gpm	$ 10.34	$ 49,614
Treatment Chemicals				
For Liquid Phase Absorption	4,800	gpm	$ 50.84	$ 244,020
Labor & Materials				
Sample Collection				
Treatment System Samples				
Influent	24	sample	$ 300	$ 7,200
Intermediate	24	sample	$ 300	$ 7,200
Effluent	24	sample	$ 300	$ 7,200
Maintenance				
Treatment System	1	LS	$ 21,000	$ 21,000
Laboratory Analysis				
Treatment System Samples				
Influent	24	sample	$ 150	$ 3,600
Intermediate	24	sample	$ 150	$ 3,600
Effluent	24	sample	$ 150	$ 3,600
Reporting				
Treatment System Operations Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 887,521	$ 73,607
TOTAL OPERATIONS & MAINTENANCE				**$ 441,642**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 3D. TCE Wellhead Treatment via GAC 3 CDA Wells; Northern Well at Edison

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
VFD and Motor	3	LS	$ 84,000	$ 252,000
Treatment System				
Liquid Phase Absorption	1	LS	$ 2,660,000	$ 2,660,000
Pipeline (LF)				
2,000-gpm capacity	8,500	LF	$ 165	$ 1,402,500
Construction Contingency	20%	percentage	$ 4,314,500	$ 862,900
Engineering, not including land acquisition	15%	percentage	$ 5,177,400	$ 776,610
TOTAL CAPITAL				**$ 5,954,010**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Liquid Phase Absorption (gpm)	4,800	gpm	$ 10.34	$ 49,614
Treatment Chemicals				
For Liquid Phase Absorption	4,800	gpm	$ 50.84	$ 244,020
Labor & Materials				
Sample Collection				
Treatment System Samples				
Influent	24	sample	$ 300	$ 7,200
Intermediate	24	sample	$ 300	$ 7,200
Effluent	24	sample	$ 300	$ 7,200
Maintenance				
Treatment System	1	LS	$ 21,000	$ 21,000
Laboratory Analysis				
Treatment System Samples				
Influent	24	sample	$ 150	$ 3,600
Intermediate	24	sample	$ 150	$ 3,600
Effluent	24	sample	$ 150	$ 3,600
Reporting				
Treatment System Operations Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 905,087	$ 73,607
TOTAL OPERATIONS & MAINTENANCE				**$ 441,642**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 4A. TCE Wellhead Treatment via Air Stripping; 1 CDA Well
TCE Groundwater Plume, Ontario, California

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
VFD and Motor	3	LS	$ 84,000	$ 252,000
Treatment System				
Decarbonator	1	LS	$ 300,000	$ 300,000
Pipeline (LF)				
2,000-gpm capacity	3,000	LF	$ 165	$ 495,000
Construction Contingency	20%	percentage	$ 1,047,000	$ 209,400
Engineering, not including land acquisition	15%	percentage	$ 1,256,400	$ 188,460
TOTAL CAPITAL				**$ 1,444,860**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Decarbonator (gpm)	800	gpm	$ 69.28	$ 55,420
Treatment Chemicals				
Acid to remove scale	800	gpm	$ 123.80	$ 99,040
Maintenance	1	LS	$ 15,000.00	$ 15,000
Labor & Materials				
Sample Collection				
Treatment System Samples				
Influent	24	sample	$ 300	$ 7,200
Intermediate	24	sample	$ 300	$ 7,200
Effluent	24	sample	$ 300	$ 7,200
Laboratory Analysis				
Treatment System Samples				
Influent	24	sample	$ 150	$ 3,600
Intermediate	24	sample	$ 150	$ 3,600
Effluent	24	sample	$ 150	$ 3,600
Reporting				
Treatment System Operations Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 263,280	$ 44,572.02
TOTAL OPERATIONS & MAINTENANCE				**$ 267,432**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 4B. TCE Wellhead Treatment via Air Stripping; 2 CDA Wells

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
VFD and Motor	3	LS	$ 84,000	$ 252,000
Treatment System				
Decarbonator	2	LS	$ 300,000	$ 600,000
Pipeline (LF)				
2,000-gpm capacity	3,000	LF	$ 165	$ 495,000
Construction Contingency	20%	percentage	$ 1,347,000	$ 269,400
Engineering, not including land acquisition	15%	percentage	$ 1,616,400	$ 242,460
TOTAL CAPITAL				**$ 1,858,860**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Decarbonator (gpm)	2,800	gpm	$ 86.38	$ 241,872.18
Treatment Chemicals				
Acid to remove scale	2,800	gpm	$ 123.80	$ 346,640
Maintenance (annual scale cleaning)	2	LS	$ 15,000.00	$ 30,000
Labor & Materials				
Sample Collection				
Treatment System Samples				
Influent	24	sample	$ 300	$ 7,200
Intermediate	24	sample	$ 300	$ 7,200
Effluent	24	sample	$ 300	$ 7,200
Laboratory Analysis				
Treatment System Samples				
Influent	24	sample	$ 150	$ 3,600
Intermediate	24	sample	$ 150	$ 3,600
Effluent	24	sample	$ 150	$ 3,600
Reporting				
Treatment System Operations Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 893,366	$ 134,382
TOTAL OPERATIONS & MAINTENANCE				**$ 806,295**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 4C. TCE Wellhead Treatment via Air Stripping; 3 CDA Wells; Northern Well at Merrill

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
VFD and Motor	3	LS	$84,000	$ 252,000
Treatment System				
Decarbonator	3	LS	$ 300,000	$ 900,000
Pipeline (LF)				
2,000-gpm capacity	3,000	LF	$ 165	$ 495,000
Construction Contingency	20%	percentage	$ 1,647,000	$ 279,000
Engineering, not including land acquisition	15%	percentage	$ 3,650,400	$ 251,100
TOTAL CAPITAL				**$ 2,177,100**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Decarbonator (gpm)	4,800	gpm	$ 103.49	$ 496,755.38
Treatment Chemicals				
Acid to remove scale	4,800	gpm	$ 123.80	$ 594,240
Maintenance (annual scale cleaning)	3	LS	$ 15,000.00	$ 45,000
Labor & Materials				
Sample Collection				
Treatment System Samples				
Influent	24	sample	$ 300	$ 7,200
Intermediate	24	sample	$ 300	$ 7,200
Effluent	24	sample	$ 300	$ 7,200
Laboratory Analysis				
Treatment System Samples				
Influent	24	sample	$ 150	$ 3,600
Intermediate	24	sample	$ 150	$ 3,600
Effluent	24	sample	$ 150	$ 3,600
Reporting				
Treatment System Operations Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 1,650,732	$ 237,879
TOTAL OPERATIONS & MAINTENANCE				**$ 1,427,274**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 4D. TCE Wellhead Treatment via Air Stripping; 3 CDA Wells; Northern Well at Edison

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
VFD and Motor	3	LS	$84,000	$ 252,000
Treatment System				
Decarbonator	3	LS	$ 300,000	$ 900,000
Pipeline (LF)				
2,000-gpm capacity	8,500	LF	$ 165	$ 1,402,500
Construction Contingency	20%	percentage	$ 2,554,500	$ 460,500
Engineering, not including land acquisition	15%	percentage	$ 3,015,000	$ 414,450
TOTAL CAPITAL				**$ 3,429,450**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Decarbonator (gpm)	4,800	gpm	$ 103.49	$ 496,755.38
Treatment Chemicals				
Acid to remove scale	4,800	gpm	$ 123.80	$ 594,240
Maintenance (annual scale cleaning)	3	LS	$ 15,000.00	$ 45,000
Labor & Materials				
Sample Collection				
Treatment System Samples				
Influent	24	sample	$ 300	$ 7,200
Intermediate	24	sample	$ 300	$ 7,200
Effluent	24	sample	$ 300	$ 7,200
Laboratory Analysis				
Treatment System Samples				
Influent	24	sample	$ 150	$ 3,600
Intermediate	24	sample	$ 150	$ 3,600
Effluent	24	sample	$ 150	$ 3,600
Reporting				
Treatment System Operations Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 1,668,298	$ 237,879
TOTAL OPERATIONS & MAINTENANCE				**$ 1,427,274**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Detailed Cost for Plume Remedial Alternative 5A. Three Wells With Dedicated Line to RO/ Decarbonator; Northern Well at Merrill Ave

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
Modify Well I-11	1	LS	$ 500,000	$ 500,000
VFD and Motor	3	LS	$ 84,000	$ 252,000
Treatment System				
Desalter modifications and intertie water lines	1	LS	$ 750,000	$ 750,000
Decarbonator	1	LS	$ 650,000	$ 650,000
Pipeline (LF)				
2,000-gpm capacity	3,000	LF	$ 165	$ 495,000
4,000-gpm capacity	3,000	LF	$ 185	$ 555,000
6,000-gpm capacity	18,581	LF	$ 234	$ 4,347,954
Construction Contingency	20%	percentage	$ 7,549,954	$ 1,509,991
Engineering, not including land acquisition	15%	percentage	$ 9,059,945	$ 1,358,992
Permitting/ utility relocation	1	LS	$350,000	$ 350,000
TOTAL CAPITAL				**$ 10,768,937**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Decarbonator (gpm)	215,000	kwhr	$ 0.15	$ 32,250
Maintenance				
Pipeline (ft)	24,581	LF	$ 0.70	$ 17,207
Operations & Maintenance Contingency	20%	percentage	$ 211,248	$ 9,891
TOTAL OPERATIONS & MAINTENANCE				**$ 59,348**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum
kwhr = kilowatt hour

Detailed Cost for Alternative 5B. Three Wells With Dedicated Line to RO/ Decarbonator; Northern Well at Edison Ave

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Wells				
Modify Well I-11	1	LS	$ 500,000	$ 500,000
VFD and Motor	3	LS	$ 84,000	$ 252,000
Treatment System				
Desalter modifications and intertie water lines	1	LS	$ 750,000	$ 750,000
Decarbonator	1	LS	$ 650,000	$ 650,000
Pipeline (LF)				
2,000-gpm capacity	5,500	LF	$ 165	$ 907,500
4,000-gpm capacity	3,000	LF	$ 185	$ 555,000
6,000-gpm capacity	18,581	LF	$ 234	$ 4,347,954
Construction Contingency	20%	percentage	$ 7,962,454	$ 1,592,491
Engineering, not including land acquisition	15%	percentage	$ 9,554,945	$ 1,433,242
Permitting/ Utility relocation	1	LS	$350,000	$ 350,000
TOTAL CAPITAL				**$ 11,338,187**
Operations & Maintenance (per year)				
Energy				
Pumping Through Treatment System				
Decarbonator (gpm)	215,000	kwhr	$ 0.15	$ 32,250
Maintenance				
Pipeline (ft)	27,081	LF	$ 0.70	$ 18,957
Operations & Maintenance Contingency	20%	percentage	$ 228,967	$ 10,241
TOTAL OPERATIONS & MAINTENANCE				**$ 61,448**

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum
kwhr = kilowatt hour

Detailed Cost for Plume Remedial Alternative 6. In Situ Remediation

	Quantity	Unit	Unit Cost	Subtotal
Capital				
Land Acquisition				
Monitoring Well Sites	4	LS	$ 30,000	$ 120,000
Wells and Injection				
Monitoring Wells (Dual Completion)	4	LS	$ 180,000	$ 720,000
Injection Wells				
1st Round - Injection wells	190	LS	$ 370,000	$ 70,300,000
2nd Round - Injection wells[1]	100	well	$ 275,315	$ 27,531,475
Construction Contingency	20%	percentage	$ 720,000	$ 19,710,295
Engineering, not including land acquisition	15%	percentage	$ 71,164,000	$ 17,757,265
TOTAL CAPITAL				**$ 136,139,035**
Operations & Maintenance (per year)				
Labor & Materials				
Sample Collection				
Groundwater Samples	40	sample	$ 300	$ 12,000
Laboratory Analysis				
Groundwater Samples	40	sample	$ 250	$ 10,000
Reporting				
Groundwater Monitoring Reports	1	ea	$ 21,000	$ 21,000
Operations & Maintenance Contingency	20%	percentage	$ 43,000	$ 8,600
TOTAL OPERATIONS & MAINTENANCE				**$ 51,600**

Notes:

(1) The cost of the second round of injection wells is the 10 year depreciated capital cost, assuming a 3% effective discount rate.

Abbreviations:

ea = each
gpm = gallons per minute
LF = lineal foot
LS = lump sum

Net Present Value Calculation of Plume Remedial Alternatives

		Feasibility Study Plume Remedial Alternatives											
	1. No Action	2. Limited Action: Monitored Natural Attenuation ("MNA")	3A. TCE Wellhead Treatment via GAC 1 CDA Well	3B. TCE Wellhead Treatment via GAC 2 CDA Wells	3C. TCE Wellhead Treatment via GAC 3 CDA Wells; Northern Well at Merrill	3D. TCE Wellhead Treatment via GAC 3 CDA Wells; Northern Well at Edison	4A. TCE Wellhead Treatment via Air Stripping; 1 CDA Well	4B. TCE Wellhead Treatment via Air Stripping; 2 CDA Wells	4C. TCE Wellhead Treatment via Air Stripping; 3 CDA Wells; Northern Well at Merrill	4D. TCE Wellhead Treatment via Air Stripping; 3 CDA Wells; Northern Well at Edison	5A. Three Wells With Dedicated Line to RO/ Decarbonator; Northern Well at Merrill Ave	5B. Three Wells With Dedicated Line to RO/ Decarbonator; Northern Well at Edison Ave	6. In-Situ Injection
Costs in 2015 Dollars (a)													
Capital Cost	$ -	$ 1,113,600	$ 4,701,660	$ 4,701,660	$ 4,701,660	$ 5,954,010	$ 1,444,860	$ 1,858,860	$ 2,177,100	$ 3,429,450	$ 10,768,937	$ 11,338,187	$ 136,139,035
Annual Operations & Maintenance Cost	$ 45,000	$ 59,520	$ 148,007	$ 294,824	$ 441,642	$ 441,642	$ 267,432	$ 806,295	$ 1,427,274	$ 1,427,274	$ 59,348	$ 61,448	$ 51,600
Net Present Value Costs (Discounted Dollars) (b)													
0	$ -	$ 1,113,600	$ 4,701,660	$ 4,701,660	$ 4,701,660	$ 5,954,010	$ 1,444,860	$ 1,858,860	$ 2,177,100	$ 3,429,450	$ 10,768,937	$ 11,338,187	$ 136,139,035
1	$ 43,689	$ 57,786	$ 143,696	$ 286,237	$ 428,778	$ 428,778	$ 259,643	$ 782,810	$ 1,385,703	$ 1,385,703	$ 57,619	$ 59,658	$ 50,097
2	$ 42,417	$ 56,103	$ 139,511	$ 277,900	$ 416,289	$ 416,289	$ 252,080	$ 760,010	$ 1,345,343	$ 1,345,343	$ 55,941	$ 57,921	$ 48,638
3	$ 41,181	$ 54,469	$ 135,447	$ 269,806	$ 404,165	$ 404,165	$ 244,738	$ 737,874	$ 1,306,158	$ 1,306,158	$ 54,312	$ 56,234	$ 47,221
4	$ 39,982	$ 52,883	$ 131,502	$ 261,947	$ 392,393	$ 392,393	$ 237,610	$ 716,382	$ 1,268,115	$ 1,268,115	$ 52,730	$ 54,596	$ 45,846
5	$ 38,817	$ 51,342	$ 127,672	$ 254,318	$ 380,964	$ 380,964	$ 230,689	$ 695,517	$ 1,231,179	$ 1,231,179	$ 51,194	$ 53,006	$ 44,511
6	$ 37,687	$ 49,847	$ 123,953	$ 246,911	$ 369,868	$ 369,868	$ 223,970	$ 675,259	$ 1,195,320	$ 1,195,320	$ 49,703	$ 51,462	$ 43,214
7	$ 36,589	$ 48,395	$ 120,343	$ 239,719	$ 359,095	$ 359,095	$ 217,447	$ 655,591	$ 1,160,505	$ 1,160,505	$ 48,255	$ 49,963	$ 41,956
8	$ 35,523	$ 46,986	$ 116,838	$ 232,737	$ 348,636	$ 348,636	$ 211,113	$ 636,496	$ 1,126,704	$ 1,126,704	$ 46,850	$ 48,508	$ 40,734
9	$ 34,489	$ 45,617	$ 113,435	$ 225,958	$ 338,481	$ 338,481	$ 204,964	$ 617,958	$ 1,093,887	$ 1,093,887	$ 45,485	$ 47,095	$ 39,547
10	$ 33,484	$ 44,288	$ 110,131	$ 219,377	$ 328,623	$ 328,623	$ 198,995	$ 599,959	$ 1,062,026	$ 1,062,026	$ 44,161	$ 45,723	$ 38,395
11	$ 32,509	$ 42,999	$ 106,923	$ 212,987	$ 319,051	$ 319,051	$ 193,199	$ 582,484	$ 1,031,093	$ 1,031,093	$ 42,874	$ 44,391	$ 37,277
12	$ 31,562	$ 41,746	$ 103,809	$ 206,784	$ 309,758	$ 309,758	$ 187,572	$ 565,519	$ 1,001,062	$ 1,001,062	$ 41,626	$ 43,098	$ 36,191
13	$ 30,643	$ 40,530	$ 100,786	$ 200,761	$ 300,736	$ 300,736	$ 182,108	$ 549,047	$ 971,904	$ 971,904	$ 40,413	$ 41,843	$ 35,137
14	$ 29,750	$ 39,350	$ 97,850	$ 194,914	$ 291,977	$ 291,977	$ 176,804	$ 533,056	$ 943,597	$ 943,597	$ 39,236	$ 40,624	$ 34,114
15	$ 28,884	$ 38,204	$ 95,000	$ 189,236	$ 283,473	$ 283,473	$ 171,655	$ 517,530	$ 916,113	$ 916,113	$ 38,093	$ 39,441	$ 33,120
16	$ 28,043	$ 37,091	$ 92,233	$ 183,725	$ 275,216	$ 275,216	$ 166,655	$ 502,456	$ 889,430	$ 889,430	$ 36,984	$ 38,292	$ 32,155
17	$ 27,226	$ 36,011	$ 89,547	$ 178,374	$ 267,200	$ 267,200	$ 161,801	$ 487,822	$ 863,525	$ 863,525	$ 35,907	$ 37,177	$ 31,219
18	$ 26,433	$ 34,962	$ 86,938	$ 173,178	$ 259,418	$ 259,418	$ 157,088	$ 473,613	$ 838,373	$ 838,373	$ 34,861	$ 36,094	$ 30,310
19	$ 25,663	$ 33,943	$ 84,406	$ 168,134	$ 251,862	$ 251,862	$ 152,513	$ 459,819	$ 813,955	$ 813,955	$ 33,845	$ 35,043	$ 29,427
20	$ 24,915	$ 32,955	$ 81,948	$ 163,237	$ 244,526	$ 244,526	$ 148,071	$ 446,426	$ 790,247	$ 790,247	$ 32,860	$ 34,022	$ 28,570
21	$ 24,190	$ 31,995	$ 79,561	$ 158,483	$ 237,404	$ 237,404	$ 143,758	$ 433,423	$ 767,230	$ 767,230	$ 31,902	$ 33,031	$ 27,738
22	$ 23,485	$ 31,063	$ 77,244	$ 153,867	$ 230,489	$ 230,489	$ 139,571	$ 420,799	$ 744,884	$ 744,884	$ 30,973	$ 32,069	$ 26,930
24	$ 22,137	$ 29,280	$ 72,810	$ 145,034	$ 217,258	$ 217,258	$ 131,559	$ 396,644	$ 702,124	$ 702,124	$ 29,195	$ 30,228	$ 25,384
26	$ 20,866	$ 27,599	$ 68,630	$ 136,708	$ 204,787	$ 204,787	$ 124,007	$ 373,875	$ 661,820	$ 661,820	$ 27,519	$ 28,493	$ 23,927
27	$ 20,259	$ 26,795	$ 66,631	$ 132,727	$ 198,822	$ 198,822	$ 120,395	$ 362,985	$ 642,543	$ 642,543	$ 26,718	$ 27,663	$ 23,230
28	$ 19,668	$ 26,015	$ 64,690	$ 128,861	$ 193,031	$ 193,031	$ 116,888	$ 352,413	$ 623,828	$ 623,828	$ 25,940	$ 26,858	$ 22,553
29	$ 19,096	$ 25,257	$ 62,806	$ 125,108	$ 187,409	$ 187,409	$ 113,484	$ 342,148	$ 605,659	$ 605,659	$ 25,184	$ 26,075	$ 21,896
30	$ 18,539	$ 24,521	$ 60,977	$ 121,464	$ 181,950	$ 181,950	$ 110,178	$ 332,183	$ 588,018	$ 588,018	$ 24,451	$ 25,316	$ 21,259
Subtotal O&M:	$ 882,020	$ 1,166,618	$ 2,901,001	$ 5,778,685	$ 8,656,369	$ 8,656,369	$ 5,241,788	$ 15,803,730	$ 27,975,209	$ 27,975,209	$ 1,163,248	$ 1,204,409	$ 1,011,383
Total:	$ 882,020	$ 2,280,218	$ 7,602,661	$ 10,480,345	$ 13,358,029	$ 14,610,379	$ 6,686,648	$ 17,662,590	$ 30,152,309	$ 31,404,659	$ 11,932,184	$ 12,542,595	$ 137,150,418

Summary of Estimated Costs for Plume Remedial Alternatives

	Feasibility Study Plume Remedial Alternatives												
	1. No Action	2. Limited Action: Monitored Natural Attenuation ("MNA")	3A. TCE Wellhead Treatment via GAC 1 CDA Well	3B. TCE Wellhead Treatment via GAC 2 CDA Wells	3C. TCE Wellhead Treatment via GAC 3 CDA Wells; Northern Well at Merrill	3D. TCE Wellhead Treatment via GAC 3 CDA Wells; Northern Well at Edison	4A. TCE Wellhead Treatment via Air Stripping; 1 CDA Well	4B. TCE Wellhead Treatment via Air Stripping; 2 CDA Wells	4C. TCE Wellhead Treatment via Air Stripping; 3 CDA Wells; Northern Well at Merrill	4D. TCE Wellhead Treatment via Air Stripping; 3 CDA Wells; Northern Well at Edison	5A. Three Wells With Dedicated Line to RO/ Decarbonator; Northern Well at Merrill Ave	5B. Three Wells With Dedicated Line to RO/ Decarbonator; Northern Well at Edison Ave	6. In-Situ Injection
COSTS													
Estimated Capital Cost (2015 Dollars)	$ -	$ 1,110,000	$ 4,700,000	$ 4,700,000	$ 4,700,000	$ 5,950,000	$ 1,440,000	$ 1,860,000	$ 2,180,000	$ 3,430,000	$ 10,770,000	$ 11,340,000	$ 136,140,000
Estimated Annual Operations & Maintenance Costs (2015 Dollars)	$ 45,000	$ 60,000	$ 148,000	$ 295,000	$ 442,000	$ 442,000	$ 267,000	$ 806,000	$ 1,427,000	$ 1,427,000	$ 59,000	$ 61,000	$ 52,000
Estimated Total 30-year Costs (Discounted Dollars)	**$ 882,000**	**$ 2,280,000**	**$ 7,600,000**	**$ 10,480,000**	**$ 13,360,000**	**$ 14,610,000**	**$ 6,680,000**	**$ 17,660,000**	**$ 30,160,000**	**$ 31,410,000**	**$ 11,930,000**	**$ 12,540,000**	**$ 137,150,000**

CUPA

San Bernardino County Fire Department • Hazardous Materials Division

620 S. E St., San Bernardino, CA 92415-0153 • (909) 386-8468 FAX (909) 386-8460

REQUEST FOR A CERTIFIED HAZARDOUS MATERIALS RECORDS SEARCH FINDING REPORT

The main focus of a REQUEST FOR A CERTIFIED HAZARDOUS MATERIALS RECORDS SEARCH FINDING REPORT is to determine whether there exists in San Bernardino County Fire Department (County Fire) files any record relating to contamination or reports of spills at a particular site. A Certified Hazardous Materials Records Search Finding Report should reveal whether there are any facilities at the site that are subject to current or past regulatory activity by County Fire, such as underground storage tanks, hazardous material handlers, hazardous waste generators, and EPCRA or CalARP facilities, as well as any reports of spills, incidents, complaints, or cleanup activity, that can be a useful tool in providing a history of compliance or non-compliance.

Once County Fire has completed its records search, a Certified Hazardous Materials Records Search Finding Report will be prepared and issued, which will detail all County Fire records associated with a particular site by type, date, location, and status where applicable. (Any files identified in a Certified Hazardous Materials Records Search Finding Report can be made available for copies and/or review upon request.)

If the completed records search reveals no County Fire record of hazardous material activity at the site, a Certified Hazardous Materials Records Search Finding Report will be issued, noting that "no records" were identified.

Please provide a specific site address or location description. If a situs address does not exist or cannot be found, list another type of location identifier such as Assessor Parcel Number (preferable), cross streets or intersections (e.g., NWC 5th Ave. & Main St.), and/or legal description, and if possible attach a map to this request form.

SITE INFORMATION		
Property Owner or Business Name	Location (Site Address and/or Assessor Parcel No.) 14525, 14651 and 14715 South Grove Avenue 8185, 8321, 8451, 8477, 8521, 8541 and 8551 Eucalyptus Avenue	City/Community Ontario

Please provide your name, the company you represent, and contact information below. *See attached document with APNs

REQUESTOR INFORMATION		
NAME Brittney Eugenio	TITLE (*If individual, leave blank*)	COMPANY (*If individual, leave blank*) Partner Engineering and Science, Inc.

MAILING ADDRESS	CITY	STATE	ZIP CODE
1761 East Garry Avenue	Santa Ana	CA	92705

TELEPHONE	FAX	EMAIL ADDRESS
714-922-9570	949-534-0566	beugenio@partneresi.com

So that we may provide better service, please check one or more of the boxes below which best describe how the findings of the Certified Hazardous Materials Records Search will be used and/or your relationship to the property in question.

PURPOSE OR RELATIONSHIP TO PROPERTY	
☒ 1. Phase I site assessment or due diligence **AT THE SITE**	☐ 7. Owner or operator of the facility or property
☐ 2. Environmental professional involved with remediation **AT THE SITE**	☐ 8. Potential buyer
☐ 3. Phase I site assessment or due diligence **NEARBY**	☐ 9. Real Estate Agent, Lender, Appraiser
☐ 4. Environmental professional involved with remediation **NEARBY**	☐ 10. Pending escrow
☐ 5. Proposed School Site (1/4 mi. search for AHM)	☐ 11. Proposed redevelopment
☐ 6. Proposed Drinking Water Well	☐ 12. Legal or other reason: ____________

AGENCY USE	
Certified Record Search Finding Report issued: __/__/__	Reference No:
Certified No Record Finding Report issued: __/__/__	Amount Paid:
	Receipt No.:
	Date:

** IMPORTANT –THIS PAGE MUST BE SIGNED PRIOR TO SUBMITTAL **

DISCLAIMER: While all attempts are made to provide accurate, current, and reliable information, County Fire recognizes the possibility of human error. Therefore, County Fire, its officers, employees, agents and volunteers, make no representations as to the accuracy, completeness or suitability of a Certified Hazardous Materials Records Search Finding Report and provides a Certified Hazardous Materials Records Search Finding Report "as is", with no warranties, express or implied, including the implied warranty of fitness for a particular purpose. In no event shall County Fire be liable for any damages of any nature whatsoever, arising out of the issuance of a Certified Hazardous Materials Records Search Finding Report. County Fire therefore assumes no liability for damages incurred directly or indirectly as a result of any errors, omissions or discrepancies in a Certified Hazardous Materials Records Search Finding Report.

RELEASE AND INDEMNIFICATION: In consideration for the issuance of a Certified Hazardous Materials Records Search Finding Report, I hereby release and forever discharge County Fire, its officers, employees, agents and volunteers from any and all claims, actions, losses, damages and/or liability in connection with County Fire's issuance of a Certified Hazardous Materials Records Search Finding Report, including, but not limited to, claims that may arise due to the active or passive negligence of County Fire, its officers, employees, agents and volunteers.

I am familiar with the provisions of California Civil Code Section 1542, which provides as follows:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."

I hereby expressly waive any and all rights that I may have there under. I understand and acknowledge the significance and consequence of this specific waiver of California Civil Code Section 1542 and assume full responsibility for any injuries, damages, losses or liabilities that I may hereafter discover as possibly resulting from County Fire's issuance of a Certified Hazardous Materials Records Search Finding Report.

In further consideration for County Fire's issuance of a Certified Hazardous Materials Records Search Finding Report, I hereby agree, for myself, my heirs, administrators, executors and assigns, that I shall indemnify, defend (with counsel approved by County) and hold harmless County Fire, its officers, employees, agents and volunteers from any and all claims, demands, actions or suits arising out of or in connection with County Fire's issuance of a Certified Hazardous Materials Records Search Finding Report brought by any third party.

* * *

I have read the above terms and conditions, including the paragraphs entitled "DISCLAIMER" and "RELEASE AND INDEMNIFICATION", and by my signature below, I affirm that I understand these terms and conditions and accept them as part of my REQUEST FOR A CERTIFIED HAZARDOUS MATERIALS RECORDS SEARCH FINDING REPORT.

I hereby request a Certified Hazardous Materials Records Search Finding Report for the location described on Page 1 of this application.

- ☐ I am including payment of the initial fee of $130.00, for the first hour of research, by check or money order, payable to San Bernardino County Fire Dept. I understand that research exceeding one hour will be billed at the rate of $130.00 for each additional hour spent by County Fire in completing this request.
- ☒ I have faxed or emailed this request and will forward payment along with the original request form within 48 hours.

REQUESTOR'S SIGNATURE	
SIGNATURE OF REQUESTOR Brittney Eugenio	DATE 2/10/17

Rev. 2/13/2014

APNs:

1054-111-01
1054-111-02
1054-121-01
1054-121-02
1054-131-01
1054-131-02
1054-141-01
1054-141-02
1054-151-01
1054-161-01
1054-201-01
1054-211-01
1054-211-02
1054-221-01
1054-221-02
1054-331-01
1054-331-02
1054-341-01
1054-341-02
1054-351-01

Google Maps

 500 ft

Facility Details

Facility ID	144827
Company Name	JOE BORBA DAIRY
Address	8477 EUCALYPTUS AVE
	ONTARIO, CA 91762

Status	ACTIVE

Are there any back fees due?

No.

SOUTH COAST AQMD

Facility INformation Detail (FIND)

Equipment List

Facility ID	144827
Company Name	JOE BORBA DAIRY
Address	8477 EUCALYPTUS AVE
	ONTARIO, CA 91762

Appl_Nbr	Permit_Nbr	Issued_Date	Permit_Status	Eq_Type	Equip_Description	Appl_Date	Appl_Status
444846	F87202	1/30/2007	INACTIVE	Basic	AGOPS EMERGENCY ICE (50-500 HP)	6/15/2005	PERMIT TO OPERATE GRANTED
444845	F87203	1/30/2007	INACTIVE	Basic	AgOps LACAF Dairy	6/15/2005	PERMIT TO OPERATE GRANTED

First Prev Page 1 of 1 (2 records) Next Last Page 1 Export To Excel

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
F87202
A/N 444846

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 144827

Legal Owner or Operator: JOE BORBA DAIRY
14651 GROVE AVE
ONTARIO, CA 91762-7704

Equipment Location: 8477 EUCALYPTUS AVE, ONTARIO, CA 91762-7261

Equipment Description :

INTERNAL COMBUSTION ENGINE, DIESEL FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR, MEGNA PLUS, MODEL NO. 431PSI-1264; SERIAL NO. LM-231921-C599

Conditions :

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF RULE 431.2 - SULFUR CONTENT OF LIQUID FUELS.

4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES..

5. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.

6. THE OPERATOR SHALL ONLY USE DIESEL FUEL WITH A SULFUR CONTENT THAT DOES NOT EXCEED 15PPM BY WEIGHT, UNLESS THE OPERATOR DEMONSTRATES IN WRITING TO THE EXECUTIVE OFFICER THAT SPECIFIC ADDITIONAL TIME IS NECESSARY.

7. AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED ON FILE TO RECORD WHEN THIS ENGINE IS STARTED MANUALLY. THE LOG SHALL LIST THE DATE OF OPERATION, THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION, AND THE REASON FOR OPERATION. THE LOG SHALL BE KEPT FOR A MINIMUM OF THE THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION (INCLUDE HOURS FOR MANUAL AND AUTOMATIC OPERATION) SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.

FILE COPY

8. NOTIFICATION OF LOSS OF EXEMPTION FROM AQMD RULE 1470:

   A. IN-USE STATIONARY COMPRESSION IGNITION (CI) ENGINES USED IN AGRICULTURAL OPERATIONS ARE CURRENTLY EXEMPT FROM THE REQUIREMENTS OF RULE 1470. OWNERS OR OPERATORS OF THESE ENGINES SHALL NOTIFY THE EXECUTIVE OFFICER IMMEDIATELY AFTER THEY BECOME AWARE THAT THE EXEMPTION NO LONGER APPLIES.

   B. NO LATER THAN 180 DAYS AFTER NOTIFYING THE EXECUTIVE OFFICER, THE OWNER OR OPERATOR SHALL DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS AND SHALL PROVIDE EMISSION DATA IN ACCORDANCE WITH 1470(F) FOR THE PURPOSES OF DEMONSTRATING COMPLIANCE.

9. RECORDS SHALL BE MAINTAINED TO DEMONSTRATE COMPLIANCE WITH CONDITION NOS. 4 AND 7. THE RECORDS SHALL BE RETAINED AT THE FACILITY FOR AT LEAST THREE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M.Bailey/CW02
1/30/2007

FILE COPY

Application Details

Application/Tracking Number 444845

Facility Information			
Business Name	JOE BORBA DAIRY		
Facility ID	144827	Facility Status	ACTIVE

Application Information			
Application Type	Existing Agricultural Operations Permit	Application Received	6/15/2005
Application Status	PERMIT TO OPERATE GRANTED	Application Deemed Complete	6/29/2005
Equipment Desc	AgOps LACAF Dairy		
Permit Number	F87203	Permit Status	INACTIVE

Engineer Information			
Engineer Assigned	CAROLYN D WILEY		
Engineer Phone	(909) 396-2631	Team Assigned	0

Compliance

Facility ID	144827
Company Name	JOE BORBA DAIRY
Address	8477 EUCALYPTUS AVE
	ONTARIO, CA 91762

Notices Of Violaton: NONE

Notices To Comply: NONE

Address: 14715 S GROVE AV

Permit No. B200203344

City of Ontario Building Department

Owner	Contractor	Architect		
~~JOE BORBA~~ 14651 S GROVE AVE ONTARIO, CA 91761 909-597-2712	C.R. GANN 4020 BAIN ST. MIRA LOMA, CA 91752 909-681-8831 Lic #: 701091	Lic #: Engineer Lic #:	**Date:** 10-22-2002 **Trct:** **Sq.Ft.:** 0 **Units:** 0 **Stories:** 0 **Occ:** **DAB #:** 0	**Val:** $2,000.00 **APN:** **Avig:** N **Lot:** **Block:** **Const:** **Var:** 0

~~**Intended Permit Use:** DEMO HOUSE, CAP SEWER~~

Description / Comments:
DEMO HOUSE AND CAP OFF SEWER

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License # 701091 Lic. Class C21 Exp. Date 1-31-03

City Lic. # OK Jr Expires 12/31/02

Date 10-22-02 Signature of Contractor Linda Broyls

OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason: I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business an Professions Code).

Date________________ Signature of Owner________________

WORKER'S COMPENSATION DECLARATION

I hereby affirm under Penalty of Perjury one of the following:

( ) I have and will maintain a Certificate of Consent of self-insure for worker's compensation.

(✓) I have and will maintain Worker's Compensation Insurance.

Policy No.: 592716 Carrier: State Comp Ins

( ) I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to Worker's Compensation Laws of California.

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provision of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Linda Broyls 10-22-02
Signature of Owner or Agent Date

Electrical		Plumbing		Mechanical		Fees	
Temp Power Service	(0)	Fixtures/Vents	(0)	Furance To 100M BTU	(0)	Issuance Fee	$0.00
Temp Dist Sys	(0)	Repair Vent/Drain	(0)	Furance Ovr 100M BTU	(0)	Building Fee	$69.25
Outlet/Switch 1-20	(0)	Building Sewer	(0)	Floor Furance	(0)	Electrical Fee	$0.00
Outlet/Switch >20	(0)	Cesspool	(0)	Unit/Wall Heater	(0)	Plumbing Fee	$33.30
Light Fix 1-20	(0)	Priv Sewage Sys	(0)	Boiler To 100M BTU	(0)	Mechanical Fee	$0.00
Light Fix >20	(0)	Ind. Waste Intercept	(0)	Boiler 101-500M BTU	(0)	Grading Fee	$0.00
Platform/Thea	(0)	Rainwater Sys.	(0)	Boiler 501-1000M BTU	(0)	Inspection Fee	$0.00
Res App	(0)	New/Repair Water Pipe	(0)	Boiler 1001-1750M BTU	(0)	Plan Review Fee	$0.00
Non-Res App	(0)	Water Heaters	(0)	Boiler +1750M BTU	(0)	Parks & Rec SFD	$0.00
Power to 1HP	(0)	Gas Outlets	(0)	AH to 10K CFM	(0)	Parks & Rec MFD	$0.00
Power >1-10HP	(0)	Gas Outlets >5	(0)	AH Ovr 10K CFM	(0)	Sewer Assmnt SFD	$0.00
Power > 10-50HP	(0)	Lawn Spr Sys.	(0)	Evap Cooler	(0)	Sewer Assmnt COM	$0.00
Power >50-100HP	(0)	Atm. Bckflw/Vac 1-5	(0)	Vent Fan	(0)	Sewer Assmnt ENG	$0.00
Power >100HP	(0)	Atms. Bckflw/Vac. >5	(0)	Vent Systetm	(0)	Fire Facilities Fee	$0.00
Pri Swim Pool	(0)	Bckflw Device to 2"	(0)	Hood	(0)	Dust Control Fee	$0.00
Carvl/Circus Gen	(0)	Bckflw Device >2"	(0)	Equip Repair/Alter	(0)	S.M.I.P Fee	$0.50
Display/Lighting/Etc:	(0)	Public Pools	(0)	Appl Vents	(0)	Investigation Fee	$0.00
Busway Length (Feet)	(0)	Public Spas	(0)	Domestic Inc	(0)	Microfilm-Permit Fee	$0.00
Service to 200 Amps	(0)	Misc.	(1)	Comm/Indust Inc	(0)	Microfilm-Plans Fee	$0.00
Service 201-1000 Amps	(0)			Misc. Appl/Equip	(0)	Xerox Copies Fee	$0.00
Service Over 600 Volts	(0)					Storm Drain Fee	$0.00
Misc. Equip	(0)					Water Fee	$0.00
Signs	(0)					Sewer Fee	$0.00
Addl. Sign Circ	(0)					Helicopter Flyover	$0.00
						Refund Amount	$0.00

Total Fees	$103.05
Total Payments (-)	$103.05
Balance Due	**$0.00**

City of Ontario

Building Department

Telephone: (909) 395-2023
Inspectors' Direct Line: (909) 395-2362
Inspection Requests **ONLY**: (909) 395-2361
Fax No.: (909) 395-2180

POST this in a conspicuous place on the job.

You must furnish PERMIT NUMBER and JOB ADDRESS for each respective inspection.
Approved plans must be on job site at all times.

OTHER DEPARTMENT RELEASES:

Department Approval required prior to the building being released by the City.

Department	Phone No.	Date	Inspector
Engineering	395-2025		
Fire	395-2029		
Public Facilities	395-2169		
Planning	395-2036		
Police	395-2240		

This permit becomes void if work not commenced within 180 days from date of issuance, OR if work has been suspended or abandoned for a period of 180 days.

BUILDING APPROVALS

Setback & Footing		
Steel		
Slab Grade		
Floor Joists		
Floor Sheathing		
Roof Framing		
Roof Sheathing		
Shear Wall & Pre-Lath		
Shear Wall Interior		
Framing & Flashing		
Insulation		
Drywall Nailing		
Lathing & Siding		
T-Bar		
Grading/Compaction		
Final Demo	10/27/02	A

ELECTRICAL APPROVALS

Temp. Power Pole		
Conduit Underground		
Rough Electric		
Rough Electric – T-Bar		
SRV's Ground & Bond		
Final		

BLOCKWALL APPROVALS

Setback & Footing		
Bond Beam & Vertical Steel		
Final		

WALL PANEL APPROVALS

Panels		
Pour Strip		
Site Walls/Trash Enclosure		
Final		

PLUMBING APPROVALS

Ground		
Water Piping		
On-Site Sewer		
Rough Plumbing		
Gas Pipe-Test		
Roof Drains		
Privet Sewer	10/09/02	[illegible]
Final	10/29/02	[illegible]

MECHANICAL APPROVALS

Underground Ducts		
Rough Mechanical		
Ducts, Ventilating		
Grills & Hoods		

POOL & SPA APPROVALS

Dep. Inspector		
Pool Steel Rein/Bond		
Pool Plumbing/Press Test		
Pre-Gunite		
Rough Pool Electric		
Gas Piping/Test		
Pool Fencing/Access		
Pre-Plaster		
Final – Pool/Spa		

ENCROACHMENT PERMIT

Clearance		

FIRE SPRINKLER APPROVALS

Rough		
Final		

NOTES:

Address: 8541 E EUCALYPTUS AV ONTA

Permit No. B200802148

City of Ontario Building Department

Owner	Contractor	Designer
GH DAIRY 17094 CUCAMONGA AV CORONA, CA 92880	SAME AS OWNER	
	Lic #: 000	Lic #:

Date: 08/28/2008
Tot Sq. Ft.: 0
New Sq.Ft/TI.: 0
Units: 0
Stories: 0
Occ:
DAB #: 0

Val: $0.00
APN:
Trct:
Lot:
Block:
Const:
Var: 0

Intended Permit Use:

Description / Comments: ELECTRIC METER FOR MILK BARN

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License #______ Lic. Class______ Exp. Date______

City Lic. #______ Expires______

Date______ Signature of Contractor______

OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason: I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business an Professions Code).

Date 8/28/08 Signature of Owner Patricia L Mohr

WORKER'S COMPENSATION DECLARATION

I hereby affirm under Penalty of Perjury one of the following:

( ) I have and will maintain a Certificate of Consent of self-insure for worker's compensation.

( ) I have and will maintain Worker's Compensation Insurance.

Policy No.:______ Carrier:______

( ) I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to Worker's Compensation Laws of California.

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provision of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

I certify that I have read this application and state that the above information is correct. I agree to comply with all City and State laws relating to the building construction, and hereby authorize representatives of this City to enter upon the above-mentioned property for inspection purposes.

Patricia L Mohr — Signature of Owner of Agent

8/28/08 — Date

Electrical		Plumbing		Mechanical		Fees	
Temp Power Service	(0)	Fixtures/Vents	(0)	Furnace To 100M BTU	(0)	Issuance Fee	$0.00
Temp Dist Sys	(0)	Repair Vent/Drain	(0)	Furnace Ovr 100M BTU	(0)	Building Fee	$0.00
Outlet/Switch 1-20	(0)	Building Sewer	(0)	Floor Furnace	(0)	Electrical Fee	$54.00
Outlet/Switch >20	(0)	Cesspool	(0)	Unit/Wall Heater	(0)	Plumbing Fee	$0.00
Light Fix 1-20	(0)	Priv Sewage Sys	(0)	Boiler To 100M BTU	(0)	Mechanical Fee	$0.00
Light Fix >20	(0)	Ind. Waste Intercept	(0)	Boiler 101-500M BTU	(0)	Grading Fee	$0.00
Platform/Thea	(0)	Rainwater Sys.	(0)	Boiler 501-1000M BTU	(0)	Inspection Fee	$0.00
Res App	(0)	New/Repair Water Pipe	(0)	Boiler 1001-1750M BTU	(0)	Plan Review Fee	$0.00
Non-Res App	(0)	Water Heaters	(0)	Boiler +1750M BTU	(0)	NMC Dev Fee	$0.00
Power to 1HP	(0)	Gas Outlets	(0)	AH to 10K CFM	(0)	Development Fee	0
Power >1-10HP	(0)	Gas Outlets >5	(0)	AH Ovr 10K CFM	(0)	Sewer Assmnt SFD	$0.00
Power > 10-50HP	(0)	Lawn Spr Sys.	(0)	Evap Cooler	(0)	Sewer Assmnt COM	$0.00
Power >50-100HP	(0)	Atm. Bckflw/Vac 1-5	(0)	Vent Fan	(0)	Fire Facilities Fee	$0.00
Power >100HP	(0)	Atms. Bckflw/Vac. >5	(0)	Vent Systetm	(0)	Dust Control Fee	$0.00
Pri Swim Pool	(0)	Bckflw Device to 2"	(0)	Hood	(0)	S.M.I.P Fee	$0.00
Carvl/Circus Gen	(0)	Bckflw Device >2"	(0)	Equip Repair/Alter	(0)	Investigation Fee	$0.00
Display/Lighting/Etc:	(0)	Public Pools	(0)	Appl Vents	(0)	Microfilm-Permit Fee	$0.00
Busway Length (Feet)	(0)	Public Spas	(0)	Domestic Inc	(0)	Microfilm-Plans Fee	$0.00
Service to 200 Amps	(1)	Misc.	(0)	Comm/Indust Inc	(0)	Xerox Copies Fee	$0.00
Service 201-1000 Amps	(0)	Misc. Appl/Equip	(0)			Min. Issuance	$0.00
Service Over 600 Volts	(0)					Refund Amount	$0.00
Misc. Equip	(0)						
Signs	(0)						
Addl. Sign Circ	(0)						

Total Fees	$54.00
Total Payments (-)	$54.00
Balance Due	**$0.00**

City of Ontario
Building Department

INSPECTION REQUESTS 909-395-2361
B200802148

POST this in a conspicuous place on the job.

Main Line 909-395-2023/Inspectors 909-395-2362
You must furnish PERMIT NUMBER and JOB ADDRESS for each respective inspection.
Approved plans must be on job site at all times.

OTHER DEPARTMENT RELEASES:

Department Approval required prior to the building being released by the City.

Department	Phone No.	Date	Inspector
Engineering	395-2025		
Fire	395-2029		
Public Facilities	395-2237		
Planning	395-2036		
Police	395-2940		

This permit becomes void if work not commenced within 365 days from date of issuance, OR if work has been suspended or abandoned for a period of 180 days.

BUILDING APPROVALS

Setback & Footing		
Steel		
Slab Grade		
Floor Joists		
Floor Sheathing		
Roof Framing		
Roof Sheathing		
Shear Wall & Pre-Lath		
Shear Wall Interior		
Framing & Flashing		
Insulation		
Drywall Nailing		
Lathing & Siding		
T-Bar		
Grading/Compaction		
Final		

ELECTRICAL APPROVALS

Temp. Power Pole		
Conduit Underground		
Rough Electric		
Rough Electric – T-Bar		
SRV's Ground & Bond	8-28-8	Blaylock
400 Amp		
Final	8-28-8	Blaylock

BLOCKWALL APPROVALS

Setback & Footing		
Bond Beam & Vertical Steel		
Final		

WALL PANEL APPROVALS

Panels		
Pour Strip		
Site Walls/Trash Enclosure		
Final		

PLUMBING APPROVALS

Ground		
Water Piping		
On-Site Sewer		
Rough Plumbing		
Gas Pipe-Test		
Roof Drains		
Final		

MECHANICAL APPROVALS

Underground Ducts		
Rough Mechanical		
Ducts, Ventilating		
Grills & Hoods		
Final		

POOL & SPA APPROVALS

Dep. Inspector		
Pool Steel Rein/Bond		
Pool Plumbing/Press Test		
Pre-Gunite		
Rough Pool Electric		
Gas Piping/Test		
Pool Fencing/Access		
Pre-Plaster		
Final – Pool/Spa		

ENCROACHMENT PERMIT

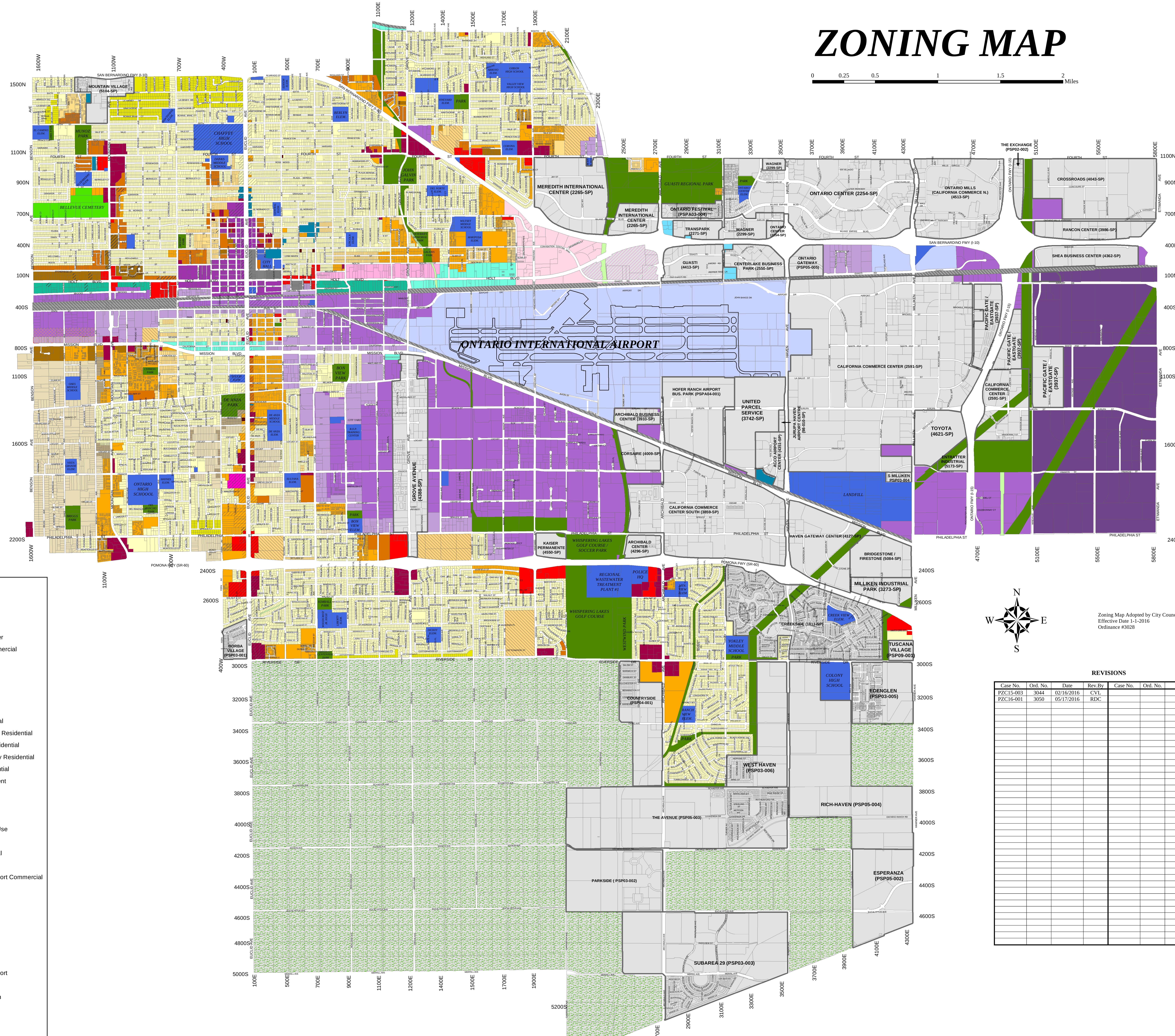
Clearance		

FIRE SPRINKLER APPROVALS

Rough		
Final		

NOTES:

ZONING MAP



Zoning Map Adopted by City Council 12-1-2015
Effective Date 1-1-2016
Ordinance #3028

LEGEND

Overlays

- AG, Agricultural
- EA, Euclid Avenue
- MTC, Multimodal Transit Center
- ICC, Interim Community Commercial
- ES, Emergency Shelter

Zones

- AR-2, Residential-Agricultural
- RE-2, Rural Estate
- RE-4, Residential Estate
- LDR-5, Low Density Residential
- MDR-11, Low-Medium Density Residential
- MDR-18, Medium Density Residential
- MDR-25, Medium-High Density Residential
- HDR-45, High Density Residential
- PUD, Planned Unit Development
- MHP, Mobile Home Park
- MU-1, Downtown Mixed-Use
- MU-2, East Holt Mixed-Use
- MU-11, Euclid/Francis Mixed-Use
- CS, Corner Store
- CN, Neighborhood Commercial
- CC, Community Commercial
- CCS, Convention Center Support Commercial
- OL, Low Intensity Office
- OH, High Intensity Office
- BP, Business Park
- IP, Industrial Park
- IL, Light Industrial
- IG, General Industrial
- IH, Heavy Industrial
- ONT, Ontario International Airport
- CIV, Civic
- OS-R, Open Space-Recreation
- OS-C, Open Space-Cemetery
- UC, Utilities Corridor
- SP, Specific Plan
- RC, Rail Corridor

REVISIONS

Case No.	Ord. No.	Date	Rev.By	Case No.	Ord. No.	Date	Rev.By
PZC15-003	3044	02/16/2016	CVL				
PZC16-001	3050	05/17/2016	RDC				

Accessibility | Disclaimer | About

Department of Conservation

Lat: 33.98922, Long: -117.64275

Division of Oil, Gas & Geothermal Resources Well Finder

Find By Location

Find My Current Location

or

Street: 14545 s grove avenue

City: ontario

Zip: Find

Display a 1500 foot buffer

Buffer radius is limited to 10 mi (52800ft).

Find By API

Find By Lat, Long

Find By PLSS

Find By Oil/Gas Field

Data (Layers):

- Notices & Permits
- DOGGR Wells

Label: API# Well# Detailed

EPA Wells for Aquifer Exemption Review

- Enhanced Oil Recovery Wells
- Disposal Wells

- Oil/Gas Fields

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-111-01-0000

Property Information

Property Address (Main Situs)	Protected per CA. Govt. Code Sect. 6254.21 Protected per CA. Govt. Code Sect. 6254.21
Owner and Mailing Address	BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR Protected per CA. Govt. Code Sect. 6254.21 Protected per CA. Govt. Code Sect. 6254.21
Effective Date	01/14/2015

Parcel	1054111010000
Parcel Status	ACTIVE
Parcel Type	REAL PROPERTY
Property ID	
Tax Status	ASSESSED BY COUNTY
Use Code	DAIRY
Land Access	PUBLIC PAVED
Size	7.001 TO 14.000 ACRES
Land Type	AGRICULTURAL
District	ONTARIO
Resp Group	REAL PROPERTY
Resp Unit	COMMERCIAL ZONE OR USE

Current Owners

		Document Numbers
Name	**BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**	
R/I	TRUST UNKNOWN	20090382145
% Int	50.0000000	
Type	BILLED OWNER	
Acquisition Date	08/31/2009	
Document Date	08/31/2009	
Inactive Date	NONE	

		Document Numbers
Name	**BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**	
R/I	TRUST UNKNOWN	20090382145
% Int	50.0000000	
Type	OTHER OWNER	
Acquisition Date	08/31/2009	
Document Date	08/31/2009	
Inactive Date	NONE	

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054111010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 9 SEC 21 TP 2S R 7W EX ST 9.24 AC M/L

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-111-02-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054111020000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code VACANT
Land Access PRIVATE UNPAVED
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054111020000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 10 SEC 21 TP 2S R 7W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-121-01-0000

Property Information

Parcel 1054121010000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code MU SFR-AGR
Land Access PUBLIC PAVED
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit AGRICULTURAL ZONE OR USE EXCEPT OSC

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054121010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 8 SEC 21 TP 2S R 7W EX ST PER DEED RECORDED 10-27-81 DOC NO 237434

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-121-02-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054121020000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code VACANT
Land Access PUBLIC PAVED
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054121020000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 7 SEC 21 TP 2S R 7W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-131-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054131010000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code DAIRY

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type AGRICULTURAL

District ONTARIO

Resp Group REAL PROPERTY

Resp Unit AGRICULTURAL ZONE OR USE EXCEPT OSC

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type OTHER OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054131010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 6 SEC 21 TP 2S R 7W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-131-02-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054131020000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code DAIRY
Land Access PUBLIC PAVED
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit AGRICULTURAL ZONE OR USE EXCEPT OSC

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054131020000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 5 SEC 21 TP 2S R 7W AND W 1/2 WALKER AVE CLOSED ADJ ON E

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-141-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054141010000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PRIVATE UNPAVED

Size 7.001 TO 14.000 ACRES

Land Type AGRICULTURAL

District ONTARIO

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type OTHER OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054141010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 11 SEC 21 TP 2S R 7W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-141-02-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054141020000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PRIVATE UNPAVED

Size 7.001 TO 14.000 ACRES

Land Type AGRICULTURAL

District ONTARIO

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type OTHER OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054141020000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 12 SEC 21 TP 2S R 7W AND W 1/2 WALKER AVE CLOSED ADJ ON E

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-151-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054151010000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code VACANT
Land Access PRIVATE UNPAVED
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054151010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 13 SEC 21 TP 2S R 7W AND E 1/2 WALKER AVE CLOSED ADJ ON W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-161-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054161010000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code DAIRY

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type AGRICULTURAL

District ONTARIO

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR USE

Property Address for Single Family Residence Characteristic (Seq # 002)

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Current Owners

Name BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

R/I TRUST UNKNOWN

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Name BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

R/I TRUST UNKNOWN

% Int 50.0000000

Type OTHER OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054161010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 4 SEC 21 TP 2S R 7W AND E 1/2 WALKER AVE CLOSED ADJ ON W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-201-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054201010000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code VACANT
Land Access PRIVATE UNPAVED
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054201010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 20 SEC 21 TP 2S R 7W AND E 1/2 WALKER AVE CLOSED ADJ ON W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-211-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054211010000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code VACANT
Land Access PRIVATE UNPAVED
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054211010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 22 SEC 21 TP 2S R 7W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-211-02-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054211020000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PRIVATE UNPAVED

Size 7.001 TO 14.000 ACRES

Land Type AGRICULTURAL

District ONTARIO

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type OTHER OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054211020000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 21 SEC 21 TP 2S R 7W AND W 1/2 WALKER AVE CLOSED ADJ ON E

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-221-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054221010000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type AGRICULTURAL

District ONTARIO

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type OTHER OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054221010000			

Legal Description

RANCHO SANTA ANA DEL CH1NO LOT 24 SEC 21 TP 2S R 7W 9.5 AC

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-221-02-0000

Property Information

Property Address (Main Situs)	Protected per CA. Govt. Code Sect. 6254.21 Protected per CA. Govt. Code Sect. 6254.21
Owner and Mailing Address	BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR Protected per CA. Govt. Code Sect. 6254.21 Protected per CA. Govt. Code Sect. 6254.21
Effective Date	01/14/2015

Parcel	1054221020000
Parcel Status	ACTIVE
Parcel Type	REAL PROPERTY
Property ID	
Tax Status	ASSESSED BY COUNTY
Use Code	VACANT
Land Access	CHECK
Size	7.001 TO 14.000 ACRES
Land Type	AGRICULTURAL
District	ONTARIO
Resp Group	REAL PROPERTY
Resp Unit	COMMERCIAL ZONE OR USE

Current Owners

		Document Numbers
Name	**BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**	
R/I	TRUST UNKNOWN	20090382145
% Int	50.0000000	
Type	BILLED OWNER	
Acquisition Date	08/31/2009	
Document Date	08/31/2009	
Inactive Date	NONE	

		Document Numbers
Name	**BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**	
R/I	TRUST UNKNOWN	20090382145
% Int	50.0000000	
Type	OTHER OWNER	
Acquisition Date	08/31/2009	
Document Date	08/31/2009	
Inactive Date	NONE	

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054221020000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 23 SEC 21 TP 2S R 7W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-331-01-0000

Property Information

Property Address (Main Situs)	Protected per CA. Govt. Code Sect. 6254.21 Protected per CA. Govt. Code Sect. 6254.21
Owner and Mailing Address	BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR Protected per CA. Govt. Code Sect. 6254.21 Protected per CA. Govt. Code Sect. 6254.21
Effective Date	01/14/2015

Parcel	1054331010000
Parcel Status	ACTIVE
Parcel Type	REAL PROPERTY
Property ID	
Tax Status	ASSESSED BY COUNTY
Use Code	VACANT
Land Access	PUBLIC PAVED
Size	7.001 TO 14.000 ACRES
Land Type	AGRICULTURAL
District	ONTARIO
Resp Group	REAL PROPERTY
Resp Unit	COMMERCIAL ZONE OR USE

Current Owners

		Document Numbers
Name	**BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**	
R/I	TRUST UNKNOWN	20090382145
% Int	50.0000000	
Type	BILLED OWNER	
Acquisition Date	08/31/2009	
Document Date	08/31/2009	
Inactive Date	NONE	

		Document Numbers
Name	**BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**	
R/I	TRUST UNKNOWN	20090382145
% Int	50.0000000	
Type	OTHER OWNER	
Acquisition Date	08/31/2009	
Document Date	08/31/2009	
Inactive Date	NONE	

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054331010000			

Legal Description

RANCHO SANTA ANA DEL CH1NO LOT 25 SEC 21 TP 2S R 7W 9 AC

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-331-02-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054331020000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code VACANT
Land Access CHECK
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054331020000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 26 SEC 21 TP 2S R 7W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-341-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054341010000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type AGRICULTURAL

District ONTARIO

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type OTHER OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054341010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 27 SEC 21 TP 2S R 7W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-341-02-0000

Property Information

Parcel 1054341020000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type AGRICULTURAL

District ONTARIO

Resp Group REAL PROPERTY

Resp Unit COMMERCIAL ZONE OR USE

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR

Protected per CA. Govt. Code Sect. 6254.21

Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**

R/I TRUST UNKNOWN

% Int 50.0000000

Type OTHER OWNER

Acquisition Date 08/31/2009

Document Date 08/31/2009

Inactive Date NONE

Document Numbers

20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054341020000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 28 SEC 21 TP 2S R 7W AND W 1/2 WALKER AVE CLOSED ADJ ON E

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found

Property Information Management System

San Bernardino County

Office of the Assessor

PROPERTY INFORMATION REPORT FOR PARCEL 1054-351-01-0000

Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR
Protected per CA. Govt. Code Sect. 6254.21
Protected per CA. Govt. Code Sect. 6254.21

Effective Date 01/14/2015

Parcel 1054351010000
Parcel Status ACTIVE
Parcel Type REAL PROPERTY
Property ID
Tax Status ASSESSED BY COUNTY
Use Code VACANT
Land Access PUBLIC PAVED
Size 7.001 TO 14.000 ACRES
Land Type AGRICULTURAL
District ONTARIO
Resp Group REAL PROPERTY
Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type BILLED OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Name **BORBA, JOSEPH & DOLEEN ADMINISTRATIVE TR**
R/I TRUST UNKNOWN
% Int 50.0000000
Type OTHER OWNER
Acquisition Date 08/31/2009
Document Date 08/31/2009
Inactive Date NONE

Document Numbers
20090382145

Legal Parcel Map

Parcel Map	Parcel Nbr	Unit	Book	Page
	1054351010000			

Legal Description

RANCHO SANTA ANA DEL CHINO LOT 29 SEC 21 TP 2S R 7W AND E 1/2 WALKER AVE CLOSED ADJ ON W

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found


1054-121-01
1054-121-02
1054-131-01
1054-131-02
1054-161-01
1054-111-01
1054-111-02
1054-141-01
1054-141-02
1054-151-01
1054-221-01
1054-221-02
1054-211-01
1054-211-02
1054-201-01
1054-331-01
1054-331-02
1054-341-01
1054-341-02
1054-351-01

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

The following questionnaire is required by the ASTM Standard E 1527-13, which adheres to the All Appropriate Inquiries (AAI) Rule (United States Environmental Protection Agency) (40 CFR 312).

As defined by ASTM, the User of the report is the *"party seeking to use Practice E 1527 to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. The user has specific obligations for completing a successful application of this practice."*

PROPERTY ADDRESS:	14545 Grove Ave.
PROPERTY CITY, STATE ZIP:	Ontario, CA

1. Environmental liens that are filed or recorded against the property (40 CFR 312.25)

Did a search of recorded land title records (or judicial records) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?

☐ YES ☐ NO

refer to title report

2. Activity and use limitations (AULs) that are in place on the property or that have been filed or records against the property (40 CFR 312.26(a)(1)(v) and (vi))

Did a search of recorded land title records (or judicial records) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?

☐ YES ☐ NO

refer to title report

3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28)

Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

☐ YES ☒ NO

PARTNER

4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29)

Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

☐ YES ☐ NO

n/A

5. Commonly known or reasonably ascertainable information about the Property (40 CFR 312.30)

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases?

☐ YES ☒ NO

a. Do you know the past uses of the property?

☒ YES ☐ NO

Answer is limited to our actual knowledge during our period of ownership

b. Do you know of specific chemicals that are present or once were present at the property?

☒ YES ☐ NO

underground gas tanks (owners believe no longer present)

c. Do you know of spills or other chemical releases that have taken place at the property?

☐ YES ☒ NO

d. Do you know of any environmental cleanups that have taken place at the property?

☐ YES ☒ NO

e. Do you have any prior knowledge that the property was developed as a gas station, dry cleaner, manufacturing/industrial facility in the past?

☐ YES ☒ NO

f. Are you aware of historical use of hazardous materials or petroleum products used or present on the property?

☒ YES ☐ NO

underground gas tanks (owners believe no longer present)

PARTNER

g. Do you know if the property is currently or was formerly equipped with underground storage tanks (USTs) or septic tanks?

☒ YES ☐ NO

underground gas tanks (owner's believe no longer present

h. Do you know of any past, threatened or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?

☐ YES ☒ NO

6. The degree of obviousness of the presence or likely presence of contamination at the property, **and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)**

Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?

☐ YES ☒ NO

Signature of User/Person Interviewed: Joan Borba James Borba / A.C.

Name of User/Person Interviewed: Joan Borba

Title/Relationship to Property: Co-trustees

Phone Number/Email: 909-931-1166 borbatrust@gmail.com

Date: 2-23-17

Contact for additional information:

Name: James Borba

Relationship to Property: co-trustee

Phone Number/Email: 949-873-3888

* This information is given as an accommodation only, is not a representation or warranty and may not be relied upon by optionee for purposes of the ground lease option agreement, and shall in no event deemed to amend or modify the ground lease option agreement.

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

14651 SOUTH GROVE AVE
ONTARIO, CA 91762

AFX Order #79-39169-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

14651 GROVE AVE
ONTARIO, CA 91762-7704

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 054-111-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-111-02
ONTARIO, CA 91762

AFX Order #79-39171-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

COMET AVE
ONTARIO, CA 91762-7704

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-111-02-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

This report was prepared for the use of **AFX Research LLC** (AFX), exclusively. This report is neither a guarantee of title, a commitment to insure, nor a policy of title insurance. **NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT.** AFX specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular use or purpose. The information contained in this report is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

14525 SOUTH GROVE AVENUE
ONTARIO, CA 91762

AFX Order #79-39172-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

14525 S GROVE AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-121-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-121-02
ONTARIO, CA 91762

AFX Order #79-39173-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

EUCALYPTUS AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-121-02-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

**8321 EUCALYPTUS AVE
ONTARIO, CA 91762**

AFX Order #79-39174-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

8321 EUCALYPTUS AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-131-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

8477 EUCALYPTUS AVE
ONTARIO, CA 91762

AFX Order #79-39175-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

8477 EUCALYPTUS AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-131-02-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-141-01
ONTARIO, CA 91762

AFX Order #79-39176-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

COMET AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor’s Parcel Number (s): 1054-141-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

This report was prepared for the use of **AFX Research LLC** (AFX), exclusively. This report is neither a guarantee of title, a commitment to insure, nor a policy of title insurance. **NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT.** AFX specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular use or purpose. The information contained in this report is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-141-02
ONTARIO, CA 91762

AFX Order #79-39177-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor’s Parcel Number (s): 1054-141-02-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

This report was prepared for the use of **AFX Research LLC** (AFX), exclusively. This report is neither a guarantee of title, a commitment to insure, nor a policy of title insurance. **NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT.** AFX specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular use or purpose. The information contained in this report is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-151-01
ONTARIO, CA 91762

AFX Order #79-39178-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-151-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

8551 EUCALYPTUS AVENUE
ONTARIO, CA 91762

AFX Order #79-39179-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

8551 EUCALYPTUS AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-161-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-201-01
ONTARIO, CA 91762

AFX Order #79-39180-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-201-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-211-01
ONTARIO, CA 91762

AFX Order #79-39181-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

COMET AVENUE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor’s Parcel Number (s): 1054-211-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-211-02
ONTARIO, CA 91762

AFX Order #79-39182-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-211-02-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

This report was prepared for the use of **AFX Research LLC** (AFX), exclusively. This report is neither a guarantee of title, a commitment to insure, nor a policy of title insurance. **NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT.** AFX specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular use or purpose. The information contained in this report is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

14715 SOUTH GROVE AVENUE
ONTARIO, CA 91762

AFX Order #79-39183-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

14715 GROVE AVE
ONTARIO, CA 91762

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-211-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-221-02
ONTARIO, CA 91762

AFX Order #79-39184-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

COMET AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-221-02-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

This report was prepared for the use of **AFX Research LLC** (AFX), exclusively. This report is neither a guarantee of title, a commitment to insure, nor a policy of title insurance. **NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT.** AFX specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular use or purpose. The information contained in this report is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-331-01
ONTARIO, CA 91762

AFX Order #79-39185-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

GROVE AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-331-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

This report was prepared for the use of **AFX Research LLC** (AFX), exclusively. This report is neither a guarantee of title, a commitment to insure, nor a policy of title insurance. **NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT.** AFX specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular use or purpose. The information contained in this report is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-331-02
ONTARIO, CA 91762

AFX Order #79-39186-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

MERRILL AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-331-02-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-341-01
ONTARIO, CA 91762

AFX Order #79-39187-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

<u>TARGET PROPERTY INFORMATION</u>

<u>ADDRESS</u>

MERRILL AVE
ONTARIO, CA 91710

<u>RESEARCH SOURCE</u>

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

<u>DEED INFORMATION</u>

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

<u>LEGAL DESCRIPTION</u>

Assessor's Parcel Number (s): 1054-341-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-341-02
ONTARIO, CA 91762

AFX Order #79-39188-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

MERRILL AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-341-02-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

-Disclaimer-

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Research, LLC
211B Tank Farm Rd San Luis Obispo, CA 93402
(877) 848-5337 Fax: (800) 201-0620

AFX Environmental Lien & AUL Search Report

17-180354.1

1054-351-01
ONTARIO, CA 91762

AFX Order #79-39189-47

02/04/2017

ENVIRONMENTAL LIEN REPORT

17-180354.1

The AFX Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

MERRILL AVE
ONTARIO, CA 91710

RESEARCH SOURCE

SAN BERNARDINO COUNTY OFFICIAL LAND RECORDS
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEED INFORMATION

Type of Instrument: TRUST TRANSFER DEED

Grantor: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOHN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATED AS OF 08-26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007 (WHO ACQUIRED TITLE AS JOSEPH A BORBA, NOW DECEASED AND DOLEEN BORBA, TRUSTEES OF THE JOSEPH AND DOLEEN BORBA TRUST, UNDER TRUST AGREEMENT D-02/02/1990)

Grantee: DOLEEN BORBA, MARLEEN BORBA DARRAS AND JOAN M BORBA, AS TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST D-03/16/2008, ESTABLISHED UNDER THE JOSEPH AND DOLEEN BORBA TRUST D-02/07/1990, AS COMPLETELY AMENDED AND RESTATES AS OF 08/26/1999, 07/09/2005 AND AGAIN AS OF 12/21/2007

Deed Dated: 08/28/2009

Deed Recorded: 08/31/2009

Instrument: 2009-0382145

Land Record Comments: MEMORANDUM OF OPTION AGREEMENT BETWEEN JOAN M BORBA AND JAMES BORBA, CO-TRUSTEES OF THE JOSEPH AND DOLEEN BORBA ADMINISTRATIVE TRUST AND PROLOGIS, INC- 2017-0050502 R-02/02/2017

LEGAL DESCRIPTION

Assessor's Parcel Number (s): 1054-351-01-0000

ENVIRONMENTAL LIEN REPORT

17-180354.1

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found X

If Found Describe:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found Not Found X

If Found Describe:

ENVIRONMENTAL LIEN REPORT

17-180354.1

Thank you for your order!
Please contact our office at (877) 848-5337
AFX Research, LLC

The **AFX Research, LLC** Environmental Lien & AUL Search Report, provides results from available current land title records for environmental cleanup liens and other activities and use limitations, such as engineering and institutional controls.

A network of trained, professional researchers, following established industry protocols, use client supplied property information to search for:

- Parcel information and / or legal description
- Ownership information
- Official land title documents recorded at jurisdictional agencies such as recorder's' office, registries of deeds, county clerks' offices, etc.
- Access a copy of the deed
- Environmental encumbrance(s) associate with the deed
- Provide a copy of any environmental encumbrance(s) based upon a review of keywords in the instrument(s) (title, parties involved and description)
- Provide a copy of the deed or cite documents reviewed

U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands

February 28, 2017

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

The following questionnaire is required by the ASTM Standard E 1527-13, which adheres to the All Appropriate Inquiries (AAI) Rule (United States Environmental Protection Agency) (40 CFR 312).

As defined by ASTM, the User of the report is the *"party seeking to use Practice E 1527 to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. The user has specific obligations for completing a successful application of this practice."*

PROPERTY ADDRESS:	14545 Grove Ave.
PROPERTY CITY, STATE ZIP:	Ontario, CA

1. Environmental liens that are filed or recorded against the property (40 CFR 312.25)

Did a search of recorded land title records (or judicial records) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?

☐ YES ☐ NO

refer to title report

2. Activity and use limitations (AULs) that are in place on the property or that have been filed or records against the property (40 CFR 312.26(a)(1)(v) and (vi))

Did a search of recorded land title records (or judicial records) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?

☐ YES ☐ NO

refer to title report

3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28)

Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

☐ YES ☒ NO

4. **Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29)**
   Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

   ☐ YES ☐ NO

   n/A

5. **Commonly known or reasonably ascertainable information about the Property (40 CFR 312.30)**
   Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases?

   ☐ YES ☒ NO

   a. Do you know the past uses of the property?

   ☒ YES ☐ NO

   Answer is limited to our actual knowledge during our period of ownership

   b. Do you know of specific chemicals that are present or once were present at the property?

   ☒ YES ☐ NO

   underground gas tanks (owners believe no longer present)

   c. Do you know of spills or other chemical releases that have taken place at the property?

   ☐ YES ☒ NO

   d. Do you know of any environmental cleanups that have taken place at the property?

   ☐ YES ☒ NO

   e. Do you have any prior knowledge that the property was developed as a gas station, dry cleaner, manufacturing/industrial facility in the past?

   ☐ YES ☒ NO

   f. Are you aware of historical use of hazardous materials or petroleum products used or present on the property?

   ☒ YES ☐ NO

   underground gas tanks (owners believe no longer present)

g. Do you know if the property is currently or was formerly equipped with underground storage tanks (USTs) or septic tanks?

[X] YES [ ] NO

underground gas tanks (owner's believe no longer present

h. Do you know of any past, threatened or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?

[ ] YES [X] NO

6. The degree of obviousness of the presence or likely presence of contamination at the property, **and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)**

Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?

[ ] YES [X] NO

Signature of User/Person Interviewed: Joan Borba James Borba / A.C.

Name of User/Person Interviewed: Joan Borba

Title/Relationship to Property: Co-trustees

Phone Number/Email: 909-931-1166 borbatrust@gmail.com

Date: 2-23-17

Contact for additional information:

Name: James Borba

Relationship to Property: Co-trustee

Phone Number/Email: 949-873-3888

*This information is given as an accommodation only, is not a representation or warranty and may not be relied upon by optionee for purposes of the ground lease option agreement, and shall in no event deemed to amend or modify the ground lease option agreement.

ENGINEERED WASTE MANAGEMENT PLAN

Prepared For:

Joe Borba Dairies
14651 South Grove Avenue
Chino, CA 91710
(909) 547-2712

NOLTE
BEYOND ENGINEERING

JOB NO. IE0123
November 2003

TABLE OF CONTENTS

ENGINEERED WASTE MANAGEMENT PLAN
for
Joe Borba Dairies
14651 South Grove Avenue
Chino, CA 91710
(909) 547-2712

I. INTRODUCTION

This Engineered Waste Management Plan describes the operational setting of the Joe Borba Dairies. The three dairies covered by the EWMP are of common ownership and are adjacent to each other. The Plan provides a description of each dairy and provides recommended procedures and improvements designed to effectively manage the dairies wastewater collection, retention, and disposal systems. The overall layout of the three dairies is presented on Plate 1. Detailed exhibits of each dairy are presented in Plates 2 through 4.

B&B Dairy

Owners: Joe Borba
Manager: Martin Garcia

Location: 8521 Eucalyptus Avenue, Chino, CA
Mailing Address: 8521 Eucalyptus Avenue, Chino, CA 91710

EWMP Responsibility:	Primary:	Martin Garcia	(909) 923-3518
	Secondary:	James Borba	(909) 947-4441

Joe Borba Dairy #2

Owners: Joe Borba
Manager: Adolpho Flores

Location: 14651 Eucalyptus Avenue, Chino, CA
Mailing Address: 14651 Eucalyptus Avenue, Chino, CA 91710

EWMP Responsibility:	Primary:	Adolpho Flores	(909) 923-3516
	Secondary:	James Borba	(909) 947-4441

Half & Half Dairy

Owner :	Joe Borba
Manager:	Gus D'melo
Location:	14651 S. Grove Avenue Avenue, Chino, CA
Mailing Address:	14651 S. Grove Avenue, Chino, CA 91710

EWMP Responsibility:	Primary:	Gus D'Melo	(909) 597-2712
	Secondary:	Marguerite Hardisty	(909) 59702905

The Joe Borba Dairies are located approximately one-half mile north of Chino Airport. They are bounded by Grove Avenue to the west, Merrill Avenue to the south, and Eucalyptus Avenue to the north. All three dairies front on Eucalyptus Avenue with their south property lines along Merrill Avenue. Half & Half Dairy is located at the west end of the collective dairy properties and is bounded by Grove Avenue to the west. Joe Borba Dairy is located in the center, with B & B Dairy at the east end of the collective properties.

At the time this report was prepared, none of the three dairies could not comply with the guidelines of RWQCB Order 99-11. The quantities reported in this document are the result of the proposed improvements described herein under Section II, Recommendations.

II. B&B DAIRY

A. GENERAL

The gross area of the dairy is approximately 37.54 acres. The dairy operations occupy approximately 37.34 acres and include the following uses:

- Corrals,
- Hay barns,
- Commodity barn,
- Milk barn,
- Wastewater lagoons, evaporation basins, and catch basins, and
- Manure management area

The current typical animal population is:

- 1,300 milk cows
- 20 dry cows,
- 100 young replacement stock (bred heifers)

Using the current onsite stock count, the dairy accounts for 1,958 total animal units. B&B Dairy does not have plans for expansion at this time.

The B&B Dairy has approximately 20.93 acres of corrals, 3.52 acres of concrete surfaces, 0.38 acres of roofed area, and 4.10 acres of dirt roads and open area on the property. The residence, yards, milk barn, garages and shops comprise approximately 1.3 acres. There are three lagoons, two catch basins, and two evaporation basins for use in wastewater management. The wastewater containment areas have a combined capacity of 13,073,221 gallons, (40.12 acre-ft.). The average daily wash water generation rate for the dairy is 34,940 gallons.

The B&B Dairy has an effective system for managing its wash water and storm water. Wash water from the milk barn gravity flows south to a concrete sump where it is transported through a pipe to a distribution manifold and released into Lagoon #1 near the west property line. Lagoon #1 is approximately 6 feet deep. Spill pipes in the berms between Lagoons #1 and #2 and Lagoons #2 and #3 allow excess water to flow to the next lagoon in order. The berms between each lagoon are approximately 6 feet high and 10 feet wide at the top. The north berm of Lagoon #1 is 3 feet higher than adjacent Corral #22. The south berm of Lagoon #3 is 4 feet higher than adjacent Catch Basin #2.

In the event that all three lagoons become full during a major storm, additional wash water may be released using the same pipe and manifold system into either Evaporation Basin #1 or #2.

Storm water from Corrals #1 through #9 gravity flows east to a swale adjacent to the east property line. Once reaching this swale, the storm water flows south into Catch Basin #1. Storm water from Corrals #10 through #16 gravity flows west to a swale adjacent to the west edge of the corrals and travels south to Catch Basin #2. Storm water that falls within Corrals #18 through #22 flows west into a swale along the west edge of the corrals, then south around the north side of Lagoon #1 and into the swale along the east side of the lagoons. This storm water ultimately drains into Catch Basin #2. The manure storage area and small corrals south of the storage area drain into Catch Basin #2. The central concrete feed lane drains directly south into Evaporation Basin #1.

B & B Dairy has effective protection from onsite stormwater leaving the site. Swales along the east and west property lines direct all onsite stormwaters to the south and into Catch Basins #1 and #2 and Evaporation Basins #1.

B & B Dairy was built prior to November 27, 1984. Therefore, it is not required to protect its manured areas from the 100-year peak stream flow. However it is required to protect all manured areas from the 20-year peak storm flow. Studies have not been done to calculate the flood elevations of a 20-year peak storm flow. In order to protect the B & B Dairy from, and prepare for, a 20-year peak flow, it must maintain regular maintenance programs as described herein. All onsite flows are to be contained and the required volumes for the 25-year 24-hour storm must be maintained. Because of this Dairy's design, offsite drainage naturally flows around the outer perimeter of the property. (See Appendix H, 100-Year Flood Plain Data).

B. DESIGN

The B & B Dairy was originally contracted to comply with RWQCB Order No. 99-11. Since that time, guidelines for achieving compliance with Order No. 99-11 have been issued (Guidelines for the Development of Engineered Waste Management Plans for Concentrated Animal Feeding Operations, February 5, 2001). This Engineered Waste Management Plan (EWMP) was prepared under the recommendations of the new guidelines.

Order No. 99-11 required the containment of the daily production of wastewater and storm water runoff from a 24-hour, 25-year storm. The new guidelines of Order No. 99-11 require the containment of:

- 150 days of the daily production of wastewater,
- A 24-hour, 25-year storm,
- 150 days of winter precipitation, and
- The 150-day accumulation of 10 percent of manure solids that could end up in the lagoons.

Although evaporation and percolation can be accounted for, the new guidelines require a large change in containment from Order No. 99-11.

In order to accommodate the new guidelines, this report contains two sets of calculations. The first set of calculations determines the amount of capacity required for 150 days storage. The second set of calculations performs a month-by-month water balance analysis of the amount of wastewater generated and eliminated. This second set of calculations was developed for those dairies that do not meet the requirements of the new guidelines. The second set of calculations optimizes the amount of storage required by including percolation and evaporation on a month-by-month basis.

The Engineered Wastewater Management Plan (EWMP) developed for B & B Dairy in May 2003 determined that the dairy has appreciable wastewater storage. The B & B Dairy meets all of the requirements of the new guidelines. Table 1 summarizes wastewater volumes and the capacity of the evaporation basins and catch basins.

Table 1
Capacity Summary
B&B Dairy

Total Days Required	150	days
Total Milkhouse and Parlor Water Rate	4,390	gal per day
Total Wash Pen Rate	30,550	gal per day
Total Milkhouse and Wash Pen Rate	34,940	gal per day
Net Required Storm Water Volume	22.71	acre-ft
Total Manure Volume	0.92	acre-ft
Total Required Containment Facility Volume	39.72	acre-ft
Total Available Volume	40.34	acre-ft
ADDITIONAL VOLUME REQUIRED	0	acre-ft
Total Annual Washwater and Storm Water Accumulation	77.24	acre-ft
Total Annual Evaporation and Percolation Capability	65.68	acre-ft
Total Winter (Nov.-Dec.-Jan.-Feb.-Mar.) Washwater and Storm Water Accumulation (Inflow)	44.88	acre-ft
Total Winter (Nov.-Dec.-Jan.-Feb.-Mar.) Evaporation and Percolation Capability (Outflow)	6.19	acre-ft

The data presented in this report were generated in the spreadsheets labeled "Worksheet for Determining Containment Facility Volume" (Appendix A). The first page[1] details the current animal population and the daily wash water generated on the dairies. All numbers for milkhouse and wash pen water rates were generated from Rain Bird and Weather Tech Sprinkler Volume Ratings for single and double nozzles. An average of 5.05 gallons per minute was used for single nozzles and 7.1 gallons per minute was used for double nozzles. These numbers were confirmed by reviewing the total run time of the wash pen sprinklers per cow pen and confirming

[1] Appendix A, "Worksheet for Determining Containment Facility Volume".

rates with research from the University of California Cooperative Extension Program for Dairies (see Appendix C).

The first page[1] also shows the equivalent gallons per cow per day. This calculation was generated in response to the EWMP guidelines adopted by the Regional Board. The guidelines recommend that as much as 100 gal/cow/day should be used to generate wastewater during winter months. The calculation on the first page[1] shows a more accurate estimate of the volume of water used per cow per day on the B & B Dairy.

Page two[1] also shows the total storm water accumulation generated on the dairies. Evaporation was considered, based on data from the California Department of Water Resources. Manure was also considered in the total volume calculations. The Total Required Containment Facility Volume is shown on the bottom of the third page[1].

The Total Available Volume is shown on page nine[1] for the B & B Dairy. The Additional Volume Required was determined by subtracting the Total Required Volume from the Current Capacity. In the case of B & B Dairy, no additional volume is required.

Page ten[1] presents a calculation showing the total depth needed in the lagoons to contain the 24-hr, 25-yr storm. This calculation was developed to show how much depth should be retained at the top of the lagoon to ensure that the 24-hr, 25-yr storm can be fully contained. It also shows the maximum fill depth of the pond before pumping must be initiated. The calculation assumes that all storm water flows by gravity to the catch basins and is contained before it is pumped to application fields. In the case of subject dairies, the following depths must be maintained in order to effectively accept a 24-hour, 25-year storm:

Basin Depth To Be Maintained For a 24-hour, 25-year Storm	
Catch Basin #1	5.00 feet
Evap Basins #1 &#2	1.90 feet

Shown below are two examples of wastewater lagoons. Figure 1 shows an optimum dairy lagoon that is able to contain all of the required wastewater and runoff volumes. Figure 2 shows a more common situation where two lagoons are used to split the total wastewater and runoff volumes. There should always be enough room in one basin to hold the 24-hr, 25-yr storm. By leaving enough room for the 24-hr, 25-yr storm, it eliminates dependency on the pump and eliminates potential spills due to pump failure. The calculation on the bottom of page three[1] shows exactly how much depth is needed at the top of the lagoon to ensure containment of the 24-hr, 25-yr storm.

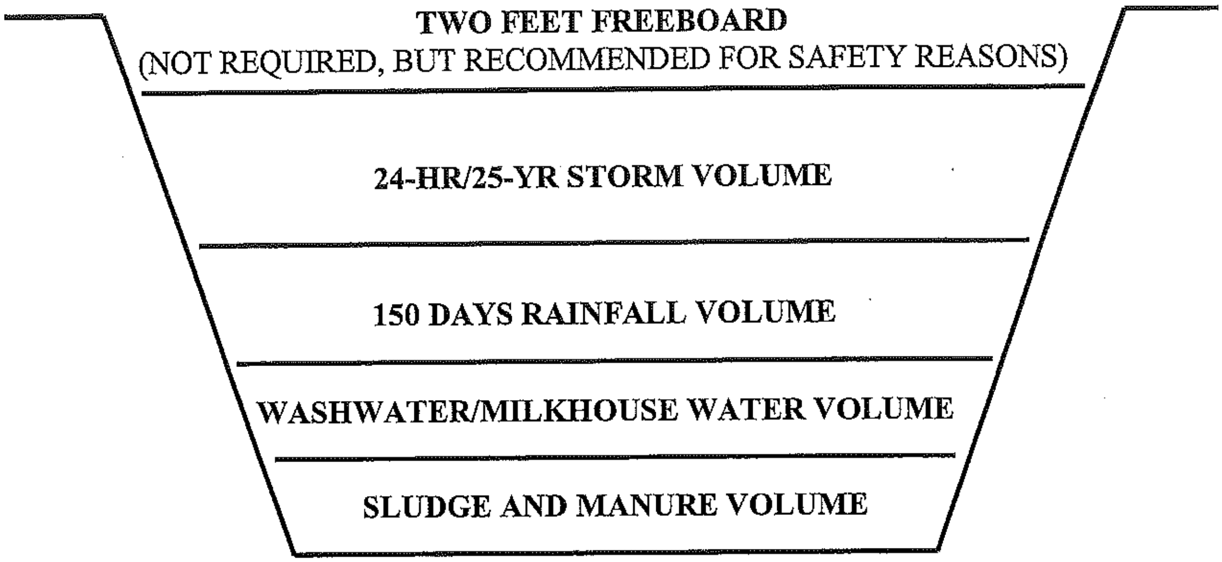


Figure 1. Cross-section of optimum dairy lagoon.

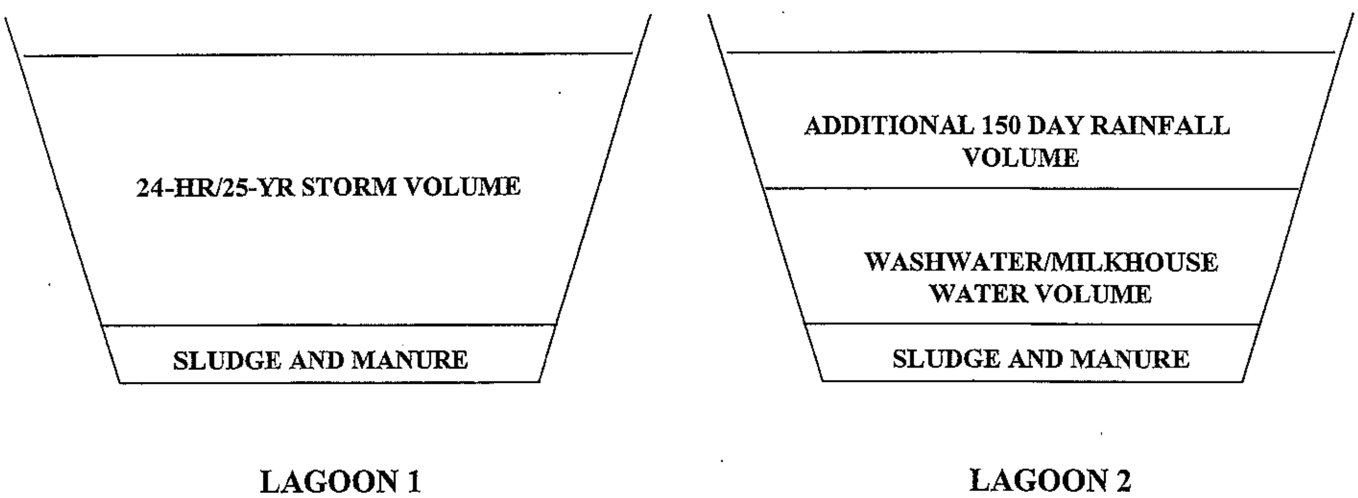


Figure 2. Cross sections of typical dairy lagoons with split volumes.

Appendix B contains the Inflow-Outflow computations designed to optimize the amount of storage required. This spreadsheet models the month-by-month totals of Operations water, Precipitation, 24-hour, 25-year storm data, Evaporation and Percolation. Although the 24-hour - 25-year storm could occur at any time, it was assumed to occur during the month of January.

Percolation is not included for November through March since it is assumed that the ground will be saturated and will not percolate. All data is referenced in Appendices D-G. As illustrated in the spreadsheets, the B & B Dairy has 23,978,192 gallons of total inflow (Column [15]), and 36,361,549 gallons of total outflow (Column [27]).

Column [28] compares the total inflow with the total outflow on a month-by-month basis. The calculation subtracts the total outflow from the total inflow to give a clear estimate of which months have more inflow than outflow. If there is more inflow than outflow, additional storage is required. Since all factors including evaporation and percolation are included, this calculation gives an accurate estimate of how much storage is needed per month. The total capacity needed on the dairy based on all the months that have more inflow than outflow is then shown at the bottom of the calculation sheet. In the case of the subject dairies, there are 5 months (November through March) where there is more inflow than outflow. Based upon these assumptions, a total of 12,002,247 gallons require containment during a typical year. This number when compared with the total available capacity on the dairy determines if the lagoons need to be expanded or not. Since the B & B Dairy has 12,497,008 gallons of capacity, there is no need to expand the lagoons and basins.

Following the spreadsheets are two charts showing the results of the Inflow-Outflow Computation, titled "Inflow-Outflow Comparison Chart" and "3D Inflow-Outflow Comparison Chart." The 3D Inflow-Outflow Comparison Chart is simply a 3D version of the Inflow-Outflow Comparison Chart. The dark blue line on the chart depicts the total operation water generated in gallons per month. The light blue line shows the total precipitation over the site in gallons per month. The yellow line shows the combination of operation water and precipitation water. The light red line shows the Total Inflow for the dairy including the operations water, precipitation, and the 24-hour, 25-year storm. The large jump in the light blue line denotes the 24-hour, 25-year storm. The purple line shows the evaporation from the fields and lagoons per month. The orange line shows the percolation from the fields per month. The large drop in the line denotes the lack of percolation in the winter months. The green line shows the Total Outflow from the dairy, including evaporation and percolation, per month.

This chart is an excellent reference because it shows the total amount of storage time that would be needed to properly manage the wastewater and storm water. In the case of the B & B Dairy, there is more total inflow than total outflow in the months of November through March. This shows that the dairy technically needs 150 days of storage to properly manage the wastewater and storm runoff. In every other month there is more potential evaporation and percolation than there is inflow.

The B & B Dairy meets all of the requirements of the guidelines to Order No. 99-11 for 150 days of storage. The following recommendations should be performed to meet the other requirements of the guidelines to Order No. 99-11.

C. RECOMMENDATIONS

1. Clean out Lagoons #1 through #3 of execss manure. Verify dimensions of each lagoon per Section B-B of the Plot Plan.

2. Verfiy the dimensions of Catch Basin #1 per Section A-A of the Plot Plan. Maintain a minimum clear depth of at least 7.50 feet to assommodate a 25-year, 24-hour storm.

3. Verfiy the dimensions of Catch Basin #2 and Evaporation Basins #1 and #2 per Section B-B of the Plot Plan. Maintain a minimum clear depth, in the Evaporation Basins, of at least 1.9 feet to assommodate a 25-year, 24-hour storm.

4. Add a wash pen sprinkler timer and limiter to the sprinkler control system. The timer should be set to the maximum wash time of 5.0 minutes per string (typically 2-1.5 minute soak, 1-2 minute time for wash) and should be equipped with a limiter/timer that prevents repeated activation of a timer (typically set to 30-45 minutes).

5. Change the existing wash pen sprinkler heads from their present dual nozzle design to a single nozzle design. This change reduces the total wash water use per sprinkler head from 7.1 gallons per minute to 5 gallons per minute. (The entire head does not need to be replaced; one of the two existing nozzles can be replaced with a plug.)

C. PLOT (SITE) PLAN

Please see Plot Plan at the end of this report. (Plate 2)

III. Joe Borba Dairy #2

A. GENERAL

The gross area of the dairy is approximately 60.3 acres. The dairy operations (manured area) occupy approximately 58.57 acres and include the following uses:

- Corrals,
- Hay barns,
- Commodity barn,
- Milk barn,
- Wastewater lagoons, evaporation basins, and catch basins, and
- Manure management area

The current typical animal population is:

- 1,300 milk cows
- 330 dry cows,
- 100 young replacement stock (bred heifers)

Assuming the current onsite stock count, the total animal units on the site is 2,392.0. The Joe Borba Dairy #2 does not have plans for expansion at this time.

The Joe Borba Dairy #2 has approximately 30.08 acres of corrals, 4.97 acres of concrete feed lanes and 11.30 acres of dirt roads and open area on the property. The residences, yards, milk barn, garages and shops comprise approximately 1.53 acres. There are two lagoons, two catch basins, and two evaporation basins for use in wastewater management. The basins have a combined capacity of 2,443,889 gallons, (56.10 acre-ft.).

The average daily wash water generation rate for the dairy is 43,990 gallons.

The Joe Borba Dairy #2 has an efficient and effective system of managing its wash water and storm water. Wash water from the milk barn gravity flows south to a concrete sump then transported through a pipe to Lagoon #1 near the center of the south half of the property. Lagoon #1 is approximately 8 feet deep. Wash water may also be diverted to Lagoon #2 located along Merrill Avenue between Evaporation Basins #1 and #2. Lagoon #2 is approximately 8 feet deep.

In the event that both lagoons become full during a major storm, overflow from Lagoon #1 will flow into Evaporation Basin #2. Lagoon #2 will overflow into Evaporation Basins #1 and #2.

Storm water that falls within Corrals #1 and #8 gravity flows west to a swale between Corrals #1 through #8 and Corrals #10 through #15. Corrals #10 through #15 flow east to the same swale. The swale directs water south to Catch Basin #1. Storm water from Corrals #16 through #28 gravity flows west to the west edge of the corrals and travels south to Catch Basin #2. Storm water falling on the east concrete feed land flows south along the lane into Catch Basin #1. The center concrete feed lane also flows south emptying into Catch Basin #1. Excess stormwater in Catch Basin #1 will be contained in Evaporation Basin #1. Excess stormwater from Catch Basin #2 may be pumped to Evaporation Basin #2 for containment.

The Joe Borba Dairy #2 also has adequate protection from onsite stormwater leaving the site. The site generally drains in a general north to south. Lagoon #2 and Evaporation Basins #1 and #2 are located along the entire south property line and retain all onsite flows.

The Joe Borba Dairy #2 was built prior to November 27, 1984. Therefore, it is not required to protect manured areas from the 100-year peak stream flow. However, it is required to protect all manured areas from the 20-year peak storm flow. Studies have not been done to calculate the flood elevations of a 20-year peak storm flow. In order to protect the Joe Borba Dairy #2 from, and prepare for, a 20-year peak flow, it must maintain regular maintenance programs as described herein. All onsite flows are to be contained and the required volumes for the 25-year 24-hour storm must be maintained. Because of this Dairy's design, offsite flows naturally flow around the outer perimeter of their property. (See Appendix H, 100-Year Flood Plain Data).

B. DESIGN

The Joe Borba Dairy #2 was originally contracted to comply with RWQCB Order No. 99-11. Since that time, guidelines for achieving compliance with Order No. 99-11 have been issued (Guidelines for the Development of Engineered Waste Management Plans for Concentrated Animal Feeding Operations, February 5, 2001). This Engineered Waste Management Plan (EWMP) was prepared under the recommendations of the new guidelines.

Order No. 99-11 required the containment of the daily production of wastewater and storm water runoff from a 24-hour, 25-year storm. The new guidelines of Order No. 99-11 require the containment of:

- 150 days of the daily production of wastewater,
- A 24-hour, 25-year storm,
- 150 days of winter precipitation, and
- The 150-day accumulation of 10% of manure solids that could end up in the lagoons.

Although evaporation and percolation can be accounted for, the new guidelines require a large change in containment from Order No. 99-11.

In order to accommodate the new guidelines, this report contains two sets of calculations. The first set of calculations determines the amount of capacity required for 150 days storage. The second set of calculations performs a month-by-month water balance analysis of the amount of wastewater generated and eliminated. This second set of calculations was developed for those dairies that do not meet the requirements of the new guidelines. The second set of calculations optimizes the amount of storage required by including percolation and evaporation on a month-by-month basis.

The Engineered Wastewater Management Plan (EWMP) developed for the Joe Borba Dairy #2 in October 2002 determined that the dairy has appreciable wastewater storage. The B & B Dairy meets all of the requirements of the new guidelines. Table 1 summarizes wastewater volumes and the capacity of the evaporation basins and catch basins.

Table 1 Capacity Summary Joe Borba Dairy #2		
Total Days Required	150	days
Total Milkhouse and Parlor Water Rate	4,390	gal per day
Total Wash Pen Rate	39,600	gal per day
Total Milkhouse and Wash Pen Rate	43,990	gal per day
Net Required Storm Water Volume	34.41	Acre-ft
Total Manure Volume	1.13	Acre-ft
Total Required Containment Facility Volume	55.79	Acre-ft
Total Available Volume	56.10	Acre-ft
ADDITIONAL VOLUME REQUIRED	0	Acre-ft
Total Annual Washwater and Storm Water Accumulation	107.51	Acre-ft
Total Annual Evaporation and Percolation Capability	65.01	Acre-ft
Total Winter (Nov.-Dec.-Jan.-Feb.-Mar.) Washwater and Storm Water Accumulation (Inflow)	65.36	Acre-ft
Total Winter (Nov.-Dec.-Jan.-Feb.-Mar.) Evaporation and Percolation Capability (Outflow)	9.43	Acre-ft

The data presented in this report were generated in the spreadsheets labeled "Worksheet for Determining Containment Facility Volume" (Appendix A). The first page[2] details the current animal population and the daily wash water generated on the dairies. All numbers for milkhouse and wash pen water rates were generated from Rain Bird and Weather Tech Sprinkler Volume Ratings for single and double nozzles. An average of 5.05 gallons per minute was used for single nozzles and 7.1 gallons per minute was used for double nozzles. These numbers were confirmed by reviewing the total run time of the wash pen sprinklers per cow pen and confirming rates with research from the University of California Cooperative Extension Program for Dairies (see Appendix C).

The equivalent gallons per cow per day are also shown on Page 1. This calculation was generated in response to the EWMP guidelines adopted by the Regional Board. The guidelines

[2] Appendix A, "Worksheet for Determining Containment Facility Volume".

recommend that as much as 100 gal/cow/day should be used to generate wastewater during winter months. The calculation on this page shows a more accurate estimate of the volume of water used per cow per day on the Joe Borba Dairy #2.

Page two[1] and three show the total storm water accumulation generated on the dairies. Evaporation was considered, based on data from the California Department of Water Resources. Manure was also considered in the total volume calculations. The Total Required Containment Facility Volume is shown on the bottom of the third page[1].

The Total Available Volume is shown on page ten[1] for the Joe Borba Dairy #2. The Additional Volume Required was determined by subtracting the Total Required Volume from the Current Capacity. In the case of Joe Borba Dairy #2, no additional volume is required.

Also included on Page 11[1] is a calculation showing the total depth needed in the lagoons to contain the 24-hr, 25-yr storm. This calculation was developed to show how much depth should be retained at the top of the lagoon to ensure that the 24-hr, 25-yr storm can be fully contained. It also shows the maximum fill depth of the pond before pumping must be initiated. The calculation assumes that all storm water flows by gravity to the catch basins and is contained or allowed to flow into the evaporation basins. In the case of subject dairies, the following depths must be maintained in order to effectively accept a 24-hour, 25-year storm:

Basin Depth To Be Maintained For a 24-hour, 25-year Storm	
Catch Basin #1	8.50 feet
Catch Basin #2	3.60 feet

Shown below are two examples of wastewater lagoons. Figure 1 shows an optimum dairy lagoon that is able to contain all of the required wastewater and runoff volumes. Figure 2 shows a more common situation where two lagoons are used to split the total wastewater and runoff volumes. There should always be enough room in one basin to hold the 24-hr, 25-yr storm. By leaving enough room for the 24-hr, 25-yr storm, it eliminates dependency on the pump and eliminates potential spills due to pump failure. The calculation on the bottom of page three[1] shows exactly how much depth is needed at the top of the lagoon to ensure containment of the 24-hr, 25-yr storm.

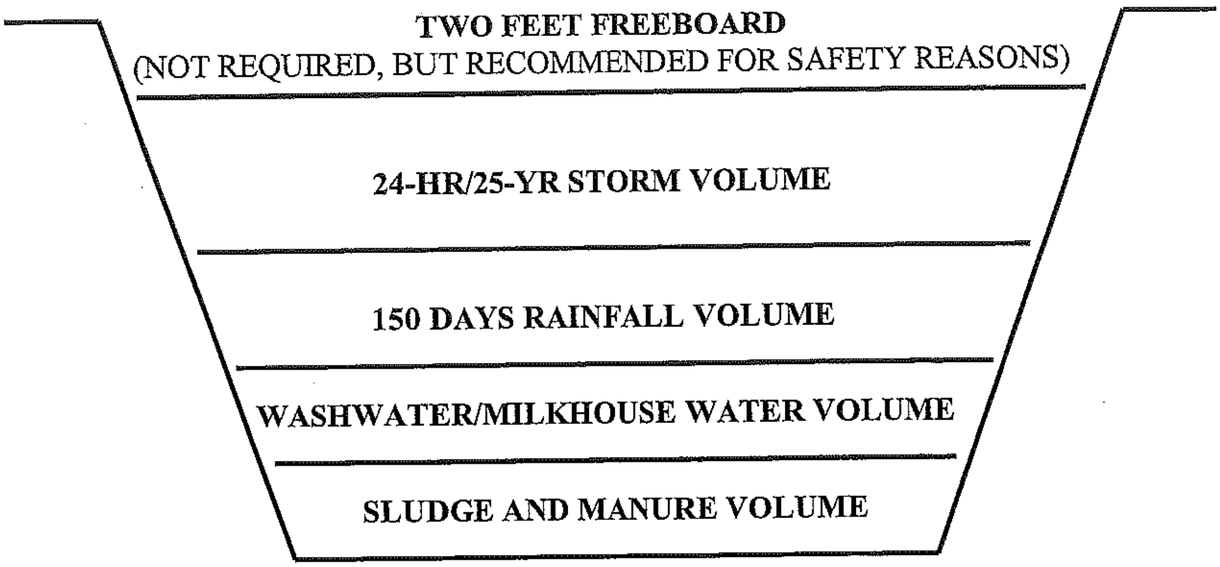


Figure 1. Cross-section of optimum dairy lagoon.

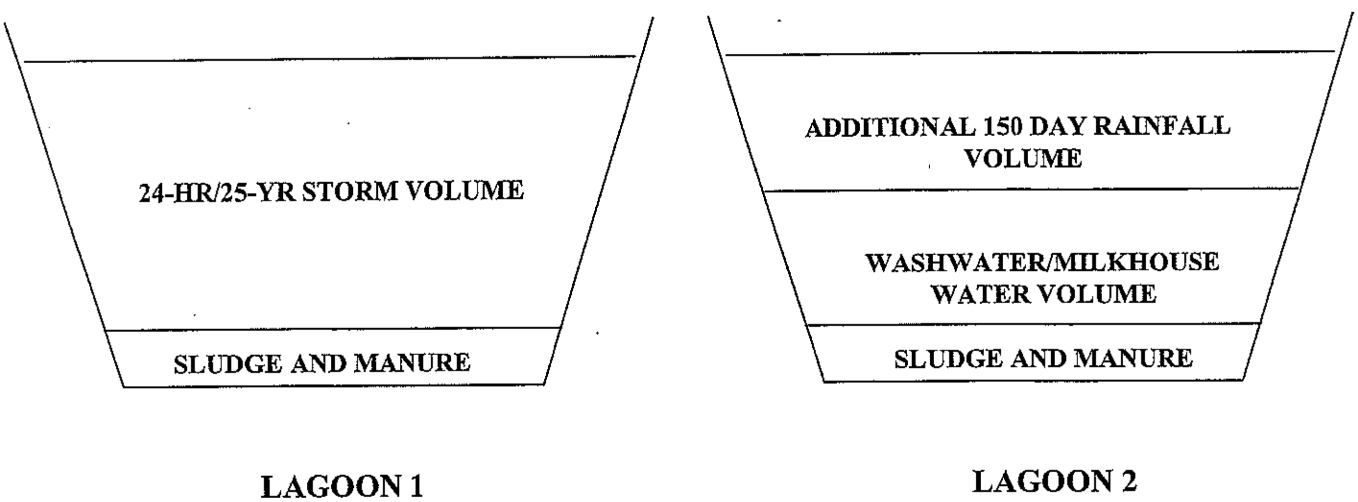


Figure 2. Cross sections of typical dairy lagoons with split volumes.

Appendix B contains the Inflow-Outflow computations designed to optimize the amount of storage required. This spreadsheet models the month-by-month totals of Operations water, Precipitation, 24-hour, 25-year storm data, Evaporation and Percolation. Although the 24-hour -

25-year storm could occur at any time, it was assumed to occur during the month of January. Percolation is not included for November through March since it is assumed that the ground will be saturated and will not percolate. All data is referenced in Appendices D-G. As illustrated in the spreadsheets, the Joe Borba Dairy #2 has 35,028,447 gallons of total inflow (Column [15]), and 21,180,749 gallons of total outflow (Column [27]).

Column [28] compares the total inflow with the total outflow on a month-by-month basis. The calculation subtracts the total outflow from the total inflow to give a clear estimate of which months have more inflow than outflow. If there is more inflow than outflow, additional storage is required. Since all factors including evaporation and percolation are included, this calculation gives an accurate estimate of how much storage is needed per month. The total capacity needed on the dairy based on all the months that have more inflow than outflow is then shown at the bottom of the calculation sheet. In the case of the subject dairies, there are 5 months (November through March) where there is more inflow than outflow. Based upon these assumptions, a total of 18,458,701 gallons require containment during a typical year. This number when compared with the total available capacity on the dairy determines if the lagoons need to be expanded or not. Since the Joe Borba Dairy #2 has 18,280,365 gallons of capacity, there is no need to expand the lagoons.

Following the spreadsheets are two charts showing the results of the Inflow-Outflow Computation, titled "Inflow-Outflow Comparison Chart" and "3D Inflow-Outflow Comparison Chart." The 3D Inflow-Outflow Comparison Chart is simply a 3D version of the Inflow-Outflow Comparison Chart. The dark blue line on the chart depicts the total operation water generated in gallons per month. The light blue line shows the total precipitation over the site in gallons per month. The yellow line shows the combination of operation water and precipitation water. The light red line shows the Total Inflow for the dairy including the operations water, precipitation, and the 24-hour, 25-year storm. The large jump in the light blue line denotes the 24-hour, 25-year storm. The purple line shows the evaporation from the fields and lagoons per month. The orange line shows the percolation from the fields per month. The large drop in the line denotes the lack of percolation in the winter months. The green line shows the Total Outflow from the dairy, including evaporation and percolation, per month.

This chart is an excellent reference because it shows the total amount of storage time that would be needed to properly manage the wastewater and storm water. In the case of the Joe Borba Dairy #2, there is more total inflow than total outflow in the months of November through March. This shows that the dairy technically needs 150 days of storage to properly manage the wastewater and storm runoff. In every other month there is more potential evaporation and percolation than there is inflow.

The Joe Borba Dairy #2 meets all of the requirements of the guidelines to Order No. 99-11 for 150 days of storage. The following recommendations should be performed to meet the other requirements of the guidelines to Order No. 99-11.

C. RECOMMEDNATIONS

1. Clean out Lagoon #1 of excess manure. Verify dimensions per Section B-B of the Plot Plan.

2. Clean out Lagoon #2 of excess manure. Verify dimensions per Section D-D of the Plot Plan.

3. Verify dimensions of Catch Basin #1 per Section C-C of the Plot Plan. Maintain a clear depth from top of berm of at least 8.70 feet to accommodate a 25-year, 24-hour storm.

4. Enlarge Catch Basin #2 per Section A-A of the Plot Plan. Maintain a clear depth from top of berm of at least 3.70 feet to accommodate a 25-year, 24-hour storm.

5. Add a wash pen sprinkler timer and limiter to the sprinkler control system. The timer should be set to the maximum wash time of 5.0 minutes per string (typically 2-1.5 minute soak, 1-2 minute time for wash) and should be equipped with a limiter/timer that prevents repeated activation of a timer (typically set to 30-45 minutes).

6. Change the existing wash pen sprinkler heads from their present dual nozzle design to a single nozzle design. This change reduces the total wash water use per sprinkler head from 7.1 gallons per minute to 5 gallons per minute. (The entire head does not need to be replaced; one of the two existing nozzles can be replaced with a plug.)

D. PLOT (SITE) PLAN

Please see Plot Plan at the end of this report. (Plate 3)

IV. Half & Half Dairy

The gross area of the dairy is approximately 92.86 acres. The dairy operations (manured area) occupy approximately 90.58 acres and include the following uses:

- Corrals,
- Hay barns,
- Commodity barn,
- Milk barn,
- Wastewater lagoons, evaporation basins, and catch basins, and
- Manure management area

The current typical animal population is:

- 1,100 milk cows
- 300 dry cows,
- 1,000 young replacement stock (bred heifers)
- 300 baby calves

Assuming the current onsite stock count, the total animal units on the site is 3,195. The Half & Half Dairy does not have plans for expansion at this time.

The Half & Half Dairy has approximately 33.40 acres of corrals, 3.44 acres of concrete feed, 1.94 acres of roofed area, and 21.12 acres of dirt roads and open area on the property. The four residences, yards, milk barn, garages and shops drain to the street and are not considered as manured areas. There are two lagoons, four catch basins, and an application basin for use in wastewater management. The basins have a combined capacity of 21,527,934 gallons, (66.07 acre-ft.). The average daily wash water generation rate for the dairy is 36,690 gallons.

The Half & Half Dairy has an efficient system of managing its wash water and storm water. Wash water from the milk barn gravity-flows east to a concrete sump located behind the milk barn. It then flows through a pipe to Lagoons #1 and #2. Both lagoons are 8 feet deep with their tops at surface grade level with adjacent property. In the event that a major storm overflows the lagoons, wash water will flow into Evaporation Basin #1 where it will be contained by the berms along the south and west sides of the basin.

Storm water falling within Milk Cow Corrals #1 through #4 gravity flows south to a swale running between Milk Cow Corrals #1 through #4 and Milk Cow Corrals #5 through #6. Stormwater from Milk Cow Corrals #5, #6, and #7 flows north through the same swale then east into Catch Basin #2. Catch Basin #2 is 8 feet deep. Storm water from Milk Cow Corral #8 gravity flows south into Catch Basin #3. Catch Basin #3 is 5 feet deep. Milk Cow Corral #9 flows into Catch Basins #3 and #4. Milk Cow Corral #10 flows south into Catch Basin #4. Catch Basin # 4 is 5 feet deep.

Heifer Corrals #1 through #9 flow south to Feed Lane #2. This feed lane drains into Feed Lane #4 and ultimately into Catch Basin #1. Catch Basin #1 is 10 feet deep. Heifer Corrals #11 through #19 flow north to Feed Lane #2 using the same path to Catch Basin #1. Heifer Corrals #20 through #23 flow south into Feed Lane #3, ultimately draining east to Catch Basin #1. Heifer Corrals #24 through #29 drain east to Feed Lane #4 and ultimately to Catch Basin #1.

Calf Corrals #1 through #3 drain southeast to Feed Lane #5 and into Catch Basin #1. Calf Corrals #4 through #11 drain directly south into Catch Basin #1. Calf Corrals 12 through 21 drain south to Feed Lane #3 and into Catch Basin #1.

In the event that Catch Basin #1 becomes full, excess water will flow into Catch Basin #2. Any additional water that cannot be contained in Catch Basin #2 will overflow into Application Field #1. The application field is also capable of containing any excess water from Catch Basins # 3 and #4.

The northwest corner of the property east of Heifer Corrals #1 and #6 is very flat and is subject to ponding. Portable pumps will be used to remove any excess standing water and direct it to Catch Basin #1 via Feed Lane #2.

All residences, yards, shops, and garages are considered non-manured areas and drain to the street frontage.

The Half & Half Dairy has acceptable protection from onsite stormwater leaving the site. All manured areas of the site drain to the south where onsite waste water is contained in catch basins, lagoons, and the application field. Berms along the Merrill Avenue and Grove Avenue frontages of Application Field #1 contain onsite wastewater and restrict its offsite movement. A concrete spillway has been proposed at the far west end of the Merrill Avenue frontage to allow for emergency release during a catastrophic storm event.

The Half & Half Dairy is subject to potential offsite drainage from the north similar to the two adjacent dairies. A diversion barrier is proposed along the Eucalyptus Avenue right-of-way to divert offsite flows away from the site and direct them west within the Eucalyptus Avenue right-of-way.

The Half & Half Dairy was built prior to November 27, 1984. Therefore, they are not required to protect their manured areas from the 100-year peak stream flow. However they are required to protect all manured areas from the 20-year peak storm flow. Studies have not been done to calculate the flood elevations of a 20-year peak storm flow. In order to protect the B & B Dairy from, and prepare for, a 20-year peak flow, it must maintain regular maintenance programs as described herein. All onsite flows are to be contained and the required volumes for the 25-year 24-hour storm must be maintained. Because of this Dairy's design, offsite flows naturally flow around the outer perimeter of their property. (See Appendix H, 100-Year Flood Plain Data).

B. DESIGN

The Half & Half Dairy was originally contracted to comply with RWQCB Order No. 99-11. Since that time, guidelines for achieving compliance with Order No. 99-11 have been issued (Guidelines for the Development of Engineered Waste Management Plans for Concentrated Animal Feeding Operations, February 5, 2001). This Engineered Waste Management Plan (EWMP) was prepared under the recommendations of the new guidelines.

Order No. 99-11 required the containment of the daily production of wastewater and storm water runoff from a 24-hour, 25-year storm. The new guidelines of Order No. 99-11 require the containment of:

- 150 days of the daily production of wastewater,
- A 24-hour, 25-year storm,
- 150 days of winter precipitation, and
- The 150-day accumulation of 10% of manure solids that could end up in the lagoons.

Although evaporation and percolation can be accounted for, the new guidelines require a large change in containment from Order No. 99-11.

In order to accommodate the new guidelines, this report contains two sets of calculations. The first set of calculations determines the amount of capacity required for 150 days storage. The second set of calculations performs a month-by-month water balance analysis of the amount of wastewater generated and eliminated. This second set of calculations was developed for those dairies that do not meet the requirements of the new guidelines. The second set of calculations optimizes the amount of storage required by including percolation and evaporation on a month-by-month basis.

The Engineered Wastewater Management Plan (EWMP) developed for the Half & Half Dairy in October 2002 determined that the dairy has appreciable wastewater storage. The Half & Half Dairy meets all of the requirements of the new guidelines. Table 1 summarizes wastewater volumes and the capacity of the evaporation basins and catch basins.

Table 1 Capacity Summary Half-N-Half Dairy		
Total Days Required	150	days
Total Milkhouse and Parlor Water Rate	4,290	gal per day
Total Wash Pen Rate	32,400	gal per day
Total Milkhouse and Wash Pen Rate	36,690	gal per day
Net Required Storm Water Volume	47.32	acre-ft
Total Manure Volume	1.51	acre-ft
Total Required Containment Facility Volume	65.72	acre-ft
Total Available Volume	66.07	acre-ft
ADDITIONAL VOLUME REQUIRED	0	acre-ft
Total Annual Washwater and Storm Water Accumulation	127.29	acre-ft
Total Annual Evaporation and Percolation Capability	238.50	acre-ft
Total Winter (Nov.-Dec.-Jan.-Feb.-Mar.) Washwater and Storm Water Accumulation (Inflow)	86.10	acre-ft
Total Winter (Nov.-Dec.-Jan.-Feb.-Mar.) Evaporation and Percolation Capability (Outflow)	20.26	acre-ft

The data presented in this report were generated in the spreadsheets labeled "Worksheet for Determining Containment Facility Volume" (Appendix A). The first page[3] details the current animal population and the daily wash water generated on the dairies. All numbers for milkhouse and wash pen water rates were generated from Rain Bird and Weather Tech Sprinkler Volume Ratings for single and double nozzles. An average of 5.05 gallons per minute was used for single nozzles and 7.1 gallons per minute was used for double nozzles. These numbers were confirmed by reviewing the total run time of the wash pen sprinklers per cow pen and confirming rates with research from the University of California Cooperative Extension Program for Dairies (see Appendix C).

The first page[1] also shows the equivalent gallons per cow per day. This calculation was generated in response to the EWMP guidelines adopted by the Regional Board. The guidelines recommend that as much as 100 gal/cow/day should be used to generate wastewater during winter months. The calculation on this page[1] shows a more accurate estimate of the volume of water used per cow per day on the dairy.

[3] Appendix A, "Worksheet for Determining Containment Facility Volume".

Page two[1] also shows the total storm water accumulation generated on the dairies. Evaporation was considered, based on data from the California Department of Water Resources. Manure was also considered in the total volume calculations. The Total Required Containment Facility Volume is shown on the bottom of the third page[1].

The Total Available Volume is shown on page ten[1] for the Half & Half Dairy. The Additional Volume Required was determined by subtracting the Total Required Volume from the Current Capacity. In the case the Half & Half Dairy, no additional volume is required.

Page eleven[1] presents a calculation showing the total depth needed in the lagoons to contain the 24-hr, 25-yr storm. This calculation was developed to show how much depth should be retained at the top of the lagoon to ensure that the 24-hr, 25-yr storm can be fully contained. It also shows the maximum fill depth of the pond before pumping must be initiated. The calculation assumes that all storm water flows by gravity to the catch basins and is contained before it is pumped to application fields. In the case of subject dairy, the following minimum clear depths from top of berm must be maintained in order to effectively accept a 24-hour, 25-year storm.

Basin Depth To Be Maintained For a 24-hour, 25-year Storm	
Catch Basin #1	5.50 feet
Catch Basin #2	2.00 feet
Evaporation Basin #1	0.20 feet

Shown below are two examples of wastewater lagoons. Figure 1 shows an optimum dairy lagoon that is able to contain all of the required wastewater and runoff volumes. Figure 2 shows a more common situation where two lagoons are used to split the total wastewater and runoff volumes. There should always be enough room in one basin to hold the 24-hr, 25-yr storm. By leaving enough room for the 24-hr, 25-yr storm, it eliminates dependency on the pump and eliminates potential spills due to pump failure. The calculation on the bottom of page three[1] shows exactly how much depth is needed at the top of the lagoon to ensure containment of the 24-hr, 25-yr storm.

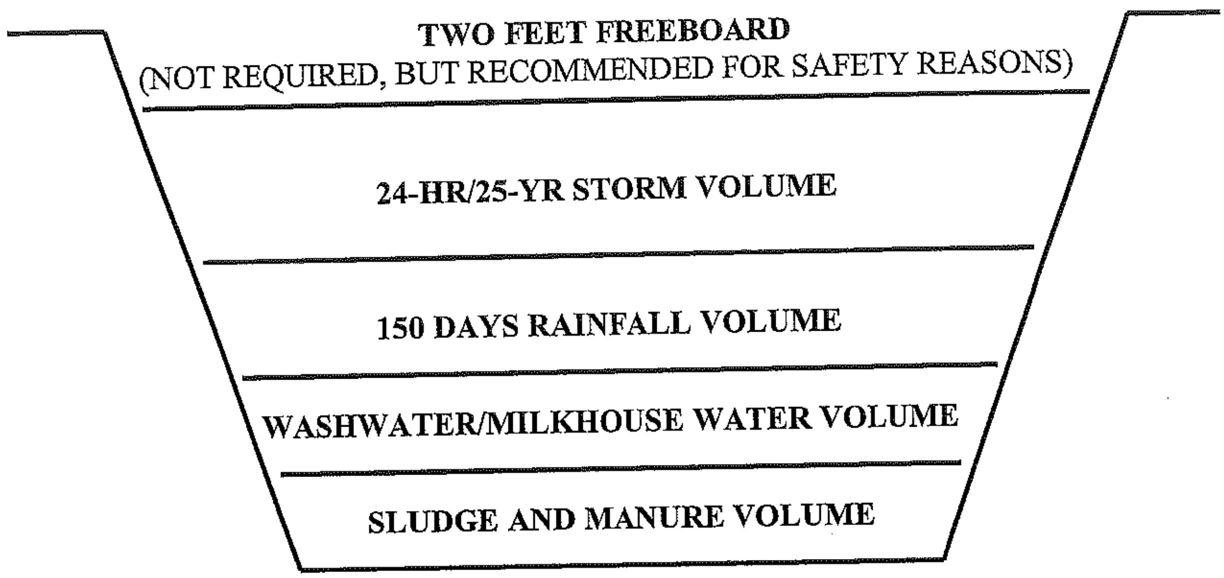


Figure 1. Cross-section of optimum dairy lagoon.

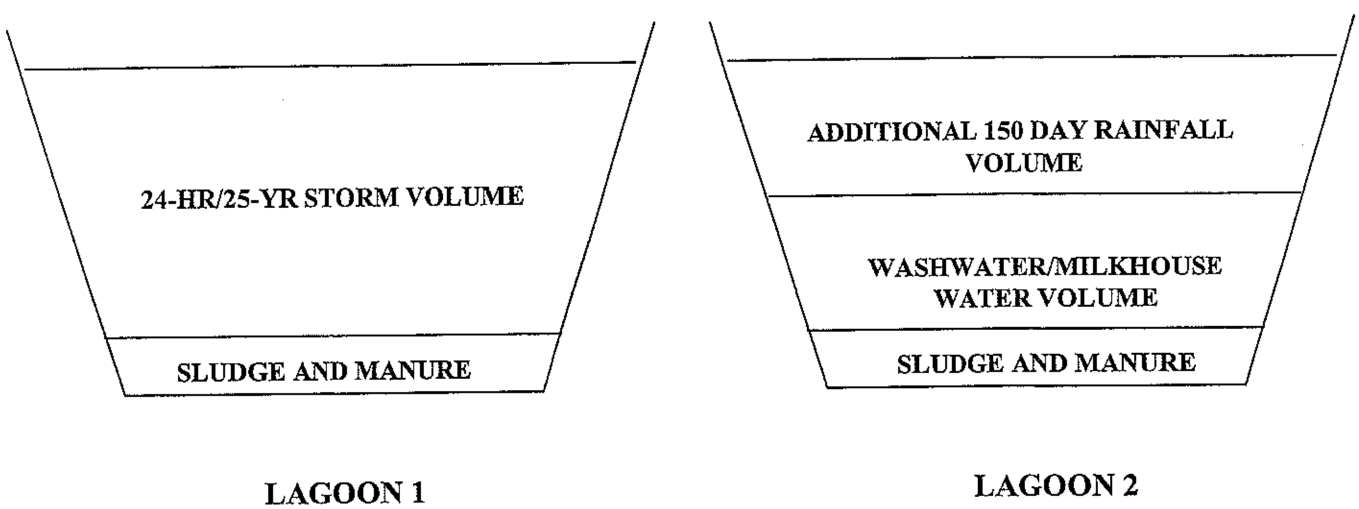


Figure 2. Cross sections of typical dairy lagoons with split volumes.

Appendix B contains the Inflow-Outflow computations designed to optimize the amount of storage required. This spreadsheet models the month-by-month totals of Operations water, Precipitation, 24-hour, 25-year storm data, Evaporation and Percolation. Although the 24-hour -

25-year storm could occur at any time, it was assumed to occur during the month of January. Percolation is not included for November through March since it is assumed that the ground will be saturated and will not percolate. All data is referenced in Appendices D-G. As illustrated in the spreadsheets, the Half & Half Dairy has 41,474,971 gallons of total inflow (Column [15]), and 77,710,780 gallons of total outflow (Column [27]).

Column [28] compares the total inflow with the total outflow on a month-by-month basis. The calculation subtracts the total outflow from the total inflow to give a clear estimate of which months have more inflow than outflow. If there is more inflow than outflow, additional storage is required. Since all factors including evaporation and percolation are included, this calculation gives an accurate estimate of how much storage is needed per month. The total capacity needed on the dairy based on all the months that have more inflow than outflow is then shown at the bottom of the calculation sheet. In the case of the subject dairies, there are 5 months (November through March) where there is more inflow than outflow. Based upon these assumptions, a total of 21,452,078 gallons require containment during a typical year. This number when compared with the total available capacity on the dairy determines if the lagoons need to be expanded or not. Since the Half & Half Dairy has 21,527,934 gallons of capacity, there is no need to expand the waste water containment facilities.

Following the spreadsheets are two charts showing the results of the Inflow-Outflow Computation, titled "Inflow-Outflow Comparison Chart" and "3D Inflow-Outflow Comparison Chart." The 3D Inflow-Outflow Comparison Chart is simply a 3D version of the Inflow-Outflow Comparison Chart. The dark blue line on the chart depicts the total operation water generated in gallons per month. The light blue line shows the total precipitation over the site in gallons per month. The yellow line shows the combination of operation water and precipitation water. The light red line shows the Total Inflow for the dairy including the operations water, precipitation, and the 24-hour, 25-year storm. The large jump in the light blue line denotes the 24-hour, 25-year storm. The purple line shows the evaporation from the fields and lagoons per month. The orange line shows the percolation from the fields per month. The large drop in the line denotes the lack of percolation in the winter months. The green line shows the Total Outflow from the dairy, including evaporation and percolation, per month.

This chart is an excellent reference because it shows the total amount of storage time that would be needed to properly manage the wastewater and storm water. In the case of the Half & Half Dairy, there is more total inflow than total outflow in the months of November through March. This shows that the dairy technically needs 150 days of storage to properly manage the wastewater and storm runoff. In every other month there is more potential evaporation and percolation than there is inflow.

The Half & Half Dairy meets all of the requirements of the guidelines to Order No. 99-11 for 150 days of storage. The following recommendations should be performed to meet the other requirements of the guidelines to Order No. 99-11.

Recommendations:

1. Construct Catch Basin #1 per Section C-C of the Plot Plan. Maintain a minimum of 5.4 feet to accommodate a 25-year, 24-hour storm event.

2. Construct Catch Basin #2 per Section C-C of the Plot Plan. Maintain a minimum of 3.7 feet to accommodate a 25-year, 24-hour storm event.

3. Clean out Lagoons #1 and #2 of excess manure. Verify dimensions, including depth, as depicted in Section A-A of the Plot Plan.

4. Clean out Catch Basins #3 and #4 of excess manure. Verify dimensions, including depth, as depicted in Section B-B of the Plot Plan.

5. Construct a spillway near the southwest corner of Basin 31. The spillway should be constructed per the Spillway Detail Section on sheet 1 of the Plot Plan.

6. Re-grade Corral #33 to drain southeast into Corral #34.

7. Add a wash pen sprinkler timer and limiter to the sprinkler control system. The timer should be set to the maximum wash time of 5.0 minutes per string (typically 2-1.5 minute soak, 1-2 minute time for wash) and should be equipped with a limiter/timer that prevents repeated activation of a timer (typically set to 30-45 minutes).

8. Change the existing wash pen sprinkler heads from their present dual nozzle design to a single nozzle design. This change reduces the total wash water use per sprinkler head from 7.1 gallons per minute to 5 gallons per minute. (The entire head does not need to be replaced; one of the two existing nozzles can be replaced with a plug.)

D. PLOT (SITE) PLAN

Please see Plot Plan at the end of this report. (Plate 4)

IV. OPERATIONAL AND DESIGN CRITERIA

The following construction and operational criteria apply to all three dairies.

A. CONSTRUCTION

For construction and/or replacement of berms, the following procedures should be followed:

A. Over excavate the soil to 1 to 2 feet below original ground before building berms.

B. Place backfill and fill materials in layers not more than 8 inches in loose depth, for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers. Backfill and fill materials should be completely free from manure.

C. Uniformly moisten subgrade and each subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

D. The excavation shall be backfilled and compacted to a relative compaction of no less than 90 percent. A Soils Engineer will need to be hired to ensure 90 percent compaction.

B. OPERATION AND MAINTENANCE

The basic maintenance objectives are to ensure the reliable storage and disposal of accumulated wastewater and waste solids. To achieve this, there are several tasks that must be accomplished on a routine basis:

- Disposal of accumulated wastewater
- Measurement of accumulated waste solids
- Removal and disposal of accumulated waste solids
- Repair and maintenance of dikes and berms
- Maintenance of site grading
- Weed Abatement
- Record keeping

Accumulated Wastewater Disposal

It is important that the water level in the wastewater holding ponds be properly maintained so that the ponds can provide the required storage capacity during wet weather periods. The California Regional Water Quality Control Board - Santa Ana Region (CRWQCB) has developed specific standards for the handling and storage of wastewater and storm water collected from the dairy operations. This portion of the Engineered Waste Management Plan describes the recommended maintenance procedures for the wastewater holding ponds to ensure compliance with CRWQCB standards.

In order to meet the requirements of the CRWQCB, the following general guidelines should be followed in disposing of wastewater in the ponds:

- Empty ponds just prior to the start of the wet weather season (November 1st) to ensure maximum capacity for the winter months. If stagnant water remains at the bottom of the ponds below the reach of the pumps, portable pumps should be used to remove all wastewater before the start of the wet season.
- Take advantage of dry weather periods during the annual wet weather period to dispose of accumulated wastewater. Fields must be bermed to prevent overflow from disposal areas onto adjacent properties.
- Start to empty ponds at end of wet weather season (March 31st) to maximize percolation and to create additional capacity in the lagoons.

General Equipment Maintenance. Pumps, pipelines and all pertinent equipment used in the handling of wastewater must be routinely checked and serviced to ensure proper operation:

- Check all wastewater distribution and application equipment weekly to ensure proper operation condition.
- Check and service motors and pumps three times a year. Portable replacement pumps should be available in case of a pump failure. If portable pumps are not available on-site, a rental company phone number should be posted with high visibility for all employees. Rental company phone numbers are also listed on the last page of this report.
- Check transmission pipes for proper condition.
- Take inventory of spare parts and check sources of emergency repair.
- Disc percolation areas (fields) to about 18 inches to assure maximum percolation during wet seasons. Disking of the disposal area should occur as early in the year as possible, as soon as the fields are dry enough for the procedure to be effective. All of the disposal area should be disked at least once each year.

Dry Weather Disposal. Following the annual wet weather months, wastewater accumulated in the ponds should be disposed of in a timely manner in preparation of the coming wet weather months. The following guidelines should be followed for wastewater disposal during dry weather conditions:

- Apply wastewater to each of the evaporation/percolation disposal areas (fields) on a rotational basis.
- Wastewater should be applied to fields in a manner so that all wastewater will percolate and evaporate. Wastewater should be applied to all parts of the field to improve percolation and evaporation and to prevent stagnant wastewater.
- Observe the wastewater levels in the disposal areas on a daily basis and apply additional wastewater as the drying and percolation rates permit.
- Avoid having the fields completely flooded for extended periods of time. The best disposal rates will occur if the fields are flooded 4 to 6 inches and then allowed to evaporate and percolate. Fields can only be flooded to 4 to 6 inches if proper berms exist around the boundaries of the field. If stagnant wastewater develops, a portable pump or other measures should be used to help spread the water and prevent insect breeding conditions.

Wet Weather Disposal. During the wet weather months, there may be weeks of dry weather available to dispose of accumulated wastewater. Take advantage of every opportunity to reduce the wastewater levels in the holding basins/lagoons so that in the event of a large storm the chances of overflow and inadvertent runoff are reduced. The following guidelines should be followed for wastewater disposal during wet weather months:

- Apply wastewater to each of the disposal areas on a rotational basis.
- Apply wastewater in a manner so that all wastewater will percolate and evaporate. Fields should be watered so that all parts of the field receive wastewater. This will help percolation and evaporation and will help prevent stagnant wastewater.
- Observe the wastewater levels in the disposal areas on a daily basis. Apply additional wastewater only if the previously applied wastewater has evaporated or percolated and if a large storm is not eminent.
- Do not flood the fields and leave standing water for a long period of time unless it has so been designated.

Accumulated Solids Removal and Disposal

Solids contained in the dairy-generated wastewater and in the storm water will naturally settle and accumulate in the bottom of the holding basins/lagoons. The settled solids will reduce the holding capacity of the ponds. To maintain holding pond storage capacity, solids must be routinely checked and periodically removed. The frequency of solids removal will depend on how quickly solids accumulate in the ponds.

Solids Removal. Remove accumulated solids by 1) agitation and pumping, 2) dredging, and 3) draining and scraping. If dredging is used, ensure that dredging runoff and excess wastewater taken from the ponds is contained and returned to the ponds. Lagoon solids should be removed *every summer* to ensure full capacity in the lagoons before the start of the next winter season.

Solids Disposal. Solids removed from the ponds can be applied to application areas on-site or must be hauled off-site to farm ground for land application. Solids from lagoon applied to application areas should be tilled and mixed into the native soils shortly after application.

Levee, Berm and Dike Maintenance

The integrity of pond berms, levees, and dikes must be maintained. Follow these guidelines to ensure proper maintenance of the levees and berms:

- Check pond dikes, levees, and berms a minimum of two times per year for erosion and settlement, and repair as necessary (one inspection to occur just prior to the rainy season).
- Check pond dikes, levees, and berms a minimum of two times per year for rodent damage, and repair as necessary (one inspection to occur just prior to the rainy season).
- If immediate repairs must be made, compacted soil should be used to fill all cracks and holes until further repair can be performed.
- Apply suitable rodent control measures for widespread or frequent rodent damage. These may include Anti-Coagulant Bait, Trapping or Fumigation. Pest Control Specialists should be contacted before using any of these methods.

Site Grading Maintenance

Site grading must be maintained to ensure proper drainage patterns across the dairy. The goal is to minimize the amount of water contaminated with manure and flowing into the holding ponds and to prevent contaminated wastewater from running off-site. The following guidelines should be followed to maintain site grading:

- Ensure that all wastewater generated by the daily dairy operations flows to the wastewater holding ponds. Re-grade as needed.
- Clean and repair buried drain lines as needed.
- Ensure that rainfall collected from cow holding pens, feed storage areas, and other manured areas flows to the holding ponds or containment areas. Re-grade as needed.
- Check the condition of containment walls and berms surrounding the cow-confined areas, and repair as necessary.
- Ensure that storm water from off-site areas is diverted away from holding pens and other manured areas.
- Ensure that storm water from other off-site areas does not drain into the holding ponds.

Weed Abatement

Weed abatement measures such as pesticides and clearing and grubbing should be used to control weeds in fields, lagoons, wastewater transport channels, and wastewater access paths. Clearing manure out of lagoons once a year and disking fields at a minimum of once a year will help ensure weed abatement.

Maintenance and Operations Records

Keep records of all maintenance activities for future reference.

Maintenance Area	Activity	Frequency
Holding Basin/Lagoon Levels	Pond Depth in Feet	Weekly
Holding Basin/Lagoon General Inspection	Berm and lagoon Wall Stability	Weekly
Wastewater Distribution/Application Equipment	Pump/Pipe/Ditch/Inspection	Weekly
Rainfall Totals	Days of Rain & Inches of Rainfall	Daily/Weekly
Solids Level	Solids Depth in Feet	Annually
Wastewater Application	Wastewater Depth in Inches	Daily
Wastewater Application	Days Applied & Approximate Volume	Weekly
Lagoon Solids Removal/Disposal	Days Removed & Volume Removed	Annually
Corral Solids Removal/Disposal	Days Removed & Volumes Removed	Semi-Annually
Dikes and Berms Maintenance	Damage Found & date Repairs Made	Semi-Annually
Site Grading Maintenance	Improvements Made & Date	Annually
Equipment Maintenance	Service And repair Records & Dates	Semi-Annually

Daily inspections should be made upon all ponds, berms and wastewater distribution and application equipment following the first significant rain event of each Winter season. These daily inspections should continue until large rain events cease in the Spring.

Should an unauthorized discharge be made from the facility, the dairy operator should follow the guidelines described in Monitoring and Reporting Program No. 99-11. (See back pages of Order No. 99-11.) Emergency phone numbers are located on the next page of this report.

Emergency Spill Plan

In the case of an emergency spill on the dairy, these directions should be followed.

First, the Regional Water Quality Control Board should be contacted if a spill occurs. This requirement is based on Order 99-11. At least one of these people should be contacted in the case of a spill.

<u>Regional Water Quality Control Board</u>
Chief of the Dairy Units 909-782-4130

Should a pump or piece of equipment break down, these numbers should be used to pursue emergency temporary equipment.

<u>Vandenberg Manufacturing Company, Inc.</u>
<u>909-597-3412</u>

Below is a list of spare parts that could be used in the case of an emergency spill.

There are no spare parts on-site.

VII. GLOSSARY

AFO	- -	Animal Feeding Operation
BMP	- -	Best Management Practices
Board	- -	See CRWQCB, SAR
CAFO	- -	Concentrated Animal Feeding Operation
Catastrophic Rainfall:		Any single event that would total the volume of the 25-year, 24-hour storm event. This could include tornadoes; hurricanes or other catastrophic conditions that could cause overflow due to winds or mechanical damage.
CFR	- -	Code of Federal Regulations
Chronic Rain Fall:	-	A series of wet weather conditions which would not provide opportunity for dewatering and which total the volume of the 25 year, 24 hour storm event.
CNMP	- -	Comprehensive Nutrient Management Plan
CRWQCB	- -	California Regional Water Quality Control Board
CWA	- -	Clean Water Act
Discharger	- -	Persons discharging, or proposing to discharge, dairy wastes or other similar kinds of wastes from an existing dairy or related facility in any manner that may affect water quality.
EWMP	- -	Engineered Waste Management Plan
NPDES	- -	National Pollutant Discharge Elimination System
Process Wastewater:		Water directly or indirectly used in the operation of a feedlot for any or all of the following: Spillage or overflow from animal or poultry watering systems
Regional Board:	-	See CRWQCB, SAR
Run-on	- -	Storm water that occurs off-site, but enters the CAFO
SAR	- -	Santa Ana Region
SWRCB	- -	State Water Resources Control Board
TDS	- -	Total Dissolved Solids
TMDL	- -	Total Maximum Daily Load
USDA	- -	United States Department of Agriculture
USEPA	- -	United States Environmental Protection Agency
Washwater	- -	Water used to wash cows prior to milking, milk equipment & milk barn

APPENDIX A

WORKSHEET FOR DETERMINING
CONTAINMENT FACILITY VOLUME

NOLTE
BEYOND ENGINEERING

WORKSHEET FOR DETERMINING CONTAINMENT FACILITY VOLUME

NAME OF FACILITY Joe Borba Dairies

NAME OF OPERATOR Maguerite Borba
14545 South Grove Avenue
Chino, CA 91710

DATE 07/28/02
PHONE (909) 547-2712

TOTAL ACRES OF PROPERTY **200**
DAIRY SITE (Manured Areas) **186.85** Acres

TOTAL DAYS STORAGE: **150**

ANIMAL UNITS

	Milk Cows	Dry Cows	Bred Heifers	Heifers 1 yr/breed	Calves 3 m to 1yr	Baby Calves
Number (N)	3,700	650	1,200	0	300	0
Weights (lbs)	1,400	1,400	1,100	775	450	150
Pounds (lbs.x N)	5,180,000	910,000	1,320,000	0	135,000	0
Units ((N x lbs.)/1000)	5,180.0	910.0	1,320.0	0.0	135.0	0.0
				TOTAL ANIMAL UNIT		**7545.0**

MILKHOUSE AND PARLOR WATER RATE

	Gal Per Milking	# Milkings Per Day	# Cows	Totals (Gal Per Day)
Bulk Tank Wash Volume [1]	210	2		420
Pipeline Wash Volume [1]	750	2		1500
Milkhouse Parlor Floor Wash [1]	750	2		1500
Cow Prep (hose wash per cow) [1]	0.25	2	3700	1850
Miscellaneous Equipment (buckets etc.) [1]	750	2		1500
Miscellaneous Wash (wash/drip pen hose etc.) [1]	3150	2		6300
TOTAL DAILY MILK HOUSE AND PARLOR WATER USE				**13,070**

WASH PEN/HOLDING PEN WATER RATE

	Half & Half Dairy	Joe Borba #2 Dairy	B & B Dairy	# Milkings Per Day	Totals (Gal Per Day)
Number of Holding Pen Sprinklers	72	72	47		
Duration of Sprinkler Wash Cycle (min.)	5.0	5.0	5.0		
Number of Wash Cycles (cow pens)	9	11	13		
Sprinkler Flow Rate (gallons per minute) [1]	5	5	5		
TOTAL WASH PEN WATER USE	16,200	19,800	15,275	2	**102,550**

WASHWATER VOLUME

Milkhouse and Wash Pen (gal per day)		**115,620**
Required days for Containment Facility to hold		**150**
TOTAL WASHWATER VOLUME	**Gallons**	**17,343,000**
	Cu. Ft.	**2,318,583**

[1] University of California Cooperative Extension - Dairy Management Series, Planning and designing dairy waste storage facilities, Alison Von Eenennaam, Series Number UCCE-DMMS-2, 10/97, Page 10.

Accumulated Wastewater Disposal

It is important that the water level in the wastewater holding ponds be properly maintained so that the ponds can provide the required storage capacity during wet weather periods. The California Regional Water Quality Control Board - Santa Ana Region (CRWQCB) has developed specific standards for the handling and storage of wastewater and storm water collected from the dairy operations. This portion of the Engineered Waste Management Plan describes the recommended maintenance procedures for the wastewater holding ponds to ensure compliance with CRWQCB standards.

In order to meet the requirements of the CRWQCB, the following general guidelines should be followed in disposing of wastewater in the ponds:

- Empty ponds just prior to the start of the wet weather season (November 1st) to ensure maximum capacity for the winter months. If stagnant water remains at the bottom of the ponds below the reach of the pumps, portable pumps should be used to remove all wastewater before the start of the wet season.
- Take advantage of dry weather periods during the annual wet weather period to dispose of accumulated wastewater. Fields must be bermed to prevent overflow from disposal areas onto adjacent properties.
- Start to empty ponds at end of wet weather season (March 31st) to maximize percolation and to create additional capacity in the lagoons.

<u>General Equipment Maintenance</u>. Pumps, pipelines and all pertinent equipment used in the handling of wastewater must be routinely checked and serviced to ensure proper operation:

- Check all wastewater distribution and application equipment weekly to ensure proper operation condition.
- Check and service motors and pumps three times a year. Portable replacement pumps should be available in case of a pump failure. If portable pumps are not available on-site, a rental company phone number should be posted with high visibility for all employees. Rental company phone numbers are also listed on the last page of this report.
- Check transmission pipes for proper condition.
- Take inventory of spare parts and check sources of emergency repair.
- Disc percolation areas (fields) to about 18 inches to assure maximum percolation during wet seasons. Disking of the disposal area should occur as early in the year as possible, as soon as the fields are dry enough for the procedure to be effective. All of the disposal area should be disked at least once each year.

<u>Dry Weather Disposal.</u> Following the annual wet weather months, wastewater accumulated in the ponds should be disposed of in a timely manner in preparation of the coming wet weather months. The following guidelines should be followed for wastewater disposal during dry weather conditions:

- Apply wastewater to each of the evaporation/percolation disposal areas (fields) on a rotational basis.
- Wastewater should be applied to fields in a manner so that all wastewater will percolate and evaporate. Wastewater should be applied to all parts of the field to improve percolation and evaporation and to prevent stagnant wastewater.
- Observe the wastewater levels in the disposal areas on a daily basis and apply additional wastewater as the drying and percolation rates permit.
- Avoid having the fields completely flooded for extended periods of time. The best disposal rates will occur if the fields are flooded 4 to 6 inches and then allowed to evaporate and percolate. Fields can only be flooded to 4 to 6 inches if proper berms exist around the boundaries of the field. If stagnant wastewater develops, a portable pump or other measures should be used to help spread the water and prevent insect breeding conditions.

Wet Weather Disposal. During the wet weather months, there may be weeks of dry weather available to dispose of accumulated wastewater. Take advantage of every opportunity to reduce the wastewater levels in the holding basins/lagoons so that in the event of a large storm the chances of overflow and inadvertent runoff are reduced. The following guidelines should be followed for wastewater disposal during wet weather months:

- Apply wastewater to each of the disposal areas on a rotational basis.
- Apply wastewater in a manner so that all wastewater will percolate and evaporate. Fields should be watered so that all parts of the field receive wastewater. This will help percolation and evaporation and will help prevent stagnant wastewater.
- Observe the wastewater levels in the disposal areas on a daily basis. Apply additional wastewater only if the previously applied wastewater has evaporated or percolated and if a large storm is not eminent.
- Do not flood the fields and leave standing water for a long period of time unless it has so been designated.

Accumulated Solids Removal and Disposal

Solids contained in the dairy-generated wastewater and in the storm water will naturally settle and accumulate in the bottom of the holding basins/lagoons. The settled solids will reduce the holding capacity of the ponds. To maintain holding pond storage capacity, solids must be routinely checked and periodically removed. The frequency of solids removal will depend on how quickly solids accumulate in the ponds.

Solids Removal. Remove accumulated solids by 1) agitation and pumping, 2) dredging, and 3) draining and scraping. If dredging is used, ensure that dredging runoff and excess wastewater taken from the ponds is contained and returned to the ponds. Lagoon solids should be removed *every summer* to ensure full capacity in the lagoons before the start of the next winter season.

Solids Disposal. Solids removed from the ponds can be applied to application areas on-site or must be hauled off-site to farm ground for land application. Solids from lagoon applied to application areas should be tilled and mixed into the native soils shortly after application.

Levee, Berm and Dike Maintenance

The integrity of pond berms, levees, and dikes must be maintained. Follow these guidelines to ensure proper maintenance of the levees and berms:

- Check pond dikes, levees, and berms a minimum of two times per year for erosion and settlement, and repair as necessary (one inspection to occur just prior to the rainy season).
- Check pond dikes, levees, and berms a minimum of two times per year for rodent damage, and repair as necessary (one inspection to occur just prior to the rainy season).
- If immediate repairs must be made, compacted soil should be used to fill all cracks and holes until further repair can be performed.
- Apply suitable rodent control measures for widespread or frequent rodent damage. These may include Anti-Coagulant Bait, Trapping or Fumigation. Pest Control Specialists should be contacted before using any of these methods.

Site Grading Maintenance

Site grading must be maintained to ensure proper drainage patterns across the dairy. The goal is to minimize the amount of water contaminated with manure and flowing into the holding ponds and to prevent contaminated wastewater from running off-site. The following guidelines should be followed to maintain site grading:

- Ensure that all wastewater generated by the daily dairy operations flows to the wastewater holding ponds. Re-grade as needed.
- Clean and repair buried drain lines as needed.
- Ensure that rainfall collected from cow holding pens, feed storage areas, and other manured areas flows to the holding ponds or containment areas. Re-grade as needed.
- Check the condition of containment walls and berms surrounding the cow-confined areas, and repair as necessary.
- Ensure that storm water from off-site areas is diverted away from holding pens and other manured areas.
- Ensure that storm water from other off-site areas does not drain into the holding ponds.

Weed Abatement

Weed abatement measures such as pesticides and clearing and grubbing should be used to control weeds in fields, lagoons, wastewater transport channels, and wastewater access paths. Clearing manure out of lagoons once a year and disking fields at a minimum of once a year will help ensure weed abatement.

Maintenance and Operations Records

Keep records of all maintenance activities for future reference.

Maintenance Area	Activity	Frequency
Holding Basin/Lagoon Levels	Pond Depth in Feet	Weekly
Holding Basin/Lagoon General Inspection	Berm and lagoon Wall Stability	Weekly
Wastewater Distribution/Application Equipment	Pump/Pipe/Ditch/Inspection	Weekly
Rainfall Totals	Days of Rain & Inches of Rainfall	Daily/Weekly
Solids Level	Solids Depth in Feet	Annually
Wastewater Application	Wastewater Depth in Inches	Daily
Wastewater Application	Days Applied & Approximate Volume	Weekly
Lagoon Solids Removal/Disposal	Days Removed & Volume Removed	Annually
Corral Solids Removal/Disposal	Days Removed & Volumes Removed	Semi-Annually
Dikes and Berms Maintenance	Damage Found & date Repairs Made	Semi-Annually
Site Grading Maintenance	Improvements Made & Date	Annually
Equipment Maintenance	Service And repair Records & Dates	Semi-Annually

Daily inspections should be made upon all ponds, berms and wastewater distribution and application equipment following the first significant rain event of each Winter season. These daily inspections should continue until large rain events cease in the Spring.

Should an unauthorized discharge be made from the facility, the dairy operator should follow the guidelines described in Monitoring and Reporting Program No. 99-11. (See back pages of Order No. 99-11.) Emergency phone numbers are located on the next page of this report.

EQUIVALENT GALLONS PER COW PER DAY			
	Gal Per Day	# Cows	
	115,620	3,700	**31.25** Gal/Cow/Day

REQUIRED STORM WATER AND RAINFALL RATES			
150	day Average Rainfall for Region (inches)		10.27
24-hr, 25 year Storm Rainfall (inches)			4.50
		TOTAL INCHES	**14.77**

RUNOFF VOLUME RAIN AND STORM WATERS			
	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	519,510	100%	519,510
Roofed Surface Area Draining Into Lagoon	100,964	100%	100,964
Surface Area Of The Lagoon	1,940,150	100%	1,940,150
Corral Surface Area Draining Into Lagoon	3,676,898	50%	1,838,449
Pasture Area Draining Into Lagoon	295,000	15%	44,250
Any Other Dirt Surface Area Draining Into Lagoon	1,606,750	30%	482,025
TOTAL SQUARE FEET OF DAIRY OPERATIONS	8,139,272	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**186.85**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**4,925,348**

TOTAL STORMWATER AND RUNOFF VOLUME		
	Gallons	**45,345,873**
	Cu Ft.	**6,062,282**
	Acre-Ft.	**139.17**

EVAPORATION CALCULATION FOR WINTER MONTHS						
Storage	Length	Width	Depth	Slope	Freeboard	Sq. Ft.
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
0	0	0	0.00	0.00	0.00	0
Total Evaporation Area						1,886,327

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** 150 =Storage Days

This data is provided by the State of California,		**107**	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPORATION			
		Gallons	11,318,311
Area of coverage:	50%	Cu Ft.	1,513,143
		Acre-Ft.	34.74

NET REQUIRED STORM WATER STORAGE VOLUME		
	Gallons	34,027,562
	Cu Ft.	4,549,139
	Acre-Ft.	104.43

WASHWATER AND STORM WATER TOTAL VOLUME		
(Wash Water and Storm Water)	**Gallons**	**51,370,562**
	Cu Ft.	**6,867,722**

MANURE CONSIDERATION

(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)

Daily Production Capacity per Unit	1.37	(Cubic ft)	
Total Units	7,545.00		
Total Volume:	10,336.65	(Cubic ft Per Day)	
Percent of daily manure produced contained in liquid (per day)	10.00%		1033.67
Storage Period (days)			150
TOTAL MANURE VOLUME		Cu Ft.	155,050
		Acre-Ft.	3.56

Total Required Containment Facility Volume	Gallons	52,530,335
	Cu Ft.	7,022,772
	Acre-Ft.	161.22

TOTAL AVAILABLE VOLUME (Cu.ft.)							
Storage	Length	Width	Depth	Slope	Freeboard	Sq. Ft.	Cu. Ft.
0	0	0	0.0	0.00	0.00	72,000	663,000
0	0	0	0.0	0.00	0.00	92,000	696,192
0	0	0	0.0	0.00	0.00	118,000	723,874
0	0	0	0.0	0.00	0.00	840,000	795,000
0	0	0	0.0	0.00	0.00	262,500	1,064,067
0	0	0	0.0	0.00	0.00	269,350	1,379,832
0	0	0	0.0	0.00	0.00	0	0
0	0	0	0.0	0.00	0.00	0	0
0	0	0	0.0	0.00	0.00	30,600	272,000
0	0	0	0.0	0.00	0.00	255,700	1,475,757
0	0	0	0.0	0.00	0.00	0	0
0	0	0	0.0	0.00	0.00	0	0
					Total:	**1,940,150**	**7,069,722**

Current Capacity		**Gallons**	**52,881,520**
		Cu Ft.	**7,069,722**
		Acre-Ft.	**162.30**
Additional Volume Required	-351,185	**Gallons**	**0**
		Cu Ft.	**0**
		Acre-Ft.	**0.00**

DEPTH IN STORAGE AREA NEEDED TO HOLD 24 HR, 25 YR STORM		
70% Runoff Coeff [3]	Total Req.'d Storm Water Volume [2]	**2,136,559**
	Total Volume of Catch Basin #1	**1,940,150**
	Total Depth Needed at Top of Lagoon to Hold 24 HR, 25 Year Storm	**1.10**

[2] Total Required Storm Water Volume during a 24 hour, 25 year storm is calculated based on Total Sq. feet of Dairy Operations multiplied by an alternate Runoff Coeff [3].

NOLTE
BEYOND ENGINEERING

WORKSHEET FOR DETERMINING
CONTAINMENT FACILITY VOLUME

NAME OF FACILITY B & B Dairy

NAME OF OPERATOR Mgr: Martin Garcia
8521 Eucalyptus Avenue
Chino CA 91710

DATE 09/05/02
PHONE (909) 923-3516

TOTAL ACRES OF PROPERTY **38.1**
DAIRY SITE (Manured Areas) **37.70** Acres

TOTAL DAYS STORAGE: **150**

ANIMAL UNITS

	Milk Cows	Dry Cows	Bred Heifers	Heifers 1 yr/breed	Calves 3 m to 1yr	Baby Calves
Number (N)	1,300	20	100	0	0	0
Weights (lbs)	1,400	1,400	1,100	775	450	150
Pounds (lbs.x N)	1,820,000	28,000	110,000	0	0	0
Units ((N x lbs.)/1000)	1,820.0	28.0	110.0	0.0	0.0	0.0
					TOTAL ANIMAL UNIT	**1958.0**

MILKHOUSE AND PARLOR WATER RATE

	Gal Per Milking	# Milkings Per Day	# Cows	Totals (Gal Per Day)
Bulk Tank Wash Volume [1]	70	2		140
Pipeline Wash Volume [1]	250	2		500
Milkhouse Parlor Floor Wash [1]	250	2		500
Cow Prep (hose wash per cow) [1]	0.25	2	1300	650
Miscellaneous Equipment (buckets etc.) [1]	250	2		500
Miscellaneous Wash (wash/drip pen hose etc.) [1]	1050	2		2100
TOTAL DAILY MILK HOUSE AND PARLOR WATER USE				**4,390**

WASH PEN/HOLDING PEN WATER RATE

		# Strings	Totals (Gal Per Day)
Number of Holding Pen Sprinklers	47		
Duration of Sprinkler Wash Cycle (minutes)	5		
Number of Wash Cycles (cow pens)	13		
Sprinkler Flow Rate (gallons per minute) [1]	5		
TOTAL WASH PEN WATER USE	15,275	2	**30,550**

WASHWATER VOLUME

Milkhouse and Wash Pen (gal per day)		**34,940**
Required days for Containment Facility to hold		**150**
TOTAL WASHWATER VOLUME	**Gallons**	**5,241,000**
	Cu. Ft.	**700,668**

EQUIVALENT GALLONS PER COW PER DAY

Gal Per Day	# Cows	# Cows
34,940	1,300	**26.88** Gal/Cow/Day

[1] University of California Cooperative Extension - Dairy Management Series, Planning and designing dairy waste storage facilities, Alison Von Eenennaam, Series Number UCCE-DMMS-2, 10/97, Page 10.

WHOLE DAIRY: RUNOFF VOLUME RAIN AND STORM WATERS			
	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	153,200	100%	153,200
Roofed Surface Area Draining Into Lagoon	16,664	100%	16,664
Surface Area Of The Lagoon	286,300	100%	286,300
Corral Surface Area Draining Into Lagoon	911,750	50%	455,875
Pasture Area Draining Into Lagoon	80,000	15%	12,000
Any Other Dirt Surface Area Draining Into Lagoon	194,500	30%	58,350
TOTAL SQUARE FEET OF DAIRY OPERATIONS	1,642,414	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**37.70**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**982,389**

REQUIRED STORM WATER AND RAINFALL RATES (WHOLE DAIRY)		
150	day Average Rainfall for Region (inches)	10.27
24-hr, 25 year Storm Rainfall (inches)		4.50
	TOTAL INCHES	**14.77**

TOTAL STORMWATER RUNOFF VOLUME		
	Gallons	**9,044,495**
	Cu Ft.	**1,209,157**
	Acre-Ft.	**27.76**

EVAPORATION CALCULATION FOR WINTER MONTHS								
Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.
Catch Basin 1	180	170		10.00		1.00	0.00	27,200
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0	0	0.00	0.00	-	-	0
0	0	0	0	0.00	0.00	-	-	0
Catch Basin 2	200	170		10.00		1.00	0.00	30,400
Lagoon 1	220	85		6.00		1.00	0.00	16,906
Lagoon 2	200	85		6.00		1.00	0.00	15,326
Lagoon 3	200	85		6.00		1.00	0.00	15,326
Basin 1 & 2	1300	130	0	5.50	0.00	1.00	0.00	169,000
0	0	0	0	0.00	0.00	-	-	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0	0	0.00	0.00	-	-	0
0	0	0	0	0.00	0.00	-	-	0
Total Lagoon Area #1, #2 & #3								**274,158**

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** 150 =Storage Days

This data is provided by the State of California,			**107**	*mm*	***November***
			86	*mm*	***December***
			87	*mm*	***January***
			89	*mm*	***February***
	add	+	**120**	*mm*	***March***
			489	*mm*	Total winter months evap. rate in millimeters
	multiply	x	0.03937		convert to inches
			19.25	*in.*	Total winter months evap. rate in inches
	divide	/	12.00		*inches in a foot*
			1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION			
		Gallons	**1,644,999**
Area of coverage:	50%	**Cu Ft.**	**219,920**
		Acre-Ft.	**5.05**

NET REQUIRED STORM WATER STORAGE VOLUME		
	Gallons	**7,399,497**
	Cu Ft.	**989,238**
	Acre-Ft.	**22.71**

WASHWATER AND STORM WATER TOTAL VOLUME		
(Wash Water and Storm Water)	**Gallons**	**12,640,497**
	Cu Ft.	**1,689,906**

MANURE CONSIDERATION				
(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)				
Daily Production Capacity per Unit	1.37	(Cubic ft)		
Total Units	1,958.00			
Total Volume:	2,682.46	(Cubic ft Per Day)		
Percent of daily manure produced contained in liquid (per day)	10.00%			268.25
Storage Period (days)				150
		TOTAL MANURE VOLUME	**Cu Ft.**	**40,237**
			Acre-Ft.	**0.92**

Total Required Containment Facility Volume		
	Gallons	**12,941,469**
	Cu Ft.	**1,730,143**
	Acre-Ft.	**39.72**

AREA #1: RUNOFF VOLUME RAIN AND STORM WATERS

	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	0	100%	0
Roofed Surface Area Draining Into Lagoon	10,164	100%	10,164
Surface Area Of The Lagoon	30,600	100%	30,600
Corral Surface Area Draining Into Lagoon	434,475	50%	217,238
Pasture Area Draining Into Lagoon	0	15%	0
Any Other Dirt Surface Area Draining Into Lagoon	65,000	30%	19,500
TOTAL SQUARE FEET OF DAIRY OPERATIONS	540,239	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**12.40**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**277,502**

REQUIRED STORM WATER AND RAINFALL RATES (Area 1)			
150	day Average Rainfall for Region (inches)		10.27
24-hr, 25 year Storm Rainfall (inches)			4.50
		TOTAL INCHES	**14.77**

TOTAL STORMWATER RUNOFF VOLUME		
	Gallons	**2,554,855**
	Cu Ft.	**341,558**
	Acre-Ft.	**7.84**

EVAPORATION CALCULATION FOR WINTER MONTHS

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.
Catch Basin	180	170		10.00		1.00	0.00	27,200
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0	0	0	0	-	-	0
0	0	0	0	0	0	-	-	0
Total Lagoon Area #1								**27,200**

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** **150.00** =Storgae Days

This data is provided by the State of California,

		107	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION		Gallons	163,205
Area of coverage:	50%	Cu Ft.	21,819
		Acre-Ft.	0.50

NET REQUIRED STORM WATER STORAGE VOLUME	Gallons	2,391,650
	Cu Ft.	319,739
	Acre-Ft.	7.34

WASHWATER AND STORM WATER TOTAL VOLUME			
(Wash Water and Storm Water)	0%	Gallons	2,391,650
		Cu Ft.	319,739

MANURE CONSIDERATION			
(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)			
Daily Production Capacity per Unit	1.37	(Cubic ft)	
Total Units	644.04	(Percentage)	32.89%
Total Volume:	882.34	(Cubic ft Per Day)	
Percent of daily manure produced contained in liquid (per day)	10.00%		88.23
Storage Period (days)			150
TOTAL MANURE VOLUME		Cu Ft.	13,235
		Acre-Ft.	0.30

Total Required Containment Facility Volume	Gallons	2,490,648
	Cu Ft.	332,974
	Acre-Ft.	7.64

AREA #2: RUNOFF VOLUME RAIN AND STORM WATERS			
	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	153,200	100%	153,200
Roofed Surface Area Draining Into Lagoon	6,500	100%	6,500
Surface Area Of The Lagoon	255,700	100%	255,700
Corral Surface Area Draining Into Lagoon	477,275	50%	238,638
Pasture Area Draining Into Lagoon	80,000	15%	12,000
Any Other Dirt Surface Area Draining Into Lagoon	129,500	30%	38,850
TOTAL SQUARE FEET OF DAIRY OPERATIONS	1,102,175	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**25.30**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**704,888**

REQUIRED STORM WATER AND RAINFALL RATES (Area #2)		
150	day Average Rainfall for Region (inches)	10.27
24-hr, 25 year Storm Rainfall (inches)		4.50
	TOTAL INCHES	**14.77**

TOTAL STORMWATER AND RUNOFF VOLUME		
	Gallons	**6,489,641**
	Cu Ft.	**867,599**
	Acre-Ft.	**19.92**

EVAPORATION CALCULATION FOR WINTER MONTHS								
Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.
Catch Basin [illegible]	200	170		10.00		1.00	0.00	30,400
Lagoon 1	220	85		6.00		1.00	0.00	16,906
Lagoon 2	200	85		6.00		1.00	0.00	15,326
Lagoon 3	200	85		6.00		1.00	0.00	15,326
Basin 1 & 2	1300	130	0	5.5	0.0	1.00	0.00	169,000
0	0	0	0	0.0	0.0	-	-	0
Total Lagoon Area #2								**246,958**

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** 150 =Storage Days

This data is provided by the State of California,		**107**	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION			
Area of coverage:	50%	Gallons	1,481,794
		Cu Ft.	198,101
		Acre-Ft.	4.55

NET REQUIRED STORM WATER STORAGE VOLUME		
	Gallons	5,007,847
	Cu Ft.	669,498
	Acre-Ft.	15.37

WASHWATER AND STORM WATER TOTAL VOLUME			
(Wash Water and Storm Water) % Wash Water :	100%	Gallons	10,248,847
		Cu Ft.	1,370,167

MANURE CONSIDERATION			
(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)			
Daily Production Capacity per Unit	1.37	(Cubic ft)	
Total Units	1,313.96	(Percentage)	67.11%
Total Volume:	1,800.12	(Cubic ft Per Day)	
Percent of daily manure produced contained in liquid (per day)	10.00%		180.01
Storage Period (days)			150
TOTAL MANURE VOLUME		Cu Ft.	27,002
		Acre-Ft.	0.62

Total Required Containment Facility Volume		
	Gallons	10,450,820
	Cu Ft.	1,397,169
	Acre-Ft.	32.07

AREA #3: RUNOFF VOLUME RAIN AND STORM WATERS

	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	0	100%	0
Roofed Surface Area Draining Into Lagoon	0	100%	0
Surface Area Of The Lagoon	0	100%	0
Corral Surface Area Draining Into Lagoon	0	50%	0
Pasture Area Draining Into Lagoon	0	15%	0
Any Other Dirt Surface Area Draining Into Lagoon	0	30%	0
TOTAL SQUARE FEET OF DAIRY OPERATIONS	0	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**0.00**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**0**

REQUIRED STORM WATER AND RAINFALL RATES (Area #3)

150	day Average Rainfall for Region (inches)	10.27
24-hr, 25 year Storm Rainfall (inches)		4.50
	TOTAL INCHES	**14.77**

TOTAL STORMWATER AND RUNOFF VOLUME

Gallons	**0**
Cu Ft.	**0**
Acre-Ft.	**0.00**

EVAPORATION CALCULATION FOR WINTER MONTHS

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0	0	0.0	0.0	-	-	0
0	0	0	0	0.0	0.0	-	-	0
Total Lagoon Area #3								**0**

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** 150 =Storage Days

This data is provided by the State of California,		**107**	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION			
		Gallons	0
Area of coverage:	50%	Cu Ft.	0
		Acre-Ft.	0.00

NET REQUIRED STORM WATER STORAGE VOLUME		
	Gallons	0
	Cu Ft.	0
	Acre-Ft.	0.00

WASHWATER AND STORM WATER TOTAL VOLUME

(Wash Water and Storm Water)	% Wash Water :	0%		
			Gallons	0
			Cu Ft.	0

MANURE CONSIDERATION

(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)

Daily Production Capacity per Unit	1.37	(Cubic ft)	
Total Units	0.00	(Percentage)	0.00%
Total Volume:	0.00	(Cubic ft Per Day)	
Percent of daily manure produced contained in liquid (per day)	10.00%		0.00
Storage Period (days)			150
TOTAL MANURE VOLUME		Cu Ft.	0
		Acre-Ft.	0.00

Total Required Containment Facility Volume

Gallons	0
Cu Ft.	0
Acre-Ft.	0.00

TOTAL AVAILABLE VOLUME (Cu.ft.)

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.	Cu. Ft.
Catch Basin	180	170		10.00		1.00	0.00	30,600	272,000
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0	0	0	0	-	-	0	0
0	0	0	0	0	0	-	-	0	0
Catch Basin	200	170		10.00		1.00	0.00	34,000	304,000
Lagoon 1	220	85		6.00		1.00	0.00	18,700	101,436
Lagoon 2	200	85		6.00		1.00	0.00	17,000	91,956
Lagoon 3	200	85		6.00		1.00	0.00	17,000	91,956
Basin 1 & 2	1300	130	0	6	0	1.00	0.00	169,000	886,409
0	0	0	0	0	0	-	-	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0	0	0.0	0.0	-	-	0	0
0	0	0	0	0.0	0.0	-	-	0	0
							Total:	**286,300**	**1,747,757**

WHOLE DAIRY

Current Capacity		Gallons	13,073,221
		Cu Ft.	1,747,757
		Acre-Ft.	40.12
Additional Volume Required	-131,753	Gallons	0
		Cu Ft.	0
		Acre-Ft.	0.00

VOLUME DRAINING INTO AREA-1

Current Capacity		Gallons	2,034,560
		Cu Ft.	272,000
		Acre-Ft.	6.24
Additional Volume Required	456,088	Gallons	456,088
		Cu Ft.	60,974
		Acre-Ft.	1.40

VOLUME DRAINING INTO AREA-2

Current Capacity		Gallons	11,038,661
		Cu Ft.	1,475,757
		Acre-Ft.	33.88
Additional Volume Required	-587,841	Gallons	0
		Cu Ft.	0
		Acre-Ft.	0.00

VOLUME DRAINING INTO AREA-3

Current Capacity		Gallons	0
		Cu Ft.	0
		Acre-Ft.	0.00
Additional Volume Required	0	Gallons	0
		Cu Ft.	0
		Acre-Ft.	0.00

NOLTE
BEYOND ENGINEERING

WORKSHEET FOR DETERMINING
CONTAINMENT FACILITY VOLUME

NAME OF FACILITY: Joe Borba #2 Dairy

NAME OF OPERATOR: Mgr. Adopho Flores
14651 Eucalyptus Avenue
Chino CA 91710

DATE: 09/05/02
PHONE: (909) 923-3516

TOTAL ACRES OF PROPERTY **60.3**
DAIRY SITE (Manured Areas) **58.57** Acres

TOTAL DAYS STORAGE: **150**

ANIMAL UNITS

	Milk Cows	Dry Cows	Bred Heifers	Heifers 1 yr/breed	Calves 3 m to 1yr	Baby Calves
Number (N)	1,300	330	100	0	0	0
Weights (lbs)	1,400	1,400	1,100	775	450	150
Pounds (lbs.x N)	1,820,000	462,000	110,000	0	0	0
Units ((N x lbs.)/1000)	1,820.0	462.0	110.0	0.0	0.0	0.0
				TOTAL ANIMAL UNIT		**2392.0**

MILKHOUSE AND PARLOR WATER RATE

	Gal Per Milking	# Milkings Per Day	# Cows	Totals (Gal Per Day)
Bulk Tank Wash Volume [1]	70	2		140
Pipeline Wash Volume [1]	250	2		500
Milkhouse Parlor Floor Wash [1]	250	2		500
Cow Prep (hose wash per cow) [1]	0.25	2	1300	650
Miscellaneous Equipment (buckets etc.) [1]	250	2		500
Miscellaneous Wash (wash/drip pen hose etc.) [1]	1050	2		2100
TOTAL DAILY MILK HOUSE AND PARLOR WATER USE				**4,390**

WASH PEN/HOLDING PEN WATER RATE

		# Strings	Totals (Gal Per Day)
Number of Holding Pen Sprinklers	72		
Duration of Sprinkler Wash Cycle (minutes)	5		
Number of Wash Cycles (cow pens)	11		
Sprinkler Flow Rate (gallons per minute) [1]	5		
TOTAL WASH PEN WATER USE	19,800	2	**39,600**

WASHWATER VOLUME

Milkhouse and Wash Pen (gal per day)		43,990
Required days for Containment Facility to hold		150
TOTAL WASHWATER VOLUME	**Gallons**	**6,598,500**
	Cu. Ft.	**882,152**

EQUIVALENT GALLONS PER COW PER DAY	Gal Per Day	# Cows	# Cows
	43,990	1,300	**33.84** Gal/Cow/Day

[1] University of California Cooperative Extension - Dairy Management Series, Planning and designing dairy waste storage facilities, Alison Von Eenennaam, Series Number UCCE-DMMS-2, 10/97, Page 10.

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** 150 =Storage Days

This data is provided by the State of		**107**	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION

		Gallons	**3,072,497**
Area of coverage:	50%	**Cu Ft.**	**410,762**
		Acre-Ft.	**9.43**

NET REQUIRED STORM WATER STORAGE VOLUME

Gallons	**11,210,568**
Cu Ft.	**1,498,739**
Acre-Ft.	**34.41**

WASHWATER AND STORM WATER TOTAL VOLUME

(Wash Water and Storm Water)	**Gallons**	**17,809,068**
	Cu Ft.	**2,380,892**

MANURE CONSIDERATION

(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)

Daily Production Capacity per Unit	1.37	(Cubic ft)		
Total Units	2,392.00			
Total Volume:	3,277.04	(Cubic ft Per Day)		
Percent of daily manure produced contained in liquid (per day)	10.00%			327.70
Storage Period (days)				150
		TOTAL MANURE VOLUME	**Cu Ft.**	**49,156**
			Acre-Ft.	**1.13**

Total Required Containment Facility Volume

Gallons	**18,176,752**
Cu Ft.	**2,430,047**
Acre-Ft.	**55.79**

AREA #1: RUNOFF VOLUME RAIN AND STORM WATERS

	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	160,550	100%	160,550
Roofed Surface Area Draining Into Lagoon	0	100%	0
Surface Area Of The Lagoon	262,500	100%	262,500
Corral Surface Area Draining Into Lagoon	962,787	50%	481,394
Pasture Area Draining Into Lagoon	0	15%	0
Any Other Dirt Surface Area Draining Into Lagoon	57,500	30%	17,250
TOTAL SQUARE FEET OF DAIRY OPERATIONS	1,443,337	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**33.13**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**921,694**

REQUIRED STORM WATER AND RAINFALL RATES (Area 1)		
150	day Average Rainfall for Region (inches)	10.27
24-hr, 25 year Storm Rainfall (inches)		4.50
	TOTAL INCHES	**14.77**

TOTAL STORMWATER RUNOFF VOLUME		
	Gallons	**8,485,694**
	Cu Ft.	**1,134,451**
	Acre-Ft.	**26.04**

EVAPORATION CALCULATION FOR WINTER MONTHS

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.
Catch Basin	400	120		10.00		1.00	0.00	42,900
E.Basin 1	550	390		3.00		1.00	0.00	211,689
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0	0	0	0	-	-	0
0	0	0	0	0	0	-	-	0
Total Lagoon Area #1								**254,589**

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** **150.00** =Storgae Days

This data is provided by the State of		**107**	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	***ft.***	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION		Gallons	1,527,581
Area of coverage:	50%	Cu Ft.	204,222
		Acre-Ft.	4.69

NET REQUIRED STORM WATER STORAGE VOLUME	Gallons	6,958,113
	Cu Ft.	930,229
	Acre-Ft.	21.36

WASHWATER AND STORM WATER TOTAL VOLUME			
(Wash Water and Storm Water)	25%	Gallons	8,607,738
		Cu Ft.	1,150,767

MANURE CONSIDERATION

(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)

Daily Production Capacity per Unit	1.37	(Cubic ft)	
Total Units	1,353.27	(Percentage)	56.57%
Total Volume:	1,853.98	(Cubic ft Per Day)	
Percent of daily manure produced contained in liquid (per day)	10.00%		185.40
Storage Period (days)			150
	TOTAL MANURE VOLUME	Cu Ft.	27,810
		Acre-Ft.	0.64

Total Required Containment Facility Volume	Gallons	8,815,755
	Cu Ft.	1,178,577
	Acre-Ft.	27.06

AREA #2: RUNOFF VOLUME RAIN AND STORM WATERS			
	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	56,100	100%	56,100
Roofed Surface Area Draining Into Lagoon	0	100%	0
Surface Area Of The Lagoon	269,350	100%	269,350
Corral Surface Area Draining Into Lagoon	347,610	50%	173,805
Pasture Area Draining Into Lagoon	0	15%	0
Any Other Dirt Surface Area Draining Into Lagoon	434,800	30%	130,440
TOTAL SQUARE FEET OF DAIRY OPERATIONS	1,107,860	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**25.43**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**629,695**

REQUIRED STORM WATER AND RAINFALL RATES (Area #2)		
150	day Average Rainfall for Region (inches)	10.27
24-hr, 25 year Storm Rainfall (inches)		4.50
	TOTAL INCHES	**14.77**

TOTAL STORMWATER AND RUNOFF VOLUME		
	Gallons	**5,797,371**
	Cu Ft.	**775,050**
	Acre-Ft.	**17.79**

EVAPORATION CALCULATION FOR WINTER MONTHS

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.
Catch Basin 1	350	250		6.00		1.00	0.00	83,936
E. Basin 2	475	220		3.00		1.00	0.00	102,424
Lagoon 1	235	170		8.00		1.00	0.00	36,774
Lagoon 2	220	170		8.00		1.00	0.00	34,344
0	0	0	0	0.0	0.0	-	-	0
0	0	0	0	0.0	0.0	-	-	0
Total Lagoon Area #2								**257,478**

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** 150 =Storage Days

This data is provided by the State of		**107**	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION		Gallons	1,544,916
Area of coverage:	50%	Cu Ft.	206,540
		Acre-Ft.	4.74

NET REQUIRED STORM WATER STORAGE VOLUME	Gallons	4,252,455
	Cu Ft.	568,510
	Acre-Ft.	13.05

WASHWATER AND STORM WATER TOTAL VOLUME			
(Wash Water and Storm Water) % Wash Water :	75%	Gallons	9,201,330
		Cu Ft.	1,230,124

MANURE CONSIDERATION			
(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)			
Daily Production Capacity per Unit	1.37	(Cubic ft)	
Total Units	1,038.73	(Percentage)	43.43%
Total Volume:	1,423.06	(Cubic ft Per Day)	
Percent of daily manure produced contained in liquid (per day)	10.00%		142.31
Storage Period (days)			150
TOTAL MANURE VOLUME		Cu Ft.	21,346
		Acre-Ft.	0.49

Total Required Containment Facility Volume	Gallons	9,360,997
	Cu Ft.	1,251,470
	Acre-Ft.	28.73

AREA #3: RUNOFF VOLUME RAIN AND STORM WATERS

	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	0	100%	0
Roofed Surface Area Draining Into Lagoon	0	100%	0
Surface Area Of The Lagoon	0	100%	0
Corral Surface Area Draining Into Lagoon	0	50%	0
Pasture Area Draining Into Lagoon	0	15%	0
Any Other Dirt Surface Area Draining Into Lagoon	0	30%	0
TOTAL SQUARE FEET OF DAIRY OPERATIONS	0	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**0.00**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**0**

REQUIRED STORM WATER AND RAINFALL RATES (Area #3)

150 day Average Rainfall for Region (inches)		10.27
24-hr, 25 year Storm Rainfall (inches)		4.50
	TOTAL INCHES	**14.77**

TOTAL STORMWATER AND RUNOFF VOLUME

Gallons	**0**
Cu Ft.	**0**
Acre-Ft.	**0.00**

EVAPORATION CALCULATION FOR WINTER MONTHS

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0		0.00		0.00	0.00	0
0	0	0	0	0.0	0.0	-	-	0
0	0	0	0	0.0	0.0	-	-	0
Total Lagoon Area #3								**0**

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** 150 =Storage Days

This data is provided by the State of

		107	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION		Gallons	0
Area of coverage:	50%	Cu Ft.	0
		Acre-Ft.	0.00

NET REQUIRED STORM WATER STORAGE VOLUME	Gallons	0
	Cu Ft.	0
	Acre-Ft.	0.00

WASHWATER AND STORM WATER TOTAL VOLUME

(Wash Water and Storm Water)	% Wash Water :	0%	Gallons	0
			Cu Ft.	0

MANURE CONSIDERATION

(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)

Daily Production Capacity per Unit	1.37	(Cubic ft)	
Total Units	0.00	(Percentage)	0.00%
Total Volume:	0.00	(Cubic ft Per Day)	
Percent of daily manure produced contained in liquid (per day)	10.00%		0.00
Storage Period (days)			150
TOTAL MANURE VOLUME		Cu Ft.	0
		Acre-Ft.	0.00

Total Required Containment Facility Volume

Gallons	0
Cu Ft.	0
Acre-Ft.	0.00

TOTAL AVAILABLE VOLUME (Cu.ft.)

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.	Cu. Ft.
atch Basin	400	120		10.00		1.00	0.00	48,000	429,000
E.Basin 1	550	390		3.00		1.00	0.00	214,500	635,067
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0	0	0	0	-	-	0	0
0	0	0	0	0	0	-	-	0	0
atch Basin	350	250		6.00		1.00	0.00	87,500	503,616
E. Basin 2	475	220		3.00		1.00	0.00	104,500	307,272
Lagoon 1	235	170		8.00		1.00	0.00	39,950	294,192
Lagoon 2	220	170		8.00		1.00	0.00	37,400	274,752
0	0	0	0	0	0	-	-	0	0
0	0	0	0	0	0	-	-	0	0
0	0	0		0.00		0.00	0.00	0	0

AREA #3: RUNOFF VOLUME RAIN AND STORM WATERS

	Square Feet	Runoff Coeff	Total Sq. Ft.
Concrete Surface Area Draining Into The Lagoon	30,300	100%	30,300
Roofed Surface Area Draining Into Lagoon	16,800	100%	16,800
Surface Area Of The Lagoon	958,000	100%	958,000
Corral Surface Area Draining Into Lagoon	243,541	50%	121,771
Pasture Area Draining Into Lagoon	215,000	15%	32,250
Any Other Dirt Surface Area Draining Into Lagoon	456,540	30%	136,962
TOTAL SQUARE FEET OF DAIRY OPERATIONS	1,920,181	(MANURED AREAS)	
TOTAL ACREAGE OF DAIRY OPERATIONS	**44.08**	(MANURED AREAS)	
TOTAL SQUARE FEET OF SURFACE RUNOFF			**1,296,083**

REQUIRED STORM WATER AND RAINFALL RATES (Area #3)

150	day Average Rainfall for Region (inches)	10.27
24-hr, 25 year Storm Rainfall (inches)		4.50
	TOTAL INCHES	**14.77**

TOTAL STORMWATER AND RUNOFF VOLUME

Gallons	**11,932,556**
Cu Ft.	**1,595,262**
Acre-Ft.	**36.62**

EVAPORATION CALCULATION FOR WINTER MONTHS

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.
C.Basin 3	400	60		5.00		1.00	0.00	21,725
C.Basin 4	400	60		5.00		1.00	0.00	21,725
Lagoon 2	400	100		8.00		1.00	0.00	36,064
Lagoon 1	200	150		8.00		1.00	0.00	27,264
Basin 1	1200	700	690	3.0	2.5	-	-	840,000
0	0	0	0	0.0	0.0	-	-	0
Total Lagoon Area #3								**946,778**

WINTER MONTH EVAPORATION RATE

Winter (5) Months Evaporation Rate for **Prado Dam** 150 =Storage Days

This data is provided by the State of California,

		107	*mm*	***November***
		86	*mm*	***December***
		87	*mm*	***January***
		89	*mm*	***February***
add	+	**120**	*mm*	***March***
		489	*mm*	Total winter months evap. rate in millimeters
multiply	x	0.03937		convert to inches
		19.25	*in.*	Total winter months evap. rate in inches
divide	/	12.00		*inches in a foot*
		1.60	*ft.*	Total winter months evaporation rate in feet

TOTAL WINTER MONTHS EVAPOARTION			
		Gallons	5,680,843
Area of coverage:	50%	Cu Ft.	759,471
		Acre-Ft.	17.44

NET REQUIRED STORM WATER STORAGE VOLUME		
	Gallons	6,251,713
	Cu Ft.	835,791
	Acre-Ft.	19.19

WASHWATER AND STORM WATER TOTAL VOLUME				
(Wash Water and Storm Water)	% Wash Water :	100%	Gallons	11,755,213
			Cu Ft.	1,571,553

MANURE CONSIDERATION

(daily animal waste produced per 1000 lb Animal Unit equals 1.37 cubic feet)

Daily Production Capacity per Unit	1.37	(Cubic ft)	
Total Units	1,554.87	(Percentage)	48.67%
Total Volume:	2,130.17	(Cubic ft Per Day)	
Percent of daily manure produced contained in liquid (per day)	10.00%		213.02
Storage Period (days)			150
	TOTAL MANURE VOLUME	Cu Ft.	31,953
		Acre-Ft.	0.73

Total Required Containment Facility Volume		
	Gallons	11,994,218
	Cu Ft.	1,603,505
	Acre-Ft.	36.81

TOTAL AVAILABLE VOLUME (Cu.ft.)

Storage	Length	Width		Depth		Slope	Freeboard	Sq. Ft.	Cu. Ft.
C.Basin 1	400	180		10.00		1.00	0.00	72,000	663,000
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0	0	0	0	-	-	0	0
0	0	0	0	0	0	-	-	0	0
C.Basin 2	400	230		8.00		1.00	0.00	92,000	696,192
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0		0.00		0.00	0.00	0	0
0	0	0	0	0	0	-	-	0	0
0	0	0	0	0	0	-	-	0	0
C.Basin 3	400	60		5.00		1.00	0.00	24,000	108,625
C.Basin 4	400	60		5.00		1.00	0.00	24,000	108,625
Lagoon 2	400	100		8.00		1.00	0.00	40,000	288,512
Lagoon 1	200	150		8.00		1.00	0.00	30,000	218,112
Basin 1	1200	700	690	3.0	2.5	-	-	840,000	795,000
0	0	0	0	0.0	0.0	-	-	0	0
							Total:	1,122,000	2,878,066

WHOLE DAIRY

Current Capacity		**Gallons**	**21,527,934**
		Cu Ft.	**2,878,066**
		Acre-Ft.	**66.07**
Additional Volume Required	-115,820	**Gallons**	**0**
		Cu Ft.	**0**
		Acre-Ft.	**0.00**

VOLUME DRAINING INTO AREA-1

Current Capacity		**Gallons**	**4,959,240**
		Cu Ft.	**663,000**
		Acre-Ft.	**15.22**
Additional Volume Required	1,490,076	**Gallons**	**1,490,076**
		Cu Ft.	**199,208**
		Acre-Ft.	**4.57**

VOLUME DRAINING INTO AREA-2

Current Capacity		**Gallons**	**5,207,516**
		Cu Ft.	**696,192**
		Acre-Ft.	**15.98**
Additional Volume Required	-2,238,937	**Gallons**	**0**
		Cu Ft.	**0**
		Acre-Ft.	**0.00**

VOLUME DRAINING INTO AREA-3

Current Capacity		**Gallons**	**11,361,178**
		Cu Ft.	**1,518,874**
		Acre-Ft.	**34.87**
Additional Volume Required	633,040	**Gallons**	**633,040**
		Cu Ft.	**84,631**
		Acre-Ft.	**1.94**

DEPTH IN STORAGE AREA-1 NEEDED TO HOLD 24 HR, 25 YR STORM

75% Runoff Coeff [3]	Total Required Storm Water Volume [2]	390,201
	Total Area #1	72,000
	Total Depth Needed at Top of Lagoon to Hold 24 HR, 25 Year Storm	**5.50**

[2] Total Required Storm Water Volume during a 24 hour, 25 year storm is calculated based on Total Sq. feet of Dairy Operations multiplied by an alternate Runoff Coeff [3].

DEPTH IN STORAGE AREA-2 NEEDED TO HOLD 24 HR, 25 YR STORM

75% Runoff Coeff [3]	Total Required Storm Water Volume [2]	179,466
	Total Area #2	92,000
	Total Depth Needed at Top of Basin to Hold 24 HR, 25 Year Storm	**2.00**

[2] Total Required Storm Water Volume during a 24 hour, 25 year storm is calculated based on Total Sq. feet of Dairy Operations multiplied by an alternate Runoff Coeff [3].

DEPTH IN STORAGE AREA-3 NEEDED TO HOLD 24 HR, 25 YR STORM

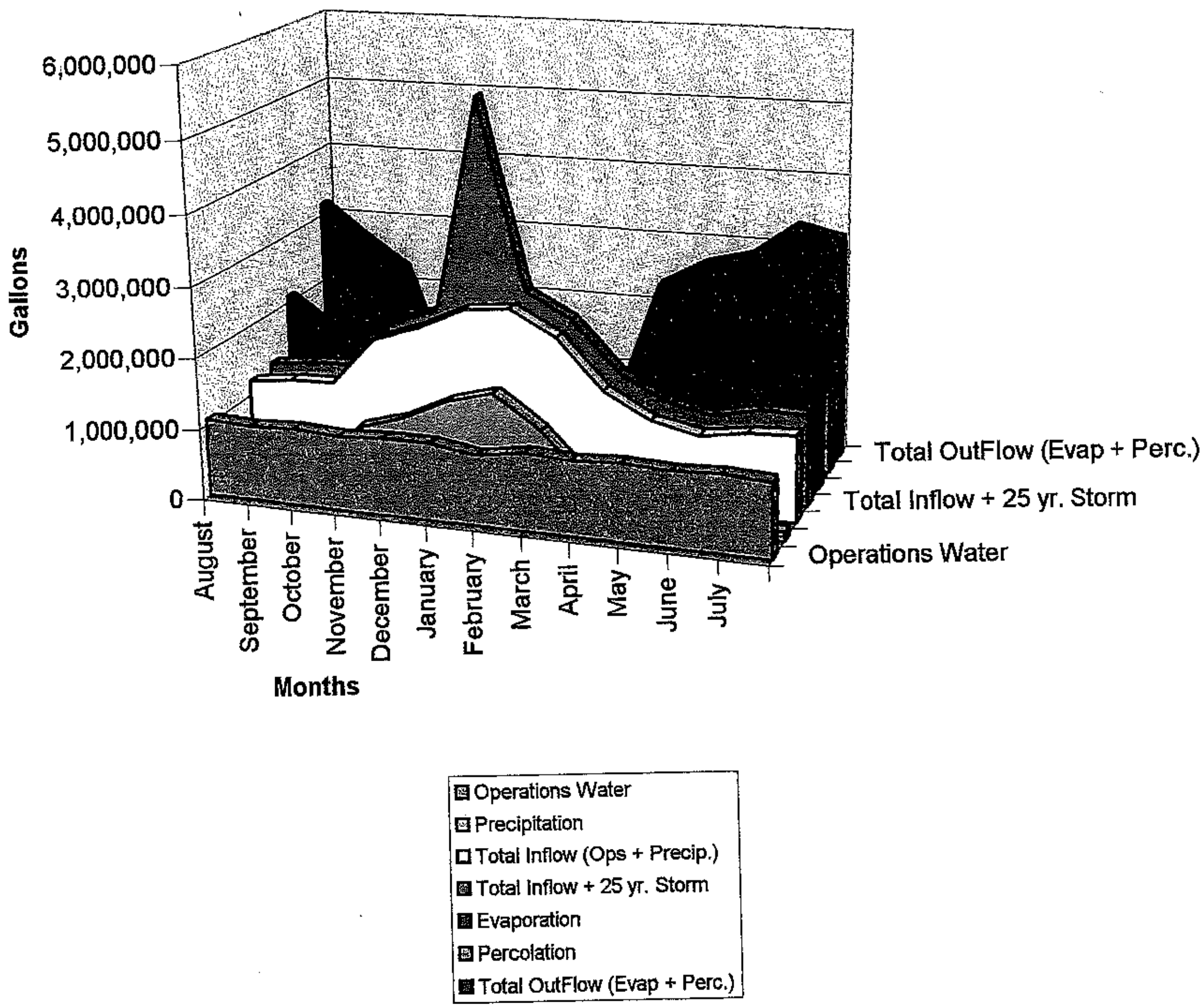
75% Runoff Coeff [3]	Total Required Storm Water Volume [2]	131,315
	Total Area #3	840,000
	Total Depth Needed at Top of Basin to Hold 24 HR, 25 Year Storm	**0.20**

[2] Total Required Storm Water Volume during a 24 hour, 25 year storm is calculated based on Total Sq. feet of Dairy Operations multiplied by an alternate Runoff Coeff [3].

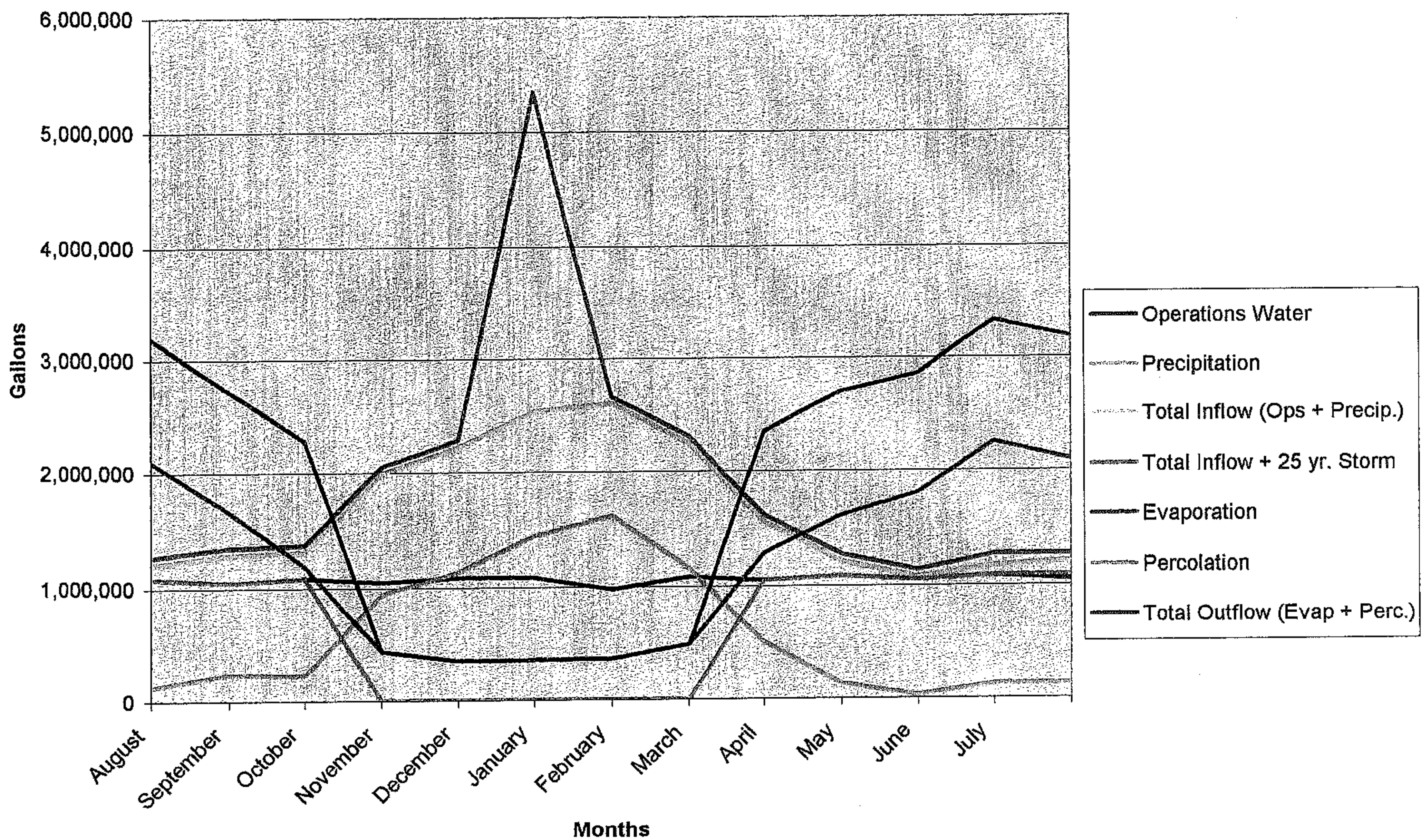
APPENDIX B

INFLOW-OUTFLOW COMPUTATION

Evaporation-vs-Percipitation Comparison Chart



Inflow - Outflow Comparison Chart



EWMP-B & B Dairy.xls

Annual Totals Worksheet (Per Month)

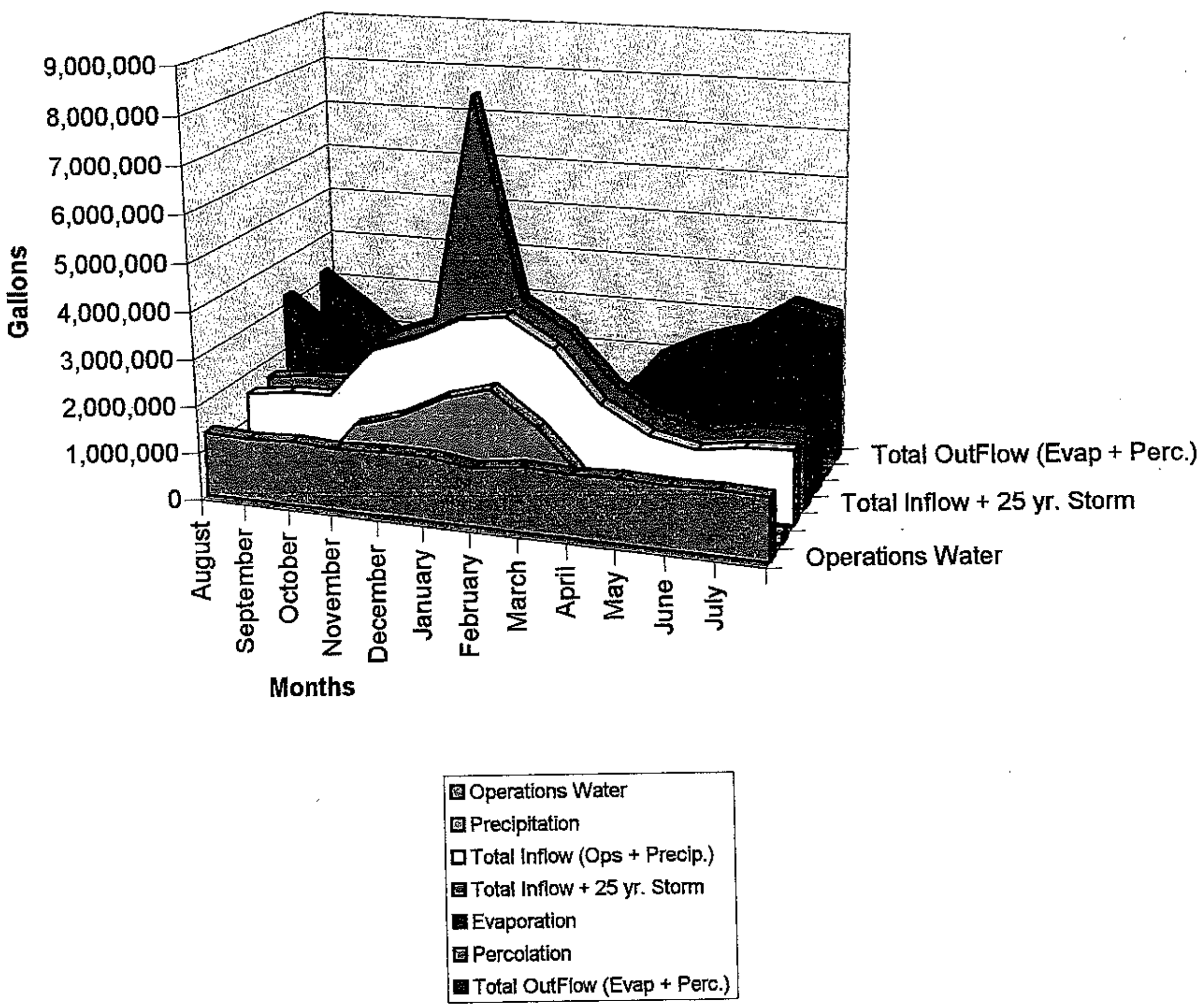
Month	[1] Operations Water	[2]	[3] Precipitation	[4]	[5] Drainage Per Month	[6] [4] x [5]	[7] [5] x 7.48	[8] Total Inflow [2] + [7]	[9] 25 Year Storm	[10]	[11] Drainage Per Month	[12] [10] x [11]	[13] [12] x 7.48	[14] Manure Inflow	[15] Total Inflow [8] + [13] + [14]
	Volume				Area	Volume		Volume			Area	Volume		Volume	Volume
	Gal per day	Gal per Month[A]	Inches	Feet	Square feet	Cubic feet	Gal per Month	Gal per Month	Inches	Feet	Square feet	Cubic feet	Gal per Month	Gallons per Month	Gallons per Month
August	43,990	1,363,690	0.20	0.02	1,551,389	25,856	193,406	1,557,096	0.0	0.00	1,551,389	0	0	75,988	1,630,633
September	43,990	1,319,700	0.39	0.03	1,551,389	50,420	377,143	1,696,843	0.0	0.00	1,551,389	0	0	73,537	1,770,379
October	43,990	1,363,690	0.37	0.03	1,551,389	47,834	357,802	1,721,492	0.0	0.00	1,551,389	0	0	75,988	1,797,480
November	43,990	1,319,700	1.54	0.13	1,551,389	199,095	1,489,230	2,808,930	0.0	0.00	1,551,389	0	0	73,537	2,882,466
December	43,990	1,363,690	1.85	0.15	1,551,389	239,172	1,789,010	3,152,700	0.0	0.00	1,551,389	0	0	75,988	3,228,688
January	43,990	1,363,690	2.35	0.20	1,551,389	303,814	2,272,526	3,636,216	4.5	0.38	1,551,389	581,771	4,351,645	75,988	8,063,848
February	43,990	1,231,720	2.64	0.22	1,551,389	341,305	2,552,965	3,784,685	0.0	0.00	1,551,389	0	0	68,634	3,853,319
March	43,990	1,363,690	1.89	0.16	1,551,389	244,344	1,827,691	3,191,381	0.0	0.00	1,551,389	0	0	75,988	3,267,369
April	43,990	1,319,700	0.83	0.07	1,551,389	107,304	802,637	2,122,337	0.0	0.00	1,551,389	0	0	73,537	2,195,873
May	43,990	1,363,690	0.21	0.02	1,551,389	27,149	203,077	1,566,767	0.0	0.00	1,551,389	0	0	75,988	1,642,755
June	43,990	1,319,700	0.04	0.00	1,551,389	5,171	38,681	1,358,381	0.0	0.00	1,551,389	0	0	73,537	1,431,918
July	43,990	1,363,690	0.03	0.00	1,551,389	25,856	193,406	1,513,106	0.0	0.00	1,551,389	0	0	75,988	1,633,084
													Total		35,028,447 [B]
														Annual Total	107.51 [B] Acre-Ft.
														Winter Months Total	65.36 [F] Acre-Ft.

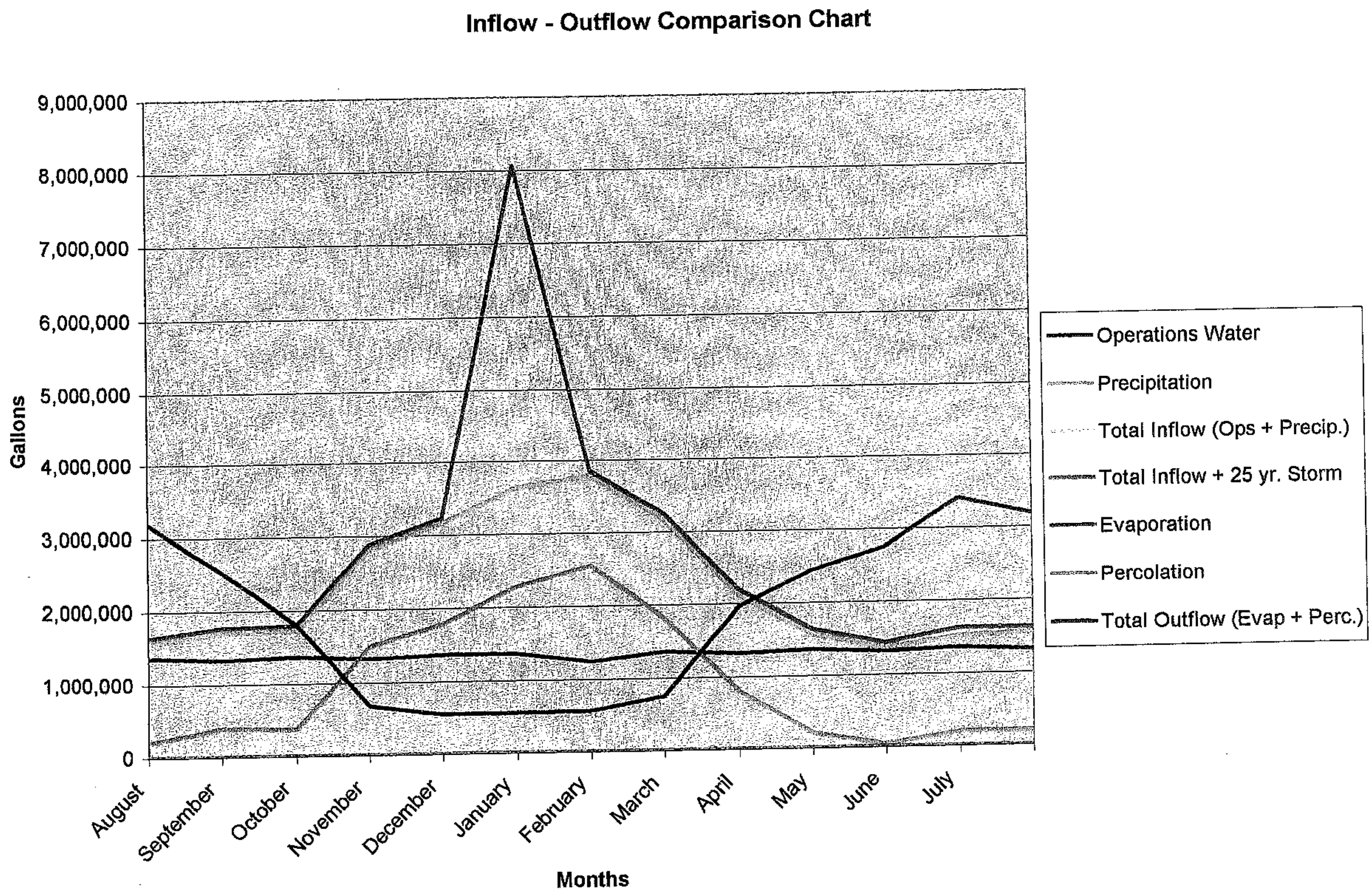
Month	[16] Evaporation (inches)	[17]	[18] Area (sq ft.)	[19]	[20] [18] + [19]	[21] Total Evaporation [17] x [20]	[22] [21] x 7.48	[23] Percolation Application	[24]	[25] Percolation Field Area[C]	[26] [23] x [25]	[27] Total Outflow [21] + [24]	[28] Total Balance [15] - [27]
					Area	Volume		Rate Per Day	Rate Per Month	Rate		Rate	Volume
	Inches [E]	Feet	Field [D]	Lagoon	Square feet	Cubic Feet	Gal per Month	Gallon / $feet^2$ x Day	Gallon / $feet^2$ x Days	Square feet	Gal per Month	Gallons per Month	Gallons per Month
August	10.00	0.83	0	512,067	512,067	426,722	3,191,878	0.7	21.7	0	0	3,191,878	-1,561,245
September	7.91	0.66	0	512,067	512,067	337,681	2,525,856	0.7	21	0	0	2,525,856	-755,477
October	5.67	0.47	0	512,067	512,067	241,921	1,809,569	0.7	21.7	0	0	1,809,569	-12,089
November	2.11	0.18	0	512,067	512,067	89,880	672,305	0	0	0	0	672,305	2,210,161
December	1.69	0.14	0	512,067	512,067	72,240	540,357	0	0	0	0	540,357	2,688,330
January	1.71	0.14	0	512,067	512,067	73,080	546,641	0	0	0	0	546,641	7,517,208
February	1.75	0.15	0	512,067	512,067	74,760	559,207	0	0	0	0	559,207	3,294,112
March	2.36	0.20	0	512,067	512,067	100,800	753,987	0	0	0	0	753,987	2,513,382
April	6.14	0.51	0	512,067	512,067	262,081	1,960,366	0.7	21	0	0	1,960,366	235,508
May	7.68	0.64	0	512,067	512,067	327,601	2,450,457	0.7	21.7	0	0	2,450,457	-807,703
June	8.62	0.72	0	512,067	512,067	367,921	2,752,052	0.7	21	0	0	2,752,052	-1,320,134
July	10.71	0.89	0	512,067	512,067	456,962	3,418,074	0.7	21.7	0	0	3,418,074	-1,787,441
											Total	21,180,749 [B]	12,214,613
											Annual Total	65.01 [B]	Acre-Ft.
											Winter Months Total	9.43 [F]	Acre-Ft.

[A] Calculation includes actual number of days in each month
[B] Annual totals are calculated January through December
[C] Assumes no percolation during winter months (Nov.-Mar.)
[D] Assumes field is bermed for winter disposal. Null values are inserted if field cannot be used for winter disposal.
[E] Evaporation inches reduced 50% during winter months (Nov.-Mar.)
[F] Winter months totals are calculated November through March

TOTAL CAPACITY NEEDED ON DAIRY	18,458,701	Gallons
	2,467,741	Cubic Feet
	56.65	Acre-Ft.
TOTAL AVAILABLE CAPACITY	18,280,365	Gallons
	56.10	Acre-Ft.

Evaporation-vs-Percipitation Comparison Chart





EWMP-Joe Borba #2 Dairy.xls

Annual Totals Worksheet (Per Month)

Month	[1] Operations Water	[2]	[3] Precipitation	[4]	[5] Drainage Per Month	[6] [4] x [5]	[7] [5] x 7.48	[8] Total Inflow [2] + [7]	[9] 25 Year Storm	[10]	[11] Drainage Per Month	[12] [10] x [11]	[13] [12] x 7.48	[14] Manure Inflow	[15] Total Inflow [8] + [13] + [14]
	Volume				Area	Volume		Volume			Area	Volume		Volume	Volume
	Gal per day	Gal per Month[A]	Inches	Feet	Square feet	Cubic feet	Gal per Month	Gal per Month	Inches	Feet	Square feet	Cubic feet	Gal per Month	Gallons per Month	Gallons per Month
August	36,690	1,137,390	0.20	0.02	2,391,571	39,860	298,149	1,435,539	0.0	0.00	2,391,571	0	0	101,497	1,533,762
September	36,690	1,100,700	0.39	0.03	2,391,571	77,726	581,391	1,682,091	0.0	0.00	2,391,571	0	0	98,223	1,780,314
October	36,690	1,137,390	0.37	0.03	2,391,571	73,740	551,576	1,688,966	0.0	0.00	2,391,571	0	0	101,497	1,790,463
November	36,690	1,100,700	1.54	0.13	2,391,571	306,918	2,295,748	3,396,448	0.0	0.00	2,391,571	0	0	98,223	3,494,671
December	36,690	1,137,390	1.85	0.15	2,391,571	368,700	2,757,879	3,895,269	0.0	0.00	2,391,571	0	0	101,497	3,996,767
January	36,690	1,137,390	2.35	0.20	2,391,571	468,349	3,503,252	4,640,642	4.5	0.38	2,391,571	896,839	6,708,355	101,497	11,450,495
February	36,690	1,027,320	2.64	0.22	2,391,571	526,146	3,935,568	4,962,888	0.0	0.00	2,391,571	0	0	91,675	5,054,563
March	36,690	1,137,390	1.89	0.16	2,391,571	376,672	2,817,509	3,954,899	0.0	0.00	2,391,571	0	0	101,497	4,056,397
April	36,690	1,100,700	0.83	0.07	2,391,571	165,417	1,237,319	2,338,019	0.0	0.00	2,391,571	0	0	98,223	2,436,242
May	36,690	1,137,390	0.21	0.02	2,391,571	41,852	313,057	1,450,447	0.0	0.00	2,391,571	0	0	101,497	1,551,944
June	36,690	1,100,700	0.04	0.00	2,391,571	7,972	59,630	1,160,330	0.0	0.00	2,391,571	0	0	98,223	1,258,553
July	36,690	1,137,390	0.03	0.00	2,391,571	39,860	298,149	1,398,849	0.0	0.00	2,391,571	0	0	101,497	1,537,036
													Total		41,474,971 [B]
														Annual Total	127.29 [B] Acre-Ft.
														Winter Months Total	86.10 [F] Acre-Ft.

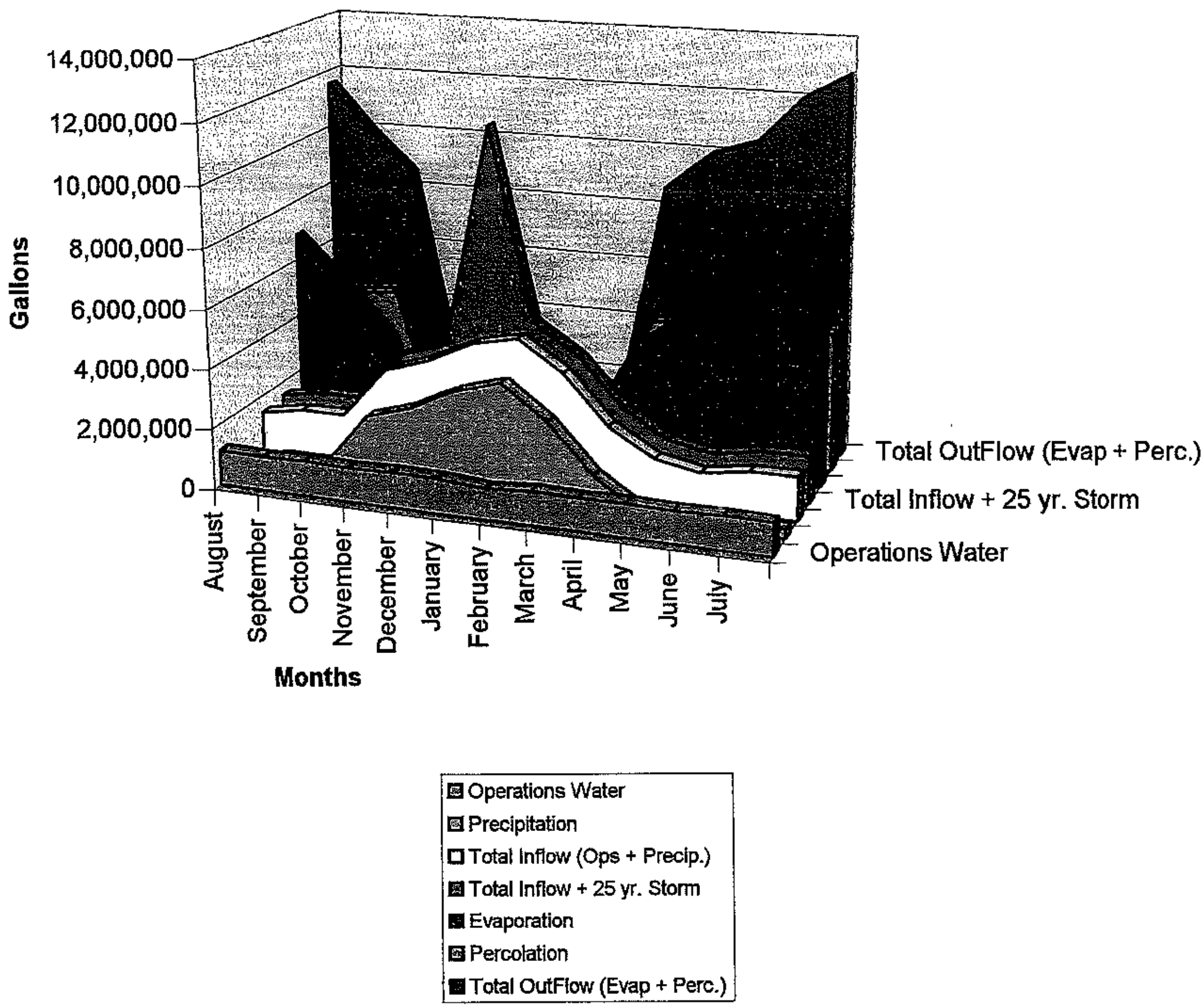
Month	[16] Evaporation (inches)	[17]	[18] Area (sq ft.)	[19]	[20] Total Evaporation [18] + [19]	[21] [17] x [20]	[22] [21] x 7.48	[23] Percolation Application	[24]	[25] Percolation Field Area[C]	[26] [23] x [25]	[27] Total Outflow [21] + [24]	[28] Total Balance [15] - [27]
					Area	Volume		Rate Per Day	Rate Per Month	Rate		Rate	Volume
	Inches [E]	Feet	Field [D]	Lagoon	Square feet	Cubic Feet	Gal per Month	Gallon / feet^2 x Day	Gallon / feet^2 x Days	Square feet	Gal per Month	Gallons per Month	Gallons per Month
August	10.00	0.83	215,000	885,102	1,100,102	916,750	6,857,289	0.7	21.7	215,000	4,665,500	11,522,789	-9,989,026
September	7.91	0.66	215,000	885,102	1,100,102	725,460	5,426,437	0.7	21	215,000	4,515,000	9,941,437	-8,161,123
October	5.67	0.47	215,000	885,102	1,100,102	519,732	3,887,597	0.7	21.7	215,000	4,665,500	8,553,097	-6,762,634
November	2.11	0.18	215,000	885,102	1,100,102	193,095	1,444,350	0	0	215,000	0	1,444,350	2,050,321
December	1.69	0.14	215,000	885,102	1,100,102	155,198	1,160,880	0	0	215,000	0	1,160,880	2,835,887
January	1.71	0.14	215,000	885,102	1,100,102	157,002	1,174,378	0	0	215,000	0	1,174,378	10,276,117
February	1.75	0.15	215,000	885,102	1,100,102	160,612	1,201,375	0	0	215,000	0	1,201,375	3,853,188
March	2.36	0.20	215,000	885,102	1,100,102	216,555	1,619,832	0	0	215,000	0	1,619,832	2,436,565
April	6.14	0.51	215,000	885,102	1,100,102	563,043	4,211,563	0.7	21	215,000	4,515,000	8,726,563	-6,290,321
May	7.68	0.64	215,000	885,102	1,100,102	703,804	5,264,454	0.7	21.7	215,000	4,665,500	9,929,954	-8,378,010
June	8.62	0.72	215,000	885,102	1,100,102	790,426	5,912,387	0.7	21	215,000	4,515,000	10,427,387	-9,168,834
July	10.71	0.89	215,000	885,102	1,100,102	981,716	7,343,238	0.7	21.7	215,000	4,665,500	12,008,738	-10,474,976
											Total	77,710,780 [B]	-37,772,846
											Annual Total	238.50 [B] Acre-Ft.	
											Winter Months Total	20.26 [F] Acre-Ft.	

[A] Calculation includes actual number of days in each month
[B] Annual totals are calculated January through December
[C] Assumes no percolation during winter months (Nov.-Mar.)
[D] Assumes field is bermed for winter disposal. Null values are inserted if field cannot be used for winter disposal.
[E] Evaporation inches reduced 50% during winter months (Nov.-Mar.)
[F] Winter months totals are calculated November through March

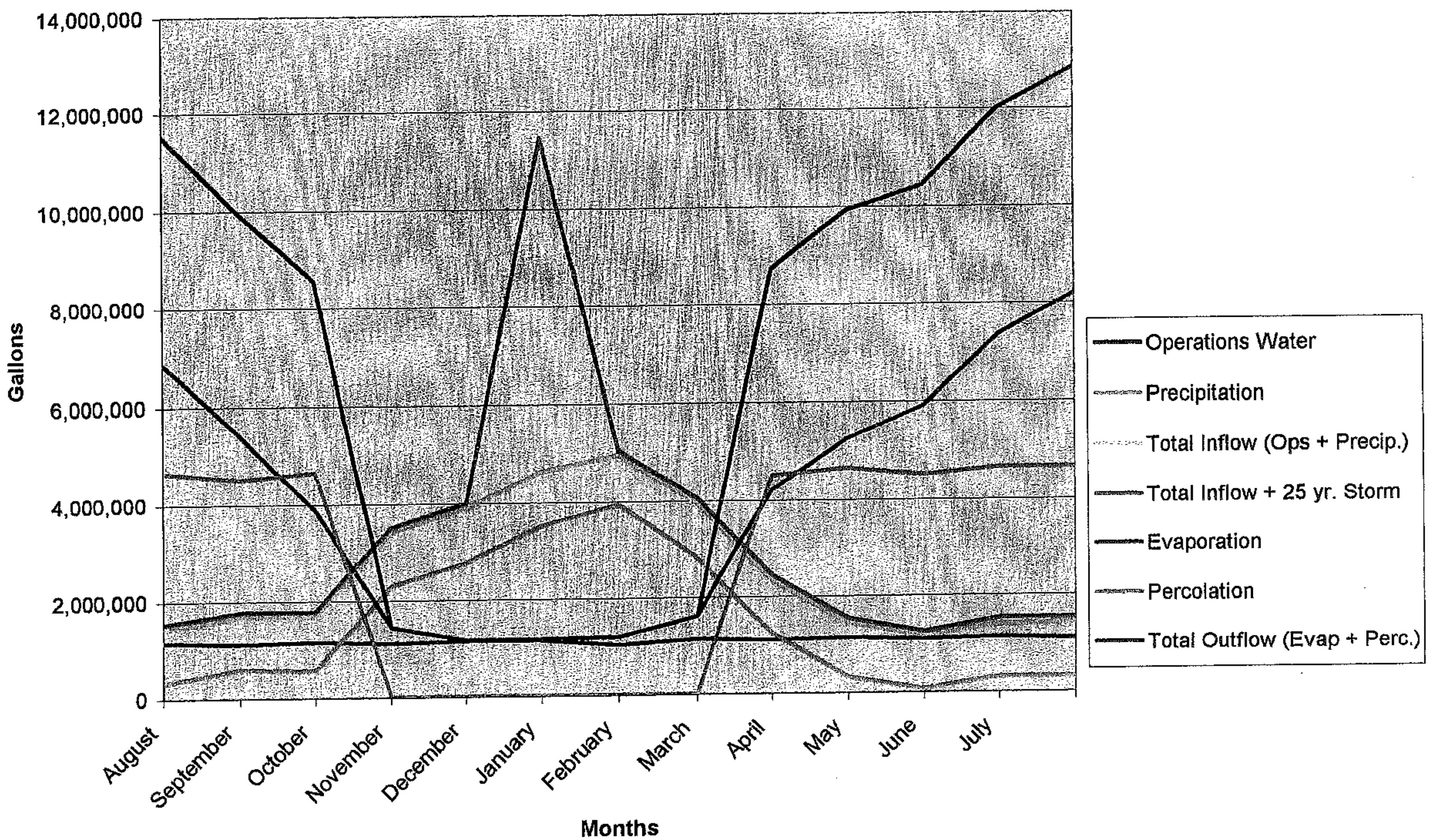
TOTAL CAPACITY NEEDED ON DAIRY	**21,452,078**	**Gallons**
	2,867,925	**Cubic Feet**
	65.84	**Acre-Ft.**

TOTAL AVAILABLE CAPACITY	**21,527,934**	**Gallons**
	66.07	**Acre-Ft.**

Evaporation-vs-Percipitation Comparison Chart



Inflow - Outflow Comparison Chart



APPENDIX C

MILKHOUSE AND WASH PEN
VOLUME ESTIMATION DATA

APPENDIX C

MILKHOUSE AND WASH PEN
VOLUME ESTIMATION DATA

TABLES

Table 1. Waste produced daily by a 1,000 pound dairy cow and where it is deposited (2).

Area	Percent	Cubic Feet
Housing area	40	.548
Feeding area	45	.617
Holding pen	10	.137
Milk parlor	5	.068
Total cubic feet/1,000 lb cow		1.370

Table 2. Volume of milkhouse and parlor water (2, and D. Johnson, NRCS, pers. comm.).

Washing operation	Water Volume
Bulk Tank	
Automatic, 3 cycle wash	60 to 110 gal/wash
Manual wash	30 to 50 gal/wash
Pipeline	
In parlor (volume is higher for long flat barns)	75 to 150 gal/wash
Milkhouse and parlor floors	300 to 700 gal/wash
Pail milkers	30 to 40 gal/wash
Miscellaneous equipment	30 gal/day
Cow preparation wash	
Automatic	1 to 4.5 gal/wash/cow
Manual	.25 to .5 gal/wash/cow
Holding pen (sprinklers)	5 gal/min/head (dependent upon nozzle size & pressure)

APPENDIX D

RAINFALL DATA

CORONA , CALIFORNIA (042031)

1961-1990 Monthly Climate Summary

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	67.40	69.40	71.10	75.20	79.40	85.10	91.80	92.10	88.70	82.30	70.80	67.40	78.60
Average Max. Temperature (F)	40.60	41.70	43.00	45.70	50.40	54.60	58.50	59.90	56.90	50.90	42.90	39.80	48.90
Average Total Precipitation (in.)	2.35	2.64	1.89	0.83	0.21	0.04	0.03	0.20	0.39	0.37	1.54	1.85	12.32

Unofficial values based on averages/sums of smoothed daily data. Information is computed from available daily data during the 1961-1990 period. Smoothing, missing data and observation-time changes may cause these 1961-1990 values to differ from official NCDC values. This table is presented for use at locations that don't have official NCDC data. No adjustments are made for missing data or time of observation. Check **NCDC normals** table for official data.

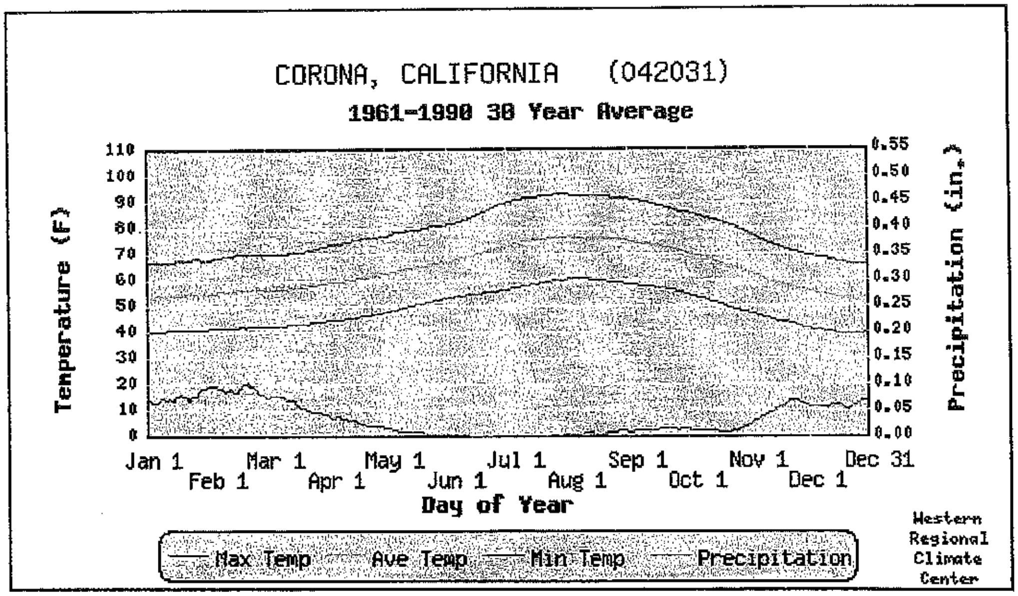
Western Regional Climate Center, wrcc@dri.edu

Total Rainfall Winter Months:

November		December		January		Febuary		March		Total	
1.54	+	*1.85*	+	*2.35*	+	*2.64*	+	*1.89*	=	*10.27*	inches

CORONA, CALIFORNIA

1961 - 1990 Temperature and Precipitation



Data is smoothed using a 29 day running average.

- Max. Temp. is the average of all daily maximum temperatures recorded for the day of the year between the years 1961 and 1990.
- Ave. Temp. is the average of all daily average temperatures recorded for the day of the year between the years 1961 and 1990.
- Min. Temp. is the average of all daily minimum temperatures recorded for the day of the year between the years 1961 and 1990.
- Precipitation is the average of all daily total precipitation recorded for the day of the year between the years 1961 and 1990.

UNIT OF MEASURE = MILLIMETRES

STATION NUM.	STATION NAME	ELEV	T R S L B	LATITUDE	LONGITUDE	CO.	AGENCY	ENV. CD.
Y01 705010	POMONA (NEAR)-AGR EXPT ST	857	01S 09W 27 S	34 03	117 49	LAX	907	

PAN	YEAR	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
G	1903											230	238	160
	1904	1729	168	108	64	71	65	94	127	165	208	237	238	184
	1905	1597	136	103	75	49	42	95	104	152	196	227	229	189
	1906		134	103	75									
G	MEAN	1652	146	105	71	60	54	95	116	159	202	231	235	178

STATION NUM.	STATION NAME	ELEV	T R S L B	LATITUDE	LONGITUDE	CO.	AGENCY	ENV. CD.
Y01 705011	POMONA SPRR	876	01S 08W 29 S	34 03 17	117 45 02	LAX	410	

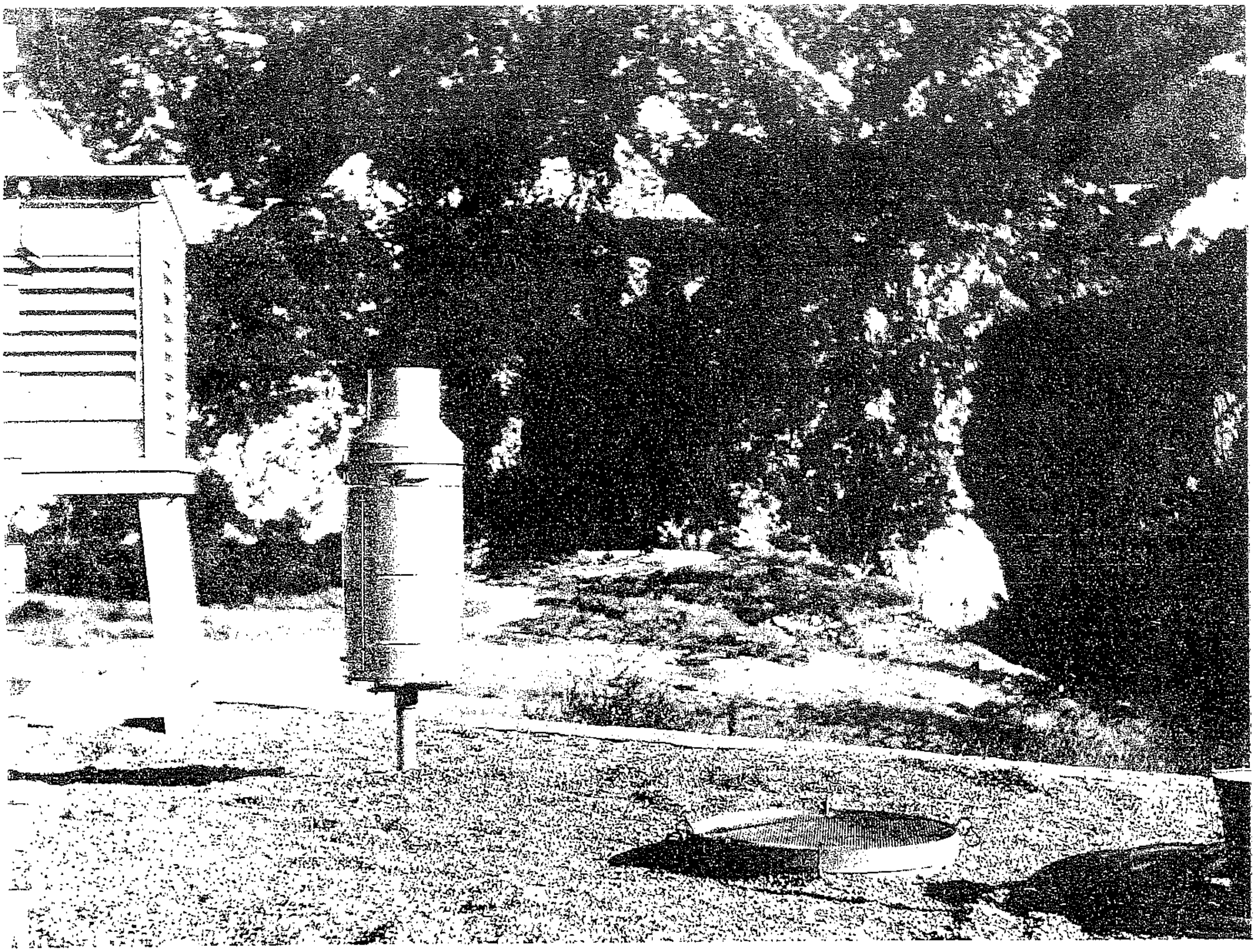
PAN	YEAR	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
A	1933											306	272	183
	1934		157	170	73	118	84	178	200	259		314	282	251
A	MEAN	2043	157	170	73	118	84	178	200	259		310	277	217

STATION NUM.	STATION NAME	ELEV	T R S L B	LATITUDE	LONGITUDE	CO.	AGENCY	ENV. CD.
Y01 712301	PRADO DAM	565	03S 07W 20 P S	33 53 30	117 38 03	RIV	415	

PAN	YEAR	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
A	1930											279	250	
	1931			128	97	102	62	146	154	197	232	293	250	194
	1932	1914	137	90	64	107	94	131	153	208	232	253	266	179
	1933	1942	152	137	70	80	112	134	138	191	229	270	241	188
	1934	1846	130	113	57	100	69	124	161	232	182	257	225	196
	1935	1630	119	65	52	52	69	90	118	170	216	266	227	186
	1936	1916	139	86	85	82	78	115	132	197	258	285	256	203
	1937	1737	130	105	69	41	58	93	148	171	231	256	230	205
	1938		139	70	77						45	255	235	197
	1939	1789	137	151	90	68	87	91	138	179	217	241	221	169
	1940	1533	135	70	57	41	70	114	105	174	185	215	204	163
	1941	1771	114	99	54	66	61	114	135	225	225	281	221	176
	1942	2245	148	136	72	117	109	177	131	269	243	315	308	220
	1943	2297	178	148	104	146	130	110	148	242	262	307	288	234
	1944	2105	166	166	107	114	81	182	178	211	236	272	229	163
	1945	2034	148	91	88	49	87	133	192	219	218	296	278	235
	1946	2073	116	117	81	113	125	80	200	168	275	319	301	178
	1947	2081	154	94	60	100	77	129	195	204	245	312	284	227
	1948	2167	146	120	98	144	106	114	179	210	223	288	290	249
	1949	2095	141	188	93	93	65	90	178	191	258	280	288	230
	1950	2017	167	136	83	68	51	139	164	197	248	302	272	190
	1951	2139	188	138	69	93	86	191	151	179	228	311	283	222
	1952	2080	201	118	81	67	115	123	136	230	229	294	275	211
	1953	2081	135	88	76	106	134	155	154	233	241	304	253	202
	1954	1878	140	84	167	67	122	97	130	186	203	262	220	200
	1955	1924	149	104	92	63	94	137	186	165	198	255	260	221
	1956	1829	116	88	42	55	89	142	179	181	227	260	226	224
	1957	2057	155	158	128	66	65	78	148	190	255	306	292	216
	1958	1950	119	92	94	103	64	49	182	202	275	276	253	241
	1959	2089	160	123	118	78	68	168	172	195	238	304	268	197
	1960	2270	169	181	120	53	100	125	185	218	242	325	288	264
	1961	2273	169	63	124	147	133	146	196	225	254	311	300	205
	1962	1589	138	95	98	118	33	73	134	145	172	220	221	142
	1963	1558	91	69	67	81	79	97	102	162	190	235	220	165
	1964	1672	102	82	99	111	141	112	146	166	181	185	192	155
	1965	1614	123	108	83	71	106	72	157	159	190	171	222	152
	1966	1811	144	46	60	76	85	124	163	173	215	267	249	209
	1967	2045	196	73	136	107	121	130	125	209	201	271	274	202
	1968	1850	177	68	101	88	65	118	166	191	202	203	248	223
	1969		117	89	51	75				138	156			
A	MEAN	1930	144	107	86	87	89	120	156	195	219	272	254	201

STATION NUM.	STATION NAME	ELEV	T R S L B	LATITUDE	LONGITUDE	CO.	AGENCY	ENV. CD.
Y01 747300	RIVERSIDE CITRUS EXP	1015	02S 04W 30 K S	33 58 00	117 20 05	RIV	900	D

PAN	YEAR	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
A	1925					90	67	127	134	166	213	269	242	182
	1926	1773	88	128	75	112	97	123	116	200	189	230	237	178
	1927	1609	150	65	48	30	24	105	102	193	193	253	262	184
	1928	1756	143	96	50	65	114	99	171	146	193	242	240	197
	1929	1656	119	82	72	61	60	105	117	175	219	256	253	137
	1930	1665	140	139	91	45	56	99	138	148	195	241	216	157
	1931	1806	126	106	75	72	124	145	149	178	191	248	237	155
	1932		109	68	46			133	149	155	155	227	220	147
	1933	1546	100	101	54	60	91	122	97	160	191	227	202	141
	1934	1763	115	129	45	99	64	120	188	215	170	232	217	169
	1935	1508	110	67	55	51	64	85	118	164	203	225	203	163
	1936	1603	120	75	61	60	65	106	137	188	208	210	207	166
	1937	1499	112	85	41	35	52	100	152	145	195	195	209	178
	1938	1584	127	59	67	76	62	92	139	176	182	219	209	176
	1939	1630	115	99	65	59	81	94	144	173	212	228	214	146
	1940	1765	149	71	69	68	101	120	166	198	189	241	216	177
	1941	1529	153	108	52	39	44	96	156	165	181	236	164	135
	1942	1671	134	75	82	64	77	129	114	193	183	251	215	154
	1943	1591	113	81	59	74	76	82	117	187	198	217	212	175
	1944	1548	111	94	51	56	62	134	132	158	168	203	226	153
	1945	1503	106	64	55	55	67	94	144	171	165	218	196	168
	1946	1575	107	81	47	91	71	105	137	135	211	205	215	170



save water
DWR

Evaporation from Water Surfaces in California

Bulletin 73-79
November 1979

APPENDIX E

EVAPORATION DATA

APPENDIX F

PERCOLATION DATA

SOILS SURVEY

Percolation Data:

Soil Series [1]	Type [1]	USDA Texture [1]	Depth from Surface	Soils Table [1]	Soils Survey Map [1]
Delhi	Db	Fine sand	0-18	See Table #4, Sheet 40	See Sheet #12
		Sand	18-60		
Hilmar	Hr	Loamy fine sand and loamy sand	0-16	See Table #4, Sheet 40	See Sheet #12
		Stratified loam	16-60		

Table 13-9 [2]

Recommended rates of wastewater application for Trench and Bed Bottom Areas [a]

Soil Texture	Percolation rate, min/In	Application rate, $gal/ft^2 \times d^{b,c}$
Gravel, coarse sand	<1	Not Suitable [d]
Coarse to medium sand	1-5	1.20
Fine sand, loamy sand	5-15	0.80
Sand loam, loam	16-30	0.60
Loam, porous silt loam	31-60	0.45
Silty clay loam, clay loam [a,f]	61-120	0.20
Clays, colloidal clays	>120	Not Suitable [g]

Use Application Rate of 0.8 to Fit Db Classification"

[a] From U.S. EPA (1980).

[b] Rates based on septic tank effluent from a domestic waste source. A factor of safety may be desirable for wastewater's of significantly different strength or character.

[c] May be suitable for sidewall infiltration rates.

[d] Soils with percolation rates less than 1 min/in may be suitable for septic tank effluent if a 2ft layer of loamy sand or other soil is placed above or in place of the native topsoil.

[e] These soils are suitable if they are without significant amounts of expandable clays.

[f] Soil easily damaged during construction.

[g] Alternative pretreatment may be needed and alternative disposal (wetlands or evaporation systems) may be required.

Bibliography:

1 Refer to Pecolation Appendix

2 Crites & Tchobanoglous, "Small and Decentralized Wastewater Management Systems", McGraw-Hill, Boston, 1998

SOIL SURVEY OF

San Bernardino County Southwestern Part, California

United States Department of Agriculture
Soil Conservation Service
in cooperation with
University of California
Agricultural Experiment Station

SHEET NO. 12

SAN BERNARDINO COUNTY, SOUTHWESTERN PART, CALIFORNIA

(CORONA NORTH QUADRANGLE AND PART OF YORBA LINDA QUADRANGLE)

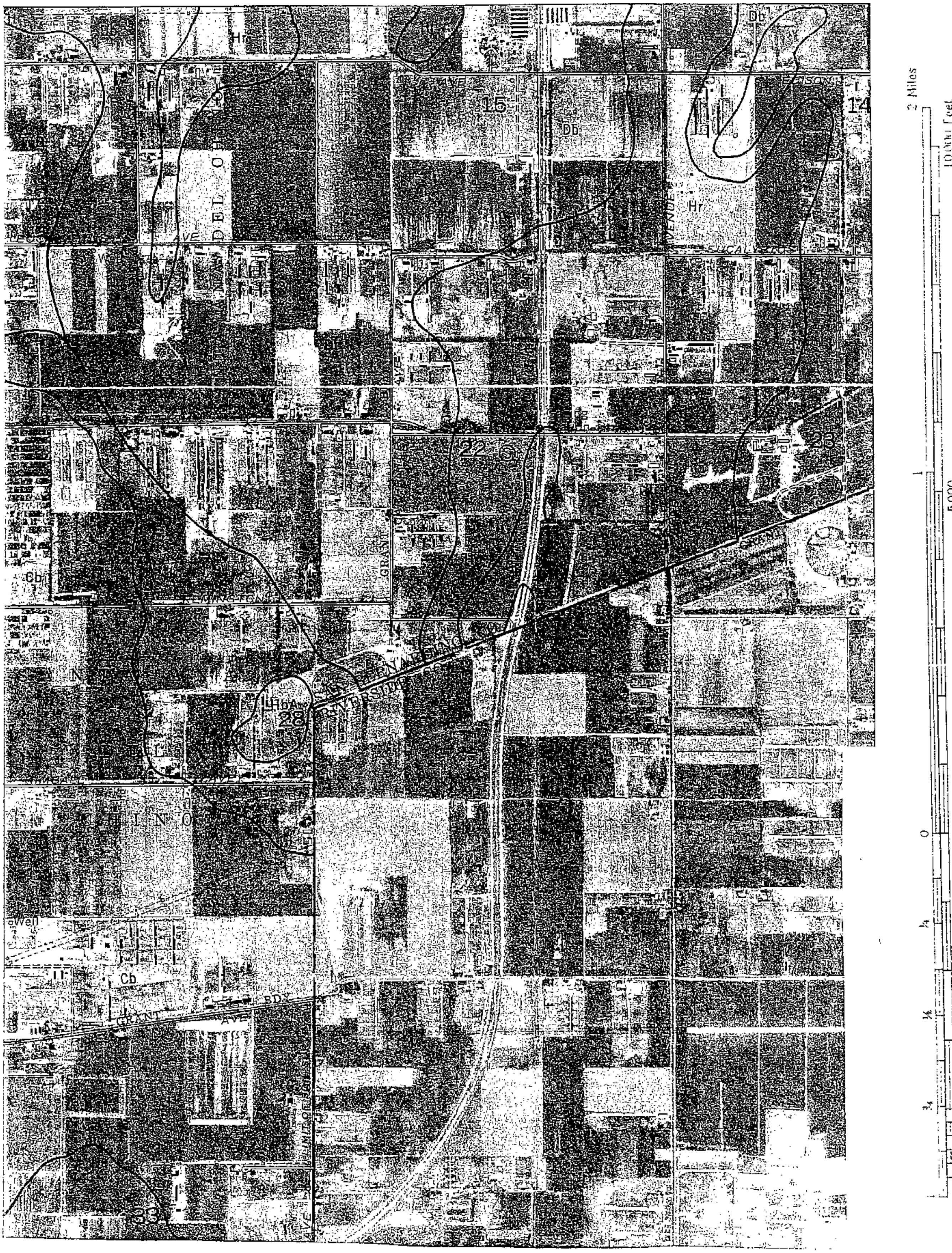


TABLE 4.—*Estimated soil properties*

[Absence of information indicates that a determination was not made or that it would not be applicable. The symbol > means made up of two or more kinds of soil. The soils in such mapping units have different properties and limitations and for this reason

Soil series and map symbols	Depth to bedrock or hardpan	Depth from surface of typical profile	(Typical profile) USDA texture	Classification		Coarse fraction greater than 3 inches	Percentage less than 3 in. passing sieve—	
				Unified	AASHTO		No. 4 (4.7 mm)	No. 10 (2.0 mm)
	Feet	*Inches*						
Alo: AaF	2-3	0-36	Clay	CH, CL	A-7		100	100
		36	Shale and sandstone.					
Chino: Cb	>5	0-16	Silt loam	ML, CL-ML	A-4		100	100
		16-60	Silty clay loam	CL	A-6		100	100
Chualar: CkA, CkC, CkD	>5	0-36	Clay loam	CL	A-6		100	100
		36-60	Loam	CL, CL-ML	A-4		100	100
*Cieneba: CnD, Cp, Cr. For properties of Friant soils in Cp, refer to Friant series.	1-1½	0-14	Sandy loam	SM	A-2	0-10	90-100	90-100
		14	Weathered granitic rock.					
Crafton: Cs2	1½-3	0-26	Sandy loam	SM	A-2	0-15	80-100	75-100
		26	Weathered micaceous schist.					
Delhi: Db	>5	0-18	Fine sand	SM	A-2		100	95-100
		18-60	Sand	SP-SM or SW-SM	A-3		100	90-100
Fontana: FoE, FoF	2-3	0-28	Clay loam, some shale fragments.	CL	A-6	0-10	85-100	70-95
		28	Weathered fractured shale.					
Friant: Fr	1-1½	0-14	Fine sandy loam	SM	A-4		95-100	80-95
		14	Hard mica schist.					
Garretson: GaC	>5	0-7	Very fine sandy loam	ML	A-4		100	100
		7-28	Loam	CL-ML, CL	A-4		100	100
		28-34	Fine sandy loam	SM	A-4		95-100	90-100
		34-42	Gravelly sandy loam	SM	A-2		65-90	65-80
		42-60	Loam	CL-ML, CL	A-4		100	100
Gaviota: Go	1-1½	0-15	Fine sandy loam	SM	A-4	0-5	95-100	80-95
		15	Hard sandstone.					
Grangeville:								
Gr	>5	0-60	Fine sandy loam	SM	A-4		100	100
Gs		0-60	Fine sandy loam	SM	A-4		100	100
Greenfield:								
GtC, GtD	>5	0-16	Sandy loam	SM	A-2		95-100	90-100
		16-50	Fine sandy loam	SM	A-4		95-100	85-100
		50-60	Sandy loam	SM	A-2		95-100	90-100
GuD	>5	0-16	Cobbly sandy loam	SM	A-2	25-40	90-100	85-95
		16-50	Fine sandy loam	SM	A-4		95-100	85-100
		50-60	Sandy loam	SM	A-2		95-100	90-100
Hanford: HaC, HaD, HbA	>5	0-60	Sandy loam	SM	A-2		100	90-100
Hilmar: Hr	>5	0-23	Loamy fine sand and loamy sand.	SM	A-2			95-100
		23-60	Stratified loam.[2]	CL-ML, CL	A-4		100	100
Merrill: Me	2-3½	0-25	Silt loam	CL-ML or ML	A-4		100	95-100
		25-43	Loam that is 25 to 50 percent extremely hard lime nodules.	GM	A-4 or A-2	0-5	40-70	35-65
		43-60	Loam	CL-ML or CL	A-4		100	95-100
Metz: MgC	>5	0-19	Coarse sandy loam	SM	A-2		95-100	90-100
		19-60	Gravelly sand and loamy coarse sand.	SM	A-1		70-80	55-75
Monserate: MoC	2½-3	0-10	Sandy loam	SM	A-2, A-4		100	100
		10-30	Clay loam	CL	A-6		100	100
		30-45	Indurated hardpan					
		45-60	Coarse sandy loam	SM	A-2		95-100	90-100

complex, eroded, about 400 feet south of Wildwood Canyon Road about one-fourth mile west of Oak Glen Road; SE¼SW¼SW¼ sec. 10, T. 3 S., R. 8 W.; San Bernardino base line and meridian.

A11—0 to 2 inches, dark-brown (10YR 4/3) sandy loam, dark brown (10YR 3/3) when moist; weak, fine crumb structure; soft, very friable, nonsticky and nonplastic; many very fine and fine roots; many very fine and fine pores; medium acid; gradual, smooth boundary.

A12—2 to 10 inches, dark-brown (10YR 4/3) sandy loam, dark brown (10YR 3/3) when moist; weak, fine crumb structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine pores; many mica flakes; slightly acid; gradual, smooth boundary.

C1—10 to 26 inches, yellowish-brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 4/4) when moist; massive; slightly hard, very friable, nonsticky and nonplastic; very fine and medium roots; many fine mica flakes; slightly acid; clear, wavy boundary.

C2—26 to 40 inches, pale-brown (10YR 6/3) weathered micaceous schist, brown (10YR 5/3) when moist; few very fine and fine roots, mainly along fracture joints.

The A1 horizon is typically dark brown; it is dark grayish brown or dark yellowish brown in minor areas. This horizon is sandy loam or fine sandy loam that is largely mica. Structure ranges from weak, fine, crumb to weak, fine or medium, granular or subangular blocky. Thickness of the A horizon ranges from 6 to 12 inches.

The C1 horizon is yellowish brown to dark yellowish brown. Its texture is sandy loam or fine sandy loam in most places. It is, by volume, 5 to 15 percent weathered schist fragments. The horizon ranges in thickness from 14 to 28 inches. Reaction is generally slightly acid, but it is neutral in places.

The C2 horizon is pale brown, brown, or yellowish brown. The degree of weathering varies widely in depth and from place to place, but the soil can be dug or cut with handtools in most places. Hard schist generally is at depths below 60 inches. Depth to the C2 horizon ranges from 20 to 36 inches.

Crafton-Rock outcrop complex, eroded (Cs2).—This steep complex is on foothills in uplands. It is about 60 percent Crafton sandy loam, 30 to 50 percent slopes, and 30 percent Rock outcrop. Crafton soils generally occur at random throughout each mapped area but mostly on hillsides. Rock outcrop is along the ridgetops. The surface layer is 8 inches thick in most places. Sheet and rill erosion are moderate.

Included with this complex in mapping are areas of Cieneba sandy loam, 9 to 15 percent slopes, that make up about 10 percent of the total area.

Runoff is rapid, and the hazard of erosion is moderate to high where the soil is left bare because of fire or overgrazing.

The soil in this complex is used mainly for grazing during spring and for watershed. Capability unit VIIe-1 dryland.

Delhi Series

The Delhi series consists of somewhat excessively drained, nearly level to strongly sloping soils that formed on alluvial fans in coarse-textured, wind-reworked granitic material. Slopes are 0 to 15 percent. Elevation is 800 to 1,400 feet. Vegetation is annual grasses and forbs. The average annual precipitation is 12 to 16 inches, the mean annual air temperature is 61° to 65° F, and the frost-free season is 230 to 280 days.

In a representative profile, the soil is pale-brown and light yellowish-brown fine sand and sand to a depth of more than 60 inches. Delhi soils are slightly acid throughout the profile.

These soils are rapidly permeable. Their available water capacity is about 4 to 5 inches. Roots can penetrate to a depth of 60 inches or more.

These soils are used for grapes, alfalfa, pasture plants, and some citrus. They are commonly used as a source of construction materials.

Representative profile of Delhi fine sand about one-half mile south of Highway 60 and about 400 feet west of Millikan Avenue; NE¼SE¼ sec. 1, T. 2 S., R. 7 W.; San Bernardino base line and meridian:

C1—0 to 18 inches, pale-brown (10YR 6/3) fine sand, brown (10YR 5/3) when moist; single grained; loose when dry and moist, nonsticky and nonplastic; common very fine and fine roots; slightly acid; gradual, smooth boundary.

C2—18 to 40 inches, pale-brown (10YR 6/3) sand, brown (10YR 5/3) when moist; single grained; loose when dry and moist, nonsticky and nonplastic; few very fine and fine roots; slightly acid; gradual, wavy boundary.

C3—40 to 60 inches, light yellowish-brown (10YR 6/4) sand, yellowish brown (10YR 5/4) when moist; single grained; loose when dry and moist, nonsticky and nonplastic; slightly acid.

The C1 horizon, or Ap horizon where present, is pale brown, brown, or light brownish gray. Thickness ranges from 12 to 18 inches. Texture is fine sand or loamy fine sand. The soil material is generally single grained, but it has weak, thin or medium, platy structure in places. Reaction is generally slightly acid; it is medium acid or neutral in a few spots.

The C2 and C3 horizons are light yellowish-brown, pale-brown, very pale brown, or brownish-yellow sand, fine sand, or loamy sand. The soil material is generally single grained, but in some places it is massive. Reaction ranges from slightly acid to mildly alkaline. The C3 horizon is slightly calcareous in a few places.

Delhi fine sand (Db).—This nearly level to strongly sloping soil is on alluvial fans that have been reworked by wind action. About 5,700 acres of this soil, along Pepper Street west of Colton, is moderately to strongly sloping and is on fans. In these areas there are wind-deposited hummocks that are about 18 to 36 inches high.

Included with this soil in mapping are small areas of Tujunga loamy sand, 0 to 5 percent slopes. Also included are about 25 acres, one-fourth mile west of Millikan Avenue and 200 feet north of Riverside Drive, where a horizon of loam that is weakly cemented with lime is between depths of 18 and 28 inches.

Runoff is very slow, and the hazard of soil blowing is generally moderate. In unprotected areas, however, the hazard of soil blowing is high.

The Delhi soil is used mainly for grapes, pasture plants, alfalfa, and some citrus. It is also used as a source for sand and road fill. Capability unit IIIe-4 irrigated.

Hilmar Series

The Hilmar series consists of somewhat poorly drained, nearly level soils on alluvial valley floors and fans. These soils formed in wind-laid coarse-textured material underlain by medium-textured granitic alluvium. Slopes are 0 to 2 percent. Elevation is 600 to 900 feet. Vegetation is annual grasses and forbs. The average annual precipitation is 12 to 16 inches, the mean annual air temperature is 62° to 65° F, and the frost-free season is 230 to 280 days.

In a representative profile, the surface layer is grayish-brown loamy fine sand about 13 inches thick. The underlying material, to a depth of 23 inches, is light yellowish-brown and grayish-brown loamy sand. Below this, to a depth of 60 inches, it is light brownish-gray mottled loam stratified with thin lenses of sandy loam and loamy sand. Hilmar soils are moderately alkaline throughout the profile and are slightly calcareous in the upper 23 inches and strongly calcareous below.

In these soils the surface layer and the upper part of the underlying material that formed in coarse-textured material are rapidly permeable. The lower part of the underlying material that formed in medium-textured material is slowly permeable. Available water capacity is about 7 to 9 inches. Roots penetrate to a depth of 60 inches or more. Originally the soils were somewhat poorly drained, but the drainage has been altered by lowering the ground water table through pumping.

These soils are used mainly for such irrigated crops as grapes, alfalfa, pasture plants, and small grains.

Representative profile of Hilmar loamy fine sand, about 100 feet south of Edison Road and about 200 feet west of Cucamonga Creek, SE¼NW¼NW¼ sec. 22, T. 2 S., R. 7 W; San Bernardino base line and meridian:

Ap—0 to 13 inches, grayish-brown (2.5Y 5/2) loamy fine sand, very dark grayish brown (2.5Y 3/2) when moist; single grained; loose when dry and moist, nonsticky and nonplastic; many very fine and fine roots; slightly effervescent; moderately alkaline; gradual, smooth boundary.

C1—13 to 16 inches, light yellowish-brown (2.5Y 6/4) loamy sand, light olive brown (2.5Y 5/4) when moist; few, fine, distinct, brownish-yellow (10YR 6/6) mottles, yellowish brown (10YR 5/6) when moist; single grained; loose when dry and moist, nonsticky and nonplastic; common very fine and fine roots; slightly effervescent; moderately alkaline; gradual, smooth boundary.

C2—16 to 23 inches, grayish-brown (2.5Y 5/2) loamy sand, light brownish gray (2.5Y 6/2) when moist; single grained; loose when dry and moist, nonsticky and nonplastic; common very fine and fine roots; slightly effervescent; moderately alkaline; abrupt, smooth boundary.

IIC3—23 to 60 inches, light brownish-gray (2.5Y 6/2) loam stratified with thin lenses of sandy loam and loamy sand, grayish brown (2.5Y 5/2) when moist; common, medium, distinct, brownish-yellow (10YR 6/6) mottles, yellowish brown (10YR 5/6) when moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine and fine roots; strongly effervescent; moderately alkaline.

The A horizon is grayish brown, dark grayish brown, or brown loamy fine sand or loamy sand. The soil material is dominantly single grained but has weak, very fine to fine, subangular blocky structure in small areas, and in some places it is massive. The soil material is slightly effervescent but is strongly effervescent in a few spots. The A horizon ranges from 8 to 14 inches in thickness but is 13 inches thick in most places.

The C horizon is generally light yellowish brown to grayish brown, but in a few places it is light brownish gray. Yellowish-brown, brownish-yellow, or dark yellowish-brown mottles are common. They range from few to common in abundance, fine to medium in size, and faint to distinct in contrast. The C horizon is loamy sand or loamy fine sand. The soil material is typically single grained, but in some places it is massive. Lime content varies from slight to strong. Thickness is about 10 inches but ranges from 8 to 12 inches.

The IIC horizon is light brownish gray, grayish brown, or light gray. Brownish-yellow or yellowish-brown mottles range from common to many in abundance, fine to medium in size, and distinct to prominent in contrast. The IIC horizon is generally loam that has thin lenses of sandy loam, coarse sandy loam, or loamy sand, but in a few places, it is clay loam or silt loam stratified with thin lenses of coarse-textured material. The IIC horizon is typically massive, but in some places it has weak, moderate, subangular blocky structure. Reaction ranges from mildly alkaline to strongly alkaline.

Hilmar loamy fine sand (Hr). —This nearly level soil is on valley floors and alluvial fans. Included with it in mapping are areas of Delhi fine sand that make up about 10 percent of each area. Also included are patches of Tujunga loamy sand, 0 to 5 percent slopes, and small areas where slopes are 2 or 3 percent.

Runoff is slow, and the hazard of water erosion is slight. If the soils are left without a protective cover of vegetation, the hazard of soil blowing is high.

The Hilmar soil is used chiefly for irrigated alfalfa, grapes, small grains, and pasture plants. Capability unit IIe-4 irrigated.

Merrill Series

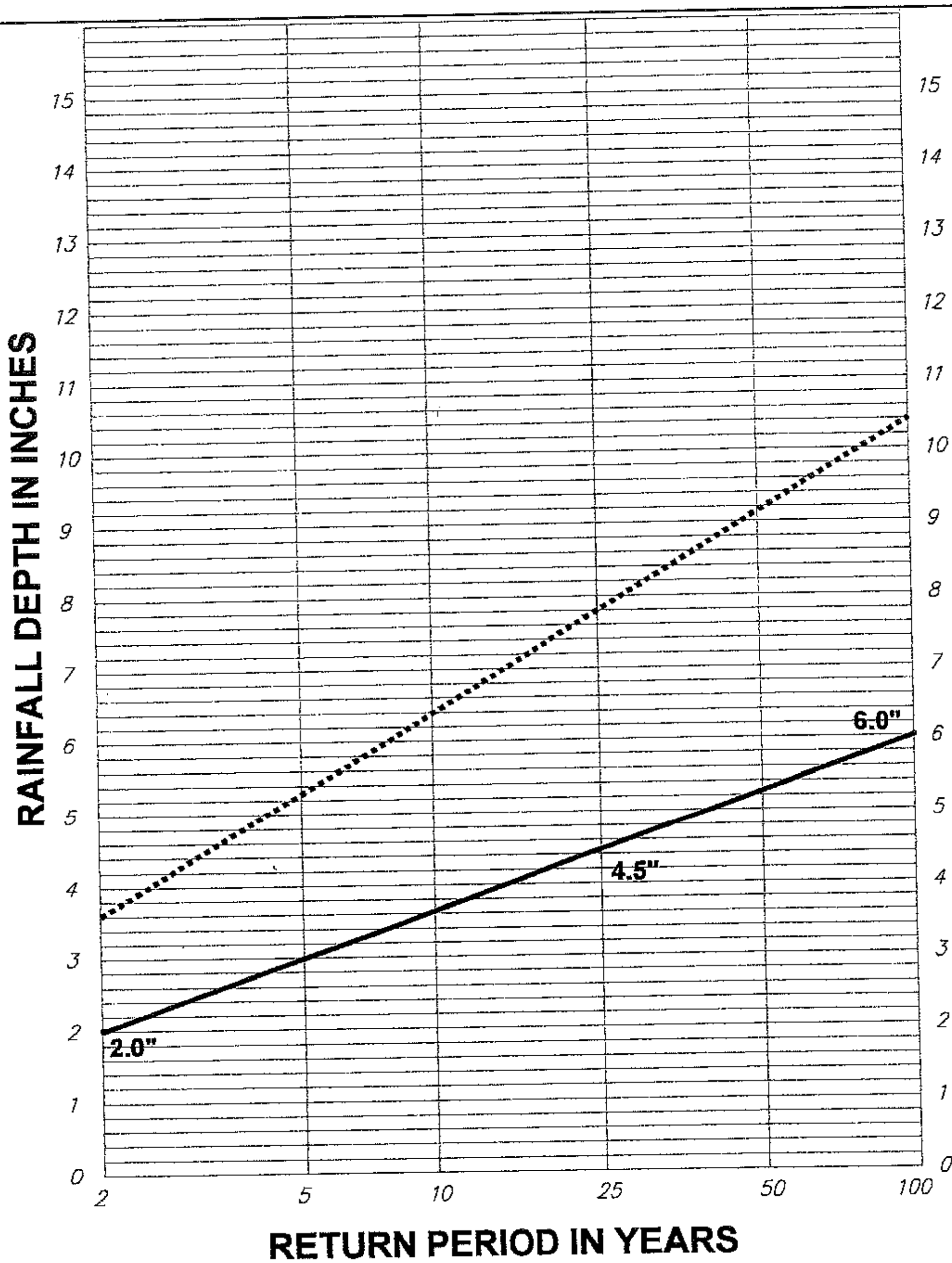
The Merrill series consists of somewhat poorly drained, nearly level soils that formed on alluvial fans in medium-textured granitic alluvium. Slopes are 0 to 2 percent, elevation is 500 to 700 feet. Vegetation is mainly annual grasses and forbs, but perennial grasses grow in some areas. The average annual precipitation is 12 to 16 inches, the mean annual air temperature is 62° to 65° F, and the frost-free season is 230 to 280 days.

In a representative profile, the surface layer is gray silt loam about 25 inches thick. The underlying material, to a depth of 43 inches, is light-gray loam that is weakly cemented and contains many extremely hard silica-lime cemented nodules. Below this the underlying material is light brownish-gray loam that extends to a depth of 60 inches or more. Merrill soils are strongly calcareous and moderately alkaline throughout their profile.

These soils are slowly permeable. Their available water capacity is 4 to 7 inches. Roots can penetrate to a depth of 25 to 40 inches. Drainage has been altered on these soils by pumping ground water for irrigation.

These soils are used for such irrigated crops as pasture plants, alfalfa, small grains, and some truck crops.

Representative profile of Merrill silt loam, about 300 feet northwest of Eucalyptus and Central Avenue;



NOTE:

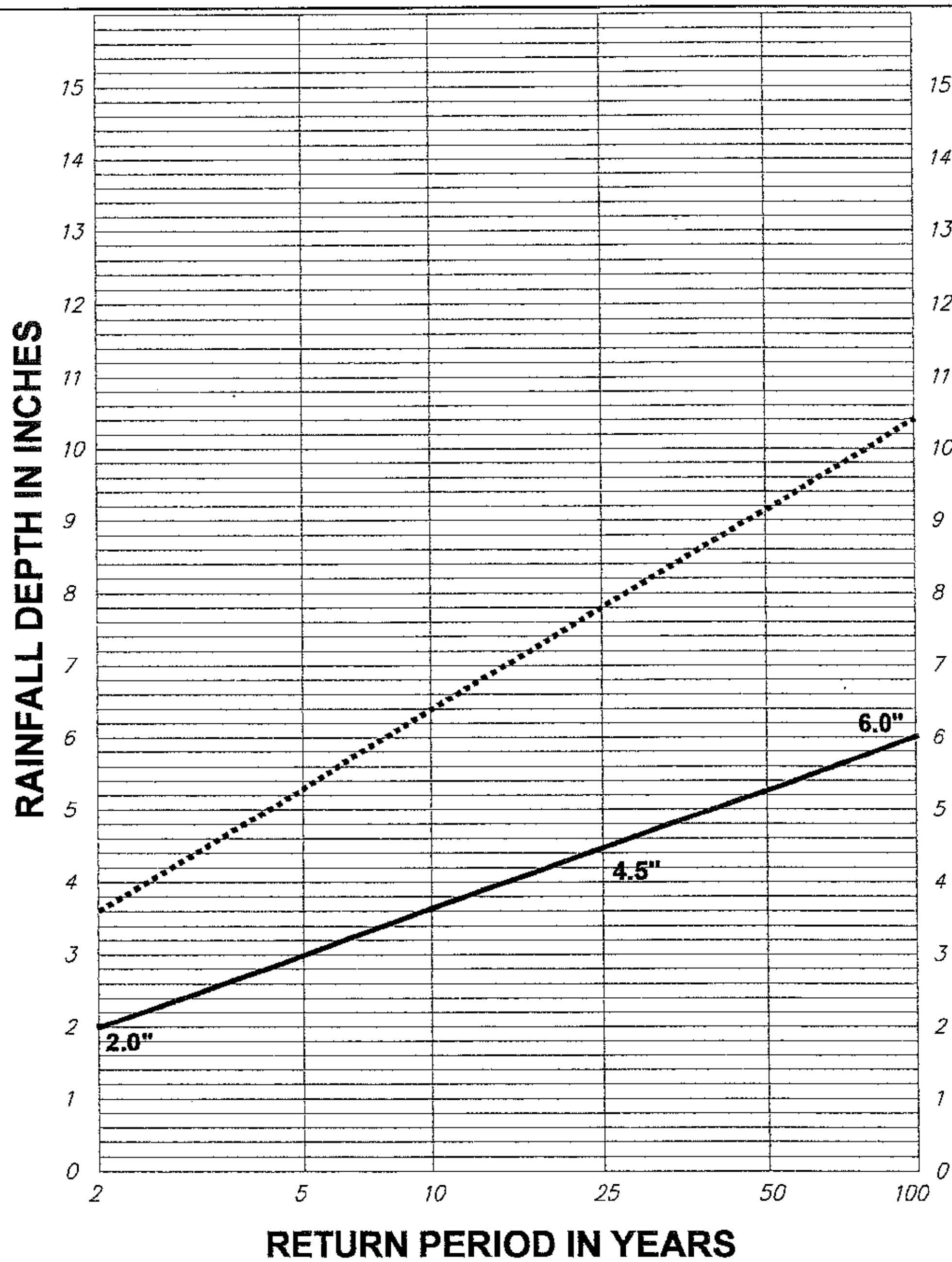
1. For intermediate return periods plot 2-year and 100-year values from maps for specific duration, then connect points and read value for desired return periond. For example given 2-year 24-hour = 3.5"' and 100-year 24-hour = 10.40", 25-year 24-hour = 7.80"

Reference: NOAA atlas 2, Volume XI - California, 1973

RCFC & WCD

Hydrology Manual

RAINFALL DEPTH VERSUS RETURN PERIOD FOR PARTIAL DURATION SERIES



NOTE:

1. For intermediate return periods plot 2-year and 100-year values from maps for specific duration, then connect points and read value for desired return periond. For example given 2-year 24-hour = 3.5"' and 100-year 24-hour = 10.40", 25-year 24-hour = 7.80"

Reference: NOAA atlas 2, Volume XI - California, 1973

RCFC & WCD

Hydrology Manual

RAINFALL DEPTH VERSUS
RETURN PERIOD FOR
PARTIAL DURATION SERIES

ESRI and FEMA

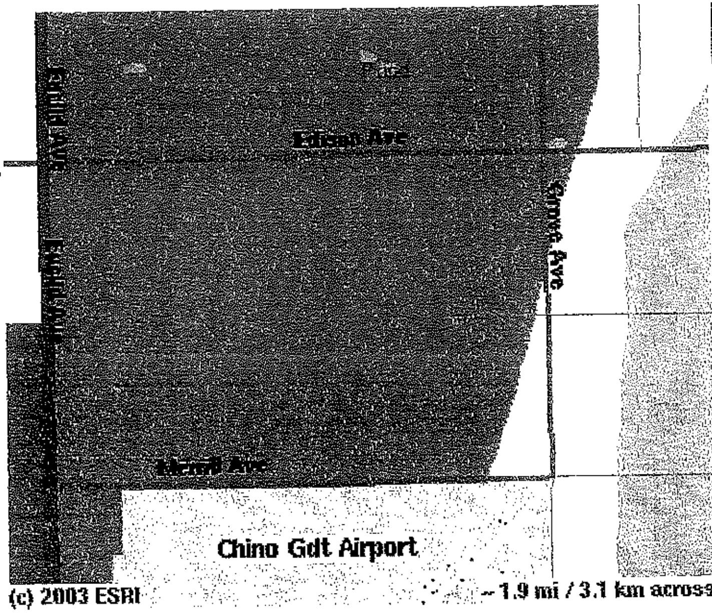
do you know your RISKS?

Hazard Information and Awareness

US FLOOD HAZARD AREAS

Flood Data

- 100 – Yr Flood
- 500 – Yr Flood
- Water Bodies
- No Data



click map to:
recenter
recenter in
recenter out

Print

Email

Map Notes: The **FEMA Digital Q3 Flood Data** displayed on this Web site is developed by scanning the existing Flood Insurance Rate Map (FIRM) hardcopy and capturing a thematic overlay of flood risks. Digital Q3 Flood Data files contain only certain features from the FIRM hardcopy in effect at the time of scanning and do not replace the existing FIRM hardcopy maps. The Q3 Flood Data is being displayed here with basemap data from the GDT Dynamap/2000 data set. The Q3 Flood Data is currently available for approximately **1,200 counties** across the United States.

The maps displayed on this site should be considered an **advisory tool** for general hazard awareness, education, and flood plain management. The flood hazard maps displayed on this site are not the legal document to be used when making a single site flood hazard determination. For more information on these maps, please refer to the **Frequently Asked Questions** page.

Current Map View:

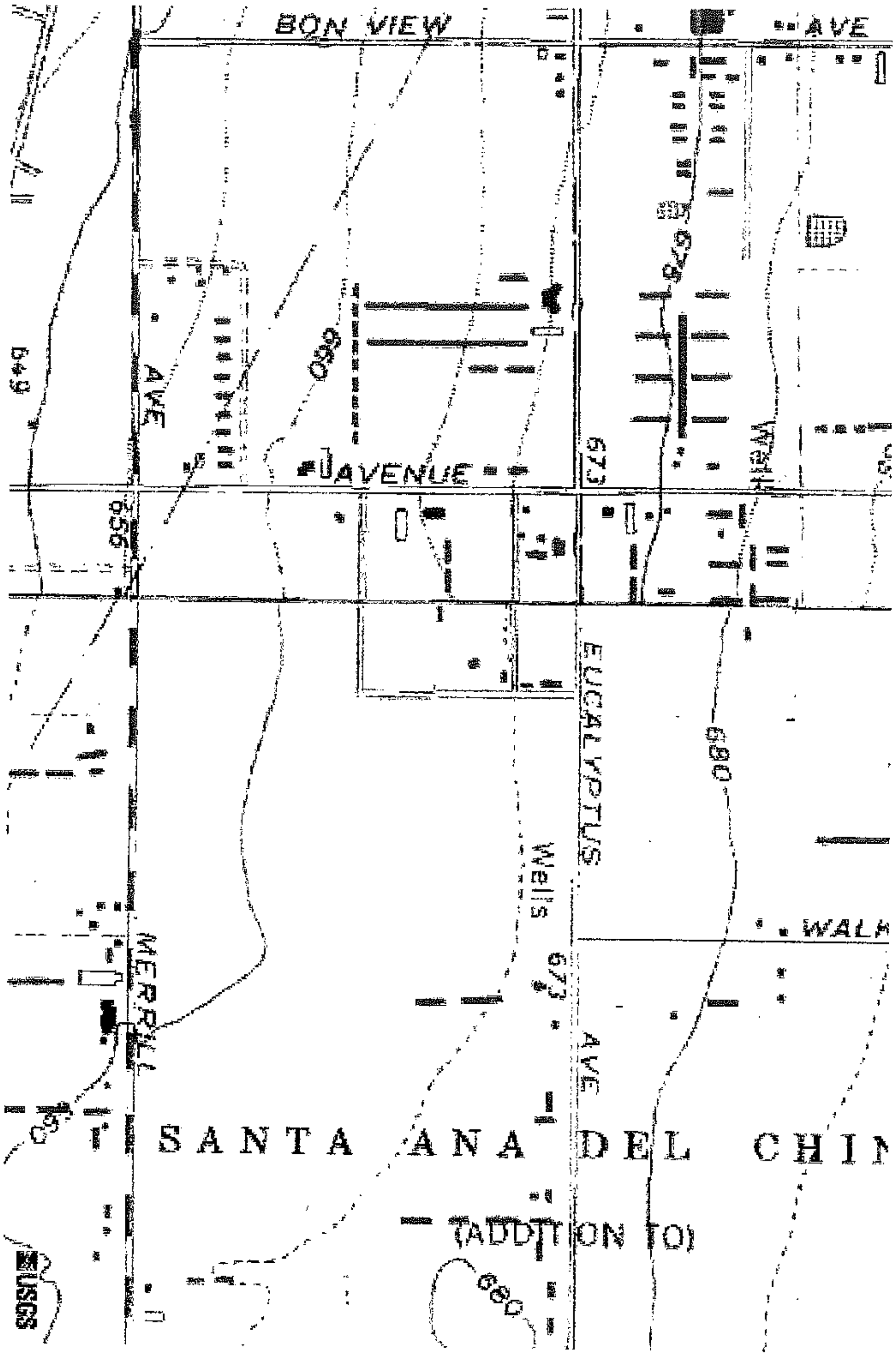
Flood Hazard Areas

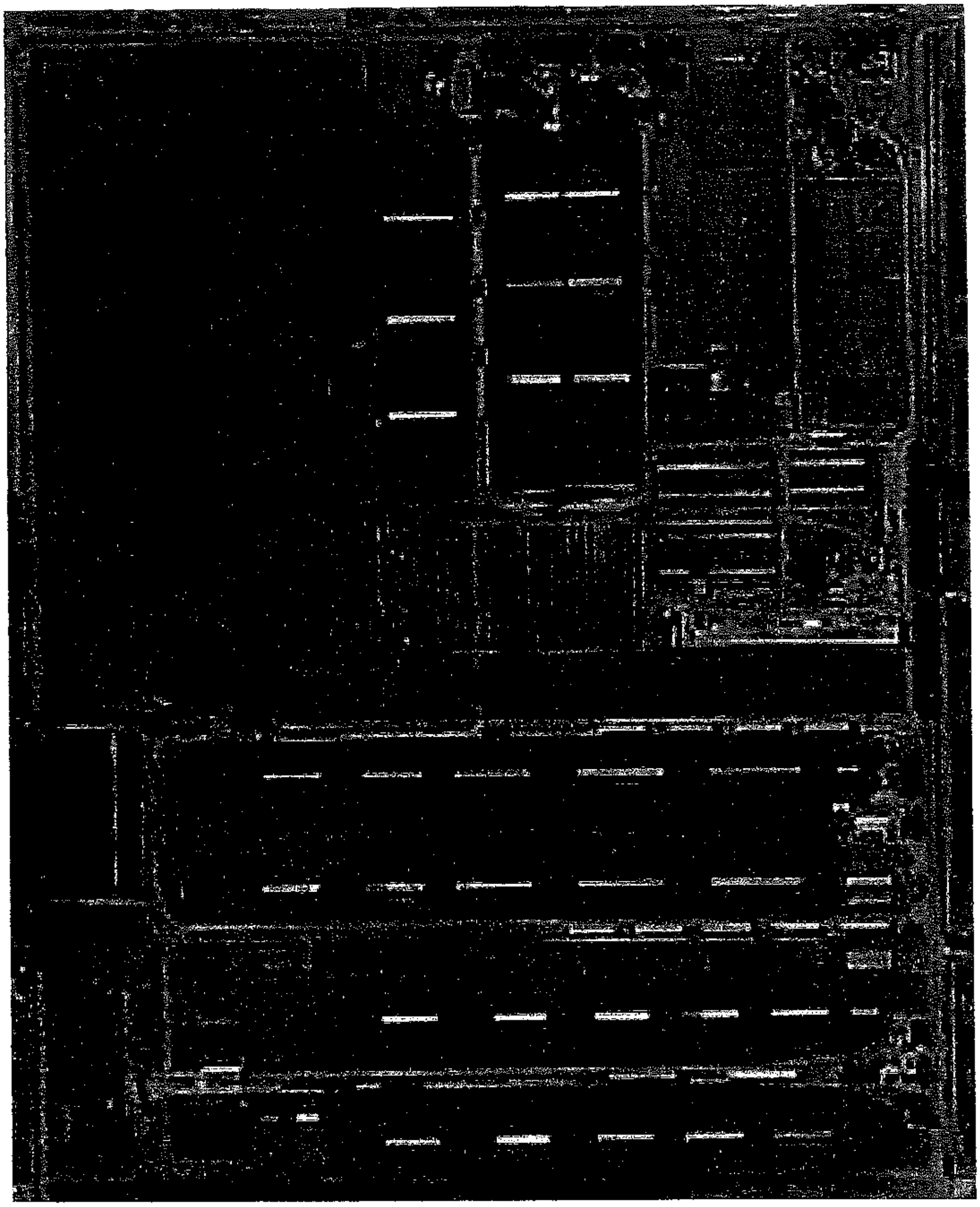
Change View

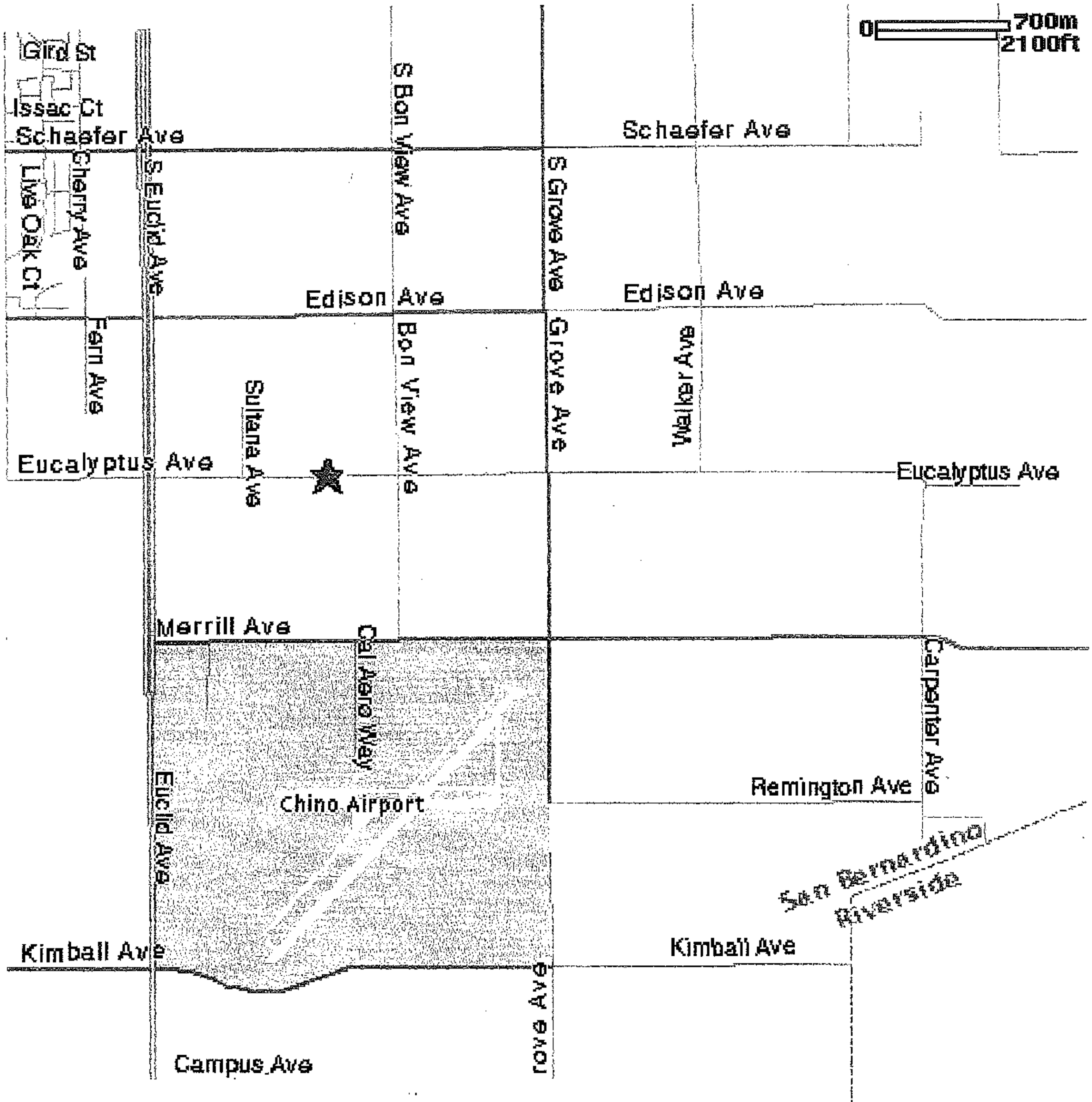
Make New Map

Return to Home Page

Mon Dec 1 13:52:21 2003


BON VIEW AVE
AVE
AVENUE
649
660
656
673
678
680
EUCALYPTUS AVE
MERRILL AVE
Wells
WALK
SANTA ANA DEL CHIN
(ADDITION TO)
USGS





0
700m
2100ft
Gird St
Issac Ct
Schaefer Ave
Cherry Ave
Live Oak Ct
S Euclid Ave
S Bon View Ave
S Grove Ave
Schaefer Ave
Edison Ave
Edison Ave
Fern Ave
Sultana Ave
Bon View Ave
Grove Ave
Walker Ave
Eucalyptus Ave
Eucalyptus Ave
Merrill Ave
Cal Aero Way
Carpenter Ave
Euclid Ave
Chino Airport
Remington Ave
San Bernardino
Riverside
Kimball Ave
Kimball Ave
rove Ave
Campus Ave

Guidelines for the Development of Engineered Waste Management Plans For Concentrated Animal Feeding Operations

(Dairies and Related Facilities)

California Regional Water Quality Control Board
Santa Ana Region

February 2001

Introduction

On August 20, 1999, the California Regional Water Quality control Board, Santa Ana Region (Board), adopted Order No. 99-11 (NPDES No. CAG018001), General Waste Discharge Requirements for Concentrated Animal Feeding Operations (Dairies and Related Facilities) in the Santa Ana Region. This order required all operators of dairies and related facilities (i.e., heifer ranches and calf nurseries) authorized to discharge wastes under Order No. 99-11 to develop and implement an engineered waste management plan (EWMP). The primary purpose of an EWMP is to provide a wastewater management system that is designed, constructed, operated and maintained to comply with the wastewater containment requirements in Order No. 99-11. Order No. 99-11 included applicable state and federal regulations that address waste discharges from animal feeding operations.

Background

The Board began issuing waste discharge requirements to all animal feeding operations in the Region in 1972. These waste discharge requirements stated that each facility had to contain, on the property, all wastewater (i.e., dairy wash water, storm water runoff from manured areas, etc.), including the storm water runoff from a 24-hour, 25-year storm. In an attempt to comply with this requirement, many facilities constructed new ponds, enlarged existing ponds, constructed berms, and implemented other measures. However, these measures were generally implemented in a piecemeal fashion, usually on an as-needed basis, and often did not integrate well with other wastewater containment measures at the facility. It became more and more apparent that many of the wastewater containment improvements that were being made were not very effective. For example, ponds were not sized properly, and therefore, did not have sufficient capacity to contain the entire volume of wastewater generated at the site; berms were sized and constructed improperly, resulting in failures; wastewater pumps, pipelines, etc., were often inoperable and were not replaced when needed; and most wastewater containment structures and equipment were often in a state of disrepair. All of these situations resulted in frequent discharges of wastewater to surface waters, primarily during the winter.

To minimize discharges to surface waters, it became apparent that an overall plan for containing wastewater was necessary. In the late 1980's, Board staff prepared a two-page document that provided guidelines for preparing an EWMP. An EWMP was then generally requested from animal feeding operations that had a history of recurring wastewater discharges. In 1994, the Board adopted Order No. 94-7 (NPDES No. CAG018001), General Waste Discharge Requirements for Concentrated Animal Feeding Operations (CAFOs). Order No. 94-7 required that, in addition to an EWMP being required from CAFOs that had a history of recurring wastewater discharges, EWMPs were to be prepared by anyone initiating a new CAFO at either a new or existing facility. The guidelines for preparing an EWMP were then included as an attachment to Order No.

94-7. Order No. 94-7 expired in March 1999, and the Board adopted Order No. 99-11 in August 1999. To assure that every CAFO had a wastewater management system capable of complying with wastewater containment requirements, Order No. 99-11 required that all CAFO operators develop and fully implement an EWMP. The existing guidelines for preparing an EWMP were included as an attachment to Order No. 99-11. However, the existing EWMP guidelines were outdated, general in nature, and did not contain sufficient criteria to comply with the wastewater containment requirements in Order No. 99-11. Therefore, Order No. 99-11 authorized the Executive Officer to make necessary revisions to the guidelines.

These revised guidelines are longer than the previous guidelines. This is primarily the result of adding explanations and clarification to make EWMPs prepared in accordance with the guidelines as consistent as possible. There are two significant differences between these guidelines and the previous guidelines. First, the new guidelines outline criteria for determining the storage capacity necessary to comply with waste discharge requirements. These criteria will result in the need for significantly more storage capacity than the criteria included in the previous guidelines. However, this does not reflect a change in state or federal regulations. Instead, previous guidelines did not accurately specify criteria for determining the storage capacity necessary to comply with state and federal regulations. Regardless of what was included in previous guidelines, CAFOs have always been, and still are, required to comply with all applicable state and federal regulations. Second, the new guidelines identify several items (such as best management practices) that should be considered in the development and implementation of EWMPs. Many of these items have been included in EWMPs approved by the Executive Officer in the past.

Purpose

The purpose of an EWMP is to provide a wastewater management system that is designed, constructed, operated and maintained to comply with the wastewater containment requirements in Order No. 99-11. These guidelines do not address the management, application or disposal of manure removed from the corrals. Compliance with waste discharge requirements associated with the discharge of manure removed from corrals is addressed separately. The development and implementation of an EWMP is required by Order No. 99-11. Discharges of wastewater from a CAFO are allowed only if the CAFO operator has constructed and maintained containment structures as required, and if a chronic or catastrophic rainfall event occurs. A chronic rainfall event is a series of wet weather conditions that would total the volume of the 24-hour, 25-year storm event, and would not provide reasonable opportunity for dewatering containment structures prior to the next storm events. A catastrophic storm event includes events such as tornadoes and hurricanes, and any single event that totals the runoff volume of the 24-hour, 25-year storm event. Order No. 99-11 requires that an EWMP be developed in accordance with guidelines established by the Executive Officer. However, these are guidelines, not regulations, and any EWMP that will result in compliance with waste discharge requirements will be acceptable by the Executive Officer. Adhering to these guidelines, though, will provide consistency for preparing EWMPs, and will increase the likelihood that the EWMP will be acceptable.

Elements of an EWMP

The EWMP must be prepared by a registered engineer (civil, or other appropriate discipline) or other qualified person (required by Order No. 99-11). The qualified person preparing the EWMP must have the knowledge, technical expertise and experience appropriate to develop an EWMP. This guidance document describes five basic elements that should be addressed in an EWMP. These elements include an introduction, a design, a plot (site) plan, construction specifications, and an operation and management plan. These elements should include a detailed description, as follows:

I. Introduction

The introduction should describe the existing animal population, the design population for the EWMP, existing wastewater containment facilities, and the operation of those facilities. At a minimum, the Introduction should consist of a brief narrative that addresses the following:

- The facility address, operator name, land owner, and location of the facility with respect to cross streets or other landmarks.
- The name, telephone number and address of the person responsible for implementing the EWMP on an on-going basis (CAFO operator or other designated person)
- The number, telephone number and address of the person(s) to be contacted, if necessary, in the event that the CAFO operator or designated person is not available.
- Current and design animal population (for the expected life of the CAFO)
- The estimated volume of wash water generated at the facility each day (based on gallons per cow per day)
- Total size of the facility (acres)
- The size (acres) of existing ponds, corrals, wastewater disposal areas and wastewater containment areas
- General location and height of berms
- How dairy wastewater is managed and where it is discharged
- Storm water run-on problems (storm water that occurs off-site, but enters the CAFO), including run-on from neighboring facilities, etc.

II. Design

To comply with Order No. 99-11, containment facilities must be designated to contain all wastewater generated at the facility (i.e., dairy wash water, storm water runoff from manured areas, etc.) and all storm water runoff that comes into contact with manure generated by a 24-hour, 25-year storm. A 24-hour, 25-year storm is a 24-hour storm with a return frequency of once every 25 years. The design must take into consideration that this storm can and should be expected to occur each year. CAFOs are required to contain the storm water runoff from all lesser storms, if that runoff has come into contact with manure.

If a CAFO does not have existing structures capable of containing the required volume of wastewater, then additional structures must be provided. This may include significantly deepening existing ponds, adding additional ponds, connecting to a sewer system, raising berms to increase the volume of wastewater that can be stored in containment areas, etc. An EWMP may be acceptable if the design has maximized the amount of wastewater that can be contained and the operation and management plan optimizes utilization of the containment capacity provided by the containment structures. **However, acceptance of such a plan will not relieve the CAFO operator of responsibility for any discharges that are not allowed by Order No. 99-11. Wastewater that is discharged off the CAFO property, even after implementing an acceptable EWMP, is still a violation of Order No. 99-11. unless the discharge occurred as a result of a chronic or catastrophic storm event.**

- Historically, containment of wash water and storm water runoff at CAFOs in the Region between the drier months of April through October has not been a problem. However, containing storm water runoff from corrals, wastewater disposal fields, etc., and daily wash water, has been problematic during the five generally wet months of November through March. During these months, evaporation is minimal, and since disposal fields are usually saturated by rainfall, percolation is minimal. Since it is difficult to dispose of daily wash water and accumulated storm water runoff during these months, wastewater facilities should be designed to contain all wastewater generated during this 150-day period, as noted below.

- Containment structures should be designed to contain 150 days of annual storm water runoff <u>and</u> the runoff from a 24-hour, 25-year storm. For the Chino Basin area, average rainfall for the 150 days from November through March is approximately 13 inches, and a 24-hour, 25-year storm generates approximately 4.5 inches of precipitation (based on information from the National Weather Service). For the San Jacinto area, average annual rainfall for the 150 days from November through March is approximately 11 inches, and a 24-hour, 25-year storm is approximately 3.5 inches. These are average values for these areas, and other values can be used for a particular CAFO, if justification is provided.

- Containment structures should be designed to contain 150 days of wash water. This should be based on the maximum number of milking cows for the life of the facility. Otherwise, the EWMP may have to be revised in the future, at such time that the number of milking cows exceeds the number of cows stated in the EWMP. Recent studies have shown that the average daily wash water generated at dairies in the Region is about 70 gal/cow/day (based on two milkings/cow/day). The average daily wash water produced during winter months, however, can exceed 100 gal/cow/day. The average gal/cow/day used during the winter should be used in determining the volume of storage required for wash water. This volume can vary, depending on specific site practices, but should be about 100 gal/cow/day unless adequate justification is provided for using a smaller number. The installation of a water meter can verify the amount of water used and assist in efforts to conserve water usage, and thereby reduce the amount of water discharged to containment structures. A wash water meter will be required to justify a volume significantly less than 100 gal/cow/day.

- During the winter, evaporation is minimal. Also, ponds tend to seal up over time, and disposal fields are generally saturated during the winter, thereby minimizing percolation. In addition, the amount of wastewater percolated during the winter at a CAFO can vary, depending on the particular wastewater disposal practices implemented at that CAFO. Allowances for loss of wastewater due to percolation and evaporation can be made in determining the amount of storage required for wastewater, as long as reasonable assumptions are made that consider winter conditions and practical CAFO specific wastewater disposal practices.

- The accumulation of solids in ponds and other containment structures decreases the storage capacity available for wastewater. It is estimated that dairy wash water in the Region contains about 10% of the manure generated by a milking cow. Also, solids are present in storm water runoff from corrals, disposal land and other areas. The estimated annual decrease in available storage capacity resulting from the accumulation of these solids should be determined (the volume of manure in wash water can be considered to be 10% of what a milking cow expels).

- Calculations should be provided showing the design capacity of all wastewater containment structures (existing and proposed).

- The total capacity of the containment structures should be at least equal to the volume determined by the following equation: 150 days dairy wash water + 150 days annual storm water runoff + 24-hour, 25-year storm runoff + accumulation of solids + wastewater in containment structures on November 1 – percolation – evaporation.

- A description of all wastewater conveyance equipment and structures (pipelines, surface channels, pumps, etc.), including their design capacities, should be provided.

- CAFOs in operation prior to November 27, 1984 must be designed to protect all manured areas from inundation or washout by overflow from any stream channel during a 20-year peak stream flow (required by Order No. 99-11).

- CAFOs built after November 27, 1984 must be designed to process all manured areas from inundation or washout by overflow from any stream channel during a 100-year peak stream flow (required by Order No. 99-11).

- The use of pumps must be considered for ponds and other containment structures so that wastewater can be pumped from ponds or containment areas to disposal areas, in order to restore needed capacity in the containments structures. If pumps are not utilized, exceptional justification for not utilizing pumps must be included.

- Storm water containment structures must be protected against inundation from off-site storm water sources, unless such run-on is fully contained (required by Order No. 99-11). If it is not practical to divert all storm water run-on away from a CAFO, a justification should be included that explains why it is not practical to do so. If all storm water run-on from up to a 24-hour, 25-year storm cannot be diverted from containment structures, a description of how the design takes the run-on into consideration should be included.

- The addition of roof structures in areas where manure is present, and diverting the roof runoff off site, should be considered in order to minimize the amount of precipitation that comes into contact with manure.

- Structures should be designed to prevent storm water runoff from non-manured areas (roofs, residence area, paved surfaces, etc.) from entering wastewater containment structures. The use of rain gutters and diversion trenches should be considered. If the CAFO cannot be designed to prevent or minimize the flow of this water onto containment areas, an explanation should be provided that describes how the design accounts for such flows.

- The design for ponds and other wastewater containment areas should allow vehicle access for mosquito abatement personnel to inspect and treat these areas to reduce the risk of mosquito-borne disease and to prevent insect nuisance conditions.

- An emergency spillway must be designed to provide for a controlled release of wastewater, and to maintain the integrity of existing containment structures, in the event that storm events cause the capacity of the containment structures to be exceeded. The use of gateways, valves, or other similar devices for the purpose of manually releasing wastewater, is not acceptable.

- If visual observations, hand-level measurements and information provided by the CAFO operator and others are not sufficient to determine rise and fall dimensions and flow directions for adequately calculating runoff volumes for placing and sizing appropriate containment structures, then current contours must be determined, based on acceptable engineering and surveying practices (it is expected that current contours will be necessary for most CAFOs).

- Structures should be designed to accommodate future increases in animal population.

III. Plot (Site) Plan

The plot plan should be a standard blue line print, using an appropriate scale, that shows sufficient detail of all containment structures, drainage patterns, and equipment. The plot plan should include:

- The legal description of the property (i.e., parcel numbers), the primary address and any other addresses that may exist at the property, and the location of significant structures on the property (residences, milk barn, hay alleys, etc.).
- The property boundaries, the gross acreage of the property, vicinity map (insert), north arrow, legend and date the plan was prepared.
- The location, elevation contours and dimensions of all areas associated with the generation, storage or management of wastewater and manure (corrals, ponds, access roads around wastewater containment areas, wastewater disposal areas, temporary manure storage areas, cropland, etc.).
- The location of all facilities necessary for containment and management of wastewater (berms, upstream diversion structures, pumps, spillway, distribution lines, etc.) and the dimensions, elevation and cross-sections of all containment structures.
- The drainage patterns (indicated by arrows) for on-site surface drainage courses (swales, ditches, etc.) and any off-site surface drainage that can flow onto, or immediately adjacent to, the facility.

IV. Construction

The construction plan should describe all construction materials, construction methods (i.e., compaction), criteria and specifications, etc., necessary for proper construction of all containment and conveyance structures (berms, ponds, levees, pipelines, channels, etc.).

- Existing berms that are not sized properly, not adequately compacted, or contain materials (i.e., manure) that are deleterious to the berm's long term stability and effectiveness, must be replaced or improved to a standard that is equivalent to that which would be expected from a new berm constructed in accordance with best engineering practices.
- Actions necessary to restore existing structures to proper conditions and capacities should be clearly described (i.e., clean out existing ponds or containment areas, regarding, repair or replacement of existing berms, etc.).

- Manure shall not be used to construct new containment structures (i.e., berms0, and manure shall not be used to improve or raise existing containment structures (prohibited by Order No. 99-11).

- In accordance with acceptable engineering practices, specifications developed to assure that construction material is applied in lifts of appropriate depth, and rolled and watered to achieve a minimum compaction of 90%, must be included.

V. Operation and Maintenance

An operation and maintenance plan should be provided to implement effective operation of all containment structures and equipment. During the wet season, wastewater should be managed on a daily basis to maximize the volume of containment capacity available.

- Specific procedures should be included to assure that containment structures have the maximum capacity available just prior to the wet season (November – March).

- Management practices to reduce, to the maximum extent practicable, the volume of dairy wash water generated should be addressed, particularly if the proposed structures are incapable of containing the required volume of wastewater.

- Replacement pumps should be available on-site, or advanced arrangements made for the immediate and reliable delivery of portable pumps.

- Specific procedures for operating standpipes or other conveyance systems used for applying wastewater to land should be provided to efficiently utilize the entire area available for wastewater disposal (i.e., avoid localized over-application that can occur with furrow application, and utilize methods to maximize the spreading of wastewater).

- If all storm water run-on cannot be diverted, the EWMP should contain a description of how storm water run-on will be managed or handled to minimize the impact on wastewater containment structures and to minimize the amount of wastewater that could be discharged from the CAFO.

- Specific measures to minimize the effects of gophers, squirrels or other rodents on the integrity of the containment structures should be identified.

- Removal of solids from containment structures on a scheduled basis should be specified so that the design capacity of the containment structures will be restored prior to each rain season.

- Measures for minimizing the accumulation of stagnant wastewater in low lying areas (corrals, disposal areas, etc.) and preventing potential insect nuisance conditions should be addressed.

- Weekly inspections of ponds, berms, wastewater distribution and application equipment, etc., should be specified to provide assurance that all containment structures are intact and all equipment is in proper operating condition. Daily inspections should be conducted following the first significant rain events at the beginning of the wet season (generally in early Fall), continuing through the cessation of significant rain events (generally in early Spring). Provisions for the immediate repair of any damaged containment structures (i.e., rodent holes, cracks, erosion, etc.) should be provided.

- A description of methods and schedules for maintaining disposal areas in a condition that maximizes the efficient disposal of wastewater in the winter should be provided (i.e., grading, disking, etc.).

- An equipment maintenance schedule should be provided to assure the efficient, consistent and reliable operation of all pumps, sumps, pipelines, etc.

- Weed abatement measures to maintain access to containment structures, maintain capacity of containment structures and to maintain the efficient distribution of wastewater through channels, etc., should be addressed.

- A brief emergency spill plan must be included. The plan must include a list of spare parts (pumps, piping, valves, etc.) that are to be kept on site to maintain adequate wastewater containment facilities, a list of names and phone numbers for contacts for obtaining immediate emergency equipment (pump, piping, valves, heavy equipment, etc.), and a list of names and phone numbers for reporting problems (Board staff, County staff, etc.).

California Regional Water Quality Control Board
Santa Ana Region

Order No. 99-11
NPDES No. CAG018001

GENERAL WASTE DISCHARGE REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS (DAIRIES AND RELATED FACILITIES) WITHIN THE SANTA ANA REGION

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Regional Board), finds that:

1. On February 17, 1994, the Board adopted Order No. 94-7, General Waste Discharge Requirements For Concentrated Animal Feeding Operations, Including Dairies, Within The Santa Ana Region (NPDES NO. CAG018001).

2. Order No. 94-7 satisfied the criteria cited in 40 CFR 122.28 and, as such, served as a General NPDES Permit. 40 CFR 122.28 pertains to the issuance of general permits to regulate discharges of waste that meet the following criteria:

   a. Waste discharges involving the same or substantially similar types of operations;
   b. Discharge the same types of wastes;
   c. Require the same or similar operating conditions;
   d. Require the same or similar monitoring ; and
   e. Are more appropriately regulated under a general permit rather than individual permits.

3. 40 CFR Part 122.23 defines a concentrated animal feeding operation (CAFO) as any animal feeding operation that has more than 1,000 animal units (dairy cattle are considered 1.4 animal units). Pursuant to the Clean Water Act (CWA), all CAFOs are point sources and are subject to NPDES permitting requirements. Smaller animal feeding operations can also be designated as CAFOs by the permitting agencies after considering certain criteria cited under 40 CFR 122.23 (b)(1). The Regional Board has determined that all dairies, heifer ranches, and calf nurseries in the Region shall be designated as CAFOs.

4. Order No. 94-7 has expedited the preparation of waste discharge requirements and has allowed the Regional Board to better utilize staff resources. To date, approximately 215 CAFOs have been enrolled under Order No. 94-7. Another 72 CAFOs are in the process of obtaining authorization to discharge wastes under that order. Order No. 94-7 expired on March 1, 1999. The dairies currently enrolled under Order No. 94-7, or in the process of enrolling under Order No. 94-7, will want to continue to discharge waste. Therefore, it is necessary to renew the waste discharge requirements contained in Order No. 94-7 to continue this expedited permitting process.

5. Persons discharging, or proposing to discharge, dairy wastes or other similar kinds of wastes in any manner that may affect water quality are hereinafter referred to as "discharger" and are subject to the terms and conditions of this order. Persons discharging, or proposing to discharge, wastes from other types of animal feeding operations must obtain coverage under a separate general permit or individual waste discharge requirements.

6. The Regional Board adopted a revised Water Quality Control Plan (Basin Plan) on March 11, 1994. The Basin Plan became effective on January 24, 1995. The Basin Plan specifies beneficial uses and water quality objectives for surface and ground waters in the Santa Ana Region (Chapters 3 and 4). This order specifies requirements necessary to meet the water quality objectives and to protect the beneficial uses.

7. Revised regulations governing discharges from CAFOs, including dairies, are contained in Division 2, Title 27 of the Combined State Water Resources Control Board/California Integrated Waste Management Board AB 1220 Regulations, which became effective on July 18, 1997. Chapter 7, Subchapter 2 (Article 1) contains requirements for Confined Animal Facilities. Previously, these regulations were specified in Chapter 15, Division 3, Article 6, Title 23 of the California Code of Regulations.

8. Section 402(p) of the CWA as amended by the Water Quality Act of 1987 and the related regulations published by the U.S. EPA on November 16, 1990 (40 CFR Parts 122, 123 and 124), requires an NPDES permit for pollutant discharges from CAFOs. The EPA's Effluent Guidelines and Standards for Feedlots are contained in 40 CFR Part 412 (revised July 1, 1993).

9. On April 17, 1997, the State Water Resources Control Board adopted the General Industrial Storm Water Permit, Order No. 97-03-DWQ, NPDES No. CAS000001. Order No. 97-03-DWQ implements the final regulations (40 CFR 122, 123, and 124) for storm water runoff published on November 16, 1990 by the U.S. EPA in compliance with Section 402(p) of the CWA. This order includes those provisions of the General Industrial Storm Water Permit that pertains to dairies. Once a discharger is authorized under Order No. 99-11, coverage under the State Water Resources Control Board's General Industrial Storm Water Permit (Order No. 97-03-DWQ) will be terminated.

10. Wastes from CAFOs contain high concentrations of salts (total dissolved solids and nitrates). Previous studies conducted by the Board have shown that cow manure produced in the Region contains about 160 pounds of salt per (dry) ton of manure (110 pounds of salt per ton of manure @ 33% moisture). The application of manure or the discharge of process wastewater[1] to land results in the discharge of salts that has adversely impacted, and continues to adversely impact, the quality of groundwater and surface water in the Region.

[1] Process wastewater shall mean any process generated wastewater and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animals or poultry or direct products (e.g. milk, eggs).

11. Most of the CAFOs in the Region overlie the Chino Groundwater Basin. The Chino II and III Groundwater Subbasins lack assimilative capacity for additional salt inputs (total dissolved solids and nitrogen). For groundwater subbasins without assimilative capacity, salt inputs that exceed the water quality objectives for these subbasins cannot be allowed (State Water Resources Control Board Order No. 73-4, the Rancho Caballero decision). To meet the Chino Basin groundwater objectives, as well as the groundwater objectives for any other subbasin lacking assimilative capacity, the discharge of manure and other animal wastes, such as process waste water, and their application as fertilizer and irrigation water, must be controlled to prevent further exceedance of water quality objectives. Salt discharges in excess of water quality objectives can only be allowed if the additional salt inputs are offset.

12. The Basin Plan assumed that two desalters would be built in the Chino Basin. The amount of salt to be extracted from the Basin from these desalters was assumed to be adequate to provide sufficient salt removal to offset the present and projected salt loads from ongoing discharges from CAFOs. However, only one desalter is currently being built. This desalter will extract enough salt to offset the amount of salt being added to the basin from process wastewater water discharges. No mitigation measures are currently in place to offset the salt loading from manure application within the Basin. Therefore, the discharge of manure, and its application as fertilizer, must be prohibited.

13. The Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16 and finds that these discharges are consistent with the State and Federal regulations, as long as appropriate salt offset programs are implemented.

14. In accordance with Water Code Section 13389, the issuance of waste discharge requirements for these discharges is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (Commencing with Section 21100), Division 13 of the Public Resources Code.

15. The Regional Board has notified interested agencies and persons of its intent to issue general waste discharge requirements for discharges of wastes CAFOs, and has provided them with an opportunity to submit their views and recommendations.

16. The Regional Board, in a public meeting, heard and considered all comments pertaining to discharges of wastes from CAFOs proposed to be regulated under the general waste discharge requirements.

IT IS HEREBY ORDERED that, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended, and regulations and guidelines adopted thereunder, dischargers, their agents, successors, and assigns, discharging wastes from CAFOs shall comply with the following:

A. DISCHARGE SPECIFICATIONS:

1. The discharger shall design, construct and maintain containment structures to retain all wastewater within its facility, including all process generated wastewater[2] and all precipitation on, and drainage through, manured areas resulting from storms up to and including a 24-hour, 25-year storm.

2. The discharger shall develop and fully implement an Engineered Waste Management Plan (EMWP) acceptable to the Executive Officer. The EMWP shall be developed by a registered professional engineer, or other qualified individual, in accordance with the guidelines specified in Attachment "B" of this order. The Executive Officer is hereby authorized to make necessary revisions to the guidelines for the preparation of an EWMP outlined in Attachment "B".

3. The discharge to any surface water bodies, or tributary thereof, is prohibited unless a chronic[3] or catastrophic[4] rainfall causes overflow from a storage facility designed, constructed, maintained and operated to contain all process generated wastewater plus the runoff from a 24-hour, 25-year storm.

4. Retention ponds and manured areas at CAFOs in operation on November 27, 1984, shall be protected from inundation or washout by overflow from any stream channel during 20-year peak stream flows. Facilities existing before November 27, 1984 that are protected against 100-year peak stream flows must continue to provide such protection. New facilities (built after November 27, 1984) shall be protected from 100-year peak stream flows.

5. Disposal of manure to land is prohibited, unless allowed by separate waste discharge requirements issued by the Board.

6. The use of manure as a fertilizer in any area that may affect a groundwater subbasin lacking assimilative capacity, including the Chino Groundwater Basin, is prohibited unless a plan, acceptable to the Executive Officer, is implemented which mitigates the effects of that use on the underlying groundwater subbasin.

---

2 Process generated wastewater shall mean water directly or indirectly used in the operation of a feedlot for any or all of the following: Spillage or overflow from animal or poultry watering systems; washing, cleaning of flushing pens, barns, manure pits or other feedlot facilities; direct contact swimming, washing or spray cooling of animals; and dust control.

3 Chronic rainfall means a series of wet weather conditions which would not provide opportunity for dewatering and which total the volume of the 25 year, 24 hour storm event.

4 Catastrophic rainfall means any single event which would total the volume of the 25 year, 24 hour storm event; this could include tornadoes, hurricanes or other catastrophic conditions which could cause overflow due to winds or mechanical damage.

7. Manure applied to cultivated cropland outside of any area that may affect a groundwater subbasin lacking assimilative capacity, including the Chino Groundwater Basin, shall not exceed agronomic rates and shall be incorporated into soil soon after application or appropriate containment (based upon the specific crop grown) controls must be provided. For any application of manure to cropland above 12 dry tons per acre per year (17.5 tons/year @ 33% moisture), an explanation of the type of crop and the number of times it is harvested per year shall also be included in the annual report.

8. Manure removed from the corrals shall be removed from the facility within 180 days. Any manure remaining at the facility after 180 days of being removed from the corrals is considered to be disposal of manure and is prohibited in accordance with Discharge Specification A.5. A manifest of the manure hauled away shall be prepared and submitted with the annual report in accordance with Monitoring and Reporting Program No. 99-11. (The discharger shall be responsible for active management of legal disposal of manure from the property over the six month period following removal of the manure from corrals. This means that legal disposal must be coordinated with periods of rainfall such that manure can be removed from the facility within 180 days of being scraped from corrals.)

9. On two designated "clean days" per calendar year, facilities subject to this order shall be free of all stockpiled manure that has been removed from corrals. These "clean days" shall be selected by each discharger, beginning in 2000. The two "clean days" shall be at least four months apart. Each "clean day" shall be identified and reported to the Board office at least five working days in advance of the selected date.

10. All surface drainage from outside of the facility shall be diverted away from any manured areas unless such drainage is fully contained.

B. PROVISIONS:

1. Neither the treatment nor the discharge of wastes shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.

2. This order shall serve as a general National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto. The general permit shall become effective 10 days after the date of its adoption provided the Regional Administrator of the Environmental Protection Agency has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

3. This order expires on August 1, 2004. However, it shall continue in force and effect until a new general permit is issued. All dischargers authorized to discharge under the expired permit may continue to discharge waste in accordance with that permit until a new permit is issued.

4. Upon receipt of an application to discharge wastes under this order, the Executive Officer shall authorize the proposed discharge by transmitting a "Discharge Authorization Letter" to the discharger. The discharge authorization letter may be terminated or revised by the Executive Officer at any time.

5. Upon issuance of a discharge authorization letter from the Executive Officer to discharge wastes under this order, the discharger's authorization to discharge waste under the State Water Resources Control Board's General Industrial Storm Water Permit (Order No. 97-03-DWQ) is hereby terminated.

6. All discharges from the facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other courses under their jurisdiction.

7. Storm flows in excess of a 24-hour, 25-year storm event may be discharged to surface water bodies in accordance with the requirements specified in U.S. Environmental Protection Agency's "Effluent Guidelines and Standards for Feedlot's, 40 CFR Part 412". Additionally, storm flows resulting from chronic or catastrophic events may also be discharged to surface water bodies in accordance with the U.S. Environmental Protection Agency's effluent guidelines referenced above.

8. The discharger shall comply with Monitoring and Reporting Program No. 99-11.

9. The discharge of wastes to property not owned or controlled by the discharger, except as authorized by this order, is prohibited.

10. The discharger shall comply with all Federal, State, County and local laws and regulations pertaining to the discharge of wastes from the facility.

11. Following a storm event, the discharger shall restore the wastewater holding capacity of retention ponds in a timely manner.

12. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under Federal, State, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

13. This order does not convey any property rights of any sort, or any exclusive privilege.

14. An authorization to discharge wastes under this order is not transferable to any person without written authorization from the Executive Officer.

15. The discharger shall comply with all requirements of this order and all terms, conditions, and limitations specified in the discharge authorization letter issued by the Executive Officer.

16. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

17. Any instance of noncompliance with this order constitutes a violation of the Clean Water Act (CWA), its regulations, and the California Water Code, and is grounds for enforcement action, and/or termination of the authorization to discharge.

18. The provisions of this order are severable, and if any provision of this order, or the application of any provisions of this order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this order shall not be affected thereby.

19. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this order.

20. Compliance determination with the terms of this order shall be based on the following:

    a. Periodic inspections by Regional Board staff;
    b. Evaluation of the annual report of animal waste and storm water discharge submitted according to the attached monitoring and reporting program; and
    c. Any other information deemed necessary by the Executive Officer.

21. The Regional Board, USEPA, and other authorized representatives shall be allowed:

    a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this general permit;
    b. Access to copy any records that are kept under the conditions of this general permit;
    c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this general permit; and
    d. To photograph, sample, and monitor for the purpose of assuring compliance with this general permit, or as otherwise authorized by the CWA.

C. PERMIT REOPENING, REVISION, REVOCATION, AND RE-ISSUANCE:

1. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, or amendments thereto, the Board will revise and modify this order in accordance with such standards.

2. This order may be reopened to address any changes in State or Federal plans, policies or regulations that would affect the quality requirements for the discharges.

D. PENALTIES:

1. The CWA provides that any person who violates a provision implementing sections 301, 302, 306, 307, or 308 of the CWA is subject to a civil penalty not to exceed $11,000 per day of such violation. Any person who willfully or negligently violates provisions implementing these sections of the CWA is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

2. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $11,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

3. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $11,000 per violation, or by imprisonment for not more than six months per violation, or by both.

4. The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day, or $20 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

E. REQUIRED REPORTS AND NOTICES:

1. Reporting Provisions:

   a. All applications, annual reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR 122.22.

   b. Any discharger authorized to discharge waste under this order shall furnish, within a reasonable time, any information the Regional Board or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating their authorization or this general permit. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this order.

c. Except for data determined to be confidential under Section 308 of the CWA, all reports prepared in accordance with the terms of this general permit shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of USEPA. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act and Section 13387 of the California Water Code.

2. The discharger shall notify the Regional Board by telephone within 24 hours of any unauthorized discharge of waste from the facility. This notification shall be followed by a written report including the following:

   a. The approximate date and time of the discharge;
   b. The volume and duration of the discharge;
   c. The cause of the discharge; and
   d. A time schedule and a plan to implement necessary corrective actions to prevent the recurrence of such discharges.

3. The discharger shall report promptly in writing to the Regional Board of any changes or proposed changes in:

   a. The control, ownership, operation or location of the facility;
   b. The character, location, volume or disposal methods of waste discharges; and
   c. The size of the animal population, if it increases beyond the design capacity of the facility specified in the EWMP.

4. The discharger shall give advance notice to the Regional Board of any planned changes in the permitted facility or activity that may result in noncompliance with this general permit.

F. APPLICATION REQUIREMENTS:

1. Dischargers previously authorized to discharge wastes under Order No. 94-7, dischargers currently discharging wastes under individual waste discharge requirements, and dischargers who have submitted a notice of intent to discharge wastes under Order No. 94-7 are automatically enrolled under this Order, unless they file an application to be covered under an individual permit. Once the Executive Officer issues a discharge authorization letter, the individual waste discharge requirements are hereby rescinded.

2. Dischargers not previously authorized to discharge waste under Order No. 94-7 are required to submit the following within 60 days of the effective date of this Order for existing discharges and at least 60 days before the start of any new discharge:

a. A completed Notice of Intent Form (see attachment "A") with the appropriate filing fee;
b. An Engineered Waste Management Plan for the facility, acceptable to the Executive Officer (see Attachment "B");
c. If an acceptable EWMP has not been developed, the discharger must submit the name of the engineer, or other qualified individual, who will develop the EWMP and a proposed time schedule for its development; and
d. Any other information deemed necessary by the Executive Officer.

If the proposed discharge meets the requirements of this order, the Executive Officer will provide the discharger with a written authorization to discharge waste in accordance with these waste discharge requirements.

3. The following types of facilities are generally not required to obtain authorization under this order. Such facilities must not discharge waste which may affect water quality, or cause a nuisance or pollution as defined in Section 13050 of the California Water Code.

   a. Dairies where the animal population is less than 20 (dry or milking cows).
   b. Heifer or calf ranches where the herd size is less than 50.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on August 20, 1999.

G J Thibeault

Gerard J. Thibeault
Executive Officer

Attachment "A" NOI

REQUIREMENTS FOR AN ENGINEERED WASTE MANAGEMENT PLAN

The Engineered Waste Management Plan must be prepared by a registered professional engineer in the State of California or another qualified individual.

A. SITE PLAN:

Site plan shall include:

1. Address and/or legal description of the property.

2. Name, address, and telephone number of the owner and operator of the property.

3. Total gross acreage of the property, showing property boundaries and all existing and proposed facilities including buildings, storage areas, berms/levees, holding ponds, pumping facilities, culverts, drainage easements, disposal areas, croplands (whether farmed by the owner/operator or another party), etc. The site plan must include the overall dimensions, contours, a vicinity map, north arrow, and the date the plan was prepared. The plan shall be drawn on a standard blue print format using an appropriate scale that shows sufficient details of all facilities.

4. Containment facilities shall be designed to retain, on the property, all process generated wastewater and storm water runoff due to precipitation and drainage through manured areas which results from a 24-hour, 25-year storm event. Facilities in operation on November 27, 1984 shall be designed for protection of all manured areas from inundation or washout by overflow from any stream channel during 20-year peak stream flows. All manured areas for new facilities (built after November 27, 1984) shall be protected from inundation resulting from a 100-year peak stream flow. The site plan shall show all facilities necessary for containment and management of on-site storm water runoff as well as the interception and conveyance of any off-site storm water runoff through the property.

5. The site plan shall show the size, elevation, and location of all facilities proposed for containment of process generated wastewater and storm water runoff on the property (berms/levees, holding ponds, upstream diversion structures, etc.). Cross section details of these facilities shall be presented.

6. A description of existing and proposed disposal areas or cropland, designated to receive operational water.

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. 99-11
for
Concentrated Animal Feeding Operations (Dairies and Related Facilities)
Santa Ana Region

A. Monitoring

1. The discharger(s) shall inspect the waste holding and disposal areas and note any discharges off the property that is under the control of the discharger. Inspections will be made daily when wastewater is being applied to cropland and weekly during other periods. The results of all inspections will be recorded and submitted with the required reports.

2. During each significant storm event[5], the discharger(s) shall make visual inspections of all storm water containment structures.

3. The discharger(s) shall record the approximate time of each storm-related discharge that results in off-property discharges of storm water commingled with wastewater or manure, and its approximate duration.

4. The discharger(s) shall record each manure-hauling event on a manure tracking manifest form.

B. Reporting

1. By January 15 of each year, an annual report of animal waste discharge and storm water discharge shall be submitted.

2. The annual report shall be submitted on forms provided by Regional Board staff and shall also include copies of all manure tracking manifests for the reporting period and copies of the inspection logs required to be maintained under A.1. and A.4. above.

3. The discharger shall notify the Regional Board by telephone within 24 hours of any unauthorized discharge of wastes. This notification shall be followed by a written report which shall be submitted to the Regional Board within two weeks of the discharge . The written report shall contain:

---

[5] A significant storm event is defined as a storm event which results in continuous discharge of storm water for a minimum of one hour, or intermittent discharge of storm water for a minimum of three hours in a 12-hour period.

California Regional Water Quality Control Board
Santa Ana Region

FACT SHEET

GENERAL WASTE DISCHARGE REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS (DAIRIES AND RELATED FACILITIES) WITHIN THE SANTA ANA REGION, ORDER NO. 99-11, NPDES NO. CAG018001

I. Need for General Waste Discharge Requirements

There are approximately 302 animal feeding operations (AFOs), including dairies, heifer ranches and calf nurseries in the Santa Ana Region. These AFOs contain about 370,000 animals [213,000 lactating (milking) cows, 37,000 dry (pregnant) cows, 56,000 heifers (12-18 month old cows), and 60,000 calves (less than 12 month old cows)]. Two hundred and seventy nine of these facilities (320,000 animals) are located in the Chino Basin, while 23 of the facilities (50,000 animals) are located in the San Jacinto Basin. The wastes generated at these facilities include manure, wash water[1] and storm water runoff from manured areas. About 950,000 tons of manure (at 33% moisture) were produced in the corrals by these facilities in 1998. This is equivalent to about 4,000,000 cubic yards of manure (at 33% moisture). About 15 million gallons of washwater, which contains about 10% of the manure produced by milking cows, is discharged to the ground each day. Wastes produced at AFOs contain high levels of bacteria, biochemical oxygen demand, ammonia, nitrate, phosphorus, and other salts.

Wastes in rainfall runoff from AFOs in the Chino Basin affect Chino Creek, Mill Creek and Reach 3 of the Santa Ana River, which are 303(d) listed impacted water bodies. Wastes from AFOs that are discharged to the Santa Ana River also affect the quality of groundwater in Orange County, since the Orange County Water District captures and percolates a significant amount of the flow of the Santa Ana River to recharge the Santa Ana Forebay Groundwater Subbasin. The Chino Basin is considered to have the highest concentration of dairy animals in the world, with its 279 facilities and 320,000 animals located within an area of less than 50 square miles (30,000 acres). The application of manure to the ground in the Chino Basin has resulted in significant groundwater pollution, specifically total dissolved solids (TDS) and nitrate. Affected groundwater in the Chino Basin also impacts the quality of the Santa Ana River because the Santa Ana River becomes a gaining steam in the Prado Basin where groundwater from the Chino Basin contributes to the surface flow of the Santa Ana River.

Wastes in surface runoff from AFOs in the San Jacinto Basin affect the San Jacinto River, Canyon Lake and Lake Elsinore. Phosphorus from AFOs is considered to be the primary cause of algae blooms in Lake Elsinore, the largest natural freshwater lake in Southern California. These algae blooms deplete oxygen in the lake, creating fish kills and other conditions which affect the economic development and aesthetics of the area. Proper management of wastes from AFOs is essential to protect the surface and groundwater resources of the Region.

---

1 Water used to wash cows prior to milking, milking equipment and the milk barn.

Beginning in 1972, and continuing through 1994, the Board's regulatory approach was to issue individual waste discharge requirements to each AFO. Changes in the location, size, number of animals, or operator of these facilities were frequent and necessitated rescinding existing waste discharge requirements and issuing new requirements. The time demands to draft and rescind individual waste discharge requirements far exceeded the staff resources available to do so.

Criteria cited in 40 CFR 122.28 state that general permits may be issued for facilities 1) involving the same or substantially similar types of operations; 2) discharging the same types of wastes; 3) having the same or similar operating conditions; 4) requiring the same or similar monitoring; and 5) that are more appropriately regulated under a general permit rather than individual permits. The types of wastes and appropriate waste discharge requirements for dairies and related facilities are similar. Given this, the AFOs in the Region can be adequately and appropriately regulated by coverage under the terms of a general waste discharge permit.

On February 17, 1994, the Board adopted Order No. 94-7, General Waste Discharge Requirements For Concentrated Animal Feeding Operations, Including Dairies, Within The Santa Ana Region (NPDES NO. CAG018001). Order No. 94-7 has allowed the Board to better utilize staff resources. Currently, approximately 215 AFOs have been enrolled under Order No. 94-7. The remaining AFOs are either covered under individual waste discharge requirements issued prior to 1994, have submitted a Notice of Intent (NOI) to be covered under Order No. 94-7, or have not yet submitted a NOI. AFOs that have submitted a NOI and have not yet been granted coverage under Order No. 94-7 and AFOs that are still covered under individual waste discharge requirements, have not been granted coverage under Order No. 94-7 because they have not yet completed Engineered Waste Management Plans (EWMPs). Order No. 94-7 expired on March 1, 1999. Therefore, it is necessary to renew the waste discharge requirements contained in Order No. 94-7.

Although Order No. 94-7 regulated the discharge of waste from all AFOs (including non-dairy related facilities), the proposed order only addresses the discharge of wastes from dairies and related facilities, such as calf nurseries and heifer ranches. Over 95% of the dischargers enrolled, or waiting to be enrolled, under Order 94-7 are dairies and related facilities. Many of the requirements contained in Order No. 94-7, and this proposed order, are not appropriate for most other types of AFOs. Therefore, persons discharging, or proposing to discharge, wastes from other types of AFOs must obtain coverage under individual waste discharge requirements or another general permit, if one is adopted.

Currently, the larger AFOs are required to get coverage under the State Water Resources Control Board (State Board) General Industrial Storm Water Permit (Order No. 91-13-DWQ) for storm water runoff from their facilities. However, the proposed order consolidates all requirements for AFOs, including those for storm water runoff, into a single permit. Once coverage is granted under this order, other waste discharge requirements issued by this Regional Board and coverage under the State's General Permit will be terminated.

The Federal Clean Water Act (CWA) states that all concentrated animal feeding operations (CAFOs) are point sources and are subject to NPDES permitting requirements. The CWA defines a CAFO as any AFO that has more than 1,000 animal units (i.e., dairy cattle are considered 1.4 animal units). About 70% of the AFOs in the Region have over 1,000 animal units, and are, therefore, considered CAFOs under the CWA. However, the CWA states that smaller facilities can be designated as CAFOs by the permitting authority (i.e., Regional Board) after considering certain criteria. These criteria include, in part, the location of the AFO relative to surface waters, the slope, rainfall and other factors that increase the likelihood or frequency of discharges, and the impact of the aggregate amount of waste from many small operations in a watershed that exceed that of lager operations. Board staff has determined that all dairies, heifer ranches and calf nurseries in the Region meet one or more of these criteria, and, therefore, should be designated as CAFOs under the CWA. Tentative Order No. 99-11 designates all dairies, heifer ranches and calf nurseries in the Region as CAFOs, and makes them subject to NPDES requirements. Therefore, the acronym "CAFO" will be used to describe all facilities addressed by Tentative Order No. 99-11.

II. <u>Basis for Discharge Limitations</u>

<u>Development and Implementation of Engineered Waste Management Plans</u>

In compliance with the CWA and the California Code of Regulations, Tentative Order No. 99-11 prohibits discharges to any surface water bodies, or tributary thereof, unless rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated waste waters plus the runoff from a 25-year, 24-hour rainfall event. (Title 27, Chapter 7, Subchapter 2, Article 1, Section 22562(a), California Code of Regulations and 40 CFR Part 412). Therefore, process waste water in overflows resulting from rainfall events that are chronic or catastrophic, or are in excess of a 24-hour, 25-year rainfall event, may be discharged to surface water bodies in accordance with requirements specified in this order. To insure that compliance with these requirements is achieved, all CAFOs are required to develop and implement an Engineered Waste Management Plan (EWMP). The guidelines for the preparation of an EWMP are included in Attachment "B" of the proposed order. Attachment "B" is intended to be revised by the Executive Officer in the near future. As with expired Order No. 94-7, Tentative Order No. 99-11 authorizes the Executive Officer to make necessary revisions to "Attachment B".

<u>Prohibition on the Application of Manure to Land in the Chino Basin</u>

The Regional Board has conducted extensive studies on TDS and nitrate using computer models to determine acceptable salt loading rates to groundwater from various land uses, including dairies and other animal confinement facilities. These studies are the basis of the TDS and nitrogen management plan specified in the Water Quality Control Plan (Basin Plan) for the Region. In accordance with the TDS/nitrogen management plan, since 1972, waste discharge requirements

California Regional Water Quality Control Board
Santa Ana Region

August 20, 1999

ITEM:

SUBJECT: General Waste Discharge Requirements For Concentrated Animal Feeding Operations (Dairies And Related Facilities) Within The Santa Ana Region, Order No. 99-11, NPDES No. CAG018001

DISCUSSION:

See attached Fact Sheet

RECOMMENDATION:

Adopt Order No. 99-11, as presented.

Comments were solicited from the following agencies and/or persons:

U.S. EPA, Washington, Office of Wastewater Enforcement and Compliance - Michael B. Cook
U.S. EPA, San Francisco – Alexis Straus
U.S. EPA, Permit Issuance Section - Terry Oda (W-5-1)
U.S. EPA, San Francisco – Dan Meer
State Water Resources Control Board, Office of the Chief Counsel - Ted Cobb
State Water Resources Control Board, DWQ – Jim Kessel, Jack Hodges, Cheryl Closson
State Department of Water Resources - Glendale
State Department of Health Services - San Bernardino/Santa Ana/San Diego
State Department of Fish and Game - Fred Worthley
Regional Water Quality Control Board (1) - Lee Michlin
Regional Water Quality Control Board (2) - Loretta Barsamian
Regional Water Quality Control Board (3) - Roger Briggs
Regional Water Quality Control Board (4) - Dennis Dickerson
Regional Water Quality Control Board (5) - Gary Carlton
Regional Water Quality Control Board (6) - Harold J. Singer
Regional Water Quality Control Board (7) - Philip Gruenberg
Regional Water Quality Control Board (9) - John Robertus
San Bernardino County Board of Supervisors
San Bernardino County Department of Environmental Health Services - Pam Bennett
San Bernardino County Transportation/Flood Control District - Naresh Varma
San Bernardino County LEA
Riverside County Board of Supervisors
Riverside County Department of Environmental Health Services

Riverside County Flood Control and Water Conservation District - Jason Christie
Riverside County LEA
City of Chino
City of Ontario
Milk Producers Council - Robert Feenstra
California Milk Producers Association – John Godino
Santa Ana Watershed Project Authority - Joseph Grindstaff
Inland Empire Utilities Agency – Doug Drury
Orange County Water District - Bill Mills, Nira Yamachika
U.C. Extension, San Bernardino - Abraham Wubishet
Inland Empire West Resource Conservation District - Jeff Wilson
National Resource Conservation Service - Jim Earsom
City of Lake Elsinore – Dick Watenpaugh, Pat Kilroy
Eastern Valley Municipal Water District
Western United Dairymen - Gary Conover, John Borges
Chino Basin Watermaster - Tracy Stewart
Daily Bulletin - Bob Page
Orange County Register
Press Enterprise - Leslie Bergman
Northwest Mosquito and Vector Control District
Santa Ana River Watershed Group - Lindel Marsh
Orange County Sanitation District - Blake Anderson
Water Advisory Committee of Orange County – H. E. Hartge
Los Alisos Water District – Kenneth Petersen
Municipal Water District of Orange County – Stanley E. Sprague
El Toro Water District – Ronald Kennedy
Mesa Consolidated Water District – Fred Bockmiller
Irvine Ranch Water District – Paul D. Jones II
Metropolitan Water District – Bob Huntley
Yorba Linda Water District – Arthur C. Korn
City of Anaheim, Public Utilities Department – Edward K. Aghjayan
Dairy Mailing List

CUPA

San Bernardino County Fire Department • Hazardous Materials Division

620 South 'E' Street, San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460 • www.sbcfire.org

HAZARDOUS WASTE GENERATOR AND HAZARDOUS MATERIALS HANDLER INSPECTION REPORT

FA #: FA0000513 Facility Name: Joe Borba Dairy #2 Inspection Date: August 12, 2008

Site Address: 14545 S. Grove Avenue Phone #: 909-597-2712

City: Ontario Zip Code: 91762 EPA ID #: CAL000319704

Consent Granted by:

☒ Inspect ☒ Photograph Name: Karen Larkin Title: Office Manager # Emp: N/A

Refer to Title 19 and Title 22 of the California Code of Regulations (CCR), Chapter 6.5 of the Health and Safety Code (CHSC) and Division 3 of Title 2 of the San Bernardino County Code (CC). The following code sections are either in Violation (V) of, in Compliance (C) with, the applicable laws and regulations, or compliance is not applicable, not addressed or unknown (N).

GENERAL REQUIREMENTS FOR GENERATORS		V	C	N
101. Hazardous Waste Generator Permit current	CC 23.0602(b)(1)			X
102. Facility access for inspection granted - HW only	CHSC 25185		X	
103. Hazardous Waste determination made	CCR 66262.11	X		
104. EPA ID Number obtained	CCR 66262.12(a)		X	
105. Hazardous Waste storage/treatment authorization	CHSC 25189.5(d)			X
106. Facility operated/maintained to prevent release/fire	CCR 66265.31	X		
107. Contingency Plan established	CCR 66265.51(a)		X	
108. Recyclable materials managed lawfully	CHSC 25143.2			X
905. Universal Waste managed lawfully	CCR 66273.1			X
STORAGE AND LABELING REQUIREMENTS				
110. Tank/container labeled/marked "Hazardous Waste"	CCR 66262.34(f)(3)	X		
111. Hazardous Waste label complete	CCR 66262.34(f)(3)	X		
112. Accumulation start date on tank/container	CCR 66262.34(f)(2)	X		
113. Hazardous Waste accumulation time not exceeded	CCR 66262.34	X		
114. Hazardous Waste containers sound	CCR 66265.171	X		
115. Hazardous Waste containers not leaking	CCR 66265.173(b)	X		
116. Hazardous Waste containers closed	CCR 66265.173(a)	X		
117. Contaminated containers managed properly	CCR 66261.7			X
118. Container storage area inspected weekly	CCR 66265.174			X
119. Hazardous Waste managed lawfully	CHSC 25154	X		
120. Hazardous Waste aboveground tank system inspected	CCR 66262.34			X
HAZARDOUS WASTE RECORDS AND MANIFESTS				
125. Hazardous Waste transported with a manifest	CCR 66262.20(a)		X	
126. Hazardous Waste manifest complete	CCR 66262.23		X	
127. Hazardous Waste manifests sent to DTSC	CCR 66262.23(a)(4)		X	
128. Manifests retained for at least 3 years	CCR 66262.40(a)		X	
129. Biennial Report prepared	CCR 66262.41			X
130. Hazardous Waste analyses retained for 3 years	CCR 66262.40(c)			X
31. Training documentation complete & available	CCR 66265.16			X
32. Copy of completed SB 14 available	CCR 67100.3			X
35. Used oil managed properly	CHSC 25250.4	X		
36. Used oil not contaminated with Hazardous Waste	CHSC 25250.7			X
37. Consolidated manifesting records available	CHSC 25160.2(b)(3)		X	
38. Used oil filters managed lawfully	CCR 66266.130	X		
39. Spent lead acid batteries managed lawfully	CCR 66266.81	X		
DISPOSAL AND TRANSPORTATION				
45. Illegal disposal/abandonment of Hazardous Waste	CHSC 25189.5(a)	X		
46. Illegal disposal of used oil	CHSC 25250.5(a)			X
47. Transporting Hazardous Waste w/o valid registration	CHSC 25163			X
8. Hazardous Waste hauled by transporter w/o valid registration	CHSC 25163			X
9. Hazardous Waste transported to an unauthorized facility	CHSC 25189.5(c)			X

GENERAL REQUIREMENTS FOR HANDLERS		V	C	N
201. Hazardous Material Handler permit current	CC 23.0602(b)(3)			X
202. Business Plan established	CHSC 25503.5		X	
203. Business Plan submitted/updated	CHSC 25505		X	
204. Hazardous Materials release reported	CHSC 25507			X
205. Facility access for inspection granted – HM	CHSC 25508		X	
206. Regulated Substances registration filed	CHSC 25533(a)			X
207. SPCC Plan prepared	CHSC 25270.5(c)			X
230. Business Plan implemented	CHSC 25503.5			X

INSPECTION NARRATIVE

An inspection was conducted to verify operating status of this dairy. Upon receipt of invoice, facility contacted the Fiscal Division indicating that a new dairy is operation at this location. According to Karen Larkin, this dairy ceased operations in May 2008 (prior to permits expiring). GH Dairy has relocated to this address and the previous Lindsey Dairy (FA0000361). Karen Larkin escorted me throughout the inspection.

Upon inspection, several containers of abandoned hazardous waste left by Joe Borba # 2 Dairy were observed. The abandoned hazardous waste observed was:

- (1) cut down, open 55-gallon drum containing what appears to be several gallons of used oil (in front of old repair shop area – see photo 2 of attached narrative)
- (1) open 5-gallon container with what appears to be oily sludge (in front of old repair shop area – see photo 2 of attached narrative)
- (1) 55-gallon drum being used as a trash can, contains several aerosol cans (in front of old repair shop area – see photo 3 of attached narrative)

Continued on next page

NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN 30 DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.

Inspected By: [signature] Sign Name

Leslie Heaviside
Print Name

Received By: CERTIFIED MAIL
Sign Name

Print Name

Title:

Report Date: August 27, 2008

Form Revised 1/16/2007

CUPA
San Bernardino County Fire Department • Hazardous Materials Division
620 South 'E' Street, San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460 • www.sbcfire.org

SUPPLEMENTAL INSPECTION REPORT

			INSPECTION DATE: August 12, 2008
FACILITY ID FA0000513	FACILITY NAME: Joe Borba Dairy #2	FACILITY LOCATION: 14545 S. Grove Avenue,	
Consent Granted by: ☒ Inspect ☒ Photograph	NAME Karen Larkin	TITLE Office Manager	

Abandoned hazardous waste observed continued:

- (1) open 15-gallon container of what appears to be used oil (in old commodity barn - see photo 4 of attached narrative)
- Approximately (15) 1-gallon containers of permethrin containing fly spray (in old commodity barn - see photo 6 of attached narrative)
- (1) open 5-gallon container with minimal amount of what appears to be used oil (in old commodity barn - see photo 5 of attached narrative)
- (1) 1-gallon container of what appears to be fly spray (in old commodity barn - see photo 7 of attached narrative)
- (1) 1-gallon container of what appears to be used oil (in old commodity barn - see photo 8 of attached narrative)
- (1) spent lead-acid automotive battery (in old commodity barn - see photo 9 of attached narrative)
- (1) 5-gallon container of unknown (in old commodity barn - see photo 10 of attached narrative)
- (1) 5-gallon container of unknown (adjacent to red feed tanks, not pictured)
- (1) 55-gallon drum of unknown (adjacent to yellow truck, see photo 12 of attached narrative)
- (1) 55-gallon drum of unknown (adjacent to B & J Trucking trailer, not pictured)
- (1) rusted, partially crushed, leaking 55-gallon drum (West of concrete truck parking area, amidst trash & debris – see photos 13 &14 of attached narrative)
- (1) open, rusted, partially crushed 55-gallon drum of unknown (South end of property, amongst large wood/debris piles - see photo 15 of attached narrative)
- (1) open 30-gallon drum containing unknown (South end of property, amongst large wood/debris piles - see photo 16 of attached narrative)
- (1) 55-gallon drum containing unknown contents (South end of property, amongst large wood/debris piles - see photo 17 of attached narrative)
- (2) 55-gallon drums and (1) 15-gallon container of unknown contents (South end of property, amongst large wood/debris piles - see photo 18 of attached narrative)
- (1) open 30-gallon drum containing unknown contents (South end of property, amongst large wood/debris piles - see photo 19 of attached narrative)
- (3) approximately 1,000-gallon AST's - previously used for Diesel storage (NE side of property). According to Gus DeMelo (via telephone) two of the AST's are empty and one may contain some Diesel fuel.

ocumentation Review:

Records of last disposal in July and August 2007 were available onsite.

NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN 30 DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.

ected By: [signature] Sign Name | Received By: CERTIFIED MAIL Sign Name | Title:

Leslie Heaviside Print Name | Print Name | Report Date: August 27, 2008

CUPA
San Bernardino County Fire Department • Hazardous Materials Division
620 South 'E' Street, San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460 • www.sbcfire.org

SUPPLEMENTAL INSPECTION REPORT

INSPECTION DATE:	August 12, 2008

FACILITY ID	FACILITY NAME:	FACILITY LOCATION:
FA0000513	Joe Borba Dairy #2	14545 S. Grove Avenue,
Consent Granted by: ☑Inspect ☑Photograph	NAME Karen Larkin	TITLE Office Manager

Correct the following violations within 30 days:

103. Failure to make Hazardous Waste determination - CCR 66262.11:

The generator of a waste must determine whether the waste being generated is a hazardous waste. Observed the following containers of unknown hazardous waste: (1) cut down, open 55-gallon drum containing what appears to be several gallons of used oil (in front of old repair shop area – see photo 2 of attached narrative); (1) open 5-gallon container with what appears to be oily sludge (in front of old repair shop area – see photo 2 of attached narrative); (1) open 15-gallon container of what appears to be used oil (in old commodity barn - see photo 4 of attached narrative); (1) open 5-gallon container with minimal amount of what appears to be used oil (in old commodity barn - see photo 5 of attached narrative); (1) 1-gallon container of what appears to be used oil (in old commodity barn - see photo 8 of attached narrative); 1) 5-gallon container of unknown (in old commodity barn - see photo 10 of attached narrative); (1) 5-gallon container of unknown (adjacent to red feed tanks, not pictured); (1) 55-gallon drum of unknown (adjacent to yellow truck, see photo 12 of attached narrative); (1) 55-gallon drum of unknown (adjacent to B & J Trucking trailer, not pictured); (1) rusted, partially crushed, leaking 55-gallon drum West of concrete truck parking area, amidst trash & debris – see photos 13 &14 of attached narrative); (1) open, rusted, partially crushed 55-gallon drum of unknown (South end of property, amongst large wood/debris piles - see photo 15 of attached narrative); (1) open 30-gallon drum containing unknown (South end of property, amongst large wood/debris piles- see photo 16 of attached narrative); (1) 55-gallon drum containing unknown contents South end of property, amongst large wood/debris piles - see photo 17 of attached narrative); (2) 55-gallon drums and (1) 15-gallon container of unknown contents (South end of property, amongst large wood/debris piles - see photo 18 of attached narrative); (2) open 30-gallon drum containing unknown contents (South end of property, amongst large wood/debris piles – see photos 16 & 19 of attached narrative).

To correct this violation: Submit copies of manifests documenting what the unknown contents are proof of proper disposal.

06. Facility not operated/maintained to prevent release/fire - CCR 66265.31:
14. Hazardous Waste containers not sound - CCR 66265.171:
15. Hazardous Waste containers leaking - CCR 66265.173(b):
16. Hazardous Waste containers not closed - CCR 66265.173(a):
19. Hazardous Waste not managed lawfully - CHSC 25154:
35. Used oil managed properly - CHSC 25250.4:

Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. A container holding hazardous waste shall not be opened, handled, transferred or stored in a manner which may rupture the container or cause it to leak. Open, leaking containers of hazardous waste and used oil is unlawful management.

☑ **NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN 30 DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.**

Inspected By: [signature] Sign Name — Received By: CERTIFIED MAIL Sign Name — Title:

Leslie Heaviside Print Name — Print Name — Report Date: August 27, 2008

Revised 1/16/2007

CUPA
San Bernardino County Fire Department • Hazardous Materials Division
620 South 'E' Street, San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460 • www.sbcfire.org

SUPPLEMENTAL INSPECTION REPORT

INSPECTION DATE:	August 12, 2008

FACILITY ID	FACILITY NAME:	FACILITY LOCATION:
FA0000513	Joe Borba Dairy #2	14545 S. Grove Avenue,
Consent Granted by: ☒Inspect ☒Photograph	NAME Karen Larkin	TITLE Office Manager

Observed (1) cut down, open 55-gallon drum containing what appears to be several gallons of used oil (in front of old repair shop area – see photo 2 of attached narrative); (1) open 5-gallon container with what appears to be oily sludge (in front of old repair shop area – see photo 2 of attached narrative); (1) open 15-gallon container of what appears to be used oil (in old commodity barn - see photo 4 of attached narrative); (1) open 5-gallon container with minimal amount of what appears to be used oil (in old commodity barn - see photo 5 of attached narrative); (1) rusted, partially crushed, leaking 55-gallon drum (West of concrete truck parking area, amidst trash & debris – see photos 13 &14 of attached narrative); (2) open 30-gallon drum containing unknown contents (South end of property, amongst large wood/debris piles – see photos 16 & 19 of attached narrative).

Recommendation: remove soil contaminated from leaking drums and containers. Submit a copy of the receipt documenting proper disposal of contaminated soil.

To correct violations 106, 114, 115,116, 119 & 135: Submit copies of manifests for removal of contents of all leaking drums and containers.

110. Tank/container not labeled/marked "Hazardous Waste"- CCR 66262.34(f)(3):
111. Hazardous Waste label not complete - CCR 66262.34(f)(3):
112. Accumulation start date not on tank/container - CCR 66262.34(f)(2):
Each container used for onsite accumulation of hazardous waste shall be labeled or marked clearly with the words, "Hazardous Waste." Additionally, all containers shall be labeled with the following information: composition and physical state of the wastes, statement or statements which call attention to the particular hazardous properties of the waste (e.g., flammable, reactive, etc.), name and address of the person producing the waste and accumulation start date.

Observed the following containers that were not properly labeled: (1) cut down, open 55-gallon drum containing what appears to be several gallons of used oil (in front of old repair shop area – see photo 2 of attached narrative); (1) open 5-gallon container with what appears to be oily sludge (in front of old repair shop area – see photo 2 of attached narrative); (1) open 15-gallon container of what appears to be used oil (in old commodity barn - see photo 4 of attached narrative); (1) open 5-gallon container with minimal amount of what appears to be used (in old commodity barn - see photo 5 of attached narrative); (1) 1-gallon container of what appears to be used (in old commodity barn - see photo 8 of attached narrative); 1) 5-gallon container of unknown (in old commodity barn - see photo 10 of attached narrative); (1) 5-gallon container of unknown (adjacent to red feed tanks, not pictured); (1) 55-gallon drum of unknown (adjacent to yellow truck, see photo 12 of attached narrative); (1) 55-gallon drum of unknown (adjacent to B & J Trucking trailer, not pictured); (1) rusted, partially crushed, leaking 55-

NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN 30 DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.

Inspected By: ________ (Sign Name) Received By: CERTIFIED MAIL (Sign Name) Title: ________

Leslie Heaviside (Print Name) ________ (Print Name) Report Date: August 27, 2008

SUPPLEMENTAL INSPECTION REPORT

INSPECTION DATE:	August 12, 2008

FACILITY ID	FACILITY NAME:	FACILITY LOCATION:
FA0000513	Joe Borba Dairy #2	14545 S. Grove Avenue,
Consent Granted by: Inspect Photograph	NAME Karen Larkin	TITLE Office Manager

gallon drum (West of concrete truck parking area, amidst trash & debris – see photos 13 &14 of attached narrative); (1) open, rusted, partially crushed 55-gallon drum of unknown (South end of property, amongst large wood/debris piles - see photo 15 of attached narrative); (1) open 30-gallon drum containing unknown (South end of property, amongst large wood/debris piles- see photo 16 of attached narrative); (1) 55-gallon drum containing unknown contents (South end of property, amongst large wood/debris piles - see photo 17 of attached narrative); (2) 55-gallon drums and (1) 15-gallon container of unknown contents (South end of property, amongst large wood/debris piles - see photo 18 of attached narrative); (2) open 30-gallon drum containing unknown contents (South end of property, amongst large wood/debris piles – see photos 16 & 19 of attached narrative).

o correct violations 110, 111 & 112: Submit a copy of manifests documenting removal of all hazardous waste.

13. Hazardous Waste accumulation time exceeded - CCR 66262.34:
ll containers of hazardous waste observed as listed above were not labeled with the accumulation start date. The st manifests documenting removal were dated August 2007. Since hazardous waste has not been removed in the st year, the waste observed onsite has exceeded the accumulation time.

o correct this violation: Submit a copy of manifests documenting removal of all hazardous waste.

38. Used oil filters not managed lawfully - CCR 66266.130:
lters that are drained of free-flowing used oil and are managed and recycled in compliance with the requirements iall not be regulated as hazardous waste. Drained used oil filters must be accumulated, stored, and transferred in closed, rainproof container that is capable of containing any used oil that may separate from the filters placed side. Containers of drained, used oil filters shall be labeled as "drained used oil filters" and show initial date of cumulation.

oserved (1) used oil filter on the concrete (adjacent to truck parking area).

correct this violation: Submit a copy of the receipt documenting proper disposal of the used oil filter.

9. Used batteries not managed lawfully - CCR 66266.81
e generator shall retain, at the generator's place of business for at least three years, a legible copy of each inifest or bill of lading which identifies spent lead-acid storage batteries shipped to a person who stores the teries or who uses, reuses, recycles or reclaims the batteries or their components. Records were not available at time of inspection to document removal of the spent lead-acid batteries.
served (1) spent lead-acid battery (in old commodity barn).

NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN 30 DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.

iected By: ____ Sign Name — Received By: CERTIFIED MAIL Sign Name — Title: ____

Leslie Heaviside
Print Name — ____ Print Name — Report Date: August 27, 2008

CUPA
San Bernardino County Fire Department • Hazardous Materials Division
620 South 'E' Street, San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460 • www.sbcfire.org

SUPPLEMENTAL INSPECTION REPORT

		INSPECTION DATE: August 12, 2008
FACILITY ID FA0000513	FACILITY NAME: Joe Borba Dairy #2	FACILITY LOCATION: 14545 S. Grove Avenue,
Consent Granted by: ☑Inspect ☑Photograph	NAME Karen Larkin	TITLE Office Manager

To correct this violation: 1) Submit a copy of the receipt documenting proper disposal of the spent lead-acid battery.

145. Abandonment of Hazardous Waste - CHSC 25189.5(a):
Hazardous waste must be disposed of according to this chapter. Joe Borba Dairy #2 ceased operations at this location in May 2008 and abandoned hazardous waste (detailed list under violation description for 110,111 and 112).

To correct this violation: Submit a copy of the manifests documenting removal off all hazardous wastes.

Universal Waste: Observed several aerosol cans in a 55-gallon drum of what appeared to be trash. If these are non-empty aerosol cans they must be disposed of as Universal Waste and CANNOT be disposed of as solid waste. A list of Universal Waste haulers is enclosed. If these cans are completely empty, they can be recycled as scrap metal.

Note: A receipt was provided at the time of inspection documenting removal of (1) 500-gallon gasoline AST.

****Submit the corrections requested above along with the signed Certificate of Compliance within 30 days.****

If you have any questions, comments or concerns feel free to contact me at (909) 386-8451 or lheaviside@sbcfire.org.

NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN 30 DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.

Inspected By: [signature] Sign Name — Received By: CERTIFIED MAIL Sign Name — Title: ——

Leslie Heaviside Print Name — —— Print Name — Report Date: August 27, 2008

CUPA
San Bernardino County Fire Department • Hazardous Materials Division
620 South "E" Street, San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460 • www.sbcfire.org

CERTIFICATE OF COMPLIANCE

Return Certification within 30 Days of Receipt to Inspector Leslie Heaviside

In the Matter of Respondent: Karen Larkin

Violation(s) cited on: August 27, 2008 *FA #::* FA0000513

Facility Name: Joe Borba Dairy #2

Site Address: 14545 S. Grove Avenue, Ontario, California

Certificate of Compliance Date: September 27, 2008

certify under penalty of law that:

Respondent has corrected the violations specified in the above-entitled action.

I have personally examined any documentation attached to this certification to establish that the violations have been corrected.

Based on my examination of the attached documentation and inquiry of the individuals, who prepared or obtained them, I believe the information to be true, accurate and complete.

I am authorized to file this certification on behalf of the Respondent.

I am aware there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature	*Date*
Printed or Typed Name	*Title*
Social Security/Federal ID Number	*Drivers License/ID Number*

tach the following documentation when returning the Certificate of Compliance:

pies of manifests for removal of contaminated soil, unknown contents of containers & drums
d fly spray.

PHOTO NARRATIVE

PHOTO 1

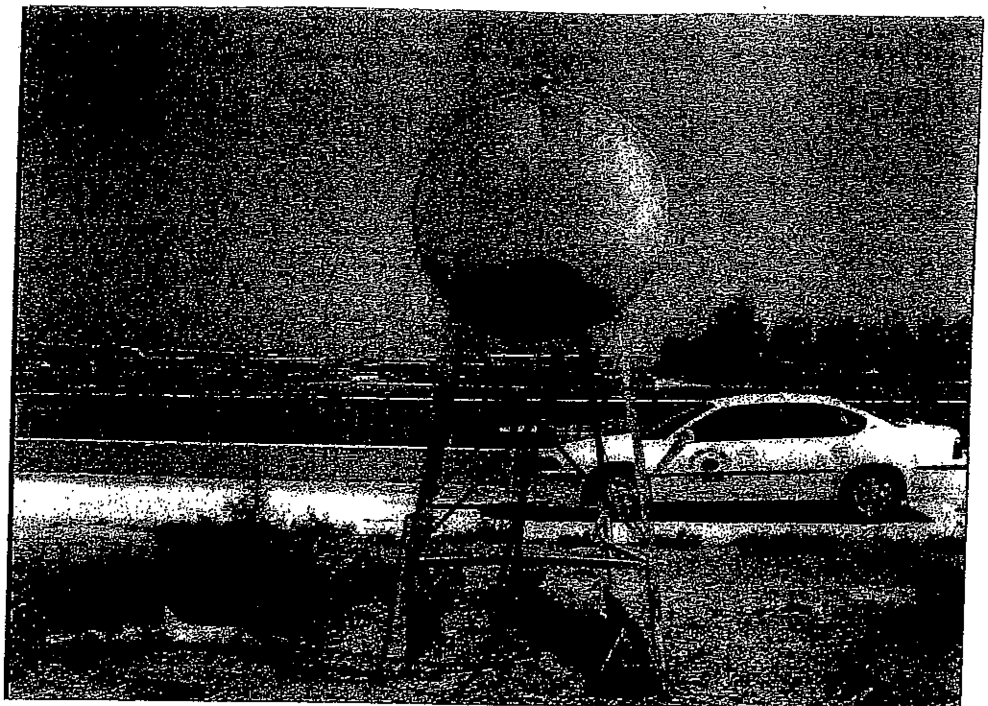
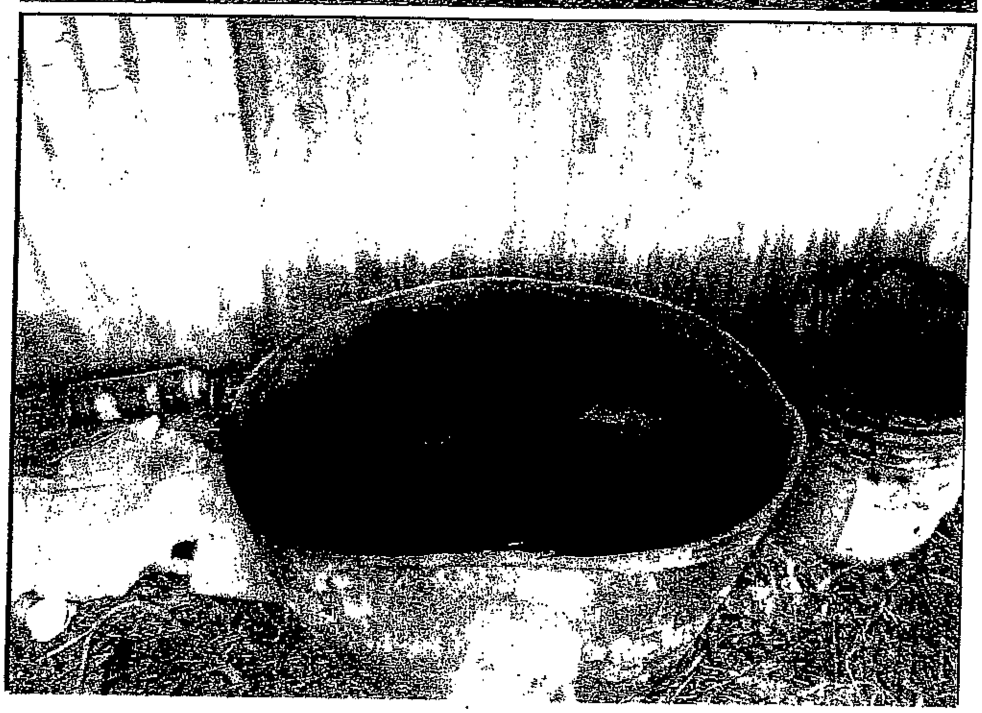


PHOTO 2



ːacility/Case Name:	Joe Borba Dairy #2	Facility ID #:	FA0000513
ˌddress:	14545 S. Grove Avenue, Ontario		
) Description:	(1) approximately 250-gallon AST (located on SW end of property, previously Half & Half Dairy). The AST is believed to be empty.		
) Description:	In front of old repair shop: (1) open, cut down 55-gallon drum containing what appears to be used oil & debris; (1) 5-gallon container of black residue		
ɜte Taken:	August 12, 2008		
ɪken By:	Leslie Heaviside	Signature:	

ed 10/12/2000

PHOTO NARRATIVE

PHOTO 3

PHOTO 4

ˈacility/Case Name: **Joe Borba Dairy #2** Facility ID #: **FA0000513**

ddress: **14545 S. Grove Avenue, Ontario**

) Description: **In front of old repair shop: 55-gallon drum being used as a trash container; observed aerosol cans inside the trash container**

) Description: **Old commodity barn: (1) open 15-gallon container of what appears to be used oil**

ate Taken: **August 12, 2008**

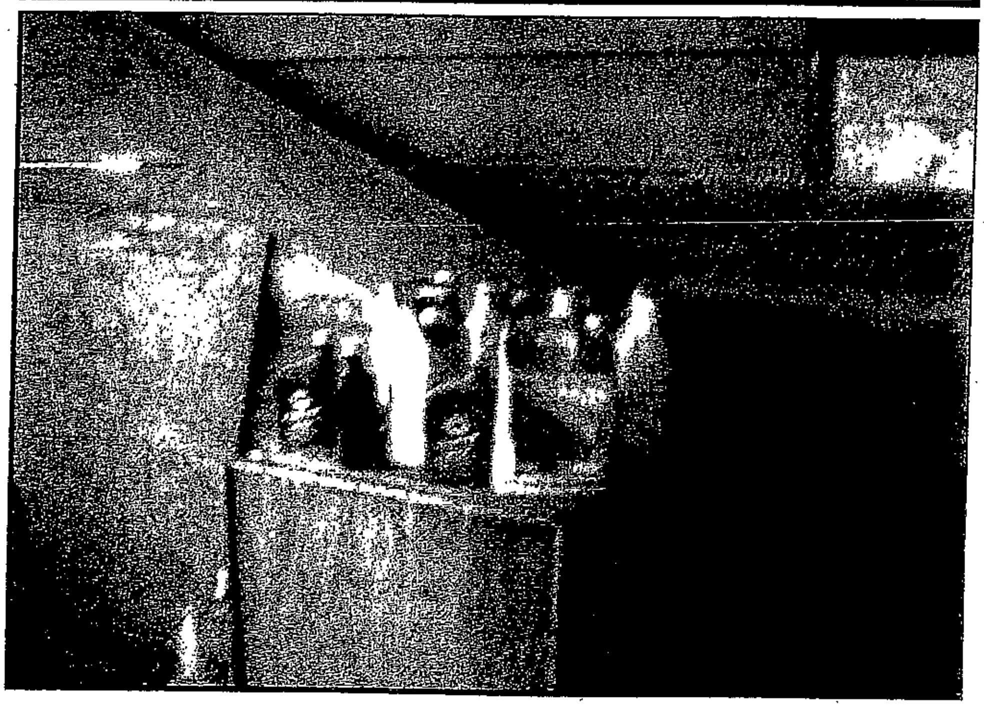
aken By: **Leslie Heaviside** Signature: [signature]

ed 10/12/2000

PHOTO NARRATIVE

PHOTO 5

PHOTO 6



'acility/Case Name:	Joe Borba Dairy #2	Facility ID #:	FA0000513
,ddress:	14545 S. Grove Avenue, Ontario		
) Description:	Old commodity barn: (1) open 5-gallon container of what appears to be used oil		
) Description:	Old commodity barn: Approximately (6) of (15) 1-gallon containers of permethrin insecticide (white bottles); (3) quart containers of ATF.		
ate Taken:	August 12, 2008		
ıken By:	Leslie Heaviside	Signature:	

PHOTO NARRATIVE

PHOTO 7

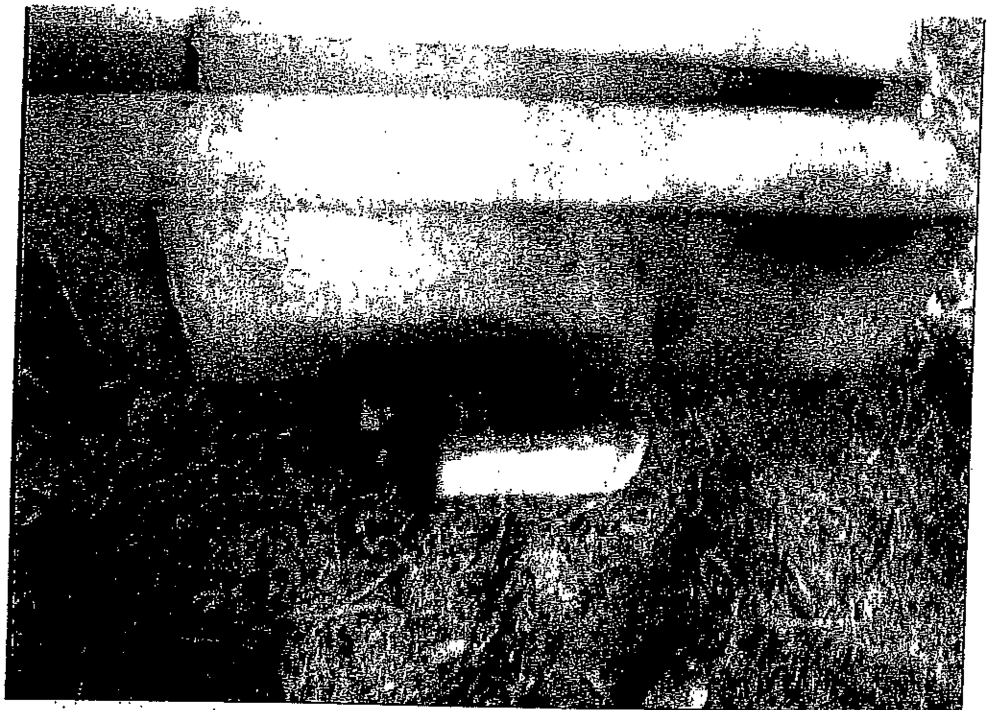
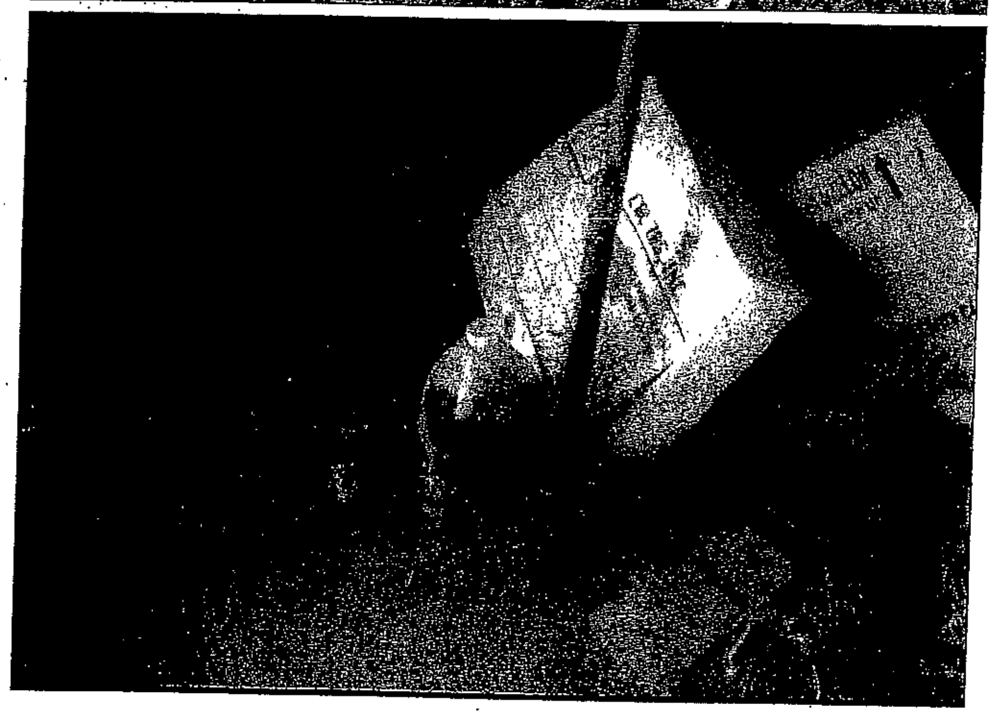


PHOTO 8



acility/Case Name: **Joe Borba Dairy #2** Facility ID #: **FA0000513**

ddress: **14545 S. Grove Avenue, Ontario**

) Description: **Old commodity barn: (1) 1-gallon container of what appears to be used oil**

Description: **Old commodity barn: (1) 1-gallon container of what appears to be used oil**

ıte Taken: **August 12, 2008**

ken By: **Leslie Heaviside** Signature: Leslie

PHOTO NARRATIVE

PHOTO 9

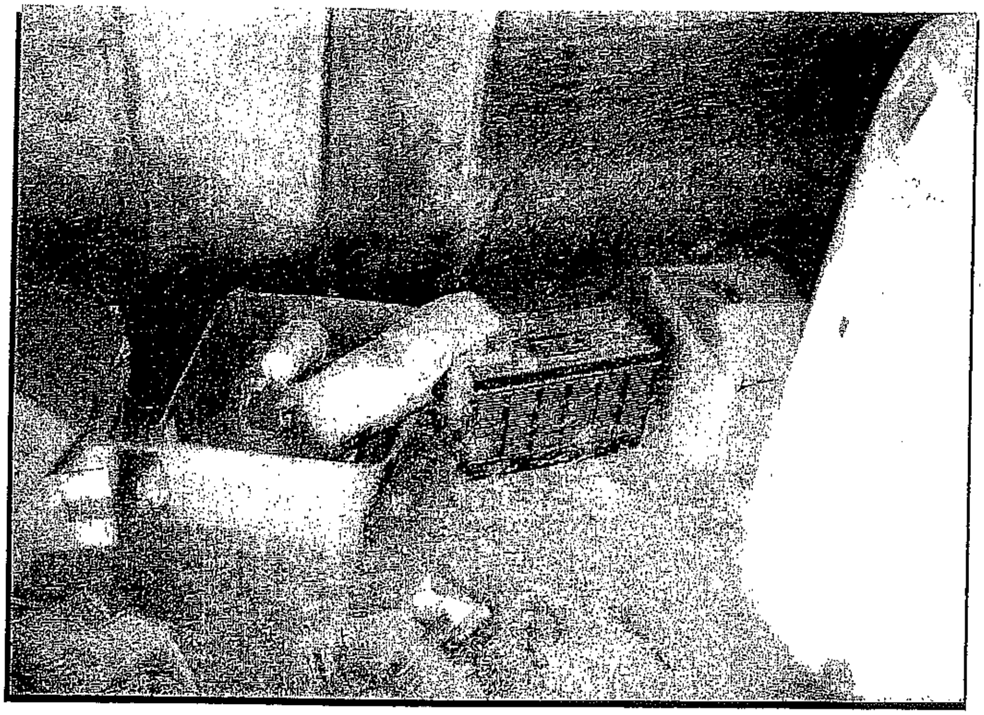


PHOTO 10

Facility/Case Name: **Joe Borba Dairy #2** Facility ID #: **FA0000513**

Address: **14545 S. Grove Avenue, Ontario**

9) Description: **Old commodity barn: (1) used automotive battery**

10) Description: **Old commodity barn: (1) 5-gallon container of what appears to be used oil**

Date Taken: **August 12, 2008**

Taken By: **Leslie Heaviside** Signature: ______________________

PHOTO NARRATIVE

PHOTO 11

PHOTO 12

ıcility/Case Name: Joe Borba Dairy #2 Facility ID #: **FA0000513**

ldress: 14545 S. Grove Avenue, Ontario

) Description: (1) used oil filter on ground (on concrete area, adjacent to truck parking area)

) Description: (1) open 55-gallon drum of unknown contents (on concrete area, next to yellow truck)

te Taken: August 12, 2008

ken By: Leslie Heaviside Signature:

PHOTO NARRATIVE

PHOTO 13

PHOTO 14

ˈacility/Case Name: **Joe Borba Dairy #2** Facility ID #: **FA0000513**

ıddress: **14545 S. Grove Avenue, Ontario**

3) Description: **(1) partially crushed 55-gallon drum of unknown, appears to be used oil (West of concrete truck parking area)**

4) Description: **Same 55-gallon drum pictured above, leaking from bottom bung**

ate Taken: **August 12, 2008**

ıken By: **Leslie Heaviside** Signature:

PHOTO NARRATIVE

PHOTO 15

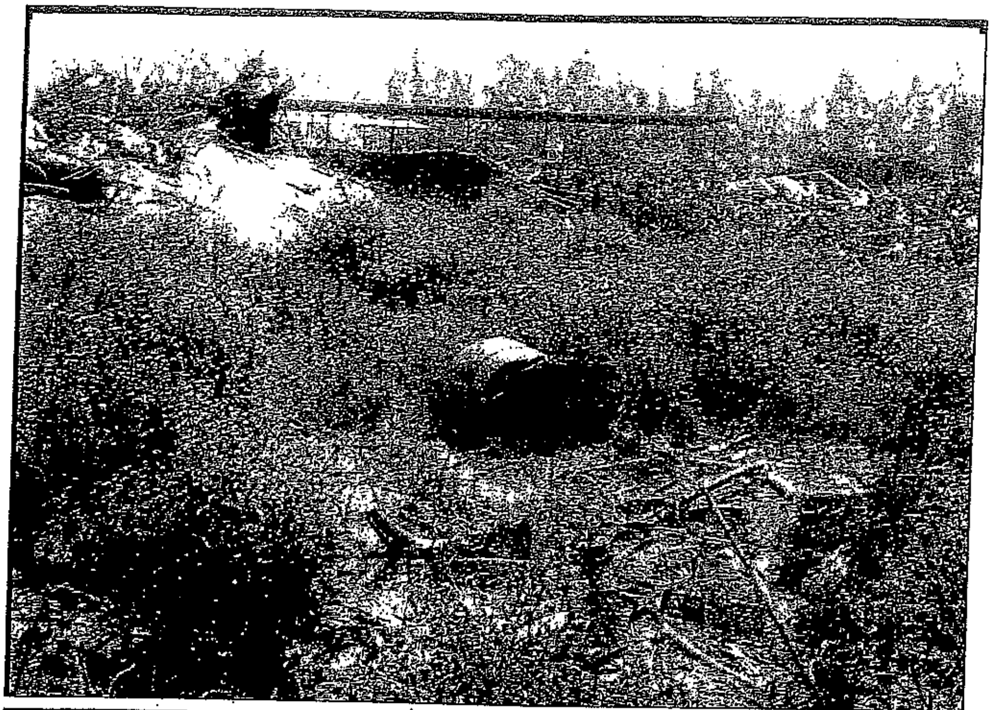


PHOTO 16

acility/Case Name: **Joe Borba Dairy #2** Facility ID #: **FA0000513**

ddress: **14545 S. Grove Avenue, Ontario**

5) Description: **(1) open, rusted, partially crushed 55-gallon drum of unknown (South end of property, amongst large wood/debris piles)**

) Description: **(1) open 30-gallon drum containing unknown (South end of property, amongst large wood/debris piles)**

ate Taken: **August 12, 2008**

ken By: **Leslie Heaviside** Signature:

PHOTO NARRATIVE

PHOTO 17

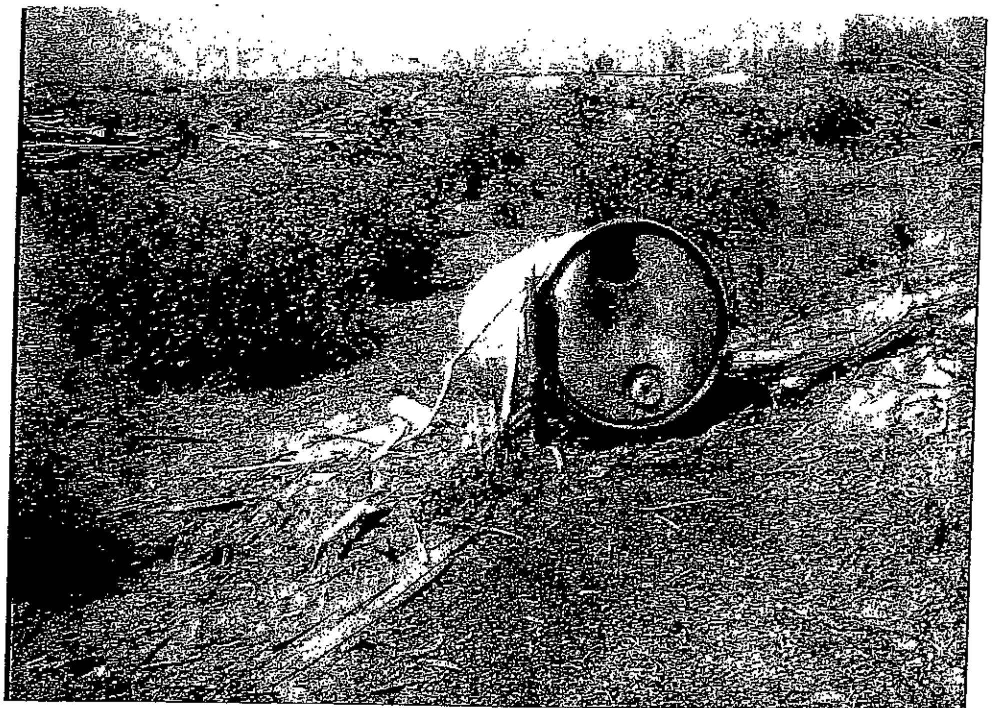


PHOTO 18

⁻acility/Case Name:	Joe Borba Dairy #2	Facility ID #:	FA0000513
\ddress:	14545 S. Grove Avenue, Ontario		

7) Description: (1) 55-gallon drum containing unknown contents (South end of property, **amongst large** wood/debris piles)

8) Description: (2) 55-gallon drums and (1) 15-gallon container of unknown contents (South **end of** property, amongst large wood/debris piles)

ate Taken: August 12, 2008

ıken By: Leslie Heaviside Signature:

PHOTO NARRATIVE

PHOTO 19

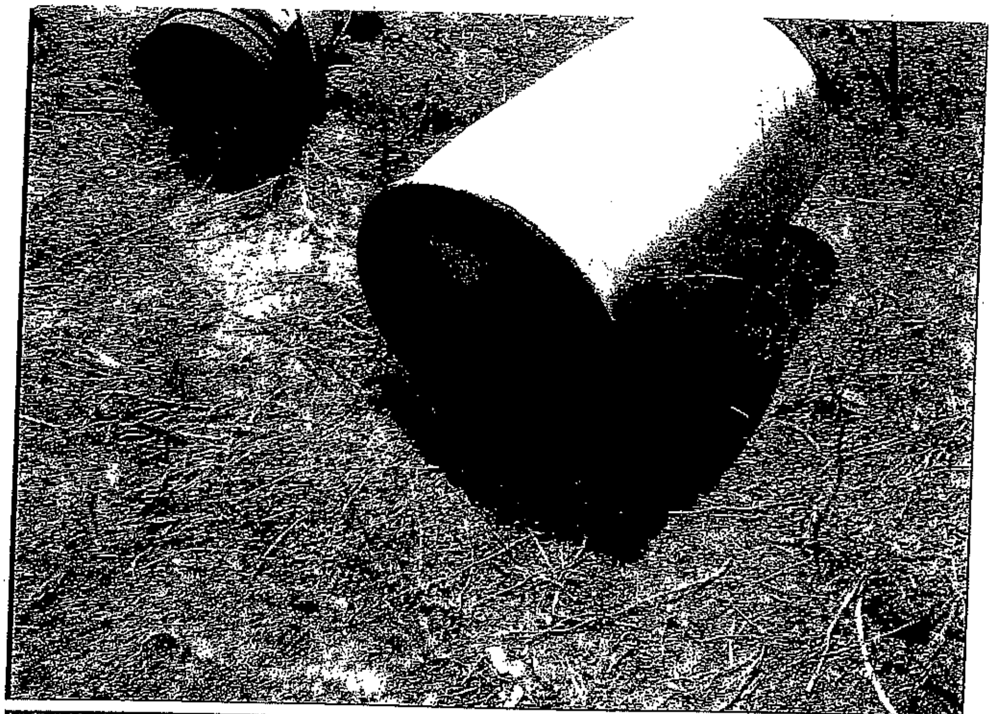


PHOTO 20

acility/Case Name: Joe Borba Dairy #2

Facility ID #: FA0000513

ldress: 14545 S. Grove Avenue, Ontario

) Description: (1) open 30-gallon drum containing unknown contents (South end of property, amongst large wood/debris piles)

) Description: (3) approximately 1,000-gallon AST's - previously used for Diesel storage (NE side of property)

te Taken: August 12, 2008

ken By: Leslie Heaviside

Signature:

APPENDIX C: REGULATORY DATABASE REPORT

PARTNER

Borba Land Phase II 189 Acres
14545 South Grove Avenue
Chino, CA 91710

Inquiry Number: 4851881.2s
February 10, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

14545 SOUTH GROVE AVENUE
CHINO, CA 91710

COORDINATES

Latitude (North):	33.9871710 - 33˚ 59' 13.81''
Longitude (West):	117.6229720 - 117˚ 37' 22.69''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	442459.5
UTM Y (Meters):	3760714.0
Elevation:	667 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640930 CORONA NORTH, CA
Version Date:	2012
Northeast Map:	5620426 GUASTI, CA
Version Date:	2012
Southwest Map:	5640938 PRADO DAM, CA
Version Date:	2012
Northwest Map:	5619074 ONTARIO, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140603
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
14545 SOUTH GROVE AVENUE
CHINO, CA 91710

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	HALF & HALF DAIRY	14651 GROVE AVE	ENF, San Bern. Co. Permit	Higher	1 ft.
2	B & B DAIRY	8521 EUCALYPTUS AVE	San Bern. Co. Permit	Higher	23, 0.004, NE
3	G H DAIRY #1	8451 EUCALYPTUS	San Bern. Co. Permit	Higher	33, 0.006, NNE
A4	PRIVATE RESIDENCE	PRIVATE RESIDENCE	LUST	Higher	34, 0.006, WNW
5	HARINGA FARMS	14848 S GROVE AVE	San Bern. Co. Permit	Lower	43, 0.008, SW
6	HARRY BOERSMA DAIRY	14746 GROVE	San Bern. Co. Permit	Lower	43, 0.008, WSW
A7	JOE BORBA DAIRY # 2	14545 S GROVE AVE	San Bern. Co. Permit	Higher	49, 0.009, WNW
8	BOUMA DAIRY	8731 EUCALYPTUS	SWEEPS UST, CA FID UST	Higher	57, 0.011, NNW
B9	JACK D STIEFEL DAIRY	8571 MERRILL AVE	HIST UST	Lower	90, 0.017, SE
B10	JACK & MACK STIEFEL	8571 MERRILL AVE	SWEEPS UST, CA FID UST	Lower	90, 0.017, SE
B11	JACK D STIEFEL	8571 MERRILL AVE	HIST UST, ENF, San Bern. Co. Permit	Lower	90, 0.017, SE
12	J & D STAR DAIRY #1	8315 MERRILL AVE	EMI, San Bern. Co. Permit, WDS	Lower	198, 0.038, South
13	O & M DAIRY	14474 GROVE AVE	ENF, San Bern. Co. Permit	Higher	418, 0.079, NW
14	G H DAIRY #3	8643 EUCALYPTUS AVE	ENF, San Bern. Co. Permit	Higher	430, 0.081, ENE
15	HERITAGE DAIRY #2	8649 MERRILL AVE	San Bern. Co. Permit	Lower	469, 0.089, ESE
16	JOE FERREIRA JR DAIR	14400 S GROVE AVE	San Bern. Co. Permit	Higher	768, 0.145, NW
17	BOUMA DAIRY	8731 EUCALYPTUS	HIST UST	Higher	810, 0.153, ENE
C18	GEORGE BORBA DAIRY	7955 EUCALYPTUS	SWEEPS UST, FINDS, ECHO	Higher	1009, 0.191, WNW
C19	GEORGE BORBA DAIRY	7955 EUCALYPTUS	CA FID UST	Higher	1009, 0.191, WNW
D20	TEUNE'S DAIRY	8749 MERRILL	SWEEPS UST, CA FID UST	Lower	1013, 0.192, ESE
D21	STRUIKMANS AND SONS	8749 MERRILL AVE	ENF, San Bern. Co. Permit	Lower	1013, 0.192, ESE
D22	TEUNES DAIRY	8749 MERRILL	HIST UST	Lower	1013, 0.192, ESE
D23	AG-TEUNE'S DAIRY	8749 MERRILL AVE	UST	Lower	1013, 0.192, ESE
C24	GEORGE BORBA & SON D	7955 EUCALYPTUS	AST, ENF, San Bern. Co. Permit	Higher	1028, 0.195, WNW
25	MAJESTIC FARMS #1	14333 WALKER	ENF, San Bern. Co. Permit	Higher	1054, 0.200, NNE
26	ALEWYN DAIRY #3	14361 GROVE	ENF, San Bern. Co. Permit	Higher	1061, 0.201, NW
E27	MINABERRY DAIRY	8731 EUCALYPTUS	San Bern. Co. Permit	Higher	1141, 0.216, ENE
E28	AG-BOUMA DAIRY	8731 EUCALYPTUS AVE	UST	Higher	1141, 0.216, ENE
29	MINABERRY DAIRY, #1	8888 EUCALYPTUS AVE	SWF/LF, EMI	Higher	1743, 0.330, ENE
F30	CHINO AIRPORT RADIUM	7000 MERRILL AVE	SEMS, PRP	Lower	2436, 0.461, WSW
F31	CORONA AERO REFINISH	7000 MERRILL AVE	AST, SWEEPS UST, HIST UST, CA FID UST, Cortese,...	Lower	2436, 0.461, WSW
F32	CHINO AIRPORT - BURI	7000 MERRILL AVENUE	SLIC, San Bern. Co. Permit	Lower	2436, 0.461, WSW
F33	CHINO AIRPORT NAPALM	7000 MERRILL AVENUE	SEMS	Lower	2436, 0.461, WSW
F34	AERO TRADER	7000 MERRILL AV, #19	SLIC, EMI, HAZNET	Lower	2436, 0.461, WSW
35	CAL-AERO FIELD / ACA		ENVIROSTOR	Lower	3597, 0.681, WSW
36	CAL-AERO AIRPORT		ENVIROSTOR	Lower	4397, 0.833, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL - National Priority List
Proposed NPL - Proposed National Priority List Sites
NPL LIENS - Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL - National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY - Federal Facility Site Information listing

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE - Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS - Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF - RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG - RCRA - Large Quantity Generators
RCRA-SQG - RCRA - Small Quantity Generators
RCRA-CESQG - RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS - Land Use Control Information System
US ENG CONTROLS - Engineering Controls Sites List
US INST CONTROL - Sites with Institutional Controls

EXECUTIVE SUMMARY

Federal ERNS list

ERNS - Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE - - - - - - - - - - - - - - - - - State Response Sites

State and tribal leaking storage tank lists

INDIAN LUST - - - - - - - - - - - - - - - Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST - - - - - - - - - - - - - - - - - - Underground Storage Tank Listing
INDIAN UST - - - - - - - - - - - - - - - - - Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP - Voluntary Cleanup Program Properties
INDIAN VCP - - - - - - - - - - - - - - - - - Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS - - - - - - - - - - - - - - Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS - - - - - - - - - - A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT - - - - - - - - - - - - - - Waste Management Unit Database
SWRCY - Recycler Database
HAULERS - - - - - - - - - - - - - - - - - - - Registered Waste Tire Haulers Listing
INDIAN ODI - - - - - - - - - - - - - - - - - Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 - - - - - - - - - - - Torres Martinez Reservation Illegal Dump Site Locations
ODI - Open Dump Inventory
IHS OPEN DUMPS - - - - - - - - - - - Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL - - - - - - - - - - - - - - - Delisted National Clandestine Laboratory Register
HIST Cal-Sites - - - - - - - - - - - - - - - Historical Calsites Database
SCH - School Property Evaluation Program
CDL - Clandestine Drug Labs
Toxic Pits - - - - - - - - - - - - - - - - - - - Toxic Pits Cleanup Act Sites
US CDL - National Clandestine Laboratory Register

Local Land Records

LIENS - Environmental Liens Listing

EXECUTIVE SUMMARY

LIENS 2 .... CERCLA Lien Information
DEED .... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS .... Hazardous Materials Information Reporting System
CHMIRS .... California Hazardous Material Incident Report System
LDS .... Land Disposal Sites Listing
MCS .... Military Cleanup Sites Listing
SPILLS 90 .... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR .... RCRA - Non Generators / No Longer Regulated
FUDS .... Formerly Used Defense Sites
DOD .... Department of Defense Sites
SCRD DRYCLEANERS .... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR .... Financial Assurance Information
EPA WATCH LIST .... EPA WATCH LIST
2020 COR ACTION .... 2020 Corrective Action Program List
TSCA .... Toxic Substances Control Act
TRIS .... Toxic Chemical Release Inventory System
SSTS .... Section 7 Tracking Systems
ROD .... Records Of Decision
RMP .... Risk Management Plans
RAATS .... RCRA Administrative Action Tracking System
PRP .... Potentially Responsible Parties
PADS .... PCB Activity Database System
ICIS .... Integrated Compliance Information System
FTTS .... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS .... Material Licensing Tracking System
COAL ASH DOE .... Steam-Electric Plant Operation Data
COAL ASH EPA .... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER .... PCB Transformer Registration Database
RADINFO .... Radiation Information Database
HIST FTTS .... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS .... Incident and Accident Data
CONSENT .... Superfund (CERCLA) Consent Decrees
INDIAN RESERV .... Indian Reservations
FUSRAP .... Formerly Utilized Sites Remedial Action Program
UMTRA .... Uranium Mill Tailings Sites
LEAD SMELTERS .... Lead Smelter Sites
US AIRS .... Aerometric Information Retrieval System Facility Subsystem
US MINES .... Mines Master Index File
FINDS .... Facility Index System/Facility Registry System
DOCKET HWC .... Hazardous Waste Compliance Docket Listing
UXO .... Unexploded Ordnance Sites
CA BOND EXP. PLAN .... Bond Expenditure Plan
CUPA Listings .... CUPA Resources List
DRYCLEANERS .... Cleaner Facilities
EMI .... Emissions Inventory Data
ENF .... Enforcement Action Listing
Financial Assurance .... Financial Assurance Information Listing
HAZNET .... Facility and Manifest Data

EXECUTIVE SUMMARY

ICE	ICE
HIST CORTESE	Hazardous Waste & Substance Site List
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
FUELS PROGRAM	EPA Fuels Program Registered Listing
ABANDONED MINES	Abandoned Mines
ECHO	Enforcement & Compliance History Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historic Gas Stations
EDR Hist Cleaner	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

EXECUTIVE SUMMARY

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 10/10/2016 has revealed that there are 2 SEMS sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHINO AIRPORT RADIUM	***7000 MERRILL AVE***	***WSW 1/4 - 1/2 (0.461 mi.)***	***F30***	***57***
CHINO AIRPORT NAPALM	7000 MERRILL AVENUE	WSW 1/4 - 1/2 (0.461 mi.)	F33	67

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/31/2016 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAL-AERO FIELD / ACA Facility Id: 80000986 Status: Inactive - Needs Evaluation		WSW 1/2 - 1 (0.681 mi.)	35	75
CAL-AERO AIRPORT Facility Id: 80000207 Status: Inactive - Needs Evaluation		SW 1/2 - 1 (0.833 mi.)	36	76

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MINABERRY DAIRY, #1 Database: SWF/LF (SWIS), Date of Government Version: 11/14/2016	***8888 EUCALYPTUS AVE***	***ENE 1/4 - 1/2 (0.330 mi.)***	***29***	***54***

EXECUTIVE SUMMARY

Facility ID: 36-AA-0480
Operational Status: Active
Regulation Status: Notification

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PRIVATE RESIDENCE	PRIVATE RESIDENCE	WNW 0 - 1/8 (0.006 mi.)	A4	15

Database: LUST, Date of Government Version: 12/12/2016
Global Id: T0607175289
Status: Completed - Case Closed

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there are 2 SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHINO AIRPORT - BURI	***7000 MERRILL AVENUE***	***WSW 1/4 - 1/2 (0.461 mi.)***	***F32***	***65***

Database: SLIC, Date of Government Version: 12/12/2016
Facility Status: Completed - Case Closed
Global Id: T10000002398

AERO TRADER	***7000 MERRILL AV, #19***	***WSW 1/4 - 1/2 (0.461 mi.)***	***F34***	***68***

Database: SLIC, Date of Government Version: 12/12/2016
Facility Status: Open - Site Assessment
Global Id: SL208634049

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board’s Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AG-BOUMA DAIRY	8731 EUCALYPTUS AVE	ENE 1/8 - 1/4 (0.216 mi.)	E28	54

Database: UST, Date of Government Version: 09/12/2016

EXECUTIVE SUMMARY

Facility Id: 87014276

Lower Elevation	Address	Direction / Distance	Map ID	Page
AG-TEUNE'S DAIRY Database: UST, Date of Government Version: 09/12/2016 Facility Id: 86008360	8749 MERRILL AVE	ESE 1/8 - 1/4 (0.192 mi.)	D23	43

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, and dated 07/06/2016 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GEORGE BORBA & SON D	***7955 EUCALYPTUS***	***WNW 1/8 - 1/4 (0.195 mi.)***	***C24***	***43***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 4 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BOUMA DAIRY Comp Number: 28129	***8731 EUCALYPTUS***	***NNW 0 - 1/8 (0.011 mi.)***	***8***	***19***
GEORGE BORBA DAIRY Status: A Tank Status: A Comp Number: 66993	***7955 EUCALYPTUS***	***WNW 1/8 - 1/4 (0.191 mi.)***	***C18***	***35***

Lower Elevation	Address	Direction / Distance	Map ID	Page
JACK & MACK STIEFEL Status: A Tank Status: A Comp Number: 42511	***8571 MERRILL AVE***	***SE 0 - 1/8 (0.017 mi.)***	***B10***	***21***
TEUNE'S DAIRY Status: A Tank Status: A Comp Number: 15088	***8749 MERRILL***	***ESE 1/8 - 1/4 (0.192 mi.)***	***D20***	***37***

EXECUTIVE SUMMARY

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 4 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BOUMA DAIRY Facility Id: 00000028129	8731 EUCALYPTUS	ENE 1/8 - 1/4 (0.153 mi.)	17	34

Lower Elevation	Address	Direction / Distance	Map ID	Page
JACK D STIEFEL DAIRY Facility Id: 00000065653	8571 MERRILL AVE	SE 0 - 1/8 (0.017 mi.)	B9	20
JACK D STIEFEL Facility Id: 00000042511	***8571 MERRILL AVE***	***SE 0 - 1/8 (0.017 mi.)***	***B11***	***21***
TEUNES DAIRY Facility Id: 00000015088	8749 MERRILL	ESE 1/8 - 1/4 (0.192 mi.)	D22	43

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 4 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BOUMA DAIRY Facility Id: 36008209 Status: I	***8731 EUCALYPTUS***	***NNW 0 - 1/8 (0.011 mi.)***	***8***	***19***
GEORGE BORBA DAIRY Facility Id: 36009263 Status: A	7955 EUCALYPTUS	WNW 1/8 - 1/4 (0.191 mi.)	C19	36

Lower Elevation	Address	Direction / Distance	Map ID	Page
JACK & MACK STIEFEL Facility Id: 36008987 Status: A	***8571 MERRILL AVE***	***SE 0 - 1/8 (0.017 mi.)***	***B10***	***21***
TEUNE'S DAIRY Facility Id: 36008701 Status: A	***8749 MERRILL***	***ESE 1/8 - 1/4 (0.192 mi.)***	***D20***	***37***

Other Ascertainable Records

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 09/26/2016 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CORONA AERO REFINISH	***7000 MERRILL AVE***	***WSW 1/4 - 1/2 (0.461 mi.)***	***F31***	***60***

San Bern. Co. Permit: San Bernardino County Fire Department Hazardous Materials Division.

A review of the San Bern. Co. Permit list, as provided by EDR, and dated 09/06/2016 has revealed that there are 17 San Bern. Co. Permit sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HALF & HALF DAIRY Facility Status: INACTIVE Facility Id: FA0000476	***14651 GROVE AVE***	***0 - 1/8 (0.000 mi.)***	***1***	***8***
B & B DAIRY Facility Status: INACTIVE Facility Id: FA0000345	8521 EUCALYPTUS AVE	NE 0 - 1/8 (0.004 mi.)	2	14
G H DAIRY #1 Facility Status: ACTIVE Facility Id: FA0011764	8451 EUCALYPTUS	NNE 0 - 1/8 (0.006 mi.)	3	15
JOE BORBA DAIRY # 2 Facility Status: INACTIVE Facility Id: FA0000513	14545 S GROVE AVE	WNW 0 - 1/8 (0.009 mi.)	A7	18
O & M DAIRY Facility Status: INACTIVE Facility Id: FA0010952 Facility Id: FA0000566	***14474 GROVE AVE***	***NW 0 - 1/8 (0.079 mi.)***	***13***	***28***
G H DAIRY #3 Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0012185 Facility Id: FA0000475	***8643 EUCALYPTUS AVE***	***ENE 0 - 1/8 (0.081 mi.)***	***14***	***30***
JOE FERREIRA JR DAIR Facility Status: INACTIVE Facility Id: FA0000515	14400 S GROVE AVE	NW 1/8 - 1/4 (0.145 mi.)	16	34
GEORGE BORBA & SON D Facility Status: ACTIVE Facility Id: FA0000455	***7955 EUCALYPTUS***	***WNW 1/8 - 1/4 (0.195 mi.)***	***C24***	***43***
MAJESTIC FARMS #1 Facility Status: INACTIVE Facility Id: FA0011051	***14333 WALKER***	***NNE 1/8 - 1/4 (0.200 mi.)***	***25***	***48***
ALEWYN DAIRY #3 Facility Status: INACTIVE Facility Id: FA0000511	***14361 GROVE***	***NW 1/8 - 1/4 (0.201 mi.)***	***26***	***49***
MINABERRY DAIRY Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0010990 Facility Id: FA0000364	8731 EUCALYPTUS	ENE 1/8 - 1/4 (0.216 mi.)	E27	53

Lower Elevation	Address	Direction / Distance	Map ID	Page
HARINGA FARMS	14848 S GROVE AVE	SW 0 - 1/8 (0.008 mi.)	5	17

EXECUTIVE SUMMARY

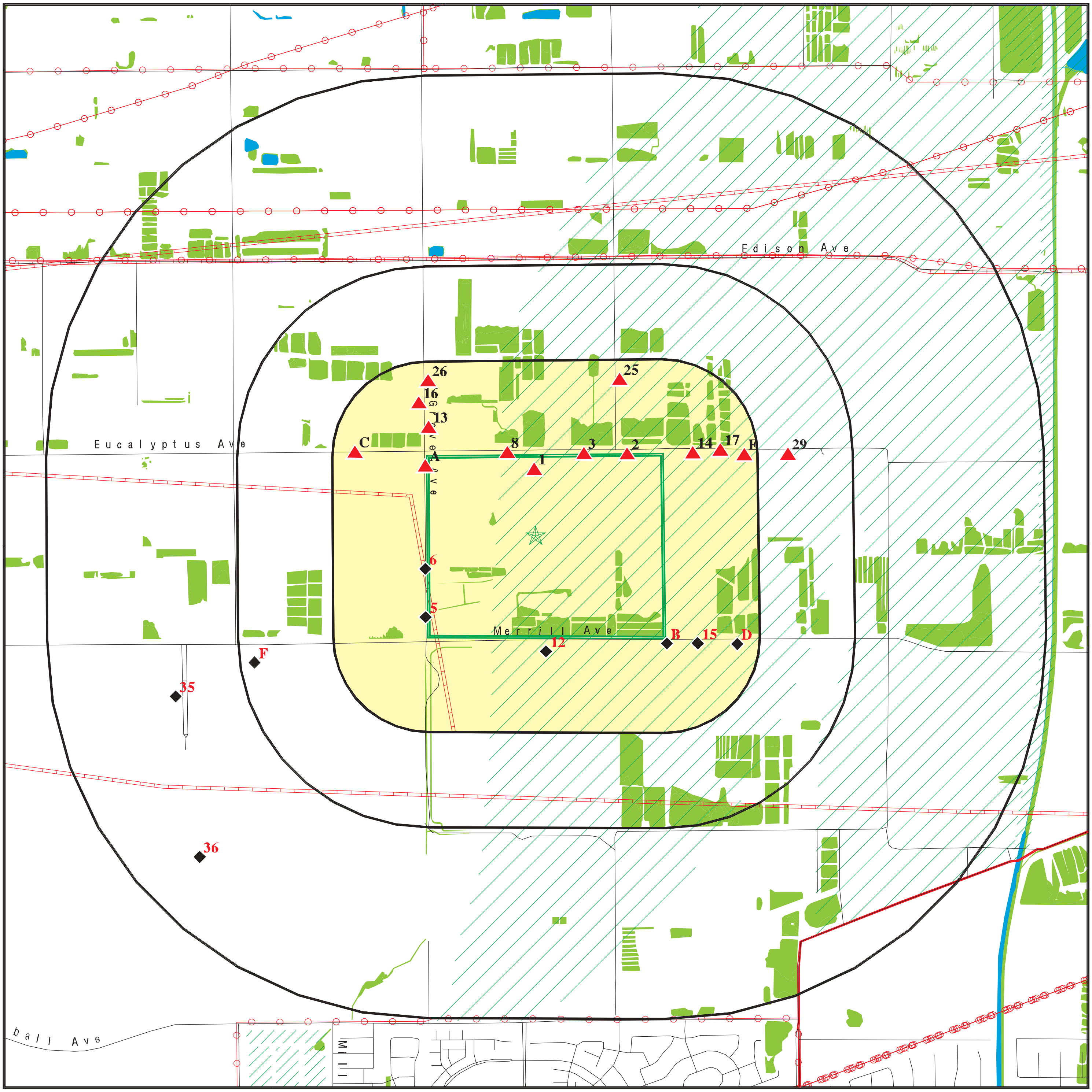
Facility Status: INACTIVE Facility Id: FA0000478				
HARRY BOERSMA DAIRY Facility Status: INACTIVE Facility Id: FA0000480	14746 GROVE	WSW 0 - 1/8 (0.008 mi.)	6	17
JACK D STIEFEL Facility Status: INACTIVE Facility Id: FA0000498	***8571 MERRILL AVE***	***SE 0 - 1/8 (0.017 mi.)***	***B11***	***21***
J & D STAR DAIRY #1 Facility Status: INACTIVE Facility Id: FA0000481	***8315 MERRILL AVE***	***S 0 - 1/8 (0.038 mi.)***	***12***	***24***
HERITAGE DAIRY #2 Facility Status: INACTIVE Facility Id: FA0000333	8649 MERRILL AVE	ESE 0 - 1/8 (0.089 mi.)	15	33
STRUIKMANS AND SONS Facility Status: INACTIVE Facility Id: FA0010823 Facility Id: FA0000664	***8749 MERRILL AVE***	***ESE 1/8 - 1/4 (0.192 mi.)***	***D21***	***37***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 5 records.

Site Name	Database(s)
	CDL
	CDL
	CDL
	CDL
SO CAL GAS/ONTARIO MGP	EDR MGP

OVERVIEW MAP - 4851881.2S



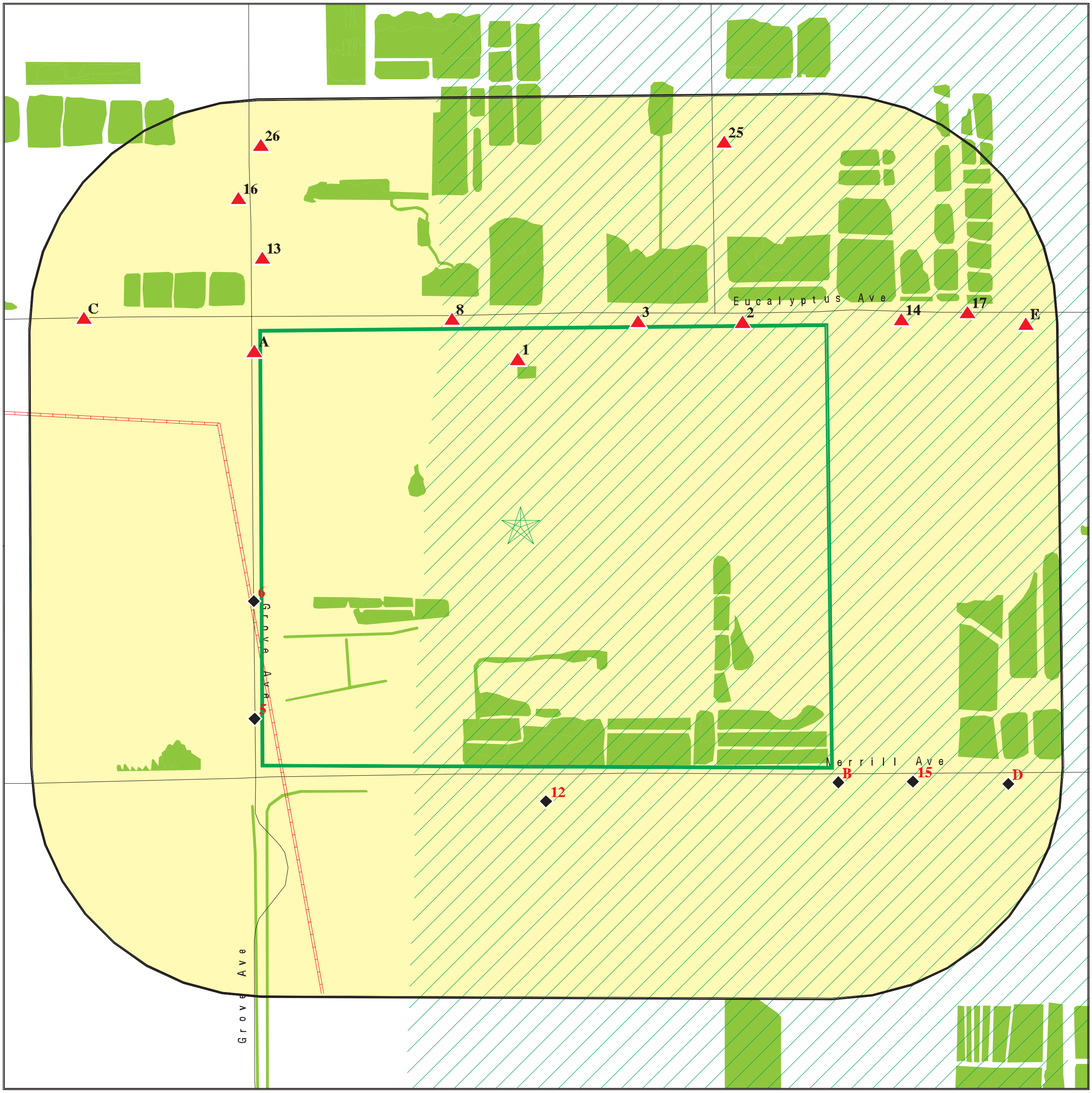
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

0 1/4 1/2 1 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Borba Land Phase II 189 Acres	CLIENT: Partner Engineering and Science, Inc.
ADDRESS: 14545 South Grove Avenue	CONTACT: Colleen Tubridy
Chino CA 91710	INQUIRY #: 4851881.2s
LAT/LONG: 33.987171 / 117.622972	DATE: February 10, 2017 7:15 pm

DETAIL MAP - 4851881.2S



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA
Pipelines
100-year flood zone
500-year flood zone
National Wetland Inventory
State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Borba Land Phase II 189 Acres ADDRESS: 14545 South Grove Avenue Chino CA 91710 LAT/LONG: 33.987171 / 117.622972	CLIENT: Partner Engineering and Science, Inc. CONTACT: Colleen Tubridy INQUIRY #: 4851881.2s DATE: February 10, 2017 7:15 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	2	NR	NR	2
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	1	NR	NR	1
State and tribal leaking storage tank lists								
LUST	0.500		1	0	0	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	2	NR	NR	2
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	2	NR	NR	NR	2
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		2	2	NR	NR	NR	4
HIST UST	0.250		2	2	NR	NR	NR	4
CA FID UST	0.250		2	2	NR	NR	NR	4
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	1	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HWT	0.250		0	0	NR	NR	NR	0
MINES	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
San Bern. Co. Permit	0.250		11	6	NR	NR	NR	17
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.500		0	0	0	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	18	15	6	2	0	41

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 **< 1/8** **1 ft.**	**HALF & HALF DAIRY** **14651 GROVE AVE** **ONTARIO, CA 91762**	**ENF** **San Bern. Co. Permit**	**S108536446** **N/A**

Relative:
Higher

Actual:
673 ft.

ENF:

Region:	8
Facility Id:	229503
Agency Name:	Borba, Joe & Lindsey
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.989774
Place Longitude:	-117.623036
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365293001
Reg Measure Id:	211630
Reg Measure Type:	Enrollee
Region:	8
Order #:	99-011
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	02/02/2006
Effective Date:	09/10/1982
Expiration/Review Date:	02/02/2006
Termination Date:	02/02/2006

HALF & HALF DAIRY (Continued) **S108536446**

WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	391908
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	04/10/2013
Adoption/Issuance Date:	04/10/2013
Achieve Date:	Not reported
Termination Date:	04/10/2013
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Com 04/10/2013 for Borba, Joe
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	8
Facility Id:	229503
Agency Name:	Borba, Joe & Lindsey
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.989774
Place Longitude:	-117.623036
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1

HALF & HALF DAIRY (Continued) **S108536446**

Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365293001
Reg Measure Id:	211630
Reg Measure Type:	Enrollee
Region:	8
Order #:	99-011
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	02/02/2006
Effective Date:	09/10/1982
Expiration/Review Date:	02/02/2006
Termination Date:	02/02/2006
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	391885
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	04/10/2013
Adoption/Issuance Date:	04/10/2013
Achieve Date:	Not reported
Termination Date:	04/10/2013
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Com 04/10/2013 for Borba, Joe
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0

HALF & HALF DAIRY (Continued) **S108536446**

Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	8
Facility Id:	229503
Agency Name:	Gerben Hettinga
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.989774
Place Longitude:	-117.623036
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365963001
Reg Measure Id:	349895
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2013-0001
Npdes# CA#:	CAG018001
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	2500
Status:	Active
Status Date:	08/28/2008

HALF & HALF DAIRY (Continued) **S108536446**

Effective Date:	09/04/2008
Expiration/Review Date:	06/01/2018
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	360913
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	01/30/2009
Adoption/Issuance Date:	01/30/2009
Achieve Date:	Not reported
Termination Date:	01/30/2009
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Notice of Violation for Hettinga, Gerben
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	8
Facility Id:	229503
Agency Name:	Not reported
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	33.989774
Place Longitude:	-117.623036
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported

HALF & HALF DAIRY (Continued) **S108536446**

NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	ANIMALWASTE
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	239640
Region:	8
Order / Resolution Number:	R8-2005-0036
Enforcement Action Type:	Admin Civil Liability
Effective Date:	04/13/2005
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	05/17/2005
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	ACLC R8-2005-0083 for Joe Borba
Description:	Prohibited disposal of manure on pastureland not previously used to grow crops.

HALF & HALF DAIRY (Continued) **S108536446**

Program:	ANIWSTCOWS
Latest Milestone Completion Date:	5/17/2005
# Of Programs1:	1
Total Assessment Amount:	50000
Initial Assessed Amount:	0
Liability $ Amount:	25000
Project $ Amount:	0
Liability $ Paid:	25000
Project $ Completed:	0
Total $ Paid/Completed Amount:	25000

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0000476
Owner:	JOE BORBA & M HARDISTY
Permit Number:	PT0018881
Permit Category:	HAZARDOUS WASTE GENERATOR - 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	07/31/2006

Region:	SAN BERNARDINO
Facility ID:	FA0000476
Owner:	JOE BORBA & M HARDISTY
Permit Number:	PT0018882
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)
Facility Status:	INACTIVE
Expiration Date:	07/31/2006

2
NE
< 1/8
0.004 mi.
23 ft.

B & B DAIRY
8521 EUCALYPTUS AVE
ONTARIO, CA 91762

San Bern. Co. Permit **S108536404**
N/A

Relative:
Higher

Actual:
675 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0000345
Owner:	JOE & JAMES BORBA
Permit Number:	PT0008941
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	04/30/2008

Region:	SAN BERNARDINO
Facility ID:	FA0000345
Owner:	JOE & JAMES BORBA
Permit Number:	PT0008942
Permit Category:	SPECIAL GENERATOR
Facility Status:	INACTIVE
Expiration Date:	04/30/1997

3 **NNE** **< 1/8** **0.006 mi.** **33 ft.**	**G H DAIRY #1** **8451 EUCALYPTUS** **ONTARIO, CA 91761**	**San Bern. Co. Permit**	**S109349319** **N/A**

Relative: **Higher**

Actual: **675 ft.**

San Bern. Co. Permit:

Region: SAN BERNARDINO
Facility ID: FA0011764
Owner: GERBEN HETTINGA
Permit Number: PT0020440
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 08/31/2016

Region: SAN BERNARDINO
Facility ID: FA0011764
Owner: GERBEN HETTINGA
Permit Number: PT0021466
Permit Category: SMALL QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 08/31/2016

Region: SAN BERNARDINO
Facility ID: FA0011764
Owner: GERBEN HETTINGA
Permit Number: PT0026731
Permit Category: APSA FARM/CONSTRUCTION CONDITIONALLY EXEMPT
Facility Status: ACTIVE
Expiration Date: 08/31/2016

A4 **WNW** **< 1/8** **0.006 mi.** **34 ft.**	**PRIVATE RESIDENCE** **PRIVATE RESIDENCE** **CHINO, CA** **Site 1 of 2 in cluster A**	**LUST**	**S110655056** **N/A**

Relative: **Higher**

Actual: **673 ft.**

LUST:

Region: STATE
Global Id: T0607175289
Latitude: 33.9899
Longitude: -117.628
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 10/18/2006
Lead Agency: SANTA ANA RWQCB (REGION 8)
Case Worker: RS
Local Agency: SAN BERNARDINO COUNTY
RB Case Number: 083604041T
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel, Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0607175289
Contact Type: Local Agency Caseworker

PRIVATE RESIDENCE (Continued) **S110655056**

Contact Name:	CATHERINE RICHARDS
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	crichards@sbcfire.org
Phone Number:	9093868419
Global Id:	T0607175289
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375

Status History:

Global Id:	T0607175289
Status:	Open - Case Begin Date
Status Date:	01/13/2004
Global Id:	T0607175289
Status:	Open - Site Assessment
Status Date:	09/02/2005
Global Id:	T0607175289
Status:	Open - Verification Monitoring
Status Date:	09/02/2005
Global Id:	T0607175289
Status:	Open - Site Assessment
Status Date:	12/05/2005
Global Id:	T0607175289
Status:	Completed - Case Closed
Status Date:	10/18/2006

Regulatory Activities:

Global Id:	T0607175289
Action Type:	Other
Date:	01/13/2004
Action:	Leak Discovery
Global Id:	T0607175289
Action Type:	Other
Date:	01/13/2004
Action:	Leak Stopped
Global Id:	T0607175289
Action Type:	RESPONSE
Date:	02/03/2006
Action:	Soil and Water Investigation Report
Global Id:	T0607175289
Action Type:	Other
Date:	09/02/2005

PRIVATE RESIDENCE (Continued) **S110655056**

Action:	Leak Reported
Global Id:	T0607175289
Action Type:	ENFORCEMENT
Date:	10/18/2006
Action:	Closure/No Further Action Letter
Global Id:	T0607175289
Action Type:	REMEDIATION
Date:	04/27/2004
Action:	Excavation
Global Id:	T0607175289
Action Type:	ENFORCEMENT
Date:	09/02/2005
Action:	Meeting
Global Id:	T0607175289
Action Type:	Other
Date:	01/13/2004
Action:	Leak Began

5
SW
< 1/8
0.008 mi.
43 ft.

HARINGA FARMS
14848 S GROVE AVE
ONTARIO, CA 91762

San Bern. Co. Permit **S104761842**
N/A

Relative:
Lower

Actual:
659 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0000478
Owner:	HARINGA, WILLIAM & RUDY E
Permit Number:	PT0008948
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	04/30/2007
Region:	SAN BERNARDINO
Facility ID:	FA0000478
Owner:	HARINGA, WILLIAM & RUDY E
Permit Number:	PT0008949
Permit Category:	SPECIAL GENERATOR
Facility Status:	INACTIVE
Expiration Date:	04/30/1997

6
WSW
< 1/8
0.008 mi.
43 ft.

HARRY BOERSMA DAIRY
14746 GROVE
ONTARIO, CA 91762

San Bern. Co. Permit **S104761845**
N/A

Relative:
Lower

Actual:
663 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0000480
Owner:	HARRY BOERSMA DAIRY

HARRY BOERSMA DAIRY (Continued) **S104761845**

Permit Number: PT0003766
Permit Category: HAZMAT HANDLER - AGRICULTURAL(FE)
Facility Status: INACTIVE
Expiration Date: 10/31/1988

A7
WNW
< 1/8
0.009 mi.
49 ft.

JOE BORBA DAIRY # 2
14545 S GROVE AVE
ONTARIO, CA 91762

Site 2 of 2 in cluster A

San Bern. Co. Permit **S108724274**
N/A

Relative:
Higher

Actual:
673 ft.

San Bern. Co. Permit:

Region: SAN BERNARDINO
Facility ID: FA0000513
Owner: JOSEPH & DOLEEN BORBA ADM TRUS
Permit Number: PT0019100
Permit Category: AST OPERATING PERMIT
Facility Status: INACTIVE
Expiration Date: 07/31/2009

Region: SAN BERNARDINO
Facility ID: FA0000513
Owner: JOSEPH & DOLEEN BORBA ADM TRUS
Permit Number: PT0019101
Permit Category: AST OPERATING PERMIT
Facility Status: INACTIVE
Expiration Date: 07/31/2009

Region: SAN BERNARDINO
Facility ID: FA0000513
Owner: JOSEPH & DOLEEN BORBA ADM TRUS
Permit Number: PT0019102
Permit Category: AST OPERATING PERMIT
Facility Status: INACTIVE
Expiration Date: 07/31/2009

Region: SAN BERNARDINO
Facility ID: FA0000513
Owner: JOSEPH & DOLEEN BORBA ADM TRUS
Permit Number: PT0019103
Permit Category: AST OPERATING PERMIT
Facility Status: INACTIVE
Expiration Date: 07/31/2009

Region: SAN BERNARDINO
Facility ID: FA0000513
Owner: JOSEPH & DOLEEN BORBA ADM TRUS
Permit Number: PT0019097
Permit Category: HAZMAT HANDLER 11-25 EMPLOYEES (W/GEN PRMT)
Facility Status: INACTIVE
Expiration Date: 07/31/2009

Region: SAN BERNARDINO
Facility ID: FA0000513
Owner: JOSEPH & DOLEEN BORBA ADM TRUS
Permit Number: PT0019098
Permit Category: HAZARDOUS WASTE GENERATOR - 11-25 EMPLOYEES
Facility Status: INACTIVE

JOE BORBA DAIRY # 2 (Continued) **S108724274**

Expiration Date: 07/31/2009

Region: SAN BERNARDINO
Facility ID: FA0000513
Owner: JOSEPH & DOLEEN BORBA ADM TRUS
Permit Number: PT0019436
Permit Category: ABOVEGROUND PETROLEUM STORAGE (AST) (SPCC)
Facility Status: INACTIVE
Expiration Date: 07/31/2009

Region: SAN BERNARDINO
Facility ID: FA0000513
Owner: JOSEPH & DOLEEN BORBA ADM TRUS
Permit Number: PT0019558
Permit Category: ABOVEGROUND PETROLEUM STORAGE (AST) (SPCC)
Facility Status: INACTIVE
Expiration Date: 07/31/2007

8
NNW
< 1/8
0.011 mi.
57 ft.

BOUMA DAIRY
8731 EUCALYPTUS
CHINO, CA 91710

SWEEPS UST **S101618753**
CA FID UST **N/A**

Relative:
Higher

Actual:
675 ft.

SWEEPS UST:
Status: Not reported
Comp Number: 28129
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-028129-000001
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: Not reported
Number Of Tanks: 2

Status: Not reported
Comp Number: 28129
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-028129-000002
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: UNKNOWN
STG: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

BOUMA DAIRY (Continued) **S101618753**

CA FID UST:

Facility ID:	36008209
Regulated By:	UTNKI
Regulated ID:	00028129
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	8731 EUCALYPTUS
Mailing Address 2:	Not reported
Mailing City,St,Zip:	CHINO 91710
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

B9
SE
< 1/8
0.017 mi.
90 ft.

JACK D STIEFEL DAIRY
8571 MERRILL AVE
CHINO, CA 91710

HIST UST **U001568924**
N/A

Site 1 of 3 in cluster B

Relative:
Lower

Actual:
663 ft.

HIST UST:

File Number:	0002A025
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002A025.pdf
Region:	STATE
Facility ID:	00000065653
Facility Type:	Other
Other Type:	DAIRY
Contact Name:	Not reported
Telephone:	7146284184
Owner Name:	JACK D. STIEFEL
Owner Address:	8571 MERRILL AVE.
Owner City,St,Zip:	CHINO, CA 91710
Total Tanks:	0001

Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

B10 | **JACK & MACK STIEFEL DAIRY** | **SWEEPS UST** | **S101591778**
SE | **8571 MERRILL AVE** | **CA FID UST** | **N/A**
< 1/8 | **CHINO, CA 91710**
0.017 mi.
90 ft. | **Site 2 of 3 in cluster B**

Relative:
Lower

Actual:
663 ft.

SWEEPS UST:

Status:	Active
Comp Number:	42511
Number:	9
Board Of Equalization:	Not reported
Referral Date:	08-27-91
Action Date:	08-27-91
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	36-000-042511-000001
Tank Status:	A
Capacity:	1000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	1

CA FID UST:

Facility ID:	36008987
Regulated By:	UTNKA
Regulated ID:	00042511
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	8571 MERRILL AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	CHINO 91710
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

B11 | **JACK D STIEFEL** | **HIST UST** | **U001568923**
SE | **8571 MERRILL AVE** | **ENF** | **N/A**
< 1/8 | **CHINO, CA 91710** | **San Bern. Co. Permit**
0.017 mi.
90 ft. | **Site 3 of 3 in cluster B**

Relative:
Lower

Actual:
663 ft.

HIST UST:

File Number:	0002A023
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002A023.pdf
Region:	STATE
Facility ID:	00000042511
Facility Type:	Other
Other Type:	DAIRY (AGRICULTURE)
Contact Name:	Not reported
Telephone:	7146284184
Owner Name:	JACK D. STIEFEL

JACK D STIEFEL (Continued) **U001568923**

Owner Address:	8571 MERRILL AVE.,
Owner City,St,Zip:	CHINO, CA 91710
Total Tanks:	0001

Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

ENF:

Region:	8
Facility Id:	270193
Agency Name:	Van Vliet, Nick
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.983252
Place Longitude:	-117.617731
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365697001
Reg Measure Id:	211723
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2007-0001

JACK D STIEFEL (Continued) **U001568923**

Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	2000
Status:	Historical
Status Date:	08/27/2014
Effective Date:	09/09/1999
Expiration/Review Date:	09/06/2012
Termination Date:	10/02/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	238785
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	12/10/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	12/10/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 365697001
Description:	Notice
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	12/13/2001
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0000498
Owner:	JACK & MARK STIEFEL DAIRY
Permit Number:	PT0003639
Permit Category:	HAZMAT HANDLER - AGRICULTURAL(FE)
Facility Status:	INACTIVE
Expiration Date:	02/28/1990

12
South
< 1/8
0.038 mi.
198 ft.

J & D STAR DAIRY #1
8315 MERRILL AVE
CHINO, CA 91710

EMI
San Bern. Co. Permit
WDS

S104857882
N/A

Relative:
Lower

Actual:
656 ft.

EMI:

Year:	2006
County Code:	36
Air Basin:	SC
Facility ID:	148675
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.813677278578396698
Reactive Organic Gases Tons/Yr:	3.363
Carbon Monoxide Emissions Tons/Yr:	.003
NOX - Oxides of Nitrogen Tons/Yr:	.012
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.122
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.5495053

Year:	2007
County Code:	36
Air Basin:	SC
Facility ID:	148675
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.813677278578396698
Reactive Organic Gases Tons/Yr:	3.363
Carbon Monoxide Emissions Tons/Yr:	.003
NOX - Oxides of Nitrogen Tons/Yr:	.012
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.122
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.5495053

Year:	2008
County Code:	36
Air Basin:	SC
Facility ID:	155418
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6.341253936444317205
Reactive Organic Gases Tons/Yr:	4.43
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.16
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.567588

Year:	2009

J & D STAR DAIRY #1 (Continued) **S104857882**

County Code:	36
Air Basin:	SC
Facility ID:	155418
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6.3126252505010001
Reactive Organic Gases Tons/Yr:	4.4100000000000001
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.1599999999999999
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.56758799999999998

Year:	2010
County Code:	36
Air Basin:	SC
Facility ID:	155418
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6.2142141425708504
Reactive Organic Gases Tons/Yr:	4.3412499999999996
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.14632
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.56089437600000003

Year:	2011
County Code:	36
Air Basin:	SC
Facility ID:	155418
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6.2417692528
Reactive Organic Gases Tons/Yr:	4.3605
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.15344
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.564378192

Year:	2012
County Code:	36
Air Basin:	SC
Facility ID:	155418
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD

J & D STAR DAIRY #1 (Continued) **S104857882**

Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 6.2417692528
Reactive Organic Gases Tons/Yr: 4.3605
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 1.15344
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.564378192

Year: 2013
County Code: 36
Air Basin: SC
Facility ID: 155418
Air District Name: SC
SIC Code: 241
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 6.1664107218
Reactive Organic Gases Tons/Yr: 4.417
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 1.16768
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.571345824

Year: 2014
County Code: 36
Air Basin: SC
Facility ID: 155418
Air District Name: SC
SIC Code: 241
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 56.042625
Reactive Organic Gases Tons/Yr: 4.48341
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 1.18192
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.569449056

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0000481
Owner: HARRY WIERSEMA DAIRY
Permit Number: PT0003992
Permit Category: HAZMAT HANDLER - AGRICULTURAL(FE)
Facility Status: INACTIVE
Expiration Date: 10/31/1988

WDS:
Facility ID: Santa Ana River 365839001
Facility Type: Agricultural - Facility that treats and/or disposes of the wastes

J & D STAR DAIRY #1 (Continued) **S104857882**

	associated with confined and concentrated animal feeding, confined animal feeding, confined animal holding, confined and concentrated aquatic animal production facilities, and aquaculture. the treatment and/or disposal of agricultural return water is included in this category.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAG018001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	9095978687
Facility Contact:	CHARLES VAN DER KOOI
Agency Name:	VAN DER KOOI CHARLES
Agency Address:	8315 MERRILL AVENUE
Agency City,St,Zip:	CHINO 91710
Agency Contact:	CHARLES VAN DER KOOI
Agency Telephone:	Not reported
Agency Type:	Private
SIC Code:	241
SIC Code 2:	Not reported
Primary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Primary Waste:	STORMS
Waste Type2:	D
Waste2:	Stormwater Runoff
Primary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Secondary Waste:	Solid Wastes
Secondary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

13 **O & M DAIRY** **ENF** **S108536478**
NW **14474 GROVE AVE** **San Bern. Co. Permit** **N/A**
< 1/8 **ONTARIO, CA 91762**
0.079 mi.
418 ft.

Relative: **Higher**

Actual: **676 ft.**

ENF:

Region:	8
Facility Id:	656083
Agency Name:	Gordon, Craig
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Individual
# Of Agencies:	1
Place Latitude:	33.991370
Place Longitude:	-117.626870
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365983001
Reg Measure Id:	376730
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2013-0001
Npdes# CA#:	CAG018001
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	919.8
Status:	Active
Status Date:	12/02/2010
Effective Date:	12/02/2010
Expiration/Review Date:	06/01/2018

O & M DAIRY (Continued) **S108536478**

Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	398048
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	Not reported
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Draft
Title:	Oral Com for Gordon, Craig
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0010952
Owner:	TRAVIS MOUW
Permit Number:	PT0018888
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	07/31/2010

Region:	SAN BERNARDINO
Facility ID:	FA0000566
Owner:	MIERSMA HARRY
Permit Number:	PT0008719
Permit Category:	SPECIAL HANDLER
Facility Status:	INACTIVE
Expiration Date:	04/30/1997

Region:	SAN BERNARDINO
Facility ID:	FA0000566
Owner:	MIERSMA HARRY
Permit Number:	PT0008720
Permit Category:	SPECIAL GENERATOR

O & M DAIRY (Continued) **S108536478**

Facility Status: INACTIVE
Expiration Date: 04/30/1997

14	**G H DAIRY #3**	**ENF**	**S104761838**
ENE	**8643 EUCALYPTUS AVE**	**San Bern. Co. Permit**	**N/A**
< 1/8	**ONTARIO, CA 91762**		
0.081 mi.			
430 ft.			

Relative: Higher

Actual: 679 ft.

ENF:

Region:	8
Facility Id:	229450
Agency Name:	Gerben Hettinga
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.990541
Place Longitude:	-117.616264
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365974001
Reg Measure Id:	374065
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2013-0001
Npdes# CA#:	CAG018001
Major-Minor:	Minor
Npdes Type:	OTH
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported

G H DAIRY #3 (Continued) **S104761838**

Status:	Active
Status Date:	08/16/2010
Effective Date:	05/06/2010
Expiration/Review Date:	06/01/2018
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	392038
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	03/07/2013
Adoption/Issuance Date:	03/07/2013
Achieve Date:	Not reported
Termination Date:	03/07/2013
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Com 03/07/2013 for Hein Hettinga
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	8
Facility Id:	229450
Agency Name:	Not reported
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	33.990541
Place Longitude:	-117.616264
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported

G H DAIRY #3 (Continued) **S104761838**

NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	Not reported
Reg Measure Id:	332712
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2007-0001
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	12/24/2013
Effective Date:	09/07/2007
Expiration/Review Date:	09/06/2012
Termination Date:	06/06/2013
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	G
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	347229
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	04/11/1986
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	04/11/1986
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Comm..

G H DAIRY #3 (Continued) **S104761838**

Description: Not reported
Program: ANIWSTCOWS
Latest Milestone Completion Date: Not reported
Of Programs1: 1
Total Assessment Amount: 0
Initial Assessed Amount: 0
Liability $ Amount: 0
Project $ Amount: 0
Liability $ Paid: 0
Project $ Completed: 0
Total $ Paid/Completed Amount: 0

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0012185
Owner: GERBEN HETTINGA
Permit Number: PT0021465
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 04/30/2017

Region: SAN BERNARDINO
Facility ID: FA0000475
Owner: HAAGSMA, RICHARD R
Permit Number: PT0008946
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 04/30/2010

Region: SAN BERNARDINO
Facility ID: FA0000475
Owner: HAAGSMA, RICHARD R
Permit Number: PT0008947
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 04/30/1997

15
ESE
< 1/8
0.089 mi.
469 ft.

HERITAGE DAIRY #2
8649 MERRILL AVE
CHINO, CA 91710

San Bern. Co. Permit **S104761599**
N/A

Relative:
Lower

Actual:
665 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0000333
Owner: ALBERS, RAYMOND ET AL
Permit Number: PT0008950
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 04/30/2010

Region: SAN BERNARDINO
Facility ID: FA0000333
Owner: ALBERS, RAYMOND ET AL
Permit Number: PT0008951
Permit Category: SPECIAL GENERATOR

HERITAGE DAIRY #2 (Continued) **S104761599**

Facility Status: INACTIVE
Expiration Date: 04/30/2009

---

16 **NW** **1/8-1/4** **0.145 mi.** **768 ft.**	**JOE FERREIRA JR DAIRY** **14400 S GROVE AVE** **ONTARIO, CA 91762**	**San Bern. Co. Permit**	**S106910656** **N/A**

Relative: Higher

Actual: 679 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0000515
Owner: JOE & LEONTINA FERREIRA TRUST
Permit Number: PT0003666
Permit Category: HAZMAT HANDLER - AGRICULTURAL(FE)
Facility Status: INACTIVE
Expiration Date: 02/28/1991

---

17 **ENE** **1/8-1/4** **0.153 mi.** **810 ft.**	**BOUMA DAIRY** **8731 EUCALYPTUS** **CHINO, CA 91710**	**HIST UST**	**U001568857** **N/A**

Relative: Higher

Actual: 679 ft.

HIST UST:
File Number: 00029A59
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00029A59.pdf
Region: STATE
Facility ID: 00000028129
Facility Type: Other
Other Type: DAIRY
Contact Name: Not reported
Telephone: 7149474349
Owner Name: BOUMA DAIRY
Owner Address: 8731 EUCALYPUTS
Owner City,St,Zip: CHINO, CA 91710
Total Tanks: 0002

Tank Num: 001
Container Num: 1
Year Installed: 1970
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

BOUMA DAIRY (Continued) **U001568857**

Click here for Geo Tracker PDF:

C18
WNW
1/8-1/4
0.191 mi.
1009 ft.

GEORGE BORBA DAIRY
7955 EUCALYPTUS
CHINO, CA 91710

SWEEPS UST
FINDS
ECHO

1005585030
N/A

Site 1 of 3 in cluster C

Relative:
Higher

Actual:
674 ft.

SWEEPS UST:

Status:	Active
Comp Number:	66993
Number:	9
Board Of Equalization:	Not reported
Referral Date:	08-27-91
Action Date:	08-27-91
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	36-000-066993-000001
Tank Status:	A
Capacity:	1000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	2

Status:	Active
Comp Number:	66993
Number:	9
Board Of Equalization:	Not reported
Referral Date:	08-27-91
Action Date:	08-27-91
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	36-000-066993-000002
Tank Status:	A
Capacity:	1000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

FINDS:

Registry ID: 110006784756

Environmental Interest/Information System
AIR EMISSIONS CLASSIFICATION UNKNOWN

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the

GEORGE BORBA DAIRY (Continued) **1005585030**

discharge does not adversely affect water quality.

STATE MASTER

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

ECHO:

Envid:	1005585030
Registry ID:	110006784756
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110006784756

C19
WNW
1/8-1/4
0.191 mi.
1009 ft.

GEORGE BORBA DAIRY
7955 EUCALYPTUS
CHINO, CA 91710

CA FID UST **S101591831**
N/A

Site 2 of 3 in cluster C

Relative:
Higher

Actual:
674 ft.

CA FID UST:

Facility ID:	36009263
Regulated By:	UTNKA
Regulated ID:	00066993
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7145972568
Mail To:	Not reported
Mailing Address:	7955 EUCALYPTUS
Mailing Address 2:	Not reported
Mailing City,St,Zip:	CHINO 91710
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

D20 **ESE** **1/8-1/4** **0.192 mi.** **1013 ft.**

TEUNE'S DAIRY
8749 MERRILL
CHINO, CA 91710

Site 1 of 4 in cluster D

SWEEPS UST **S101618817**
CA FID UST **N/A**

Relative: **Lower**

Actual: **666 ft.**

SWEEPS UST:

Status:	Active
Comp Number:	15088
Number:	9
Board Of Equalization:	Not reported
Referral Date:	03-24-92
Action Date:	03-24-92
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	36-000-015088-000001
Tank Status:	A
Capacity:	1000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	1

CA FID UST:

Facility ID:	36008701
Regulated By:	UTNKA
Regulated ID:	00015088
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	8749 MERRILL
Mailing Address 2:	Not reported
Mailing City,St,Zip:	CHINO 91710
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

D21 **ESE** **1/8-1/4** **0.192 mi.** **1013 ft.**

STRUIKMANS AND SONS DAIRIES
8749 MERRILL AVE
CHINO, CA 91710

Site 2 of 4 in cluster D

ENF **S104762167**
San Bern. Co. Permit **N/A**

Relative: **Lower**

Actual: **666 ft.**

ENF:

Region:	8
Facility Id:	224042
Agency Name:	Not reported
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	33.983036

STRUIKMANS AND SONS DAIRIES (Continued) **S104762167**

Place Longitude:	-117.613476
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	Not reported
Reg Measure Id:	332712
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2007-0001
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	12/24/2013
Effective Date:	09/07/2007
Expiration/Review Date:	09/06/2012
Termination Date:	06/06/2013
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	G
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	347331
Region:	8
Order / Resolution Number:	Not reported

STRUIKMANS AND SONS DAIRIES (Continued) **S104762167**

Enforcement Action Type:	Oral Communication
Effective Date:	01/17/2007
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	01/17/2007
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Comm..
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	8
Facility Id:	263256
Agency Name:	Bouma, Peter
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.983279
Place Longitude:	-117.613784
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1

STRUIKMANS AND SONS DAIRIES (Continued) **S104762167**

WDID:	8 365855001
Reg Measure Id:	211816
Reg Measure Type:	Enrollee
Region:	8
Order #:	99-011
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	10/28/2002
Effective Date:	06/27/2001
Expiration/Review Date:	Not reported
Termination Date:	10/28/2002
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	238796
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	12/10/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	12/10/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 365855001
Description:	Notice
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	12/13/2001
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	8
Facility Id:	263256
Agency Name:	Haringa, Rudolph
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural

STRUIKMANS AND SONS DAIRIES (Continued) **S104762167**

Agency Type:	Privately-Individual
# Of Agencies:	1
Place Latitude:	33.983279
Place Longitude:	-117.613784
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365973001
Reg Measure Id:	373912
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2013-0001
Npdes# CA#:	CAG018001
Major-Minor:	Minor
Npdes Type:	OTH
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	920
Status:	Active
Status Date:	04/27/2010
Effective Date:	04/26/2010
Expiration/Review Date:	06/01/2018
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive

STRUIKMANS AND SONS DAIRIES (Continued) **S104762167**

Enforcement Id(EID):	392036
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	04/11/2013
Adoption/Issuance Date:	04/11/2013
Achieve Date:	Not reported
Termination Date:	04/11/2013
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Com 04/11/2013 for Haringa, Rudolph
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0010823
Owner:	STRUICKMANS AND SONS
Permit Number:	PT0018596
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	02/28/2010

Region:	SAN BERNARDINO
Facility ID:	FA0010823
Owner:	STRUICKMANS AND SONS
Permit Number:	PT0018597
Permit Category:	SPECIAL GENERATOR
Facility Status:	INACTIVE
Expiration Date:	02/28/2010

Region:	SAN BERNARDINO
Facility ID:	FA0000664
Owner:	TEUNE'S DAIRY
Permit Number:	PT0018371
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)
Facility Status:	INACTIVE
Expiration Date:	12/31/2006

Region:	SAN BERNARDINO
Facility ID:	FA0000664
Owner:	TEUNE'S DAIRY
Permit Number:	PT0001039
Permit Category:	HAZARDOUS WASTE GENERATOR - 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	12/31/2006

D22 **ESE** **1/8-1/4** **0.192 mi.** **1013 ft.**

TEUNES DAIRY
8749 MERRILL
CHINO, CA 91710

HIST UST — **U001568970** **N/A**

Site 3 of 4 in cluster D

Relative: **Lower**
Actual: **666 ft.**

HIST UST:

File Number:	0002A777
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002A777.pdf
Region:	STATE
Facility ID:	00000015088
Facility Type:	Other
Other Type:	DAIRY
Contact Name:	Not reported
Telephone:	7149475347
Owner Name:	TEUNE'S DAIRY
Owner Address:	8749 MERRILL
Owner City,St,Zip:	CHINO, CA 91710
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	1980
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

D23 **ESE** **1/8-1/4** **0.192 mi.** **1013 ft.**

AG-TEUNE'S DAIRY
8749 MERRILL AVE
CHINO, CA 91710

UST — **U003971267** **N/A**

Site 4 of 4 in cluster D

Relative: **Lower**
Actual: **666 ft.**

UST:

Facility ID:	86008360
Permitting Agency:	SAN BERNARDINO COUNTY
Latitude:	33.983653
Longitude:	-117.612422

C24 **WNW** **1/8-1/4** **0.195 mi.** **1028 ft.**

GEORGE BORBA & SON DAIRY
7955 EUCALYPTUS
ONTARIO, CA 91762

AST **ENF** **San Bern. Co. Permit** — **S108536441** **N/A**

Site 3 of 3 in cluster C

Relative: **Higher**
Actual: **673 ft.**

AST:

Certified Unified Program Agencies:	Not reported
Owner:	GEORGE BORBA & SON DAIRY
Total Gallons:	Not reported
CERSID:	10034668
Facility ID:	FA0000455
Business Name:	GEORGE BORBA & SON DAIRY
Phone:	(909) 597-2568
Fax:	(909) 393-3283

GEORGE BORBA & SON DAIRY (Continued) **S108536441**

Mailing Address:	7955 EUCALYPTUS
Mailing Address City:	ONTARIO
Mailing Address State:	CA
Mailing Address Zip Code:	91762
Operator Name:	George Borba
Operator Phone:	909-597-2568
Owner Phone:	909-597-2568
Owner Mail Address:	7955 EUCALYPTUS
Owner State:	CA
Owner Zip Code:	91762
Owner Country:	United States
Property Owner Name:	George Borba
Property Owner Phone:	909-597-2568
Property Owner Mailing Address:	7955 Eucalyptus Ave
Property Owner City:	Ontario
Property Owner Stat :	Ca
Property Owner Zip Code:	91762
Property Owner Country:	United States
EPAID:	CAL000307535

ENF:

Region:	8
Facility Id:	630618
Agency Name:	Borba, George
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1

GEORGE BORBA & SON DAIRY (Continued) **S108536441**

WDID:	8 365291001
Reg Measure Id:	211628
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2013-0001
Npdes# CA#:	CAG018001
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	07/23/2009
Effective Date:	04/13/1984
Expiration/Review Date:	06/01/2018
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	391911
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	08/08/2012
Adoption/Issuance Date:	08/08/2012
Achieve Date:	Not reported
Termination Date:	08/08/2012
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Com 08/08/2012 for Borba, George
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	8
Facility Id:	630618
Agency Name:	Borba, George
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural

GEORGE BORBA & SON DAIRY (Continued) **S108536441**

Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365291001
Reg Measure Id:	211628
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2013-0001
Npdes# CA#:	CAG018001
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	07/23/2009
Effective Date:	04/13/1984
Expiration/Review Date:	06/01/2018
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive

GEORGE BORBA & SON DAIRY (Continued) **S108536441**

Enforcement Id(EID):	347185
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	12/12/2007
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	12/12/2007
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Comm 12/12/2007
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0000455
Owner:	GEORGE BORBA & SON DAIRY
Permit Number:	PT0018955
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	05/31/2017

Region:	SAN BERNARDINO
Facility ID:	FA0000455
Owner:	GEORGE BORBA & SON DAIRY
Permit Number:	PT0018956
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	ACTIVE
Expiration Date:	05/31/2017

Region:	SAN BERNARDINO
Facility ID:	FA0000455
Owner:	GEORGE BORBA & SON DAIRY
Permit Number:	PT0026616
Permit Category:	APSA FARM/CONSTRUCTION CONDITIONALLY EXEMPT
Facility Status:	ACTIVE
Expiration Date:	05/31/2017

25 **MAJESTIC FARMS #1** **ENF** **S108724299**
NNE **14333 WALKER** **San Bern. Co. Permit** **N/A**
1/8-1/4 **ONTARIO, CA 91762**
0.200 mi.
1054 ft.

Relative:
Higher

Actual:
683 ft.

ENF:

Region:	8
Facility Id:	239249
Agency Name:	Struikmans, Henry
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.993203
Place Longitude:	-117.618212
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 365236002
Reg Measure Id:	211615
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2013-0001
Npdes# CA#:	CAG018001
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	01/26/2010
Effective Date:	06/09/1978
Expiration/Review Date:	06/01/2018

MAJESTIC FARMS #1 (Continued) **S108724299**

Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	391902
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	08/09/2012
Adoption/Issuance Date:	08/09/2012
Achieve Date:	Not reported
Termination Date:	08/09/2012
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Com 08/09/2012 for Struikmans, Henry
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0011051
Owner:	STRUIKMAN, NICHOLAS
Permit Number:	PT0019049
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	07/31/2009

---

26 **NW** **1/8-1/4** **0.201 mi.** **1061 ft.**	**ALEWYN DAIRY #3** **14361 GROVE** **ONTARIO, CA 91762**	**ENF** **San Bern. Co. Permit**	**S104761898** **N/A**

Relative:
Higher

Actual:
682 ft.

ENF:

Region:	8
Facility Id:	204960
Agency Name:	Not reported
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural

ALEWYN DAIRY #3 (Continued) **S104761898**

Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	33.992964
Place Longitude:	-117.628072
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	Not reported
Reg Measure Id:	332712
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2007-0001
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	12/24/2013
Effective Date:	09/07/2007
Expiration/Review Date:	09/06/2012
Termination Date:	06/06/2013
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	G
Fee Code:	Not reported
Direction/Voice:	Passive

ALEWYN DAIRY #3 (Continued) **S104761898**

Enforcement Id(EID):	347119
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	10/08/1982
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	10/08/1982
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Commun..
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	8
Facility Id:	204960
Agency Name:	Gordon, Craig
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Individual
# Of Agencies:	1
Place Latitude:	33.992964
Place Longitude:	-117.628072
SIC Code 1:	241
SIC Desc 1:	Dairy Farms
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS

ALEWYN DAIRY #3 (Continued) **S104761898**

Program Category1:	ANIMALWASTE
Program Category2:	ANIMALWASTE
# Of Programs:	1
WDID:	8 366006001
Reg Measure Id:	390359
Reg Measure Type:	Enrollee
Region:	8
Order #:	R8-2013-0001
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	535
Status:	Active
Status Date:	06/14/2013
Effective Date:	06/13/2013
Expiration/Review Date:	06/01/2018
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	10 - Confined animal feeding facility
Direction/Voice:	Passive
Enforcement Id(EID):	398050
Region:	8
Order / Resolution Number:	Not reported
Enforcement Action Type:	Oral Communication
Effective Date:	Not reported
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Draft
Title:	Oral Com for Gordon, Craig
Description:	Not reported
Program:	ANIWSTCOWS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0000511

ALEWYN DAIRY #3 (Continued) **S104761898**

Owner: JACK & ELANE ALEWYN
Permit Number: PT0003754
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 04/30/2013

E27
ENE
1/8-1/4
0.216 mi.
1141 ft.

MINABERRY DAIRY
8731 EUCALYPTUS
ONTARIO, CA 91762

San Bern. Co. Permit **S108536475**
N/A

Site 1 of 2 in cluster E

Relative:
Higher

Actual:
679 ft.

San Bern. Co. Permit:

Region: SAN BERNARDINO
Facility ID: FA0010990
Owner: HENRI & MARIE MINABERRY
Permit Number: PT0018933
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 05/31/2017

Region: SAN BERNARDINO
Facility ID: FA0010990
Owner: HENRI & MARIE MINABERRY
Permit Number: PT0018934
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 05/31/2014

Region: SAN BERNARDINO
Facility ID: FA0000364
Owner: BOUMA DAIRY
Permit Number: PT0003503
Permit Category: HAZMAT HANDLER - UST ONLY
Facility Status: INACTIVE
Expiration Date: 09/30/1989

Region: SAN BERNARDINO
Facility ID: FA0000364
Owner: BOUMA DAIRY
Permit Number: PT0011124
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: INACTIVE
Expiration Date: 09/30/1989

Region: SAN BERNARDINO
Facility ID: FA0000364
Owner: BOUMA DAIRY
Permit Number: PT0011125
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: INACTIVE
Expiration Date: 09/30/1989

E28 **AG-BOUMA DAIRY** **UST** **U003785005**
ENE **8731 EUCALYPTUS AVE** **N/A**
1/8-1/4 **CHINO, CA 91762**
0.216 mi.
1141 ft. **Site 2 of 2 in cluster E**

Relative:
Higher

Actual:
679 ft.

UST:

Facility ID:	87014276
Permitting Agency:	SAN BERNARDINO COUNTY
Latitude:	33.991553
Longitude:	-117.61302

---

29 **MINABERRY DAIRY, #1** **SWF/LF** **S109282041**
ENE **8888 EUCALYPTUS AVE** **EMI** **N/A**
1/4-1/2 **ONTARIO, CA 91762**
0.330 mi.
1743 ft.

Relative:
Higher

Actual:
681 ft.

SWF/LF (SWIS):

Region:	STATE
Facility ID:	36-AA-0480
Lat/Long:	33.98995 / -117.61164
Owner Name:	Henri Minaberry
Owner Telephone:	9092397403
Owner Address:	Not reported
Owner Address2:	8888 Eucalyptus Ave.
Owner City,St,Zip:	Ontario, CA 91762
Operational Status:	Active
Operator:	Partida Fertilizer
Operator Phone:	9092397403
Operator Address:	Betty Partida
Operator Address2:	824 Tam O'Shanter St.
Operator City,St,Zip:	Ontario, CA 91762
Permit Date:	08/01/2014
Permit Status:	Notification
Permitted Acreage:	$4.00
Activity:	Composting Operation (Ag)
Regulation Status:	Notification
Landuse Name:	Not reported
GIS Source:	Map
Category:	Composting
Unit Number:	01
Inspection Frequency:	Quarterly
Accepted Waste:	Agricultural,Manure
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	Not reported
SWIS Num:	36-AA-0480
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	266
Actual Throughput with Units:	Cu Yards/day
Permitted Capacity with Units:	96000
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Cu Yards/year
Lat/Long:	33.98995 / -117.61164

EMI:

Year:	2006

MINABERRY DAIRY, #1 (Continued) **S109282041**

County Code:	36
Air Basin:	SC
Facility ID:	144860
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7.871457200114514743
Reactive Organic Gases Tons/Yr:	5.499
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.287
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.6297291

Year:	2007
County Code:	36
Air Basin:	SC
Facility ID:	144860
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7.871457200114514743
Reactive Organic Gases Tons/Yr:	5.499
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.287
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.6297291

Year:	2008
County Code:	36
Air Basin:	SC
Facility ID:	144860
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.936444317205840251
Reactive Organic Gases Tons/Yr:	2.75
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.68
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.822024

Year:	2009
County Code:	36
Air Basin:	SC
Facility ID:	144860
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD

MINABERRY DAIRY, #1 (Continued) **S109282041**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.0223303750357804
Reactive Organic Gases Tons/Yr:	2.8100000000000001
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.72
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.84159600000000001

Year:	2010
County Code:	36
Air Basin:	SC
Facility ID:	144860
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.1210850271972497
Reactive Organic Gases Tons/Yr:	2.8789899999999999
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.78068
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.87128672399999996

Year:	2011
County Code:	36
Air Basin:	SC
Facility ID:	144860
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2012
County Code:	36
Air Basin:	SC
Facility ID:	144860
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0

MINABERRY DAIRY, #1 (Continued) **S109282041**

SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2013
County Code:	36
Air Basin:	SC
Facility ID:	144860
Air District Name:	SC
SIC Code:	241
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

F30
WSW
1/4-1/2
0.461 mi.
2436 ft.

CHINO AIRPORT RADIUM DIALS
7000 MERRILL AVE
CHINO, CA 91710

Site 1 of 5 in cluster F

SEMS **1008341524**
PRP **CAN000906127**

Relative:
Lower

Actual:
651 ft.

SEMS:

Site ID:	906127
EPA ID:	CAN000906127
Federal Facility:	N
NPL:	Not on the NPL
Non NPL Status:	Removal Only Site (No Site Assessment Work Needed)

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID:	0906127
EPA ID:	CAN000906127
Facility County:	SAN BERNARDINO
Short Name:	CHINO AIRPORT RADIUM DIAL
Congressional District:	Not reported
IFMS ID:	09MU
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	0.00000
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	R
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	09
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported

CHINO AIRPORT RADIUM DIALS (Continued) **1008341524**

RResp Fed Agency Code: Not reported
Non NPL Status: Removal Only Site (No Site Assessment Work Needed)
Non NPL Status Date: 03/07/05
Site Fips Code: 06071
CC Concurrence Date: / /
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):
Contact ID: 9270721.00000
Contact Name: Robert Wise
Contact Tel: (562) 499-6312
Contact Title: On-Scene Coordinator (OSC)
Contact Email: Not reported

Contact ID: 13003854.00000
Contact Name: Leslie Ramirez
Contact Tel: (415) 972-3978
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13003858.00000
Contact Name: Sharon Murray
Contact Tel: (415) 972-4250
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13004003.00000
Contact Name: Carl Brickner
Contact Tel: Not reported
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: UNILATERAL ADMIN ORDER
Date Started: / /
Date Completed: 04/12/05
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: Notice of Intent by All Parties
Date Started: / /
Date Completed: 04/13/05
Priority Level: Not reported
Operable Unit: SITEWIDE

CHINO AIRPORT RADIUM DIALS (Continued) **1008341524**

Primary Responsibility: Not reported
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: REMOVAL
Date Started: 03/10/05
Date Completed: 10/04/06
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Emergency
Action Anomaly: Not reported

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 05/11/05
Date Completed: 10/05/06
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Time Critical
Action Anomaly: Not reported

Action Code: 001
Action: CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started: / /
Date Completed: 07/15/08
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

PRP:
PRP name: CHINO DEVELOPMENT LEAGUE, INC.
COUNTY OF SAN BERNARDINO
COUNTY OF SAN BERNARDINO
HERITAGE AERO, INC.
JEFFREY PEARSON
PRESERVATION AVIATION, INC

F31 **WSW** **1/4-1/2** **0.461 mi.** **2436 ft.**	**CORONA AERO REFINISHERS,JAMES W HATFIELD** **7000 MERRILL AVE** **CHINO, CA 91710** **Site 2 of 5 in cluster F**	**AST** **SWEEPS UST** **HIST UST** **CA FID UST** **Cortese** **EMI** **San Bern. Co. Permit**	**S101618757** **N/A**

Relative:
Lower

Actual:
651 ft.

AST:

Certified Unified Program Agencies:	Not reported
Owner:	SAN BERNARDINO COUNTY FLEET MANAGEMENT
Total Gallons:	Not reported
CERSID:	10037797
Facility ID:	FA0002277
Business Name:	FLEET MANAGEMENT
Phone:	(909) 597-3910
Fax:	(909) 387-8001
Mailing Address:	7000 E. MERRILL AVE BOX 4
Mailing Address City:	CHINO
Mailing Address State:	CA
Mailing Address Zip Code:	91710
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	(909) 387-7855
Owner Mail Address:	210 N LENA RD
Owner State:	CA
Owner Zip Code:	Not reported
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

SWEEPS UST:

Status:	Active
Comp Number:	8707
Number:	5
Board Of Equalization:	44-020093
Referral Date:	03-24-92
Action Date:	03-24-92
Created Date:	02-29-88
Owner Tank Id:	15
SWRCB Tank Id:	36-000-008707-000001
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	5

Status:	Active
Comp Number:	8707
Number:	5
Board Of Equalization:	44-020093

CORONA AERO REFINISHERS,JAMES W HATFIELD (Continued) **S101618757**

Referral Date: 03-24-92
Action Date: 03-24-92
Created Date: 02-29-88
Owner Tank Id: 16
SWRCB Tank Id: 36-000-008707-000002
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 8707
Number: 5
Board Of Equalization: 44-020093
Referral Date: 03-24-92
Action Date: 03-24-92
Created Date: 02-29-88
Owner Tank Id: 17
SWRCB Tank Id: 36-000-008707-000003
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 8707
Number: 5
Board Of Equalization: 44-020093
Referral Date: 03-24-92
Action Date: 03-24-92
Created Date: 02-29-88
Owner Tank Id: AVGAS1
SWRCB Tank Id: 36-000-008707-000004
Tank Status: A
Capacity: 12000
Active Date: 06-29-94
Tank Use: M.V. FUEL
STG: P
Content: AVIA. GAS
Number Of Tanks: Not reported

Status: Active
Comp Number: 8707
Number: 5
Board Of Equalization: 44-020093
Referral Date: 03-24-92
Action Date: 03-24-92
Created Date: 02-29-88
Owner Tank Id: JET-A1
SWRCB Tank Id: 36-000-008707-000005
Tank Status: A

CORONA AERO REFINISHERS,JAMES W HATFIELD (Continued) **S101618757**

Capacity:	12000
Active Date:	06-29-94
Tank Use:	M.V. FUEL
STG:	P
Content:	JET FUEL
Number Of Tanks:	Not reported

HIST UST:

File Number:	0002A5A7
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002A5A7.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	36002274
Regulated By:	UTNKA
Regulated ID:	00008707
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	825 E 003RD ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	CHINO 91710
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

Facility ID:	36002274
Regulated By:	UTNKA
Regulated ID:	00010545
Cortese Code:	Not reported
SIC Code:	Not reported

CORONA AERO REFINISHERS,JAMES W HATFIELD (Continued) **S101618757**

Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	7000 MERRILL AVENUE BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	CHINO 91710
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

CORTESE:

Region:	CORTESE
Envirostor Id:	Not reported
Site/Facility Type:	Not reported
Cleanup Status:	Not reported
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	CORTESE
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported

EMI:

Year:	2002
County Code:	36
Air Basin:	SC
Facility ID:	101972
Air District Name:	SC
SIC Code:	7699
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2003
County Code:	36
Air Basin:	SC
Facility ID:	101972

CORONA AERO REFINISHERS,JAMES W HATFIELD (Continued) **S101618757**

Air District Name: SC
SIC Code: 7699
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 1
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Year: 2004
County Code: 36
Air Basin: SC
Facility ID: 101972
Air District Name: SC
SIC Code: 7699
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.07122
Reactive Organic Gases Tons/Yr: 1.01
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0.13
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.09

San Bern. Co. Permit:

Region: SAN BERNARDINO
Facility ID: FA0002277
Owner: SAN BERNARDINO COUNTY FLEET MANAGEMENT
Permit Number: PT0003396
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY
Facility Status: ACTIVE
Expiration Date: 09/30/2016

Region: SAN BERNARDINO
Facility ID: FA0002277
Owner: SAN BERNARDINO COUNTY FLEET MANAGEMENT
Permit Number: PT0003384
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: ACTIVE
Expiration Date: 09/30/2016

Region: SAN BERNARDINO
Facility ID: FA0002277
Owner: SAN BERNARDINO COUNTY FLEET MANAGEMENT
Permit Number: PT0018682
Permit Category: EPCRA FACILITY
Facility Status: INACTIVE
Expiration Date: 09/30/2013

Region: SAN BERNARDINO
Facility ID: FA0002277

CORONA AERO REFINISHERS,JAMES W HATFIELD (Continued) **S101618757**

Owner: SAN BERNARDINO COUNTY FLEET MANAGEMENT
Permit Number: PT0014399
Permit Category: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
Facility Status: INACTIVE
Expiration Date: 09/30/2008

F32 **CHINO AIRPORT - BURIED DRUMS AREA** **SLIC** **S103956204**
WSW **7000 MERRILL AVENUE** **San Bern. Co. Permit** **N/A**
1/4-1/2 **CHINO, CA 91710**
0.461 mi.
2436 ft. **Site 3 of 5 in cluster F**

Relative: **Lower**

Actual: **651 ft.**

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 03/17/2011
Global Id: T10000002398
Lead Agency: SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number: Not reported
Latitude: 33.9771752582545
Longitude: -117.647438049316
Case Type: Cleanup Program Site
Case Worker: PAH
Local Agency: Not reported
RB Case Number: Not reported
File Location: Regional Board
Potential Media Affected: Soil
Potential Contaminants of Concern: Benzene, Toluene, Xylene, Other Petroleum
Site History: In the afternoon of July 22, 2010, three buried drums were discovered during trenching for installation of a storm drain pipeline for a new facility for SCE. Additional drums were discovered during the response activities. By sunset, eight buried drums had been removed from the excavation. The drums did not have lids and contained soil that had been placed on top of other materials. The contents of the drums were field tested using a HazCat chemical identification kit, and determined to be a non-explosive, flammable, non-corrosive, organic resin-type material. The eight drums were placed in a roll-off bin. Two more drums were visible in the excavation, but were left in place due to limited remaining daylight. Samples were collected of the soil, the material in the drums, and the liquid in one of the drums. The samples were delivered to Microbac Laboratory in Riverside, and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) carbon range, polynuclear aromatic hydrocarbons (PAHs), CAM17 metals, and flashpoint (only the liquid sample). The analytical results indicated that high concentrations of benzene were present in all of the samples. Also detected were toluene, ethylbenzene, xylene, styrene, 1,2,4-trimethylbenzene, and naphthalene. On July 28, 2010, a geophysical survey was conducted in an effort to locate any additional buried drums. During the survey, several areas to the east and west of the original excavation were marked as possible targets for further investigation. Excavation and removal of additional drums was conducted between August 16 and August 25, 2010. A total of 51 drums, several aluminum canisters and pieces of wood were removed from the excavation and placed in roll-off-bins. Excavated soil was stockpiled and covered with plastic sheeting. Additional soil was excavated from beneath the drums, placed in stockpiles and covered. The resulting excavation measured approximately 100 feet from east to

CHINO AIRPORT - BURIED DRUMS AREA (Continued) **S103956204**

west and 20 feet from north to south. The bottom of the excavation varied from 10 to 15 feet below ground surface. Patricia Hannon of Board Staff observed the collection of the final confirmation soil samples on August 26, 2010. Staff from the U.S. EPA and the California Department of Toxic Substances Control were also present. The samples were submitted to a California certified laboratory for analysis as per the TCRAP. The analytical results for the soil samples showed only very low concentrations of benzene (<1 to 1.28 micrograms/kilogram (a%g/kg)), ethylbenzene (<1 to 2.24 a%g/kg), xylene (<1 to 28.8 a%g/kg), 1,3,5 trimethylbenzene (<5 to 55.4 a%g/kg), naphthalene (<5 to 10.9 a%g/kg), TPH gasoline range (<1 to 4.71 milligrams/kilogram (mg/kg)), TPH diesel range <1 to 123 mg/kg, and TPH motor oil range (<1 to 355 mg/kg).

Click here to access the California GeoTracker records for this facility:

San Bern. Co. Permit:

Region: SAN BERNARDINO
Facility ID: FA0010632
Owner: VAN’S MOBILE TRUCK SERVICE INC
Permit Number: PT0018102
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 08/31/2010

Region: SAN BERNARDINO
Facility ID: FA0010632
Owner: VAN’S MOBILE TRUCK SERVICE INC
Permit Number: PT0018103
Permit Category: SPECIAL HANDLER
Facility Status: INACTIVE
Expiration Date: 08/31/2010

Region: SAN BERNARDINO
Facility ID: FA0000826
Owner: AERO RESTORATION INC
Permit Number: PT0008391
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 11/30/2001

Region: SAN BERNARDINO
Facility ID: FA0000826
Owner: AERO RESTORATION INC
Permit Number: PT0008390
Permit Category: SPECIAL HANDLER
Facility Status: INACTIVE
Expiration Date: 11/30/2001

F33 WSW 1/4-1/2 0.461 mi. 2436 ft.	**CHINO AIRPORT NAPALM WASTE 7000 MERRILL AVENUE CHINO, CA 91710** **Site 4 of 5 in cluster F**	**SEMS**	**1014202332 CAN000908946**

Relative: **Lower**

Actual: **651 ft.**

SEMS:

Site ID:	908946
EPA ID:	CAN000908946
Federal Facility:	N
NPL:	Not on the NPL
Non NPL Status:	Removal Only Site (No Site Assessment Work Needed)

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID:	0908946
EPA ID:	CAN000908946
Facility County:	SAN BERNARDINO
Short Name:	CHINO AIRPORT NAPALM WAST
Congressional District:	Not reported
IFMS ID:	09WH
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	0.00000
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	R
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	09
Classification:	Other
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Removal Only Site (No Site Assessment Work Needed)
Non NPL Status Date:	09/02/10
Site Fips Code:	06071
CC Concurrence Date:	/ /
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	9270669.00000
Contact Name:	Craig Benson
Contact Tel:	(562) 499-6312
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported

Contact ID:	13003854.00000
Contact Name:	Leslie Ramirez
Contact Tel:	(415) 972-3978
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported

CHINO AIRPORT NAPALM WASTE (Continued) **1014202332**

Contact ID: 13003858.00000
Contact Name: Sharon Murray
Contact Tel: (415) 972-4250
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13004003.00000
Contact Name: Carl Brickner
Contact Tel: Not reported
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY EMERGENCY REMOVAL
Date Started: 08/26/10
Date Completed: 10/26/10
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Emergency
Action Anomaly: Not reported

F34 **AERO TRADER** **SLIC** **S103948886**
WSW **7000 MERRILL AV, #19** **EMI** **N/A**
1/4-1/2 **CHINO, CA 91710** **HAZNET**
0.461 mi.
2436 ft. **Site 5 of 5 in cluster F**

Relative:
Lower

Actual:
651 ft.

SLIC:

Region: STATE
Facility Status: **Open - Site Assessment**
Status Date: 10/31/1990
Global Id: SL208634049
Lead Agency: SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number: Not reported
Latitude: 33.9804492902876
Longitude: -117.645871639252
Case Type: Cleanup Program Site
Case Worker: PAH
Local Agency: Not reported
RB Case Number: 2086300
File Location: Regional Board
Potential Media Affected: Aquifer used for drinking water supply
Potential Contaminants of Concern: 1,2,3-Trichloropropane (TCP), Dichloroethene (DCE), Trichloroethylene (TCE)
Site History: The primary chemicals of concern in the groundwater at the site are trichloroethene, 1,2,3-trichloropropane, cis-1,2-dichloroethene, 1,2-dichloroethane, and 1,1-dichloroethene. Offsite plume characterization field activities were initiated in 2007. Twelve cone penetrometer testing (CPT)/direct push borings were advanced to investigate the below grade lithology, and to determine the

AERO TRADER (Continued) **S103948886**

horizontal and vertical extent of the VOCs in the groundwater in the vicinity of the site. Eleven additional direct push borings were also advanced, and water samples were collected. The soils encountered consisted of silts, sands, gravels and some clay lenses. The depth to groundwater ranged from 25 to 50 feet below ground surface (bgs), with the depth to water decreasing toward the south. Groundwater was detected at approximately 50 feet bgs at the Kimball Avenue boring location, approximately 30 to 45 feet bgs at the Bickmore Avenue boring locations and approximately 25 to 35 feet bgs at the Pine Avenue boring locations. The local groundwater flow direction is toward the southeast. Based on the results of the investigation in 2007, nine nested groundwater monitoring wells were installed in 2008 at three locations along the axis of the plume. Three wells were installed at each location to monitor the shallow (approximately 35 to 96 feet bgs), intermediate (approximately 91 to 146 feet bgs) and deep (approximately 206 to 309 feet bgs) groundwater zones.

Click here to access the California GeoTracker records for this facility:

EMI:

Year:	1987
County Code:	36
Air Basin:	SC
Facility ID:	45213
Air District Name:	SC
SIC Code:	5199
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1990
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1990
County Code:	36
Air Basin:	SC

AERO TRADER (Continued) **S103948886**

Facility ID:	45213
Air District Name:	SC
SIC Code:	1711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1993
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1996
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported

AERO TRADER (Continued) **S103948886**

Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 1
Part. Matter 10 Micrometers and Smllr Tons/Yr:1

Year: 1997
County Code: 36
Air Basin: SC
Facility ID: 55101
Air District Name: SC
SIC Code: 4581
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Year: 1998
County Code: 36
Air Basin: SC
Facility ID: 55101
Air District Name: SC
SIC Code: 4581
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Year: 1999
County Code: 36
Air Basin: SC
Facility ID: 55101
Air District Name: SC
SIC Code: 4581
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0

AERO TRADER (Continued) **S103948886**

Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Year:	2000
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2001
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Year:	2002
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2003
County Code:	36
Air Basin:	SC
Facility ID:	55101

AERO TRADER (Continued) **S103948886**

Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2004
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.4188
Reactive Organic Gases Tons/Yr:	0.77
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0.325
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.28

Year:	2005
County Code:	36
Air Basin:	SC
Facility ID:	55101
Air District Name:	SC
SIC Code:	4581
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.9856
Reactive Organic Gases Tons/Yr:	.67271826
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	.1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.086

HAZNET:

envid:	S103948886
Year:	2015
GEPAID:	CAC002806862
Contact:	SHILOH JARAMILLO
Telephone:	7142796184
Mailing Name:	Not reported
Mailing Address:	8191 E KAISER BLVD
Mailing City,St,Zip:	ANAHEIM, CA 928082214
Gen County:	San Bernardino

AERO TRADER (Continued) **S103948886**

TSD EPA ID: CAD980675276
TSD County: Kern
Waste Category: Other organic solids
Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 0.2
Cat Decode: Other organic solids
Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County: San Bernardino

envid: S103948886
Year: 2015
GEPAID: CAC002806862
Contact: SHILOH JARAMILLO
Telephone: 7142796184
Mailing Name: Not reported
Mailing Address: 8191 E KAISER BLVD
Mailing City,St,Zip: ANAHEIM, CA 928082214
Gen County: San Bernardino
TSD EPA ID: NED981723513
TSD County: 99
Waste Category: Other organic solids
Disposal Method: Incineration--Thermal Destruction Other Than Use As A Fuel
Tons: 0.075
Cat Decode: Other organic solids
Method Decode: Incineration--Thermal Destruction Other Than Use As A Fuel
Facility County: San Bernardino

envid: S103948886
Year: 2015
GEPAID: CAC002806862
Contact: SHILOH JARAMILLO
Telephone: 7142796184
Mailing Name: Not reported
Mailing Address: 8191 E KAISER BLVD
Mailing City,St,Zip: ANAHEIM, CA 928082214
Gen County: San Bernardino
TSD EPA ID: NED981723513
TSD County: 99
Waste Category: Other organic solids
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 1.2
Cat Decode: Other organic solids
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: San Bernardino

envid: S103948886
Year: 2015
GEPAID: CAC002843070
Contact: MIKE RIGGS
Telephone: 7146941930
Mailing Name: Not reported
Mailing Address: PO BOX 190
Mailing City,St,Zip: PLACENTIA, CA 928710190

AERO TRADER (Continued) **S103948886**

Gen County: San Bernardino
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Waste Category: Waste oil and mixed oil
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.8968
Cat Decode: Waste oil and mixed oil
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: San Bernardino

envid: S103948886
Year: 2015
GEPAID: CAC002806862
Contact: SHILOH JARAMILLO
Telephone: 7142796184
Mailing Name: Not reported
Mailing Address: 8191 E KAISER BLVD
Mailing City,St,Zip: ANAHEIM, CA 928082214
Gen County: San Bernardino
TSD EPA ID: CAD044429835
TSD County: Los Angeles
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.4
Cat Decode: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: San Bernardino

Click this hyperlink while viewing on your computer to access
3 additional CA_HAZNET: record(s) in the EDR Site Report.

35
WSW
1/2-1
0.681 mi.
3597 ft.

CAL-AERO FIELD / ACADEMY **ENVIROSTOR** **S107735994**
N/A

CHINO, CA

Relative:
Lower

Actual:
638 ft.

ENVIROSTOR:
Facility ID: 80000986
Status: Inactive - Needs Evaluation
Status Date: 07/01/2005
Site Code: Not reported
Site Type: Military Evaluation
Site Type Detailed: FUDS
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Douglas Bautista
Division Branch: Cleanup Cypress
Assembly: 52
Senate: 20
Special Program: Not reported

CAL-AERO FIELD / ACADEMY (Continued) **S107735994**

Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: DERA
Latitude: 33.98111
Longitude: -117.6394
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CA99799FA37100
Alias Type: Federal Facility ID
Alias Name: J09CA7342 & J0CA7341
Alias Type: INPR
Alias Name: 80000986
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 05/28/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 05/28/1999
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

36
SW
1/2-1
0.833 mi.
4397 ft.

CAL-AERO AIRPORT
CHINO, CA

ENVIROSTOR **S107735993**
N/A

Relative:
Lower

Actual:
625 ft.

ENVIROSTOR:
Facility ID: 80000207
Status: Inactive - Needs Evaluation
Status Date: 07/01/2005
Site Code: Not reported
Site Type: Military Evaluation
Site Type Detailed: FUDS
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported

CAL-AERO AIRPORT (Continued) **S107735993**

Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	52
Senate:	20
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	33.975
Longitude:	-117.6383
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799F538900
Alias Type:	Federal Facility ID
Alias Name:	J09CA0264
Alias Type:	INPR
Alias Name:	80000207
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 5 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHINO	S107539760		ON CARPENTER RD,1/8 MI S OF ME	91710	CDL
CHINO	S107539847		ON GROVE AVENUE (SOUTH OF PINE	91710	CDL
CHINO	S107538626		GROVE AVE (15700 BLOCK)	91710	CDL
ONTARIO	S107537995		CARPENTER 100 YDS S OF MERRILL		CDL
ONTARIO	1009508586	SO CAL GAS/ONTARIO MGP	CORNER OF CAMPUS, MARTLAND, MO	91761	EDR MGP

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 01/05/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 01/05/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 01/05/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 09/14/2016
Date Data Arrived at EDR: 10/04/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/05/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/10/2016
Date Data Arrived at EDR: 10/20/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 78

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/06/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/10/2016
Date Data Arrived at EDR: 10/20/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 78

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/06/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 100

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/18/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/29/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/29/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites
Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/31/2016
Date Data Arrived at EDR: 11/01/2016
Date Made Active in Reports: 01/18/2017
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/31/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database
The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/31/2016
Date Data Arrived at EDR: 11/01/2016
Date Made Active in Reports: 01/18/2017
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/31/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/15/2016
Date Made Active in Reports: 01/20/2017
Number of Days to Update: 66

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/15/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/14/2016
Date Made Active in Reports: 01/20/2017
Number of Days to Update: 37

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/14/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/24/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC: Statewide SLIC Cases

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/14/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 40

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/14/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/15/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 12/22/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 120

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/24/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/27/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/31/2016
Date Data Arrived at EDR: 11/01/2016
Date Made Active in Reports: 01/18/2017
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/31/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 58

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 01/04/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/20/2016
Date Data Arrived at EDR: 09/21/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 51

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/20/2016
Next Scheduled EDR Contact: 04/03/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 02/03/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/14/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 08/25/2016
Date Data Arrived at EDR: 08/26/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 49

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 08/31/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/29/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/31/2016
Date Data Arrived at EDR: 11/01/2016
Date Made Active in Reports: 01/18/2017
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/31/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 08/31/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 01/09/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/29/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/01/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 35

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/24/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program’s oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder’s office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/20/2017
Number of Days to Update: 45

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 01/17/2017
Number of Days to Update: 83

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/25/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/14/2016
Date Made Active in Reports: 01/20/2017
Number of Days to Update: 37

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/14/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/14/2016
Date Made Active in Reports: 01/20/2017
Number of Days to Update: 37

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/14/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/08/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/13/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/13/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 01/31/2017
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 10/11/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/03/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/23/2016
Next Scheduled EDR Contact: 04/03/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/22/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/22/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/07/2016
Number of Days to Update: 3	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016	Source: EPA
Date Data Arrived at EDR: 04/28/2016	Telephone: 202-566-0500
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 01/13/2017
Number of Days to Update: 127	Next Scheduled EDR Contact: 04/24/2017
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/27/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/05/2016	Telephone: 202-564-5088
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 01/09/2017
Number of Days to Update: 77	Next Scheduled EDR Contact: 04/24/2017
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 02/03/2017
Number of Days to Update: 43	Next Scheduled EDR Contact: 05/22/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/29/2016
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/03/2016
Date Data Arrived at EDR: 10/05/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/06/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/01/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/23/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/13/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016
Date Data Arrived at EDR: 07/26/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 59

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 02/03/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/07/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 148

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 01/05/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 12/22/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 12/22/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/05/2016
Date Data Arrived at EDR: 09/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/01/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/12/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/15/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 65

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 01/20/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/27/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 52

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/28/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/27/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 09/23/2016
Date Made Active in Reports: 10/24/2016
Number of Days to Update: 31

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/23/2016
Next Scheduled EDR Contact: 04/03/2017
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 12/09/2016
Date Made Active in Reports: 01/18/2017
Number of Days to Update: 40

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/16/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/20/2017
Number of Days to Update: 63

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/09/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/22/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/22/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/11/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 01/13/2017
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 37

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/15/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 37

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/19/2016
Date Data Arrived at EDR: 09/20/2016
Date Made Active in Reports: 12/16/2016
Number of Days to Update: 87

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/16/2016
Next Scheduled EDR Contact: 04/03/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 12/14/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/13/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/22/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines
An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 81

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/18/2016
Date Data Arrived at EDR: 09/20/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 12/20/2016
Next Scheduled EDR Contact: 04/03/2017
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 73

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/22/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/14/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 35

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/06/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 10/10/2016
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 90

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/09/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 11/10/2016
Date Data Arrived at EDR: 12/13/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 9

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 10/21/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 23

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 10/25/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 22

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/27/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/17/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/26/2017
Number of Days to Update: 65

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 11/01/2016
Date Data Arrived at EDR: 11/03/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 19

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/22/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 01/17/2017
Number of Days to Update: 55

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA’s are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/11/2016
Date Data Arrived at EDR: 10/14/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 35

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/03/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 10/25/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 22

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 10/24/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 22

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/08/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 63

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/14/2016
Date Data Arrived at EDR: 12/16/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 6

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 09/08/2016
Date Data Arrived at EDR: 09/09/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 35

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/17/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 12/15/2016
Next Scheduled EDR Contact: 04/03/2017
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 66

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 10/18/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 58

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/18/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/17/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/17/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/17/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/04/2016
Date Data Arrived at EDR: 10/11/2016
Date Made Active in Reports: 01/12/2017
Number of Days to Update: 93

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/09/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county’s Certified Unified Program Agency database. California’s Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 12/09/2016
Date Made Active in Reports: 01/19/2017
Number of Days to Update: 41

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 10/19/2016
Date Data Arrived at EDR: 10/25/2016
Date Made Active in Reports: 01/12/2017
Number of Days to Update: 79

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 01/17/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/17/2017
Number of Days to Update: 42

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/05/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 17

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 43

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 01/09/2017
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/08/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 44

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 11/03/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/03/2016
Date Data Arrived at EDR: 11/08/2016
Date Made Active in Reports: 01/12/2017
Number of Days to Update: 65

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/07/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/20/2016
Date Data Arrived at EDR: 10/25/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 51

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/19/2016
Next Scheduled EDR Contact: 04/03/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 10/20/2016
Date Data Arrived at EDR: 10/25/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/19/2016
Next Scheduled EDR Contact: 04/03/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 10/04/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 45

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/05/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 10/04/2016
Date Made Active in Reports: 12/16/2016
Number of Days to Update: 73

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/05/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 10/19/2016
Number of Days to Update: 42

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015	Source: Department of Health Services
Date Data Arrived at EDR: 11/07/2015	Telephone: 619-338-2209
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 01/23/2017
Number of Days to Update: 58	Next Scheduled EDR Contact: 05/08/2017
	Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010	Source: San Diego County Department of Environmental Health
Date Data Arrived at EDR: 06/15/2010	Telephone: 619-338-2371
Date Made Active in Reports: 07/09/2010	Last EDR Contact: 12/02/2016
Number of Days to Update: 24	Next Scheduled EDR Contact: 03/20/2017
	Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008	Source: Department Of Public Health San Francisco County
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 09/29/2008	Last EDR Contact: 02/03/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 05/22/2017
	Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/16/2016	Source: Department of Public Health
Date Data Arrived at EDR: 11/21/2016	Telephone: 415-252-3920
Date Made Active in Reports: 01/12/2017	Last EDR Contact: 02/06/2017
Number of Days to Update: 52	Next Scheduled EDR Contact: 05/22/2017
	Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 09/21/2016	Source: Environmental Health Department
Date Data Arrived at EDR: 09/22/2016	Telephone: N/A
Date Made Active in Reports: 10/18/2016	Last EDR Contact: 12/15/2016
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/03/2017
	Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/17/2016	Source: San Luis Obispo County Public Health Department
Date Data Arrived at EDR: 11/21/2016	Telephone: 805-781-5596
Date Made Active in Reports: 01/19/2017	Last EDR Contact: 11/16/2016
Number of Days to Update: 59	Next Scheduled EDR Contact: 03/06/2017
	Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 15

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 11/16/2016
Date Data Arrived at EDR: 11/21/2016
Date Made Active in Reports: 01/19/2017
Number of Days to Update: 59

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/10/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 75

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 11/16/2016
Date Data Arrived at EDR: 11/21/2016
Date Made Active in Reports: 01/19/2017
Number of Days to Update: 59

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/15/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 29

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 1

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/22/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 19

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 09/27/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 55

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/22/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/04/2016
Date Data Arrived at EDR: 10/06/2016
Date Made Active in Reports: 12/16/2016
Number of Days to Update: 71

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/22/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 35

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 10/27/2016
Date Data Arrived at EDR: 10/28/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 74

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/17/2017
Number of Days to Update: 82

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/30/2016
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/14/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 89

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/28/2016
Date Data Arrived at EDR: 12/14/2016
Date Made Active in Reports: 01/12/2017
Number of Days to Update: 29

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/14/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/12/2017
Number of Days to Update: 55

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/03/2017
Next Scheduled EDR Contact: 04/17/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/28/2016
Date Data Arrived at EDR: 11/03/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 42

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 01/03/2017
Number of Days to Update: 96

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/09/2017
Next Scheduled EDR Contact: 04/24/2017
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 11/02/2016
Date Made Active in Reports: 01/04/2017
Number of Days to Update: 63

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/01/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/12/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/12/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

BORBA LAND PHASE II 189 ACRES
14545 SOUTH GROVE AVENUE
CHINO, CA 91710

TARGET PROPERTY COORDINATES

Latitude (North):	33.987171 - 33˚ 59’ 13.82’’
Longitude (West):	117.622972 - 117˚ 37’ 22.70’’
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	442459.5
UTM Y (Meters):	3760714.0
Elevation:	667 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640930 CORONA NORTH, CA
Version Date:	2012
Northeast Map:	5620426 GUASTI, CA
Version Date:	2012
Southwest Map:	5640938 PRADO DAM, CA
Version Date:	2012
Northwest Map:	5619074 ONTARIO, CA
Version Date:	2012

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

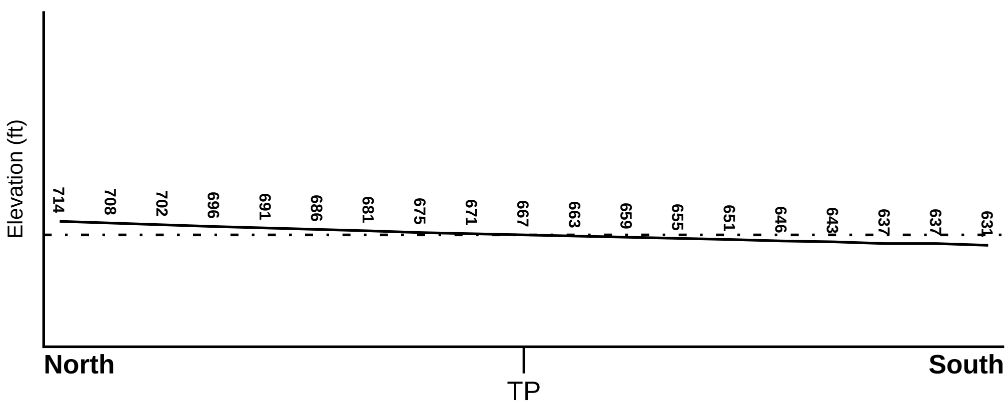
TOPOGRAPHIC INFORMATION

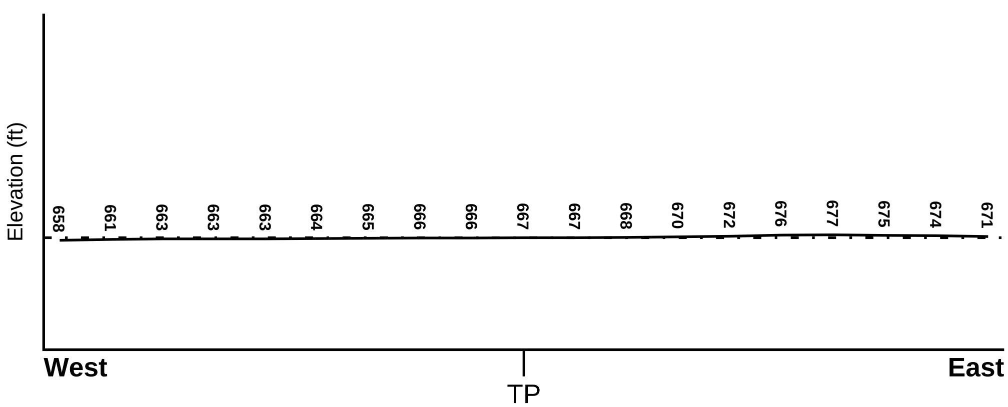
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 667 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06071C9375H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06037C1750F	FEMA FIRM Flood data
06071C8620H	FEMA FIRM Flood data
06071C8638H	FEMA FIRM Flood data
06071C9335H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CORONA NORTH	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

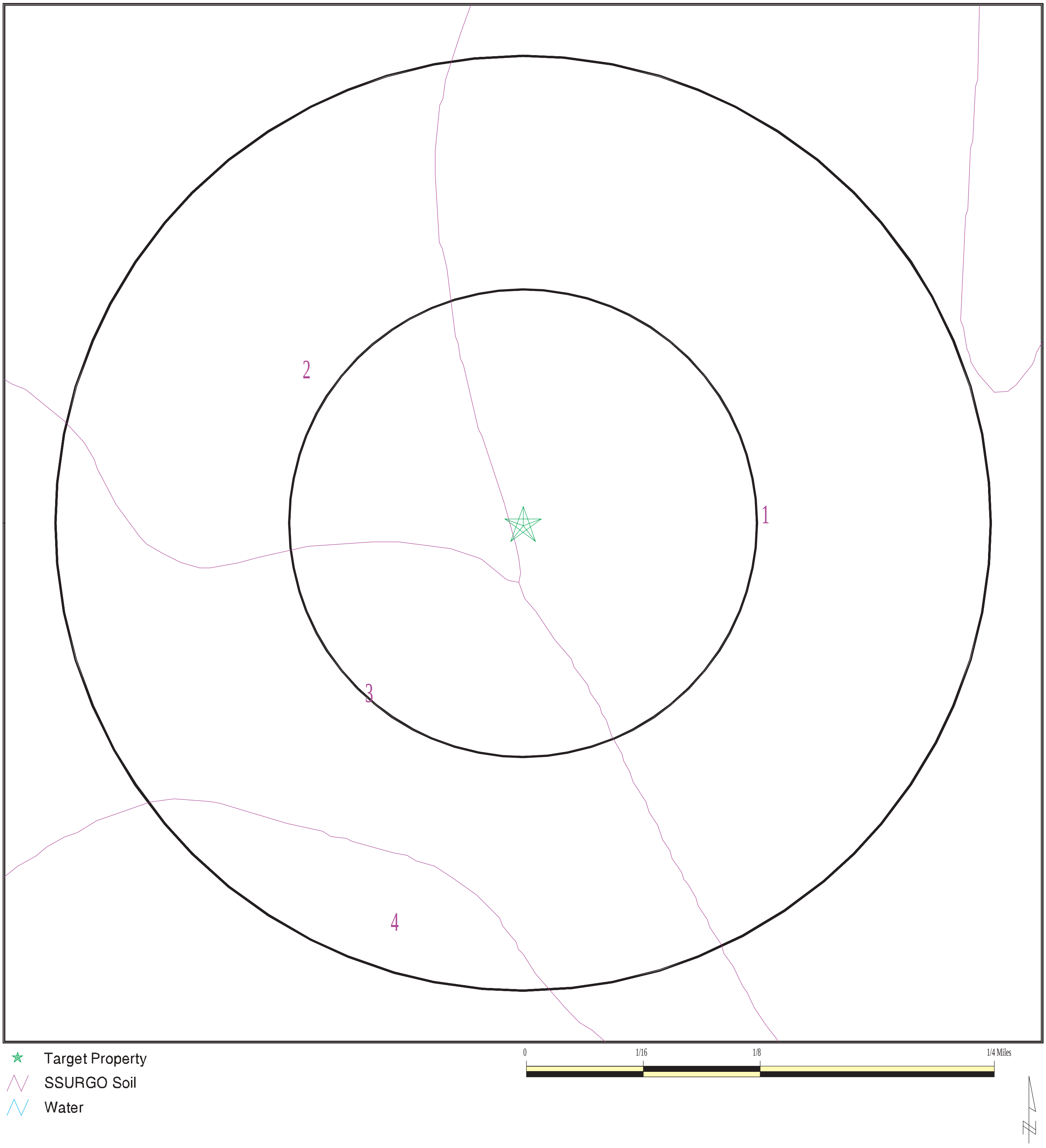
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4851881.2s



SITE NAME: Borba Land Phase II 189 Acres ADDRESS: 14545 South Grove Avenue Chino CA 91710 LAT/LONG: 33.987171 / 117.622972	CLIENT: Partner Engineering and Science, Inc. CONTACT: Colleen Tubridy INQUIRY #: 4851881.2s DATE: February 10, 2017 7:15 pm

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: DELHI

Soil Surface Texture: fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	**Upper**	**Lower**	**Soil Texture Class**	**AASHTO Group**	**Unified Soil**		**Soil Reaction (pH)**
1	0 inches	18 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 5.6
2	18 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1

Soil Map ID: 2

Soil Component Name: TUJUNGA

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
2	18 inches	59 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1

Soil Map ID: 3

Soil Component Name: HILMAR

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1
2	22 inches	59 inches	stratified loamy sand to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

Soil Map ID: 4

Soil Component Name:	CHINO
Soil Surface Texture:	silt loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Somewhat poorly drained
Hydric Status: Not hydric	
Corrosion Potential - Uncoated Steel:	High
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	16 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	16 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

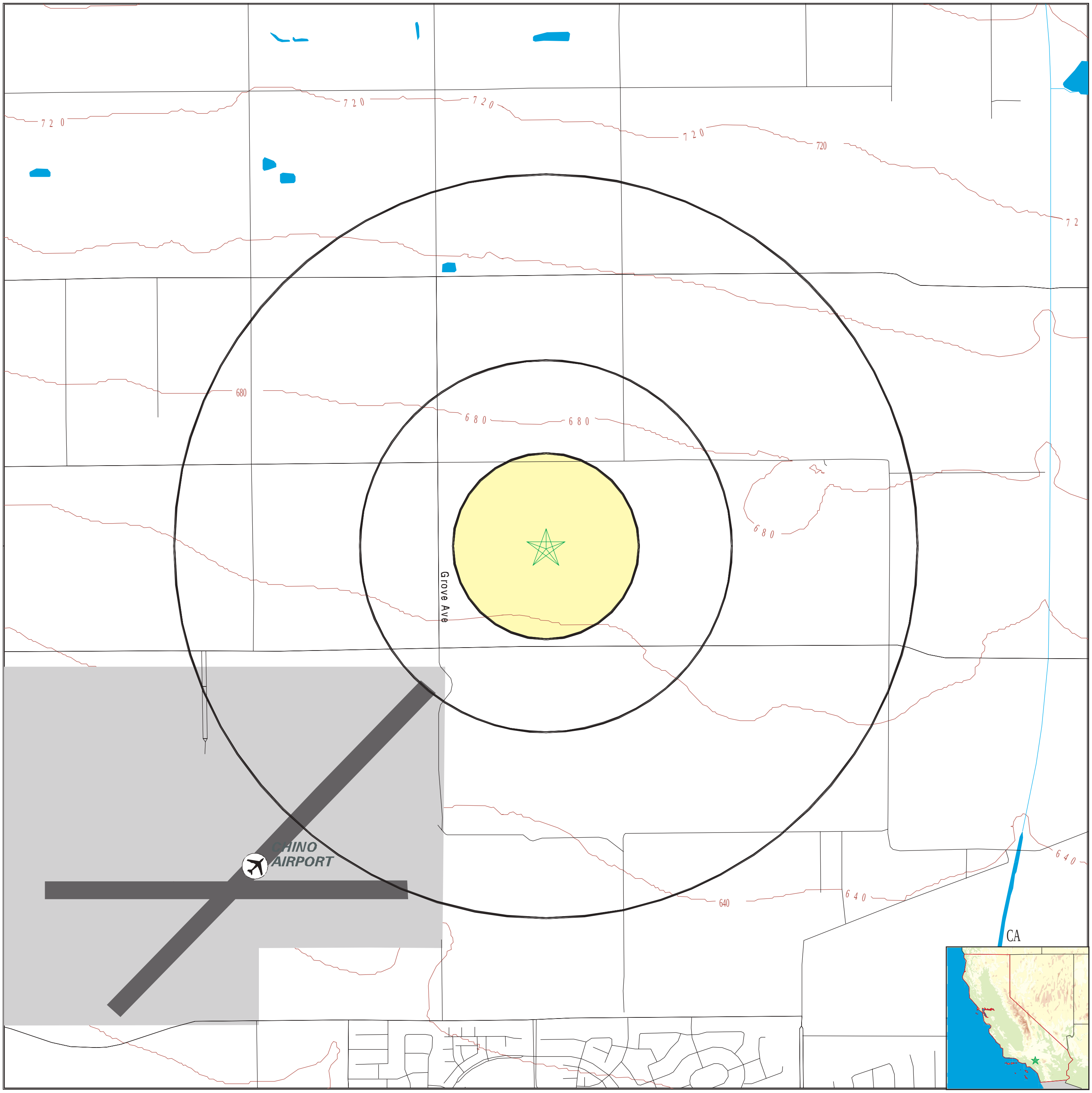
Note: PWS System location is not always the same as well location.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 4851881.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Borba Land Phase II 189 Acres	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	14545 South Grove Avenue Chino CA 91710	CONTACT:	Colleen Tubridy
		INQUIRY #:	4851881.2s
LAT/LONG:	33.987171 / 117.622972	DATE:	February 10, 2017 7:15 pm

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91710	14	0

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 91710

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.900 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

APPENDIX D: QUALIFICATIONS

PARTNER

Brittney Eugenio
Project Scientist

Education

B.A., in Environmental Studies, University of California, Santa Barbara
Minor in Professional Writing with an emphasis in Business Communication

Registrations

AHERA Certified Asbestos Building Inspector, ABII0202150007N6474

Training

Asbestos Building Inspector Initial Course

Highlights

3 years in the environmental consulting industry
3 years of experience performing due diligence assessments including Phase I Environmental Site Assessments, Transaction Screen Assessments and Environmental Desktop Reports

Experience Summary

Ms. Eugenio currently holds the role of a Project Scientist and her responsibilities include thorough site assessment and technical report writing in line with the American Society of Testing and Materials (ASTM) standard and US Environmental Protection Agency's All Appropriate Inquiry (AAI) as well as customized client formats. In addition, Ms. Eugenio performs limited asbestos surveys, lead-based paint surveys and radon testing as required per scope of work.

Ms. Eugenio has worked on numerous large scope projects including gas stations, dry cleaners, manufacturing sites, industrial/warehouse facilities, hotels, office buildings, retail shopping centers, machine shops, auto repair facilities, cell phone data towers and associated land, recycling facilities, and multi-use commercial/residential buildings.

Project Experience

Ms. Eugenio has three years of experience performing due diligence assessments for a variety of property types, as detailed above. For each assessment she reviews the condition of the building structure and systems and develops a thorough report.

Laguna Serrano Apartments, Laguna Niguel, CA. Ms. Eugenio performed a Phase I Environmental Assessment for a 336-unit multi-family apartment complex on a 21.9 acre lot.

Porsche Motorsport North America, Santa Ana, CA. Ms. Eugenio performed a Phase I Environmental Assessment for a sports car engine and gear box assembly, testing and maintenance facility.

Freeway Technology Park, Irvine, CA. Ms. Eugenio performed a Phase I Environmental Assessment for a ten building multi-tenant commercial/light industrial business park on a 20.5 acre lot which was formerly developed as part of the Orange County International Raceway.

Bouquet Canyon Senior Apartments, Santa Clarita, CA. Ms. Eugenio performed a Phase I Environmental Assessment for a 264-unit senior apartment complex.

Agricultural land, Imperial County, CA. Ms. Eugenio performed a Phase I Environmental Assessment for 103.2 acres of agricultural land.

South Hills Plaza, West Covina, CA. Ms. Eugenio performed a Phase I Environmental Assessment for a 104,374 square-foot commercial retail shopping center with multiple retail stores, dental and medical offices, a gym, restaurants and an active dry cleaner.

Commercial, Los Angeles, CA. Ms. Eugenio performed a Phase I Environmental Assessment for a ten-story commercial office building in Downtown Los Angeles that was constructed in 1920.

All Car Auto Repair, Riverside, CA. Ms. Eugenio performed a Phase I Environmental Assessment for an automobile maintenance and repair facility with storage of large quantities of hazardous materials, equipped with a septic system and formerly developed as a gas station.

Contact

beugenio@partneresi.com

PARTNER

Kathy Lehnus, CPG, LEP
Project Manager

Education

University of Connecticut, M.S. Applied Geology
University of Massachusetts, B.S. Environmental Science
University of Massachusetts, B.A. Geology

Registrations

Licensed Environmental Professional, State of Connecticut
Certified Professional Geologist, American Institute of Petroleum Geologists

Training

Behavior-Based Health and Safety: Control of Work (BP)
Behavior-Based Health and Safety: Loss Prevention System (Chevron)
OSHA HAZWOPER 40-hour training

Highlights

20 years in the environmental assessment and remediation industry
Phase I ESAs
Transaction Screens
Phase II ESAs
Contaminant Transport Evaluations
Remediation Design
Implementation of Remediation

Experience Summary

Ms. Lehnus is currently a project manager providing staff oversight and quality reviews for Phase I ESAs and desktop reviews. Ms. Lehnus focuses on portfolios for purchase or refinance.

Ms. Lehnus has 20 years of experience in the environmental assessment and remediation industry. She has extensive experience conducting due diligence assessments for a variety of property types using a varied number of reporting standards, including ASTM standards, EPA's All Appropriate Inquiry (AAI), and customized client formats. Specifically, Mrs. has performed and managed Phase I Environmental Site Assessments, Environmental Transaction Screens, Phase II and III Subsurface Investigations, and remediation projects.

Further, Ms. Lehnus is a Licensed Environmental Professional in Connecticut and has served as a project manager for large industrial sites involved with Brownfield initiatives for transfer, sale, and redevelopment. Duties included strategic planning of future redevelopment of properties based on the current environmental conditions and the determination of proper remedies required based on future use. Duties also included working with legal counsel to review sale agreements to ensure that remediation measures are appropriately documented for compliance. Ms. Lehnus has also designed and implemented investigation and remediation plans in order to verify closure of projects under the Connecticut Transfer Act.

Responsibilities include managing projects to complete large-scale soil and groundwater investigation and remediation tasks, completion of closure letters, variances, permitting, and other submittals to state agencies, and participation on internal and external committees to improve sampling, reporting, and regulatory processes.

Project Experience

Johnny on the Spot Dry Cleaner, Whitestone, New York. Ms. Lehnus managed the contaminate delineation (Phase III) investigation of groundwater, soil vapor, and indoor air at a former dry cleaner facility in the New York Department of Environmental Conservation (NYDEC) cleanup program. Work included soil, groundwater, soil vapor, and indoor air sampling in compliance with NYDEC guidance documents, and oversight of the design of a sub-slab depressurization system to alleviate vapor intrusion.

Ansonia Copper and Brass, Ansonia, Connecticut. Responsible for the completion of Phase III activities at release areas with completion of several Connecticut Department of Energy and Environmental Protection (CTDEEP) submittals, which include proposed remediation strategies for final closure under the Remediation Standard Regulations (RSRs) to allow for property redevelopment. Remediation activities included incorporating capped areas into land use restrictions to allow for extensive reuse of the brownfield property.

Starbuck Sprague Facility, Waterbury, Connecticut. Responsible for the completion of the Phase I, II and III activities, reporting, and completion of DEEP submittals to administer a remediation strategy to bring the property into compliance with the RSRs while allowing for minimal disturbance of the existing conditions;

Farrel Corporation, Ansonia, Connecticut. Responsible for the completion of Phase III activities at release areas, quarterly groundwater monitoring and contaminant plume mapping, reporting, and completion of several DEEP submittals, which include proposed remediation strategies for final closure.

Latex Foam, Shelton, Connecticut. Responsible for permitting and oversight of remediation of wetland area near an Indian burial ground, quarterly groundwater sampling with plume mapping in overburden and bedrock groundwater, and Phase III delineation of a No. 6 oil spill.

Antares, Stamford, Connecticut. Included on the team to investigate and assess a portfolio of properties for the prospect of quick-turn purchase, as well as investigation and remediation of properties added to the portfolio.

Verizon Wireless, Inc., Environmental Assessments, Various Connecticut Locations. Responsible for the Verizon Wireless account, duties include oversight of staff members and review of reports for the account, client interaction, and applying DEP regulations and National Environmental Policy Act (NEPA) protocol to work scopes and templates.

Foxon Road, North Haven, Connecticut. Participated with a team to design an active vapor extraction system at a former dry cleaning facility. Work included conducting a soil gas survey, installing soil vapor extraction points, creating a site-specific geologic cross section with respect to soil permeability, and performing a pilot test to determine design specifications.

Home Depot, Bloomfield, Connecticut. Oversight of initial soil and groundwater assessment, followed by site-wide soil excavation and the installation of a passive vapor barrier at a former manufacturing facility. This work was conducted coincident with Site development activities at a high profile retail chain and required working closely with development contractors to ensure the safety of the barrier while exposed. Post remediation work included the installation monitoring wells and soil vapor points with quarterly sampling and DEP submittals.

Talcottville Road, Vernon, Connecticut. Excavation of gasoline-contaminated soil and application of Oxygen Release Compound (ORC) in order to remediate release area. Study included DEP permitting, and pre- and post-remediation water chemistry monitoring.

General Electric, Hazardous Ranking System Package, Pittsfield, Massachusetts. Worked with a team of geologists assessing and ranking sources at this high profile Site for proposal to the National Priority List.

American Optical Company, Site Inspection Prioritization, Southbridge, Massachusetts. As Site Leader for this Site Inspection Prioritization, duties included the preparation of a report to summarize current site conditions and rate the potential for further regulation under the EPA Superfund program. Duties included review of previous analytical data to assess potential sources.

Affiliations

Board of Directors, Connecticut Environmental Forum (2011-2015)
Society of Woman Environmental Professionals (2005-2014)
Environmental Professionals of Connecticut (1998-2014)

Contact

klehnus@partneresi.com

PARTNER

Misty Vazquez Ponce, PE
Principal

Education

M.S. Civil-Environmental Engineering, California State University, Fullerton
B.S. Environmental Engineering, University of California, Riverside
Coursework in Legal and Regulatory Framework for Environmental Management, University of California Irvine
Coursework in Mold Inspection

Registrations

Professional Engineer, Colorado
Engineer-In Training (EIT), California
State of California Registered Environmental Assessor (program canceled in July 2012)
LEED Green Associate (GA) Accredited Professional, United States Green Building Council
AHERA Certified Building Inspector for Asbestos

Training

OSHA 40-hour HAZWOPER, Operations Level Health and Safety Training
OSHA 10-hour Construction Safety Training
Trained/Certified – Hazardous Waste in California, US Department of Transportation Hazardous Materials Transportation, and USEPA Hazardous/Toxic Waste management (LION)

Highlights

Over 16 years in the environmental and engineering consulting industry with institutional and private clients
Environmental Engineer
Extensive knowledge of real estate due diligence
Phase I and Phase II Environmental Site Assessments
Site Mitigation and Remediation

Experience Summary

Ms. Ponce is an environmental engineer with more than 16 years of experience in the environmental and engineering services industries. As a Principal and National Client Manager working within Partner's Investment Advisory Group, Ms. Ponce strives to provide the expected high level of client service for the Equity Asset Management industry.

Ms. Ponce has significant experience in the field of environmental due diligence, site assessment, remediation, and regulatory compliance. Ms. Ponce provides environmental support to clients nationwide during the acquisition, disposition, development, and on-going management and operation of commercial, industrial, and multifamily residential properties.

Ms. Ponce has considerable experience in Phase I and Phase II Environmental Site Assessments (ESAs) of commercial, agricultural, and industrial properties and projects involving water quality, soil quality, and regulatory compliance including hazardous and solid waste site characterization and remediation; remediation system design installation, and operation; tank removals; asbestos surveys; lead-based paint surveys; radon studies; mold assessments; lead-in water sampling and analysis; and technical reporting.

Ms. Ponce has been involved with feasibility and treatability studies associated with several remediation projects including soil and groundwater treatment systems, UST/LUST closures, and management of construction soils generated during redevelopment of agricultural and industrial properties. Other equity and finance level services managed and directed by Ms. Ponce include management of Property Condition Assessments, ALTA Land Surveys, zoning reports, Seismic Risk Assessments (PML), Construction Risk Management, construction monitoring services, and construction document cost review analysis.

Real estate investors, financial institutions, insurance lenders, property managers, developers, and brokers have come to rely on her advice and judgment to help them with their real estate business decisions. Ms. Ponce is a dedicated professional who takes pride and pleasure in meeting her client's needs and spearheading and assembling the team with the expertise to handle any issue that may come up during the real estate transaction.

Project Experience

Ms. Ponce has conducted, managed, and directed thousands of ESAs, industrial hygiene, and engineering assessments throughout her career, nationally and globally. The following select projects and client base provide a glimpse of her consulting experience and due diligence background:

Ford Leasing Development Company / Sunset Ford, Westminster, California. Conducted a Phase I and II ESA and remedial activities at a closing automobile dealership with 41 service bays containing active, decommissioned, or removed in-ground hydraulic vehicle lifts. The Phase II ESA identified petroleum hydrocarbon and VOC impacts in soil and groundwater in the immediate vicinity of the lifts. Based on the identified impacts, managed the removal of all lifts and contaminated soil under regulatory oversight and conducted a comprehensive site investigation, including well installation and soil, groundwater, and soil vapor sampling. Prepared and submitted final reports to the client and regulatory agencies and obtained regulatory site closure.

UBS Realty Investors, LLC, Riverside, California. Conducted a Phase I ESA of an approximately 36-acre commercial shopping center containing retail stores; restaurants; banks; grocery stores; a movie theater; hair, nail, and beauty salons; and a dry cleaner in a total of 16 buildings. Work included site reconnaissance, tenant inspections, site history review, database search, and final report preparation with recommendations for additional assessment.

USDA Forest Service, Mountain Center, California. Prepared a Soil Excavation and Groundwater Well Installation Workplan to assess a release that was discovered during the removal of two 1,000-gallon USTs. Elevated contaminant concentrations were detected in confirmation soil samples collected at that time. Installed one groundwater monitoring well into fractured bedrock and later abandoned the well due to planned excavation activities in the area. A groundwater sample collected prior to well abandonment contained elevated contaminant concentrations. Prepared a Site Investigation Summary Report summarizing site activities and investigations to date. Prepared a Groundwater Assessment Workplan to assess the extent of contaminant concentrations in groundwater. Site assessment work is pending.

American Golf Corporation, Eighteen Sites in Southern California. Managed underground storage tank removal and closure activities. Work included performing initial confirmation soil sampling and analysis and subsequent monitoring and soil and/or groundwater testing in association with the removal of the underground storage tanks, associated dispensers, and piping at sixteen sites located throughout Southern California. Prepared soil and/or groundwater investigation workplans as needed to address contamination issues at several of the sites and closure reports for the various State and local authorities. To date, regulatory closure has been obtained at most of the facilities. Currently managing ongoing monitoring and/or remediation is occurring at several of the facilities.

G.E. Capital, Tijuana, Mexico. Managed and conducted more than 30 Phase I and Phase II ESAs for active and proposed industrial developments within various areas of Tijuana, Mexico. Work included site reconnaissance, site history review, and final report preparation.

Affiliations

Member, Commercial Real Estate Development Association (NAIOP)
Member, Urban Land Institute (ULI)
Member, National Ground Water Association (NGWA)
Associate Member, American Society of Civil Engineers (ASCE)
Member, Commercial Real Estate Women (CREW)
Member, Groundwater Resources Association (GRA) of California
Intern Environmental Engineer, American Academy of Environmental Engineers (AAEE)
Member, International Council of Shopping Centers (ICSC)

Contact

mponce@partneresi.com

8.5 Retained Plume Remedial Alternatives

A summary of all the plume remedial alternatives is presented in Table 11. The following plume remedial alternatives were retained based on evaluation of effectiveness, implementability, and cost:

- Plume Remedial Alternative 1
- Plume Remedial Alternative 2
- Plume Remedial Alternative 3C
- Plume Remedial Alternative 3D
- Plume Remedial Alternative 5A
- Plume Remedial Alternative 5B

The retained plume remedial alternatives will undergo detailed evaluation in Section 9.