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30 January 2015
File No. 39751-007

United States Environmental Protection Agency
Region 9
75 Hawthorne Street (SFD-7-1)
San Francisco, California 94105

Attention: Ms. Melanie Morash

Subject: Combined 2014 Annual Groundwater Monitoring Report and
Annual In Situ Bioremediation Program Report
Former 901/902 Thompson Place
Sunnyvale, California

Dear Ms. Morash:

Please find enclosed the subject report prepared by Haley & Aldrich, Inc., on behalf of Advanced Micro Devices, Inc. (AMD). This report documents the results of the 2014 annual groundwater monitoring program and the 2014 quarterly performance monitoring of the in situ bioremediation program for the former AMD facility located at 901/902 Thompson Place, in Sunnyvale, California.

Please feel free to call the undersigned if you have question regarding this report.

Sincerely yours,
HALEY & ALDRICH, INC.

Michael Calhoun, PG, CHG
Senior Technical Specialist

Peter Bennett, PG, CHG
Vice President and Lead Hydrogeologist

c: Advanced Micro Devices, Inc.; Attn: Ms. Heather O'Cleirigh
Advanced Micro Devices, Inc.; Attn: Mr. Brett Stringer
City of Sunnyvale; Attn: Mr. Ron Staricha
Santa Clara Valley Water District; Attn: Mr. George Cook

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COMBINED 2014 ANNUAL GROUNDWATER MONITORING REPORT AND ANNUAL IN SITU BIOREMEDIATION PROGRAM REPORT
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

by

Haley & Aldrich, Inc.
Oakland, California

for

Advanced Micro Devices, Inc.
Sunnyvale, California

File No. 39751-007
30 January 2015

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Description
1,1-DCA	1,1-dichloroethane
1,2-DCB	1,2-dichlorobenzene
1,1-DCE	1,1-dichloroethene
1,1,1-TCA	1,1,1-trichloroethane
AMD	Advanced Micro Devices, Inc.
bgs	below ground surface
ANS	acid neutralization system
C&T	Curtis & Tompkins, Ltd.
cDCE	cis-1,2-dichloroethene
COCs	chemicals of concern
ES	Engineering Science, Inc.
FFS	focused feasibility study
EPA	United States Environmental Protection Agency
FSI	Field Solutions, Inc.
GAC	granular activated carbon
Geomatrix	Geomatrix Consultants, Inc.
GETS	groundwater extraction and treatment system
g/L	grams per liter
Haley & Aldrich	Haley & Aldrich, Inc.
ISB	*in situ* bioremediation
MCL	Maximum Contaminant Level
μg/L	micrograms per liter
MNA	monitored natural attentuation
MS/MSD	matrix spike/matrix spike duplicate
NAVD88	North American Vertical Datum of 1988
NPL	National Priorities List
OOU	Off-Site Operable Unit
PCE	tetrachloroethene
QA/QC	quality assurance/quality control
ROD	Record of Decision

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

Acronym	Description
Site	Former 901/902 Thompson Place
Summit	Summit Commercial Properties
TCE	trichloroethene
tDCE	trans-1,2-dichloroethene
the Order	Site Cleanup Requirements Order Number 91-102
TOC	total organic carbon
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
Water Board	California Regional Water Quality Control Board, San Francisco Bay Region

1. INTRODUCTION

This report documents the results of the 2014 annual groundwater monitoring program and the 2014 quarterly performance monitoring of the in situ bioremediation (ISB) program for the former Advanced Micro Devices, Inc., (AMD) facility located at 901/902 Thompson Place, in Sunnyvale, California ([Site]; Figures 1 and 2). The report was prepared for AMD by Haley & Aldrich, Inc. (Haley & Aldrich).

The Site was added to the National Priorities List (NPL) in June 1986, and a Record of Decision (ROD) was issued by the United States Environmental Protection Agency (EPA) on 11 September 1991. The Site has been regulated under Site Cleanup Requirements Order Number 91-102 (the Order) issued on 19 June 1991 by the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board). The Water Board was the lead regulatory oversight agency for the Site pursuant to the South Bay Multi-Site Cooperative Agreement and the South Bay Groundwater Contamination Enforcement Agreement, established on May 2, 1985 by the Water Board, Department of Health Services and the EPA. However, in a letter dated 7 August 2014, the lead agency role was transferred from the Water Board to the EPA.

1.1 Report Organization

This report is organized into four sections as described below:

- Section 1 – Introduction
- Section 2 – Background: this section includes a Site description and history, summary of Site hydrogeology, and current environmental conditions.
- Section 3 – Annual Groundwater Monitoring: this section describes the methods, results, and conclusions of the 2014 annual groundwater monitoring event.
- Section 4 – In Situ Bioremediation Summary: this section describes the methods, results, and conclusions of the 2014 quarterly in situ bioremediation performance monitoring program.

2. BACKGROUND

The Site comprises approximately 3 acres of relatively flat land, at an average elevation of approximately 48 feet above sea level, approximately 4 miles south of the southern end of San Francisco Bay. Neighboring properties are used for light industrial and commercial purposes.

Two low-rise buildings, connected by a hallway, previously existed at the Site (formerly 901 and 902 Thompson Place; Figure 2). The property was sold to Summit Commercial Properties (Summit) and redeveloped in 2007. The 901 and 902 buildings were razed and a single 3-story building (875 East Arques Avenue; Figure 2) was constructed over the footprints of the previous buildings.

A network of 21 wells are monitored for groundwater quality on an annual basis. A network of 13 wells in the ISB area are monitored on a quarterly basis to evaluate the performance of the ISB system.

2.1 Site History and Chemical Use

AMD designed and fabricated semiconductor devices at the Site between 1969 and 1992 (Engineering Science, Inc., [ES], 1992). Two belowground acid neutralization system (ANS) tank vaults were located at the northern and southern ends of the former 901 and 902 Thompson Place buildings, respectively (Arcadis, 2001). Both of the ANS tanks were constructed of coated concrete, had capacities of 2,000 gallons or less (Arcadis, 2001), and were used to contain acidic industrial wastewater that was neutralized by adding caustics before it was discharged to the sanitary sewer (Parsons ES, 1996).

Chemicals historically used by AMD for semiconductor fabrication at the Site included solvents and corrosives (Engineering Science, 1988). Records of chemical use prior to 1980 are not available; however, it has been inferred by others that TCE was used on Site between 1969 and 1979 (Engineering Science, 1988). The primary on-Site source of trichloroethene (TCE) impacts to groundwater and soil beneath the Site appears to have been leaks of volatile organic compounds (VOCs) either from cracks in the ANS tanks that developed over time or from the movement of VOCs through the tanks' concrete walls (Engineering Science, 1988). The two ANS tanks were removed between 1983 and 1984 and replaced by two sets of three underground storage tanks (USTs) and associated vaulted containment systems (Arcadis, 2001). As of 1980, the majority of the solvent waste generated by Site activities was collected and stored in an aboveground storage tank (Arcadis, 2001). Hazardous waste materials were containerized in 55-gallon drums in a hazardous material storage area.

The facility was vacated by AMD in 1992 and remained vacant until the property was sold to Summit in 2007 and redeveloped for use as a self-storage facility.

2.2 Hydrogeologic Conditions

The Site is in the central portion of Santa Clara Valley of the Coast Range physiographic province, an area characterized by north-south trending valleys and mountains. The Site is located within the San Jose Subarea of the South Bay Groundwater Basin. This area is characterized by a thick alluvial sequence underlain by sediments of the Santa Clara Formation (DWR, 1967). The alluvium generally is considered to be water-bearing, with coarse-grained alluvial deposits, representing ancestral stream channels and levee deposits, conveying groundwater from the forebay regions south and west of the site near the Santa Cruz Mountains, towards San Francisco Bay (Helley et al., 1979). This depositional

environment has resulted in a high degree of heterogeneity with respect to hydrogeologic conditions beneath the site.

The site hydrostratigraphy is described by Engineering Science (1986) as a sequence of coarse-grained sediments separated primarily by silty clay. From shallow to deep, the primary hydrostratigraphic zones are described as follows:

1. the A Zone, an approximately 5-feet thick relatively continuous sandy layer typically encountered between 7 to 20 feet below ground surface (bgs);

2. the B1 Zone, an approximately 3 feet-thick, discontinuous, lenticular, sand and gravel unit typically encountered between 22 to 40 feet bgs;

3. the B2 Zone, an approximately 4-feet-thick discontinuous sequence of sand and gravel lenses typically encountered between 45 to 65 feet bgs; and

4. the B3 Zone, a system of two sandy layers approximately 1 and 4-feet thick, respectively, that is encountered between approximately 70 and 80 feet bgs.

The depth intervals designated for each of the zones are not consistent among many of the early reports on Site hydrogeology; different interpretations of depth intervals for various zones likely occurred because of the complex nature of the alluvial system beneath the Site, in which sand zones comprise elongated, channel-type deposits that can occur at various depths and widths, with a meandering three-dimensional configuration, rather than a series of horizontal, continuous layers. Nonetheless, A-zone wells are generally screened from 10 to 25 feet bgs; B1-zone wells are generally screened from 25 to 45 feet bgs; B2-zone wells are generally screened from 45 to 55 feet bgs; and the one B3-zone well (35-DDD) is screened from 70 to 80 feet bgs (Engineering Science, 1982).

The depth of the uppermost groundwater surface typically is encountered at approximately 10 feet bgs, and generally occurs under confined conditions. Upward vertical hydraulic gradient values were calculated between the three zones in 2014 (see Section 3, below), although downward vertical hydraulic gradient values have been reported at some locations during previous monitoring events (e.g., Geomatrix, 2007a). The horizontal hydraulic gradient is generally to the north – northeast, towards the Bay. This is consistent with the regional groundwater direction under natural conditions (PA, 1991).

2.3 Chemicals of Concern

As part of a baseline public health evaluation (Clement, 1990), the complete list of chemicals detected in environmental media was evaluated and a subset of those chemicals was selected to represent the chemicals of concern (COCs) at the Site. Ten COCs for groundwater were selected in the Record of Decision (ROD; EPA, 1991) for the Site:

- 1,2-dichlorobenzene (1,2-DCB)
- 1,1-dichloroethane (1,1-DCA)
- 1,1-dichloroethene (1,1-DCE)

- cis-1,2-dichloroethene (cDCE)
- trans-1,2-dichloroethene (tDCE)
- Freon 113
- tetrachloroethene (PCE)
- 1,1,1-trichloroethane (1,1,1-TCA)
- TCE
- vinyl chloride (VC)

Of these, the major COCs reported in groundwater samples above cleanup goals are TCE and cDCE, both of which have been present in most groundwater samples from the A-, B1-, and B2-Zone wells, but rarely in the B3-zone wells, likely because of the upward gradient from the B3 to the B2 Zone. VC is also detected in groundwater samples collected from the ISB treatment area (VC is an interim breakdown product of TCE and cDCE as they degrade to ethene).

2.4 Current Remedial Alternative

The ROD specifies groundwater extraction and treatment as the remedial alternative for the Site. The groundwater extraction and treatment system (GETS) began operating in 1983 and continued through 2002, when it was discontinued with Water Board approval to allow for the ISB pilot test. Based on the success of the pilot test, implementation of a Full Scale ISB program was initiated in 2005 with Water Board approval. Under this program, extracted groundwater was treated with carbon filtration before adding carbohydrate as a substrate for ISB, followed by re-injection to form a groundwater treatment zone. A detailed description of the ISB operational history and current status is included in Section 4.

In 2011 AMD submitted a Focused Feasibility Study (FFS) to the Water Board and EPA (AMEC, 2011) to evaluate the current potential revised cleanup plans. Based on the FFS, the proposed remedy for the Site is ISB with monitored natural attenuation (MNA) and institutional controls. The EPA reviewed the FFS and provided comments to AMD via the Water Board in June 2013. Haley & Aldrich incorporated the comments and submitted a Revised FFS in September 2013 (Haley & Aldrich, 2013b). The Revised FFS is currently under review by the EPA.

3. 2014 ANNUAL GROUNDWATER MONITORING

This report documents the methods and results of the 2014 annual groundwater monitoring event, and includes the following:

- A description of Site activities that have occurred since the submission of the Combined 2013 Annual Groundwater Monitoring Report and Annual In Situ Bioremediation Program Report (Haley & Aldrich, 2014).
- A Site plan (Figure 2).
- Potentiometric maps of the A, B1, and B2 Zones for water levels measured on 13 October 2014 (Figures 3, 4, and 5).
- Isoconcentration contour maps for TCE and cDCE, the primary COCs in groundwater samples from the A, B1, and B2 Zones (Figures 6 through 11).
- Groundwater level measurements and analytical results for Site monitoring and extraction wells sampled during the 2014 annual groundwater monitoring event are summarized in Tables I and II.
- Field sampling data sheets and a photo log of the sampling procedures are included in Appendix A.
- Historical groundwater elevation data are included in Appendix B.
- Historical TCE, cDCE, and total VOC concentrations for Site monitoring wells are summarized in tabular format in Appendix C.
- Laboratory analytical reports are included in Appendix D.
- A summary of quality assurance/quality control (QA/QC) data is included in Appendix E.
- Concentration trend plots for the Site monitoring wells that are included in the annual groundwater monitoring program are shown in Appendix F.

3.1 Site Work in 2014

The following occurred at the Site in 2014:

- Ongoing ISB system operation and maintenance (described in Section 4, below);
- Quarterly performance monitoring of the ISB program (described in Section 4, below); and
- Annual groundwater sampling of Site monitoring wells.

3.2 Monitoring Program

Site monitoring activities for the 2014 annual sampling event were completed in accordance with the more recently revised monitoring program approved by the Water Board on 27 December 2007 (Geomatrix, 2008).

3.3 2014 Annual Monitoring Event Procedures

The 2014 annual monitoring event was conducted on behalf of AMD by Field Solutions, Inc. (FSI), of San Jose, California. Water levels were measured on 13 October 2014, and groundwater samples were collected from 17 Site monitoring wells between 20 and 22 October 2014 for the annual groundwater monitoring event. Four wells (16-S, 16-D, 23-S, and 23-D) that are included in both the annual groundwater monitoring event and the quarterly ISB performance monitoring event were sampled on 14 October 2014.

The 17 Site monitoring wells were purged prior to sample collection using a portable submersible pump or a Teflon bailer until water quality parameters (temperature, pH, and specific conductance) stabilized and a minimum of three casing volumes were removed. In cases where the well dewatered during purging, the well was allowed to recharge prior to sampling. Samples were then collected with Teflon bailers. The four wells included in both the annual groundwater monitoring event and the quarterly ISB performance monitoring event were purged with a peristaltic pump and new, disposable tubing using low-flow methods; after water quality parameters stabilized, samples were collected from the pump effluent. All samples were collected in 40-mililiter volatile organic analysis (VOA) vials preserved with hydrochloric acid, labeled, sealed in plastic bags, and placed in an ice-cooled chest pending shipment to the analytical laboratory under chain-of-custody procedures. QA/QC samples, including blind field duplicates, equipment blanks and trip blanks, were collected in addition to the groundwater samples. All re-used, downhole equipment (e.g., pump and bailer) were decontaminated between each well using a steam cleaner. Purge water was discharged into the groundwater treatment system operating at the AMD 915 DeGuigne Drive site. Field sampling data sheets and a photo log documenting the sampling procedures are included in Appendix A.

Samples were analyzed for chlorinated VOCs consistent with EPA Method 8260B by Curtis & Tompkins, Ltd. (C&T) of Berkeley, California, a California- and NELAP-certified laboratory.

3.4 Groundwater Elevation Data

Water levels measured on 13 October 2014 are summarized in Table I; historical groundwater elevation data is included in Appendix B. Interpretations of the potentiometric surfaces for the A, B1, and B2 Zones are shown in Figures 3, 4, and 5, respectively. Groundwater elevations for Site monitoring wells were calculated as the measured water level depths subtracted from the surveyed top of well casing elevations. Calculated groundwater elevations for water levels measured in October 2014 ranged from 34.87 to 41.35 feet relative to the North American Vertical Datum of 1988 (NAVD88) in A-Zone wells, from 34.90 to 42.21 feet NAVD88 in B1-Zone wells, from 35.34 to 40.97 feet NAVD88 in B2-Zone wells, and 39.58 feet NAVD88 in B3-Zone well 35-DDD. In general, water levels measured in October 2014 were lower than those measured in October 2013 (ranging between 0.19 higher and 1.69 feet lower), likely due to the low amount of precipitation experienced in 2014.

As illustrated in Figures 3 through 5, the approximate direction of the horizontal hydraulic gradient is generally north or northeast except where locally influenced by groundwater extraction wells at the Philips and 915 DeGuigne Sites. At locations where water levels were measured for well pairs representing multiple depth intervals (i.e., 16-S/16-D, 23-S/23-D, 27-S/27-D, 28-S/28-D, 36-S/36-D, 27-D/27-DD, and 36-D/36-DD), the direction of calculated vertical hydraulic gradients is generally upwards.

3.5 Analytical Results

Laboratory analytical results for groundwater samples collected in October 2014 are summarized in Table II; historical analytical results for TCE, cDCE, and total VOCs are included in Appendix C. The laboratory analytical reports are included in Appendix D.

Of the COCs listed in the ROD, only PCE, TCE, cDCE, tDCE, and VC were detected above their respective cleanup goals[1] during the 2014 annual groundwater monitoring event (Table II). The distribution of these compounds is described in the sections below

3.5.1 Concentrations in the ISB Treatment Area

There are nine monitoring wells in the ISB treatment area included in the annual groundwater monitoring program: 16-S, 16-D, 22-S, 22-DD, 23-S, 23-D, 28-S, 28-D, and 35-DDD. Additionally, nine additional ISB performance monitoring wells are sampled on a quarterly basis, the results of which are described in greater detail in Section 4, and summarized in Table III. For completeness, however, the ISB well results are included in this discussion.

PCE was not detected above its cleanup goal in any sample collected from the ISB treatment area. In the A Zone, TCE concentrations reported in 2014 groundwater samples ranged from non-detect (<5 micrograms per liter [μg/L] in several wells) to 36 μg/L (wells 22-S and 23-S); cDCE concentrations ranged from 0.5 μg/L (DW-2) to 130 (well 23-S); and VC ranged from 0.7 μg/L (DW-2) to 530 μg/L (X2A). In the B1 Zone, TCE concentrations ranged from non-detect (<5 μg/L in several wells) to 280 μg/L (23-D); cDCE ranged from non-detect (<0.5 μg/L in DW-1) to 5,100 μg/L (PMW-2-1); and VC ranged from non-detect (<0.5 μg/L in 23-D) to 760 μg/L (PMW-2-1). The concentrations detected in the B1 Zone are generally higher than in the A Zone. For the B2-Zone ISB well PMW-2-3, concentrations were 210 μg/L for TCE, 92 μg/L for cDCE, and 9.7 μg/L for VC. These levels represent or are near historical low concentrations, consistent with a decreasing trend in concentrations observed since 2005.

The higher concentrations of breakdown products (cDCE and VC) relative to TCE in the ISB treatment area are indicative of ongoing ISB processes, as described in Section 4, below. Total organic carbon (TOC) concentrations are relatively low (less than 10 mg/L) suggesting that additional substrate amendment may be required to further reduce cDCE and VC to ethene.

3.5.2 Concentrations in the Area Upgradient of the ISB Treatment Area

There are eight on-Site monitoring wells upgradient of the ISB treatment area: 15-S, 27-S, 27-D, 27-DD, 29-S, 29-D, 52-D, and 53-D. In groundwater samples collected during the 2014 annual groundwater monitoring event, concentrations of TCE ranged from 2.3 to 210 μg/L in the A zone; 5.8 to 110 μg/L in the B1 zone; and 44 μg/L in the B2 zone. The concentrations of cDCE ranged from 1.3 to 180 μg/L in the A zone; non-detect (<0.5 μg/L) to 2.4 μg/L in the B1 zone; and 4.6 μg/L in the B2 zone. VC was detected in only one upgradient monitoring well (A-Zone well 27-S, at a concentration of 4.1 μg/L). The concentration of TCE in the samples collected from the upgradient wells is generally greater than cDCE; the concentrations of cDCE remained low (close to or below the cleanup goal of 6 μg/L) in most of the upgradient wells. It

[1] The cleanup goal is the lower of the federal or California Maximum Contaminant Levels (MCLs).

is noted that the TCE and cDCE concentrations observed at the well cluster of 27-S, 27-D, and 27-DD are significantly higher than those at other upgradient wells. These wells are likely affected by off-Site upgradient non-AMD sources (Haley & Aldrich, 2013).

3.5.3 Concentrations in Downgradient, Off-Site Monitoring Wells

For downgradient, off-Site monitoring wells (36-S, 36-D, 36-DD, and 37-S), TCE ranged from 73 to 83 μg/L in A-Zone wells 36-S and 37-S, and cDCE ranged from 2.7 to 13 μg/L. For B1-Zone well 36-D, TCE and cDCE were detected at 56 and 23 μg/L, respectively. For B2-Zone well 36-DD, TCE was not detected, and cDCE was detected at 7.1 μg/L. VC was detected in wells 36-S and 36-DD, but at concentrations below 2 μg/L.

3.6 Quality Assurance/Quality Control

Laboratory analytical data were reviewed in accordance with the "National Functional Guidelines for Superfund Organic Methods Data Review" (EPA, 2008). Appendix E summarizes QA/QC data.

Overall, the results of the laboratory quality control sample analyses indicate that the test results in this report are of sufficient quality to support the conclusions presented, and the results are considered to be valid and usable.

3.7 Summary and Conclusions

Isoconcentration contours for TCE and cDCE within the A, B1, and B2 Zones, as inferred from the 2014 analytical results, are presented in Figures 6 through 8, and Figures 9 through 11, respectively. These figures also incorporate data from the Philips Semiconductor, TRW Microwave, Mohawk Laboratories, and The Companies Off-Site Operable Unit (OOU) wells in the Site's vicinity, as well as analytical data from wells sampled as part of the ISB program. The analytical results from the adjacent sites provided by Locus Technologies (consultant for Philips Semiconductor), AECOM (consultant for TRW Microwave), and The Source Group (consultant for Mohawk Laboratories) are provided in their respective site monitoring reports.

As shown in Figures 6 through 8, higher concentrations of TCE and cDCE are found in groundwater samples from monitoring wells along the western side of the Site and west of the Site, indicating an off-Site upgradient source impacting groundwater beneath the western portion of the Site. Detections of COCs at upgradient wells 15-S, 29-S, 29-D, and 53-D also indicate upgradient, off-Site COC impacts since these wells are not located downgradient of former AMD sources. TCE concentrations below 5 µg/L are observed in groundwater samples from the on-Site A- and B1-zone monitoring wells in the vicinity of the former 901 source area where ISB has been implemented.

Concentration trends for A-, B1-, and B2-Zone monitoring wells are included in Appendix F. Concentrations of primary COCs detected in groundwater samples from most A-, B1-, and B2-Zone monitoring wells during the 2014 monitoring event generally were stable. The concentrations detected in 2014 are generally consistent with a long-term decreasing trend, which accelerated with the start of the full-scale ISB program (AMEC, 2008). Conclusions are summarized below:

- Primary COC concentrations have generally remained stable for samples collected from a majority of wells located on-Site. However, COC concentrations in samples collected in 2014 from many wells are low when compared to concentrations detected prior to the start of ISB

treatment, indicating the successful application of the alternative groundwater cleanup strategy towards expediting groundwater cleanup, as discussed in Section 4.

- Groundwater beneath the Site is impacted by off-Site sources at levels above COC cleanup goals (i.e., MCLs). As a result, it may not be feasible to meet cleanup goals at the end of active remediation.

4. 2014 IN SITU BIOREMEDIATION REPORT

This section documents the monitoring results of the ISB system for 2014. The ISB system is designed to treat COC-affected groundwater beneath the Site. The work completed and described in this report follows the scope outlined in the Full Scale In Situ Bioremediation Work Plan (ISB Work Plan; Geomatrix, 2005), approved by the Water Board on 11 April 2005. The ISB system installation and startup was documented in the In Situ Bioremediation Program Implementation Report (ISB Implementation Report; Geomatrix, 2006). The ISB system was started in December 2005 and operated until 2 May 2008, when it was determined that an excess of organic carbon was successfully delivered to the subsurface to sustain the passive bioremediation of COCs.

The performance monitoring program results indicate that the in situ biological reduction of TCE, cDCE, and VC is occurring. Since the inception of the ISB program, laboratory results for groundwater samples indicate that TCE, cDCE, and VC concentrations have greatly decreased at most performance monitoring locations (by greater than 90 percent at some locations), but have increased recently because the organic carbon in the subsurface treatment zone has been depleted, therefore indicating a need for additional substrate to be added.

4.1 Overview of the ISB System

Background information for the ISB program was previously described in the ISB Implementation Report (Geomatrix, 2006), including the program history and implementation, hydrogeologic conditions, and chemical distribution at the Site. The focus for the ISB program in 2014 was to treat COCs remaining in the ISB area and continue performance monitoring of the ISB system on a quarterly basis.

4.1.1 General Description of the ISB System

The ISB system was designed to increase the organic carbon content of the groundwater system, thereby enhancing the anaerobic microbiological activity and promoting the in situ biotransformation of COCs to environmentally benign end-products. The primary components of the ISB system include:

- **Ex situ COC Removal:** Groundwater pumped from the extraction well(s) in the former source area is treated with two granular activated carbon (GAC) vessels in series to remove VOCs prior to reinjection into the subsurface.
- **Substrate Delivery System:** Substrate delivery is performed by adding the substrate (60 percent sodium lactate solution) directly to the well, then flushing with the reinjection groundwater.
- **In situ Destruction of COCs:** In situ treatment processes are promoted by adding substrate to the extracted groundwater using the delivery system described above. The addition of substrate to groundwater containing TCE and cDCE has proven to be an effective in situ remedial strategy at this Site as demonstrated in the pilot test conducted from 2002 to 2004 (Geomatrix, 2004) and the full-scale ISB system.

The layout of the ISB system is presented on Figure 12. The construction details of the ISB program wells are summarized in Table IV.

4.1.2 Summary of Monitoring Performed in 2014

The following monitoring tasks were accomplished in 2014:

- **ISB System Monitoring:** Groundwater treatment progress was monitored by collecting groundwater samples from extraction wells and from the influent and effluent of the carbon vessels in February and March 2014 (when substrate was being actively added to the ISB treatment area).
- **Quarterly Groundwater Monitoring:** Quarterly monitoring of wells in the ISB treatment area (Figure 12) was continued to assess groundwater conditions. Quarterly monitoring was conducted in March, May, August, and October 2014 as described in Table V.

4.1.3 Operation and Maintenance Activities

The following activities were conducted as part of the operation, maintenance, and monitoring program for the ISB system while it was operating in 2014:

- Weekly Site visits were conducted.
- Monthly system inspections were conducted. Groundwater samples were collected from operational extraction wells, and from the influent and effluent of the carbon vessels for VOC analysis by EPA Method 8260B (8010 list) and TOC by EPA Method 415.2 by C&T of Berkeley, California. Extraction well samples were also analyzed for dissolved hydrocarbon gases (methane, ethane, and ethene) by method AM20GAX by Microseeps, Inc. of Pittsburgh, Pennsylvania.
- Routine maintenance was conducted, including servicing extraction pumps and management of the substrate drums.
- Extraction and injection configurations were adjusted to optimize distribution of substrate.
- Extraction and injection wells were redeveloped in August 2014.

4.1.4 Summary of ISB System Operation

Table VI summarizes the ISB system operation for 2014, including operation time, average flow rates, gallons pumped, and volume and rate of substrate injection for each system configuration. A summary of historical ISB operations since 2008 is included in Table VII. In 2014, the ISB system was operated approximately 2,466 hours in the A- and B- Zones in 2014. Approximately 80,300 gallons of groundwater were extracted (approximately 32,600 gallons from A-Zone wells X2A and 16-S, and approximately 47,700 gallons from B-Zone wells X1B, X2B1, 16-D, ISB3BR, and DW-7), treated with GAC, amended with substrate, and reinjected. The calculated average system pumping rate during operation for this period was approximately 778 gallons per day, or approximately 0.54 gallon per minute.

Approximately 144 gallons (1,584 pounds) of substrate (60 percent sodium lactate solution) were added to the treatment zone groundwater in 2014: approximately 48 gallons (528 pounds) of substrate were added into the A Zone and 96 gallons (1,056 pounds) were added to the B

Zone. Substrate was distributed in the A Zone using wells ISB1AR and ISB2AR for injection; substrate was distributed in the B Zone using wells X2B1, ISB1BR, and ISB3BR for injection.

As shown in Table VIII, approximately 0.1 pound of COCs was extracted and removed by the GAC vessels during this period (13 pounds of COCs since ISB activities began in December 2005). The average efficiency of the ex-situ treatment system in 2014 was calculated as approximately 1.2 pounds of COCs removed per million gallons (lbs/Mgal) of groundwater extracted; this is lower than the historical average removal rate of 8.1 lbs/Mgal, but is consistent with analytical results from monitoring wells which have shown large decreases in concentrations in 2014. It is important to note that this ex-situ treatment by the GAC vessels is in addition to the COC mass removed by ongoing in situ treatment, which is difficult to accurately quantify.

No COCs were detected in samples collected from the GAC vessel discharge (effluent), indicating effective ex situ treatment of extracted groundwater in 2014 (Table III).

4.2 Performance Monitoring

Performance monitoring to assess the effects of active ISB remediation was conducted by collecting monthly groundwater samples from active extraction wells (Table III) while the ISB system was in operation. Four quarterly performance monitoring events were also conducted in March, May, August, and October 2014 to assess the passive, intrinsic remediation in and downgradient of the former source area (Figure 12). The field procedures for the monitoring events conducted in 2014 were consistent with those documented in the In Situ Bioremediation Program, Quarterly Report, September through December 2006 (Geomatrix, 2007b).

4.2.1 Water Levels

Water levels were measured in 17 wells within the ISB area during 2014 (Table IX). Groundwater elevations in A- and B-Zone monitoring wells not in use as temporary extraction wells in 2014 ranged from 37.32 to 40.92 feet mean sea level, corresponding to depths of 6.12 to 10.10 feet below the top of casing.

4.2.2 Groundwater Sampling Results

Thirteen performance monitoring wells (five A-Zone and eight B-Zone wells) were sampled during quarterly monitoring events in 2014 as described in Table V. Current and historical performance monitoring results are summarized in Table III, and laboratory analytical reports for the October 2014 performance monitoring event are included in Appendix D.

The results of chemical analyses of groundwater samples from performance monitoring wells are interpreted based on quantification of COC breakdown products and concentration trend analysis for COCs, dissolved gases, and TOC. COC concentration trends for ISB wells are summarized graphically in Figure 13 (A and B). Table X summarizes the interpretation of performance monitoring results.

4.2.2.1 Quality Assurance and Quality Control

Laboratory analytical data were reviewed in accordance with the "National Functional Guidelines for Superfund Organic Methods Data Review" (PA, 2008) and the "National Functional Guidelines for Inorganic Superfund Data Review" (PA, 2010). Appendix E summarizes quality assurance/ quality control (QA/QC) data.

Overall, the results of the laboratory quality control sample analyses indicate that the test results in this report are of sufficient quality to support the conclusions presented, and the results are considered to be valid and usable.

4.2.2.2 Interpretation of Performance Monitoring Results

As shown in Table III and Figure 13 (A and B), COC concentrations for groundwater samples collected from wells that were monitored in 2014 generally have continued to be lower than concentrations before the ISB program began, and continue to show a stable to decreasing trend in COC concentrations. In fact, 8 of the 13 performance monitoring wells (16-S, 16-D, 28-MW, DW-7, PMW-2-1, PMW-2-3, X1B, and X2B1) recorded historical low COC concentrations in 2014. A number of wells show increases in the breakdown products cDCE and VC relative to TCE (Figure 13) and/or elevated ethene concentrations, indicating that ISB processes are continuing.

The higher concentrations of cDCE and VC indicate ongoing ISB processes. Total organic carbon (TOC) concentrations are relatively low (less than 10 mg/L) suggesting that additional substrate amendment may be required to further reduce cDCE and VC to ethene.

The results of quarterly groundwater monitoring conducted in 2014 are similar to 2013 and support the conclusion that a low organic carbon concentration is limiting the dechlorination rate of target COCs in some areas. Future quarterly ISB monitoring and treatment system sampling events will be used to evaluate the effectiveness of continuing active ISB during 2015.

4.3 Conclusions

Haley & Aldrich derives the following conclusions from the results of the monitoring program performed during 2014.

- Cumulative TCE, cDCE, and VC concentrations have greatly decreased at most monitoring locations (and by more than 90 percent at some locations). Complete transformation of TCE, cDCE, and VC to ethene is occurring throughout the A-Zone and in most B1-Zone wells.
- In general, concentration trends indicate that COCs continue to decrease, and the sampling of many wells revealed historical low concentrations in 2014. The plan to expedite groundwater cleanup through full-scale ISB appears to have been successful so far.
- Monitoring results show that the passive, intrinsic dechlorination processes continue to occur but may be limited in some areas due to a depletion of substrate (determined by TOC concentrations) in the subsurface. The ISB system is expected to be restarted in 2015 to promote the destruction of target COCs in situ; progress will be monitored quarterly in 2015.
- The ex situ treatment system removed approximately 0.1 pound of COCs from treatment zone groundwater during the period of 17 January 2014 to 19 March 2014, and 30 April 2014 to 18

June 2014. In situ reductive dechlorination transformed target COCs into benign end products (e.g., ethene); however, the mass of COCs removed in situ is difficult to quantify.

4.4 Actions Proposed for 2015

Based on the conclusions above, Haley & Aldrich recommends continued monitoring and operation of the ISB program in 2015 as follows:

- Continue groundwater circulation and substrate amendment as needed
- Continue quarterly groundwater monitoring as outlined in the program summary in Table V.

Quarterly progress updates, including the results of the performance monitoring, will be submitted to the EPA; the next quarterly progress update will be submitted to the EPA by 30 April 2015.

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TABLES

TABLE I

GROUNDWATER ELEVATIONS [1]
13 OCTOBER 2014
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Well ID	Aquifer Zone Screened	Top of Casing Elevation (feet NAVD88)[2]	Depth to Groundwater (feet btoc)[3]	Groundwater Elevation (feet NAVD88)[2]
15-S	A	50.82	9.47	41.35
16-S		47.70	10.67	37.03
22-S		46.37	8.80	37.57
23-S		47.03	9.38	37.65
27-S		50.71	10.98	39.73
28-S		47.88	10.46	37.42
29-S		50.10	9.98	40.12
36-S		41.46	6.59	34.87
37-S		42.06	6.82	35.24
16-D	B1	47.49	10.15	37.34
23-D		47.04	8.75	38.29
27-D		50.59	10.40	40.19
28-D		47.74	10.22	37.52
29-D		50.17	10.00	40.17
36-D		41.26	6.36	34.90
52-D		48.31	9.80	38.51
53-D		50.94	8.73	42.21
22-DD	B2	46.45	8.16	38.29
27-DD		50.72	9.75	40.97
36-DD		41.58	6.24	35.34
35-DDD	B3	46.47	6.89	39.58

Notes:

1. Water levels were measured on 13 October 2014 by Field Solutions, Inc. of San Jose, California. Water level at well 27-D was initially recorded as 18.40 ft btoc but was determined to be a recording error based on remeasurements on 15 October 2014 and 17 October 2014.
2. Feet NAVD88 = elevation (in feet) relative to the North American Vertical Datum of 1988.
3. feet btoc = feet below top of casing

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES [1,2]
OCTOBER 2014
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L)

Well ID	Aquifer Zone	Sampling Date	PCE	TCE	cDCE	tDCE	VC	1,1-DCE	1,1-DCA	1,1,1-TCA	Freon 113	1,2-DCB
15-S	A	10/21/2014	<0.5[3]	**2.3**[4]	**1.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5
16-S		10/14/2014	<0.5	<0.5	**1.6**	<0.5	**15**	<0.5	<0.5	<0.5	<2.0	**8.0**
22-S		10/22/2014	**1.2**	**36**	**28**	**11**	**7.0**	**0.6**	<0.5	<0.5	<2.0	**24**
23-S		10/14/2014	**1.0**	**36**	**130**	**10**	**9.2**	**1.1**	<1.0	<1.0	<4.0	**17**
27-S		10/22/2014	**13**	**210**	**180**	**7.2**	<1.7	**4.2 J**[5]	<1.7	<1.7	<6.7	<1.7
27-S (Dup)		10/22/2014	**11**	**170**	**160**	**5.4**	**4.1 J**	**2.8 J**	<1.3	<1.3	<5.0	<1.3
28-S		10/21/2014	<0.5	<0.5	**10**	**1.3**	**62**	<0.5	**0.6**	<0.5	<2.0	**10**
29-S		10/21/2014	**0.6**	**23**	**1.3**	<0.5	<0.5	<0.5	<0.5	**0.7**	<2.0	<0.5
36-S		10/22/2014	**2.2**	**73**	**13**	**0.8**	**1.7**	**0.6**	<0.5	**0.6**	<2.0	<0.5
37-S		10/22/2014	**0.8**	**83**	**2.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5
16-D	B1	10/14/2014	<0.5	<0.5	**3.3**	**1.2**	**84**	<0.5	**0.8**	<0.5	<2.0	**1.8**
23-D		10/14/2014	<1.7	**260**	**4.7**	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7
23-D (Dup)		10/14/2014	<0.5	**280**	**4.6**	<0.5	<0.5	**0.9**	**0.5**	<0.5	**6.3**	<0.5
27-D		10/22/2014	**5.6**	**110**	**2.2**	<0.5	<0.5	**0.8**	**0.6**	**1.0**	<2.0	<0.5
27-D (Dup)		10/22/2014	**5.9**	**99**	**2.4**	<0.5	<0.5	**0.8**	**0.6**	**1.0**	<2.0	<0.5
28-D		10/20/2014	<0.5	<0.5	**2.0**	<0.5	**11**	<0.5	<0.5	<0.5	<2.0	**4.0**
29-D		10/21/2014	**3.2**	**55**	**0.9**	<0.5	<0.5	**0.8**	<0.5	**0.9**	<2.0	<0.5
36-D		10/21/2014	**1.8**	**56**	**23**	**0.9**	<0.5	**0.6**	<0.5	<0.5	<2.0	<0.5
52-D		10/21/2014	<0.5	**33**	**1.3**	<0.5	<0.5	**0.5**	<0.5	**0.7**	<2.0	<0.5
53-D		10/20/2014	<0.5	**5.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5
22-DD	B2	10/22/2014	<1.3	**180**	**5.5**	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3
27-DD		10/21/2014	**1.6**	**44**	**4.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5
36-DD		10/21/2014	<0.5	<0.5	**7.1**	**1.0**	**0.8**	<0.5	<0.5	<0.5	<2.0	<0.5
35-DDD	B3	10/20/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5
Cleanup Goal [6]			**5.0**	**5.0**	**6.0**	**10**	**0.5**	**6.0**	**5.0**	**200**	**1,200**	**600**

TABLE II

ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES [1,2]

OCTOBER 2014

FORMER 901/902 THOMPSON PLACE

SUNNYVALE, CALIFORNIA

Notes:

1. Groundwater samples were collected by Field Solutions, Inc., of San Jose, California, and analyzed by Curtis & Tompkins, Ltd., of Berkeley, California, for the EPA Method 8010 list with Freon 113 in accordance with EPA Method 8260B.
2. Only compounds listed in the Record of Decision are included in this table; for a full list of analytes and detected compounds, see laboratory analytical reports.
3. "<" indicates constituent not detected above the laboratory reporting limit shown.
4. Results in **bold** indicate the constituent was detected in the sample above the laboratory reporting limit.
5. "J" indicates that the analyte was positively identified in the sample; the associated numerical value is the approximate concentration of the analyte in the sample.
6. Cleanup Goal is the lower of the Federal or California Maximum Contaminant Levels (MCLs).

Abbreviations:

1,1,1-TCA = 1,1,1-trichloroethane
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
1,2-DCB = 1,2-dichlorobenzene
cDCE = cis-1,2-dichloroethene
Dup = duplicate sample
Freon 113 = 1,1,2-trichloro-1,2,2-trifluoromethane
PCE = tetrachloroethene
TCE = trichloroethene
tDCE = trans-1,2-dichloroethene
VC = vinyl chloride

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
23-S [3]	12/6/2005	<0.5	37	84	14	1.9	31	0.5	<0.5	11	<0.5	1.0	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	2/14/2006	<1.0	38	140	15	2.2	11	<1.0	<1.0	6.4	<1.0	<1.0	<1.0	<1.0	<2.0	--	--	--	--	--	--	--	--
	5/2/2006	<1.0	18	210	15	1.9	15	<1.0	<1.0	11	<1.0	<1.0	<1.0	<1	<2	--	--	--	--	--	--	--	--
	8/2/2006	<0.5	14	49	18	0.7	10	<0.5	12	6.9	<0.5	0.7	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	11/7/2006 [4]	<0.5	29 J [5]	67	25	1.7	14	0.5	16	12	<0.5	0.8	<0.5 UJ [6]	<0.5	3	--	--	--	--	--	--	--	--
	5/31/2007	<0.5	41	71	8.7	2.2	15	<0.5	1.7	5.6	<0.5	<0.5	<0.5	<0.5	<1	1.500	<0.025	--	--	--	--	58.000	2.6
	8/21/2007	<0.5	50	88	16	2.2	40	0.6	3.9	11	<0.5	0.5	<0.5	<0.5	<1.0	4.000	0.52	--	--	--	--	59.000	2.8
	10/22/2007	<0.5	52	60	6.0	1.8	25	<0.5	<0.5	5.9	<0.5	<0.5	<0.5	<0.5	<1.0	3.2	<0.025	--	--	--	--	980	4.4
	2/5/2008	0.7	34	43	5.0	1.1	14	<0.5	0.6	4.4	<0.5	<0.5	<0.5	<0.5	1.6	1.90	0.028	--	--	--	--	1700	5.1
	5/2/2008	<0.5	22	180	37	3.0	100	0.6	4.0	8.8	<0.5	0.5	<0.5	<0.5	2.8	42.000	0.120	--	--	--	--	2300.000	20
	7/18/2008	<0.5	38	71	15	2.0	22	<0.5	0.7	5.9	<0.5	<0.5	<0.5	<0.5	2.4	1.800	<0.025	--	--	--	--	500.000	4.9
	10/7/2008	<0.5	29	130	17	1.5	23	<0.5	2.1	20	<0.5	0.9	<2.0	<0.5	3.2	0.990	0.070	--	--	--	--	1900.000	4.3
	2/10/2009	<0.5	18	89	6.1	1.3	6.9	<0.5	1.0	12	<0.5	0.5	<2.0	<0.5	<1.0	0.250	<0.025	--	--	--	--	190.000	3.5
	5/27/2009	<1.0	9.3	130	8.3	1.5	7.9	<1.0	<1.0	14	<1.0	<1.0	<4.0	<1.0	<2.0	0.260	0.036	--	--	--	--	270.000	2.4
	7/13/2009	<1.0	7.9	150	9.4	1.6	13	<1.0	<1.0	22	<1.0	<1.0	<4.0	<1.0	<2.0	0.300	0.029	--	--	--	--	420.000	2.6
	10/16/2009	<1.0	17	200	12.0	2.0	11	<1.0	1.1	23	<1.0	1.0	<4.0	<1.0	<2.0	0.590	0.052	--	--	--	--	410.000	3
	2/19/2010	<0.5	14	77	4.6	0.8	2.8	<0.5	<0.5	8	<0.5	<0.5	<2.0	<0.5	<1.0	0.038	<0.025	--	--	--	--	70.000	6.3
	4/23/2010	<0.5	16	76	4.4	0.8	1.8	<0.5	<0.5	6.6	<0.5	<0.5	<2.0	<0.5	<1.0	0.051	<0.025	--	--	--	--	36.000	7.4
	7/7/2010	<1.3	32	130	7.3	<1.3	9.5	<1.3	<1.3	14	<1.3	<1.3	<5.0	<1.3	<2.5	0.180	<0.025	--	--	--	--	93.000	2.3
	10/21/2010	<1.3	9.5	350	19	<1.3	160	<1.3	1.6	18	<1.3	<1.3	<5.0	<1.3	<2.5	5.400	0.036	--	--	--	--	370.000	2.7
	2/1/2011	0.7	18	77	5.1	0.6	3.7	<0.5	<0.5	7.0	<0.5	<0.5	<2.0	<0.5	<1.0	0.070	<0.025	--	--	--	--	6.300	7.1
	4/14/2011	0.9	20	63	4.8	0.7	1.2	<0.5	<0.5	5.6	<0.5	<0.5	<2.0	<0.5	<1.0	<0.025	<0.025	--	--	--	--	3.400	6.2
	7/22/2011	<0.7	26	110	7.8	0.8	3.4	<0.7	<0.7	16	<0.7	<0.7	<2.9	<0.7	<1.4	0.120	<0.025	--	--	--	--	29	2.7
	10/26/2011	<1.0	19	270	20.0	1.0	100	<1.0	1.0	18	<1.0	<1.0	<4.0	<1.0	<2.0	1.4	0.11	--	--	--	--	130	2.5
	2/8/2012	0.7	40	86	5.1	0.9	<0.50	<0.50	<0.50	9.4	<0.50	0.50	<2.0	<0.50	<1.0	0.031	0.0065 J	--	--	--	--	4.1	2.5
	4/19/2012	1.1	17	51	5.6	0.8	6.2	<0.50	<0.50	7.5	<0.50	<0.50	<2.0	<0.50	<1.0	0.10	0.0059 J	--	--	--	--	4.4	5.5
	7/23/2012	0.7	24	80	7.0	0.6	6.8	<0.50	<0.50	9.7	<0.50	0.60	<2.0	<0.50	<1.0	0.11	0.0074 J	--	--	--	--	5.9	2.1
	10/10/2012	0.9 J	30 J	120 J	7.6 J	<1.0	15 J	<0.50	0.5 J	20 J	<0.50	0.80 J	<2.0	<0.50	<1.0	0.17	0.15	--	--	--	--	25	1.9
	3/12/2013	1.0	31	46	4.5	0.5	5.7	<0.5	<0.5	9.1	<0.5	<0.5	<1.0	<0.5	<1.0	0.052	0.20	--	--	--	--	410	4.1
	6/4/2013	0.8	34	64	3.2	0.6	0.9	<0.5	<0.5	11	<0.5	0.5	<2.0	<0.5	<1.0	0.011 J	0.11	--	--	--	--	63	2.5
	8/29/2013	1.1	38	120	12	1.3	6.1	<0.5	<0.5	17	<0.5	0.7	<2.0	<0.5	<1.0	0.12	0.68	--	--	--	--	310	2.5
	10/17/2013	1.0	37	130	13	1.5	12	<0.5	<0.5	20	<0.5	0.8	<2.0	<0.5	<1.0	0.14	0.62	--	--	--	--	270	2.4
	3/4/2014	1.1	36	97	8.7	1.3	3.0	<1.0	<1.0	14	<1.0	<1.0	<4.0	<1.0	<2.0	0.024 J	0.13	--	--	--	--	30	2.6
	5/27/2014	0.9	29	93	6.5	0.8	0.7	<0.5	<0.5	9.8	<0.5	0.6	<2.0	<0.5	<1.0	0.0083 J	0.072	--	--	--	--	36	2.2
	8/18/2014	1.4	48	120	12	1.6	7.6	<0.5	<0.5	17	<0.5	0.8	<2.0	<0.5	<1.0	0.10	0.21	--	--	--	--	130	2.4
	10/14/2014	1.0	36	130	10	1.1	9.2	<1.0	<1.0	17	<1.0	<1.0	<4.0	<1.0	<2.0	0.087	0.14	--	--	--	--	82	2.2

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
23-D [3]	12/6/2005	<0.7	230	390	15	1.8	56	0.7	<0.7	11	<0.7	1.0	3.0	<0.7	<1.4	0.670	0.026	1.0 B [7]	240	<100	770	11.000	1.1
	2/14/2006	<1.0	140	160	11	1.4	20	<1.0	<1.0	6.5	<1.0	<1.0	3.6	<1.0	<2.0	0.280	0.067	0.83	200	<100	690	41.000	1.6
	5/2/2006	<1.0	140	370	16	2.1	40	<1.0	<1.0	9.5	<1.0	<1.0	3.4	<1	<2	0.620	0.080	0.91	74	5300	6700	130.000	33
	8/2/2006	<0.5	56	54	13	<0.5	82	0.6	4.2	5.2	<0.5	<0.5	2.2	<0.5	<1	60.000 J	0.110 J	0.19	21	510	3800	2700.000 J	22
	11/7/2006 [4]	<0.5	3.1 J	47	6.6	<0.5	21	0.7	3.0	3.0	<0.5	<0.5	4.1 J	<0.5	<1	--	--	--	--	--	--	--	--
	2/15/2007	<0.5	6.6	69	4.6	<0.5	41	0.7	2.8	1.6	<0.5	<0.5	2.6	<0.5	<1	14.000	0.043	<0.05	120	1900	1700	130.000	3.5
	5/31/2007	<0.5	9.3	83	2.7	0.7	15	0.7	1.6	1.1	<0.5	<0.5	3.4	0.7	<1	6.300	0.041	--	--	--	--	130.000	1.6
	8/21/2007	<1.0	28	140	2.5	<1.0	34	<1.0	<1.0	<1.0	<1.0	<1.0	2.8	<1.0	<2.0	9.000	0.110	--	--	--	--	36.000	1.3
	10/22/2007	<1.3	210	28	<1.3	<1.3	2.4	<1.3	<1.3	<1.3	<1.3	<1.3	7.0	<1.3	<2.5	0.52	<0.025	--	--	--	--	1.4	0.79
	2/5/2008	<1.0 / <0.7	110 / 120	9.8 / 9.7	<1.0 / <0.7	<1.0 / <0.7	<1.0 / <0.7	<1.0 / <0.7	<1.0 / <0.7	<1.0 / <0.7	<1.0 / <0.7	<1.0 / <0.7	<1.0 / <0.7	<1.0 / <0.7	<2.0 / <1.4	<0.025	<0.025	--	--	--	--	0.20	5.6 / 5.5
	5/2/2008	<1.0 / <1.7	280 / 270	9.8 / 9.6	<1.0 / <1.7	<1.0 / <1.7	<1.0 / <1.7	<1.0 / <1.7	<1.0 / <1.7	<1.0 / <1.7	<1.0 / <1.7	<1.0 / <1.7	4.5 / 3.9	<1.0 / <0.7	<2.0 / <1.4	0.060	<0.025	--	--	--	--	1.600	0.71 / 0.67
	7/18/2008	<1.3 / <1.7	270 / 280	10 / 10	<1.3 / <1.7	<1.3 / <1.7	1.3 / <1.7	<1.3 / <1.7	<1.3 / <1.7	<1.3 / <1.7	<1.3 / <1.7	<1.3 / <1.7	5.1 / 5.4	<1.3 / <1.7	<2.5 / <3.3	0.180	<0.025	--	--	--	--	0.500	0.50 / 0.59
	10/7/2008	<2.5 / <0.7	300 / 290	8.0 / 8.7	<2.5 / <0.7	<2.5 / 0.8	<2.5 / <2.5	<2.5 / <0.7	<2.5 / <0.7	<2.5 / <0.7	<2.5 / <0.7	<2.5 / <0.7	<10 / 4.9	<2.5 / <0.7	<5.0 / <1.4	0.300	<0.025	--	--	--	--	2.900	0.78 / 0.78
	2/10/2009	<2.5 / <0.5	200 / 180	260/ 230	11 / 11	<2.5 / 1.6	<2.5 / 1.3	<2.5 / 0.7	<2.5 / <0.7	<2.5 / 0.8	<2.5 / <0.5	<2.5 / <0.5	<10 / 3.7	<2.5 / <0.5	<5.0 / <1.0	0.055	<0.025	--	--	--	--	0.690	0.67 / 0.60
	6/1/2009	<1.7 / <2.0	270 / 210	150/ 100	7.9 / 5.3	<1.7 / <2.0	2.3 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<6.7 / <8.0	<1.7 / <2.0	<3.3 / <4.0	0.160	<0.025	--	--	--	--	0.860	0.56 / 0.67
	7/13/2009	<1.7 / <0.5	220 / 190	240 / 190	11 / 12	<1.7 / 1.6	4.5 / 4.8	<1.7 / 0.5	<1.7 / 0.6	<1.7 / <0.5	<1.7 / <0.5	<1.7 / <0.5	<6.7 / 3.2	<1.7 / <0.5	<3.3 / <1.0	0.097	<0.025	--	--	--	--	1.100	1.5 / 1.2
	10/16/2009	<1.7 / <2.0	180 / 180	350 / 330	19 / 18	2.6 / <2.0	41 / 40	<1.7 / <2.0	<1.7 / <2.0	4.1 / 4.0	<1.7 / <2.0	<1.7 / <2.0	<6.7 / <8.0	<1.7 / <2.0	<3.3 / <4.0	2.600	0.031	--	--	--	--	130.000	1.2 / 1.2
	2/19/2010	<1.3 / <1.3	140 / 140	150 / 150	7.9 / 7.8	<1.3 / <1.3	2.3 / 2.3	<1.3 / <1.3	<1.3 / <1.3	<1.3 / <1.3	<1.3 / <1.3	<1.3 / <1.3	<5.0 / <5.0	<1.3 / <1.3	<2.5 / <2.5	0.075	<0.025	--	--	--	--	2.800	2.3 / 2.3
	4/23/2010	<1.7 / <1.7	230 / 230	150 / 150	8.2 / 8.5	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<6.7 / <6.7	<1.7 / <1.7	<3.3 / <3.3	0.045	<0.025	--	--	--	--	5.200	1.2 / 1.1
	7/7/2010	<2.5 / <2.0	190 / 190	340 / 300	18 / 17	<2.5 / <2.0	21 / 20	<2.5 / <2.0	<2.5 / <2.0	<2.5 / 2.6	<2.5 / <2.0	<2.5 / <2.0	<10 / <8.0	<2.5 / <2.0	<5.0 / <4.0	0.420	<0.025	--	--	--	--	14.000	0.93 / 0.99
	10/21/2010	<2.5 / <2.0	160 / 150	360 / 350	20 / 19	3.5 / 2.8	52 / 54	<2.5 / <2.0	3.0 / 2.7	7.5 / 7.6	<2.5 / <2.0	<2.5 / <2.0	<10 / <8.0	<2.5 / <2.0	<5.0 / <4.0	1.600	<0.025	--	--	--	--	110.000	1.2 / 1.3
	2/1/2011	<2.5 / <2.0	250 / 220	27 / 20	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<10 / <8.0	<2.5 / <2.0	<5.0 / <4.0	0.054	<0.025	--	--	--	--	0.320	0.70 / 0.73
	4/14/2011	<2.5 / <2.0	270 / 280	14 / 14	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<10 / <8.0	<2.5 / <2.0	<5.0 / <4.0	0.039	<0.025	--	--	--	--	0.15	0.68 / 0.59
	7/22/2011	<2.5 / <2.0	250 / 280	6.4 / 7.6	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<10 / <8.0	<2.5 / <2.0	<5.0 / <4.0	0.050	<0.025	--	--	--	--	0.21	0.70 / 0.73
	10/26/2011	<1.7 / <2.0	240 / 260	6.9 / 7.4	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<6.7 / <8.0	<1.7 / <2.0	<3.3 / <4.0	0.30	0.027	--	--	--	--	1.7	0.57 / 0.56
	2/8/2012	<1.7 / <1.7	250 / 290	6.1 / 6.3	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<6.7 / <6.7	<1.7 / <1.7	<3.3 / <3.3	0.062	0.0087 J	--	--	--	--	1.6	<0.50 / <0.50
	4/19/2012	<1.7 / <2.5	270 / 300	5.7 / 7.6	<1.7 / <2.5	<1.7 / <2.5	<1.7 / <2.5	<1.7 / <2.5	<1.7 / <2.5	<1.7 / <2.5	<1.7 / <2.5	<1.7 / <2.5	<6.7 / <10	<1.7 / <2.5	<3.3 / <5.0	0.066	0.049	--	--	--	--	3.2	<0.50 / <0.50
	7/23/2012	<2.0 / <2.5	260 / 310	5.0 / 6.6	<2.0 / <2.5	<2.0 / <2.5	<2.0 / <2.5	<2.0 / <2.5	<2.0 / <2.5	<2.0 / <2.5	<2.0 / <2.5	<2.0 / <2.5	<8.0 / <10	<2.0 / <2.5	<4.0 / <5.0	0.052	0.010 J	--	--	--	--	0.24	<0.50 / <0.50
	10/10/2012	<2.5 / <2.0	280 / 240	4.6 / 4.3	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<2.5 / <2.0	<10 / <8.0	<2.5 / <2.0	<5.0 / <4.0	0.18	<0.025	--	--	--	--	0.44	<0.50 / <5.0
	3/12/2013	<2.5 / <0.5	280 / 260	6.5 / 7.2	<2.5 / 0.8	<2.5 / 0.9	<2.5 / <0.5	<2.5 / 0.6	<2.5 / <0.5	<2.5 / <0.5	<2.5 / <0.5	<2.5 / <0.5	<5.0 / 4.7	<2.5 / <0.5	<5.0 / <1.0	0.042	0.0092 J	--	--	--	--	0.20	0.85 / 0.70
	6/4/2013	<1.7 / <1.7	260 / 270	4.6 / 4.6	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 /<1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<6.7 / <6.7	<1.7 / <1.7	<3.3 / <3.3	0.056	0.0088 J	--	--	--	--	0.68	0.61 / 0.73
	8/29/2013	<1.7 / <1.7	280 / 270	5.4 / 5.5	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 /<1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<6.7 / <6.7	<1.7 / <1.7	<3.3 / <3.3	0.090	0.0078 J	--	--	--	--	0.25	0.70 / 0.66
	10/17/2013	<1.7 / <1.7	280 / 280	6.6 / 6.3	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7/ <1.7	<1.7 / <1.7	<1.7 / <1.7	<6.7 / <6.7	<1.7 / <1.7	<3.3 / <3.3	0.22	0.017 J	--	--	--	--	0.58	0.64 / 0.72

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
23-D [3] (cont'd)	3/4/2014	<1.7 / <1.7	250 / 250	4.9 / 5.5	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7/ <1.7	<1.7 / <1.7	<1.7 / <1.7	<6.7 / <6.7	<1.7 / <1.7	<3.3 / <3.3	0.077	0.012 J	--	--	--	--	0.32	<0.50 / <0.50
	5/27/2014	<1.7 / <1.7	280 / 280	5.3 / 5.4	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<1.7 / <1.7	<6.7 / <6.7	<1.7 / <1.7	<3.3 / <3.3	0.076	0.039	--	--	--	--	0.40	<0.50 / <0.50
	8/18/2014	<1.7 / <2.0	250 / 260	6.0 / 6.1	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<1.7 / <2.0	<6.7 / <8.0	<1.7 / <2.0	<3.3 / <4.0	0.14	0.011 J	--	--	--	--	0.26	0.70 / <0.50
	10/14/2014	<1.7 / <0.5	260 / 280	4.7 / 4.6	<1.7 / <0.5	<1.7 / 0.9	<1.7 / <0.5	<1.7 / 0.5	<1.7 / <0.5	<1.7 / <0.5	<1.7 / <0.5	<1.7 / <0.5	<6.7 / 6.3	<1.7 / <0.5	<3.3 / <1.0	0.11	0.0096 J	--	--	--	--	0.23	0.89 / 0.80
P2A [7]	12/6/2005	3.3	340	200	8.7	2.3	12	<2.0	<2.0	34	<2.0	<2.0	<2.0	<2	<4	0.320	0.37	51 B	370	<100	2600	12.000	1.5
	2/14/2006	<2.5	<2.5	250	3.7	<1.0	<2.5	<2.5	<2.5	41	<2.5	<2.5	<2.5	<2.5	<5.0	0.500	0.220	<0.05	0.62	21000	7700	84.000	190
	5/2/2006	<0.5	2.5	12	2.5	<0.5	14	<0.5	59	14	<0.5	2.2	<0.5	<0.5	<1	6.300	<0.025	<0.10	<1.0	110000	34000	16000.000	1800
	8/2/2006	<0.5	1.4	10	2.4	<0.5	7.3	<0.5	72	14	0.6	3.9	<0.5	<0.5	<1	2.700 J	0.150 J	<0.05	2.2	340000	46000	30000.000 J	2500
	11/13/2006	<0.5	0.5	6.7	3.8	<0.5	5.4	<0.5	59	3.4	<0.5	2.0	<0.5	<0.5	<1	11.000	0.330	--	--	--	--	17000.000	76
	2/12/2007	<0.5	<0.5	2.7	4.6	<0.5	1.8	<0.5	51	1.8	<0.5	1.4	<0.5	<0.5	<1	11.000	1.500	<0.05	<0.50	43000	10000	17000.000	78
	5/31/2007	<0.5 / <0.5	<0.5 / <0.5	0.9 / 0.9	4.1 / 4.0	<0.5 / <0.5	0.9 / 0.8	<0.5 / <0.5	53 / 52	1.2 / 1.5	<0.5 / <0.5	1.5 / 1.4	<0.5 / <0.5	<0.5 / <0.5	<1 / <1	4.100	1.700	--	--	--	--	16000.000	82
DW-1 [8]	12/6/2005	<17	440	3700	110	<17	32	<17	<17	<17	<17	<17	<17	<17	<33	--	--	--	--	--	--	--	--
	2/14/2006	<31	540	5900	39	<31	<31	<31	<31	<31	<31	<31	<31	<31	<63	0.180	0.850	0.07	310	<100	<10	7.70	1.8
	5/3/2006	<36	<36	28000	110	73	4100	<36	<36	<36	<36	<36	<36	<36	<71	14.000	2.100	<0.05	42	8800	2300	3600.000	140
	2/12/2007	<0.5	1.2	6.1	<0.5	<0.5	8.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<1	82.000	0.740	<0.05	12	9200	1900	22000.000	32
	4/11-13/2007	<5.0	310	3200	17	8.8	290	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<10	190.000	0.650	--	--	--	--	6700.000	14
	4/30/2007	<17	<17	2800	<17	<17	300	<17	<17	<17	<17	<17	<17	<17	<33	400.000	0.830	--	--	--	--	8900.000	35
	5/31/2007	<10 / <20	<10 / <20	2200 / 2500	12 / <20	<10 / <20	370 / 320	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<20 / <40	270 / 340	0.82 / 0.91	--	--	--	--	9100/10000	18/39
	6/27/2007	<20	<20	2400	21.0	<20	580	<20	<20	<20	<20	<20	<20	<20	<40	250.000	0.310	--	--	--	--	12000.000	750
	9/14/2007	<20	<20	2700	22	<20	930	<20	<20	<20	<20	<20	<20	<20	<40	310.000	2.400	--	--	--	--	15000.000	21.000
	10/15/2007	<13	<13	1200	<13	<13	820	<13	<13	<13	<13	<13	<13	<13	<25	260.000	1.500	--	--	--	--	13000.000	320
	11/1/2007	<6.3	<6.3	900	20	<6.3	760	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	320.000	2.700	--	--	--	--	12000.000	100
	11/20/2007	<3.1	<3.1	520	7.0	<3.1	340	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.3	340 B	5.4	--	--	--	--	14000	46
	12/18/2007	4.5	2.1	230	3.8	<2.0	160	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	270.000	3.700	--	--	--	--	13000.000	120
	1/23/2008	<0.5	3.3	290	5.7	0.8	180	1.2	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<1.0	220.000	6.300	--	--	--	--	7700.000	14
	7/21/2008	<6.3	<6.3	<6.3	<6.3	<6.3	51	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	62.000	3.300	--	--	--	--	14000.000	33
	10/7/2008	<1.3	2.5	1.6	2.1	<1.3	40	<1.3	<1.3	2.7	<1.3	<1.3	<5.0	<1.3	<2.5	74.000	12.000	--	--	--	--	18000.000	36
	2/11/2009	<0.5	<0.5	1.1	0.9	<0.5	1.7	<0.5	2.3	1.5	<0.5	<0.5	<2.0	<0.5	<1.0	1.100	140.000	--	--	--	--	17000.000	35
	6/1/2009	<0.5	0.6	2.3	0.6	<0.5	3.6	<0.5	4.4	1.2	<0.5	<0.5	<2.0	<0.5	<1.0	11.000	280.000	--	--	--	--	20000.000	21
	7/13/2009	<0.5	<0.5	1.9	0.5	<0.5	2.8	<0.5	4	1.1	<0.5	<0.5	<2.0	<0.5	<1.0	1.600	240.000	--	--	--	--	19000.000	24
	10/16/2009	<0.5	<0.5	0.8	0.8	<0.5	1.5	<0.5	4.2	1.4	<0.5	<0.5	<2.0	<0.5	<1.0	3.600	390.000	--	--	--	--	24000.000	28
	2/18/2010	<0.5	1.5	1.3	<0.5	<0.5	1.8	<0.5	3.3	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	0.690	81.000	--	--	--	--	14000.000	14
	4/23/2010	<0.5	2.4	2.0	0.8	<0.5	2.7	<0.5	2.6	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	1.300	82.000	--	--	--	--	12000.000	17
	7/72010	<0.5	1.7	1.8	3.6	<0.5	5.4	<0.5	1.6	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	1.300	81.000	--	--	--	--	11000.000	21
	10/21/2010	<0.5	0.6	1.2	10	<0.5	3.1	<0.5	2.6	0.7	<0.5	<0.5	<2.0	<0.5	<1.0	0.520	170.000	--	--	--	--	19000.000	23

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
DW-1 [8] (cont'd)	2/2/2011	<0.5	<0.5	1.2	23	<0.5	2.7	<0.5	2.3	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	0.480	120.000	--	--	--	--	11000.000	16
	4/15/2011	<0.5	<0.5	1.3	38	<0.5	2.5	<0.5	2.3	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	0.30	310.000	--	--	--	--	13000.000	17
	7/22/2011	<0.5	0.7	98	41	<0.5	140	<0.5	3.1	0.7	<0.5	<0.5	<2.0	<0.5	<1.0	58	570	--	--	--	--	17000	15
	10/26/2011	<1.3	18	7.4	<1.3	<1.3	4.0	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	1.7	9.0	--	--	--	--	7600	1,200
	2/9/2012	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	1.7	0.25	--	--	--	--	1300	5.1
	4/19/2012	<0.50	0.50	51	1.1	<0.50	33	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	17	24	--	--	--	--	12000	6.6
	7/24/2012	<0.50	<0.50	1.1	1.0	<0.50	20	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	8.6	130	--	--	--	--	18000	8.3
	10/11/2012	<0.50	0.90	1.8	<0.50	<0.50	2.6	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	1.4	29	--	--	--	--	3700	9.6
	3/12/2013	<50	64	<50	<50	<50	<50	<50	<50	<50	<50	<50	<200	<50	<100	1.6	2.2	--	--	--	--	11000	1100
	6/4/2013	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<100	<25	<50	4.2	6.3	--	--	--	--	13000	400
	8/29/2013	<0.5	<0.5	<0.5	0.7	<0.5	0.9	<0.5	0.6	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	2.4	33	--	--	--	--	16000	70
	10/17/2013	<0.5	0.7	0.6	0.9	<0.5	7.4	<0.5	0.8	1.3	<0.5	<0.5	<2.0	<0.5	<1.0	2.9	68	--	--	--	--	14000	39
	3/4/2014	<0.5	<0.5	0.6	0.7	<0.5	5.2	<0.5	1.4	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	12	130	--	--	--	--	17000	21
	5/28/2014	<0.5	1.7	6.0	1.1	<0.5	69	<0.5	2.8	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	57	56	--	--	--	--	20000	14
	8/18/2014	<0.5	<0.5	<0.5	1.0	<0.5	7.0	<0.5	1.4	0.9	<0.5	<0.5	<2.0	<0.5	<1.0	1.6	100	--	--	--	--	15000	18
	10/14/2014	<0.5	<0.5	<0.5	0.9	<0.5	2.1	<0.5	1.2	0.7	<0.5	<0.5	<2.0	<0.5	<1.0	0.89	200	--	--	--	--	16000	18
28-MW	12/6/2005	<0.5	10	26	20	<0.5	28	1.5	7.2	13	<0.5	1.7	<0.5	<0.5	<1	33.000	0.063	0.55 B	390	6000	1900	1400.000	4.3
	2/14/2006	<0.5	<0.5	4.8	11	<0.5	4.3	<0.5	8.8	16	<0.5	1.0	<0.5	<0.5	<1.0	52.000	0.160	<0.05	9.0	8400	3000	7700.000	74
	5/3/2006	<0.5	<0.5	0.8	5.0	<0.5	0.7	<0.5	28	3.2	<0.5	1.5	<0.5	<0.5	<1	2.000	0.300	<0.05	<0.50	36000	19000	15000.000	200
	8/2/2006	<0.5	1.3	1.7	5.3	<0.5	1.2	<0.5	41	5.8	<0.5	2.4	<0.5	<0.5	<1	1.500 J	0.048 J	<0.05	<0.50	160000	34000	26000.000 J	1000
	11/13/2006	<0.5	1.5	28	18	<0.5	38	0.5	34	7.0	<0.5	1.3	<0.5	<0.5	<1	31.000	0.330	--	--	--	--	14000.000	49
	2/12/2007	<0.5	<0.5	0.7	4	<0.5	1.2	<0.5	32	6.5	<0.5	1.4	<0.5	<0.5	<1	22.000	0.440	<0.05	0.5	13000	4500	16000.000	45
	5/31/2007	<0.5	0.6	<0.5	1.7	<0.5	0.6	<0.5	29	5.3	<0.5	1.1	<0.5	<0.5	<1	16.000	0.520	--	--	--	--	15000.000	41
	8/21/2007	<0.5	<0.5	1.1	2.6	<0.5	2.7	<0.5	31	4.7	<0.5	1.2	<0.5	<0.5	1.2 J	29.000	0.890	--	--	--	--	14000.000	57
	11/1/2007	<0.5	<0.5	0.7	1.4	<0.5	1.0	<0.5	32	4.8	<0.5	1.3	<0.5	<0.5	<1.0	9.400	1.000	--	--	--	--	14000.000	88
	2/5/2008	<0.5	<0.5	16	5.2	<0.5	23	<0.5	25	5.3	<0.5	1.1	<0.5	<0.5	<1.0	19	1.4	--	--	--	--	8800	77
	5/2/2008	<0.5	<0.5	59	6.7	0.6	47	<0.5	24	4.5	<0.5	1.1	<0.5	<0.5	<1.0	38.000	7.100	--	--	--	--	15000.000	50
	7/18/2008	<0.5	<0.5	0.6	2.3	<0.5	1.2	<0.5	17	4.2	<0.5	1	<0.5	<0.5	2.1	25.000	9.700	--	--	--	--	18000.000	32
	10/7/2008	<0.5	0.7	1.9	2.7	<0.5	4.3	<0.5	17	5.4	<0.5	0.9	<2.0	<0.5	2.7	16.000	13.000	--	--	--	--	14000.000	21
	2/10/2009	<0.5	1.1	28	5.9	<0.5	44	<0.5	16	7.1	<0.5	0.9	<2.0	<0.5	3.3	11.000	12.000	--	--	--	--	7900.000	11
	5/27/2009	<0.5	0.8	45	9.1	<0.5	110	<0.5	15	6.6	<0.5	0.9	<2.0	<0.5	4.9	21.000	11.000	--	--	--	--	5900.000	10
	7/13/2009	<0.5	0.6	30	8.4	<0.5	95	<0.5	14	8.0	<0.5	1.0	<2.0	<0.5	4.4	12.000	7.800	--	--	--	--	5100.000	12
	10/16/2009	<0.5	0.6	12	4.7	<0.5	43	<0.5	16	8.1	<0.5	1.0	<2.0	<0.5	8.8	11.000	13.000	--	--	--	--	11000.000	12
	2/18/2010	<0.5	0.6	22	6.7	<0.5	48	<0.5	12	7.3	<0.5	1.0	<2.0	<0.5	4.5	7.000	4.200	--	--	--	--	4700.000	9.8
	4/22/2010	<0.5	0.6	22	5.1	<0.5	50	<0.5	11	7.0	<0.5	0.7	<2.0	<0.5	4.4	6.900	3.100	--	--	--	--	3200.000	7.8

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
28-MW (cont'd)	7/6/2010	<0.5	<0.5	18	2.4	<0.5	92	<0.5	10	7.0	<0.5	0.8	<2.0	<0.5	3.9	8.400	1.800	--	--	--	--	2000.000	5.8
	10/21/2010	<0.5	<0.5	10	1.0	<0.5	73	<0.5	8.1	6.2	<0.5	0.6	<2.0	<0.5	2.2	7.700	1.000	--	--	--	--	1300.000	5.1
	2/1/2011	<0.5	<0.5	6.0	1.2	<0.5	47	<0.5	7.2	7.1	<0.5	0.8	<2.0	<0.5	2.4	3.900	1.200	--	--	--	--	1100.000	5.5
	4/14/2011	<0.5	<0.5	5.2	0.7	<0.5	39	<0.5	6.1	5.7	<0.5	0.6	<2.0	<0.5	2.2	2.200	1.100	--	--	--	--	900.000	6.2
	7/22/2011	<0.5	<0.5	3.3	<0.5	<0.5	40	<0.5	5.8	6.1	<0.5	0.6	<2.0	<0.5	<1.0	3.2	0.55	--	--	--	--	470	3.9
	10/26/2011	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	6.8	6.1	<0.5	0.6	<2.0	<0.5	1.9	0.61	4.0	--	--	--	--	12000	55
	2/8/2012	<0.50	<0.50	0.7	<0.50	<0.50	4.8	<0.50	9.4	8.3	<0.50	0.70	<2.0	<0.50	<1.0	0.69	11	--	--	--	--	13000	12
	4/20/2012	<0.50	<0.50	1.0	0.70	<0.50	6.6	<0.50	7.8	7.5	<0.50	0.70	<2.0	<0.50	<1.0	0.42	3.5	--	--	--	--	7200	7.0
	7/24/2012	<0.50	<0.50	0.9	<0.50	<0.50	8.2	<0.50	8.1	7.0	<0.50	0.70	<2.0	<0.50	<1.0	0.64	3.1	--	--	--	--	7200	6.7
	10/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	2.8 J	<0.50	8.5 J	7.5 J	<0.50	0.70 J	<2.0	<0.50	1.2 J	0.16	2.3	--	--	--	--	4600	6.0
	3/12/2013	<0.5	<0.5	0.5	<0.5	<0.5	0.7	<0.5	9.8	7.5	<0.5	0.7	<1.0	<0.5	<1.0	0.30	9.2	--	--	--	--	14000	18
	6/5/2013	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	9.8	7.0	<0.5	0.8	<2.0	<0.5	<1.0	0.049	2.4	--	--	--	--	9800	9.0
	8/30/2013	<0.5	<0.5	1.2	<0.5	<0.5	4.5	<0.5	6.8	4.8	<0.5	0.6	<2.0	<0.5	<1.0	0.57	2.0	--	--	--	--	4500	7.4
	10/17/2013	<0.5	<0.5	1.7	<0.5	<0.5	8.6	<0.5	7.2	5.2	<0.5	0.6	<2.0	<0.5	<1.0	0.66	1.4	--	--	--	--	2300	5.8
	3/4/2014	<0.5	<0.5	0.7	<0.5	<0.5	3.7	<0.5	6.6	5.2	<0.5	0.5	<2.0	<0.5	<1.0	0.46	4.7	--	--	--	--	12000	7.9
	5/28/2014	<0.5	<0.5	0.6	<0.5	<0.5	1.5	<0.5	6.3	4.9	<0.5	0.5	<2.0	<0.5	<1.0	0.070	3.3	--	--	--	--	11000	8.3
	8/18/2014	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	5.9	4.3	<0.5	0.5	<2.0	<0.5	<1.0	0.065	4.0	--	--	--	--	9100	8.0
	10/14/2014	<0.5	<0.5	1.0	<0.5	<0.5	4.4	<0.5	7.3	5.9	<0.5	0.6	<2.0	<0.5	<1.0	0.45	5.8	--	--	--	--	8500	6.5
PMW-1-1 [9]	12/7/2005	<50	3500	8400	61	<50	410	<50	<50	<50	<50	<50	<50	<50	<100	5.400	3.900	0.39	330	180	560	11.0	0.89
	2/14/2006	<50	3200	11000	64	<50	410	<50	<50	<50	<50	<50	<50	<50	<100	4.100	2.800	0.06	330	160	310	29.0	1.9
	5/3/2006	<50	140	8700	56	<50	330	<50	<50	<50	<50	<50	<50	<50	<100	4.300	2.600	<0.05	160	1000	2300	680.000	13
	11/14/2006	<2.0	3.6	540	74	2.2	580	2.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<4	69.000	1.100	--	--	--	--	3100.000	7.2
	2/16/2007	<2.5	<2.5	560	88	<2.5	850	5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5	29.000	0.400	--	--	--	--	580.000	5.3
PMW-1-2 [10]	12/7/2005	<2.5	2.8	930	53	<2.5	730	4.7	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5	--	--	--	--	--	--	--	--
	11/14/2006	<1.7	7.7	330	27	<1.7	280	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<3.3	580.000	1.400	--	--	--	--	13000.000	120
	2/16/2007	<1.7	1.9	240	34	<1.7	360	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<3.3	410.000	1.800	--	--	--	--	13000.000	38
PMW-1-3[10]	12/7/2005	<8.3	<8.3	1200	9.9	<8.3	90	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<17	--	--	--	--	--	--	--	--
	11/13/2006	<13	16	2000	20	<13	560	<13	<13	<13	<13	<13	<13	<13	<25	270.000	0.650	--	--	--	--	14000.000	52
	2/15/2007	<20	61	7800	33	20	900	<20	<20	<20	<20	<20	<20	<20	<40	290.000	1.400	<0.05	150	7100	5200	12000.000	12
PMW-2-1	12/7/2005	<31	82	6700	72	<31	2300	<31	<31	<31	<31	<31	<31	<31	<63	0.810	0.240	<0.5	300	580	690	2.400	2.0
	2/14/2006	<71	140	7500	<71	<71	1600	<71	<71	<71	<71	<71	<71	<71	<140	16.000	0.490	<0.05	420	860	890	3.800	2.4
	5/2/2006	<63	140	6400	<63	<63	1500	<63	<63	<63	<63	<63	<63	<63	<130	29.000	1.900	<0.05	440	700	920	11.000	3.3
	8/2/2006	<25	130	6700	42	<25	2200	<25	<25	<25	<25	<25	<25	<25	<50	48.000 J	2.100 J	<0.05	170	780	900	1400.000 J	1.9
	11/13/2006	<63	<63	5700	<63	<63	2800	<63	<63	<63	<63	<63	<63	<63	<130	130.000	2.100	--	--	--	--	6800.000	3.2
	2/12/2007	<50	<50	6300	74	<50	2600	<50	<50	<50	<50	<50	<50	<50	<100	160.000	1.700	<0.05	320	1500	1300	8900.000	2.6

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
PMW-2-1 (cont'd)	5/31/2007	<42	48	5100	46	<42	2400	<42	<42	<42	<42	<42	<42	<42	<83	170.000	1.800	--	--	--	--	11000.000	2.3
	8/21/2007	<42	64	6500	54	<42	2600	<42	<42	<42	<42	<42	<42	<42	<83	140.000	1.600	--	--	--	--	9400.000	2.1
	11/1/2007	<31	57	5700	62	<31	2500	<31	<31	<31	<31	<31	<31	<31	<63	110.000	1.500	--	--	--	--	8000.000	1.6
	2/5/2008	<42	<42	4600	55	<42	1200	<42	<42	<42	<42	<42	<42	<42	<83	71.000	0.850	--	--	--	--	4500.000	1.4
	5/2/2008	<42	66	5500	51	<42	2400	<42	<42	<42	<42	<42	<42	<42	<83	320.000	1.800	--	--	--	--	8200.000	2.5
	7/18/2008	<42	72	6300	55	<42	2300	<42	<42	<42	<42	<42	<42	<42	<83	360.000	2.500	--	--	--	--	12000.000	2
	10/7/2008	<42	58	4900	<42	<42	1700	<42	<42	<42	<42	<42	<170	<42	<83	340.000	2.7	--	--	--	--	14000	2.3
	2/10/2009	<42	68	4800	46	<42	1500	<42	<42	<42	<42	<42	<170	<42	<83	280.000	2.700	--	--	--	--	13000.000	1.3
	6/1/2009	<42	58	4500	<42	<42	1500	<42	<42	<42	<42	<42	<170	<42	<83	260.000	2.600	--	--	--	--	12000.000	1.8
	7/13/2009	<42	71	5500	74	<42	1700	<42	<42	<42	<42	<42	<170	<42	<83	190.000	1.600	--	--	--	--	11000.000	1.8
	10/16/2009	<42	75	5600	49	<42	1500	<42	<42	<42	<42	<42	<170	<42	<83	270.000	2.700	--	--	--	--	14000.000	1.9
	2/18/2010	<42	61	5600	76	<42	1800	<42	<42	<42	<42	<42	<170	<42	<83	270.000	2.900	--	--	--	--	16000.000	2
	4/23/2010	<42	75	6500	47	<42	1600	<42	<42	<42	<42	<42	<170	<42	<83	260.000	2.500	--	--	--	--	14000.000	1.6
	7/6/2010	<42	69	6100	54	<42	2000	<42	<42	<42	<42	<42	<170	<42	<83	260.000	2.700	--	--	--	--	14000.000	1.4
	10/21/2010	<42	79	6800	54	<42	1800	<42	<42	<42	<42	<42	<170	<42	<83	240.000	2.500	--	--	--	--	14000.000	1.6
	2/1/2011	<42	70	6800	47	<42	1700	<42	<42	<42	<42	<42	<170	<42	<83	220.000	2.200	--	--	--	--	12000.000	1.9
	4/14/2011	<42	83	7300	62	<42	1800	<42	<42	<42	<42	<42	<170	<42	<83	200.000	1.900	--	--	--	--	11000.000	1.6
	7/22/2011	<42	66	5600	43	<42	1500	<42	<42	<42	<42	<42	<170	<42	<83	230	2.1	--	--	--	--	11000	1.7
	10/26/2011	<36	67	5600	85	<36	1500	<36	<36	<36	<36	<36	<140	<36	<71	220	2.4	--	--	--	--	11000	1.6
	2/9/2012	<36	61	6500	<36	<36	1400	<36	<36	<36	<36	<36	<140	<36	<71	320	24	--	--	--	--	12000	1.5
	4/19/2012	<36	51	5700	63	<36	1600	<36	<36	<36	<36	<36	<140	<36	<71	360	17	--	--	--	--	12000	2.2
	7/23/2012	<36	60	5500	140	<36	1600	<36	<36	<36	<36	<36	<140	<36	<71	360	21	--	--	--	--	10000	1.5
	10/11/2012	<50	72	7100	55	<50	1900	<50	<50	<50	<50	<50	<200	<50	<100	310	16	--	--	--	--	9400	1.6
	3/12/2013	<42	51	4400	<42	<42	1600	<42	<42	<42	<42	<42	<83	<42	<83	380	21	--	--	--	--	12000	2.4
	6/4/2013	<36	57	5600	46	<36	1600	<36	<36	<36	<36	<36	<140	<36	<71	380	23	--	--	--	--	14000	2.3
	8/29/2013	<36	60	5000	<36	<36	1400	<36	<36	<36	<36	<36	<140	<36	<71	360	24	--	--	--	--	13000	2.1
	10/17/2013	<36	57	6500	51	<36	2100	<36	<36	<36	<36	<36	<140	<36	<71	370	24	--	--	--	--	13000	2.3
	3/5/2014	<36	60	5000	37	<36	1500	<36	<36	<36	<36	<36	<140	<36	<71	320	24	--	--	--	--	14000	1.4
	5/27/2014	<36	50	4200	55	<36	1000	<36	<36	<36	<36	<36	<140	<36	<71	150	19	--	--	--	--	12000	1.4
	8/18/2014	<36	48	4800	36	<36	790	<36	<36	<36	<36	<36	<140	<36	<71	86	15	--	--	--	--	10000	2.0
	10/14/2014	<42	48	5100	<42	<42	760	<42	<42	<42	<42	<42	<170	<42	<83	100	18	--	--	--	--	11000	2.1
PMW-2-2 [10]	12/7/2005	<20	<20	2100	<20	<20	310	<20	<20	<20	<20	<20	<20	<20	<40	--	--	--	--	--	--	--	39
	11/14/2006	<2.0	<2.0	160	<2.0	<2.0	730	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<4	100.000	0.410	--	--	--	--	95.000	29
	2/16/2007	<5.0	<5.0	830	8.3	<5.0	2300	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<10	180.000	0.850	--	--	--	--	530.000	29

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
PMW-2-3	12/7/2005	<3.1	290	440	7.4	<3.1	24	<3.1	<3.1	<3.1	<3.1	<3.1	4.8	<3.1	<6.3	22.000	1.300	1.7	130	<100	380	6.000	0.66
	2/14/2006	<3.1	320	480	3.5	<3.1	16	<3.1	<3.1	<3.1	<3.1	<3.1	11	<3.1	<6.3	0.065	0.190	1.7	120	<100	170	3.000	0.78
	5/3/2006	<2.5	300	420	8.4	<2.5	16	<2.5	<2.5	<2.5	<2.5	<2.5	5.3	<2.5	<5	0.300	0.086	1.9	120	<100	110	16.000	0.57
	8/2/2006	<1.3	260	330	1.4	<1.3	15	<1.3	<1.3	<1.3	<1.3	<1.3	5.0	<1.3	<2.5	0.520 J	0.096 J	1.8	110	<100	140	46.000 J	<0.50
	11/13/2006	<2.5	280	360	3.6	<2.5	32	<2.5	<2.5	<2.5	<2.5	<2.5	6.0	<2.5	<5	1.500	0.091	--	--	--	--	44.000	0.60
	2/12/2007	<2.5	270	400	5.8	<2.5	32	<2.5	<2.5	<2.5	<2.5	<2.5	4.7	<2.5	<5	1.900	0.120	1.8	120	<100	250	49.000	0.66
	5/31/2007	<2.5 / <2.5	270 / 270	380 / 370	3.9 / 3.6	<2.5 / <2.5	40 / 30	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	5.6 / 6.4	<2.5 / <2.5	<5 / <5	3.100	0.066	--	--	--	--	63.000	0.53
	8/21/2007	<2.5 / <2.5	270 / 270	360 / 340	6.4 / 3.9	<2.5 / <2.5	20 / 22	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	5.2 / 4.8	<2.5 / <2.5	<5.0 / <5.0	1.600	0.110	--	--	--	--	52.000	0.67
	11/1/2007	<2.0	230	280	11	<2.0	16	<2.0	<2.0	<2.0	<2.0	<2.0	8.3	<2.0	<4.0	1.500	0.048	--	--	--	--	31.000	<0.50
	2/5/2008	<2.0	240	230	7.0	<2.0	11	<2.0	<2.0	<2.0	<2.0	<2.0	3.0	<2.0	<4.0	0.850	0.033	--	--	--	--	14.000	<0.50
	5/2/2008	<2.0	250	230	2.1	<2.0	21	<2.0	<2.0	<2.0	<2.0	<2.0	3.9	<2.0	<4.0	2.300	0.041	--	--	--	--	19.000	0.67
	7/18/2008	<1.3	250	230	1.8	<1.3	17	<1.3	<1.3	<1.3	<1.3	<1.3	4.9	<1.3	<2.5	3.100	0.034	--	--	--	--	22.000	<0.50
	10/7/2008	<2.5	250	220	3.0	<2.5	20	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<5.0	3.300	0.049	--	--	--	--	26.000	0.64
	2/12/2009	<1.7	220	160	<1.7	<1.7	13	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	2.100	0.042	--	--	--	--	20.000	<0.50
	6/1/2009	<1.7	240	170	3.8	<1.7	22	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	2.600	0.048	--	--	--	--	22.000	0.59
	7/13/2009	<1.7	240	170	3.1	<1.7	17	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	2.100	0.034	--	--	--	--	19.000	0.69
	10/16/2009	<1.7	260	160	4.8	<1.7	13	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	2.500	0.052	--	--	--	--	28.000	0.70
	2/18/2010	<1.7	250	170	3.4	<1.7	14	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	1.800	0.030	--	--	--	--	15.000	0.74
	4/23/2010	<1.7	290	210	3.5	<1.7	12	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	6.700	0.044	--	--	--	--	25.000	0.68
	7/6/2010	<1.7	270	200	2.0	<1.7	22	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	3.200	0.036	--	--	--	--	24.000	0.85
	10/21/2010	<1.7	260	220	5.8	<1.7	21	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	3.100	0.031	--	--	--	--	17.000	0.51
	2/2/2011	<1.7	250	180	4.3	<1.7	14	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	2.100	<0.025	--	--	--	--	13.000	0.58
	4/14/2011	<1.7	250	240	6.6	<1.7	33	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	5.500	<0.025	--	--	--	--	28.000	0.65
	7/22/2011	<1.7	210	170	4.5	<1.7	19	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	3.7	0.044	--	--	--	--	19	0.77
	10/26/2011	<1.7	200	180	2.8	<1.7	40	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	2.5	0.070	--	--	--	--	22	0.53
	2/9/2012	<1.7	260	180	3.7	<1.7	15	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	2.7	0.033	--	--	--	--	15	<0.50
	4/19/2012	<1.7	210	170	6.4	1.7	38	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	7.0	0.055	--	--	--	--	44	<0.50
	7/23/2012	<1.3	220	160	3.9	<1.3	43	<1.3	<1.3	<1.3	<1.3	<1.3	7.3	<1.3	<2.5	9.3	0.083	--	--	--	--	81	0.52
	10/11/2012	<1.7	220	150	4.3	<1.7	28	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	6.0	0.082	--	--	--	--	56	0.59
	3/12/2013	<0.7	240	110	2.7	1.5	17	<0.7	<0.7	<0.7	<0.7	<0.7	4.3	<0.7	<1.4	2	0.044	--	--	--	--	16	0.84
	6/4/2013	<1.3	240	120	1.8	<1.3	14	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	6.4	0.060	--	--	--	--	29	0.62
	8/29/2013	<1.3	210	110	2.0	<1.3	9.6	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	1.8	0.042	--	--	--	--	13	0.69
	10/17/2013	1.3	230	120	2.4	<1.3	18	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	2.5	0.059	--	--	--	--	21	0.78
	3/5/2014	<1.3	250	120	3.0	<1.3	34	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	7.1	0.079	--	--	--	--	51	<0.50

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
PMW-2-3 (cont'd)	5/27/2014	<1.3	230	97	2.2	<1.3	15	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	1.4	0.037	--	--	--	--	11	<0.50
	8/18/2014	<1.3	210	130	3.0	<1.3	21	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	3.0	0.054	--	--	--	--	18	0.67
	10/14/2014	<1.7	210	92	<1.7	<1.7	9.7	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	1.2	0.047	--	--	--	--	12	0.73
DW-2 [11]	2/14/2006	<0.7	3.0	110	0.8	<0.7	<0.7	<0.7	<0.7	2.5	<0.7	<0.7	<0.7	<0.7	<1.4	0.560	0.260	<0.05	46	9500	14000	1300.000	160
	5/3/2006	<0.7	5.9	2.8	<0.7	<0.7	<0.7	<0.7	<0.7	1.0	<0.7	<0.7	<0.7	<0.7	<1.4	0.460	0.130	<0.05	64	95000	9600	1200.000	1700
	2/21/2007	<0.5	1.4	3.7	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<1	0.510	0.066	630	3.9	19000	3100	20000.000	72
	5/31/2007	<0.5	2.3	5.5	<0.5	<0.5	0.7	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<1	0.210	0.450	--	--	--	--	19000.000	350
	7/21/2008	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	2.000	0.028	--	--	--	--	6300.000	35
	10/7/2008	<0.5	0.6	<0.5	<0.5	<0.5	1	<0.5	<0.5	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	0.240	<0.025	--	--	--	--	5800.000	48
	2/11/2009	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.7	<0.5	<0.5	<2.0	<0.5	<1.0	0.200	0.120	--	--	--	--	5900.000	30
	5/27/2009	<0.5	0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	0.240	0.810	--	--	--	--	13000.000	27
	7/13/2009	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	0.052	0.560	--	--	--	--	11000.000	22
	10/16/2009	<0.5	<0.5	1.1	<0.5	<0.5	1.1	<0.5	<0.5	1.0	<0.5	<0.5	<2.0	<0.5	<1.0	0.220	2.300	--	--	--	--	14000.000	24
	2/19/2010	<0.5	<0.5	0.6	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.054	1.500	--	--	--	--	7400.000	17
	4/23/2010 [12]	<0.5	0.6	0.8	<0.5	<0.5	0.9	<0.5	<0.5	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	0.120	1.900	--	--	--	--	7100.000	21
	7/7/2010	<0.5	0.6	0.9	0.7	<0.5	0.5	<0.5	<0.5	1.0	<0.5	<0.5	<2.0	<0.5	<1.0	0.065	4.700	--	--	--	--	8700.000	25
	10/21/2010	<0..5	0.5	1.1	0.9	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<2.0	<0.5	<1.0	0.098	0.490	--	--	--	--	860.000	23
	2/2/2011	<0..5	<0.5	0.6	0.9	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	0.042	0.620	--	--	--	--	1000.000	15
	4/15/2011	<0.5	<0.5	0.7	2.1	<0.5	<0.5	<0.5	0.7	1.1	<0.5	<0.5	<2.0	<0.5	<1.0	<0.025	0.860	--	--	--	--	610.000	11
	7/22/2011	<0.5	0.5	0.9	5.9	<0.5	0.9	<0.5	2.0	3.2	<0.5	<0.5	<2.0	<0.5	<1.0	0.13	8.4	--	--	--	--	2500	9.4
	10/26/2011	<0.5	1.3	0.7	1.9	<0.5	<0.5	<0.5	0.9	1.8	<0.5	<0.5	<2.0	<0.5	<1.0	0.22	0.64	--	--	--	--	3500	630
	2/9/2012	<0.50	<0.50	0.90	<0.50	<0.50	<0.50	<0.50	0.5	1.4	<0.50	<0.50	<2.0	<0.50	<1.0	0.21	0.078	--	--	--	--	5300	540
	4/19/2012	<0.50	0.80	0.80	0.70	<0.50	<0.50	<0.50	<0.50	1.3	<0.50	<0.50	<2.0	<0.50	<1.0	0.21	0.80	--	--	--	--	10000	32
	7/24/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	0.097	0.58	--	--	--	--	2900	23
	10/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	0.029	0.028	--	--	--	--	1.2	20
	3/12/2013	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.14	3.7	--	--	--	--	8500	65
	6/4/2013	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<14	<3.6	<7.1	0.061	0.066	--	--	--	--	19000	59
	8/29/2013	<0.5	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	0.16	0.35	--	--	--	--	11000	33
	10/17/2013	<0.5	<0.5	2.0	<0.5	<0.5	1.3	<0.5	<0.5	0.7	<0.5	<0.5	<2.0	<0.5	<1.0	0.17	0.43	--	--	--	--	16000	32
	3/4/2014	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	1.1	0.9	<0.5	<0.5	<2.0	<0.5	<1.0	0.40	0.093	--	--	--	--	16000	64
	5/28/2014	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	0.11	0.40	--	--	--	--	14000	15
	8/18/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.11	0.54	--	--	--	--	6800	8.2
	10/14/2014	<0.5	<0.5	0.5	<0.5	<0.5	0.7	<0.5	0.9	0.7	<0.5	<0.5	<2.0	<0.5	<1.0	0.21	1.1	--	--	--	--	16000	14

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
X2B1 [13]	12/12/2005	<2.5	420	420	8.3	2.8	41	<2.5	<2.5	<2.5	<2.5	<2.5	15	<2.5	<5	--	--	--	--	--	--	--	0.78
	1/13/2006	<2.5	84	500	45	3.7	240	<2.5	<2.5	26	<2.5	<2.5	<2.5	<2.5	<5.0	--	--	--	--	--	--	--	2.7
	2/10/2006	<3.1	450	470	8.4	3.2	35	<3.1	<3.1	<3.1	<3.1	<3.1	15	<3.1	<6.3	--	--	--	--	--	--	--	1.2
	5/1/2006	<3.1	570	1000	29	4.7	130	<3.1	<3.1	<3.1	<3.1	<3.1	6.9	<3.1	<6.3	--	--	--	--	--	--	--	0.71
	7/6/2006	<8.3	460	920	19	<8.3	71	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<17	--	--	--	--	--	--	--	0.70
	8/2/2006	<6.3	350	980	11	<6.3	71	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	--	--	--	--	--	--	--	1.1
	9/18/2006	<6.3	540	1400	19	<6.3	130	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	3.700	0.310	--	--	--	--	340.000	0.75
	10/18/2006	<10	480	1600	21	<10	130	<10	<10	<10	<10	<10	<20	<10	<20	--	--	--	--	--	--	--	1.0
	11/14/2006	<6.3	510	1300	20	<6.3	140	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	6.400	0.200	--	--	--	--	490.000	0.89
	12/11/2006	<20	450	1900	21	<20	190	<20	<20	<20	<20	<20	<200	<20	<40	13.000	0.180	--	--	--	--	1200.000	3.2
	5/31/2007	<2.5	8.5	670	14	<2.5	560	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5	230.000	0.410	--	--	--	--	1500.000	5.4
	8/21/2007	<3.1	3.9	190	5.8	<3.1	250	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.3	120.000	0.810	--	--	--	--	330.000	4.5
	11/1/2007	<0.8	8.2	120	5.2	<0.8	120	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<1.7	130.000	0.540	--	--	--	--	2400.000	600
	2/7/2008	<3.1	240	420	6.3	<3.1	63	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.3	8.8	0.12	--	--	--	--	310	1.2
	2/28/2008	<2.5	150	360	9.2	<2.5	73	<2.5	5.3	7.2	<2.5	<2.5	<2.5	<2.5	<5.0	36.000	1.400					6000.000	20
	3/27/2008	<2.5	330	980	22	4.4	160	<2.5	<2.5	<2.5	<2.5	<2.5	<7.1	<2.5	<5.0	25.000	0.310	--	--	--	--	730.000	1.1
	5/2/2008	<6.3	380	1100	18	<6.3	140	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	4.700	0.140	--	--	--	--	140.000	1.4
	7/18/2008	<1.3	3.8	300	4.7	<1.3	160	<1.3	<1.3	<1.3	<1.3	<1.3	2.4	<1.3	<2.5	51.000	0.870	--	--	--	--	210.000	0.82
	10/7/2008	<2.5	30	360	5.6	<2.5	200	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<5.0	44.000	0.420	--	--	--	--	68.000	1.5
	2/11/2009	<2.5	22	660	15	<2.5	580	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<5.0	140.000	0.400	--	--	--	--	310.000	1.4
	6/1/2009	<8.3	53	990	17	<8.3	570	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	110.000	0.320	--	--	--	--	260.000	1.1
	7/13/2009	<8.3	100	1200	23	<8.3	530	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	73.000	0.260	--	--	--	--	230.000	1.1
	10/16/2009	<8.3	71	1100	17	<8.3	510	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	73.000	0.410	--	--	--	--	280.000	1.2
	2/18/2010	<8.3	57	830	20	<8.3	330	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	26.000	0.200	--	--	--	--	150.000	2.2
	4/23/2010	7.7	80	640	9.3	<5.0	220	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<10	25.000	0.170	--	--	--	--	130.000	1.2
	7/6/2010	<5.0	110	920	14	<5.0	520	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<10	32.000	0.220	--	--	--	--	200.000	0.87
	10/21/2010	<7.1	59	470	13	<7.1	690	<7.1	<7.1	<7.1	<7.1	<7.1	<29	<7.1	<14	74.000	0.470	--	--	--	--	260.000	1.1
	2/1/2011	<3.6	50	370	6.7	<3.6	140	<3.6	<3.6	<3.6	<3.6	<3.6	<14	<3.6	<7.1	13.000	0.180	--	--	--	--	80.000	0.92
	4/14/2011	<1.3	23	180	5.2	<1.3	130	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	12.000	0.270	--	--	--	--	34.000	0.96
	7/22/2011	<5.0	150	950	14	<5.0	420	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<10	21	0.43	--	--	--	--	92	0.96
	10/27/2011	<2.5	140	420	6.1	<2.5	130	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<5.0	21	1.1	--	--	--	--	330	0.65
	11/21/2011	0.87	470	1100	10	4.2	150	0.91	<0.5	0.78	<0.5	<0.5	6.1	1.2	<1.0	13	1.8	--	--	--	--	540	0.57
	2/9/2012	<2.5	330	1200	16.0	3.8	160	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<5.0	23	3.2	--	--	--	--	1,000	0.55
	4/19/2012	<5.0	100	670	13	<5.0	110	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<10	15	0.40	--	--	--	--	140	0.64
	7/23/2012	<5.0	68	860	13	<5.0	210	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<10	18	0.52	--	--	--	--	150	0.72

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
X2B1 [13] (cont'd)	10/11/2012	<1.3	23	360	8.1	<1.3	170	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	13	0.45	--	--	--	--	57	0.7
	12/12/2012	<6.3	360	890	8.0	<6.3	100	<6.3	<6.3	<6.3	<6.3	<6.3	12	<6.3	<13	19	1.8	--	--	--	--	600	0.70
	1/28/2013	<5.0	340	890	15	<5.0	95	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	15	1.5	--	--	--	--	1100	0.81
	2/20/2013	<6.3	320	860	11	<6.3	76	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	7.2	1.5	--	--	--	--	1100	0.80
	3/12/2013	<8.3	230	860	18	<8.3	100	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	6.9	4.6	--	--	--	--	2600	1.4
	6/4/2013	<8.3	110	1200	19	<8.3	82	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	1.6	1.1	--	--	--	--	450	1.0
	8/29/2013	<7.1	250	1100	15	<7.1	66	<7.1	<7.1	<7.1	<7.1	<7.1	<29	<7.1	<14	4.1	0.64	--	--	--	--	280	2.0
	10/17/2013	<7.1	100	1700	52	<7.1	200	<7.1	<7.1	<7.1	<7.1	<7.1	<29	<7.1	<14	7.4	0.87	--	--	--	--	440	1.5
	5/27/2014	<1.0	<1.0	34	3.3	<1.0	30	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	2.1	470	6.9	--	--	--	--	7000	270
	8/18/2014	<1.0	2.7	270	11	<1.0	120	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<2.0	150	9.6	--	--	--	--	9200	4200
	10/14/2014	<2.5	<2.5	130	5.3	<2.5	34	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<5.0	47	9.9	--	--	--	--	7200	3700
X2A [14]	12/12/2005	1.6	200	230	13	2	62	1.1	<0.7	46.0	<0.7	2.9	<0.7	<0.7	<1.4	--	--	--	--	--	--	--	1.6
	1/13/2006	<3.1	150	610	45	<3.1	250	<3.1	<3.1	28	<3.1	<3.1	<3.1	<3.1	<6.3	--	--	--	--	--	--	--	2.6
	2/10/2006	<6.3	23	740	69	<6.3	340	<6.3	<6.3	32	<6.3	<6.3	<6.3	<6.3	<13	--	--	--	--	--	--	--	3.9
	4/19/2006	<5.0	110	840	57	<5.0	350	<5.0	<5.0	28	<5.0	<5.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	16
	5/1/2006	<5.0	190	790	44	<5.0	330	<5.0	<5.0	20	<5.0	<5.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	8.3
	7/6/2006	<1.7	2.2	320	52	<1.7	240	<1.7	19	26	<1.7	<1.7	<1.7	<1.7	<3.3	--	--	--	--	--	--	--	49
	8/2/2006	<0.5	1	320	58	1.1	200	1	22	35	<0.5	0.8	<0.5	<0.5	<1.0	150.000 J	0.470 J	<0.05	87	16000	3100	3900 J	24
	11/14/2006	<0.5	1.9	6.7	9.1	<0.5	5.8	<0.5	80	17	<0.5	2.8	<0.5	<0.5	3.5	54.000	0.660	--	--	--	--	13000.000	40
	5/31/2007	<0.5	0.6	1.7	5.7	<0.5	1.7	<0.5	56	30	<0.5	3.3	<0.5	<0.5	4.8	24.000	3.600	--	--	--	--	15000.000	14
	8/21/2007	<0.5 / <0.5	10 / 10	18 / 18	7.5 / 7.7	<0.5 / <0.5	83 / 74	0.5 / 0.5	35 / 35	19 / 18	<0.5 / <0.5	2.0 / 2.1	<0.5 / <0.5	<0.5 / <0.5	7.0 J / 4.0 J	220.000	3.600	--	--	--	--	7100.000	8.9
	11/1/2007	<0.5 / <0.5	0.7 / 0.8	40 / 40	15 / 14	<0.5 / <0.5	210 / 170	0.9 / 0.9	35 / 34	18 / 20	<0.5 / <0.5	1.0 / 1.0	<0.5 / <0.5	<0.5 / <0.5	3.6 / 4.8	280 / 280	3.6 / 3.3	--	--	--	--	9200/8000	8.3/8.2
	2/7/2008	<0.5	2.9	36	17	<0.5	96	<0.5	24	21	<0.5	2.2	<0.5	<0.5	<1.0	51	3.3	--	--	--	--	9300	23
	2/28/2008	<0.5	1.6	60	14	<0.5	73	<0.5	20	26	<0.5	2.3	<0.5	<0.5	1.3	48.000	2.000	--	--	--	--	12000.000	110
	3/27/2008	<0.5	0.9	110	24	<0.5	140	<0.5	30	22	<0.5	1.5	<0.5	<0.5	2.0	54.000	1.600	--	--	--	--	10000.000	30
	5/2/2008	2.9	210	960	27	4.1	150	<2.5	<2.5	6.5	<2.5	<2.5	<2.5	<2.5	<5.0	13.000	0.380	--	--	--	--	1800.000	1.8
	7/18/2008	<1.7	<1.7	48	14	<1.7	420	<1.7	6.6	7.9	<1.7	<1.7	<1.7	<1.7	<3.3	340.000	1.100	--	--	--	--	5400.000	6.8
	10/7/2008	<0.5	<0.5	15	12	<0.5	880	1.7	14	10	<0.5	<0.5	<2.0	<0.5	1.1	380.000	3.700	--	--	--	--	12000.000	12
	2/11/2009	<1.7	<1.7	5.9	4.9	<1.7	190	<1.7	10	7.3	<1.7	<1.7	<6.7	<1.7	<3.3	190.000	5.200	--	--	--	--	7800.000	12
	5/27/2009	<1.7	<1.7	8.8	6.6	<1.7	250	<1.7	13	7.1	<1.7	<1.7	<6.7	<1.7	<3.3	93.000	9.000	--	--	--	--	9500.000	8.5
	7/13/2009	<1.7	<1.7	4.3	5.4	<1.7	320	<1.7	15	8.4	<1.7	<1.7	<6.7	<1.7	<3.3	79.000	8.500	--	--	--	--	10000.000	9.1
	10/16/2009	<0.5	<0.5	10	7.6	<0.5	360	1.0	20	13	<0.5	0.5	<2.0	<0.5	<1.0	83.000	11.000	--	--	--	--	12000.000	7.9
	2/18/2010	<2.5	<2.5	4.0	3.4	<2.5	240	<2.5	17	10	<2.5	<2.5	<10	<2.5	<5.0	39.000	10.000	--	--	--	--	7500.000	6.9
	4/22/2010	<1.7	<1.7	4.7	2.6	<1.7	250	<1.7	18	12	<1.7	<1.7	<6.7	<1.7	<3.3	47.000	8.600	--	--	--	--	5700.000	5.2
	7/6/2010	<1.7	<1.7	6.6	2	<1.7	580	<1.7	20	13	<1.7	<1.7	<6.7	<1.7	<3.3	71.000	8.500	--	--	--	--	5400.000	4.4

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
X2A [14] (cont'd)	10/21/2010	<5.0	<5.0	13	<5.0	<5.0	850	<5.0	22	13	<5.0	<5.0	<20	<5.0	<10	78.000	6.300	--	--	--	--	4200.000	4.2
	2/1/2011	<5.0	<5.0	20	<5.0	<5.0	800	<5.0	23	12	<5.0	<5.0	<20	<5.0	<10	68.000	4.700	--	--	--	--	3200.000	3.7
	4/14/2011	<5.0	<5.0	43	<5.0	<5.0	830	<5.0	22	13	<5.0	<5.0	<20	<5.0	<10	59.000	4.000	--	--	--	--	2900.000	3.9
	7/22/2011	<5.0	<5.0	74	<5.0	<5.0	820	<5.0	27	16	<5.0	<5.0	<20	<5.0	<10	63	3.7	--	--	--	--	2900	3.9
	10/26/2011	<5.0	<5.0	88	<5.0	<5.0	830	<5.0	24	13	<5.0	<5.0	<20	<5.0	<10	52	3.4	--	--	--	--	2400	3.5
	12/20/2011	<0.5	<0.5	64	5.5	<0.5	96	<0.5	15	14	<0.5	1.2	<0.5	<0.5	<1.0	7.4	1.6	--	--	--	--	4700	7.0
	2/9/2012	<2.5	<2.5	43	3.9	<2.5	380	<2.5	17	16.0	<2.5	<2.5	<10	<2.5	<5.0	64	2.3	--	--	--	--	5400	9.4
	4/19/2012	<2.5	<2.5	32	4	<2.5	640	<2.5	15	17	<2.5	<2.5	<10	<2.5	<5.0	69	3.1	--	--	--	--	5900	11
	7/23/2012	<5.0	<5.0	27	<5.0	<5.0	670	<5.0	17	15	<5.0	<5.0	<20	<5.0	<10	73	4.1	--	--	--	--	5600	4.7
	10/11/2012	<5.0	<5.0	54	<5.0	<5.0	790	<5.0	21	23	<5.0	<5.0	<20	<5.0	<10	90	4.3	--	--	--	--	4800	4.1
	12/12/2012	<1.0	<1.0	120	6.2	<1.0	140	<1.0	14	20	<1.0	<1.0	<1.0	<1.0	<2.0	9.0	1.4	--	--	--	--	4500	6.8
	1/28/2013	<1.0	<1.0	91	5.8	<1.0	120	<1.0	13	18	<1.0	<1.0	<1.0	<1.0	<2.0	12	2.9	--	--	--	--	8100	8.9
	2/20/2013	<1.0	1.2	17	1.9	<1.0	150	<1.0	10	12	<1.0	<1.0	<1.0	<1.0	<2.0	24	4	--	--	--	--	7300	<0.5
	3/12/2013	<0.5	<0.5	2.9	0.9	<0.5	34	<0.5	16	5.7	<0.5	0.7	<2.0	<0.5	<1.0	31	4.2	--	--	--	--	9700	170
	6/4/2013	<0.5	<0.5	0.7	<0.5	<0.5	47	<0.5	19	6	<0.5	0.8	<2.0	<0.5	<1.0	33	2.6	--	--	--	--	10000	10
	8/29/2013	<0.5	<0.5	1.0	<0.5	<0.5	96	<0.5	18	9.7	<0.5	0.6	<2.0	<0.5	<1.0	46	2.8	--	--	--	--	9300	8.7
	10/17/2013	<0.7	<0.7	<0.7	<0.7	<0.7	140	<0.7	17	14	<0.7	<0.7	<2.9	<0.7	<1.4	38	3.6	--	--	--	--	8600	8.0
	2/5/2014	<1.0	<1.0	56	3.4	<1.0	130	<1.0	11	12	<1.0	<1.0	<10	<1.0	<2.0	6.5	1.1	--	--	--	--	1400	3.7
	3/4/2014	<1.0	<1.0	17	<1.0	<1.0	240	<1.0	12	12	<1.0	<1.0	<4.0	<1.0	<2.0	21	1.8	--	--	--	--	2000	3.9
	5/27/2014	<2.0	<2.0	6.1	<2.0	<2.0	300	<2.0	14	16	<2.0	<2.0	<8.0	<2.0	<4.0	28	1.6	--	--	--	--	2100	3.7
	8/18/2014	<2.5	<2.5	25	<2.5	<2.5	320	<2.5	14	13	<2.5	<2.5	<10	<2.5	<5.0	29	2.4	--	--	--	--	2000	4.0
	10/14/2014	<3.1	<3.1	10	<3.1	<3.1	530	<3.1	13	12	<3.1	<3.1	<13	<3.1	<6.3	50	3.3	--	--	--	--	2700	3.8
X1B [13]	12/12/2005 [15]	<8.3	360	1600	29	10	120	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<17	--	--	--	--	--	--	--	0.72
	1/13/2006 [15]	5.8	350	1100	36	7.8	110	2.1	<2.0	9.7	<2.0	<2.0	2.3	<2.0	<4.0	--	--	--	--	--	--	--	0.72
	2/10/2006 [15]	<8.3	300	940	33	8.7	110	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<17	--	--	--	--	--	--	--	1.5
	4/19/2006 [15]	<7.1	340	880	61	<7.1	84	<7.1	<7.1	9.3	<7.1	<7.1	<7.1	<7.1	<14	--	--	--	--	--	--	--	2.1
	5/1/2006 [15]	7.4	310	970	37	<7.1	120	<7.1	<7.1	9.6	<7.1	<7.1	<7.1	<7.1	<14	--	--	--	--	--	--	--	0.73
	7/6/2006 [15]	6.4	290	860	22.0	5.8	75	<5.0	<5.0	7.7	<5.0	<5.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	0.71
	8/2/2006 [15]	<7.1	240	850	19.0	<7.1	81	<7.1	<7.1	7.6	<7.1	<7.1	<7.1	<7.1	<14	--	--	--	--	--	--	--	0.67
	9/18/2006	7.7	270	850	27	7.3	94	<5.0	<5.0	8.5	<5.0	<5.0	<5.0	<5.0	<10	3.500	0.220	--	--	--	--	310.000	0.77
	10/18/2006	6.2	240	840	30	5.3	110	1.8	<0.7	9.3	<0.7	<0.7	1.8	1.6	<1.4	--	--	--	--	--	--	--	0.94
	11/14/2006 [15]	<5.0	250	840	28	5.5	140	<5.0	<5.0	6.7	<5.0	<5.0	<5.0	<5.0	<10	21.000	0.350	--	--	--	--	12000.000	0.93
	12/11/2006	<7.1	270	930	28	<7.1	120	<7.1	<7.1	9.4	<7.1	<7.1	<71	<7.1	<14	22.000	0.330	--	--	--	--	13000.000	1.0
	5/31/2007	<6.3	140	1700	47	<6.3	350	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	35.000	0.350	--	--	--	--	12000.000	1.3
	8/21/2007	<5.0	17	950	31	<5.0	200	<5.0	<5.0	6.5	<5.0	<5.0	<7.1	<5.0	<10	14.000	0.400	--	--	--	--	4000.000	1.7

TABLE III
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FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
X1B [13] (cont'd)	11/1/2007	<7.1	<7.1	740	36	<7.1	220	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<14	20.000	0.190	--	--	--	--	2400.000	4.0
	2/7/2008	<4.2	260	930	<4.2	6.3	110	<4.2	<4.2	8.0	<4.2	<4.2	<4.2	<4.2	<8.3	18	0.24	--	--	--	--	3800	0.77
	2/28/2008	<5.0	180	620	19	<5.0	58	<5.0	<5.0	6.1	<5.0	<5.0	<5.0	<5.0	<10	32.000	0.630	--	--	--	--	7900.000	2.5
	3/27/2008	6.6	240	860	24	<6.3	110	<6.3	<6.3	12	<6.3	<6.3	<6.3	<6.3	<13	20.000	0.550	--	--	--	--	3800.000	1.1
	5/2/2008	<7.1	250	890	40	<7.1	93	<7.1	<7.1	8.0	<7.1	<7.1	<7.1	<7.1	<14	7.900	0.380	--	--	--	--	2200.000	1.3
	7/18/2008	<2.0	74	450	14	<2.0	380	<2.0	<2.0	6.4	<2.0	<2.0	2.7	<2.0	<4.0	19.000	0.200	--	--	--	--	1300.000	1.6
	10/7/2008	1.8	100	680	15	2.2	240	1.8	<1.3	6.4	<1.3	<1.3	<5.0	<1.3	<2.5	21.000	0.280	--	--	--	--	1800.000	1.6
	2/10/2009	<7.1	140	1000	25	<7.1	160	<7.1	<7.1	7.6	<7.1	<7.1	<29	<7.1	<14	36.000	1.200	--	--	--	--	11000.000	1.1
	6/1/2009	<3.6	79	570	25	3.8	570	<3.6	<3.6	5.3	<3.6	<3.6	<14	<3.6	<7.1	28.000	0.870	--	--	--	--	7500.000	1.4
	7/13/2009	<5.0	37	660	20	<5.0	590	<5.0	<5.0	5.3	<5.0	<5.0	<20	<5.0	<10	20.000	0.510	--	--	--	--	6900.000	1.5
	10/16/2009	<5.0	140	1300	27	7.0	400	<5.0	<5.0	7.0	<5.0	<5.0	<20	<5.0	<10	11.000	1.200	--	--	--	--	9600.000	1.3
	2/18/2010	<5.0	12	510	21	<5.0	660	<5.0	<5.0	5.1	<5.0	<5.0	<20	<5.0	<10	9.900	0.990	--	--	--	--	5600.000	1.5
	4/22/2010	<5.0	62	1500	25	<5.0	340	<5.0	<5.0	5.3	<5.0	<5.0	<20	<5.0	<10	7.600	1.600	--	--	--	--	4300.000	1.5
	7/6/2010	<10	29	1100	21	<10	300	<10	<10	<10	<10	<10	<40	<10	<20	4.000	0.790	--	--	--	--	1700.000	1.1
	10/21/2010	<8.3	240	2400	32	12	49	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	0.600	1.700	--	--	--	--	4300.000	1.3
	2/1/2011	<17	87	1900	24	<17	83	<17	<17	<17	<17	<17	<67	<17	<33	0.510	0.520	--	--	--	--	950.000	0.96
	4/15/2011	<10	110	1300	17	<10	28	<10	<10	<10	<10	<10	<40	<10	<20	0.170	0.180	--	--	--	--	320.000	0.91
	7/22/2011	<6.3	67	940	22	<6.3	44	<6.3	<6.3	<6.3	<6.3	<6.3	<25	<6.3	<13	0.82	0.17	--	--	--	--	360	0.89
	10/27/2011	<6.3	200	1000	23	<6.3	110	<6.3	<6.3	<6.3	<6.3	<6.3	<25	<6.3	<13	11	5.2	--	--	--	--	1400	0.79
	11/21/2011	7.4	360	1700	28	8.7	130	2.2	<0.5	11	<0.5	<0.5	1.7	1.1	<1.0	5.5	2.3	--	--	--	--	880	0.64
	2/9/2012	<6.3	180	780	31	<6.3	93	<6.3	<6.3	<6.3	<6.3	<6.3	<25	<6.3	<13	7.1	1.8	--	--	--	--	1200	0.93
	4/20/2012	<6.3	150	620	35	<6.3	21	<6.3	<6.3	<6.3	<6.3	<6.3	<25	<6.3	<13	0.20	0.56	--	--	--	--	670	0.72
	7/23/2012	<5.0	190	570	16	<5.0	21	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<10	0.15	0.47	--	--	--	--	240	0.62
	10/11/2012	<10	100	940	18	<10	64	<10	<10	<10	<10	<10	<40	<10	<20	0.25	0.5	--	--	--	--	210	0.61
ISB2AR	12/12/2012	<7.1	260	1100	16	<7.1	44	<7.1	<7.1	7.9	<7.1	<7.1	<7.1	<7.1	<14	5.3	2.9	--	--	--	--	1600	0.81
	1/28/2013	<10	210	950	24	<10	30	<10	<10	<10	<10	<10	<10	<10	<20	3.4	3.2	--	--	--	--	2600	0.98
	2/20/2013	<7.1	200	850	27	<7.1	29	<7.1	<7.1	9.2	<7.1	<7.1	<7.1	<7.1	<14	0.92	2.9	--	--	--	--	1900	0.92
	3/12/2013	<10	200	1200	25	<10	21	<10	<10	<10	<10	<10	<40	<10	<20	0.17	2.8	--	--	--	--	1200	1.2
	6/4/2013	<7.1	82	850	14	<7.1	80	<7.1	<7.1	<7.1	<7.1	<7.1	<29	<7.1	<14	0.24	3.0	--	--	--	--	1500	1.3
	8/29/2013	<5.0	77	520	12	<5.0	79	<5.0	<5.0	5.8	<5.0	<5.0	<20	<5.0	<10	0.86	1.0	--	--	--	--	370	3.3
	10/17/2013	<5.0	100	640	37	<5.0	79	<5.0	<5.0	6.2	<5.0	<5.0	<20	<5.0	<10	0.20	0.80	--	--	--	--	250	1.2
	3/5/2014	<5.0	200	890	24	5.8	46	<5.0	<5.0	6.6	<5.0	<5.0	<20	<5.0	<10	5.0	3.0	--	--	--	--	1100	0.69
	5/28/2014	<0.5	<0.5	19	12	<0.5	26	1.3	<0.5	6.4	<0.5	<0.5	<2.0	<0.5	<1.0	820	1.5	--	--	--	--	1100	18
	8/18/2014	<0.5	<0.5	210	14	<0.5	240	1.3	<0.5	4.9	<0.5	<0.5	<2.0	<0.5	<1.0	220	0.87	--	--	--	--	570	1.7
	10/14/2014	<2.0	<2.0	230	10	<2.0	280	<2.0	<2.0	4.9	<2.0	<2.0	<8.0	<2.0	<4.0	260	0.81	--	--	--	--	1700	1.6

TABLE III
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FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
ISB2AR	9/14/2007	<1.3	3.1	190	42	<1.3	84	<1.3	13	21	<1.3	<1.3	<1.3	<1.3	2.7	120	2.9	--	--	--	--	9800	250
ISB3BR	3/19/2014	<0.5	1.8	14	2.6	<0.5	76	0.6	1.0	3.2	<0.5	<0.5	<5.0	<0.5	<1.0	68	60	--	--	--	--	22000	220
16-S [16]	12/12/2005	<0.5	6.1	29	20	<0.5	37	1.3	11	32	0.7	3.3	<0.5	<0.5	2.6	--	--	--	--	--	--	--	2.3
	1/13/2006	0.6	17	43	15	<0.5	44	0.9	6.7	22	<0.5	2.2	<0.5	<0.5	1.5	--	--	--	--	--	--	--	3.0
	2/10/2006	<0.5	9.7	33	21	<0.5	27	0.6	6.3	25	<0.5	2.6	<0.5	<0.5	1.7	--	--	--	--	--	--	--	6.2
	4/19/2006	4.3	260	840	29	4.8	120	1.7	2.8	17	<0.5	0.8	2	1.4	<1.0	--	--	--	--	--	--	--	5.4
	5/1/2006	<6.3	340	810	27	<6.3	130	<6.3	<6.3	6.5	<6.3	<6.3	<6.3	<6.3	<13	--	--	--	--	--	--	--	1.9
	7/6/2006	<0.5	5.5	37	27	<0.5	14	<0.5	21.0	24.0	0.6	3	<0.5	<0.5	2.1	--	--	--	--	--	--	--	16
	8/2/2006	<0.5	2.8	30	17	<0.5	15	<0.5	23.0	21.0	0.6	2.9	<0.5	<0.5	1.5	--	--	--	--	--	--	--	72
	11/14/2006	<0.5	1.5	32	19	<0.5	13	<0.5	26	13	0.5	2.6	<0.5	<0.5	3.1	18.000	0.130	--	--	--	--	11000.000	18
	5/31/2007	<0.5	0.7	11	28	<0.5	9.6	0.6	24	21	0.5	3.0	<0.5	<0.5	7.4	4.500	0.240	--	--	--	--	5800.000	4.930
	8/21/2007	<0.5	0.8	14	31	<0.5	19	0.6	21	22	0.6	3.0	<0.5	<0.5	9.3 J	9.900	2.100	--	--	--	--	6500.000	8.900
	10/22/2007	<0.5	0.9	19	27	<0.5	27	0.6	20	28	0.5	3.0	<0.5	<0.5	6.0	13.000	1.100	--	--	--	--	7300.000	18
	2/7/2008	<0.5	2.9	14	18	<0.5	8.8	<0.5	21	32	0.7	3.6	<0.5	<0.5	7.4	5.4	1.0	--	--	--	--	8800	35
	2/28/2008	<0.5	1.1	13	9.8	<0.5	7.3	<0.5	20	21	0.5	2.8	<0.5	<0.5	1.4	20.000	0.440	--	--	--	--	10000.000	280
	3/27/2008	<0.5	1.2	13	13	<0.5	11	<0.5	27	15	0.6	2.8	<0.5	<0.5	1.4	19.000	0.470	--	--	--	--	13000.000	71
	5/2/2008	<0.5	0.9	36	12	<0.5	31	<0.5	36	12	0.5	3.0	<0.5	<0.5	<1.0	19.000	0.660	--	--	--	--	13000.000	57
	7/21/2008	<0.5	<0.5	3.6	7	<0.5	3.6	<0.5	24	5.4	<0.5	1.9	<0.5	<0.5	<1.0	10.000	0.140	--	--	--	--	9900.000	38
	10/7/2008	<0.5	<0.5	4.2	6.3	<0.5	3.9	<0.5	34	4.8	0.5	2.3	<2.0	<0.5	1.1	13.000	0.320	--	--	--	--	12000.000	40
	2/11/2009	<0.5	0.8	5.8	5.9	<0.5	5.9	<0.5	22	6.2	<0.5	1.9	<2.0	<0.5	1.8	7.000	2.200	--	--	--	--	8800.000	17
	5/27/2009	<0.5	1.3	11	8.8	<0.5	14	<0.5	28	8.2	<0.5	2.3	<2.0	<0.5	3.9	4.400	4.500	--	--	--	--	6000.000	13
	7/13/2009	<0.5	1.0	14	9.3	<0.5	20	<0.5	31	11	0.6	2.8	<2.0	<0.5	3.2	3.900	3.600	--	--	--	--	4500.000	12
	10/16/2009	<0.5	1.0	18	10	<0.5	26	<0.5	24	16	0.6	2.9	<2.0	<0.5	4.1	4.400	4.600	--	--	--	--	3800.000	9.5
	2/19/2010	<0.5	0.6	7.7	8.8	<0.5	27	<0.5	16	13	<0.5	2.4	<2.0	<0.5	3.7	3.200	4.400	--	--	--	--	3300.000	9.2
	4/23/2010	<0.5	<0.5	7.3	7.2	<0.5	20	<0.5	15	12	<0.5	2.1	<2.0	<0.5	3.3	2.200	4.800	--	--	--	--	3000.000	7.5
	7/7/2010	<0.5	<0.5	7.2	4.6	<0.5	26	<0.5	31	13	0.6	2.9	<2.0	<0.5	4.9	1.800	4.000	--	--	--	--	2800.000	8.3
	10/21/2010	<0.5	<0.5	6.9	6.4	<0.5	21	<0.5	13	13	<0.5	2.1	<2.0	<0.5	2.9	2.000	2.700	--	--	--	--	1600.000	6.4
	2/2/2011	<0.5	<0.5	3.6	4.1	<0.5	18	<0.5	16	12	<0.5	2.2	<2.0	<0.5	1.8	1.500	2.900	--	--	--	--	1400.000	6.0
	4/15/2011	<0.5	<0.5	3.5	5.7	<0.5	22	<0.5	11	10	<0.5	1.7	<2.0	<0.5	1.6	1.200	2.800	--	--	--	--	1100.000	5.3
	7/22/2011	<0.5	<0.5	2.5	2.0	<0.5	11	<0.5	15	9.6	<0.5	2.1	<2.0	<0.5	1.5	0.58	3.0	--	--	--	--	1400	5.5
	10/27/2011	<0.5	<0.5	2.0	1.5	<0.5	7.9	<0.5	11	11	<0.5	1.8	<2.0	<0.5	2.2	2.5	3.3	--	--	--	--	1300	5.0
	2/8/2012	<0.50	<0.50	2.1	1.4	<0.50	5.6	<0.50	12	10.0	<0.50	1.6	<2.0	<0.50	1.1	0.38	2.7	--	--	--	--	5700	7.1
	4/20/2012	<0.50	<0.50	3.8	1.9	<0.50	9.5	<0.50	11	11	<0.50	1.9	<2.0	<0.50	<1.0	0.66	2.5	--	--	--	--	6000	6.8
	7/24/2012	<0.50	<0.50	3.3	1.1	<0.50	17	<0.50	13	13	<0.50	2.3	<2.0	<0.50	<1.0	1.2	1.6	--	--	--	--	3800	5.5
	10/10/2012	<0.50	<0.50	3.2	0.9	<0.50	20	<0.50	10	16.0	<0.50	2.4	<2.0	<0.50	<1.0	1.2	1.3	--	--	--	--	1700	4.8

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
16-S [16] (cont'd)	12/12/2012	<0.5	<0.5	3.4	1.4	<0.5	10	<0.5	13	16.0	0.6	2.7	<0.5	<0.5	<1.0	2	2	--	--	--	--	6700	7.8
	1/28/2013	<0.5	<0.5	4.1	2.8	<0.5	9.9	<0.5	12	14.0	<1.0	2.4	<0.5	<0.5	<1.0	0.81	2.4	--	--	--	--	9600	11
	2/20/2013	<0.5	<0.5	5.4	2.6	<0.5	13	<0.5	14	13.0	0.5	2.3	<0.5	<0.5	<1.0	1.8	2.1	--	--	--	--	10000	35
	3/12/2013	<0.5	<0.5	2.9	1.3	<0.5	7.2	<0.5	16	6.1	<0.5	1.7	<2.0	<0.5	<1.0	2.2	1.3	--	--	--	--	10000	21
	6/4/2013	<0.5	<0.5	1.0	<0.5	<0.5	1.7	<0.5	26	2.9	<0.5	1.9	<2.0	<0.5	<1.0	0.65	0.59	--	--	--	--	12000	13
	8/30/2013	<0.5	<0.5	1.8	<0.5	<0.5	4.6	<0.5	21	5.6	<0.5	1.9	<2.0	<0.5	<1.0	0.61	1.4	--	--	--	--	6000	8.7
	10/17/2013	<0.5	<0.5	2.0	0.6	<0.5	7.0	<0.5	23	7.6	0.5	2.4	<2.0	<0.5	<1.0	0.70	1.4	--	--	--	--	2800	8.5
	2/5/2014	<0.5	<0.5	2.8	1.3	<0.5	12	<0.5	13	9.5	<0.5	2.0	<5.0	<0.5	<1.0	0.61	0.70	--	--	--	--	2600	4.2
	3/5/2014	<0.5	<0.5	1.3	<0.5	<0.5	5.6	<0.5	14	6.8	<0.5	1.8	<2.0	<0.5	<1.0	0.62	1.0	--	--	--	--	2700	6.3
	5/28/2014	<0.5	<0.5	2.3	<0.5	<0.5	17	<0.5	15	8.6	<0.5	2.0	<2.0	<0.5	<1.0	1.5	1.3	--	--	--	--	2000	5.3
	8/18/2014	<0.5	<0.5	2.0	<0.5	<0.5	11	<0.5	15	7.1	<0.5	1.6	<2.0	<0.5	<1.0	1.6	1.8	--	--	--	--	3100	16
	10/14/2014	<0.5	<0.5	1.6	<0.5	<0.5	15	<0.5	23	8.0	<0.5	2.4	<2.0	<0.5	<1.0	1.6	1.4	--	--	--	--	1300	5.9
DW-7 [14]	12/12/2005	<1.3	300	100	1.6	1.7	4.6	<1.3	<1.3	1.3	<1.3	<1.3	10	<1.3	<2.5	--	--	--	--	--	--	--	<0.50
	1/13/2006	<2.5	350	210	<2.5	<2.5	5	<2.5	<2.5	<2.5	<2.5	<2.5	15	<2.5	<5.0	--	--	--	--	--	--	--	<0.50
	2/10/2006	<1.7	270	140	2.8	2	4.1	<1.7	<1.7	1.9	<1.7	<1.7	9.9	<1.7	<3.3	--	--	--	--	--	--	--	0.97
	4/19/2006	<2.0	180	290	3.8	2.3	3.9	<2.0	<2.0	<2.0	<2.0	<2.0	4.6	<2.0	<4.0	--	--	--	--	--	--	--	1.7
	5/1/2006	<2.0	110	2000	17	6.4	42	<2.0	<2.0	4.8	<2.0	<2.0	3.8	<2.0	<4.0	--	--	--	--	--	--	--	5.4
	7/6/2006	<3.6	72	430	6.1	<3.6	230	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<7.1	--	--	--	--	--	--	--	69
	8/2/2006	<1.3	57	180	5.9	1.3	150	<1.3	<1.3	3.1	<1.3	<1.3	2.8	<1.3	<2.5	170.000 J	0.160 J	<0.05	44	7700	14000	4700.000 J	200
	11/14/2006[17]	<1.7	140	200	<1.7	<1.7	6.4	<1.7	<1.7	<1.7	<1.7	<1.7	4.5	<1.7	<3.3	--	--	--	--	--	--	--	0.66
	5/31/2007	<1.0	68	210	1.5	1.1	14	<1.0	<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<2.0	2.500	0.150	--	--	--	--	66.000	0.72
	8/21/2007	<1.3	85	210	1.9	<1.3	10	<1.3	<1.3	<1.3	<1.3	<1.3	3.5	<1.3	<2.5	2.000	0.270	--	--	--	--	160.000	0.63
	11/1/2007	<1.0	160	97	<1.0	<1.0	5.3	<1.0	<1.0	<1.0	<1.0	<1.0	5.4	<1.0	<2.0	0.940	0.110	--	--	--	--	42.000	<0.50
	2/7/2008	<1.7	72	230	1.8	<1.7	22	<1.7	<1.7	<1.7	<1.7	<1.7	2.8	<1.7	<3.3	18	0.086	--	--	--	--	350	0.57
	2/28/2008	<1.3	130	160	4.2	<1.3	43	<1.3	<1.3	<1.3	<1.3	<1.3	2.8 U[19]	<1.3	<2.5	18.000	0.082	--	--	--	--	560.000	0.76
	3/27/2008	<1.0	140	130	1.8	<1.0	51	<1.0	<1.0	1.2	<1.0	<1.0	2.4	<1.0	<2.0	36.000	0.720	--	--	--	--	5500.000	3.6
	5/2/2008	<1.0	160	160	2.5	<1.0	59	<1.0	<1.0	1.4	<1.0	<1.0	3.3	<1.0	<2.0	6.500	0.075	--	--	--	--	570.000	2.3
	7/21/2008	<0.5	6.9	210	2.8	0.7	62	0.9	<0.5	0.6	<0.5	<0.5	1.5	<0.5	<1.0	4.500	0.490	--	--	--	--	220.000	1.1
	10/7/2008	<1.3	17	190	2.5	<1.3	70	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	2.900	0.450	--	--	--	--	150.000	1.1
	2/11/2009	<1.3	14	160	1.7	<1.3	70	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	2.400	0.160	--	--	--	--	270.000	0.54
	6/1/2009	<0.5	5.1	100	1.7	<0.5	65	0.7	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.960	0.280	--	--	--	--	53.000	0.67
	7/13/2009	<0.5	6.1	95	1.8	<0.5	87	0.6	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	1.400	0.340	--	--	--	--	58.000	0.8
	10/16/2009	<0.5	6.0	69	2.2	<0.5	110	0.7	<0.5	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	2.700	0.610	--	--	--	--	64.000	0.79
	2/19/2010	<0.5	3.3	44	1.1	<0.5	26	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.450	0.230	--	--	--	--	6.100	0.89
	4/23/2010	<0.5	12.0	86	1.4	<0.5	28	0.6	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.360	0.290	--	--	--	--	9.300	0.73

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
DW-7 [14] (cont'd)	7/7/2010	<1.0	4.2	57	1.5	<1.0	110	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<2.0	1.500	0.410	--	--	--	--	14.000	<0.50
	10/21/2010	<1.0	5.2	52	2.1	<1.0	140	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<2.0	2.500	0.530	--	--	--	--	12.000	0.80
	2/2/2011	<0.5	3.1	32	0.9	<0.5	19	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.230	0.140	--	--	--	--	3.400	0.71
	4/15/2011	<0.5	5.2	62	1.5	<0.5	41	0.7	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.370	0.200	--	--	--	--	3.800	0.77
	7/22/2011	<1.0	2.0	32	1.6	<1.0	110	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<2.0	2.0	0.38	--	--	--	--	9.2	0.82
	10/27/2011	<1.0	2.1	36	1.7	<1.0	140	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<2.0	2.5	0.59	--	--	--	--	11	0.54
	2/8/2012	<0.50	2.4	46	1.1	<0.50	23	0.6	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	0.28	0.14	--	--	--	--	1.8	<0.50
	4/20/2012	<0.50	6.5	51	1.3	<0.50	24	0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	0.61	0.42	--	--	--	--	4.5	<0.50
	7/24/2012	<0.50	1.7	30	1.8	<0.50	110	0.80	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	1.5	1.0	--	--	--	--	19	0.54
	10/10/2012	<0.50	1.6	26	1.5	<0.50	110	0.6	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	2.4	0.48	--	--	--	--	6.7	<0.50
	3/12/2013	<0.5	7.1	55	1.2	<0.5	21	0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.22	0.17	--	--	--	--	31	0.73
	6/5/2013	<0.5	1.1	18	1.0	<0.5	32	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.41	0.18	--	--	--	--	12	0.72
	8/30/2013	<0.5	15	22	1.3	<0.5	83	0.6	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	1.6	0.68	--	--	--	--	42	1.0
	10/17/2013	<0.5	11	150	2.2	<0.5	97	0.9	<0.5	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	0.73	0.33	--	--	--	--	14	0.76
	3/5/2014	<0.5	4.8	41	1.3	<0.5	20	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	0.23	0.14	--	--	--	--	2.6	<0.50
	5/28/2014	<2.0	<2.0	18	<2.0	<2.0	18	<2.0	<2.0	<2.0	<2.0	<2.0	<8.0	<2.0	<4.0	0.49	0.25	--	--	--	--	37	<0.50
	8/18/2014	<1.0	3.5	50	1.5	<1.0	89	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<2.0	1.0	0.42	--	--	--	--	230	0.70
	10/14/2014	<0.5	<0.5	9.3	1.9	<0.5	100	0.6	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	2.0	0.59	--	--	--	--	290	0.60
DW-8 [16]	12/12/2005	<1.7	300	14	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	12	<1.7	<3.3	--	--	--	--	--	--	--	<0.50
	1/13/2006	<1.3	240	15	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	8	<1.3	<2.5	--	--	--	--	--	--	--	<0.50
	2/10/2006	<1.3	200	13	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	6.9	<1.3	<2.5	--	--	--	--	--	--	--	0.79
	4/19/2006	<1.7	220	12	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	3.8	<1.7	<3.3	--	--	--	--	--	--	--	1.2
	5/1/2006	<1.7	220	11	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	3.7	<1.7	<3.3	--	--	--	--	--	--	--	<0.50
	5/31/2007	<1.7	200	8.1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	5.4	<1.7	<3.3	<0.025	0.034	--	--	--	--	19.000	0.53
16-D [16]	12/12/2005	<5.0	740	970	17	6.7	45	<5.0	<5.0	7.9	<5.0	<5.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	1.2
	1/13/2006	<17	3200	4000	<17	<17	100	<17	<17	<17	<17	<17	<17	<17	<33	--	--	--	--	--	--	--	0.93
	2/10/2006	<25	1800	3100	<25	<25	82	<25	<25	<25	<25	<25	<25	<25	<50	--	--	--	--	--	--	--	1.0
	4/19/2006	<6.3	340	970	41	<6.3	91	<6.3	<6.3	9.6	<6.3	<6.3	<6.3	<6.3	<13	--	--	--	--	--	--	--	1.8
	5/1/2006	<2.5	220	390	6.8	3.1	6.9	<2.5	<2.5	<2.5	<2.5	<2.5	5.6	<2.5	<5.0	--	--	--	--	--	--	--	0.78
	7/6/2006	<3.6	110	460	4.7	<3.6	80	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<7.1	--	--	--	--	--	--	--	8.4
	9/18/2006	<0.5	0.6	12	10	<0.5	10	<0.5	2.7	4.4	1.9	0.5	<0.5	<0.5	<1.0	250.000	0.380	--	--	--	--	19000.000	91
	10/18/2006	<0.5	1.5	50	4.7	<0.5	59	<0.5	0.8	2.3	<0.5	0.6	0.5	<0.5	<1.0	--	--	0.37	100	7100	9600	--	2.7

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
16-D [16] (cont'd)	11/14/2006 [17]	<0.5	1.2	26	8.8	<0.5	30	0.7	1.5	4.8	<0.5	0.6	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	9.7
	5/31/2007	<0.5	1.7	140	21	0.6	190	2.2	3.0	8.6	<0.5	<0.5	<0.5	<0.5	<1.0	76.000	0.140	--	--	--	--	6600.000	2.4
	8/21/2007	<0.5	1.0	3.4	5.9	<0.5	6.6	1.4	0.9	4.8	<0.5	<0.5	<2.5	<0.5	<5.0	54.000	0.360	--	--	--	--	5900.000	2.2
	10/22/2007	<0.5	1.7	20	7.2	<0.5	150	1.4	<0.5	3.4	<0.5	<0.5	<1.7	<0.5	<3.3	50.000	0.170	--	--	--	--	7700.000	1.8
	2/7/2007	<0.5	3.0	18	5.2	<0.5	29	0.9	<0.5	3.2	<0.5	<0.5	<0.5	<0.5	<1.0	95.000	0.300	--	--	--	--	12000.000	75
	2/28/2008	<0.5	1.9	34	4.3	0.6	26	1	<0.5	2.7	<0.5	<0.5	<0.5	<0.5	<1.0	17.000	0.320	--	--	--	--	8700.000	3.7
	3/27/2008	<0.5	2.4	48	6.3	<0.5	53	0.5	<0.5	3.0	<0.5	<0.5	<0.5	<0.5	<1.0	33.000	1.200	--	--	--	--	19000.000	10
	5/2/2008	<0.5	3.3	36	5.2	<0.5	52	0.7	<0.5	2.1	<0.5	<0.5	0.6	<0.5	<1.0	17.000	0.380	--	--	--	--	8400.000	9.6
	7/21/2008	<0.5	1.5	2.1	4.1	<0.5	1.5	1.1	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<1.0	0.120	0.220	--	--	--	--	3300.000	2.4
	10/7/2008	<0.5	1.7	2.5	4.3	<0.5	4.5	1.2	<0.5	2.2	<0.5	<0.5	<2.0	<0.5	<1.0	0.310	0.230	--	--	--	--	2400.000	1.8
	2/11/2009	<0.5	1.3	71	7.1	<0.5	50	0.8	<0.5	2.2	<0.5	<0.5	<2.0	<0.5	<1.0	0.140	3.400	--	--	--	--	1500.000	1.6
	6/1/2009	<1.0	1.0	160	12	<1.0	110	<1.0	4.5	7.5	<1.0	<1.0	<4.0	<1.0	<2.0	18.000	0.860	--	--	--	--	7200.000	3.5
	7/13/2009	<1.0	<1.7	190	15	<1.0	130	1.0	6.4	8.4	<1.0	<1.0	<4.0	<1.0	<2.0	13.000	0.800	--	--	--	--	6900.000	4.1
	10/16/2009	<1.7	7.0	240	16	<1.7	110	<1.7	9.7	9.9	<1.7	<1.7	<6.7	<1.7	<3.3	13.000	1.400	--	--	--	--	7100.000	4.2
	2/19/2010	<1.7	2.7	230	17	<1.7	130	<1.7	8.3	7.3	<1.7	<1.7	<6.7	<1.7	<3.3	9.600	1.300	--	--	--	--	5500.000	3.6
	4/23/2010	<1.7	2.1	240	15	<1.7	130	<1.7	6.8	8.3	<1.7	<1.7	<6.7	<1.7	<3.3	11.000	1.200	--	--	--	--	5700.000	2.9
	7/7/2010	<1.7	2.6	240	15	<1.7	210	<1.7	8.8	9.9	<1.7	<1.7	<6.7	<1.7	<3.3	9.500	1.300	--	--	--	--	5200.000	2.9
	10/21/2010	<1.7	<1.7	180	14	<1.7	180	<1.7	5.2	6.6	<1.7	<1.7	<6.7	<1.7	<3.3	10.000	0.780	--	--	--	--	3500.000	1.9
	2/2/2011	<1.3	<1.3	230	13	<1.3	240	1.5	2.0	5.8	<1.3	<1.3	<5.0	<1.3	<2.5	10.000	0.370	--	--	--	--	3800.000	1.1
	4/15/2011	<1.3	<1.3	32	7.2	<1.3	210	1.5	<1.3	3.8	<1.3	<1.3	<5.0	<1.3	<2.5	10.000	0.250	--	--	--	--	1500.000	0.88
	7/22/2011	<1.3	<1.3	40	8.3	<1.3	200	<1.3	<1.3	3.1	<1.3	<1.3	<5.0	<1.3	<2.5	13	0.39	--	--	--	--	2600	0.84
	10/27/2011	<1.3	<1.3	14	5.9	<1.3	130	<1.3	<1.3	2.5	<1.3	<1.3	<5.0	<1.3	<2.5	9.1	1.2	--	--	--	--	340	0.68
	12/20/2011	<0.5	2.0	94	8.1	<0.5	170	0.9	<0.5	1.7	<0.5	<0.5	1.1	<0.5	<1.0	46	14	--	--	--	--	2400	1.2
	2/8/2012	<0.50	<0.50	16	7.0	<0.50	80	1.1	<0.50	2.0	<0.50	<0.50	<2.0	<0.50	<1.0	31	6.6	--	--	--	--	8000	6.7
	4/20/2012	<0.50	<0.50	6.1 J	4.3 J	<0.50	70 J	0.6 J	<0.50	1.7 J	<0.50	<0.50	<2.0	<0.50	<1.0	5.5	2.8	--	--	--	--	1500	0.84
	7/24/2012	<0.50	<0.50	9.9	3.5	<0.50	130	0.80	<0.50	1.4	<0.50	<0.50	<2.0	<0.50	<1.0	9.0	2.0	--	--	--	--	1400	0.89
	10/10/2012	<1.3	<1.3	16	3.6	<1.3	180	<1.3	<1.3	1.8	<1.3	<1.3	<5.0	<1.3	<2.5	12	1.7	--	--	--	--	1800	0.93
	12/12/2012	<1.3	<1.3	29	6.3	<1.3	120	<1.3	<1.3	1.9	<1.3	<1.3	<1.3	<1.3	<2.5	140	12	--	--	--	--	6000	20
	1/28/2013	<0.5	0.5	53	6.4	<0.5	110	1.0	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<1.0	82	9.1	--	--	--	--	9100	3.5
	2/20/2013	1.5	150	730	10	3.3	68	<1.3	<1.3	3.4	<1.3	<1.3	1.4	<1.3	<2.5	8	5.6	--	--	--	--	4200	1.7
	3/12/2013	<0.7	3.0	100	3.6	<0.7	120	0.7	<0.7	<0.7	<0.7	<0.7	<2.9	<0.7	<2.0	23	9.1	--	--	--	--	6100	2.4
	6/5/2013	<1.0	<1.0	73	6.3	<1.0	250	1.3	<1.0	2.1	<1.0	<1.0	<4.0	<1.0	<2.0	12	1.9	--	--	--	--	2500	1.5
	8/30/2013	<1.7	<1.7	26	4.9	<1.7	190	<1.7	<1.7	2.1	<1.7	<1.7	<6.7	<1.7	<3.3	12	1.2	--	--	--	--	1900	1.6
	10/17/2013	<1.7	<1.7	22	4.4	<1.7	160	<1.7	<1.7	1.7	<1.7	<1.7	<6.7	<1.7	<3.3	7.1	0.93	--	--	--	--	710	1.2
	3/5/2014	<0.5	<0.5	2.2	2.8	<0.5	15	0.7	<0.5	1.7	<0.5	<0.5	<2.0	<0.5	<1.0	82	6.6	--	--	--	--	10000	60

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
16-D [16] (cont'd)	3/19/2014	<0.5	<0.5	22	5.2	<0.5	75	0.7	<0.5	1.8	<0.5	<0.5	<5.0	<0.5	1.3	150	14	--	--	--	--	13000	240
	5/28/2014	<0.5	<0.5	2.2	1.9	<0.5	15	0.9	<0.5	2.3	<0.5	<0.5	<2.0	<0.5	<1.0	43	3.2	--	--	--	--	18000	14
	8/18/2014	<0.5	<0.5	3.5	1.0	<0.5	36	0.6	<0.5	1.5	<0.5	<0.5	<2.0	<0.5	<1.0	4.7	3.8	--	--	--	--	4700	<0.50
	10/14/2014	<0.5	<0.5	3.3	1.2	<0.5	84	0.8	<0.5	1.8	<0.5	<0.5	<2.0	<0.5	<1.0	20	3.4	--	--	--	--	5200	1.2
Influent	1/13/2006	3.0	610	850	15	5.1	81	1.3	0.8	10.0	<0.5	<0.5	3.4	1.2	<1.0	--	--	--	--	--	--	--	0.96
	2/10/2006	<5.0	440	780	20	<5.0	63	<5.0	<5.0	7.1	<5.0	<5.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	1.5
	3/22/2006	<10	160	1600	21	<10	83	<10	<10	<10	<10	<10	<10	<10	<20	--	--	--	--	--	--	--	34
	4/19/2006	<3.6	260	550	20	<3.6	73	<3.6	<3.6	6.9	<3.6	<3.6	3.7	<3.6	<7.1	--	--	--	--	--	--	--	3.3
	5/1/2006	<4.2	270	1100	30	<4.2	88	<4.2	<4.2	5.2	<4.2	<4.2	5.7	<4.2	<8.3	--	--	--	--	--	--	--	2.5
	8/2/2006	<2.5	55	330	12	<2.5	120	<2.5	5.5	8.1	<2.5	<2.5	<2.5	<2.5	<5	--	--	--	--	--	--	--	150
	9/18/2006	<5.0	280	940	21	<5.0	18	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	18
	10/18/2006	<4.2	240	790	21	4.8	89	<4.2	<4.2	4.2	<4.2	<4.2	<4.2	<4.2	<8.3	--	--	--	--	--	--	--	1.5
	11/14/2006	<4.2	390	1100	24	5.7	120	<4.2	<4.2	5.3	<4.2	<4.2	<4.2	<4.2	<8.3	--	--	--	--	--	--	--	0.9
	12/11/2006	<10	320	1100	25	<10	150	<10	<10	<10	<10	<10	<100	<10	<20	--	--	--	--	--	--	--	2.4
	4/11-13/2007 [19]	<5.0	310	3200	17	8.8	290	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<10	190.000	0.650	--	--	--	--	6700.000	14
	4/30/2007 [19]	<17	<17	2800	<17	<17	300	<17	<17	<17	<17	<17	<17	<17	<33	400.000	0.830	--	--	--	--	8900.000	35
	5/31/2007 [19]	<10 / <20	<10 / <20	2200 / 2500	12 / <20	<10 / <20	370 / 320	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<20 / <40	270 / 340	0.82 / 0.91	--	--	--	--	9100/10000	18/39
	6/27/2007 [19]	<20	<20	2400	21	<20	580	<20	<20	<20	<20	<20	<20	<20	<40	--	--	--	--	--	--	--	750
	9/14/2007 [19]	<10	<10	1500	24	<10	560	<10	<10	10	<10	<10	<10	<10	<20	--	--	--	--	--	--	--	140
	10/15/2007 [19]	<13	<13	1200	<13	<13	820	<13	<13	<13	<13	<13	<13	<13	<25	260.000	1.500	--	--	--	--	13000.000	320
	11/1/2007 [19]	<6.3	<6.3	900	20	<6.3	760	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	320.000	2.700	--	--	--	--	12000.000	100
	11/20/2007 [19]	<3.1	<3.1	520	7	<3.1	340	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.3	340 B	5.4	--	--	--	--	14000	46
	12/18/2007 [19]	4.5	2.1	230	3.8	<2.0	160	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	270.000	3.700	--	--	--	--	13000.000	120
	1/23/2008 [19]	<0.5	3.3	290	5.7	0.8	180	1.2	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<1.0	220.000	6.300	--	--	--	--	7700.000	14
	2/4/2008	<1.7	110	260	8.6	<1.7	55	<1.7	6.4	7.8	<1.7	<1.7	1.8	<1.7	<3.3	--	--	--	--	--	--	--	25
	2/21/2008	<1.3	90	210	7.6	<1.3	60	<1.3	7.5	11	<1.3	<1.3	<1.3	<1.3	<2.5	--	--	--	--	--	--	--	61
	2/28/2008	<2.0	81	200	8.5	<2.0	38	<2.0	7.1	11	<2.0	<2.0	<2.0	<2.0	<4.0	--	--	--	--	--	--	--	64
	3/17/2008	<2.5	110	410	15	3.0	85	<2.5	10	9.8	<2.5	<2.5	4.2	<2.5	<5.0	--	--	--	--	--	--	--	48
	3/27/2008	<2.5	120	390	14	<2.5	90	<2.5	11	11	<2.5	<2.5	<2.5	<2.5	<5.0	--	--	--	--	--	--	--	22
	4/18/2008	<2.5	160	390	9.2	<2.5	56	<2.5	4.4	5	<2.5	<2.5	<10	<2.5	<5.0	--	--	--	--	--	--	--	19
	5/2/2008	<2.5	150	410	9.4	<2.5	71	<2.5	4.9	4.9	<2.5	<2.5	<2.5	<2.5	<5.0	--	--	--	--	--	--	--	7.6
	11/21/2011	4.8	410	1400	20	6.8	120	1.7	<0.5	7.0	<0.5	<0.5	3.2	1.1	<1.0	--	--	--	--	--	--	--	0.71
	12/20/2011	<0.5	1.1	87	6.7	<0.5	140	0.5	7.5	8.1	<0.5	0.7	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	4.2
	1/19/2012	4.2	190	900	14	4.2	95	1.0	<1.0	5.6	<1.0	<1.0	1.7	<1.0	<2.0	--	--	--	--	--	--	--	1.4
	12/12/2012	<3.1	130	440	7.6	<3.1	8.1	<3.1	3.9	7.2	<3.1	<3.1	<3.1	<3.1	<6.3	--	--	--	--	--	--	--	8.1
	1/28/2013	<2.5	120	470	6.8	<2.5	57	<2.5	5.5	7.8	<2.5	<2.5	<2.5	<2.5	<5.0	--	--	--	--	--	--	--	5.5

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
Influent (cont'd)	2/20/2013	<3.1	130	530	9.5	<3.1	76	<3.1	4.3	6.0	<3.1	<3.1	<3.1	<3.1	<6.3	--	--	--	--	--	--	--	11
	2/5/2014	<0.5	<0.5	37	3.1	<0.5	97	<0.5	13	12	<0.5	1.5	<5.0	<0.5	<1.0	--	--	--	--	--	--	--	3.9
	3/19/2014	<0.5	0.6	22	4.3	<0.5	97	0.6	<0.5	2.0	<0.5	<0.5	<5.0	<0.5	<1.0	--	--	--	--	--	--	--	230
Midpoint [20]	1/13/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	2/10/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	1.0
	4/19/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	1.9
	5/1/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	7/11/2006	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	90
	8/2/2006	<0.5	<0.5	3.8	<0.5	<0.5	7.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	99
	9/18/2006	<0.5	<0.5	4.0	<0.5	<0.5	6.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	5.9
	9/18/2006	<0.5	1.2	1.4	<0.5	<0.5	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	10/18/2006	<0.5	<0.5	0.8	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	0.71
	11/14/2006	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<1.0
	12/11/2006	<0.5	<0.5	0.8	<0.5	<0.5	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	4/30/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	5/31/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	6/27/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	9/14/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	86
	10/18/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	120
	11/20/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	76
	12/18/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	120
Effluent [20]	3/22/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	24
	7/11/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	--	--	--	--	--	--	--	69
	9/18/2006	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	15
	9/18/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	10/18/2006	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	11/14/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<.050
	12/11/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	4/30/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	5/31/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	6/27/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--
	9/14/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	88
	10/18/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	91
	11/20/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	65
	12/18/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	100

TABLE III
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED COMPOUNDS [1,2]
FORMER 901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L), unless otherwise noted

Sample ID	Sample Date	PCE EPA 8260B	TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	1,1-DCA EPA 8260B	CB EPA 8260B	1,2-DCB EPA 8260B	1,3-DCB EPA 8260B	1,4-DCB EPA 8260B	Freon 113 EPA 8260B	1,1,1-TCA EPA 8260B	CE EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	Nitrate- N 300 (mg/L)	Sulfate 300 (mg/L)	Iron 6010B (mg/L)	Manganese 6010B (mg/L)	Methane AM20GAX	TOC EPA 415.2 (mg/L)
Effluent [20] (cont'd)	1/23/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	25
	2/4/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	39
	2/21/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	30
	2/28/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	62
	3/17/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	22
	3/27/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	9.8
	4/18/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	26
	5/2/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	9.0
	11/21/2011	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	12/20/2011	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	1/19/2012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	12/12/2012	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	1/28/2013	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	2/20/2013	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.1	--	--					--	<0.50
	2/5/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<1.0	--	--	--	--	--	--	--	<0.50
	3/19/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<1.0	--	--	--	--	--	--	--	1.1

Notes:
1. Samples were collected by AMEC Geomatrix or Field Solutions, Inc., of San Jose, California, and submitted to Curtis and Tompkins, Ltd., of Berkeley, California, for VOC and TOC analyses. Ethene, ethane, and methane were analyzed by Microseeps, Inc., of Pittsburgh, Pennsylvania.
2. Baseline sampling was conducted on 6 and 7 December 2005.
3. 23-S was not accessible to sample during the February 2007 sampling event.
4. Well was sampled on 7 November 2006 as part of the annual groundwater monitoring event for the site. See the Annual Groundwater Monitoring Report (Geomatrix, 2007).
5. J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
6. UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of the quantitation necessary to accurately and precisely measure the analyte in the sample.
7. Well P2A was decommissioned in August 2007.
8. DW-1 was converted to an injection well on 22 May 2006 and 25 January 2008, and to an extraction well on 30 March 2007.
9. Well PMW-1-1 was not sampled during the August 2006 quarterly sampling event due to low recharge.
10. Monitoring well sampling discontinued due to low recharge during the baseline sampling event; however, adequate sample volumes were available during the November 2006 and February 2007 quarterly sampling events.
11. Well DW-2 was converted to an injection well on 22 May 2006. Injection was discontinued on 30 August 2007, was resumed on 25 January 2008, and was discontinued on 2 May 2008.
12. The sample bottles for analysis of ethene, ethane, and methane were broken during shipping but the samples bottles for VOC analysis were okay. DW-2 was re-sampled on 28 April 2010 for analysis of ethene, ethane, and methane.
13. Groundwater extraction at wells X1B and X2B1 was discontinued on 11 December 2006, was resumed on 25 January 2008, and was discontinued on 2 May 2008.
14. Groundwater extraction at wells X2A and DW-7 was discontinued on 3 August 2006, was resumed on 25 January 2008, and was discontinued on 2 May 2008.
15. Sample ID is "X1B1" on laboratory report.
16. Groundwater extraction at wells DW-8, 16-S, and 16-D was discontinued on 1 May, 10 August, and 18 October 2006, respectively. Extraction at wells 16-S and 16-D was resumed on 25 January 2008, and was discontinued on 2 May 2008.
17. Samples for ethene, ethane, and methane were not analyzed due to field oversight.
18. U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
19. DW-1 is the only extraction well in operation during the period from 11 April 2007 to 23 January 2008 and, therefore, analytical results for influent and DW-1 are the same.
20. The midpoint and effluent ports for the GAC vessel were sampled after replacement of carbon in the lag vessel on 18 September 2006. The lag carbon vessel was disconnected on 31 January 2008, and no samples were taken from the midpoint port after 31 January 2008.

Abbreviations:
< = compound not detected above indicated laboratory reporting limit
<0.5 / <0.5 = indicates that duplicate samples were collected
1,1,1-TCA = 1,1,1-trichloroethane
1,1-DCA = 1,1 dichloroethane
1,1-DCE = 1,1-dichloroethene
1,3-DCB = 1,3-dichlorobenzene
1,4-DCB = 1,4-dichlorobenzene
CB = chlorobenzene
cDCE = cis-1,2-dichloroethene
CE = chloroethane
TCE = trichloroethene
tDCE = trans-1,2-dichloroethene
TOC = total organic carbon
µg/L = micrograms per liter
VC = vinyl chloride
1,2-DCB = 1,2-dichlorobenzene
PCE = tetrachloroethene
VOC = volatile organic compound

TABLE IV

IN SITU BIOREMEDIATION WELL CONSTRUCTION DETAILS [1]

FORMER 901/902 THOMPSON PLACE

SUNNYVALE, CALIFORNIA

Well ID	Well Type	Screen Interval (ft bgs)	Borehole Diameter (inches)	Well Diameter (inches)
A-Zone Wells				
16-S	Extraction/Monitoring	9 - 16	8	4
X2A	Extraction/Monitoring	10.0 - 19.9	8.25	2
23-S	Monitoring	9.0 - 16.0	8	4
DW-2	Monitoring/Injection	10.0 - 14.0	NA	12
28-MW	Monitoring	10.0 - 16.3	8.25	2
ISB1AR	Injection	10.0 - 24.4	8.25	2
ISB2AR	Extraction/Injection	15.1 - 19.6	8.25	2
B1-Zone Wells				
16-D	Extraction/Monitoring	31 - 41	8	4
DW-7	Extraction/Monitoring	35 - 45	NA	NA
X1B	Extraction/Monitoring	25.4 - 30.2	8.25	2
X2B1	Monitoring/ Injection/Extraction	26.5 - 36.5	8.25	2
DW-1	Monitoring/ Injection/Extraction	32 - 40	NA	4
23-D	Monitoring	40 - 50	8	4
PMW-1-1	Monitoring	26.0 - 27.4	5.5	1.1
PMW-1-2	Monitoring	31.0 - 32.4	5.5	1.1
PMW-1-3	Monitoring	35.9 - 38.5	5.5	1.1
PMW-2-1	Monitoring	26.7 - 28.1	5.5	1.1
PMW-2-2	Monitoring	36.7 - 38.1	5.5	1.1
ISB3BR	Injection/Extraction	25.7 - 43.3	8.25	2
ISB2BR [1]	Injection	31.4 - 39.6	8.25	2
B2-Zone Wells				
DW-8	Extraction	45 - 65	NA	NA
PMW-2-3	Monitoring	45.5 - 48.2	5.5	1.1
ISB1BR	Injection	31.0 - 44.5	8.25	2

Notes:

1. Well ISB2BR is angled at approximately 30 degrees from vertical running beneath the building. The true of the screen interval is 31.4 to 39.6 ft bgs.

Abbreviations:

ft bgs = feet below ground surface

NA = not available

TABLE V

IN SITU BIOREMEDIATION MONITORING PROGRAM [1]

FORMER 901/902 THOMPSON PLACE

SUNNYVALE, CALIFORNIA

Well ID	Water Levels	Sampling [1]
23-S	Quarterly	Quarterly
23-D	Quarterly	Quarterly
DW-1	Quarterly	Quarterly
28-MW	Quarterly	Quarterly
PMW-1-1	Quarterly	--
PMW-1-2	Quarterly	--
PMW-1-3	Quarterly	--
PMW-2-1	Quarterly	Quarterly
PMW-2-2	Quarterly	--
PMW-2-3	Quarterly	Quarterly
DW-2	Quarterly	Quarterly
X2B1	Quarterly	Quarterly
X2A	Quarterly	Quarterly
X1B	Quarterly	Quarterly
16-S	Quarterly	Quarterly
DW-7	Quarterly	Quarterly
16-D	Quarterly	Quarterly
DW-8	--	--
ISB1AR	--	--
ISB1BR	--	--
ISB2AR	--	--
ISB2BR	--	--
ISB3BR	--	--

Notes:

1. Samples are analyzed for volatile organic compounds by EPA Method 8260B; total organic carbon by EPA Method 415.2; and ethene, methane, ethane by method AM20GAX.
2. -- = Not included in monitoring plan.

TABLE VI
IN SITU BIOREMEDIATION OPERATIONAL SUMMARY - 2014
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Period	Extraction Wells	Injection Wells	Operation Time (hours)	Average Flow Rate - Extraction (gpm)	Total Flow Extracted during Period (gallons)	Substrate Injected during Period [1] (gallons)	Substrate Loading Rate (g/day) [2]
A-Zone							
1/17/14 - 1/22/14	X2A	ISB1AR, ISB2AR	113	0.11	763	16	10,228
1/22/14 - 1/29/14	16-S	ISB1AR, ISB2AR	167	0.54	5,404	16	6,887
1/29/14 - 2/05/14	X2A, 16-S	ISB1AR, ISB2AR	173	0.94	9,751	16	6,646
4/30/14 - 5/14/14	16-S	ISB1AR, ISB2AR	336	0.45	9,021	0	0
6/4/14 - 6/18/14 [3]	X2A	ISB1AR, ISB2AR	339	0.38	7,682	0	0
B-Zone							
2/05/14 - 2/06/14 [4]	X2B1, X1B	ISB1BR, ISB3BR	21	1.1	1,439	16	7,054
2/06/14 - 2/12/14	X2B1	ISB1BR, ISB3BR	142	0.45	3,813	0	
2/12/14 - 2/19/14	X1B	ISB1BR, ISB3BR	172	0.70	7,255	16	6,706
2/19/14 - 2/28/14	X2B1	ISB1BR, ISB3BR	215	0.43	5,534	16	5,339
2/28/14 - 3/05/14	X1B	ISB1BR, ISB3BR	117	0.77	5,400	16	9,826
3/05/14 - 3/12/14	ISB3BR, 16-D	ISB1BR, X2B1	165	0.65	6,434	16	6,983
3/12/14 - 3/19/14 [5]	ISB3BR, 16-D	ISB1BR, X2B1	170	0.72	7,319	16	6,776
5/21/14 - 6/4/14	DW-7	ISB1BR, ISB3BR	335	0.52	10,523	0	0
Subtotals							
A-Zone			1,128	0.48	32,621	48	3,057
B-Zone			1,337	0.59	47,717	96	5,158
2014 Total			2,466	0.54	80,338	144	4,196

Abbreviations:
gpm = gallons per minute
g/day = grams carbohydrate injected per day
1. The substrate injected during this period was 60% w/w sodium lactate solution.
2. The substrate loading rate is presented in grams of sodium lactate per day.
3. The pump for extraction well X2A was inoperable for a portion of the first week of operation during this period.
4. Extraction wells X1B and X2B1 were inadvertently operated for 20.5 hours from 5 to 6 February 2014. Substrate loading rate shown is approximate and includes the entire period of 5 to 12 February 2014.
5. Flow meter for extraction well ISB3BR was inoperable, and calculated flow may underestimate actual flow volume.

TABLE VII

HISTORICAL *IN SITU* BIOREMEDIATION OPERATIONAL SUMMARY
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Year	Operation Time (hours)	Average Flow Rate - Extraction (gpm)	Total Flow Extracted during Period (gallons)	Substrate Injected during Period [1] (gallons)	Substrate Loading Rate (g/day)
A-Zone					
2008	2,019	0.80	92,364	192	5,435
2009	0	--	0	0	0
2010	0	--	0	0	0
2011	692	0.60	25,046	28	3,873
2012	1,031	0.95	58,491	76	7,042
2013	1,346	0.51	40,934	43	3,052
2014	1,128	0.48	32,621	48	3,057
B-Zone					
2008	2,644	1.1	169,211	346	7,479
2009	0	--	0	0	0
2010	0	--	0	0	0
2011	1,290	1.09	84,158	175	12,930
2012	2,473	0.99	146,634	152	8,925
2013	1,346	0.91	73,436	77	5,465
2014	1,337	0.59	47,717	96	5,158
Totals					
A-Zone	6,216	0.67	249,456	387	4,473
B-Zone	9,090	0.94	521,156	846	6,687

Note

1. From 2008 to 2013, the substrate injected was food-grade molasses. In 2014 the substrate was changed to a 60% w/w sodium lactate solution.

Abbreviations:

gpm = gallons per minute
g/day = grams carbohydrate injected per day

TABLE VIII
STATUS OF CHEMICALS REMOVED THROUGH 2014
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Mechanism	Volume Extracted [1] (gallons)	Average Influent VOCs (µg/L)	Estimated Total VOCs Removed (pounds)	Extraction System Efficiency (lb/MG)
1983/1984 Excavations	NA	NA	10	NA
1992 Excavation	NA	NA	0.3	NA
Groundwater Extraction				
1984 through 1995 [2,3]	126,940,000	529	559	4.4
Groundwater Extraction				
1996	16,140,000	283	38	2.4
1997	15,817,920	339	45	2.8
1998	16,636,170	277	38	2.3
1999	16,170,000	251	33	1.9
2000	12,291,830	262	27	2.2
2001	13,032,970	281	29	2.2
2002	13,495,145	363	40	2.9
Subtotals [4,5]	**103,584,035**	**294**	**250**	**2.4**
ISB Groundwater Extraction				
2006	586,929	1,287	5.9	10.0
2007	154,649	2,653	3.0	19.5
2008	291,553	539	1.3	4.5
2011	109,204	1,113	1.0	9.3
2012	205,125	761	1.3	6.3
2013	114,370	721	0.7	6.0
2014	80,338	145	0.1	1.2
Subtotals [4]	**1,542,168**	**1,031**	**13**	**8.1**
Total [4]	**232,066,203**		**832**	**3.6**

Notes:
1. The extraction volumes (and associated VOCs removed estimate) are based upon meter readings for individual extraction wells.
2. Estimated values based on data from a previous 5-year Status Report (Arcadis, 2001).
3. DCE (sum of trans-1,2-DCE and cis-1,2-DCE) not monitored in 1990; estimation based on 1989 data; trans-1,2-DCE not monitored in 1991; estimation based on 1989 data.
4. Mass removed values rounded to nearest pound.
5. Extraction system efficiency calculated over 1996 to 2002 period.

Abbreviations:
µg/L = micrograms per liter
DCE = dichloroethene
ISB = *in situ* bioremediation
lb/MG = pounds VOCs removed per million gallons extracted
NA = not available
VOCs = volatile organic compounds

TABLE IX
ISB PROGRAM GROUNDWATER ELEVATIONS - 2014
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Well Name	Date [1]	Location Coordinates [2]		Screen Interval (feet bgs)	Measuring Point Elevation (feet msl)	Water Level Depth (feet btoc)	Water Level Elevation (feet msl)
		Latitude	Longitude				
23-S	3/4/2014	37.38292321	122.009706	9 - 16	47.03	8.00	39.03
	5/27/2014					8.88	38.15
	8/18/2014					9.23	37.80
	10/13/2014					9.38	37.65
16-S	3/4/2014	37.38302803	122.0094942	9 - 16	47.7	9.48	38.22
	5/27/2014					10.32	37.38
	8/18/2014					10.53	37.17
	10/13/2014					10.67	37.03
DW-2	3/4/2014	37.38290374	122.0095907	10 - 14	46.45	7.13	39.32
	5/27/2014					8.25	38.20
	8/18/2014					8.59	37.86
	10/13/2014					8.74	37.71
28-MW	3/4/2014	37.38294782	122.0095259	10.0 - 16.3	47.42	8.91	38.51
	5/27/2014					9.70	37.72
	8/18/2014					9.99	37.43
	10/13/2014					10.10	37.32
X2A	3/4/2014	37.38298213	122.0096288	10.0 - 19.9	47.08	8.97	38.11
	5/27/2014					9.83	37.25
	8/18/2014					10.14	36.94
	10/13/2014					10.28	36.80
X1B	3/4/2014	37.38297721	122.0095389	25.4 - 30.2	47.18	10.82	36.36
	5/27/2014					9.02	38.16
	8/18/2014					9.49	37.69
	10/13/2014					9.60	37.58
X2B1	3/4/2014	37.38298238	122.0096398	26.5 - 36.5	46.83	8.65	38.18
	5/27/2014					8.02	38.81
	8/18/2014					8.75	38.08
	10/13/2014					9.19	37.64
PMW-1-1	3/4/2014	37.38294193	122.009538	26.0 - 27.4	47.45	9.97	37.48
	5/27/2014					9.35	38.10
	8/18/2014					9.82	37.63
	10/13/2014					9.90	37.55
PMW-1-2	3/4/2014	37.38294193	122.009538	31.0 - 32.4	47.45	9.33	38.12
	5/27/2014					8.99	38.46
	8/18/2014					9.63	37.82
	10/13/2014					9.71	37.74
PMW-1-3	3/4/2014	37.38294193	122.009538	35.9 - 38.5	47.45	7.64	39.81
	5/27/2014					9.05	38.40
	8/18/2014					9.82	37.63
	10/13/2014					9.95	37.50

TABLE IX
ISB PROGRAM GROUNDWATER ELEVATIONS - 2014
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Well Name	Date [1]	Location Coordinates [2]		Screen Interval (feet bgs)	Measuring Point Elevation (feet msl)	Water Level Depth (feet btoc)	Water Level Elevation (feet msl)
		Latitude	Longitude				
PMW-2-1	3/4/2014	37.38295602	122.0096339	26.7 - 28.1	47.26	9.38	37.88
	5/27/2014					8.98	38.28
	8/18/2014					9.42	37.84
	10/13/2014					9.57	37.69
PMW-2-2	3/4/2014	37.38295602	122.0096339	36.7 - 38.1	47.26	7.27	39.99
	5/27/2014					8.26	39.00
	8/18/2014					9.38	37.88
	10/13/2014					9.48	37.78
PMW-2-3	3/4/2014	37.38295602	122.0096339	45.5 - 48.2	47.26	6.62	40.64
	5/27/2014					7.64	39.62
	8/18/2014					8.91	38.35
	10/13/2014					9.15	38.11
16-D	3/4/2014	37.38303803	122.0095055	31 - 41	47.49	7.92	39.57
	5/27/2014					9.39	38.10
	8/18/2014					9.98	37.51
	10/13/2014					10.15	37.34
DW-1	3/4/2014	37.38289028	122.0095901	32 - 40	46.91	7.74	39.17
	5/27/2014					8.72	38.19
	8/18/2014					9.18	37.73
	10/13/2014					9.32	37.59
DW-7	3/4/2014	37.3830608	122.0095395	35 - 45	46.11	6.42	39.69
	5/27/2014					8.69	37.42
	8/18/2014					8.47	37.64
	10/13/2014					8.70	37.41
23-D	3/4/2014	37.38293321	122.009716	40 - 50	47.04	6.12	40.92
	5/27/2014					7.12	39.92
	8/18/2014					8.47	38.57
	10/13/2014					8.75	38.29

Notes:

1. Groundwater circulation was not occurring during collection of water levels on 18 August 2014 and 13 October 2014.
2. Well locations were surveyed by Silicon Valley Land Surveying, Inc. (SVLS) on 16 November 2006. Wells were resurveyed by SVLS on 10 to 11 September 2007 after site redevelopment.

Abbreviations:

feet bgs = feet below ground surface
feet btoc = feet below top of well casing
feet msl = feet relative to mean sea level

TABLE X
INTERPRETATION OF PERFORMANCE MONITORING RESULTS - 2014
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

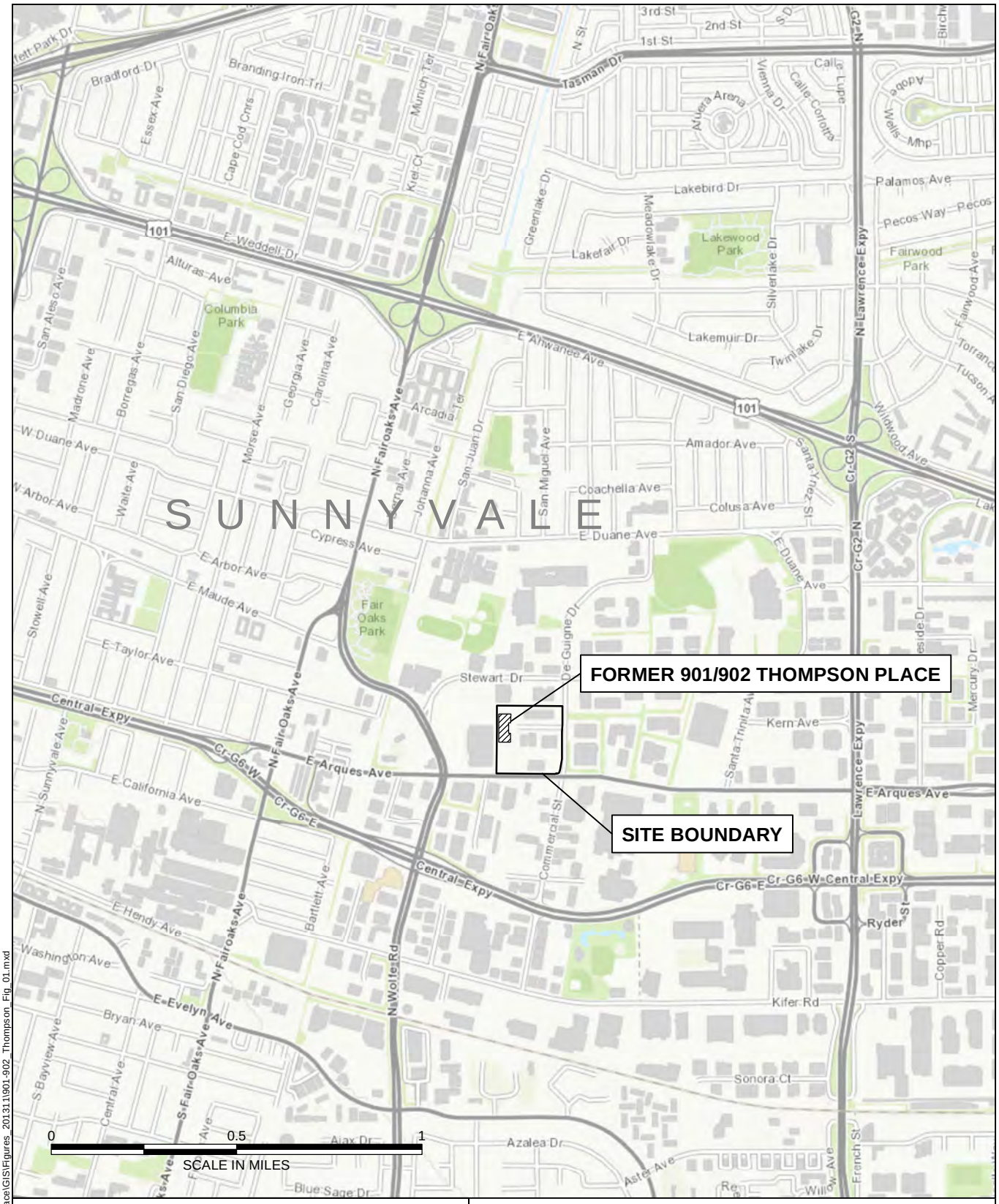
Well ID	Depth Interval (ft bgs)	Decrease in TCE relative to cDCE & VC [1]	Increase in CH_4? [2]	TOC Currently above 10 mg/L? [3]	% Decrease in VOCs from maximum to minimum value (date - date) [4]	Highest Observed %Dechlorination (date) [5]	Conclusions
23-S	9 - 16	Yes	No	No	88% (10/21/10 - 4/19/12)	29% (5/2/08)	Groundwater in the vicinity of this well has previously been affected by the ISB program, and ISB was occurring because of carbohydrate injection. However, rebound of TCE has been observed as carbohydrate is depleted in the vicinity of the well.
23-D	40 - 50	No	No	No	87% (12/6/05 - 11/7/06)	48% (8/2/06)	Groundwater in the vicinity of this well has previously been affected by the ISB program, and ISB was occurring because of carbohydrate injection. However, rebound of TCE has been observed as substrate is depleted in the vicinity of the well.
28-MW	10 - 16.3	Yes	Yes	No	99% (5/27/09 - 6/5/13)	98% (5/31/07)	The complete transformation of chlorinated VOCs to ethene promoted by substrate injection continued to be observed.
PMW-2-1	26.7 - 28.1	No	Yes	No	45% (8/21/07 - 5/27/14)	16% (3/12/13)	The presence of methane and ethene suggest that the conditions are favorable for ISB to occur, however, the lack of a decrease of VOCs and low TOC concentrations are consistent with intrinsic (natural) remediation that has been ongoing likely due to natural organic material in the sediments. It appears that target COCs are slowly decreasing over time. Groundwater velocity is expected to be low based on well yields, therefore intrinsic remediation appears to be a viable long-term remedy at this location.
PMW-2-3	45.5 - 48.2	No	No	No	65% (2/14/06 - 10/14/14)	10% (12/7/05)	Intrinsic ISB processes appear to be responsible for the destruction of VOCs prior to implementing the ISB program (based on %dechlorination value). This well does not appear to be effected by carbohydrate injection likely due to the fine-grained sediments at this depth interval.
X2B1 [7]	26.5 - 36.5	Yes	No	Yes	97% (12/11/06 - 5/27/14)	95% (5/27/14)	ISB appears to be occurring as indicated by the increase of ethene and the decrease in target COCs in 2014. Elevated TOC and methane concentrations indicate favorable conditions for ongoing, passive ISB processes.
X2A [7]	10.0 - 19.9	Yes	Yes	No	100% (4/19/06 - 5/31/07)	95% (5/31/07)	Ethene concentrations indicate that ISB is ongoing at this well; however, low TOC concentrations and rebounding target COCs have been observed as substrate is depleted at this well.
X1B [7]	25.4 - 30.2	Yes	No	No	98% (10/21/10 - 5/28/14)	98% (5/28/14)	Ethene concentrations indicate that ISB is ongoing at this well; however, low TOC concentrations and rebounding target COCs have been observed as substrate is depleted at this well.
16-S [7]	9 - 16	Yes	Yes	No	100% (5/1/06 - 6/4/13)	81% (10/7/08)	ISB processes have been stimulated in the vicinity of this former ISB extraction well, and continue to remove VOCs in this area. Additional substrate injection may be required for complete transformation to ethene
16-D [7]	31 - 41	Yes	Yes	No	100% (1/13/06 - 7/21/08)	97% (9/18/06)	ISB appears to be occurring as indicated by the increase of ethene and the decrease in target COCs in 2014. Elevated TOC and methane concentrations indicate favorable conditions for ongoing, passive ISB processes.
DW-7 [7]	35 - 45	Yes	No	No	98% (5/1/06 - 5/28/14)	56% (8/2/06)	ISB processes were stimulated in the vicinity of this former extraction well upon the arrival of substrate; however, vinyl chloride concentrations have increased recently.
DW-1	32 - 40	No	Yes	Yes	100% (5/3/06 - 2/9/12)	93% (2/12/07)	COCs have decreased by three orders of magnitude in this area, indicating successful source area remediation near this well. Elevated TOC and methane concentrations indicate favorable conditions for ongoing, passive ISB processes.
DW-2	10 - 14	Yes	No	Yes	100% (2/14/06 - 7/21/08)	100% (7/21/08)	COCs have decreased by two orders of magnitude in this area, indicating successful source area remediation near this well. Elevated TOC and methane concentrations indicate favorable conditions for ongoing, passive ISB processes.

Notes:
1. TCE, cDCE, and VC concentrations are tabulated in Table III. An increase in cDCE and/or VC relative to TCE with time indicates that the reductive dechlorination (the primary ISB process) of TCE is occurring.
2. CH4 concentrations are presented in Table III. An increase in CH4 over time suggests that microbiologically mediated reduction of carbon dioxide is occurring, along with fermentation of organic compounds. This process is promoted by substrate addition, and an increase in CH4 relative to baseline conditions suggests that conditions are favorable for ISB to occur, as shown during the Pilot Study.
3. TOC concentrations are presented in Table III. An increase in TOC above 10 mg/L (relative to baseline conditions) is assumed to be indicative of the influence of carbohydrate injection at this well. As shown in the Pilot Study, complete microbiological dechlorination of TCE to ethene by ISB processes was generally preceded by an increase in TOC several months earlier.
4. VOCs refers to the sum of the concentrations of the primary constituents of concern (TCE and cDCE) and VC (i.e., VOCs = TCE+cDCE+VC), where the concentrations of these individual compounds are summarized in Table III. The % decrease is calculated as 1-(C2/C1) x 100%, where C1 is the earlier concentration and C2 is the later concentration. C2 is the minimum and C1 is the preceding maximum TCE+cDCE+VC concentration reported for sampling events over the performance monitoring period (December 2005 to December 2008).
5. Values for %Dechlorination are based on concentrations of the main COCs and ethene. ISB processes are assumed to be the primary reason for an observed decrease in VOC concentrations when %dechlorination values are greater than half of the observed %decrease in VOCs.
6. Well was destroyed on 27 August 2007 due to damage that occurred during property development.
7. Well was formerly an extraction well; data used in calculations are from samples collected after pumping ceased.

Abbreviations:

cDCE = cis-1,2-dichloroethene
CH_4= methane
COCs = chemicals of concern
TOC = total organic carbon
ft bgs = feet below ground surface
ISB = *in situ* bioremediation
mg/L = milligrams per liter
VC = vinyl chloride
NC = not calculated if VOC concentrations remained the same (in general) or increased
NM = not measured in 2010
TCE = trichloroethene
VOC = volatile organic compounds

FIGURES



HALEY & ALDRICH

FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

SITE LOCATION MAP

JANUARY 2015

FIGURE 1

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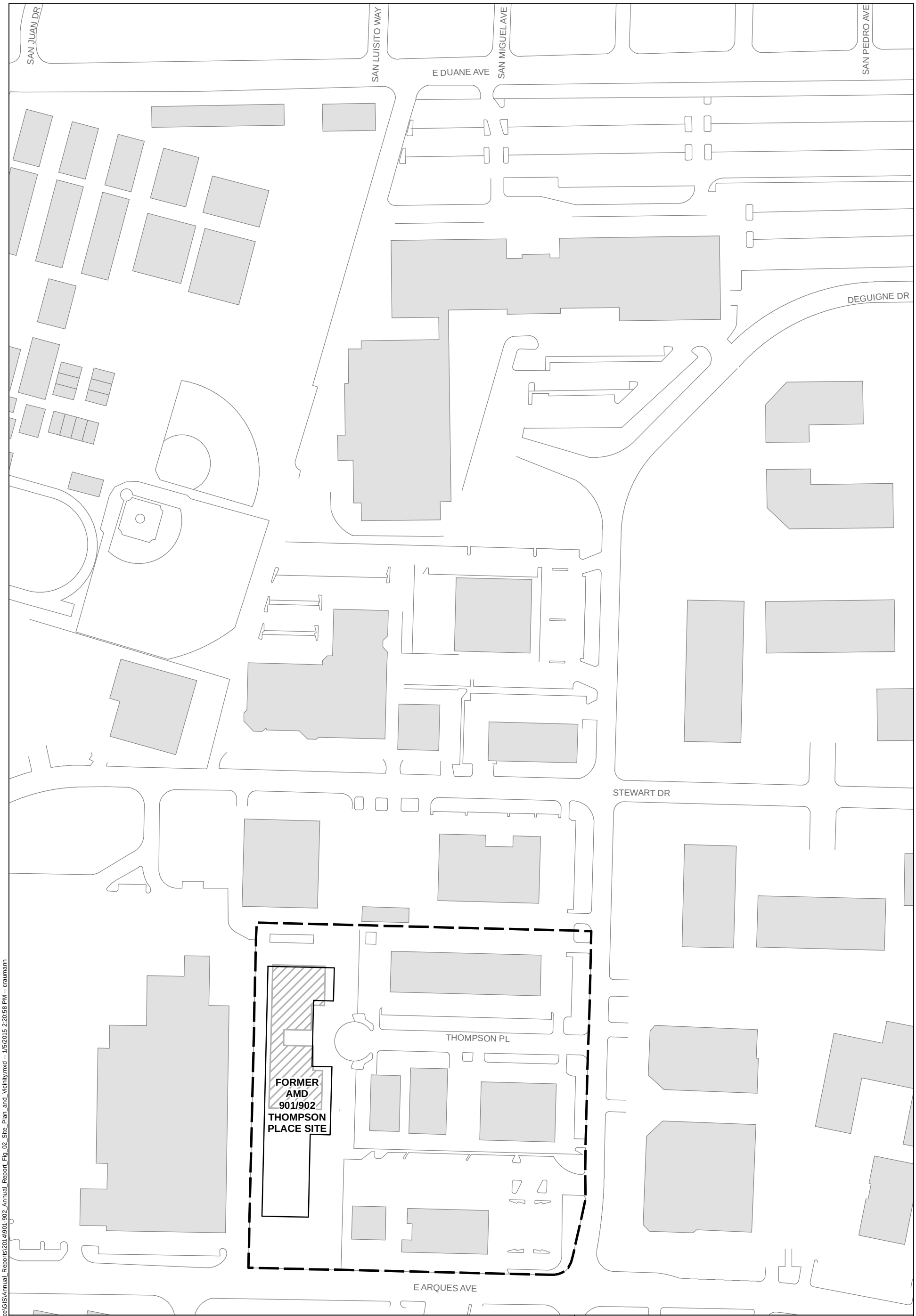

SITE BOUNDARY

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

N
W E
S

0 200 400

SCALE IN FEET 1 INCH = 200 FEET

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FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

SITE PLAN AND VICINITY

JANUARY 2015

FIGURE 2

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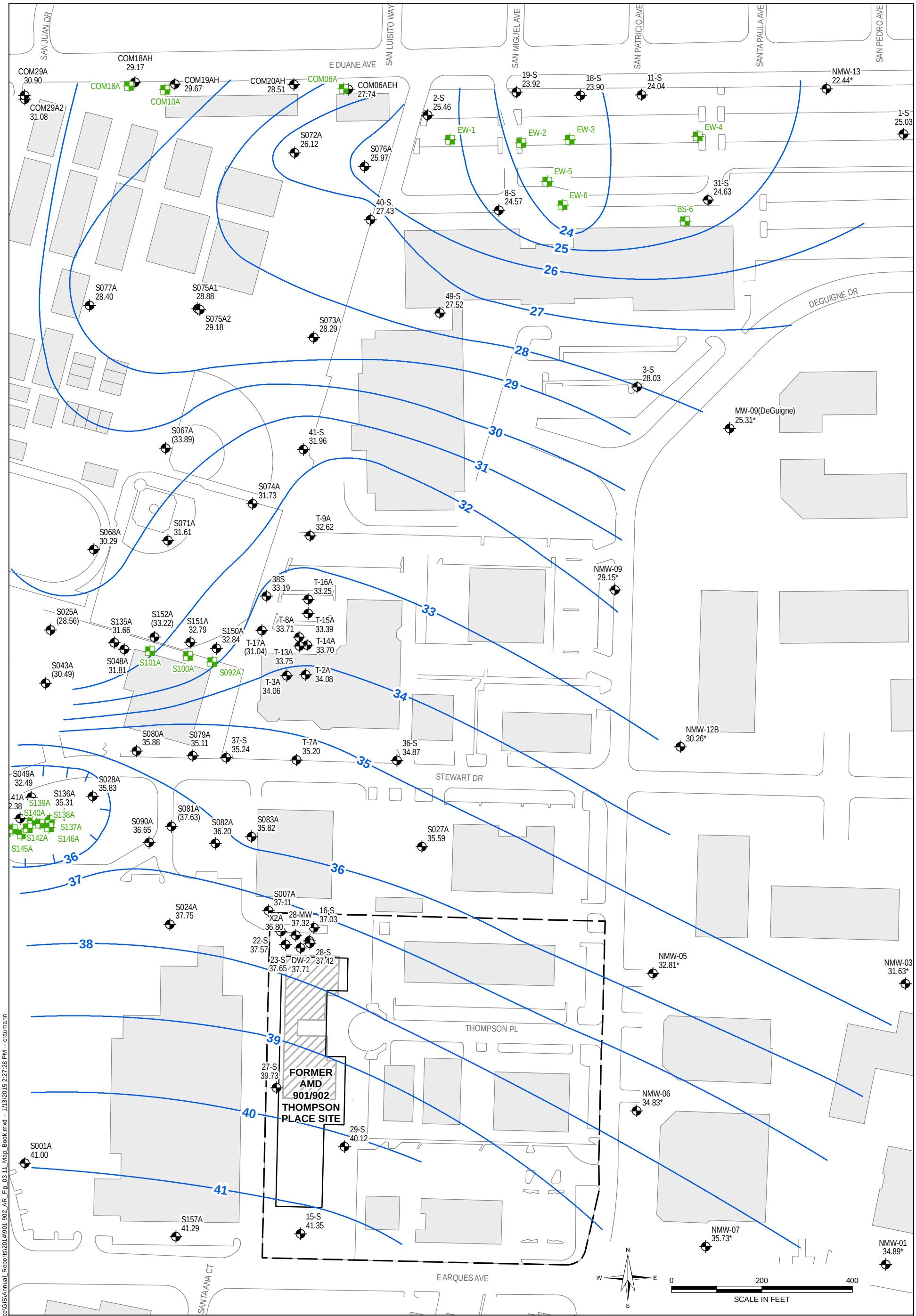

A-ZONE MONITORING WELL WITH WATER LEVEL IN FEET (NAVD88)

EXTRACTION WELL

GROUNDWATER ELEVATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

1. *MOHAWK WELLS ARE SURVEYED TO A DIFFERENT VERTICAL DATUM (NGVD29), AND ARE OFFSET BY APPROXIMATELY 2.7 FEET.
2. WATER LEVELS IN PARENTHESIS, E.G., (43.29), WERE NOT USED IN GENERATING CONTOURS.
3. CONTOURS ARE BASED ON INTERPRETATION OF MONITORING-WELL DATA AND CURRENT UNDERSTANDING OF HYDROGEOLOGIC CONDITIONS. THEY ARE PROVIDED FOR CLARITY AND ARE NOT INTENDED TO IMPLY CERTAINTY.
4. EW-1 THROUGH EW-6 ARE SCREENED ACROSS BOTH THE A AND B1 ZONES.

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FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

A-ZONE WATER LEVELS
OCTOBER 2014

JANUARY 2015

FIGURE 3

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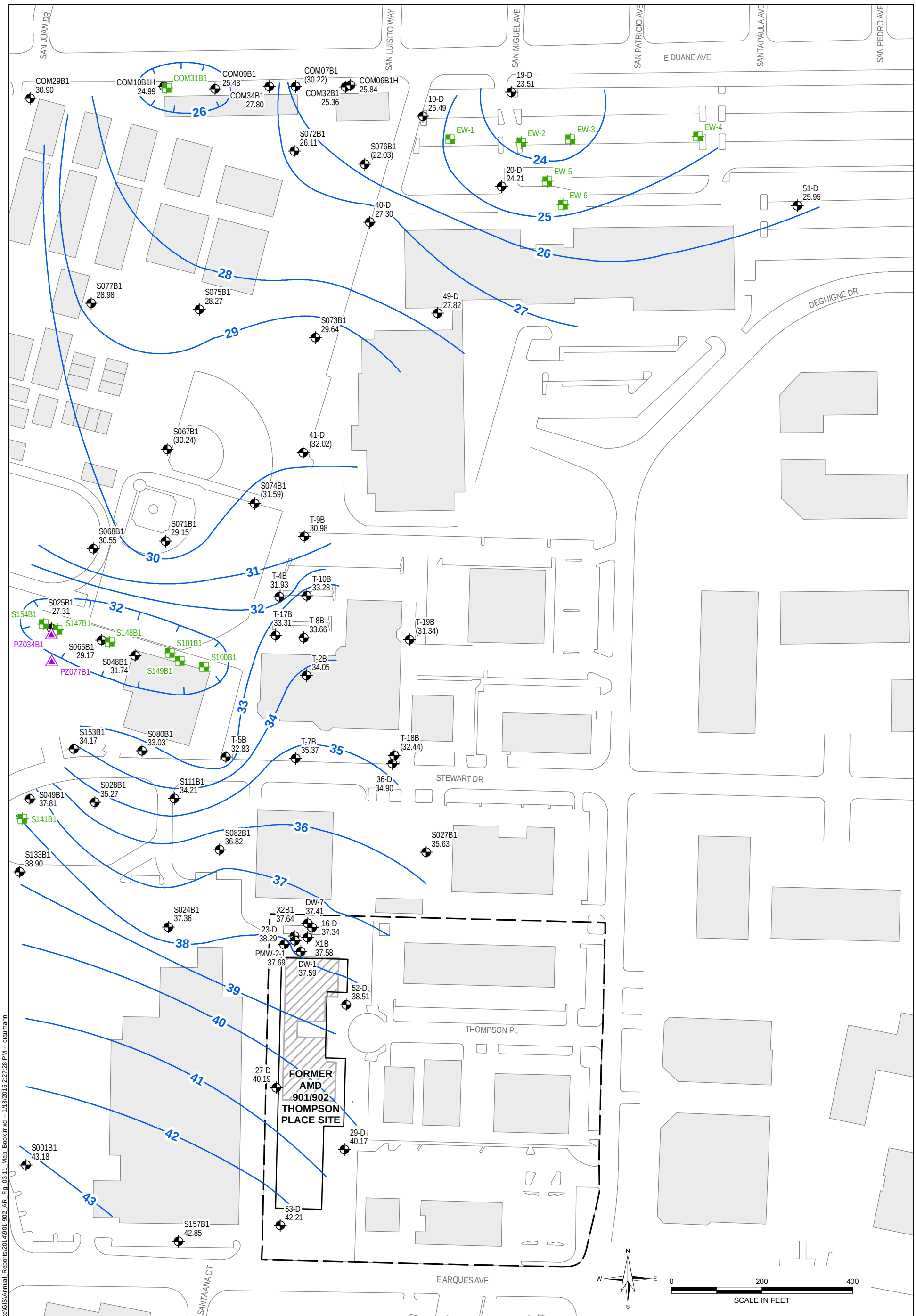

MONITORING WELL

EXTRACTION WELL

PIEZOMETER

GROUNDWATER ELEVATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

1. WATER LEVELS IN PARENTHESIS, E.G., (43.29), WERE NOT USED IN GENERATING CONTOURS.
2. CONTOURS ARE BASED ON INTERPRETATION OF MONITORING-WELL DATA AND CURRENT UNDERSTANDING OF HYDROGEOLOGIC CONDITIONS. THEY ARE PROVIDED FOR CLARITY AND ARE NOT INTENDED TO IMPLY CERTAINTY.
3. EW-1 THROUGH EW-6 ARE SCREENED ACROSS BOTH THE A AND B1 ZONES.

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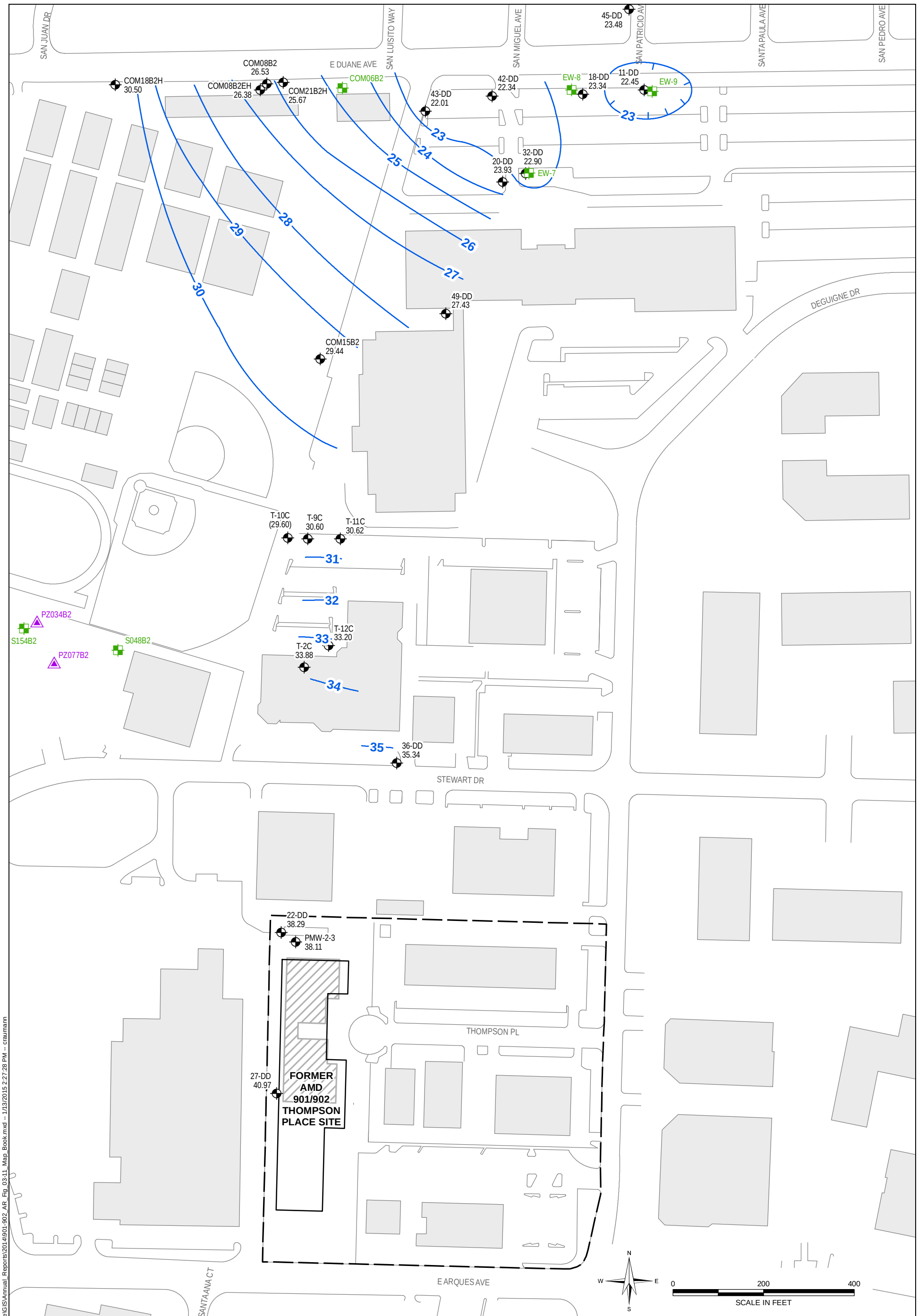
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B1-ZONE WATER LEVELS
OCTOBER 2014

JANUARY 2015

FIGURE 4

G:\39751_AMD_Former 901-902 Thompson Place\GIS\Annual_Reports\2014\901-902_AR_Fig_03-11_Map_Book.mxd -- 1/13/2015 2:27:28 PM -- craumann



MONITORING WELL

EXTRACTION WELL

PIEZOMETER

GROUNDWATER ELEVATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

1. WATER LEVELS IN PARENTHESIS, E.G., (43.29), WERE NOT USED IN GENERATING CONTOURS.
2. CONTOURS ARE BASED ON INTERPRETATION OF MONITORING-WELL DATA AND CURRENT UNDERSTANDING OF HYDROGEOLOGIC CONDITIONS. THEY ARE PROVIDED FOR CLARITY AND ARE NOT INTENDED TO IMPLY CERTAINTY.

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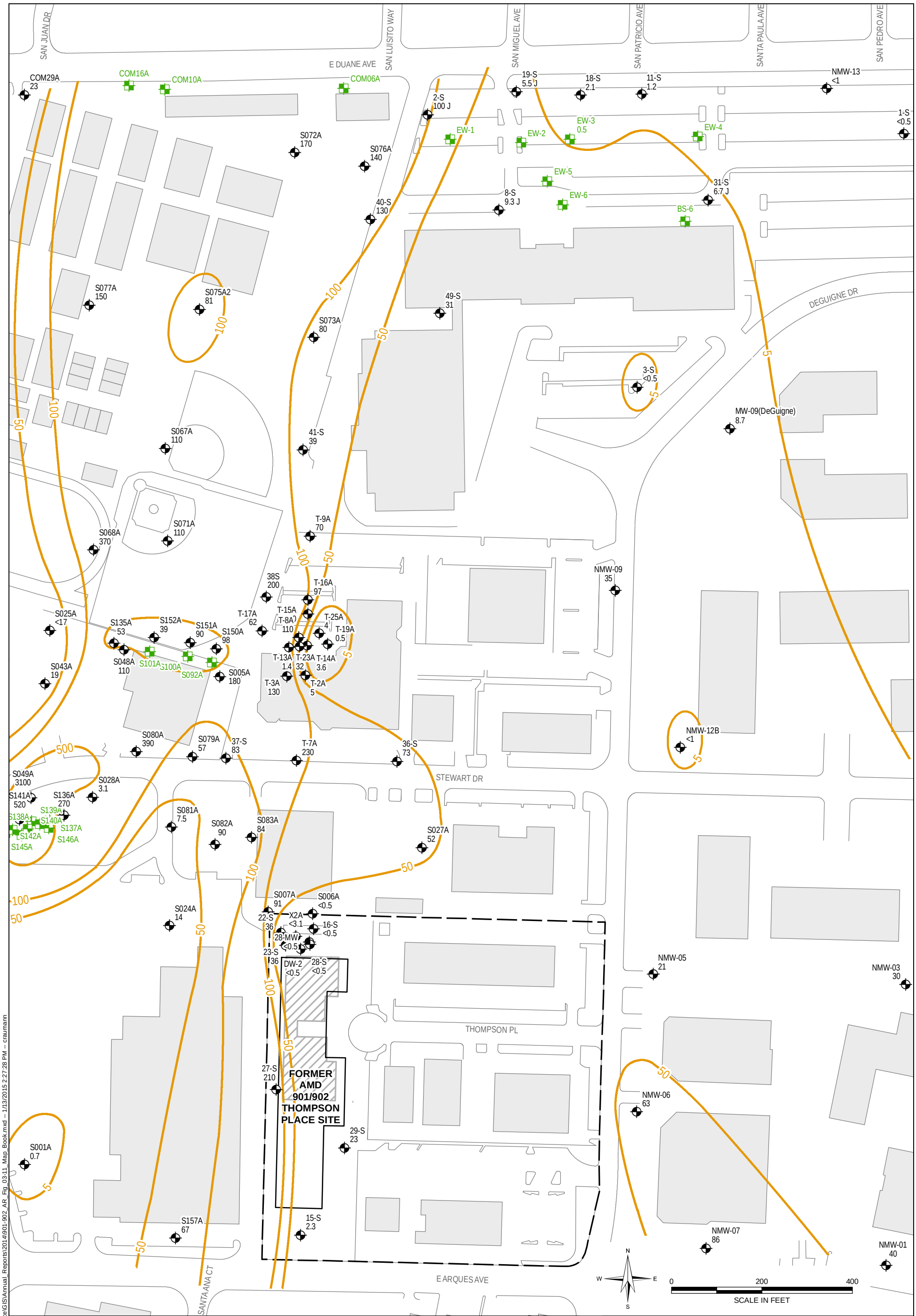
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B2-ZONE WATER LEVELS
OCTOBER 2014

JANUARY 2015

FIGURE 5

G:\39751_AMD_Former 901-902 Thompson Place\GIS\Annual_Reports\2014\901-902_AR_Fig_03-11_Map_Book.mxd -- 1/13/2015 2:27:28 PM -- craumann



MONITORING WELL

EXTRACTION WELL

TCE CONCENTRATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

1. CONTOURS ARE BASED ON INTERPRETATION OF MONITORING-WELL DATA, PREVIOUS SITE-INVESTIGATION DATA, AND CURRENT UNDERSTANDING OF HYDROGEOLOGIC CONDITIONS. THEY ARE PROVIDED FOR CLARITY AND ARE NOT INTENDED TO IMPLY CERTAINTY.
2. EW-1 THROUGH EW-6 ARE SCREENED ACROSS BOTH THE A AND B1 ZONES.

TCE = TRICHLOROETHENE
µG/L = MICROGRAMS PER LITER
J = ESTIMATED CONCENTRATION

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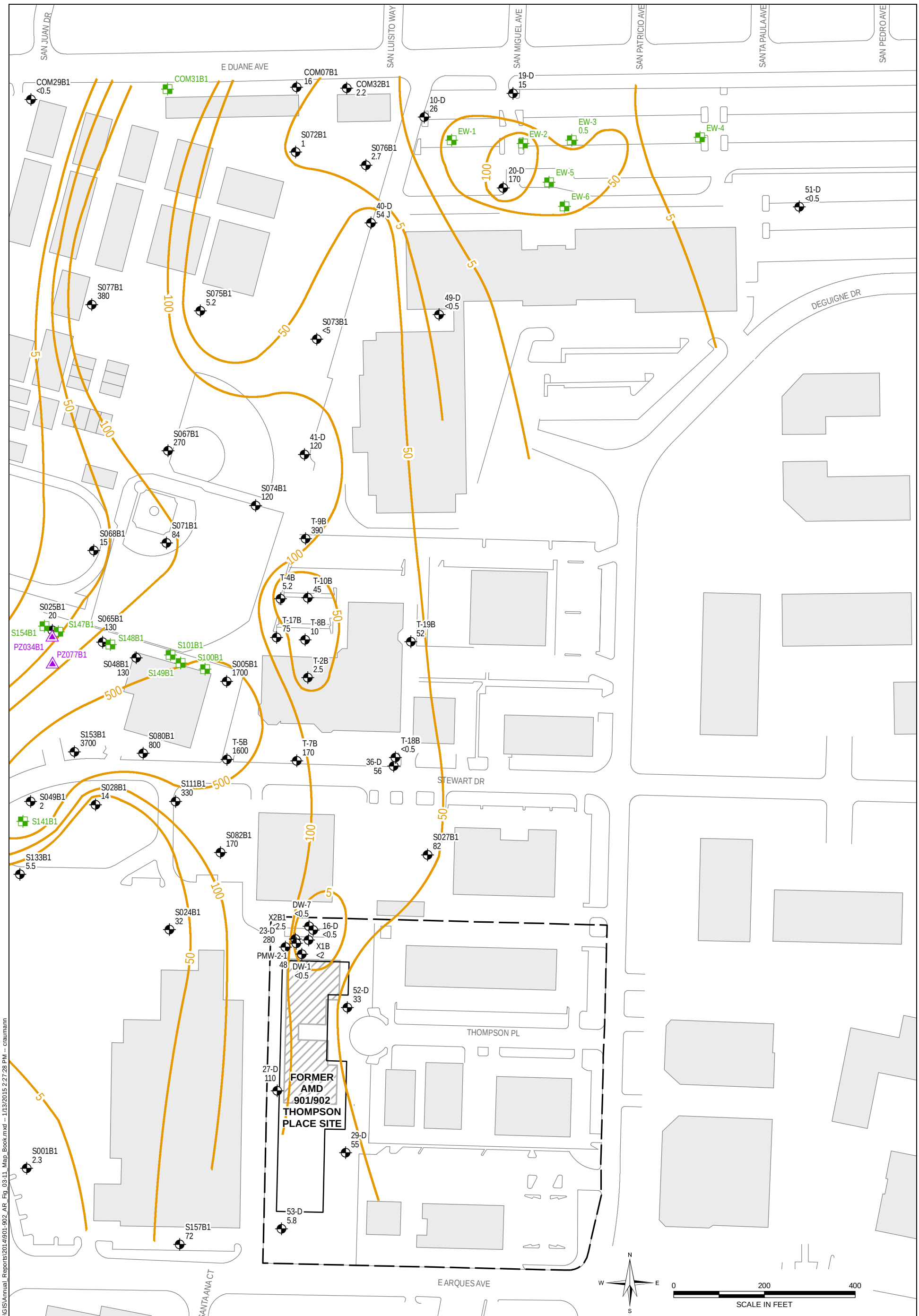
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

A-ZONE TCE CONTOURS
OCTOBER 2014

JANUARY 2015

FIGURE 6

G:\39751_AMD_Former 901-902 Thompson Place\GIS\Annual_Reports\2014\901-902_AR_Fig_03-11_Map_Book.mxd -- 1/13/2015 2:27:28 PM -- craumann



MONITORING WELL

EXTRACTION WELL

PIEZOMETER

TCE CONCENTRATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

1. CONTOURS ARE BASED ON INTERPRETATION OF MONITORING-WELL DATA, PREVIOUS SITE-INVESTIGATION DATA, AND CURRENT UNDERSTANDING OF HYDROGEOLOGIC CONDITIONS. THEY ARE PROVIDED FOR CLARITY AND ARE NOT INTENDED TO IMPLY CERTAINTY.
2. EW-1 THROUGH EW-6 ARE SCREENED ACROSS BOTH THE A AND B1 ZONES.

TCE = TRICHLOROETHENE
µG/L = MICROGRAMS PER LITER
J = ESTIMATED CONCENTRATION

HALEY & ALDRICH

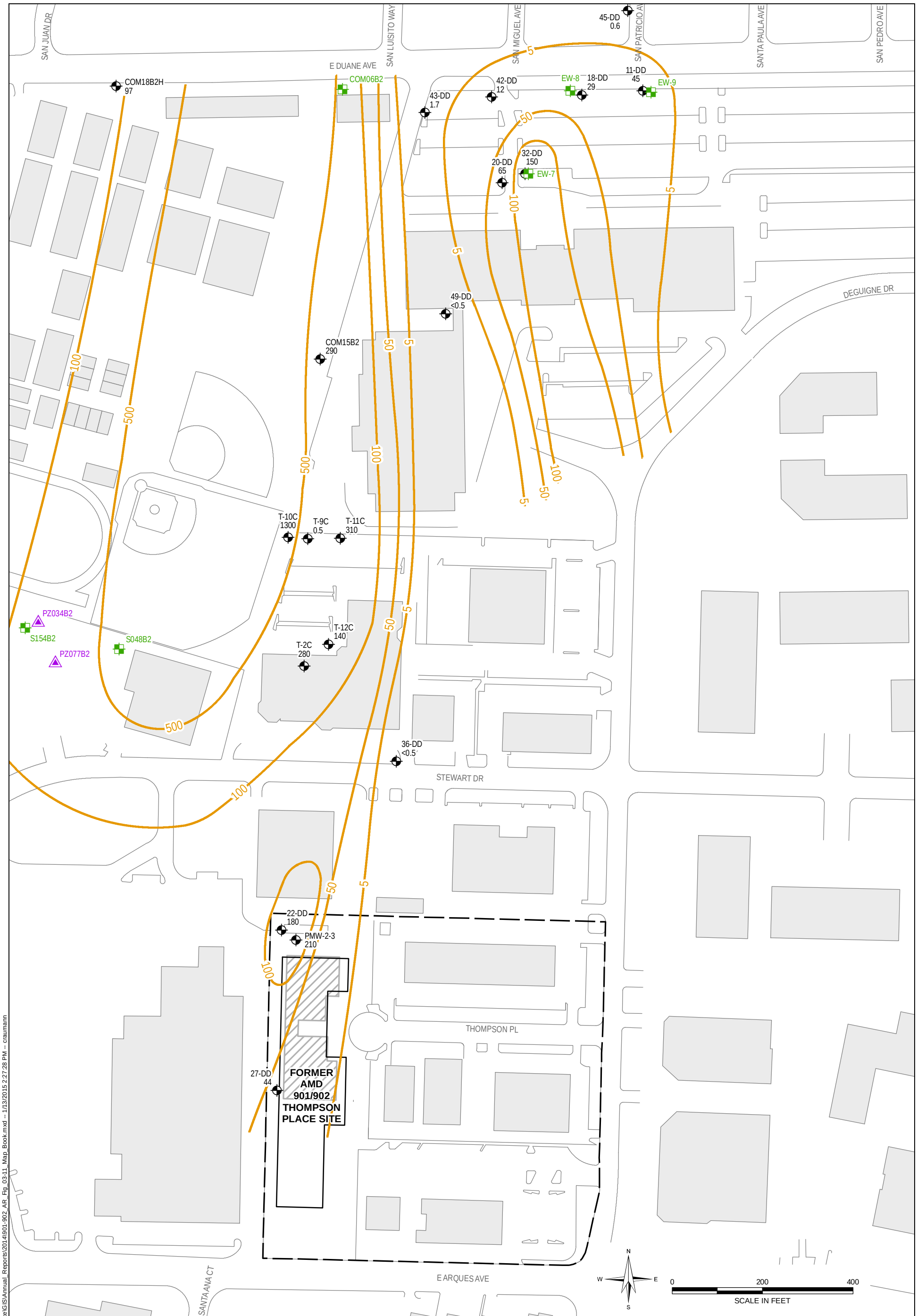
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B1-ZONE TCE CONTOURS
OCTOBER 2014

JANUARY 2015

FIGURE 7

G:\39751_AMD_Former 901-902 Thompson Place\GIS\Annual_Reports\2014\901-902_AR_Fig_03-11_Map_Book.mxd -- 1/13/2015 2:27:28 PM -- craumann



MONITORING WELL

EXTRACTION WELL

PIEZOMETER

TCE CONCENTRATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

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HALEY & ALDRICH

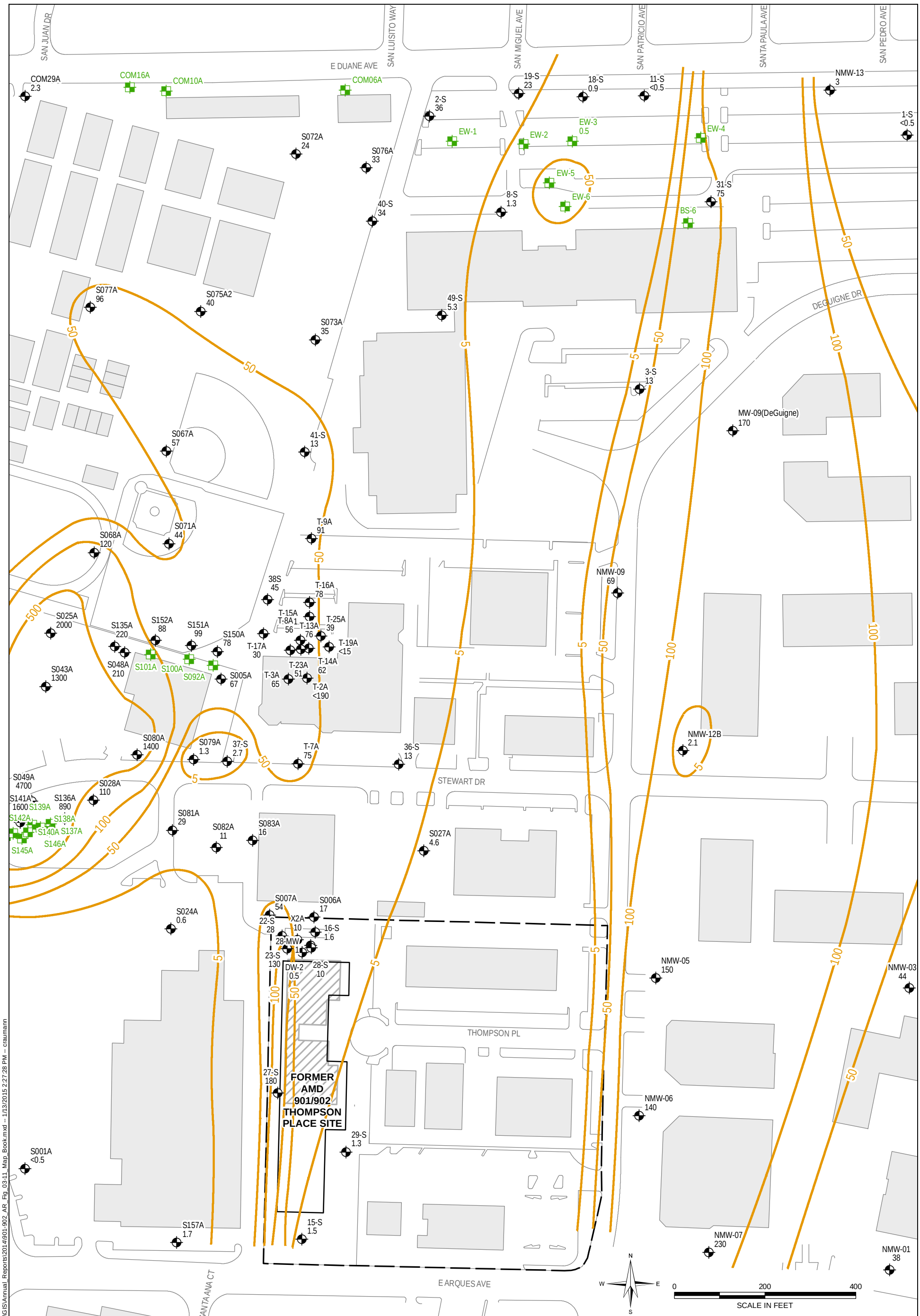
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B2-ZONE TCE CONTOURS
OCTOBER 2014

JANUARY 2015

FIGURE 8

G:\39751_AMD_Former 901-902 Thompson Place\GIS\Annual_Reports\2014\901-902_AR_Fig_03-11_Map_Book.mxd -- 1/13/2015 2:27:28 PM -- craumann



MONITORING WELL

EXTRACTION WELL

cDCE CONCENTRATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

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2. EW-1 THROUGH EW-6 ARE SCREENED ACROSS BOTH THE A AND B1 ZONES.

CDCE = CIS-1,2-DICHLOROETHENE
µG/L = MICROGRAMS PER LITER
J = ESTIMATED CONCENTRATION

HALEY & ALDRICH

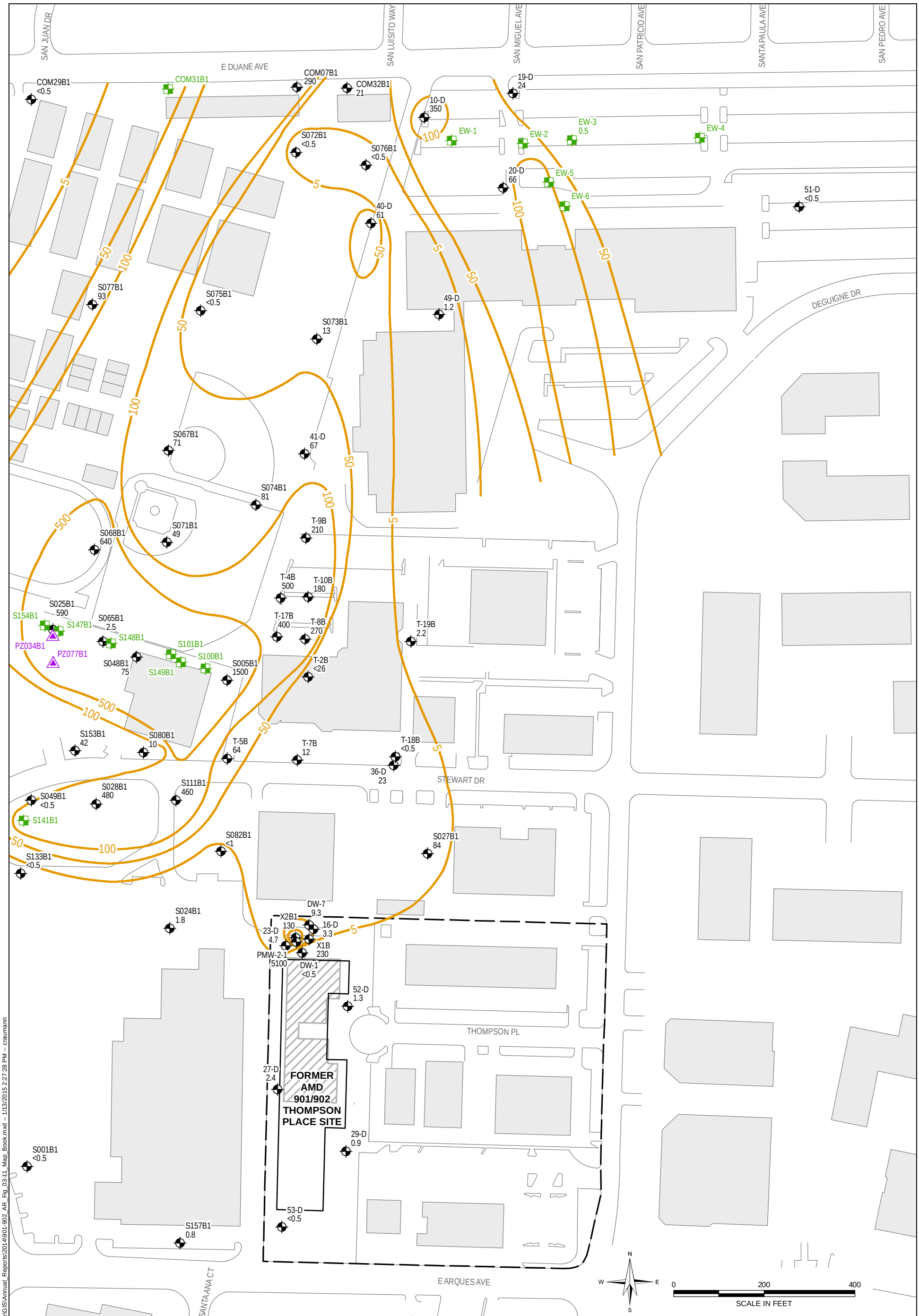
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

A-ZONE cDCE CONTOURS
OCTOBER 2014

JANUARY 2015

FIGURE 9

G:\39751_AMD_Former 901-902 Thompson Place\GIS\Annual_Reports\2014\901-902_AR_Fig_03-11_Map_Book.mxd -- 1/13/2015 2:27:28 PM -- craumann



MONITORING WELL

EXTRACTION WELL

PIEZOMETER

cDCE CONCENTRATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

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2. EW-1 THROUGH EW-6 ARE SCREENED ACROSS BOTH THE A AND B1 ZONES.

CDCE = CIS-1,2-DICHLOROETHENE
µG/L = MICROGRAMS PER LITER
J = ESTIMATED CONCENTRATION

HALEY & ALDRICH

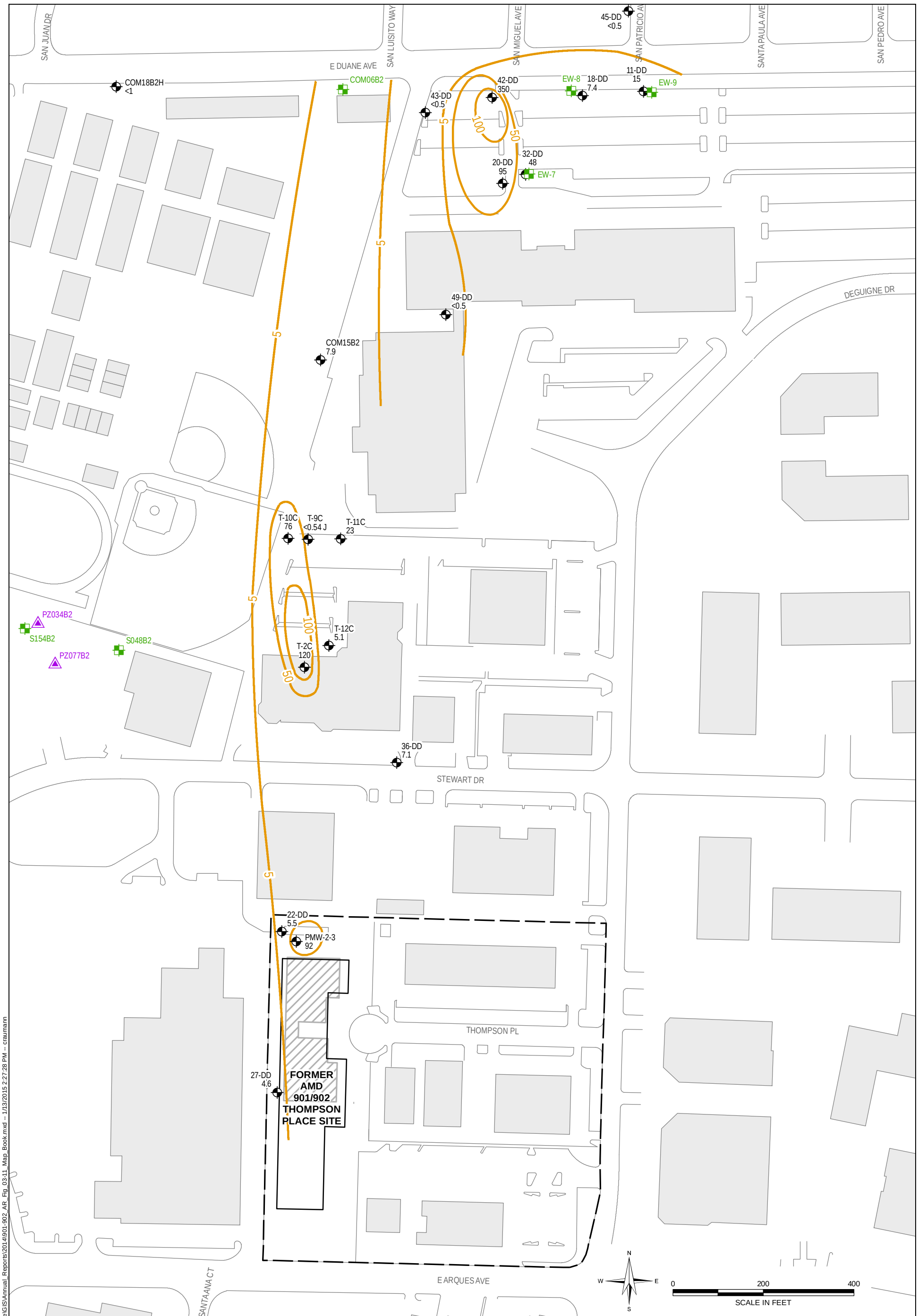
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B1-ZONE cDCE CONTOURS
OCTOBER 2014

JANUARY 2015

FIGURE 10

G:\39751_AMD_Former 901-902 Thompson Place\GIS\Annual_Reports\2014\901-902_AR_Fig_03-11_Map_Book.mxd -- 1/13/2015 2:27:28 PM -- craumann



MONITORING WELL

EXTRACTION WELL

PIEZOMETER

cDCE CONCENTRATION CONTOUR

CURRENT ON-SITE BUILDING

FORMER 901/902 THOMPSON PLACE

OTHER BUILDING

NOTES

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CDCE = CIS-1,2-DICHLOROETHENE
µG/L = MICROGRAMS PER LITER
J = ESTIMATED CONCENTRATION

HALEY & ALDRICH

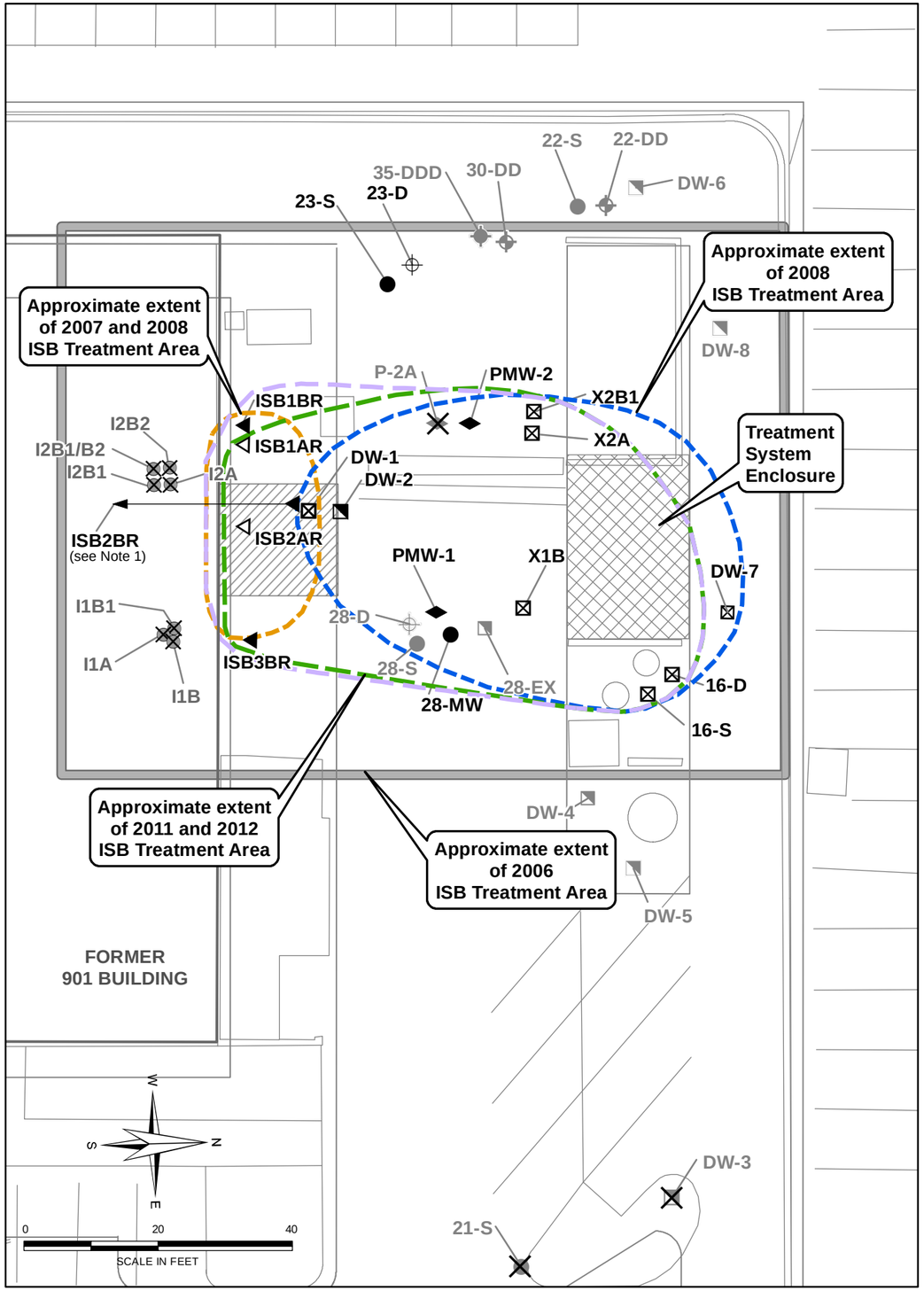
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

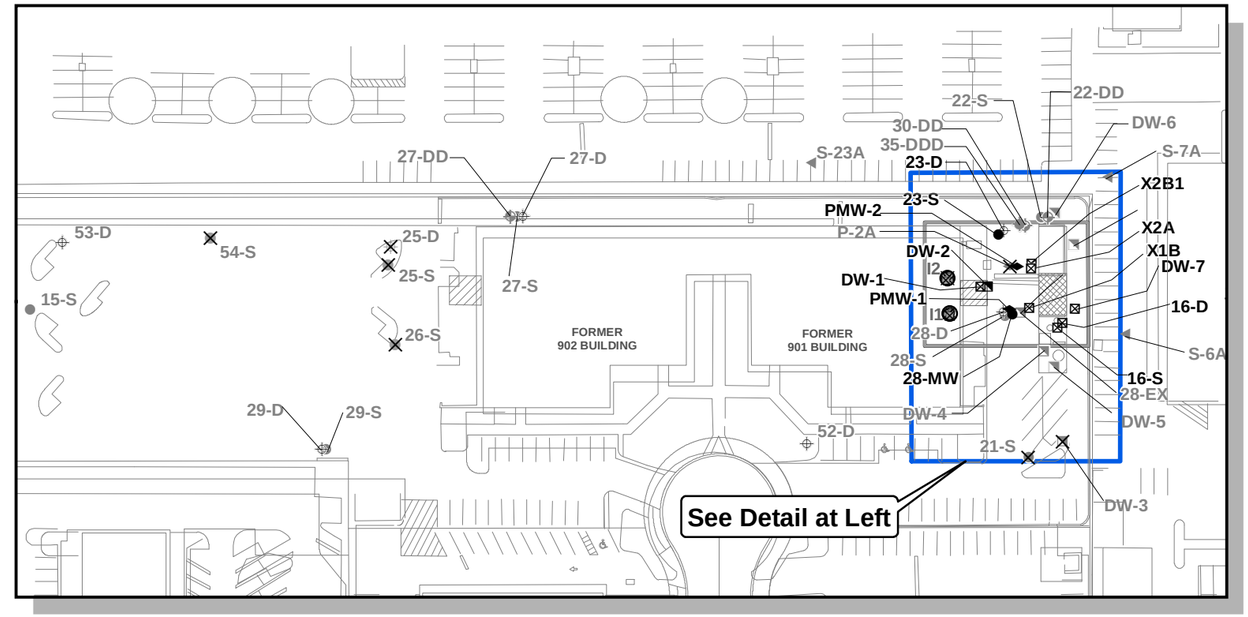
B2-ZONE cDCE CONTOURS
OCTOBER 2014

JANUARY 2015

FIGURE 11

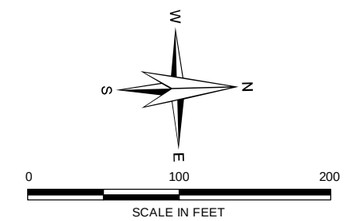
G:\39751_AMD_Former 901-902 Thompson Place\GIS\Annual_Reports\2014\901-902_AR_Fig_03-11_Map_Book.mxd -- 1/13/2015 2:27:28 PM -- craumann





LEGEND

- EXTRACTION WELL
- A-ZONE MONITORING WELL
- B1-ZONE MONITORING WELL
- B2-ZONE MONITORING WELL
- B3-ZONE MONITORING WELL
- A-ZONE INJECTION WELL
- B-ZONE INJECTION WELL
- DESTROYED WELL
- PERFORMANCE MONITORING WELL (PMW-1, PMW-1, P-2A)
- IN SITU BIOREMEDIATION EXTRACTION WELL
- FORMER BUILDING BOUNDARIES
- FORMER POINT SOURCE LOCATION (NEUTRALIZATION AND STORAGE TANKS)



NOTES:

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. INJECTION WELL ISB2BR INSTALLED AT A 30-DEGREE ANGLE FROM VERTICAL WITH A BEARING TO THE SOUTH.
3. BASE MAP PROVIDED BY AMD.

HALEY & ALDRICH

FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

LAYOUT OF THE IN SITU BIOREMEDIATION PROGRAM

SCALE: AS SHOWN
JANUARY 2015

FIGURE 12

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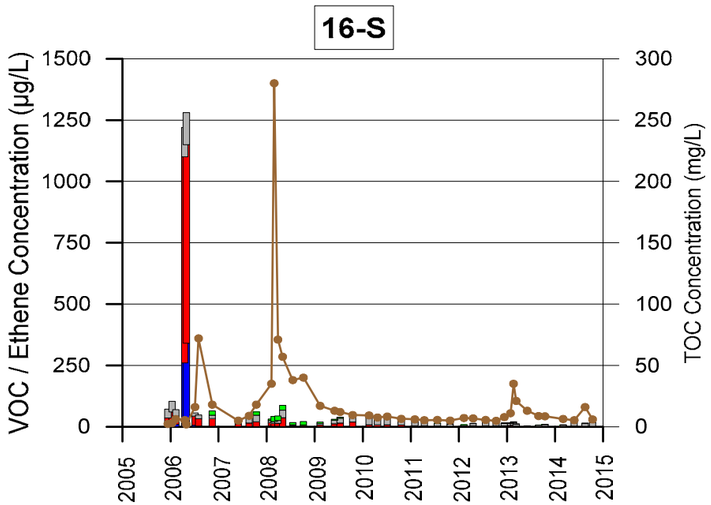
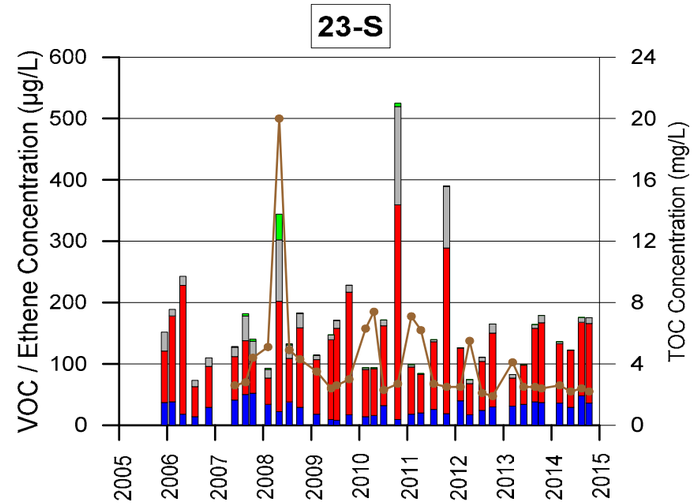
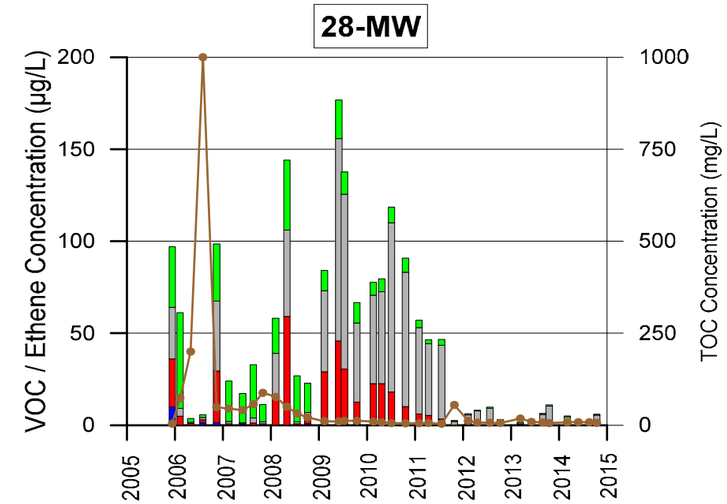
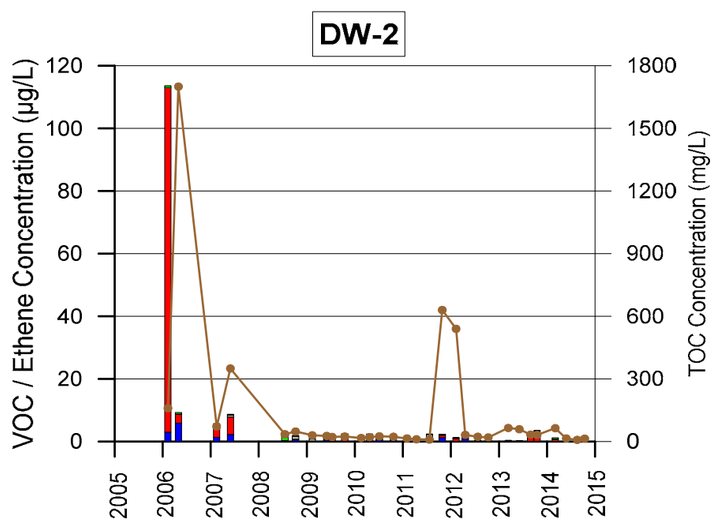
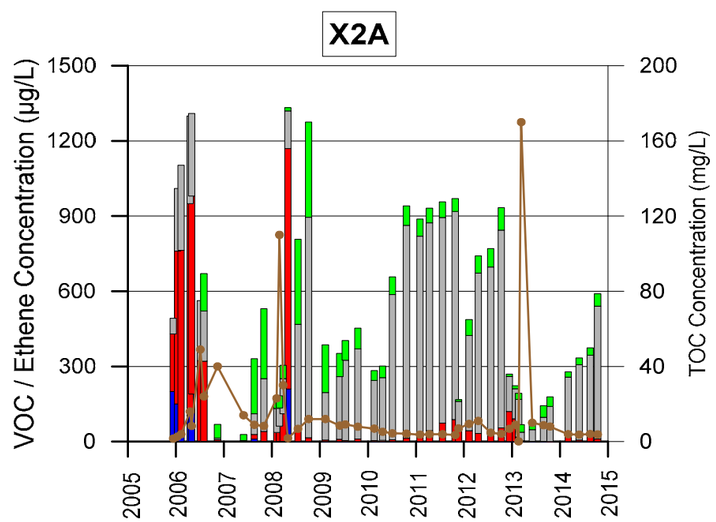










EXPLANATION

- TCE
- cDCE
- VC
- Ethene
- TOC

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
TOC = total organic carbon
µg/L = micrograms per liter
mg/L = milligrams per liter
VOC = volatile organic compound

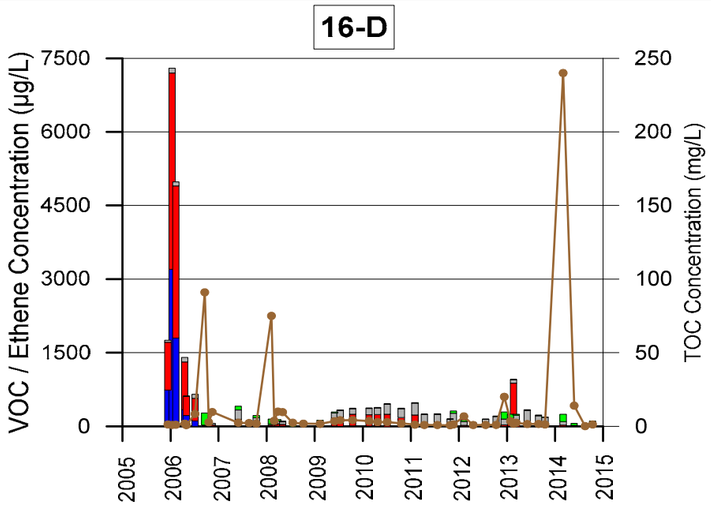
HALEY & ALDRICH

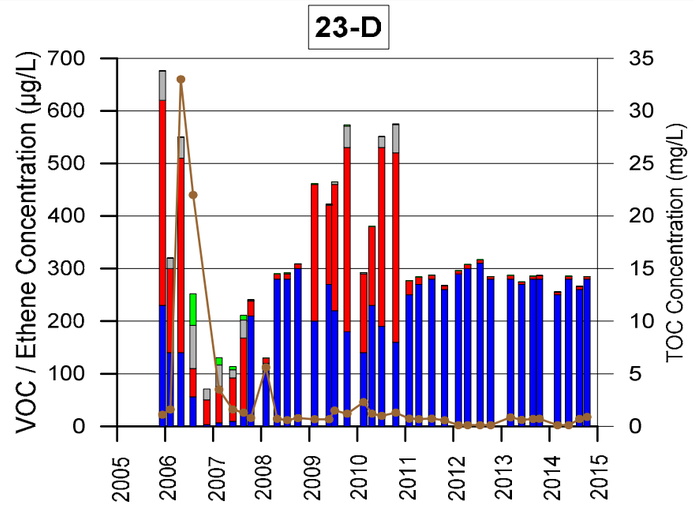
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

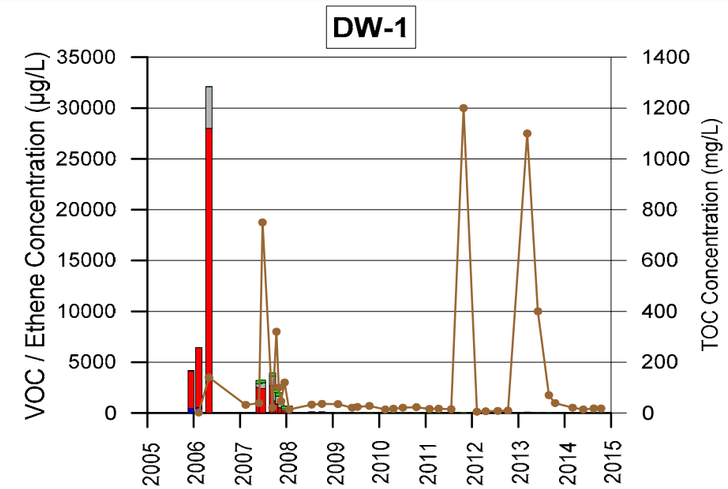
VOC CONCENTRATION TRENDS FOR A-ZONE WELLS IN SITU BIOREMEDIATION PROGRAM

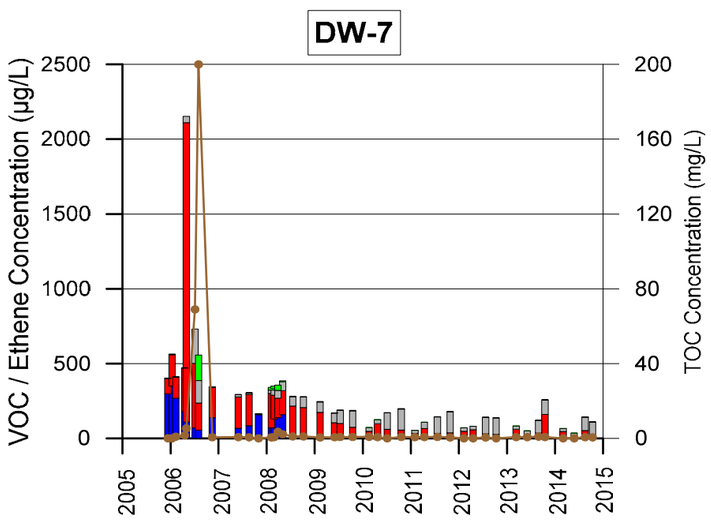
JANUARY 2015

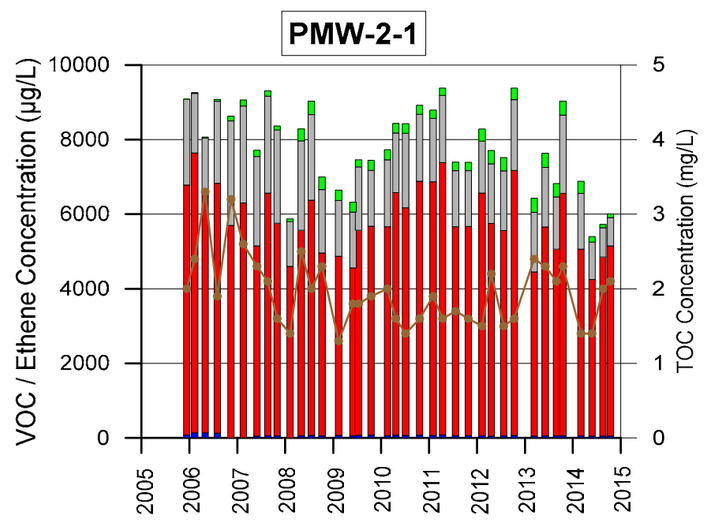
FIGURE 13A

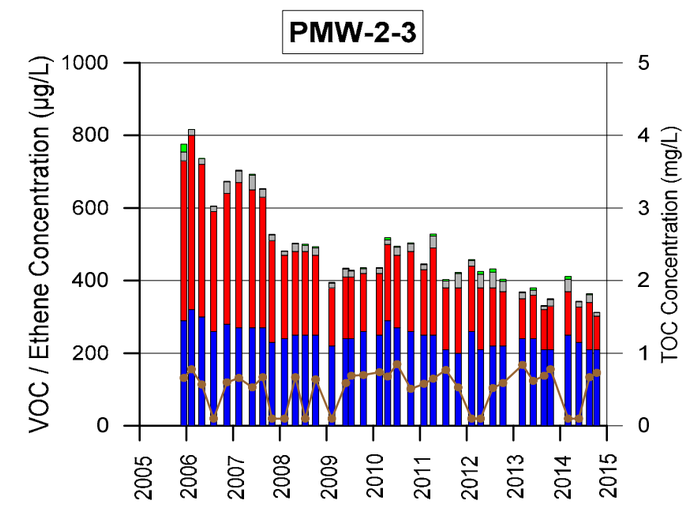


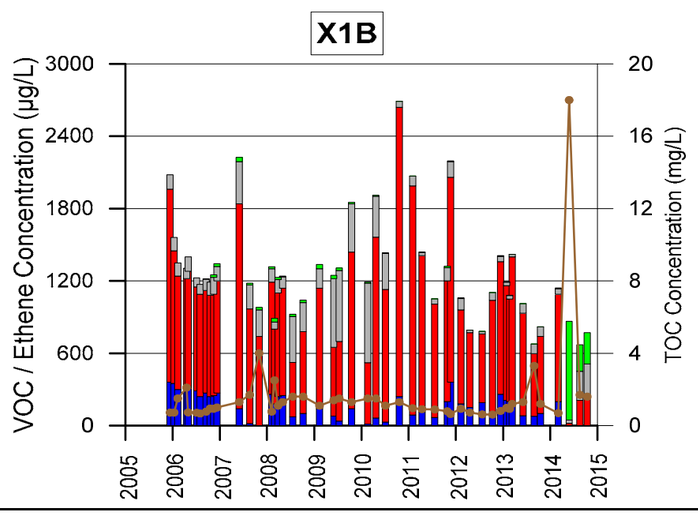


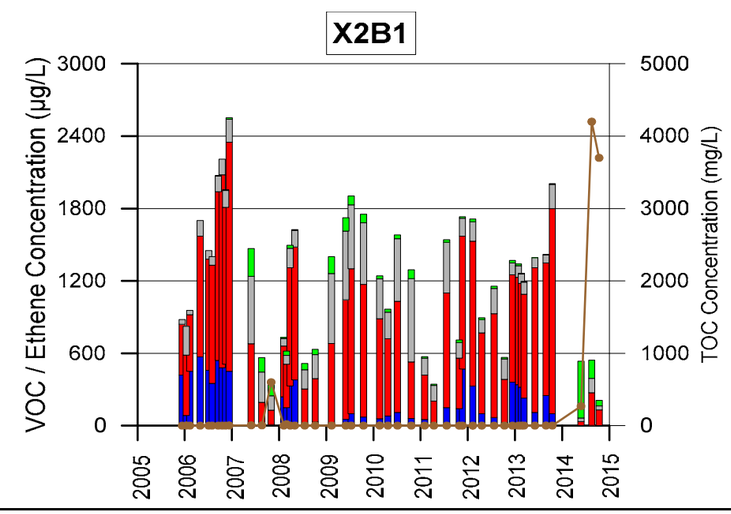












EXPLANATION

- TCE
- cDCE
- VC
- Ethene
- TOC

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
TOC = total organic carbon
µg/L = micrograms per liter
mg/L = milligrams per liter
VOC = volatile organic compound

HALEY & ALDRICH

FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

VOC CONCENTRATION TRENDS FOR B-ZONE WELLS IN SITU BIOREMEDIATION PROGRAM

JANUARY 2015

FIGURE 13B

APPENDIX A

Field Sampling Data Sheets and Photo Log of Sampling Procedures

Transmittal

October 27, 2014

Mr. Michael Calhoun
Haley & Aldrich, Inc.
1956 Webster Street, Suite 450
Oakland, California 94612

Please find enclosed:

Re: ***901 Thompson Place, Sunnyvale, California***

Quarterly Sampling and Analysis Request and Field Data; Annual Sampling and Analysis Field Request and Field Data

Comments:

Field Solutions, Inc. (FSI) has completed the annual liquid level survey, the quarterly water quality monitoring services, and the annual water quality monitoring services at 901 Thompson Place in Sunnyvale, California consistent with the executed subcontracting agreement between Haley & Aldrich and FSI.

Liquid levels were recorded in 35 wells on October 13, 2014. Samples were collected from thirteen quarterly wells after the liquid level survey was completed. Tubing systems were re-installed in wells PMW-2-1, PMW-2-3, and DW-2 before micropurging was initiated. Dedicated systems were still present in the remaining wells from the previous event. Samples were collected after indicator parameter stabilization had occurred. Water removed during groundwater well purging was transported to the treatment system at 915 DeGuigne.

Samples collected for volatile organic compounds (VOCs) and total organic carbon (TOC) were relinquished to a courier service provided by Curtis & Tompkins in Berkeley, California. Samples collected for dissolved gases were shipped via Federal Express to Microseeps Laboratory in Pittsburg, Pennsylvania, accompanied by chain-of-custody documentation.

Quality control samples were collected during this monitoring program. One trip blank (TB-1), obtained from the laboratory was relinquished with the samples for VOC analysis. Additionally, one duplicate (DUP-1) was collected at well 23-D and submitted

for analysis, and extra sample volume for matrix spike/duplicate matrix spike analyses was collected at well 28-MW.

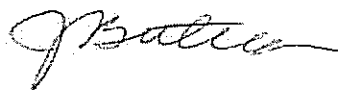
After the quarterly sampling program was completed, seventeen specified wells were purged using portable submersible electric pumps or Teflon bailers. After parameter stabilization was achieved or the wells dewatered and recovered, Teflon bailers were used to obtain samples for VOC analysis. Water removed during groundwater well purging was transported to the treatment system at 915 DeGuigne.

Samples collected for VOCs were relinquished to a courier service provided by Curtis & Tompkins in Berkeley, California accompanied by Chain-of-Custody documentation.

Quality control samples were collected during the October 2014 program as requested. One laboratory prepared trip blank (TB-1) was carried throughout the program and submitted with the well samples relinquished to the laboratory courier. Three equipment blanks (EB-1, EB-2, and EB-3) were collected during the monitoring program one per day. All three sets were relinquished to the laboratory for VOC analysis. Additional sample volume was obtained from well 53-D for the laboratory to run matrix spike/matrix spike duplicates. Blind field duplicates were also collected from two wells. Duplicate sample 1-D was collected from well 27-D and duplicate sample 2-D was collected from well 27-S.

Please note that some of the wells dewatered during purging. Samples were obtained from these low yield wells after the liquid levels had recharged sufficiently for sample collection.

Field observations and measurements, including instrument calibration data, are included on the attached water sample field data sheets. Thank you for the opportunity to provide the requested services. Please call if you have any questions.



James V. Butera
Field Services Coordinator

Attachments

October 2014 Quarterly Monitoring

901 Thompson Place, Sunnyvale California

Micropurge and sample the A wells first, followed by the B wells in any order. After liquid level stabilization, record temperature, pH, specific conductance, DO, and Redox at regular intervals until stability has be achieved for three consecutive measurements. Transport the purgewater to the DeGuigne treatment system. Relinquish VOC and TOC samples to Curtis and Tompkins. The metabolic gas samples need to be shipped to Microseeps.

Dedicate tubing systems with the intake as indicated at each location. Sample all of the wells listed below in the order listed.

Well ID	Aquifer	Diameter (inches)	Interval (ft below TOC)	Intake (ft below TOC)	
23-S	A-Zone	4.0	9 - 16	12	
28-MW	A-Zone	2.0	10 - 16.3	13	**Collect 6 additional VOAs (HCL) for MS/MSD**
23-D	B-Zone	4.0	40 - 50	45	**Collect DUP1 at this well/ not including gases**
PMW-2-1	B-Zone	1.1	26.7 - 28.1	27	
PMW-2-3	B-Zone	1.1	45.5 - 48.2	47	
X2A	A-Zone	2.0	10 - 19.9	14	
X1B	B-Zone	2.0	25.4 - 30.2	28	
X2B1	B-Zone	2.0	26.5 - 36.5	31	
16-S	A-Zone	4.0	9 - 16	12	
16-D	B-Zone	4.0	31 - 41	36	
DW-1	B-Zone	12.0	30 - 40	35	
DW-7	B-Zone	12.0	35 - 45	40	
DW-2	A-Zone	12.0	10 - 14	12	

Analytical Parameters

CURTIS AND TOMPKINS - OFFICE PICKUP ON FRIDAY

VOCs (8260B) 8010 list

(3 VOAs w/ HCL)

TOC (415.1)

(1 250 ml Amber w/ H2SO4)

SHIP TO MICROSEEPS ON THURSDAY

Methane, Ethene, and Ethane

(2 VOAs w/Na3PO4)

Carry trip blanks with the samples at all times and relinquish them with the samples submitted to the lab.

DO NOT REMOVE THE TUBING SYSTEMS THESE WILL BE USED TO PURGE AND SAMPLE WELLS DURING THE NEXT QUARTERLY PROGRAM

Field Solutions, Inc.
6280 San Ignacio Avenue, Suite P
San Jose, California, 95119

Historical Monitoring Well Data
901 Thompson Place
Sunnyvale, California

Well ID	Date	First Depth to Water (feet)	Second Depth to Water (feet)	Annual level		Comments
15-S	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
	10/13/14	9.47	9.47			Time: 1038
16-S	03/04/14	9.48	9.48			
	05/27/14	10.32	10.32			
	08/18/14	10.53	10.53			
	10/13/14	10.67	10.67			Time: 1010
22-S	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
	10/13/14	8.80	8.80			Time: 0939
23-S	03/04/14	8.00	8.00			
	05/27/14	8.88	8.88			
	08/18/14	9.23	9.23			
	10/13/14	9.38 ~~8.75~~	9.38			Time: 0934
27-S	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
	10/13/14	10.98	10.98			Time: 1016
28-S	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
	10/13/14	10.46	10.46			Water in well 6.7 Time: 0945
29-S	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
	10/13/14	9.98	9.98			Time: 1034
36-S	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
	10/13/14	6.59	6.59			roots in well; punched through the roots and obtained GL. Time: 1051
37-S	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
	10/13/14	6.82	6.82			3/4" bolt cage holes needs to be retapped; needs a new 4" well cap Time: 1057
16-D	03/04/14	7.92	7.92			
	05/27/14	9.39	9.39			
	08/18/14	9.98	9.98			
	10/13/14	10.15	10.15			Time: 1009
23-D	03/04/14	6.12	6.12			
	05/27/14	7.12	7.12			
	08/18/14	8.47	8.47			
	10/13/14	8.75	8.75			Time: 0932
27-D	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
	10/13/14	~~8.40~~ 10.40	~~8.40~~ 10.40			Time: 1018

Completed By: MG/KB/DA

Field Solutions, Inc.
6280 San Ignacio Avenue, Suite P
San Jose, California, 95119

Historical Monitoring Well Data
901 Thompson Place
Sunnyvale, California

Well ID	Date	First Depth to Water (feet)	Second Depth to Water (feet)	Annual level		Comments
	03/04/14	NR	NR			1 9/16 bolt missing
	05/27/14	NR	NR			
	08/18/14	NR	NR			
28-D	10/13/14	10.22	10.22			Time: 0948
	03/04/14	NR	NR			well box full of dirt
	05/27/14	NR	NR			
	08/18/14	NR	NR			
29-D	10/13/14	10.00	10.00			Time: 1026
	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
36-D	10/13/14	6.36	6.36			Time: 1049
	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
52-D	10/13/14	9.80	9.80			Time: 1016
	03/04/14	NR	NR			water in well box
	05/27/14	NR	NR			
	08/18/14	NR	NR			
53-D	10/13/14	8.73	8.73			Time: 1039
	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
22-DD	10/13/14	8.16	8.16			Time: 0932
	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
27-DD	10/13/14	9.75	9.75			Time: 1020
	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
36-DD	10/13/14	6.29	6.29			Time: 1050
	03/04/14	NR	NR			
	05/27/14	NR	NR			
	08/18/14	NR	NR			
35-DDD	10/13/14	6.89	6.89			Time: 0936
	03/04/14	8.91	8.91			no bolts
	05/27/14	9.70	9.70			
	08/18/14	9.99	9.99			
28-MW	10/13/14	10.10	10.10			Time: 0951
	03/04/14	9.97	9.97			
	05/27/14	9.35	9.35			
	08/18/14	9.82	9.82			
PMW-1-1	10/13/14	9.90	9.90			Time: 1008
	03/04/14	9.33	9.33			
	05/27/14	8.99	8.99			
	08/18/14	9.63	9.63			
PMW-1-2	10/13/14	9.71	9.71			Time: 1006

Completed By: MG/LB/DA

Field Solutions, Inc.
6280 San Ignacio Avenue, Suite P
San Jose, California, 95119

Historical Monitoring Well Data
901 Thompson Place
Sunnyvale, California

Well ID	Date	First Depth to Water (feet)	Second Depth to Water (feet)	Annual level		Comments
	03/04/14	7.64	7.64			no bolts (9/16)
	05/27/14	9.05	9.05			
	08/18/14	9.82	9.82			
PMW-1-3	10/13/14	9.95	9.95			Time: 1007
	03/04/14	9.38	9.38			water in box
	05/27/14	8.98	8.98			
	08/18/14	9.42	9.42			
PMW-2-1	10/13/14	9.57	9.57			Time: 1009
	03/04/14	7.27	7.27			
	05/27/14	8.26	8.26			
	08/18/14	9.38	9.38			
PMW-2-2	10/13/14	9.98	9.98			Time: 1009
	03/04/14	6.62	6.62			
	05/27/14	7.64	7.64			
	08/18/14	8.91	8.91			
PMW-2-3	10/13/14	9.15	9.15			Time: 1010
	03/04/14	8.97	8.97			
	05/27/14	9.83	9.83			
	08/18/14	10.14	10.14			
X2A	10/13/14	10.28	10.28			Time: 0926
	03/04/14	10.82	10.82			
	05/27/14	9.02	9.02			
	08/18/14	9.49	9.49			
X1B	10/13/14	9.60	9.60			Time: 0940
	03/04/14	8.65	8.65			water in well box
	05/27/14	8.02	8.02			
	08/18/14	8.75	8.75			
X2B1	10/13/14	9.19	9.19			Time: 0931
	03/04/14	7.74	7.74			
	05/27/14	8.72	8.72			
	08/18/14	9.18	9.18			
DW-1	10/13/14	9.32	9.32			Time: 1005
	03/04/14	7.13	7.13			
	05/27/14	8.25	8.25			
	08/18/14	8.59	8.59			
DW-2	10/13/14	8.74	8.74			Time: 1005
	03/04/14	6.42	6.42			
	05/27/14	8.69	8.69			
	08/18/14	8.47	8.47			
DW-7	10/13/14	8.70	8.70			Time: 0955
	03/04/14	4.88	4.88			
	05/27/14	5.92	5.92			
	08/18/14	7.27	7.27			
DW-8	10/13/14	7.53	7.53			Time: 0957

Completed By: MG/CB/DA

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # _____

Project No: 39751
Project Name: 901 Thompson Place
Project P. O. No:
EDD Format: Report Level: ☒ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Bruk Gallegos, Avila
Report To: Mike Calhoun
Company: Haley & Aldrich
Telephone: (510) 879-4554
Email: MCalhoun@HaleyAldrich.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	8260B+Freon 113 (8010 List)	TOC (415.1)
	23-S	10/14/14	0808	X		4	3	1				X	X
	23-MW	10/14/14	1213	X		10	9	1				X	X
	23-D	10/14/14	0846	X		4	3	1				X	X
	PMW-2-1	10-14-14	0851	X		4	3	1				X	X
	PMW-2-3	10-14-14	0930	X		4	3	1				X	X
	X2A	10-14-14	1044	X		4	3	1				X	X
	X1B	10-14-14	1127	X		4	3	1				X	X
	X2B1	10-14-14	1006	X		4	3	1				X	X
	16-S	10/14/14	1100	X		4	3	1				X	X
	16-D	10/14/14	1138	X		4	3	1				X	X
	PW-1	10/14/14	0932	X		4	3	1				X	X
	PW-7	10/14/14	1217	X		4	3	1				X	X
	PW-2	10/14/14	1005	X		4	3	1				X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
[signature] DATE: TIME:
DATE: TIME:
DATE: TIME:

RECEIVED BY:
[signature] DATE: 10/14/14 TIME: 1500
DATE: TIME:
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # _____

Project No: 39751
Project Name: 901 Thompson Place
Project P. O. No:
EDD Format: Report Level ☒ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Bruk, Gallegos, Avila
Report To: Mike Calhoun
Company: Haley & Aldrich
Telephone: (510) 879-4554
Email: MCalhoun@HaleyAldrich.com

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	8260B+Freon113 (SOWD)	TOC (415.1)
	DUP-1	10/14/14	—	X		4	3	1				X	X
	TB-1	10/14/14	—	X		3	3					X	

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
Bruk — DATE: TIME:
DATE: TIME:
DATE: TIME:

RECEIVED BY:
[signature] DATE: 10/14/14 TIME: 1513
DATE: TIME:
DATE: TIME:

Microseeps Lab. Proj. # _____

CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. # 3d

Phone: (412) 826-5245 | Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 | Fax No.: (412) 826-3433

Company : Haley & Aldrich Inc.
Co. Address : 1956 Webster St. Suite 450
Phone # : (510) 879-4554 Fax # :
Proj. Manager : Mike Calhoun
Proj. Name/Number : 901 Thompson Place
Sampler's signature : [signature]

Cooler Temp.

Parameters Requested: Methane, Ethane, Ethene

Results to :

Invoice to :

Sample ID	Sample Description	Sample Type: Water	Vapor	Solid	Date	Time	# Bottles	Methane, Ethane, Ethene										Remarks :
23-S	GW	X			10/14/14	0808	2	X										
28-MW		X			10-14-14	1213	2	X										
23-D		X			10/14/14	0846	2	X										
PMW-2-1		X			10-14-14	0851	2	X										
PMW-2-3		X			10-14-14	0930	2	X										
X2A		X			10-14-14	1044	2	X										
X1B		X			10-14-14	1127	2	X										
X2B1		X			10-14-14	1006	2	X										
16-S		X			10/14/14	1100	2	X										
16-D		X			10/14/14	1138	2	X										
DW-1		X			10/14/14	0932	2	X										
DW-7	↓	X			10/14/14	1217	2	X										

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
[signature]	F. S. I.	10/14/14	1430				
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Lab Log Book PINK COPY : Sampler

Microseeps Lab. Proj. # _____

CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. # 320

Phone: (412) 826-5245 | Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 | Fax No. : (412) 826-3433

Company : Haley & Aldrich, Inc
Co. Address : 1956 Webster St, Suite 450
Phone # : (510) 879-4554 Fax # :
Proj. Manager : Mike Calhoun
Proj. Name/Number : 901 Thompson Place
Sampler's signature : [signature]

Cooler Temp.

Results to :

Invoice to :

Sample ID	Sample Description	Sample Type: Water	Vapor	Solid	Date	Time	# Bottles	Methane, Ethene, Ethane	Remarks :
DW-2	GW	X			10/14/14	1005	2	X	

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
[signature]	F.S.I.	10/14/14	1430				
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : [illegible]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: 28-MW
SAMPLE ID: 28-MW
DATE PURGED: 10-14-14
DATE SAMPLED: 10-14-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 2.0 Depth to liquid (ft): 10.11 Well depth (ft): 16.6 Screened interval (ft): 10-16.3
Wetted screened length (ft): 6.3 Stabilized liquid level (ft): 10.15

WELL PURGING: Start Time (2400 Hr): 1155 End Time (2400 Hr): 1211 Pump rate: 0.19 (liters /min)
ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic ✓ Teflon bailer ____ PVC bailer ____
Depth to intake from TOC (ft): 15.0
Volume purged: 3,000 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
1205	2,000	10.15	18.9	6.54	1536	0.69	-103.7	6.8
1208	2,500	10.15	18.9	6.54	1528	0.58	-104.2	5.2
1211	3,000	10.15	18.9	6.54	1523	0.55	-105.4	5.1
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1213 End Time (2400 Hr): 1223 Sample reacts with acids (Y/N)
Equipment used: Peristaltic ✓ Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____
QC samples collected at well: MS/MSD Samples filtered through 0.45µm filter: none

REMARKS:
- all samples collected
- casing needs to be cut down; well lid doesn't sit flush.

Meter Calibration: Date: 10-13-14 Time: 1800 Location of calibration: home YSI 556 # 05F1981
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____%) D.O. (____ ppm) (EC (____/____ µS@25°C)
ORP (____/____mV @____°C Turbidity Meter (____/____ NTU)

Purged and sampled by (print): Juan Avila
Signature: JAvila
Reviewed by: [illegible]

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: PMW-2-1
SAMPLE ID: PMW-2-1
DATE PURGED: 10-14-14
DATE SAMPLED: 10-14-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 1.1 Depth to liquid (ft): 9.45 Well depth (ft): 28.1 Screened interval (ft): 26.2 - 28.1

Wetted screened length (ft): 1.9 Stabilized liquid level (ft): NA

WELL PURGING: Start Time (2400 Hr): 0830 End Time (2400 Hr): 0850 Pump rate: 0.23 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic X Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 27.0

Volume purged: 4,500 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
0835	1500	NA	16.5	6.78	1,783	0.51	-164.0	24.8
0838	2,000	NA	16.4	6.77	1,777	0.42	-152.6	18.3
0841	2,600	NA	16.5	6.78	1,769	0.37	-133.1	10.5
0844	3,300	NA	16.5	6.78	1,763	0.36	-96.8	7.2
0847	3,900	NA	16.5	6.79	1,758	0.36	-91.9	4.2
0850	4,500	NA	16.5	6.80	1,755	0.35	-87.0	3.8
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 08:51 End Time (2400 Hr): 08:57 Sample reacts with acids (Y / N)

Equipment used: Peristaltic ✓ Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS:

all samples collected

NA - Sounder does not ~~fitter~~ fit down well with tubing.

Meter Calibration: Date: 10-13-14 Time: 1800 Location of calibration: Home YSI 556 #

pH 4: (4.03 / 4.00 @ 28.4 °C) pH 7: (7.00 / 7.00 @ 27.9 °C) pH 10: (10.02 / 10.00 @ 29.0 °C)

D.O. (5.93 / 100 %) D.O. (0.24 ppm) (EC (1496 / 15,000 µS@25°C)

ORP (225.6 / 227.1 mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): Juan Avila Jr.

Signature: [signature]

Reviewed by: [signature]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: PMW-2-3
SAMPLE ID: PMW-2-3
DATE PURGED: 10-14-14
DATE SAMPLED: 10-14-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 1.1 Depth to liquid (ft): 9.15 Well depth (ft): 48.3 Screened interval (ft): 45.5 - 48.2

Wetted screened length (ft): 2.7 Stabilized liquid level (ft): NA

WELL PURGING: Start Time (2400 Hr): 0908 End Time (2400 Hr): 0928 Pump rate: ~~0.125~~ 0.26 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic ✓ Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 47.0

Volume purged: 5200 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
0915	2,200	NA	17.2	7.06	992	0.34	-136.7	4.7
0918	3,000		17.3	7.06	998	0.28	-114.0	4.5
0922	4,200		17.3	7.05	998	0.20	-79.5	2.7
0925	4,700		17.3	7.06	1,000	0.21	-80.7	3.7
0928	5,200	NA	17.1	7.06	999	0.20	-79.4	4.0
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 0930 End Time (2400 Hr): 0938 Sample reacts with acids (Y / N)

Equipment used: Peristaltic ✓ Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS:

all samples collected

NA - Sonder does not fit inside well casing with tubing.

Meter Calibration: Date: 10-13-14 Time: 1800 Location of calibration: home YSI 556 # 05F1981

pH 4: (____ / ____ @ ____ °C) pH 7: (____ / ____ @ ____ °C) pH 10: (____ / ____ @ ____ °C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)

ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): Juan Avila

Signature: JAvila

Reviewed by: [illegible]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: X2B1
SAMPLE ID: X2B1
DATE PURGED: 10-14-14
DATE SAMPLED: 10-14-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 2.0 Depth to liquid (ft): 8.81 Well depth (ft): 35.0 Screened interval (ft): 26.5 - 36.5

Wetted screened length (ft): 8.5 Stabilized liquid level (ft): ~~9.80~~ 9.62

WELL PURGING: Start Time (2400 Hr): 0949 End Time (2400 Hr): 1004 Pump rate: 0.21 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic ✓ Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 31.0

Volume purged: 3,100 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
0958	2,100	9.62	17.9	6.34	10,099	0.69	-130.3	~~-136.40~~
1001	2,600	9.62	17.9	6.33	10,288	0.68	-136.9	38.0
1004	3,100	9.62	18.1	6.32	10,400	0.63	-139.8	34.1
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1006 End Time (2400 Hr): 1014 Sample reacts with acids (Y / N)

Equipment used: Peristaltic ✓ Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS: all samples collected

Meter Calibration: Date: 10-13-14 Time: 1800 Location of calibration: home YSI 556 # 05F1981

pH 4: (____ / ____ @ ____°C) pH 7: (____ / ____ @ ____°C) pH 10: (____ / ____ @ ____°C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)

ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): Juan A.

Signature: [signature]

Reviewed by: [signature]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: X2A
SAMPLE ID: X2A
DATE PURGED: 10-14-14
DATE SAMPLED: 10-14-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 2.0 Depth to liquid (ft): 10.29 Well depth (ft): 19.9 Screened interval (ft): 10 - 19.9

Wetted screened length (ft): 9.97 Stabilized liquid level (ft): 10.85

WELL PURGING: Start Time (2400 Hr): 1027 End Time (2400 Hr): 1042 Pump rate: 0.25 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic ✓ Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 16.0

Volume purged: 3,700 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
1036	2,300	10.65	19.1	6.69	1944	0.45	-69.1	5.3
1039	3,000	10.65	19.0	6.70	1895	0.35	-69.1	5.9
1042	3,700	10.65	19.0	6.70	1876	0.39	-66.3	6.5
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1044 End Time (2400 Hr): 1052 Sample reacts with acids (Y / N)

Equipment used: Peristaltic ✓ Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS: all samples collected

Meter Calibration: Date: 10-13-14 Time: ~~home~~ 1800 Location of calibration: home YSI 556 # 05F1981

pH 4: (____ / ____ @ ____ °C) pH 7: (____ / ____ @ ____ °C) pH 10: (____ / ____ @ ____ °C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)

ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): Juan Avila

Signature: [signature]

Reviewed by: [signature]

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: ~~X24~~ X1B
SAMPLE ID: ~~X24~~ X1B
DATE PURGED: 10-14-14
DATE SAMPLED: 10-14-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 2.0 Depth to liquid (ft): 9.61 Well depth (ft): 29.25 Screened interval (ft): 25.4-30.2

Wetted screened length (ft): 4.8 Stabilized liquid level (ft): 9.88

WELL PURGING: Start Time (2400 Hr): 1104 End Time (2400 Hr): 1125 Pump rate: 0.25 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic ✓ Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 28.0

Volume purged: 5,200 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
1113	2,600	9.88	18.2	6.84	1457	0.85	-82.9	3.4
1116	3,200	9.88	18.2	6.84	1451	0.62	-79.9	3.7
1119	3,900	9.88	18.3	6.83	1445	0.51	-78.6	2.4
1122	4,600	9.88	18.3	6.83	1446	0.48	-79.2	2.4
1125	5,200	9.88	18.3	6.83	1445	0.47	-78.4	2.6
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1127 End Time (2400 Hr): 1132 Sample reacts with acids (Y / N)

Equipment used: Peristaltic ✓ Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS: all samples collected

Meter Calibration: Date: 10-13-14 Time: 1800 Location of calibration: home YSI 556 # 05F1981

pH 4: (____ / ____ @ ____ °C) pH 7: (____ / ____ @ ____ °C) pH 10: (____ / ____ @ ____ °C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)

ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): Juan Avila

Signature: [signature]

Reviewed by: [signature]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: DW-7
SAMPLE ID: DW-7
DATE PURGED: 10/14/14
DATE SAMPLED: 10/14/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 6.0 Depth to liquid (ft): 8.73 Well depth (ft): 45.0 Screened interval (ft): 35-45

Wetted screened length (ft): 10.0 Stabilized liquid level (ft): 8.85

WELL PURGING: Start Time (2400 Hr): 1158 End Time (2400 Hr): 1216 Pump rate: 0.18 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic ✓ Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 39.0

Volume purged: 3,200 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
1207	1500	8.85	19.46	7.31	970	0.36	-122.4	3.2
1210	2,100	8.85	19.47	7.37	948	0.34	-115.0	3.2
1213	2,600	8.85	19.45	7.41	941	0.32	-108.1	2.5
1216	3,200	8.85	19.46	7.41	923	0.31	-105.5	2.0
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1217 End Time (2400 Hr): 1225 Sample reacts with acids (Y/(N))

Equipment used: Peristaltic ✓ Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS: All samples collected.

Meter Calibration: Date: 10/18/14 Time: 1544 Location of calibration: office YSI 556 # ____

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____%) D.O. (____ ppm) (EC (____/____ µS@25°C)

ORP (____/____ mV @____°C Turbidity Meter (____/____ NTU)

Purged and sampled by (print): L. Bmx / M. Gallegos Reviewed by: MB

Signature: LBmx

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: 16-D
SAMPLE ID: 16-D
DATE PURGED: 10/14/14
DATE SAMPLED: 10/14/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.17 Well depth (ft): 41.0 Screened interval (ft): 38-41

Wetted screened length (ft): 3.0 Stabilized liquid level (ft): 10.46

WELL PURGING: Start Time (2400 Hr): 1120 End Time (2400 Hr): 1132 Pump rate: 0.18 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic X Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 40.0

Volume purged: 3,100 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
1131	1900	10.46	18.78	6.91	1,264	0.55	-137.2	4.6
1134	2500	10.46	18.79	6.89	1,253	0.52	-135.5	7.5
1137	3,100	10.46	18.79	6.91	1,247	0.51	-130.4	2.7
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1138 End Time (2400 Hr): ~~1145~~ 1147 Sample reacts with acids (Y/N)

Equipment used: Peristaltic X Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS: All samples collected.

Meter Calibration: Date: 10/13/14 Time: 1544 Location of calibration: office YSI 556 # ____

pH 4: (____ / ____ @ ____ °C) pH 7: (____ / ____ @ ____ °C) pH 10: (____ / ____ @ ____ °C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)

ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): LiBnk

Signature: LiBnk

Reviewed by: DB

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ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: 16-S
SAMPLE ID: 16-S
DATE PURGED: 10/14/14
DATE SAMPLED: 10/14/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.68 Well depth (ft): 16.0 Screened interval (ft): 9-16

Wetted screened length (ft): 5.32 Stabilized liquid level (ft): 10.83

WELL PURGING: Start Time (2400 Hr): 1043 End Time (2400 Hr): 1059 Pump rate: 0.21 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic X Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 15.0

Volume purged: 3,300 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
1053	2,000	10.83	18.86	6.52	1,553	0.97	-155.6	6.1
1056	2,600	10.83	18.87	6.52	1,531	0.98	-148.5	5.3
1059	3,300	10.83	18.91	6.52	1,518	0.93	-158.4	4.9
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1100 End Time (2400 Hr): 1107 Sample reacts with acids (Y/N)

Equipment used: Peristaltic X Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS: All samples collected. Roots in well; pushed through roots with a PVC rod to obtain liquid level.

Meter Calibration: Date: 10/13/14 Time: 1544 Location of calibration: office YSI 556 # ____

pH 4: (____ / ____ @ ____ °C) pH 7: (____ / ____ @ ____ °C) pH 10: (____ / ____ @ ____ °C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)

ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): C. Brink

Signature: C. Brink

Reviewed by: [illegible]

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ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: DW-2
SAMPLE ID: DW-2
DATE PURGED: 10/14/14
DATE SAMPLED: 10/14/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 12.0 Depth to liquid (ft): 8.73 Well depth (ft): 15.0 Screened interval (ft): 10-14
Wetted screened length (ft): 4.0 Stabilized liquid level (ft): 8.73

WELL PURGING: Start Time (2400 Hr): 0947 End Time (2400 Hr): 1004 Pump rate: 0.26 (liters /min)
ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic X Teflon bailer ____ PVC bailer ____
Depth to intake from TOC (ft): 12.0
Volume purged: 4,400 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
0955	2000	8.73	18.43	6.49	2157	1.91	-155.0	4.8
0958	2700	8.73	18.48	6.51	2,154	1.86	-147.0	4.6
1001	3700	8.73	18.52	6.52	2,147	1.82	-140.4	4.4
1004	4,400	8.73	18.54	6.53	2,138	1.78	-137.2	4.9
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1005 End Time (2400 Hr): 1012 Sample reacts with acids (Y / N)
Equipment used: Peristaltic X Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____
QC samples collected at well: none Samples filtered through 0.45µm filter: none
REMARKS: All samples collected.

Meter Calibration: Date: 10/14/14 Time: 1544 Location of calibration: office YSI 556 # ____
pH 4: (____ / ____ @ ____ °C) pH 7: (____ / ____ @ ____ °C) pH 10: (____ / ____ @ ____ °C)
D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)
ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): LiBmK
Signature:
Reviewed by:

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: DW - 1
SAMPLE ID: DW - 1
DATE PURGED: 10/14/14
DATE SAMPLED: 10/14/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 12.0 Depth to liquid (ft): 9.32 Well depth (ft): 40.0 Screened interval (ft): 30-40

Wetted screened length (ft): 10 Stabilized liquid level (ft): NA

WELL PURGING: Start Time (2400 Hr): 0912 End Time (2400 Hr): 0931 Pump rate: 0.19 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic X Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 35.0

Volume purged: 3,700 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
0925	2,000	NA	18.07	6.50	2,074	2.06	-160.5	3.7
0928	2,700	↓	18.18	6.50	2,093	2.08	-155.7	4.1
0931	3,700	↓	18.24	6.49	2,102	2.11	-159.7	4.0
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 0932 End Time (2400 Hr): 0938 Sample reacts with acids: (Y) N)

Equipment used: Peristaltic X Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: none Samples filtered through 0.45µm filter: none

REMARKS: All samples collected.

Meter Calibration: Date: 10/13/14 Time: 1544 Location of calibration: office YSI 556 # ____

pH 4: (____ / ____ @ ____°C) pH 7: (____ / ____ @ ____°C) pH 10: (____ / ____ @ ____°C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)

ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): L Brink

Signature: L Brink

Reviewed by: [illegible]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: 23-D
SAMPLE ID: 23-D
DATE PURGED: 10/14/14
DATE SAMPLED: 10/14/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 8.75 Well depth (ft): 44.8 Screened interval (ft): 40-50

Wetted screened length (ft): 10.0 Stabilized liquid level (ft): 9.01

WELL PURGING: Start Time (2400 Hr): 0826 End Time (2400 Hr): 0845 Pump rate: 0.18 (liters /min)

ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic X Teflon bailer ____ PVC bailer ____

Depth to intake from TOC (ft): 42.0

Volume purged: 3,400 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
0839	2200	9.02	17.84	6.90	1,032	0.86	-74.2	1.6
0842	2800	9.01	17.87	6.95	1,016	0.83	-74.1	2.0
0845	3400	9.01	17.93	6.94	1,008	0.80	-74.9	4.5
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 0846 End Time (2400 Hr): 0856 Sample reacts with acids (Y (N))

Equipment used: Peristaltic X Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____

QC samples collected at well: DUP 1 Samples filtered through 0.45µm filter: none

REMARKS: All samples collected.

Meter Calibration: Date: 10/13/14 Time: 1544 Location of calibration: office YSI 556 # ____

pH 4: (____ / ____ @ ____°C) pH 7: (____ / ____ @ ____°C) pH 10: (____ / ____ @ ____°C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)

ORP (____ / ____ mV @ ____ °C Turbidity Meter (____ / ____ NTU)

Purged and sampled by (print): L Bank

Signature: L Bank

Reviewed by: [illegible]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: 39751
PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL ID: 23-S
SAMPLE ID: 23-S
DATE PURGED: 10/14/14
DATE SAMPLED: 10/14/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 9.38 Well depth (ft): 16.0 Screened interval (ft): 9-16
Wetted screened length (ft): 6.62 Stabilized liquid level (ft): 9.53

WELL PURGING: Start Time (2400 Hr): 0748 End Time (2400 Hr): 0807 Pump rate: 0.15 (liters /min)
ES-submersible ____ Grundfos-submersible ____ Waterra ____ Peristaltic X Teflon bailer ____ PVC bailer ____
Depth to intake from TOC (ft): 14.0
Volume purged: 2900 (ml) Purge water disposal: Transported to Treatment System at DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (NTU)
0801	1,700	9.53	17.68	6.41	1,492	3.73	-64.9	2.08
0804	2,300	9.53	17.82	6.42	1,473	3.48	-69.2	2.4
0807	2,900	9.53	17.75	6.44	1,464	3.36	-70.9	2.4
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 0808 End Time (2400 Hr): 0815 Sample reacts with acids (Y / N)
Equipment used: Peristaltic X Grundfos ____ Teflon bailer ____ PVC bailer ____ Waterra ____
QC samples collected at well: none Samples filtered through 0.45µm filter: none
REMARKS: All samples collected.

Meter Calibration: Date: 10/13/14 Time: 0/1544 Location of calibration: office YSI 556 # 05K1407AG
pH 4: (4.18 / 3.98 @ 29.09 °C) pH 7: (~~9.67~~ 6.95 / ~~10.00~~ 7.00 @ ~~29.25~~ 30.43 °C) pH 10: 9.67 / 10.00 @ ~~30.42~~ 29.25 °C)
D.O. (91.6 / 100.0 %) D.O. (0.98 ppm) (EC (14,940 / 15,000 µS@25°C)
ORP (225.7 / 224.5 mV @ 29.93 °C Turbidity Meter (10.30 / 10.00 NTU)

Purged and sampled by (print): L Bmk
Signature: [signature]
Reviewed by: [signature]

October 2014 Annual Monitoring
901 Thompson Place, Sunnyvale California

Remove three casing volumes from the wells listed below. Wells must be purged and sampled in the order indicated. Record temperature, pH, and specific conductance at casing volume intervals until a minimum of three casing volumes are removed or the well dewaters (Figure 1). Purge wells using the submersible electric pump and collect samples using a Teflon bailer. Temporarily contain all waste water and discharge to the 915 treatment system. Curtis and Tompkins will be picking up the samples from the office on Wednesday.

Purge the following wells in INDICATED order. ***PLACE THE PUMP INTAKE APPROXIMATELY 10 FEET BELOW THE LIQUID LEVEL***

Well ID	Aquifer	Casing Dia	Depth	TVOC (2013)	Comments
35-DDD	B-3	4.0	80.3	0	145 gallon purge
53-D	B-1	4.0	37.1	7	**Collect 6 additional VOAs for MS/MSD**
28-D	B-1	4.0	23.4	8	
15-S	A	4.0	9.8	13	
36-DD	B-2	4.0	55.1	13	Well dewaters (32 gallons)
29-S	A	4.0	15.0	29	
29-D	B-1	4.0	26.5	30	
52-D	B-1	4.0	38.6	34	
27-DD	B-2	4.0	52.2	44	Well dewaters (34 gallons)
28-S	A	4.0	16.1	49	Well dewaters (5 gallons)
36-D	B-1	4.0	20.3	68	
27-D	B-1	4.0	27.1	80	**Collect duplicate (1-D)**
36-S	A	4.0	15.2	85	
37-S	A	4.0	13.3	98	
22-S	A	4.0	15.2	98	Well dewaters (5 gallons)
22-DD	B-2	4.0	43.6	174	
27-S	A	4.0	12.9	361	**Collect duplicate (2-D)**

Analytical Parameters

For all wells:

VOC's (8010)+ Freon 113

(3 VOAs with HCL)

Carry trip blanks with the samples at all times and relinquish them with each set of samples submitted to the lab. **Start with TB-1.**

Collect 6 additional VOAs for MS/MSD Only one MS/MSD should be included with each set of samples relinquished

Collect a equipment blank from a clean bailer at the end of each day of sampling **Start with EB-1**

CHAIN OF CUSTODY

Chain of Custody # _____

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # _____

Project No: 39751
Project Name: 901 Thompson Place
Project P. O. No:
EDD Format: Report Level: ☒ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Brok Avila Guevara
Report To: Mike Calhoun
Company: Haley & Aldrich
Telephone: (510) 879-4554
Email: MCalhoun@haleyaldrich.com

ANALYTICAL REQUEST: 8260B/8015 Gas/Diesel + Freon 113 using 8010B

Lab No.	Sample ID.	Sampling Date Collected	Sampling Time Collected	Matrix: Water	Matrix: Solid	# of Containers	Chemical Preservative: HCl	H2SO4	HNO3	NaOH	None	8260B/8015 Gas/Diesel + Freon 113 using 8010B	
	TB-1	10/20/14	—	X		3	X					X	
	35-DDD	10/20/14	1213	X		3	X					X	
	53-D	10/20/14	1357	X		3	X					X	4 RUN MS/MSD (93) 10/24/14
	28-D	10/20/14	1446	X		3	X					X	
	EB-1	10/20/14	1458	X		3	X					X	
	15-S	10/21/14	1004	X		3	X					X	
	36-DD	10/21/14	0929	X		3	X					X	
	29-S	10/21/14	1048	X		3	X					X	
	29-D	10/21/14	1048	X		3	X					X	
	52-D	10-21-14	1214	X		3	X					X	
	27-DD	10/21/14	1232	X		3	X					X	
	36-D	10/21/14	1335	X		3	X					X	
	78-S	10/21/14	1425	X		3	X					X	

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
[signature] DATE: 10/22/14 TIME: 1503
DATE: TIME:
DATE: TIME:

RECEIVED BY:
[signature] DATE: 10/22/14 TIME: 1503
DATE: TIME:
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
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Berkeley, CA 94710

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Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # _____

Project No: 39751
Project Name: 901 Thompson
Project P. O. No:
EDD Format: Report Level ☒ I ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Bruk Avila Gallegos
Report To: Mike Calhoun
Company: Haley & Aldrich
Telephone: (510) 879-4554
Email: MCalhoun@HaleyAldrich.com

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	ANALYTICAL REQUEST 8260 + Freon 113	DSHWBOD 457
	EB-2	10/21/14	14:40	X		3	X					X	
	27-D	10/22/14	00:00	X		3	X					X	
	1-D	10/22/14	00:10	X		3	X					X	
	36-S	10/22/14	08:41	X		3	X					X	
	37-S	10/22/14	08:40	X		3	X					X	
	22-DD	10/22/14	10:05	X		3	X					X	
	27-S	10/22/14	10:58	X		3	X					X	
	22-S	10/22/14	10:02	X		3	X					X	
	2-D	10/22/14	11:10	X		3	X					X	
	EB-3	10/22/14	11:36	X		3	X					X	

Notes:

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
LBruk DATE: 10/22/14 TIME: 1503
(gs) 10/24/14 DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: TIME:
DATE: TIME:
DATE: TIME:

WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 15-S
SAMPLE ID: 15-S
DATE PURGED: 10-21-14
DATE SAMPLED: 10-21-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 9.51 Measured Well depth (ft): 9.8

Water Column (ft): 0.29 x 0.653 (VCF) = One casing volume (gal): 0.18 (0.68 L) 3 casing volumes (gal): 0.56 (2.1 L)

WELL PURGING: Start Time (2400 Hr): 0957 End Time (2400 Hr): 1001 Pump rate: .5 L ~~(gal)~~/min)

ES-submersible ____ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ✓ PVC bailer ____

Time (2400 Hr)	Volume ~~(gal)~~ L	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
0959	0.68	20.1	6.98	1,267	Clear, no odor
1000	1.36	20.5	6.96	1,244	Tang, no odor
1001	2.04	20.5	6.93	1,246	Cloudy, no odor

Volume purged: 2.04 L (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Partly Cloudy Start Time (2400 Hr): 1004 End Time (2400 Hr): 1007

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS:

all samples collected

Meter Calibration: Date: 10-21-14 Time: 0845 Location of calibration: 15-S Turbidity: (1,000 / 0.02)

EC: (15,010 / 15,000) pH 4: (3.97 / 4.01) pH 7: (6.98 / 7.00) pH 10: (10.04 / 10.00)

Purged and sampled by (print): Juan Avila

Signature: Avila

Reviewed by: [illegible]

WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 22-DD
SAMPLE ID: 22-DD
DATE PURGED: 10-22-14
DATE SAMPLED: 10-22-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 8.69 Measured Well depth (ft): 43.6

Water Column (ft): 34.91 X 0.653 (VCF) = One casing volume (gal): 22.79 3 casing volumes (gal): 68.38

WELL PURGING: Start Time (2400 Hr): 0935 End Time (2400 Hr): 1002 Pump rate: 1.8 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
0944	23.0	18.8	7.32	975	tan, no odor
0954	46.0	18.4	7.24	970	tan no odor
1002	69.0	18.6	7.23	972	tan, no odor

Volume purged: 69.0 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: partly cloudy Start Time (2400 Hr): 1005 End Time (2400 Hr): 1010

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: all samples collected

Meter Calibration: Date: 10-22-14 Time: 07:45 Location of calibration: 27-D Turbidity: (1,000 / 0.02)

EC: (15,000 / 15,000) pH 4: (4.08 / 4.01) pH 7: (7.09 / 7.00) pH 10: (10.05 / 10.00)

Purged and sampled by (print): Juan A.

Signature: [signature]

Reviewed by: [signature]

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 22-S
SAMPLE ID: 22-S
DATE PURGED: 10/22/14
DATE SAMPLED: 10/22/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 8.87 Measured Well depth (ft): 15.1

Water Column (ft): 6.23 X 0.653 (VCF) = One casing volume (gal): 4.07 3 casing volumes (gal): 12.20

WELL PURGING: Start Time (2400 Hr): 0952 End Time (2400 Hr): 0954 Pump rate: 2.5 (gal/min)

ES-submersible X Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
0954	4.5	18.4	7.13	1,402	Tan, slight odor
0954	5.0	Well dewatered to limit of pump			
1012	Recharge	17.8	7.30	1,401	Tan, no odor

Volume purged: 5.0 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Partly Cloudy Start Time (2400 Hr): 1002 End Time (2400 Hr): 1012

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: Roots in well. ACE sampler collected.

DTW @ sample – 11.18

Meter Calibration: Date: 10/22/14 Time: 0716 Location of calibration: on site Turbidity: (____/____)

EC: (____/____) pH 4: (____/____) pH 7: (____/____) pH 10: (____/____)

Purged and sampled by (print): L. Bank

Signature: [signature]

Reviewed by: [signature]

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 27-D
SAMPLE ID: 27-D
DATE PURGED: 10/22/14
DATE SAMPLED: 10/22/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.44 Measured Well depth (ft): 27.1

Water Column (ft): 16.66 X 0.653 (VCF) = One casing volume (gal): 10.88 3 casing volumes (gal): 32.64

WELL PURGING: Start Time (2400 Hr): 0738 End Time (2400 Hr): 0749 Pump rate: 3.0 (gal/min)

ES-submersible X Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
0742	11.0	18.3	7.11	1,106	Tan, no odor
0745	22.0	18.9	7.11	1,102	Tan, no odor
0749	33.00	18.7	7.16	1,102	Tan, no odor

Volume purged: 33.00 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Cloudy Start Time (2400 Hr): 0800 End Time (2400 Hr): 0811

Equipment used: Teflon bailer QC samples collected at well: 1-D (0810)

Sample Containers Filled: 40 ml VOA vials w/HCl 6

REMARKS: All samples collected.

Meter Calibration: Date: 10/22/14 Time: 0716 Location of calibration: on site Turbidity: (/)

EC: (15,010 / 15,000) pH 4: (4.12 / 4.00) pH 7: (6.61 / 7.00) pH 10: (10.03 / 10.00)

Purged and sampled by (print): LBnR

Signature: LBnR

Reviewed by: [illegible]

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 27-DD
SAMPLE ID: 27-DD
DATE PURGED: 10/21/14
DATE SAMPLED: 10/21/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 9.70 Measured Well depth (ft): 52.2

Water Column (ft): 42.5 x 0.653 (VCF) = One casing volume (gal): 27.75 3 casing volumes (gal): 83.26

WELL PURGING: Start Time (2400 Hr): 1143 End Time (2400 Hr): 1217 Pump rate: 2.1 (gal/min)

ES-submersible X Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1154	28.0	19.4	7.40	797	Tan, no odor
1207	55.5	19.5	7.50	808	Tan, no odor
1217	72.5	Well dewatered to limit of pump			
1240	Recharge	19.1	7.77	839	Tan, no odor

Volume purged: 72.5 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Partly Cloudy Start Time (2400 Hr): 1232 End Time (2400 Hr): 1236

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: All samples collected.

DTW @ sample – 37.50

Meter Calibration: Date: 10/21/14 Time: 0747 Location of calibration: on site Turbidity: (____/____)

EC: (____/____) pH 4: (____/____) pH 7: (____/____) pH 10: (____/____)

Purged and sampled by (print): L Park

Signature: L Park

Reviewed by: [illegible]

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 27-S
SAMPLE ID: 27-S
DATE PURGED: 10/22/14
DATE SAMPLED: 10/22/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 11.02 Measured Well depth (ft): 12.9

Water Column (ft): 1.88 X 0.653 (VCF) = One casing volume (gal): 1.23 3 casing volumes (gal): 3.68

WELL PURGING: Start Time (2400 Hr): 1048 End Time (2400 Hr): 1051 Pump rate: 1.3 (gal/min)

ES-submersible X Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1048	1.5	19.0	7.24	1.129	Tan, no odor
1049	2.5	19.1	7.16	1.142	Tan, no odor
1051	4.0	19.1	7.11	1.141	Tan, no odor

Volume purged: 4.0 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Partly Cloudy Start Time (2400 Hr): 1058 End Time (2400 Hr): 1103

Equipment used: Teflon bailer QC samples collected at well: 2-D (1110), EB-3 (1136)

Sample Containers Filled: 40 ml VOA vials w/HCl 6

REMARKS: All samples collected. EB-3 collected after sampling this well using laboratory provided DI water.

Meter Calibration: Date: 10/22/14 Time: 0716 Location of calibration: outside Turbidity: (____/____)

EC: (____/____) pH 4: (____/____) pH 7: (____/____) pH 10: (____/____)

Purged and sampled by (print): C. Park / D. Avila

Signature: C. Park

Reviewed by: [illegible]

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 28-D
SAMPLE ID: 28-D
DATE PURGED: 10-20-14
DATE SAMPLED: 10-20-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.21 Measured Well depth (ft): 23.4

Water Column (ft): 13.19 X 0.653 (VCF) = One casing volume (gal): 8.61 3 casing volumes (gal): 25.83

WELL PURGING: Start Time (2400 Hr): 1433 End Time (2400 Hr): 1444 Pump rate: 2.3 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1436	9	18.4	6.59	1,509	clear, moderate odor
1440	18	18.6	6.61	1,480	clear, moderate odor
1444	26	18.6	6.63	1,463	clear, moderate odor

Volume purged: 26 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: overcast Start Time (2400 Hr): 1446 End Time (2400 Hr): 1453

Equipment used: Teflon bailer QC samples collected at well: ~~none~~ EB-1 (14:58)

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS:

all samples collected

Meter Calibration: Date: 10-20-14 Time: 1051 Location of calibration: 35-DDD Turbidity: (1,000 / 0.02)

EC: (14,840 / 15,000) pH 4: (3.99 / 4.01) pH 7: (7.02 / 7.00) pH 10: (9.96 / 10.00)

Purged and sampled by (print): Juan Avila

Signature: Juan Avila

Reviewed by: [illegible]

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 28-S
SAMPLE ID: 28-S
DATE PURGED: 10-21-14
DATE SAMPLED: 10-21-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.44 Measured Well depth (ft): 16.1

Water Column (ft): 5.66 X 0.653 (VCF) = One casing volume (gal): 3.69 3 casing volumes (gal): 11.08

WELL PURGING: Start Time (2400 Hr): 1416 End Time (2400 Hr): 1423 Pump rate: 1.6 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1418	4.0	19.1	6.85	1,259	clear, slight odor
1421	8.0	19.1	6.82	1,272	clear, slight odor
1423	11.5	19.1	6.82	1,272	clear, slight odor

Volume purged: 11.5 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: partly cloudy Start Time (2400 Hr): 1425 End Time (2400 Hr): 1430

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS:

all samples collected

Meter Calibration: Date: 10-21-14 Time: 0845 Location of calibration: 15-S Turbidity: (1,000 / 0.02)

EC: (15,010 / 15,000) pH 4: (3.97 / 4.01) pH 7: (6.98 / 7.00) pH 10: (10.04 / 10.00)

Purged and sampled by (print): Juan A.

Signature: J Ales

Reviewed by: [illegible]

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 29-D
SAMPLE ID: 29-D
DATE PURGED: 10-21-14
DATE SAMPLED: 10-21-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.04 Measured Well depth (ft): 26.5

Water Column (ft): 16.1 x 0.653 (VCF) = One casing volume (gal): 10.51 3 casing volumes (gal): 31.54

WELL PURGING: Start Time (2400 Hr): 1030 End Time (2400 Hr): 1048 Pump rate: 3.2 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1034	11.0	20.8	7.22	1097	Clear, slight odor
1037	21.5	20.8	7.20	1102	Clear, no odor
1040	32.0	20.9	7.18	1103	Clear, no odor

Volume purged: 32.0 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Partly Cloudy Start Time (2400 Hr): 1048 End Time (2400 Hr): 1052

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: All samples collected.

Meter Calibration: Date: 10-21-14 Time: 0815 Location of calibration: 15-S Turbidity: (____ / ____)

EC: (15,010 / 15,000) pH 4: (3.97 / 4.01) pH 7: (6.98 / 7.00) pH 10: (10.04 / 10.00)

Purged and sampled by (print): ~~Juan Avila~~ VB L. Bruk

Signature: [illegible] L. Bruk

Reviewed by: [illegible]

WATER SAMPLE FIELD DATA

PROJECT No: 39751

PROJECT NAME: 901 Thompson Place

CITY: Sunnyvale

COUNTY: Santa Clara

WELL ID: 29-S

SAMPLE ID: 29-S

DATE PURGED: 10/21/14

DATE SAMPLED: 10-21-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.02 Measured Well depth (ft): 15.0

Water Column (ft): 4.98 X 0.653 (VCF) = One casing volume (gal): 3.25 3 casing volumes (gal): 9.75

WELL PURGING: Start Time (2400 Hr): 1039 End Time (2400 Hr): 1046 Pump rate: ~~1052~~ 1.4 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1042	3.5	21.9	6.96	1,254	clear, no odor
1044	7	22.2	6.91	1,224	clear, no odor
1046	10	22.3	6.89	1,218	clear, no odor

Volume purged: 10 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: partly cloudy Start Time (2400 Hr): 1048 End Time (2400 Hr): 1052

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: all samples collected

Meter Calibration: Date: 10/21/14 Time: 0747 Location of calibration: on site Turbidity: (____/____)

EC: (____/____) pH 4: (____/____) pH 7: (____/____) pH 10: (____/____)

Purged and sampled by (print): ~~C. Brak~~ J. Avila Reviewed by: [illegible]

Signature: Avila

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 35-DDD
SAMPLE ID: 35-DDD
DATE PURGED: 10-20-14
DATE SAMPLED: 10-20-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 6.60 Measured Well depth (ft): 80.3

Water Column (ft): 73.70 X 0.653 (VCF) = One casing volume (gal): 48.12 3 casing volumes (gal): 144.37

WELL PURGING: Start Time (2400 Hr): 1109 End Time (2400 Hr): 1211 Pump rate: 2.3 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1128	48.5	19.4	7.52	665	clear, no odor
1150	97.0	19.4	7.64	697	clear, no odor
1211	144.5	19.1	7.65	712	clear, no odor

Volume purged: 144.5 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: light rain, light wind Start Time (2400 Hr): 1213 End Time (2400 Hr): 1219

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS:

all samples collected

Meter Calibration: Date: ~~10-51~~ 10-20-14 Time: 10:51 Location of calibration: 35-DDD Turbidity: (1,000 / -0.02)

EC: (14,840 / 15,000) pH 4: (3.99 / 4.00) pH 7: (7.02 / 7.00) pH 10: (9.96 / 10.00)

Purged and sampled by (print): Juan Avila

Signature: J Avila

Reviewed by: JB

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WATER SAMPLE FIELD DATA

PROJECT No: 39751 WELL ID: 36-D

PROJECT NAME: 901 Thompson Place SAMPLE ID: 36-D

CITY: Sunnyvale DATE PURGED: 10/21/14

COUNTY: Santa Clara DATE SAMPLED: 10/21/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 6.33 Measured Well depth (ft): 20.3

Water Column (ft): 13.97 X 0.653 (VCF) One casing volume (gal): 9.12 3 casing volumes (gal): 27.37

WELL PURGING: Start Time (2400 Hr): 1318 End Time (2400 Hr): 1328 Pump rate: 2.8 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1322	9.5	21.8	7.22	1215	Clear, no odor
1325	19.0	21.6	7.15	1203	Clear, no odor
1328	27.5	21.6	7.13	1199	Clear, no odor

Volume purged: 27.5 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Clear, Sunny Start Time (2400 Hr): 1335 End Time (2400 Hr): 1338

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: All samples collected.

Meter Calibration: Date: 10/21/14 Time: 0747 Location of calibration: on site Turbidity: (____/____)

EC: (____/____) pH 4: (____/____) pH 7: (____/____) pH 10: (____/____)

Purged and sampled by (print): L Brink Reviewed by: [illegible]

Signature: [illegible] Page 12 of 17

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WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 36-DD
SAMPLE ID: 36-DD
DATE PURGED: 10/21/14
DATE SAMPLED: 10/21/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 7.39 Measured Well depth (ft): 55.1

Water Column (ft): 47.58 X 0.653 (VCF) = One casing volume (gal): 31.15 3 casing volumes (gal): 93.46

WELL PURGING: Start Time (2400 Hr): 0903 End Time (2400 Hr): 0919 Pump rate: 2.19 (gal/min)

ES-submersible X Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
0917	31.5	21.5	7.35	1.013	Cloudy, strong odor
	35.0	Well dewatered to limit of pump			
0935	Recharge	19.5	8.06	1.116	Cloudy, slight odor

Volume purged: 35.0 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Clear, Sunny Start Time (2400 Hr): 0929 End Time (2400 Hr): 0935

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: All samples collected.

DTW@ Sample – 52.82

Meter Calibration: Date: 10/21/14 Time: 0747 Location of calibration: on site Turbidity: (/)

EC: (15,090 / 15,000) pH 4: (4.07 / 4.00) pH 7: (6.79 / 7.00) pH 10: (9.94 / 10.00)

Purged and sampled by (print): C. Bank

Signature: C Bank

Reviewed by: [illegible]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 36-S
SAMPLE ID: 36-S
DATE PURGED: 10-22-14
DATE SAMPLED: 10-22-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 6.53 Measured Well depth (ft): 15.2

Water Column (ft): 8.67 X 0.653 (VCF) = One casing volume (gal): 5.66 3 casing volumes (gal): 16.98

WELL PURGING: Start Time (2400 Hr): 0827 End Time (2400 Hr): 0838 Pump rate: 1.5 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
0831	~~7.0~~ 6.0	21.1	6.95	1,193	clear, no odor
0835	11.5	21.2	6.92	1,192	clear, no odor
0838	17.0	21.2	6.93	1,190	clear, no odor

Volume purged: 17.0 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: partly cloudy Start Time (2400 Hr): 0841 End Time (2400 Hr): 0846

Equipment used: Teflon bailer QC samples collected at well: ~~none~~ EB-2 (1440)

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS:

- all samples collected
- EB-2 collected using laboratory provided Di Water from a clean bailer before sampling this well on 10-21-14.

Meter Calibration: Date: 10-22-14 Time: 07:45 Location of calibration: 27-D Turbidity: (1,000 / 0.02)

EC: (15,000 / 15,000) pH 4: (4.08 / 4.01) pH 7: (7.09 / 7.00) pH 10: (10.05 / 10.00)

Purged and sampled by (print): Juan Avila

Signature: J Avila

Reviewed by: [illegible]

WATER SAMPLE FIELD DATA

PROJECT No: 39751

PROJECT NAME: 901 Thompson Place

CITY: Sunnyvale

COUNTY: Santa Clara

WELL ID: 37-S

SAMPLE ID: 37-S

DATE PURGED: 10/22/14

DATE SAMPLED: 10/22/14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 6.77 Measured Well depth (ft): 13.3

Water Column (ft): 6.53 X 0.653 (VCF) = One casing volume (gal): 4.26 3 casing volumes (gal): 12.79

WELL PURGING: Start Time (2400 Hr): 0829 End Time (2400 Hr): 0834 Pump rate: 2.6 (gal/min)

ES-submersible X Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
0830	4.5	21.5	7.27	1231	Tan, no odor
0832	9.0	21.9	7.32	1228	Tan, no odor
0834	13.0	21.8	7.36	1220	Tan, no odor
	~~7.5~~				

Volume purged: 13.0 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: Partly cloudy Start Time (2400 Hr): 0840 End Time (2400 Hr): 0843

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: All samples collected. Well lid bolts do not tighten; well box eyeholes need rethreading (3/4"). Needs a new 4" well cap.

Meter Calibration: Date: 10/22/14 Time: 0716 Location of calibration: On site Turbidity: (____/____)

EC: (____/____) pH 4: (____/____) pH 7: (____/____) pH 10: (____/____)

Purged and sampled by (print): L. Bmk / M. Gallegos Reviewed by: [illegible]

Signature: [illegible]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT No: 39751 WELL ID: 52-D
PROJECT NAME: 901 Thompson Place SAMPLE ID: 52-D
CITY: Sunnyvale DATE PURGED: 10-21-14
COUNTY: Santa Clara DATE SAMPLED: 10-21-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 9.80 Measured Well depth (ft): 38.6

Water Column (ft): 28.80 X 0.653 (VCF) = One casing volume (gal): 18.80 3 casing volumes (gal): 56.41

WELL PURGING: Start Time (2400 Hr): 1138 End Time (2400 Hr): 1212 Pump rate: 1.6 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1150	19.0	20.5	7.21	986	clear, no odor
1201	38.0	20.4	7.18	1,012	clear, no odor
1212	57.0	20.4	7.17	1,026	clear, no odor

Volume purged: 57.0 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: partly cloudy Start Time (2400 Hr): 1214 End Time (2400 Hr): 1218

Equipment used: Teflon bailer QC samples collected at well: none

Sample Containers Filled: 40 ml VOA vials w/HCl 3

REMARKS: all samples collected

Meter Calibration: Date: 10-21-14 Time: 0845 Location of calibration: 15-S Turbidity: (1,000 / 0.02)

EC: (15,010 / 15,000) pH 4: (3.97 / 4.01) pH 7: (6.98 / 7.00) pH 10: (10.04 / 10.00)

Purged and sampled by (print): Juan Avila Reviewed by: [illegible]

Signature: J Avila

WATER SAMPLE FIELD DATA

PROJECT No: 39751
PROJECT NAME: 901 Thompson Place
CITY: Sunnyvale
COUNTY: Santa Clara

WELL ID: 53-D
SAMPLE ID: 53-D
DATE PURGED: 10-20-14
DATE SAMPLED: 10-20-14

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 8.55 Measured Well depth (ft): 37.1

Water Column (ft): 28.55 X 0.653 (VCF) = One casing volume (gal): 18.64 3 casing volumes (gal): 55.92

WELL PURGING: Start Time (2400 Hr): 1335 End Time (2400 Hr): 1355 Pump rate: 2.8 (gal/min)

ES-submersible ✓ Grundfos-submersible ____ Centrifugal ____ Peristaltic ____ Teflon bailer ____ PVC bailer ____

Time (2400 Hr)	Volume (gal)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Comments (i.e. color/odor)
1341	56 19	19.1	7.24	1,004	clear no odor
1348	38	19.3	7.24	1,010	clear, no odor
1355	56	19.3	7.22	1,012	clear, no odor

Volume purged: 56 (gal) Purge water: Transported to treatment system at 915 DeGuigne Avenue

WELL SAMPLING: Weather: light rain, light wind Start Time (2400 Hr): 1357 End Time (2400 Hr): 1409

Equipment used: Teflon bailer QC samples collected at well: MS-MSD

Sample Containers Filled: 40 ml VOA vials w/HCl 9

REMARKS:

all samples collected

Meter Calibration: Date: 10-20-14 Time: 1051 Location of calibration: 35-DDD Turbidity: (1000 / 0.02)

EC: (14,840 / 15,000) pH 4: (3.99 / 4.01) pH 7: (7.02 / 7.00) pH 10: (9.96 / 10.00)

Purged and sampled by (print): Juan Avila

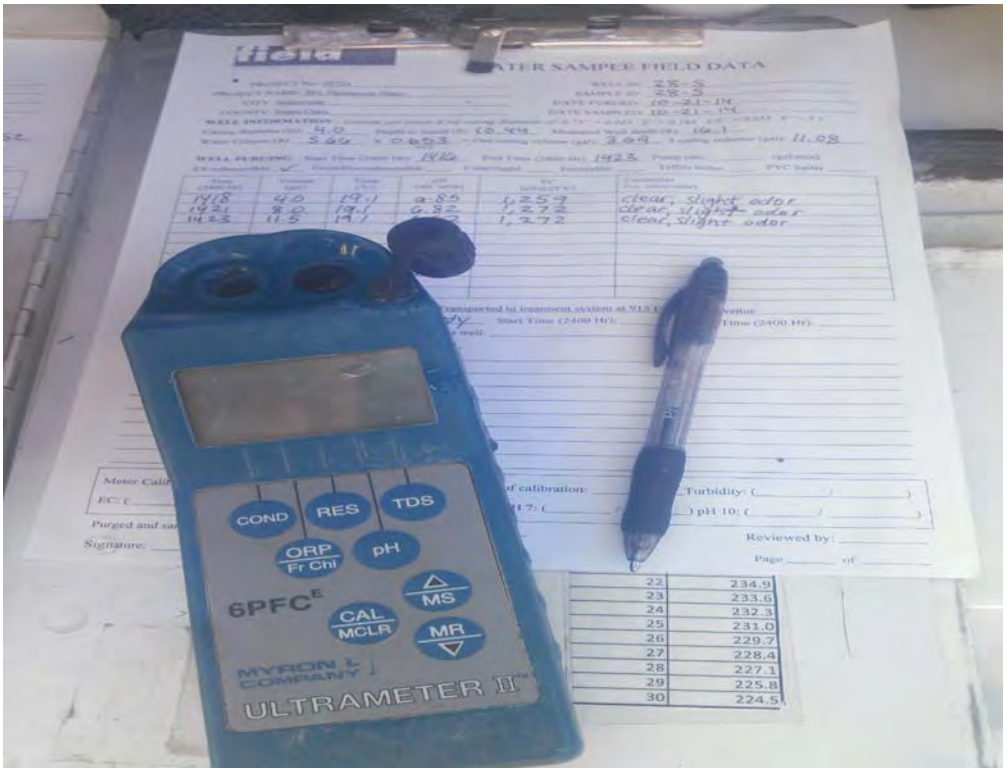
Signature: Juan Avila

Reviewed by: [illegible]

Recording the liquid level

Dropping the pump down the well to begin the purge

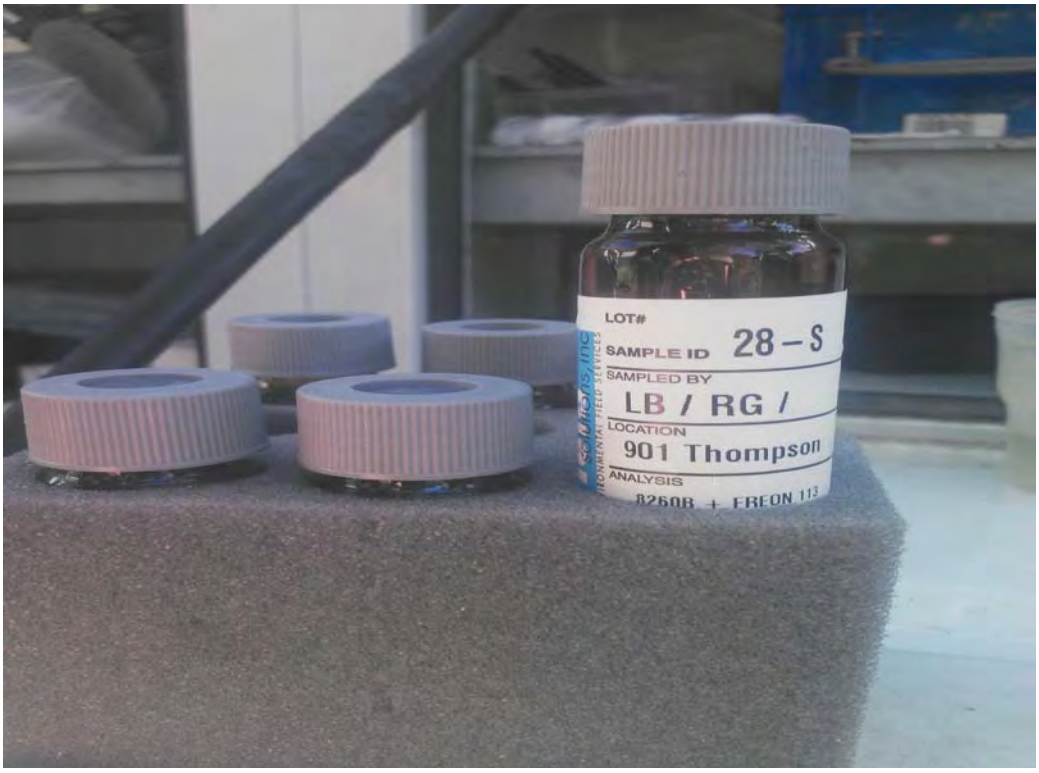
Pumping three casing volumes of purge water from the well through a totalizer into the purge water holding tank



Recording the stabilization parameters on the field data sheet

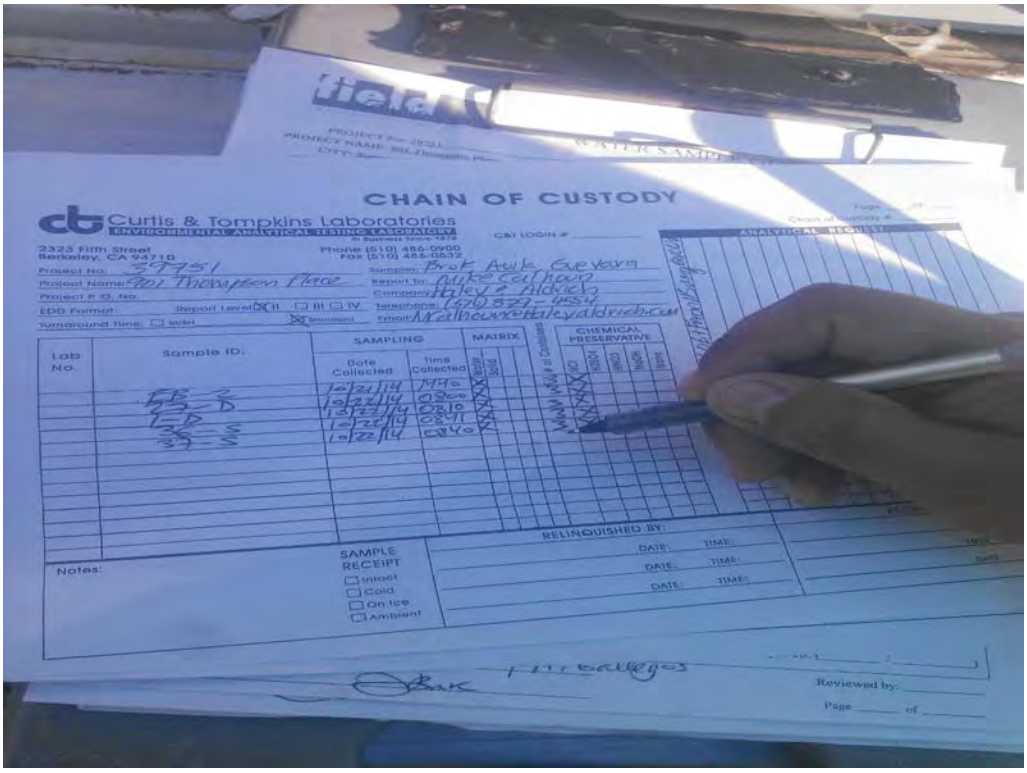
Dropping the Teflon bailer to collect samples

Filling VOA vials from the Teflon bailer



Labeled VOA checked for bubbles and being transported to the cooler

Samples placed in cooler on ice



Filled out Chain-of-Custody after sample is placed in cooler

Steam cleaning sampling pump and Teflon bailer after use

Flushing pump with hot water before moving onto next location

APPENDIX B

Historical Groundwater Elevation Data

HISTORICAL GROUNDWATER ELEVATION DATA
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Well ID	Jun-87	Aug-87	Nov-87	Mar-88	Jun-88	Sep-88	Dec-88	Mar-89	Jun-89	Oct-89	Jan-90	Apr-90	Jul-90	Oct-90	Jan-91	Apr-91	Jul-91	Oct-91	Jan-92	Apr-92	Jul-92	Oct-92	Jan-93	Apr-93	Jul-93	Aug-93	Sep-93	Oct-93	Jan-94	Apr-94
A Aquifer																														
14-S	34.66	34.64	34.21	33.56	33.40	33.17	32.25	31.22	30.32	29.57	DRY	DRY	28.80	DRY	DRY	29.03	28.52	DRY	28.57	29.82	30.45	30.71	30.56	33.17	33.34	NM	NM	33.02	32.49	32.75
15-S	36.66	49.06	36.22	35.52	35.26	34.96	34.59	34.16	33.50	31.90	DRY	DRY	32.25	DRY	DRY	DRY	DRY	DRY	DRY	DRY	33.94	32.43	DRY	34.12	34.60	NM	NM	34.11	34.28	34.41
16-S	32.81	33.00	32.79	31.27	DRY	30.00	29.51	30.23	28.66	DRY	DRY	29.76	DRY	DRY	29.18	29.85	30.16	DRY	DRY	31.41	29.62	34.27	28.76	29.48	29.14	28.96	34.24	32.57	29.19	29.08
17-S	32.55	32.48	32.22	31.45	31.19	30.67	30.09	29.67	28.85	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	29.00	28.91	29.12	29.42	31.42	31.20	NM	NM	30.76	30.37	30.56
21-S	32.57	32.52	32.36	31.35	30.75	30.00	29.50	29.45	28.77	25.94	25.44	25.34	DRY	DRY	DRY	DRY	25.98	25.99	DRY	26.66	26.77	29.29	27.97	29.34	29.49	29.19	29.49	29.51	29.23	29.12
22-S	32.74	32.86	32.87	32.35	31.33	30.76	30.15	29.95	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	29.28	31.60	30.53	30.91	30.38	30.24	32.49	33.03	30.65	30.49
23-S	32.83	32.94	32.89	31.68	31.19	30.52	29.89	29.84	28.72	DRY	DRY	DRY	DRY	DRY	DRY	DRY	28.51	DRY	DRY	DRY	29.06	31.49	30.25	30.67	30.26	30.10	31.92	33.00	30.54	30.21
25-S	35.53	46.43*	35.28	34.23	34.21	33.63	33.11	32.74	32.36	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	33.08	34.20	NM	NM	DRY	32.95	34.94
26-S	35.12	36.25	34.80	33.99	33.45	32.98	32.49	32.20	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	32.54	32.55	NM	NM	DRY	32.23	32.30
27-S	35.06	35.06	34.81	34.22	33.81	33.36	32.82	32.39	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	32.63	32.78	32.61	32.56	32.41	32.61	32.62
28-S	32.77	32.88	32.79	31.60	31.10	30.49	29.90	29.90	29.63	DRY	DRY	DRY	DRY	DRY	29.44	DRY	DRY	DRY	DRY	DRY	DRY	31.57	29.92	30.30	30.03	29.87	31.45	32.81	30.29	30.67
29-S	35.03	34.94	34.69	34.22	33.79	33.37	32.74	32.30	31.43	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	32.30	32.31	NM	NM	31.81	32.07	32.30
36-S	30.93	30.13	30.07	29.72	28.97	28.22	28.06	27.90	27.34	28.43	DRY	DRY	25.54	27.25	DRY	26.30	25.32	DRY	27.54	30.06	27.42	27.95	27.81	29.64	28.51	NM	NM	27.83	27.55	27.71
37-S	30.16	29.95	30.25	29.26	28.27	27.36	27.26	27.10	DRY	27.56	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	30.24	27.93	NM	NM	28.36	27.40	27.52
38-S	27.70	26.58	26.97	27.11	26.15	25.41	25.26	25.23	24.91	24.56	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	IA	DRY	DRY	DRY	24.85	25.85	DRY	NM	NM	DRY	DRY	DRY
54-S	NI	NI	NI	NI	NI	NI	NI	NI	NI	30.73	29.48	29.48	29.97	29.74	29.19	30.46	29.85	29.37	IA	31.43	31.33	32.12	29.50	33.55	33.66	NM	NM	33.28	33.45	33.54
B1 Aquifer																														
16-D	31.25	30.74	30.62	29.81	29.13	27.77	28.03	27.38	24.86	24.00	22.40	27.70	24.98	24.37	23.19	26.74	25.75	18.93	20.15	26.47	26.85	26.35	18.48	20.27	22.45	21.36	24.35	21.89	22.31	23.11
23-D	30.07	29.14	28.37	29.14	27.07	26.17	25.90	24.85	15.97	16.43	15.63	14.80	14.25	18.94	17.07	17.53	16.73	16.35	21.10	26.11	25.67	19.92	16.74	20.27	23.38	23.67	23.97	11.53	16.33	16.68
25-D	35.69	35.79	35.72	34.79	34.20	33.73	33.12	32.73	32.09	29.76	28.51	28.46	29.37	29.20	28.66	29.92	29.33	28.83	28.82	31.07	30.82	31.71	30.98	33.03	33.12	NM	NM	32.70	32.86	33.00
27-D	35.26	35.27	34.98	34.34	33.95	33.48	32.87	32.47	31.87	29.85	28.59	28.52	29.05	28.89	28.38	29.62	28.92	28.5	28.52	30.81	30.58	31.46	30.70	32.72	32.83	32.64	32.60	32.42	32.60	32.68
28-D	32.74	32.85	32.74	34.56	31.09	30.46	29.88	29.86	28.94	26.44	25.29	27.98	27.40	26.09	28.41	28.77	28.51	25.68	25.84	28.08	28.90	31.60	29.91	30.30	30.04	29.88	31.47	32.81	30.29	29.96
29-D	35.23	35.18	34.82	34.09	33.69	33.15	32.56	32.14	31.33	29.66	28.33	28.32	28.83	28.56	28.05	29.32	28.59	28.15	28.30	30.51	30.22	31.13	30.38	32.46	32.56	NM	NM	32.10	32.25	32.40
36-D	30.94	30.20	30.16	29.90	29.10	28.34	28.09	28.04	27.44	27.61	26.34	25.36	25.18	25.36	24.23	25.55	24.92	24.63	24.86	28.61	26.59	27.68	27.47	29.20	28.19	NM	NM	27.89	27.64	27.80
52-D	NI	NI	NI	NI	NI	NI	NI	NI	NI	32.53	24.52	24.65	24.80	24.83	24.53	25.79	25.01	24.3	24.77	28.39	27.98	28.71	26.56	28.56	29.16	28.89	29.03	27.93	28.46	28.63
53-D	NI	NI	NI	NI	NI	NI	NI	NI	NI	35.21	30.01	29.97	30.13	30.10	29.61	31.11	30.31	29.75	29.92	32.06	31.99	32.36	31.61	33.84	34.13	NM	NM	33.39	33.58	33.89
B2 Aquifer																														
22-DD	30.31	29.37	28.46	32.49	29.18	28.97	27.58	28.70	20.84	15.87	15.22	14.88	14.60	19.81	16.47	16.91	17.20	16.29	20.95	26.14	24.74	21.61	17.21	20.01	23.33	23.62	24.05	10.80	15.72	19.31
27-DD	32.67	33.04	32.49	32.26	31.18	29.82	29.38	28.83	29.99	26.61	25.53	25.58	25.32	25.99	25.63	26.76	25.91	25.23	26.27	29.24	28.57	28.88	26.77	29.57	29.68	29.71	29.86	27.42	29.18	29.28
30-DD	30.13	29.21	28.30	29.17	26.97	26.09	25.79	24.75	15.61	15.95	15.25	14.35	14.05	20.54	16.81	17.28	16.53	16.15	20.67	26.09	25.66	19.74	16.57	20.13	23.44	23.65	23.94	11.02	16.01	16.20
36-DD	29.99	28.95	28.97	28.80	27.77	26.80	26.48	26.26	25.49	26.23	25.48	23.42	23.78	24.75	23.27	24.83	23.99	23.61	24.52	28.59	26.01	26.88	26.21	28.45	27.89	NM	NM	26.87	26.74	26.76
B3 Aquifer																														
35-DDD	30.01	29.75	28.66	29.75	27.69	25.78	25.43	25.13	24.01	23.90	23.88	23.38	23.34	24.28	23.96	25.16	24.26	23.51	24.69	27.71	26.81	27.73	24.69	27.51	27.34	NM	27.49	25.06	26.25	27.06

IA	Well inaccessible
NM	Not measured
DRY	No water in well
NI	NI - Not installed
NA	NA - Not available

* Water level measurement is believed to be inaccurate

Groundwater elevations are reported in feet above mean sea level (USGS Datum) through 2004, and feet NAVD88 since 2005
Top of casing elevations were resurveyed in October 1997, and again in December 2005. Groundwater elevations measured during subsequent monitoring events were calculated using resurveyed elevations.

HISTORICAL GROUNDWATER ELEVATION DATA
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Well ID	Jul-94	Oct-94	Jan-95	Apr-95	Jul-95	Oct-95	Apr-96	Oct-96	Apr-97	Oct-97	Apr-98	Oct-98	Oct-99	Oct-00	Oct-01	Oct-02	Oct-03	Oct-04	Oct-05	Nov-06	Oct-07	Oct-08	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14
A Aquifer																												
14-S	33.07	33.55	33.24	35.17	34.65	34.50	34.90	34.34	34.95	34.54	35.87	35.37	35.14	35.18	35.25	35.21	35.44	35.28	38.25	38.33	38.22	NM	NM	NM	NM	NM	NM	NM
15-S	34.77	35.02	35.15	37.75	38.14	37.10	38.24	37.31	38.44	37.92	NM	38.81	NM	DRY	DRY	DRY	DRY	DRY	DRY	DRY	42.34	42.02	41.69	41.81	42.17	41.97	41.84	41.35
16-S	29.86	30.20	34.76	32.99	31.13	30.89	34.54	31.22	34.29	32.53	NM	34.87	33.30	33.26	33.44	34.08	34.94	34.55	37.75	37.57	37.72	37.53	37.10	37.42	38.09	37.56	37.29	37.03
17-S	30.80	31.25	31.05	33.72	32.51	32.50	33.22	32.19	33.12	32.50	NM	33.50	33.14	33.11	33.33	33.41	33.74	33.67	36.67	36.76	36.84	NM	NM	NM	NM	NM	NM	NM
21-S	29.62	30.65	30.71	32.97	31.50	32.00	32.92	31.46	32.65	32.11	34.10	33.46	32.95	DRY	DRY	DRY	34.72	DRY	37.94	37.96	NM	NM	NM	NM	NM	NM	NM	NM
22-S	31.13	31.88	33.44	33.71	32.60	32.36	35.06	32.67	33.84	33.24	34.95	34.43	33.82	33.86	33.81	34.09	34.71	34.53	38.42	38.53	38.78	38.27	37.75	37.97	38.59	38.19	37.87	37.57
23-S	30.90	31.63	32.96	33.65	32.52	32.40	34.62	32.63	33.80	33.18	NM	33.40	33.70	33.81	33.79	34.05	34.84	34.80	38.66	38.71	38.97	38.4	37.83	38.11	38.74	38.28	38.02	37.65
25-S	33.31	33.78	34.38	36.39	35.60	35.60	36.74	35.71	36.84	36.36	38.18	37.37	37.08	37.02	37.31	37.42	38.22	37.75	41.02	NM	NM	NM	NM	NM	NM	NM	NM	NM
26-S	32.84	33.35	33.32	35.88	34.96	35.05	36.17	35.07	36.31	35.75	NM	38.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
27-S	33.22	33.77	33.80	36.01	35.35	35.45	36.44	35.56	36.53	36.04	NM	36.99	36.63	36.74	36.85	36.75	37.54	37.37	40.53	41.68	41.05	40.56	40.17	40.28	40.66	40.39	40.21	39.73
28-S	30.59	31.25	32.61	33.33	32.15	32.22	34.05	32.20	33.47	32.83	NM	34.11	33.47	33.48	33.58	33.82	34.95	NM	38.29	38.15	38.37	38.15	37.43	37.75	38.47	37.93	37.71	37.42
29-S	32.73	33.19	33.31	35.98	35.03	35.06	36.37	35.23	36.35	35.77	NM	37.02	36.70	36.78	37.01	36.91	37.69	37.50	40.74	41.01	41.12	40.78	40.46	40.58	40.99	40.78	40.57	40.12
36-S	28.33	30.08	29.28	31.61	31.07	30.28	31.23	29.82	30.74	30.12	32.07	31.26	30.84	30.75	31.10	31.55	32.10	31.67	35.23	35.16	35.52	35.10	34.64	34.84	35.21	35.06	34.78	34.87
37-S	28.19	29.51	28.25	31.66	30.00	30.19	32.55	30.32	30.98	30.04	NM	30.80	30.88	30.71	30.77	31.10	31.86	31.39	35.82	35.65	36.46	35.82	34.75	35.18	35.63	35.52	35.05	35.24
38-S	25.23	29.14	26.28	29.44	27.31	26.83	28.41	26.99	27.94	26.72	NM	27.51	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
54-S	34.08	34.61	34.57	36.93	36.43	36.46	37.46	36.65	37.68	37.18	NM	37.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
B1 Aquifer																												
16-D	25.30	23.97	27.89	24.63	20.35	21.08	26.81	25.05	25.96	20.47	NM	26.82	26.91	26.88	27.81	28.13	33.89	33.83	38.21	37.23	38.87	36.52	36.54	37.27	37.82	37.80	37.54	37.34
23-D	15.80	20.28	18.41	19.49	13.73	15.58	16.51	15.73	17.66	19.55	17.25	16.95	18.49	17.63	17.51	19.62	34.05	34.31	39.23	38.00	40.21	37.24	37.45	38.23	39.20	39.98*	38.68	38.29
25-D	33.54	34.18	34.10	36.49	35.81	35.86	36.91	35.99	36.90	36.45	NM	36.50	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
27-D	33.28	33.90	33.87	36.22	35.49	35.62	37.83	35.74	36.69	36.24	37.94	37.26	36.98	37.15	37.20	37.14	37.83	37.68	41.01	42.02	41.44	40.99	40.60	40.73	41.08	40.81	40.62	40.19
28-D	30.59	31.25	32.59	33.34	33.16	32.14	34.07	32.22	33.64	33.01	NM	34.29	33.62	33.68	33.81	34.01	35.16	35.29	38.45	37.61	38.53	38.14	37.51	37.85	38.55	37.99	37.79	37.52
29-D	32.95	33.60	33.56	NA	35.21	35.33	36.46	35.38	36.46	35.95	NM	37.08	36.83	36.93	37.14	37.06	37.83	37.61	40.95	41.17	41.26	40.84	40.47	40.65	41.05	40.82	40.66	40.17
36-D	28.36	30.16	29.27	31.69	30.17	30.39	31.34	29.95	30.81	30.20	32.05	31.26	30.90	30.78	31.12	31.11	32.03	31.67	35.26	35.21	35.58	35.16	34.66	34.85	35.24	35.09	34.82	34.90
52-D	29.20	30.48	30.22	32.46	31.06	31.74	32.59	31.27	32.55	32.23	34.15	33.50	33.15	33.12	33.45	33.69	35.68	35.58	39.30	39.00	39.80	38.74	38.42	38.74	39.32	39.13	38.82	38.51
53-D	34.27	35.03	34.83	37.45	36.84	36.88	38.23	37.23	38.60	38.65	NM	39.19	39.09	38.87	39.11	39.31	40.22	39.85	43.60	43.32	43.75	42.88	42.67	42.99	43.47	43.18	42.98	42.21
B2 Aquifer																												
22-DD	15.86	21.08	18.24	19.10	12.42	22.84	15.46	15.93	22.15	18.37	NM	17.62	17.39	16.50	NM	20.81	33.97	34.17	39.19	37.90	40.08	37.30	37.39	38.21	39.20	38.99	38.67	38.29
27-DD	29.59	31.22	30.43	33.28	32.21	32.48	34.15	32.89	34.67	34.39	36.36	35.43	35.43	35.09	34.75	34.54	38.46	38.38	42.68	43.21	43.48	41.10	40.83	41.54	42.60	42.26	41.84	40.97
30-DD	15.44	20.14	18.07	19.16	13.22	15.16	16.04	15.06	17.11	19.06	16.48	16.40	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
36-DD	26.58	28.96	28.53	30.75	29.38	29.75	31.46	28.84	29.88	29.12	30.84	30.08	30.07	29.32	29.76	30.18	31.79	31.70	35.67	35.09	36.09	34.79	34.73	35.04	35.86	35.69	35.39	35.34
B3 Aquifer																												
35-DDD	27.12	29.33	27.94	30.58	29.51	30.41	32.47	30.11	33.21	33.02	NM	34.31	33.92	30.87	31.54	33.51	36.52	36.52	41.90	40.00	43.38	39.17	38.92	39.99	41.48	41.17	40.41	39.58

IA	Well inaccessible
NM	Not measured
DRY	No water in well
NI	NI - Not installed
NA	NA - Not available

Groundwater elevations are reported in feet above mean sea level (USGS Datum) through 2004, and feet NAVD88 since 2005
Top of casing elevations were resurveyed in October 1997, and again in December 2005. Groundwater elevations measured during subsequent monitoring events were calculated using resurveyed elevations.

* Water level measurement is believed to be inaccurate

APPENDIX C

Historical TCE, cDCE, and Total VOC Concentrations

APPENDIX C-I
HISTORICAL TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L)

	Extraction Wells								A-Zone Wells																	B1-Zone Wells									B2-Zone Wells				B3-Zone Well
Date	DW-1	DW-2	DW-3	DW-4	DW-5	DW-6	DW-7	DW-8	14-S	15-S	16-S	17-S	21-S	22-S	23-S	25-S	26-S	27-S	28-S	29-S	36-S	37-S	38-S	54-S	16-D	23-D	25-D	27-D	28-D	29-D	36-D	52-D	53-D	22-DD	27-DD	30-DD	36-DD	35-DDD
Apr-82	NS	NS	NS	NI	NI	NI	NI	NI	1	1	400	1	2100	6700	3700	1450	1400	1100	13000	99	NS	NS	NS	NI	1000	2200	600	320	29000	110	NS	NI	NI	11000	NS	740	NS	NI
Jun-82	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	17	NS	910	1800	1100	640	440	1100	14000	110	710	2600	1250	NI	3200	3900	600	140	16000	43	NS	NI	NI	280	250	2200	NS	NI
Jul-82	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	180	NS	NS	6500	5300	210	1200	1700	23000	110	NS	NS	NS	NI	NS	7900	170	260	30000	100	210	NI	NI	660	17	NS	40	NI
Aug-82	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	NS	NS	3900	NS	NS	NS	NS	NS	NS	NS	590	1400	2200	NI	NS	1600	NS	NS	NS	NS	500	NI	NI	420	NS	930	31	NI
May-83	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	110	NS	NS	NS	NS	NS	NS	NS	110000	NS	82	270	2000	NI	1700	2000	NS	NS	20000	NS	9200	NI	NI	26	NS	NS	990	NI
Jul-83	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NI	NS	1800	NS	NS	NS	NS	650	NI	NI	360	NS	NS	NS	NI
Sep-83	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	130	NS	NS	780	120	NS	780	2000	24000	NS	290	3200	4000	NI	46000	520	340	840	37000	NS	160	NI	NI	380	NS	NS	NS	NI
Mar-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	11	51	NS	810	390	410	1500	830	1100	73	58	150	450	NS	NI	420	1	440	290	27	310	110	NI	NI	500	15	610	1	NI
Apr-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	80	NS	920	650	310	1300	810	910	61	63	170	610	1700	NI	1000	370	440	370	18	450	130	NI	NI	580	9	610	NS	NI
May-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	75	NS	900	1360	420	1400	880	1200	150	340	160	600	1600	NI	1050	1300	NS	350	190	70	160	NI	NI	NS	39	530	11	NI
Jun-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	72	NS	1240	1860	270	1010	1370	950	300	100	220	510	1710	NI	620	190	590	330	560	810	170	NI	NI	840	2	690	1	NI
Jul-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	1	70	NS	1230	1940	480	1580	980	870	220	110	160	730	2380	NI	100	1410	540	300	160	380	160	NI	NI	NS	20	170	7	NI
Aug-85	NS	NS	NS	NI	NI	NI	NI	NI	1	NS	NS	4	1900	NS	800	NS	1560	1900	NS	185	280	620	NS	NI	NS	NS	960	640	NS	NS	NS	NI	NI	590	75	1260	12	NS
Sep-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	1200	NS	980	1900	920	1700	1200	1300	240	120	120	690	1800	NI	820	1400	430	430	220	430	130	NI	NI	470	28	780	13	7
Oct-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	940	NS	1000	1500	970	1800	1100	1200	170	160	130	420	2700	NI	230	4900	520	520	240	570	190	NI	NI	330	100	770	53	8
Nov-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	540	23	1200	2300	1400	1500	1440	1200	230	115	136	340	3000	NI	950	1100	690	530	130	560	150	NI	NI	350	59	720	9	5
Dec-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	1	450	NS	1100	2800	1100	2200	1200	1600	300	110	150	690	2200	NI	630	3200	460	510	120	590	1	NI	NI	760	37	690	9	4
Jan-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	260	NS	1100	2400	570	2100	950	2200	1500	160	160	1	1800	NI	290	540	620	450	460	570	120	NI	NI	520	23	9	9	NS
Feb-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	490	NS	1100	2200	1100	1400	720	780	820	150	130	470	1100	NI	260	570	450	510	510	670	180	NI	NI	490	350	700	12	1
Apr-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	1	350	NS	750	1500	700	1030	430	1200	2200	150	45	360	2000	NI	1100	1300	380	250	830	310	70	NI	NI	450	94	130	2	1
Jun-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	1	NS	70	1200	590	1700	870	1500	1800	160	110	640	2500	NI	600	1400	600	310	860	340	130	NI	NI	660	140	370	14	4
Sep-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	2900	NS	1100	1000	780	3500	840	1500	2000	150	NR	620	2400	NI	150	1600	590	310	1100	440	120	NI	NI	520	330	480	9	1
Oct-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	69	NS	830	880	890	1900	550	1300	1800	84	68	290	1100	NI	350	2000	420	170	1100	510	55	NI	NI	340	110	2	13	2
Dec-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	52	NS	770	410	740	1700	230	1000	2200	230	110	700	1700	NI	490	1800	450	360	340	470	99	NI	NI	360	250	14	18	1
Feb-87	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	26	NS	320	290	540	1500	410	1600	580	100	52	350	890	NI	260	520	440	150	300	290	74	NI	NI	380	170	43	11	1
Apr-87	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	51	NS	490	540	850	1300	610	1800	650	140	120	560	910	NI	370	1900	570	230	280	190	130	NI	NI	520	210	29	22	1
Jun-87	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	24	NS	480	550	750	1600	660	1600	1200	84	99	600	1400	NI	310	1800	300	340	620	390	110	NI	NI	560	330	13	8	1
Aug-87	NS	NS	NS	NI	NI	NI	NI	NI	ND	NS	30	ND	680	440	550	1200	420	1500	2400	190	120	760	1600	NI	240	1900	400	390	1200	280	88	NI	NI	550	410	11	17	1
Oct-87	NS	NS	NS	NI	NI	NI	NI	NI	ND	NS	35	ND	ND	370	500	1400	640	1500	1700	160	85	540	1300	NI	380	1500	320	ND	1200	460	78	NI	NI	490	290	8	24	1
Dec-87	NS	NS	NS	NI	NI	NI	NI	NI	ND	NS	23	ND	400	190	530	700	410	1100	540	NR	65	340	1100	NI	140	500	290	170	540	370	65	NI	NI	650	250	5	13	1
Mar-88	NS	NS	NS	NI	NI	NI	NI	NI	ND	NS	ND	1	480	190	480	940	480	1300	680	95	60	500	1400	NI	560	1100	290	380	240	590	78	NI	NI	170	260	14	22	ND
Jun-88	NS	NS	NS	500	52	4	NI	NI	ND	1	ND	ND	560	690	300	1100	760	1800	1600	170	180	790	2200	NI	190	480	440	180	300	610	170	NI	NI	460	420	28	25	ND
Sep-88	NS	NS	NS	300	38	19	NI	NI	ND	NS	110	ND	629	470	210	750	520	1600	1000	180	150	480	1800	NI	450	850	480	470	130	400	98	NI	NI	520	450	9.4	54	0.9
Dec-88	NS	NS	330	225	39	ND	NI	NI	ND	NS	ND	ND	280	310	ND	NS	800	1500	1100	120	140	740	NS	NI	440	220	370	370	140	460	140	NI	NI	480	580	38	69	ND
Mar-89	NS	NS	190	ND	NS	NS	NI	NI	NS	ND	190	NS	525	NS	440	400	NS	2100	NS	140	140	370	NS	NI	440	1300	500	420	210	480	140	NI	NI	360	430	38	64	0.5
Jun-89	NS	NS	NS	NS	NS	NS	NI	NI	NS	ND	NS	ND	470	NS	110	290	NS	NS	330	3	120	NS	1400	NI	430	1100	320	270	210	330	170	NI	NI	760	320	65	30	1
Oct-89	NS	NS	NS	NS	NS	NS	NI	NI	NS	ND	NS	NS	510	NS	NS	NS	NS	NS	NS	NS	87	130	650	1	390	2700	370	330	180	390	87	450	ND	740	290	NS	25	3
Jan-90	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	490	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	230	1200	390	280	73	390	95	300	NS	480	280	98	29	1
Apr-90	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1	350	1500	57	420	58	310	110	240	ND	500	320	210	28	ND
Jul-90	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	300	1400	450	390	96	570	120	360	NS	720	370	250	41	1
Oct-90	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	26	NS	NS	2	400	1300	500	350	97	520	160	260	ND	750	360	770	26	0.5
Jan-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	38	NS	NS	NS	NS	NS	NS	NS	60	NS	NS	NS	NS	NS	855	1500	450	350	64	455	110	440	NS	750	365	NS	33	2
Apr-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	45	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	2	840	970	420	400	160	550	110	190	1	440	370	160	27	1
Jul-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	620	1400	400	390	210	450	110	320	NS	720	290	670	38	1
Oct-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	800	1100	390	320	190	400	130	180	ND	640	250	68	42	0.8
Jan-92	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20	NS	NS	NS	820	930	400	370	100	410	110	200	NS	650	280	15	20	ND
Apr-92	NS	NS	NS	NS	NS	NS	NI	NI	ND	NS	67	ND	220	NS	NS	NS	NS	NS	110	NS	50	NS	NS	ND	200	980	120	230	86	120	120	170	ND	230	230	66	25	1.2
Jul-92	NS	NS	NS	NS	NS	NS	NI	NI	ND	NS	69	NS	710	110	15	NS	NS	NS	NS	NS	56	NS	NS	3	460	1100	400	370	130	400	130	330	NS	470	370	240	24	0.9
Oct-92	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	50	NS	ND	NS	6	NS	NS	NS	140	NS	47	NS	NS	15	150	810	90	230	130	380	100	120	2.4	200	280	140	25	2
Jan-93	NS	NS	NS	NS	NS	NS	790	21	ND	NS	NS	ND	1090	44	8	NS	NS	NS	140	NS	62	NS	380	ND	820	1200	NS	NS	130	NS	NS	NS	NS	430	NS	20	NS	ND
Apr-93	NS	NS	NS	NS	NS	NS	400	12	ND	ND	64	ND	670	140	12	NS	44	440	160	110	51	740	660	1	240	950	730	380	110	71	85	340	4.1	270	110	23	36	2.9
Jul-93	NS	NS	NS	NS	NS	NS	NS	240	ND	ND	81	2	570	82	36	28	33	540	160	80	70	610	NS	2	500	1200	NS	NS	160	NS	NS	NS	NS	310	NS	51	NS	4.4

APPENDIX C-I
HISTORICAL TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L)

	Extraction Wells								A-Zone Wells																	B1-Zone Wells									B2-Zone Wells				B3-Zone Well
Date	DW-1	DW-2	DW-3	DW-4	DW-5	DW-6	DW-7	DW-8	14-S	15-S	16-S	17-S	21-S	22-S	23-S	25-S	26-S	27-S	28-S	29-S	36-S	37-S	38-S	54-S	16-D	23-D	25-D	27-D	28-D	29-D	36-D	52-D	53-D	22-DD	27-DD	30-DD	36-DD	35-DDD
Oct-93	NS	NS	NS	NS	NS	NS	520	160	ND	ND	60	ND	400	94	10	NS	NS	330	110	54	60	430	NS	1	260	760	370	290	120	140	NS	92	NS	360	320	460	NS	4
Jan-94	NS	NS	NS	NS	NS	NS	NS	280	ND	ND	60	ND	400	68	33	4	39	450	160	39	48	280	NS	ND	170	1100	NS	NS	130	NS	NS	NS	NS	300	NS	360	NS	3
Apr-94	NS	NS	NS	NS	NS	NS	390	290	ND	ND	61	ND	450	62	30	10	34	370	210	40	43	400	NS	4	120	950	350	350	140	390	88	160	ND	280	420	32	57	2.3
Jul-94	NS	NS	NS	NS	NS	NS	440	270	ND	ND	58	2	480	100	16	2	63	390	140	130	39	400	950	1	140	290	NS	NS	120	NS	NS	NS	NS	270	NS	35	NS	5.2
Oct-94	NS	NS	NS	NS	NS	NS	460	350	ND	ND	86	1	530	120	10	50	86	670	130	190	22	400	210	1	180	780	350	280	120	300	NS	7.1	NS	480	290	58	NS	2
Jan-95	NS	NS	NS	NS	NS	NS	370	350	ND	ND	42	1	370	84	20	8	82	530	130	72	ND	310	580	ND	120	460	NS	NS	100	NS	NS	NS	NS	110	NS	5.9	NS	NS
Apr-95	NS	NS	NS	NS	NS	NS	420	240	ND	ND	1.2	ND	340	91	37	7.5	97	490	160	120	17	270	630	0.8	270	640	410	260	120	300	56	250	0.6	120	460	30	47	1.9
Jul-95	NS	NS	NS	NS	NS	NS	110	240	ND	ND	52	ND	460	100	28	4.7	380	620	180	140	24	420	810	1.1	280	810	NS	NS	160	NS	NS	NS	NS	270	NS	210	NS	1.8
Oct-95	NS	NS	NS	NS	NS	NS	390	330	ND	ND	84	NS	920	120	40	11	380	800	220	190	20	410	1300	1.2	270	710	310	280	170	300	NS	14	NS	350	770	420	NS	2.6
Apr-96	1900	NS	210	120	74	390	330	250	ND	ND	85	2.2	380	68	45	11	290	640	190	88	7.9	250	710	1.5	110	540	63	220	140	350	11	45	ND	210	410	270	44	0.6
Oct-96	NS	NS	NS	NS	NS	NS	240	240	NS	NS	38	NS	320	94	7	14	NS	750	180	110	NS	NS	370	NS	39	310	220	190	140	200	NS	21	NS	92	320	93	NS	0.8
Apr-97	1600	NS	190	95	78	230	250	200	ND	ND	46	1.9	340	130	14	87	120	430	370	82	21	170	120	1.4	80	340	18	220	200	91	32	56	ND	200	260	15	18	1.4
Oct-97	2200	NS	180	170	75	230	220	NS	ND	ND	50	4.4	290	120	22	74	120	640	310	100	20	260	160	1.5	120	250	200	190	150	210	52	0.7	ND	210	310	49	13	1.8
Apr-98	1400	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	81	NS	NS	NS	NS	NS	11	NS
Oct-98	910	NS	NS	NS	93	NS	NS	260	ND	ND	34	10	190	70	NS	39	NS	NS	340	95	7.2	NS	NS	NS	67	240	NS	NS	NS	180	1.1	0.7	ND	210	NS	NS	11	1.6
May-99	NS	NS	190	240	52	210	230	230	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-99	1800	NS	NS	260	86	280	240	230	ND	NS	44	15	230	38	16	32	NS	810	550	71	100	83	NS	NS	56	300	NS	200	370	150	3.2	190	ND	220	290	NS	6.4	ND
Jan-00	NS	NS	NS	71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	730	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.2 *	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-00	1100	12	NS	280	110	190	210	210	ND	NS	33	14	NS	27	6.3	110	NS	620	370	52	83	200	NS	NS	31	170	NS	190	360	160	110	4.2	3.8	NS	200	NS	6.4	1
Oct-01	1400	12	NS	250	100	240	250	250	ND	NS	25	22	NS	26	3.1	62	NS	680	270	30	140	150	NS	NS	82	180	NS	140	470	160	67	5.4	4.1	NS	300	NS	11	1
Oct/Nov-02	730	NS	NS	250	110	240	210	270	ND	NS	43	38	NS	33	9.4	84	NS	910	330	25	140	170	NS	NS	130	200	NS	190	290	58	150	24	5.6	120	320	NS	8.1	0.6
Oct-03	13000	NS	NS	29	61	210	250	270	ND	NS	8.9	41	NS	71	17	2.7	NS	960	71	49	100	160	NS	NS	95	220	NS	63	250	0.6	110	13	3.3	180	220	NS	1.2	ND
Oct-04	16000	NS	NS	50	8.6	1.2	230	250	ND	NS	5.1	40	NS	130	25	67	NS	520	NS	84	91	110	NS	NS	300	250	NS	25	11	1.1	85	ND	1.8	9	190	NS	0.5	ND
Oct-05	18000	NS	NS	NS	NS	NS	NS	NS	ND	NS	3	42	NS	190	33	86	NS	480	41	20	91	91	NS	NS	110	110	NS	36	160	1.3	4.6	29	1.2	2.8	110	NS	ND	ND
Oct-06	NS	NS	NS	NS	NS	NS	NS	11	ND	NS	1	58	NS	2.3	29	NS	NS	340	1.2	32	98	83	NS	NS	1.5	3.1	NS	58	1.3	3.6	92	32	1.3	1.1	93	NS	0.8	0.5
Oct-07	ND	NS	NS	NS	NS	NS	160	NS	ND	30	0.9	72	NS	6.5	52	NS	NS	130	ND	16	70	81	NS	NS	1.7	210	NS	120	ND	53	17	37	5.0	3.7	79	NS	1.5	ND
Oct-08	2.5	0.6	NS	NS	NS	NS	17	NS	NS	15	ND	NS	NS	7.8	29	NS	NS	280	1.6	25	98	81	NS	NS	1.7	300	NS	130	0.9	49	27	33	6.9	140	94	NS	1.6	ND
Oct-09	ND	ND	NS	NS	NS	NS	6	NS	NS	13	1	NS	NS	7.7	17	NS	NS	330	0.5	13	80	91	NS	NS	7	180	NS	110	1.4	89	19	29	7	94	83	NS	1.3	ND
Oct-10	0.6	0.5	NS	NS	NS	NS	5.2	NS	NS	11	ND	NS	NS	16	9.5	NS	NS	300	ND	18	75	60	NS	NS	ND	160	NS	110	1.5	35	47	35	6.9	97	59	NS	ND	ND
Oct-11	18	1.3	NS	NS	NS	NS	2.1	NS	NS	3.4	ND	NS	NS	23	19	NS	NS	270	ND	62	73	63	NS	NS	ND	260	NS	110	0.6	60	29	27	5.8	150	52	NS	2.6	ND
Oct-12	0.9	ND	NS	NS	NS	NS	1.6	NS	NS	6.2	ND	NS	NS	17	30	NS	NS	270	ND	29	80	63	NS	NS	ND	280	NS	94	ND	49	47	31	6.9	150	60	NS	3.2	ND
Oct-13	0.7	ND	NS	NS	NS	NS	11	NS	NS	7.0	ND	NS	NS	28	37	NS	NS	230	ND	26	74	95	NS	NS	ND	280	NS	88	ND	28	38	32	6.9	170	37	NS	ND	ND
Oct-14	ND	ND	NS	NS	NS	NS	ND	NS	NS	2.3	ND	NS	NS	36	36	NS	NS	210	ND	23	73	83	NS	NS	ND	280	NS	110	ND	55	56	33	5.8	180	44	NS	ND	ND

ND	Not Detected
NI	Not Installed
NS	Not Sampled

APPENDIX C-II
HISTORICAL cis-1,2-DICHLOROETHENE CONCENTRATIONS IN GROUNDWATER
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L)

	Extraction Wells								A-Zone Wells																	B1-Zone Wells									B2-Zone Wells				B3-Zone Well
Date	DW-1	DW-2	DW-3	DW-4	DW-5	DW-6	DW-7	DW-8	14-S	15-S	16-S	17-S	21-S	22-S	23-S	25-S	26-S	27-S	28-S	29-S	36-S	37-S	38-S	54-S	16-D	23-D	25-D	27-D	28-D	29-D	36-D	52-D	53-D	22-DD	27-DD	30-DD	36-DD	35-DDD
Apr-82	NS	NS	NS	NI	NI	NI	NI	NI	1	1	2700	1	10	4200	3600	10	160	120	700	5	NS	NS	NS	NI	810	4600	10	10	1300	5	NS	NI	NI	8200	NS	5	NS	NI
Jun-82	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	1	NS	750	1520	750	1	37	2	1400	2	10	10	10	NI	46	6800	2	9	2800	1	NS	NI	NI	770	2	170	NS	NI
Jul-82	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	2100	NS	NS	17000	5500	28	110	4	4500	4	NS	NS	NS	NI	NS	2700	14	4	5100	4	5	NI	NI	NS	4	NS	5	NI
Aug-82	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	NS	NS	3300	NS	NS	NS	NS	NS	NS	NS	55	27	300	NI	NS	NS	NS	NS	NS	NS	52	NI	NI	1700	NS	110	3	NI
May-83	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	2400	NS	NS	NS	NS	NS	NS	NS	70000	NS	1	17	350	NI	35	NS	NS	NS	12000	NS	1	NI	NI	44	NS	NS	120	NI
Jul-83	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NI	NS	NS	NS	NS	NS	NS	38	NI	NI	NS	NS	NS	NS	NI
Mar-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	1	1300	NS	210	920	3300	7	45	12	1500	9	13	27	NS	NI	1200	5700	21	8	1800	14	13	NI	NI	110	6	38	44	NI
Apr-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	2500	NS	140	1400	4800	6	43	11	1100	8	14	21	210	NI	870	3400	16	9	1100	13	10	NI	NI	82	1	10	NS	NI
May-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	4100	NS	106	1800	3900	6	38	14	1800	8	10	22	200	NI	660	4800	NS	45	1100	18	13	NI	NI	NS	10	9	31	NI
Jun-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	5200	NS	80	2090	1070	4	26	6	1420	10	10	12	180	NI	540	1610	10	6	1470	13	9	NI	NI	34	1	7	6	NI
Jul-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	1	6300	NS	63	2630	1071	5	29	8	960	10	7	1	250	NI	63	4300	14	6	610	1	11	NI	NI	NS	5	3	1	NI
Aug-85	NS	NS	NS	NI	NI	NI	NI	NI	1	NS	NS	20	490	NS	1000	NS	100	45	NS	40	64	70	NS	NI	NS	NS	96	47	NS	NS	NS	NI	NI	390	1	18	45	NS
Sep-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	3100	NS	81	2300	1200	11	21	19	1400	12	6	23	190	NI	890	2200	12	8	1200	16	8	NI	NI	430	6	4	11	2
Oct-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	3800	NS	78	2500	1100	1	16	16	1200	8	7	4	190	NI	250	4200	11	8	1100	11	13	NI	NI	67	100	8	25	1
Nov-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	4500	7	141	2200	1800	1	42	56	1100	6	7	15	270	NI	1600	4200	15	8	1100	10	9	NI	NI	420	8	5	13	1
Dec-85	NS	NS	NS	NI	NI	NI	NI	NI	NS	1	6100	NS	100	3500	1700	1	28	1	1700	6	10	1	270	NI	3000	9100	270	37	1200	14	8	NI	NI	1000	3	9	13	1
Jan-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	5900	NS	80	1700	1300	1	22	1	3900	14	9	14	180	NI	4600	5700	12	9	1900	13	10	NI	NI	1	1	100	14	NS
Feb-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	2600	NS	78	1800	1700	15	15	1	3900	21	7	11	100	NI	4000	6000	14	10	3100	14	12	NI	NI	530	10	6	16	1
Apr-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	1	9600	NS	40	920	2000	1	11	1	3200	19	4	7	140	NI	3100	9600	7	6	2400	11	5	NI	NI	920	2	5	7	8
Jun-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	6600	NS	6	1200	2000	60	15	21	9200	20	6	20	150	NI	1600	2200	13	8	8000	10	9	NI	NI	610	4	5	20	10
Aug-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	6600	NS	61	880	1700	1	16	10	13000	11	NS	15	97	NI	590	1400	10	7	9700	10	8	NI	NI	1100	8	4	16	1
Oct-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	1100	NS	56	1300	1500	410	13	11	6300	12	6	25	120	NI	670	4100	1	8	7300	10	7	NI	NI	660	3	10	30	4
Dec-86	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	440	NS	870	700	1400	1	6	5	4500	9	5	31	100	NI	590	5100	9	4	5100	42	4	NI	NI	1300	6	150	9	1
Feb-87	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	290	NS	1200	1800	1500	1	19	1	4800	13	6	26	210	NI	430	3700	9	6	5300	10	6	NI	NI	500	12	6	44	3
Apr-87	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	620	NS	230	2200	2200	1	11	43	4600	13	7	22	140	NI	530	980	10	5	5300	5	15	NI	NI	2400	5	14	34	1
Jun-87	NS	NS	NS	NI	NI	NI	NI	NI	NS	NS	550	NS	120	1500	1100	1	10	26	9800	3	5	25	340	NI	520	230	5	7	12000	3	4	NI	NI	1800	5	22	16	1
Aug-87	NS	NS	NS	NI	NI	NI	NI	NI	1	NS	350	1	53	1200	980	ND	ND	ND	1400	5	7	18	320	NI	560	1200	ND	ND	14000	8	10	NI	NI	1800	6	24	40	1
Oct-87	NS	NS	NS	NI	NI	NI	NI	NI	ND	NS	400	ND	38	850	930	ND	ND	ND	7800	4	55	ND	150	NI	660	1600	13	ND	8600	ND	15	NI	NI	1600	ND	5	37	1
Dec-87	NS	NS	NS	NI	NI	NI	NI	NI	ND	NS	630	ND	30	320	850	ND	ND	ND	ND	NS	5	38	210	NI	700	750	ND	12	8000	ND	16	NI	NI	1400	ND	25	19	2
Mar-88	NS	NS	NS	NI	NI	NI	NI	NI	ND	NS	3000	ND	ND	320	700	ND	7	ND	5400	6	15	ND	70	NI	1100	760	ND	ND	4600	590	17	NI	NI	79	ND	9	13	ND
Jun-88	NS	NS	NS	8600	1	21	NI	NI	ND	ND	2000	ND	27	710	1100	ND	10	24	2300	5	32	ND	190	NI	1100	1400	ND	5	3100	ND	39	NI	NI	1200	3	21	20	ND
Sep-88	NS	NS	NS	5770	ND	8	NI	NI	ND	NS	2353	ND	33	500	1600	ND	ND	ND	1200	ND	16	ND	67	NI	1100	3000	ND	4	1600	ND	21	NI	NI	760	ND	3	22	ND
Dec-88	NS	NS	164	8225	ND	6	NI	NI	1	NS	2800	ND	ND	470	3800	NS	10	40	760	4	15	ND	NS	NI	1280	1800	6	ND	1600	ND	40	NI	NI	1200	ND	38	26	ND
Mar-89	NS	NS	33	6100	NS	NS	NI	NI	NS	ND	2800	NS	55	NS	2600	ND	NS	40	NS	79	21	40	NS	NI	1300	3500	11	ND	1300	ND	35	NI	NI	760	ND	13	28	ND
Jun-89	NS	NS	NS	NS	NS	NS	NI	NI	ND	ND	NS	ND	50	NS	1200	ND	NS	NS	170	1	17	NS	180	NI	650	2400	8	ND	1200	ND	51	NI	NI	650	ND	41	20	ND
Oct-89	NS	NS	NS	NS	NS	NS	NI	NI	ND	ND	NS	NS	120	NS	NS	NS	NS	NS	NS	NS	8	ND	140	ND	480	790	16	ND	770	ND	8	ND	ND	560	ND	52	22	ND
Jan-90	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	460	670	ND	ND	400	ND	13	ND	NS	170	ND	6	9	1
Apr-90	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	420	NS	NS	NS	NS	NS	NS	NS	NS	NS	2	NS	NS	ND	850	530	4	14	270	ND	14	ND	ND	290	ND	27	5	ND
Jul-90	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	730	620	18	ND	250	ND	14	ND	NS	320	ND	36	13	ND
Oct-90	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1	NS	NS	ND	510	400	ND	ND	300	ND	15	ND	ND	230	ND	40	7	ND
Jan-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	170	NS	NS	NS	NS	NS	NS	NS	62	NS	NS	NS	NS	NS	455	420	ND	ND	220	ND	15	ND	NS	260	ND	NS	7	ND
Apr-91	NS	NS	NS	NS	NS	NS	NI	NI	ND	NS	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	ND	280	520	12	ND	245	ND	15	ND	ND	150	ND	25	6	ND
Jul-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	250	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	230	690	13	ND	1830	ND	14	ND	NS	260	ND	58	9	1
Oct-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	810	1500	ND	ND	760	ND	13	ND	ND	220	ND	22	ND	ND
Jan 92	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	490	360	8	ND	500	ND	11	ND	NS	56	ND	5	5	ND
Apr 92	NS	NS	NS	NS	NS	NS	NI	NI	ND	NS	102	ND	127	NS	NS	NS	NS	NS	54	NS	ND	NS	NS	ND	242	494	7	3	92	3	ND	3	ND	155	3	ND	ND	ND
Jul 92	NS	NS	NS	NS	NS	NS	NI	NI	ND	NS	174	NS	332	717	558	NS	NS	NS	NS	NS	2	NS	NS	ND	616	102	9	5	135	5	12	5	NS	1115	7	15	7	ND
Oct 92	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	205	NS	32	NS	197	NS	NS	NS	146	NS	5	NS	NS	3	123	715	3	7	158	7	11	1	ND	8053	19	24	13	ND
Jan 93	NS	NS	NS	NS	NS	NS	59	8	ND	NS	NS	ND	821	394	475	NS	NS	NS	660	NS	2	NS	684	ND	389	2203	NS	NS	795	NS	NS	NS	NS	3613	NS	11	NS	ND
Apr 93	NS	NS	NS	NS	NS	NS	81	ND	ND	ND	78	ND	707	1616	741	NS	170	157	373	3	5	20	525	ND	1027	1504	10	ND	1720	2	4	6	4	2420	2	19	11	ND
Jul 93	NS	NS	NS	NS	NS	NS	NS	3	ND	ND	84	ND	703	575	854	6	241	171	340	ND	ND	21	NS	ND	598	663	NS	NS	1538	NS	NS	NS	NS	1917	NS	27	NS	1
Oct 93	NS	NS	NS	NS	NS	NS	146	2	ND	ND	44	ND	379	354	434	NS	NS	73	336	12	2	9	NS	ND	415	990	7	4	448	1	NS	3	NS	1660	6	18	NS	1

APPENDIX C-II
HISTORICAL cis-1,2-DICHLOROETHENE CONCENTRATIONS IN GROUNDWATER
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L)

	Extraction Wells								A-Zone Wells																	B1-Zone Wells									B2-Zone Wells				B3-Zone Well
Date	DW-1	DW-2	DW-3	DW-4	DW-5	DW-6	DW-7	DW-8	14-S	15-S	16-S	17-S	21-S	22-S	23-S	25-S	26-S	27-S	28-S	29-S	36-S	37-S	38-S	54-S	16-D	23-D	25-D	27-D	28-D	29-D	36-D	52-D	53-D	22-DD	27-DD	30-DD	36-DD	35-DDD
Jan 94	NS	NS	NS	NS	NS	NS	NS	9	ND	ND	37	ND	606	386	797	13	221	83	605	45	1	7	NS	ND	538	577	NS	NS	879	NS	NS	NS	NS	798	NS	21	NS	1
Apr 94	NS	NS	NS	NS	NS	NS	118	ND	ND	ND	37	ND	518	293	487	24	260	34	222	7	2	8	NS	ND	352	430	7	4	696	4	2	3	ND	1246	7	22	8	ND
Jul 94	NS	NS	NS	NS	NS	NS	115	ND	ND	ND	67	0.9	592	285	637	16	302	46	525	5	0.6	13	362	ND	378	306	NS	NS	648	NS	NS	NS	NS	138	NS	17	NS	1
Oct-94	NS	NS	NS	NS	NS	NS	72	6	ND	ND	156	ND	780	331	985	7	181	40	786	2	ND	6	151	ND	510	687	4	2	837	4	NS	ND	NS	156	5	14	NS	0.6
Jan-95	NS	NS	NS	NS	NS	NS	84	5.8	ND	ND	68	ND	543	386	515	ND	15	25	309	0.8	ND	25	501	ND	278	733	NS	NS	550	NS	NS	NS	NS	1948	NS	9.3	NS	ND
Apr-95	NS	NS	NS	NS	NS	NS	98.7	7.1	ND	ND	149	ND	480	264	1025	29	92	21	577	4.7	ND	4.9	223	ND	247	686	8.8	3.9	640	4.3	8.6	3.6	0.7	1448	13	7.7	13	ND
Jul-95	NS	NS	NS	NS	NS	NS	499	2.3	ND	ND	58	ND	514	204	613	8.8	152	51.1	719	6.2	1.1	6	222	ND	327	633	NS	NS	709	NS	NS	NS	NS	723	NS	77	NS	ND
Oct-95	NS	NS	NS	NS	NS	NS	84	ND	ND	ND	150	ND	330	410	888	14	87	20	903	ND	ND	ND	140	ND	220	460	ND	ND	864	ND	NS	ND	NS	400	ND	92	NS	ND
Apr-96	1638	NS	31	770	120	13	147	7.2	ND	ND	ND	11	405	172.3	693	5.2	84	20	644	3.2	ND	3.2	364	ND	ND	518	2.9	2.2	556	4.1	12	ND	ND	354	8	79	0.6	ND
Oct-96	NS	NS	NS	NS	NS	NS	54	ND	NS	NS	93	NS	170	310	270	3.5	NS	ND	490	ND	NS	NS	550	NS	232	440	2.9	ND	390	ND	NS	ND	NS	470	5.3	8.9	NS	ND
Apr-97	980	NS	8.6	188	56	11	80	2.8	ND	ND	96	55	391	366	299	4.3	47	21	404	16	6	7.8	404	ND	303	562	9	4.8	459	4.7	45	1.3	ND	736	15	11	42.7	ND
Oct-97	1400	NS	17	410	53	14	86	NS	1.9	ND	90	85	286	194	228	5.4	49	32	387	5.4	21	12	520	ND	236	230	5.2	4.5	371	6.9	92	ND	ND	194	18	20	50	ND
Apr-98	830	NS	NS	NS	NS	NS	NS	NS	2.2	NS	NS	NS	NS	NS	NS	6.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130	NS	NS	NS	ND	NS	42	NS
Oct-98	890	NS	NS	NS	67	NS	NS	6	3.5	ND	34	230	40	180	NS	7	NS	23	330	10	13	NS	NS	NS	200	160	NS	2.4	NS	4.1	2	ND	ND	320	9.2	NS	69	ND
May-99	NS	NS	8.5	220	20	7	86	25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-99	1505	NS	NS	230	54	11	91.5	22	ND	NS	66	200	28	260	220	ND	NS	81	708	7.9	167.7	147.1	NS	NS	23	220	NS	ND	575	ND	ND	4.2	ND	298.5	18	NS	97	ND
Jan-00	NS	NS	NS	73	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	57	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	199	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-00	940	NS	NS	190	140	13	68	20	21	NS	79	180	NS	170	180	12	NS	45	210	6.9	100	9.7	NS	NS	160	290	NS	3.2	400	4.9	97	ND	ND	NS	11	NS	100	ND
Oct-01	890	NS	NS	140	160	13	82	15	96	NS	62	180	NS	150	150	40	NS	62	91	3.7	110	2.5	NS	NS	190	270	NS	2.5	240	2.9	48	ND	ND	NS	17	NS	110	ND
Oct/Nov-02	490	NS	NS	120	150	22	88	14	120	NS	60	170	NS	180	170	58	NS	72	83	9.3	70	3.7	NS	NS	170	220	NS	4.4	280	1.6	90	31	ND	690	14	NS	130	ND
Oct-03	13000	NS	NS	150	28	26	97	91	160	NS	160	140	NS	250	210	0.6	NS	110	85	4	53	2.9	NS	NS	340	150	NS	71	91	0.7	57	33	4.5	300	16	NS	29	ND
Oct-04	14000	NS	NS	87	18	2.1	100	18	150	NS	26	90	NS	190	240	37	NS	160	NS	5.3	34	3.3	NS	NS	520	92	NS	32	34	ND	46	1.3	6.9	150	8.6	NS	31	ND
Oct-05	17000	NS	NS	NS	NS	NS	NS	NS	140	NS	27	61	NS	180	96	74	NS	75	29	1.7	22	5.2	NS	NS	140	74	NS	26	54	ND	1.5	2.1	4.4	160	4.7	NS	73	ND
Oct-06	NS	NS	NS	NS	NS	NS	69	99	130	NS	18	65	NS	14	67	NS	NS	27	3.3	1.7	20	8.5	NS	NS	50	47	NS	15	7.3	72	42	2.2	0.7	10	3.2	NS	22	ND
Oct-07	NS	NS	NS	NS	NS	NS	NS	NS	120	2.1	19	57	NS	27	60	NS	NS	6.4	1.5	0.8	15	2.4	NS	NS	20	28	NS	1.4	2.0	0.7	6.1	1.4	ND	96	2.2	NS	22	ND
Oct-08	NS	NS	NS	NS	NS	NS	NS	NS	NS	16	4.2	NS	NS	41	130	NS	NS	23	8.1	1.7	13	3.6	NS	NS	2.5	8	NS	2.5	12	0.9	5.8	1.7	ND	21	2.4	NS	24	ND
Oct-09	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.1	18	NS	NS	31	200	NS	NS	52	18	1	9.3	2.2	NS	NS	240	350	NS	1.5	10	11	40	1	ND	84	2.9	NS	35	ND
Oct-10	1.2	1.1	NS	NS	NS	NS	52	NS	NS	9.3	6.9	NS	NS	25	350	NS	NS	79	6.1	1.6	11	3.7	NS	NS	180	360	NS	1.9	15	1.5	34	1.8	ND	78	3.9	NS	14	ND
Oct-11	7.4	0.7	NS	NS	NS	NS	36	NS	NS	3.6	2	NS	NS	27	270	NS	NS	66	0.6	2.8	8	2.3	NS	NS	14	7.4	NS	1.7	0.8	0.9	34	1.1	ND	12	3.1	NS	10	ND
Oct-12	1.8	ND	NS	NS	NS	NS	26	NS	NS	5.0	3.2	NS	NS	25	120	NS	NS	64	3.5	2.2	10	2.5	NS	NS	16	4.6	NS	2.1	1.9	1.2	29	1.7	ND	18	3.5	NS	24	ND
Oct-13	0.6	2.0	NS	NS	NS	NS	150	NS	NS	6.1	2.0	NS	NS	23	130	NS	NS	110	4.4	1.5	8.1	1.6	NS	NS	22	6.6	NS	1.3	0.8	0.6	28	1.4	ND	3.8	5.8	NS	11	ND
Oct-14	ND	0.5	NS	NS	NS	NS	9.3	NS	NS	1.5	1.6	NS	NS	28	130	NS	NS	180	10	1.3	13	2.7	NS	NS	3.3	4.7	NS	2.4	2.0	0.9	23	1.3	ND	5.5	4.6	NS	7.1	ND

ND	Not Detected
NI	Not Installed
NS	Not Sampled

APPENDIX C-III
HISTORICAL TOTAL VOLATILE ORGANIC COMPOUND CONCENTRATIONS IN GROUNDWATER
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

Concentrations reported in micrograms per liter (µg/L)

Well	Extraction Wells								A-Zone Wells																B1-Zone Wells									B2-Zone Wells				B3-Zone Well
ID	DW-1	DW-2	DW-3	DW-4	DW-5	DW-6	DW-7	DW-8	14-S	15-S	16-S	17-S	21-S	22-S	23-S	25-S	26-S	27-S	28-S	29-S	36-S	37-S	38-S	54-S	16-D	23-D	25-D	27-D	28-D	29-D	36-D	52-D	53-D	22-DD	27-DD	30-DD	36-DD	35-DDD
Jan-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	208	NS	NS	NS	NS	NS	NS	NS	122	NS	NS	NS	NS	NS	1310	1920	474	369	348	486	125	462	NS	1010	384	103	40	2
Apr-91	NS	NS	NS	NS	NS	NS	NI	NI	ND	NS	235	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	4	1160	1515	464	432	405	582	125	197	4	590	399	192	33	1
Jul-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	363	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	857	2090	449	410	2830	483	129	341	NS	987	304	728	48	1
Oct-91	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.6	1692	2600	390	320	1170	400	143	190	4.4	898	250	95	42	0.8
Jan-92	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	21	NS	NS	NS	1332	1290	433	393	820	436	121	211	NS	706	290	25	25	ND
Apr-92	NS	NS	NS	NS	NS	NS	NI	NI	1.5	NS	217	1.4	374	NS	NS	NS	NS	NS	169	NS	53	NS	NS	ND	469	1485	145	262	202	133	123	197	ND	441	259	66	25	1.2
Jul-92	NS	NS	NS	NS	NS	NS	NI	NI	ND	NS	263	NS	1065	841	757	NS	NS	NS	NS	NS	64	NS	NS	4.5	1161	1238	461	411	287	441	149	366	NS	1660	408	274	31	0.9
Oct-92	NS	NS	NS	NS	NS	NS	NI	NI	NS	NS	352	NS	255	NS	445	NS	NS	NS	330	NS	57	NS	NS	21	301	1554	125	254	339	415	119	132	4.6	8392	318	177	40	1.6
Jan-93	NS	NS	NS	NS	NS	NS	850	29	ND	NS	NS	ND	1967	454	584	NS	NS	NS	920	NS	64	NS	1089	ND	1275	3453	NS	NS	1124	NS	NS	NS	NS	4069	NS	35	NS	ND
Apr-93	NS	NS	NS	NS	NS	NS	536	12	ND	ND	154	4	2236	1932	2375	NS	218	616	751	128	60	767	1198	4.3	1457	2577	813	423	2115	81	94	390	9.9	2806	152	84	49	2.9
Jul-93	NS	NS	NS	NS	NS	NS	NS	259	ND	8.2	173	5.4	1667	679	1996	48	280	737	689	97	74	640	NS	4.4	1490	1949	NS	NS	2036	NS	NS	NS	NS	2314	NS	115	NS	5.1
Oct-93	NS	NS	NS	NS	NS	NS	706	171	1.2	ND	128	4	951	465	815	NS	NS	439	574	81	69	444	NS	4	767	1789	416	321	599	145	NS	112	NS	2089	350	498	NS	4.7
Jan-94	NS	NS	NS	NS	NS	NS	NS	306	ND	ND	101	6	1213	480	1384	20	262	563	936	94	50	291	NS	2.5	819	1740	NS	NS	1137	NS	NS	NS	NS	1146	NS	402	NS	3.7
Apr-94	NS	NS	NS	NS	NS	NS	548	310	ND	ND	103	6	1241	361	923	34	296	419	515	54	45	414	NS	7.2	622	1444	404	385	965	424	92	177	ND	1567	450	57	65	2.9
Jul-94	NS	NS	NS	NS	NS	NS	584	284	ND	ND	139	5.1	1340	475	1370	37	368	464	806	147	41	416	1320	4	721	650	NS	NS	891	NS	NS	NS	NS	420	NS	57	NS	6.5
Oct-94	NS	NS	NS	NS	NS	NS	560	378	ND	ND	299	4.7	1528	518	1629	61	271	735	1000	208	23	417	379	4.2	764	1631	385	304	1196	329	NS	8.8	NS	660	306	75	NS	2.6
Jan-95	NS	NS	NS	NS	NS	NS	476	369	ND	ND	153	1.4	1093	492	986	8	100	576	517	77	ND	323	1091	302	506	1238	NS	NS	935	NS	NS	NS	NS	2106	NS	25	NS	ND
Apr-95	NS	NS	NS	NS	NS	NS	550	266	ND	ND	280	1.8	959	429	1515	38	194	537	848	138	18	280	864	5	586	1360	458	289	877	330	67	277	1.3	1608	490	42	62	1.9
Jul-95	NS	NS	NS	NS	NS	NS	681	255	ND	ND	151	2.7	1155	427	1032	14	537	730	1080	163	27	432	1044	4.1	740	1515	NS	NS	1061	NS	NS	NS	NS	1015	NS	315	NS	1.8
Oct-95	NS	NS	NS	NS	NS	NS	474	330	ND	ND	313	5	1360	628	1466	26	467	842	1283	190	22	410	1440	4.2	545	1212	310	280	1174	300	NS	16	NS	750	770	512	NS	2.6
Apr-96	3578	NS	262	1068	212	411	507	279	ND	ND	172	15	982	281	911	16	379	681	910	94	7.9	256	1077	3.1	177	1084	68	233	804	375	26	46	0.6	575	431	396	65	0.6
Oct-96	NS	NS	NS	NS	NS	NS	294	246	NS	NS	154	NS	552	455	327	18	NS	750	739	110	NS	NS	920	NS	319	750	241	190	563	200	NS	21	NS	562	333	102	NS	0.8
Apr-97	2609	NS	218	336	145	252	363	227	ND	ND	192	60	868	560	384	96	172	468	845	103	27	178	524	4.3	502	954	27	247	766	115	77	63	ND	997	294	29	61	1.4
Oct-97	3850	NS	220	663	142	254	327	NS	1.9	ND	198	94	680	380	346	92	169	695	792	111	41	272	680	4.3	416	485	222	215	645	225	147	0.7	ND	417	339	74	64	1.8
Apr-98	2230	NS	NS	NS	NS	NS	NS	NS	2.2	NS	NS	NS	NS	NS	NS	102	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	211	NS	NS	NS	250	NS	53	NS
Oct-98	1886	NS	NS	NS	166	NS	NS	276	3.5	ND	104	253	289	312	NS	50	NS	236	712	109	20	NS	NS	NS	318	404	NS	202	NS	205	3.1	0.7	ND	549	299	NS	81	1.6
May-99	NS	NS	249	546	75	221	344	264	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-99	3380	NS	NS	531	145	291	337	260	0	0	169	218	355	351	302	32	NS	957	1329	79	270	230	NS	NS	387	520	NS	218	1009	156	3	226	0	519	336	NS	103	ND
Jan-00	NS	NS	NS	169	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	844	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	374	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-00	2070	NS	NS	546	269	208	298	235	21.6	NS	197	201	NS	263	287	131	NS	689	623	62	195	216	NS	NS	254	478	NS	207	842	176	217	6.2	6	NS	218	NS	109	1
Oct-01	2342	NS	NS	454	278	256	354	274	97	NS	179	213	NS	235	291	121	NS	773	388	35	261	155	NS	NS	309	470	NS	152	748	171	120	8	6	NS	331	NS	125	1
Oct/Nov-02	1238	NS	NS	422	271	266	316	295	122	NS	176	213	NS	285	302	162	NS	1011	442	37	218	175	NS	NS	339	444	NS	203	642	62	251	56	8	832	344	NS	143	1
Oct-03	26593	NS	NS	333	91	241	360	373	162	NS	429	186	NS	410	362	5	NS	1120	340	56	160	164	NS	NS	471	403	NS	198	377	11	176	57	9	505	246	NS	37	1
Oct-04	30500	NS	NS	295	28	18	343	275	152	NS	156	135	NS	416	363	116	NS	727	NS	97	132	116	NS	NS	874	365	NS	73	121	4	142	3	10	446	207	NS	39	0.7
Oct-05	35490	NS	NS	NS	NS	NS	NS	NS	142	NS	152	106	NS	476	217	181	NS	579	146	23	118	97	NS	NS	267	201	NS	74	261	7	7	36	6	343	119	NS	89	1.5
Oct-06	NS	NS	NS	NS	NS	NS	102.6	111.4	133	NS	94	130	NS	171	169	NS	NS	387	60	36	124	95	NS	NS	119	89	NS	93	61	103	142	38	7	118	101	NS	31	0.5
Oct-07	NS	NS	NS	NS	NS	NS	NS	NS	123	33.9	132	135	NS	108	153	NS	NS	144	42	19	88	86	NS	NS	184	247	NS	128	51	59	24	42	6	147	84	NS	28	ND
Oct-08	NS	NS	NS	NS	NS	NS	NS	NS	NS	32	19	NS	NS	83	221	NS	NS	321	27	29	115	86	NS	NS	16	308	NS	138	28	54	34	35	9	167	101	NS	28	ND
Oct-09	NS	NS	NS	NS	NS	NS	NS	NS	NS	19	71	NS	NS	77	265	NS	NS	411	96	15	92	95	NS	NS	383	597	NS	118	44	107	61	31	8	212	90	NS	41	ND
Oct-10	18.2	2.5	NS	NS	NS	NS	199.3	NS	NS	20.3	47.3	NS	NS	85.4	556.5	NS	NS	396	103.7	20.3	89.8	64.6	NS	NS	380.6	603	NS	117.8	116.5	38.7	84.3	38.3	6.9	206.6	65.2	NS	16.9	ND
Oct-11	29.4	6.6	NS	NS	NS	NS	179.8	NS	NS	7	24.4	NS	NS	97	428	NS	NS	350.2	25.2	68.4	84	66.1	NS	NS	149.9	246.9	NS	116.1	11.3	65.5	65.6	29.4	6.3	165.3	57	NS	20	ND
Oct-12	5.3	ND	NS	NS	NS	NS	139.7	NS	NS	11.2	52.5	NS	NS	92	194.8	NS	NS	349.8	63.3	33	92.6	66.3	NS	NS	201.4	284.6	NS	104.1	27.2	54.2	79.2	34	6.9	173.6	65.8	NS	32.3	ND
Oct-13	11.7	4.0	NS	NS	NS	NS	261.7	NS	NS	13.1	17.2	NS	NS	98	214.5	NS	NS	361.2	48.7	28.8	84.9	97.6	NS	NS	188.1	286.6	NS	93.6	8.4	29.8	68.1	34.1	6.9	173.8	44.2	NS	13.2	ND
Oct-14	4.9	2.8	NS	NS	NS	NS	111.8	NS	NS	3.8	50.0	NS	NS	111.3	204.3	NS	NS	456.0	86.0	25.6	91.9	86.5	NS	NS	91.1	292.4	NS	126.6	24.3	60.8	82.3	35.5	5.8	185.5	53.4	NS	8.9	ND

ND	Not Detected
NI	Not Installed
NS	Not Sampled

APPENDIX D

Laboratory Analytical Reports

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 261713
ANALYTICAL REPORT

Haley & Aldrich, Inc. 1956 Webster Street Oakland, CA 94612	Project : 39751 Location : 901 Thompson Place Level : II

Sample ID	Lab ID
23-S	261713-001
28-MW	261713-002
23-D	261713-003
PMW-2-1	261713-004
PMW-2-3	261713-005
X2A	261713-006
X1B	261713-007
X2B1	261713-008
16-S	261713-009
16-D	261713-010
DW-1	261713-011
DW-7	261713-012
DW-2	261713-013
DUP-1	261713-014
TB-1	261713-015

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 10/28/2014

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**261713**
Client:	**Haley & Aldrich, Inc.**
Project:	**39751**
Location:	**901 Thompson Place**
Request Date:	**10/14/14**
Samples Received:	**10/14/14**

This data package contains sample and QC results for fifteen water samples, requested for the above referenced project on 10/14/14. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
X2B1 (lab # 261713-008) was diluted due to high non-target analytes. X2B1 (lab # 261713-008) had pH greater than 2. No other analytical problems were encountered.

Total Organic Carbon (TOC) (SM5310C):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

Chain of Custody #

C&T LOGIN # 261713

2323 Fifth Street
Berkeley, CA 94710
Phone (510) 486-0900
Fax (510) 486-0532

Project No: 39751
Project Name: 901 Thompson Place
Project P. O. No:
EDD Format: Report Level ☒ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH ☒ Standard

Sampler: Bruk Gallegos, Avila
Report To: Mike Calhoun
Company: Haley & Aldrich
Telephone: (510) 879-4554
Email: MCalhoun@HaleyAldrich.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	8260B+Freon 113 (8010 List)	TOC (415.1)
1	23-S	10/14/14	0808	X		4	3	1				X	X
2	29-MW	10/14/14	1213	X		10	9	1				X	X
3	23-D	10/14/14	0846	X		4	3	1				X	X
4	PMW-2-1	10-14-14	0851	X		4	3	1				X	X
5	PMW-2-3	10-14-14	0930	X		4	3	1				X	X
6	X2A	10-14-14	1044	X		4	3	1				X	X
7	X1B	10-14-14	1127	X		4	3	1				X	X
8	X2B1	10-14-14	1006	X		4	3	1				X	X
9	16-S	10/14/14	1100	X		4	3	1				X	X
10	16-D	10/14/14	1138	X		4	3	1				X	X
11	DW-1	10/14/14	0932	X		4	3	1				X	X
12	DW-7	10/14/14	1217	X		4	3	1				X	X
13	DW-2	10/14/14	1005	X		4	3	1				X	X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: TIME:
DATE: 10/14/14 TIME: 1845
DATE: TIME:

RECEIVED BY:
DATE: 10/14/14 TIME: 1513
DATE: 10/14/14 TIME: 1845
DATE: TIME:

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 241713

Project No: 39751
Project Name: 901 Thompson Place
Project P. O. No:
EDD Format: Report Level ☒ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Bruk, Gallegos, Avila
Report To: Mike Calhoon
Company: Haley & Aldrich
Telephone: (510) 879-4554
Email: MCalhoon@HaleyAldrich.com

ANALYTICAL REQUEST

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	8260B+Freon113 (8010List)	TOC (415.1)
14	DUP-1	10/14/14	—	X		4	3	1				X	X
15	TB-1	10/14/14	—	X		3	3					X	

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
Bruk — DATE: TIME:
[signature] — DATE: 10/14/14 TIME: 1845
DATE: TIME:

RECEIVED BY:
[signature] — DATE: 10/14/14 TIME: 1513
[signature] — DATE: 10/14/14 TIME: 1845
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 261713 Date Received 10/14/14 Number of coolers 1
Client Adley & Blanch Project 39757

Date Opened 10/14 By (print) [illegible] (sign) [illegible]
Date Logged in " " By (print) " " (sign) "

1. Did cooler come with a shipping slip (airbill, etc)_____ YES ~~NO~~
   Shipping info_____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☐ ~~NO~~
   How many _____ Name_____ Date_____
2B. Were custody seals intact upon arrival? _____ YES NO ~~N/A~~
3. Were custody papers dry and intact when received? _____ ~~YES~~ NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form)___ ~~YES~~ NO
6. Indicate the packing in cooler: (if other, describe)_____

   ☑ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
   ☑ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation: * Notify PM if temperature exceeds 6°C

   Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.8

   ☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

   ☑ Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? _____ YES ~~NO~~
   If YES, what time were they transferred to freezer?_____
9. Did all bottles arrive unbroken/unopened? _____ ~~YES~~ NO
10. Are there any missing / extra samples? _____ YES ~~NO~~
11. Are samples in the appropriate containers for indicated tests? _____ ~~YES~~ NO
12. Are sample labels present, in good condition and complete? _____ ~~YES~~ NO
13. Do the sample labels agree with custody papers? _____ ~~YES~~ NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES ~~NO~~ N/A
16. Did you check preservatives for all bottles for each sample? _____ ~~YES~~ NO N/A
17. Did you document your preservative check? _____ ~~YES~~ NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO ~~N/A~~
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO ~~N/A~~
20. Are bubbles > 6mm absent in VOA samples? _____ ~~YES~~ NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES ~~NO~~
   If YES, Who was called?_____ By_____ Date:_____

COMMENTS
15) Added H_2SO_4 (2014020596) on 10/14/14 @ 2205 to - 008 top pH <2

Rev 10, 9/12

Curtis & Tompkins Sample Preservation for 261713

Sample	pH: <2	>9	>12	Other
-001a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-002a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
j	[X]	[ ]	[ ]	_____
-003a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-004a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-005a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-006a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-008a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-009a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-010a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-011a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-012a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-013a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____
-014a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[X]	[ ]	[ ]	_____

Analyst: TD
Date: 10/14/14

Page 1 of 1

Curtis & Tompkins, Ltd.

Detections Summary for 261713

Results for any subcontracted analyses are not included in this summary.

Client : Haley & Aldrich, Inc.
Project : 39751
Location : 901 Thompson Place

Client Sample ID : 23-S Laboratory Sample ID : 261713-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	9.2		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
1,1-Dichloroethene	1.1		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	10		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	130		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
Trichloroethene	36		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
Tetrachloroethene	1.0		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	17		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
Total Organic Carbon	2.2		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : 28-MW Laboratory Sample ID : 261713-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	4.4		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	1.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	7.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,4-Dichlorobenzene	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	5.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Total Organic Carbon	6.5		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : 23-D Laboratory Sample ID : 261713-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
cis-1,2-Dichloroethene	4.7		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Trichloroethene	260		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Total Organic Carbon	0.89		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : PMW-2-1 Laboratory Sample ID : 261713-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	760		42	ug/L	As Recd	83.33	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	5,100		42	ug/L	As Recd	83.33	EPA 8260B	EPA 5030B
Trichloroethene	48		42	ug/L	As Recd	83.33	EPA 8260B	EPA 5030B
Total Organic Carbon	2.1		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : PMW-2-3 Laboratory Sample ID : 261713-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	9.7		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	92		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Trichloroethene	210		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Total Organic Carbon	0.73		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : X2A Laboratory Sample ID : 261713-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	530		3.1	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	10		3.1	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Chlorobenzene	13		3.1	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	12		3.1	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Total Organic Carbon	3.8		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : X1B Laboratory Sample ID : 261713-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	280		2.0	ug/L	As Recd	4.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	10		2.0	ug/L	As Recd	4.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	230		2.0	ug/L	As Recd	4.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	4.9		2.0	ug/L	As Recd	4.000	EPA 8260B	EPA 5030B
1,2,4-Trichlorobenzene	2.9		2.0	ug/L	As Recd	4.000	EPA 8260B	EPA 5030B
Total Organic Carbon	1.6		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : X2B1 Laboratory Sample ID : 261713-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	34		2.5	ug/L	As Recd	5.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	5.3		2.5	ug/L	As Recd	5.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	130		2.5	ug/L	As Recd	5.000	EPA 8260B	EPA 5030B
Total Organic Carbon	3,700		200	mg/L	TOTAL	400.0	SM5310C	METHOD

Client Sample ID : 16-S Laboratory Sample ID : 261713-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	15		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	1.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	23		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,4-Dichlorobenzene	2.4		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	8.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Total Organic Carbon	5.9		5.0	mg/L	TOTAL	10.00	SM5310C	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : 16-D Laboratory Sample ID : 261713-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	84		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	1.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethane	0.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	3.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	1.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Total Organic Carbon	1.2		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : DW-1 Laboratory Sample ID : 261713-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	2.1		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	0.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	1.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Total Organic Carbon	18		5.0	mg/L	TOTAL	10.00	SM5310C	METHOD

Client Sample ID : DW-7 Laboratory Sample ID : 261713-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	100		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	1.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethane	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	9.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Total Organic Carbon	0.60		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : DW-2 Laboratory Sample ID : 261713-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	0.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	0.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Total Organic Carbon	14		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Client Sample ID : DUP-1 Laboratory Sample ID : 261713-014

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Freon 113	6.3		2.0	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethene	0.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethane	0.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	4.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	280		2.5	ug/L	As Recd	5.000	EPA 8260B	EPA 5030B
Total Organic Carbon	0.80		0.50	mg/L	TOTAL	1.000	SM5310C	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : TB-1 Laboratory Sample ID : 261713-015

No Detections

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	23-S	Batch#:	216564
Lab ID:	261713-001	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/19/14
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	9.2	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	ND	4.0
1,1-Dichloroethene	1.1	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	10	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	130	1.0
Chloroform	ND	2.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	36	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	1.0	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	17	1.0
1,2,4-Trichlorobenzene	ND	1.0
1,2,3-Trichlorobenzene	ND	1.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	28-MW	Batch#:	216710
Lab ID:	261713-002	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/23/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	4.4	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	1.0	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	7.3	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	0.6	0.5
1,2-Dichlorobenzene	5.9	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	91	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	23-D	Batch#:	216564
Lab ID:	261713-003	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/19/14
Diln Fac:	3.333		

Analyte	Result	RL
Chloromethane	ND	3.3
Vinyl Chloride	ND	1.7
Bromomethane	ND	3.3
Chloroethane	ND	3.3
Trichlorofluoromethane	ND	3.3
Freon 113	ND	6.7
1,1-Dichloroethene	ND	1.7
Methylene Chloride	ND	67
trans-1,2-Dichloroethene	ND	1.7
1,1-Dichloroethane	ND	1.7
cis-1,2-Dichloroethene	4.7	1.7
Chloroform	ND	3.3
1,1,1-Trichloroethane	ND	1.7
Carbon Tetrachloride	ND	1.7
1,2-Dichloroethane	ND	1.7
Trichloroethene	260	1.7
1,2-Dichloropropane	ND	1.7
Bromodichloromethane	ND	1.7
cis-1,3-Dichloropropene	ND	1.7
trans-1,3-Dichloropropene	ND	1.7
1,1,2-Trichloroethane	ND	1.7
Tetrachloroethene	ND	1.7
Dibromochloromethane	ND	1.7
Chlorobenzene	ND	1.7
Bromoform	ND	1.7
1,1,2,2-Tetrachloroethane	ND	1.7
1,3-Dichlorobenzene	ND	1.7
1,4-Dichlorobenzene	ND	1.7
1,2-Dichlorobenzene	ND	1.7
1,2,4-Trichlorobenzene	ND	1.7
1,2,3-Trichlorobenzene	ND	1.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	PMW-2-1	Batch#:	216710
Lab ID:	261713-004	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/23/14
Diln Fac:	83.33		

Analyte	Result	RL
Chloromethane	ND	83
Vinyl Chloride	760	42
Bromomethane	ND	83
Chloroethane	ND	83
Trichlorofluoromethane	ND	83
Freon 113	ND	170
1,1-Dichloroethene	ND	42
Methylene Chloride	ND	1,700
trans-1,2-Dichloroethene	ND	42
1,1-Dichloroethane	ND	42
cis-1,2-Dichloroethene	5,100	42
Chloroform	ND	83
1,1,1-Trichloroethane	ND	42
Carbon Tetrachloride	ND	42
1,2-Dichloroethane	ND	42
Trichloroethene	48	42
1,2-Dichloropropane	ND	42
Bromodichloromethane	ND	42
cis-1,3-Dichloropropene	ND	42
trans-1,3-Dichloropropene	ND	42
1,1,2-Trichloroethane	ND	42
Tetrachloroethene	ND	42
Dibromochloromethane	ND	42
Chlorobenzene	ND	42
Bromoform	ND	42
1,1,2,2-Tetrachloroethane	ND	42
1,3-Dichlorobenzene	ND	42
1,4-Dichlorobenzene	ND	42
1,2-Dichlorobenzene	ND	42
1,2,4-Trichlorobenzene	ND	42
1,2,3-Trichlorobenzene	ND	42

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	93	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	PMW-2-3	Batch#:	216564
Lab ID:	261713-005	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/19/14
Diln Fac:	3.333		

Analyte	Result	RL
Chloromethane	ND	3.3
Vinyl Chloride	9.7	1.7
Bromomethane	ND	3.3
Chloroethane	ND	3.3
Trichlorofluoromethane	ND	3.3
Freon 113	ND	6.7
1,1-Dichloroethene	ND	1.7
Methylene Chloride	ND	67
trans-1,2-Dichloroethene	ND	1.7
1,1-Dichloroethane	ND	1.7
cis-1,2-Dichloroethene	92	1.7
Chloroform	ND	3.3
1,1,1-Trichloroethane	ND	1.7
Carbon Tetrachloride	ND	1.7
1,2-Dichloroethane	ND	1.7
Trichloroethene	210	1.7
1,2-Dichloropropane	ND	1.7
Bromodichloromethane	ND	1.7
cis-1,3-Dichloropropene	ND	1.7
trans-1,3-Dichloropropene	ND	1.7
1,1,2-Trichloroethane	ND	1.7
Tetrachloroethene	ND	1.7
Dibromochloromethane	ND	1.7
Chlorobenzene	ND	1.7
Bromoform	ND	1.7
1,1,2,2-Tetrachloroethane	ND	1.7
1,3-Dichlorobenzene	ND	1.7
1,4-Dichlorobenzene	ND	1.7
1,2-Dichlorobenzene	ND	1.7
1,2,4-Trichlorobenzene	ND	1.7
1,2,3-Trichlorobenzene	ND	1.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	X2A	Batch#:	216564
Lab ID:	261713-006	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/19/14
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	530	3.1
Bromomethane	ND	6.3
Chloroethane	ND	6.3
Trichlorofluoromethane	ND	6.3
Freon 113	ND	13
1,1-Dichloroethene	ND	3.1
Methylene Chloride	ND	130
trans-1,2-Dichloroethene	ND	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	10	3.1
Chloroform	ND	6.3
1,1,1-Trichloroethane	ND	3.1
Carbon Tetrachloride	ND	3.1
1,2-Dichloroethane	ND	3.1
Trichloroethene	ND	3.1
1,2-Dichloropropane	ND	3.1
Bromodichloromethane	ND	3.1
cis-1,3-Dichloropropene	ND	3.1
trans-1,3-Dichloropropene	ND	3.1
1,1,2-Trichloroethane	ND	3.1
Tetrachloroethene	ND	3.1
Dibromochloromethane	ND	3.1
Chlorobenzene	13	3.1
Bromoform	ND	3.1
1,1,2,2-Tetrachloroethane	ND	3.1
1,3-Dichlorobenzene	ND	3.1
1,4-Dichlorobenzene	ND	3.1
1,2-Dichlorobenzene	12	3.1
1,2,4-Trichlorobenzene	ND	3.1
1,2,3-Trichlorobenzene	ND	3.1

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	X1B	Batch#:	216710
Lab ID:	261713-007	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/23/14
Diln Fac:	4.000		

Analyte	Result	RL
Chloromethane	ND	4.0
Vinyl Chloride	280	2.0
Bromomethane	ND	4.0
Chloroethane	ND	4.0
Trichlorofluoromethane	ND	4.0
Freon 113	ND	8.0
1,1-Dichloroethene	ND	2.0
Methylene Chloride	ND	80
trans-1,2-Dichloroethene	10	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	230	2.0
Chloroform	ND	4.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
1,2-Dichloroethane	ND	2.0
Trichloroethene	ND	2.0
1,2-Dichloropropane	ND	2.0
Bromodichloromethane	ND	2.0
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Tetrachloroethene	ND	2.0
Dibromochloromethane	ND	2.0
Chlorobenzene	ND	2.0
Bromoform	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	4.9	2.0
1,2,4-Trichlorobenzene	2.9	2.0
1,2,3-Trichlorobenzene	ND	2.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	X2B1	Batch#:	216543
Lab ID:	261713-008	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/17/14
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	34	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
Freon 113	ND	10
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	5.3	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	130	2.5
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	ND	2.5
1,2-Dichloropropane	ND	2.5
Bromodichloromethane	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
Tetrachloroethene	ND	2.5
Dibromochloromethane	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5
1,2,4-Trichlorobenzene	ND	2.5
1,2,3-Trichlorobenzene	ND	2.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	16-S	Batch#:	216543
Lab ID:	261713-009	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	15	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	1.6	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	23	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	2.4	0.5
1,2-Dichlorobenzene	8.0	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	89	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	16-D	Units:	ug/L
Lab ID:	261713-010	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	1.0	1.000	216543	10/17/14
Vinyl Chloride	84	1.0	2.000	216577	10/20/14
Bromomethane	ND	1.0	1.000	216543	10/17/14
Chloroethane	ND	1.0	1.000	216543	10/17/14
Trichlorofluoromethane	ND	1.0	1.000	216543	10/17/14
Freon 113	ND	2.0	1.000	216543	10/17/14
1,1-Dichloroethene	ND	0.5	1.000	216543	10/17/14
Methylene Chloride	ND	20	1.000	216543	10/17/14
trans-1,2-Dichloroethene	1.2	0.5	1.000	216543	10/17/14
1,1-Dichloroethane	0.8	0.5	1.000	216543	10/17/14
cis-1,2-Dichloroethene	3.3	0.5	1.000	216543	10/17/14
Chloroform	ND	1.0	1.000	216543	10/17/14
1,1,1-Trichloroethane	ND	0.5	1.000	216543	10/17/14
Carbon Tetrachloride	ND	0.5	1.000	216543	10/17/14
1,2-Dichloroethane	ND	0.5	1.000	216543	10/17/14
Trichloroethene	ND	0.5	1.000	216543	10/17/14
1,2-Dichloropropane	ND	0.5	1.000	216543	10/17/14
Bromodichloromethane	ND	0.5	1.000	216543	10/17/14
cis-1,3-Dichloropropene	ND	0.5	1.000	216543	10/17/14
trans-1,3-Dichloropropene	ND	0.5	1.000	216543	10/17/14
1,1,2-Trichloroethane	ND	0.5	1.000	216543	10/17/14
Tetrachloroethene	ND	0.5	1.000	216543	10/17/14
Dibromochloromethane	ND	0.5	1.000	216543	10/17/14
Chlorobenzene	ND	0.5	1.000	216543	10/17/14
Bromoform	ND	0.5	1.000	216543	10/17/14
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	216543	10/17/14
1,3-Dichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,4-Dichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,2-Dichlorobenzene	1.8	0.5	1.000	216543	10/17/14
1,2,4-Trichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,2,3-Trichlorobenzene	ND	0.5	1.000	216543	10/17/14

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
1,2-Dichloroethane-d4	100	75-139	1.000	216543	10/17/14
Toluene-d8	99	80-120	1.000	216543	10/17/14
Bromofluorobenzene	88	80-120	1.000	216543	10/17/14

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	DW-1	Batch#:	216577
Lab ID:	261713-011	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/20/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	2.1	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	0.9	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	1.2	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	0.7	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	DW-7	Units:	ug/L
Lab ID:	261713-012	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	1.0	1.000	216543	10/17/14
Vinyl Chloride	100	1.0	2.000	216577	10/20/14
Bromomethane	ND	1.0	1.000	216543	10/17/14
Chloroethane	ND	1.0	1.000	216543	10/17/14
Trichlorofluoromethane	ND	1.0	1.000	216543	10/17/14
Freon 113	ND	2.0	1.000	216543	10/17/14
1,1-Dichloroethene	ND	0.5	1.000	216543	10/17/14
Methylene Chloride	ND	20	1.000	216543	10/17/14
trans-1,2-Dichloroethene	1.9	0.5	1.000	216543	10/17/14
1,1-Dichloroethane	0.6	0.5	1.000	216543	10/17/14
cis-1,2-Dichloroethene	9.3	0.5	1.000	216543	10/17/14
Chloroform	ND	1.0	1.000	216543	10/17/14
1,1,1-Trichloroethane	ND	0.5	1.000	216543	10/17/14
Carbon Tetrachloride	ND	0.5	1.000	216543	10/17/14
1,2-Dichloroethane	ND	0.5	1.000	216543	10/17/14
Trichloroethene	ND	0.5	1.000	216543	10/17/14
1,2-Dichloropropane	ND	0.5	1.000	216543	10/17/14
Bromodichloromethane	ND	0.5	1.000	216543	10/17/14
cis-1,3-Dichloropropene	ND	0.5	1.000	216543	10/17/14
trans-1,3-Dichloropropene	ND	0.5	1.000	216543	10/17/14
1,1,2-Trichloroethane	ND	0.5	1.000	216543	10/17/14
Tetrachloroethene	ND	0.5	1.000	216543	10/17/14
Dibromochloromethane	ND	0.5	1.000	216543	10/17/14
Chlorobenzene	ND	0.5	1.000	216543	10/17/14
Bromoform	ND	0.5	1.000	216543	10/17/14
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	216543	10/17/14
1,3-Dichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,4-Dichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,2-Dichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,2,4-Trichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,2,3-Trichlorobenzene	ND	0.5	1.000	216543	10/17/14

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
1,2-Dichloroethane-d4	100	75-139	1.000	216543	10/17/14
Toluene-d8	99	80-120	1.000	216543	10/17/14
Bromofluorobenzene	86	80-120	1.000	216543	10/17/14

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	DW-2	Batch#:	216577
Lab ID:	261713-013	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/20/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	0.7	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	0.5	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	0.9	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	0.7	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	DUP-1	Units:	ug/L
Lab ID:	261713-014	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	1.0	1.000	216543	10/17/14
Vinyl Chloride	ND	0.5	1.000	216543	10/17/14
Bromomethane	ND	1.0	1.000	216543	10/17/14
Chloroethane	ND	1.0	1.000	216543	10/17/14
Trichlorofluoromethane	ND	1.0	1.000	216543	10/17/14
Freon 113	6.3	2.0	1.000	216543	10/17/14
1,1-Dichloroethene	0.9	0.5	1.000	216543	10/17/14
Methylene Chloride	ND	20	1.000	216543	10/17/14
trans-1,2-Dichloroethene	ND	0.5	1.000	216543	10/17/14
1,1-Dichloroethane	0.5	0.5	1.000	216543	10/17/14
cis-1,2-Dichloroethene	4.6	0.5	1.000	216543	10/17/14
Chloroform	ND	1.0	1.000	216543	10/17/14
1,1,1-Trichloroethane	ND	0.5	1.000	216543	10/17/14
Carbon Tetrachloride	ND	0.5	1.000	216543	10/17/14
1,2-Dichloroethane	ND	0.5	1.000	216543	10/17/14
Trichloroethene	280	2.5	5.000	216577	10/20/14
1,2-Dichloropropane	ND	0.5	1.000	216543	10/17/14
Bromodichloromethane	ND	0.5	1.000	216543	10/17/14
cis-1,3-Dichloropropene	ND	0.5	1.000	216543	10/17/14
trans-1,3-Dichloropropene	ND	0.5	1.000	216543	10/17/14
1,1,2-Trichloroethane	ND	0.5	1.000	216543	10/17/14
Tetrachloroethene	ND	0.5	1.000	216543	10/17/14
Dibromochloromethane	ND	0.5	1.000	216543	10/17/14
Chlorobenzene	ND	0.5	1.000	216543	10/17/14
Bromoform	ND	0.5	1.000	216543	10/17/14
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	216543	10/17/14
1,3-Dichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,4-Dichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,2-Dichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,2,4-Trichlorobenzene	ND	0.5	1.000	216543	10/17/14
1,2,3-Trichlorobenzene	ND	0.5	1.000	216543	10/17/14

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
1,2-Dichloroethane-d4	99	75-139	1.000	216543	10/17/14
Toluene-d8	100	80-120	1.000	216543	10/17/14
Bromofluorobenzene	86	80-120	1.000	216543	10/17/14

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	TB-1	Batch#:	216543
Lab ID:	261713-015	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	216543
Units:	ug/L	Analyzed:	10/17/14
Diln Fac:	1.000		

Type: BS Lab ID: QC762139

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	14.36	115	65-134
Trichloroethene	12.50	12.63	101	80-120
Chlorobenzene	12.50	13.92	111	80-120
1,2,4-Trichlorobenzene	12.50	10.89	87	68-136
1,2,3-Trichlorobenzene	12.50	10.89	87	68-136

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC762140

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.74	110	65-134	4	20
Trichloroethene	12.50	12.53	100	80-120	1	20
Chlorobenzene	12.50	13.73	110	80-120	1	20
1,2,4-Trichlorobenzene	12.50	10.88	87	68-136	0	20
1,2,3-Trichlorobenzene	12.50	10.88	87	68-136	0	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	89	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC762141	Batch#:	216543
Matrix:	Water	Analyzed:	10/17/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	216564
Units:	ug/L	Analyzed:	10/19/14
Diln Fac:	1.000		

Type: BS Lab ID: QC762221

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	6.250	6.274	100	65-134
Trichloroethene	6.250	5.935	95	80-120
Chlorobenzene	6.250	6.372	102	80-120
1,2,4-Trichlorobenzene	6.250	5.697	91	68-136
1,2,3-Trichlorobenzene	6.250	5.860	94	68-136

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-120

Type: BSD Lab ID: QC762222

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	6.250	6.247	100	65-134	0	20
Trichloroethene	6.250	6.038	97	80-120	2	20
Chlorobenzene	6.250	6.379	102	80-120	0	20
1,2,4-Trichlorobenzene	6.250	5.783	93	68-136	1	20
1,2,3-Trichlorobenzene	6.250	5.881	94	68-136	0	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC762223	Batch#:	216564
Matrix:	Water	Analyzed:	10/19/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	216577
Units:	ug/L	Analyzed:	10/20/14
Diln Fac:	1.000		

Type: BS Lab ID: QC762275

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	13.38	107	65-134
Trichloroethene	12.50	12.18	97	80-120
Chlorobenzene	12.50	13.86	111	80-120
1,2,4-Trichlorobenzene	12.50	10.67	85	68-136
1,2,3-Trichlorobenzene	12.50	10.67	85	68-136

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC762276

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.63	101	65-134	6	20
Trichloroethene	12.50	12.02	96	80-120	1	20
Chlorobenzene	12.50	13.35	107	80-120	4	20
1,2,4-Trichlorobenzene	12.50	10.76	86	68-136	1	20
1,2,3-Trichlorobenzene	12.50	10.76	86	68-136	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	88	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC762277	Batch#:	216577
Matrix:	Water	Analyzed:	10/20/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	89	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	216577
MSS Lab ID:	261753-003	Sampled:	10/14/14
Matrix:	Water	Received:	10/15/14
Units:	ug/L	Analyzed:	10/20/14
Diln Fac:	1.000		

Type: MS Lab ID: QC762302

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1117	12.50	12.79	102	69-129
Trichloroethene	<0.1000	12.50	12.36	99	70-127
Chlorobenzene	<0.1000	12.50	14.04	112	80-120
1,2,4-Trichlorobenzene	<0.1000	12.50	10.91	87	68-127
1,2,3-Trichlorobenzene	<0.1000	12.50	10.91	87	70-127

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	86	80-120

Type: MSD Lab ID: QC762303

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.72	102	69-129	1	26
Trichloroethene	12.50	12.34	99	70-127	0	21
Chlorobenzene	12.50	13.67	109	80-120	3	22
1,2,4-Trichlorobenzene	12.50	10.82	87	68-127	1	25
1,2,3-Trichlorobenzene	12.50	10.82	87	70-127	1	25

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	87	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	216710
Units:	ug/L	Analyzed:	10/23/14
Diln Fac:	1.000		

Type: BS Lab ID: QC762806

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	12.43	99	65-134
Trichloroethene	12.50	13.66	109	80-120
Chlorobenzene	12.50	13.22	106	80-120
1,2,4-Trichlorobenzene	12.50	10.72	86	68-136
1,2,3-Trichlorobenzene	12.50	11.02	88	68-136

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	88	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC762807

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.41	99	65-134	0	20
Trichloroethene	12.50	12.37	99	80-120	10	20
Chlorobenzene	12.50	13.38	107	80-120	1	20
1,2,4-Trichlorobenzene	12.50	10.48	84	68-136	2	20
1,2,3-Trichlorobenzene	12.50	10.52	84	68-136	5	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	88	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	103	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC762808	Batch#:	216710
Matrix:	Water	Analyzed:	10/23/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	28-MW	Batch#:	216710
MSS Lab ID:	261713-002	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	ug/L	Analyzed:	10/23/14
Diln Fac:	1.000		

Type: MS Lab ID: QC762872

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1000	12.50	9.145	73	69-129
Trichloroethene	<0.1161	12.50	10.23	82	70-127
Chlorobenzene	7.263	12.50	18.67	91	80-120
1,2,4-Trichlorobenzene	<0.1141	12.50	10.48	84	68-127
1,2,3-Trichlorobenzene	<0.1000	12.50	10.75	86	70-127

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	90	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-120

Type: MSD Lab ID: QC762873

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	9.936	79	69-129	8	26
Trichloroethene	12.50	10.90	87	70-127	6	21
Chlorobenzene	12.50	19.31	96	80-120	3	22
1,2,4-Trichlorobenzene	12.50	11.35	91	68-127	8	25
1,2,3-Trichlorobenzene	12.50	11.78	94	70-127	9	25

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	90	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	METHOD
Project#:	39751	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	216457
Matrix:	Water	Sampled:	10/14/14
Units:	mg/L	Received:	10/14/14

Field ID	Type	Lab ID	Result	RL	Diln Fac	Analyzed
23-S	SAMPLE	261713-001	2.2	0.50	1.000	10/15/14
28-MW	SAMPLE	261713-002	6.5	0.50	1.000	10/15/14
23-D	SAMPLE	261713-003	0.89	0.50	1.000	10/15/14
PMW-2-1	SAMPLE	261713-004	2.1	0.50	1.000	10/15/14
PMW-2-3	SAMPLE	261713-005	0.73	0.50	1.000	10/15/14
X2A	SAMPLE	261713-006	3.8	0.50	1.000	10/15/14
X1B	SAMPLE	261713-007	1.6	0.50	1.000	10/15/14
X2B1	SAMPLE	261713-008	3,700	200	400.0	10/16/14
16-S	SAMPLE	261713-009	5.9	5.0	10.00	10/16/14
16-D	SAMPLE	261713-010	1.2	0.50	1.000	10/15/14
DW-1	SAMPLE	261713-011	18	5.0	10.00	10/15/14
DW-7	SAMPLE	261713-012	0.60	0.50	1.000	10/15/14
DW-2	SAMPLE	261713-013	14	0.50	1.000	10/15/14
DUP-1	SAMPLE	261713-014	0.80	0.50	1.000	10/16/14
	BLANK	QC761797	ND	0.50	1.000	10/15/14

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	261713	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	METHOD
Project#:	39751	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Diln Fac:	1.000
Field ID:	23-S	Batch#:	216457
MSS Lab ID:	261713-001	Sampled:	10/14/14
Matrix:	Water	Received:	10/14/14
Units:	mg/L	Analyzed:	10/15/14

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC761798		10.00	9.761	98	90-110		
MS	QC761799	2.233	2.000	4.195	98	33-129		
MSD	QC761800		2.000	4.265	102	33-129	2	39

RPD= Relative Percent Difference

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October 24, 2014

Michael Calhoun
Haley & Aldrich
1956 Webster St
Suite 450
Oakland, CA 94612

RE: **901 THOMPSON PLACE**

Microseeps Workorder: 13638

Dear Michael Calhoun:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, October 15, 2014. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Robbin Robl 10/24/2014
rrobl@microseeps.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email info@microseeps.com.

Total Number of Pages 22

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, Microseeps is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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SAMPLE SUMMARY

Workorder: 13638 901 THOMPSON PLACE

Lab ID	Sample ID	Matrix	Date Collected	Date Received
136380001	23-S	Water	10/14/2014 08:08	10/15/2014 08:30
136380002	28-MW	Water	10/14/2014 12:13	10/15/2014 08:30
136380003	23-D	Water	10/14/2014 08:46	10/15/2014 08:30
136380004	PMW-2-1	Water	10/14/2014 08:51	10/15/2014 08:30
136380005	PMW-2-3	Water	10/14/2014 09:30	10/15/2014 08:30
136380006	X2A	Water	10/14/2014 10:44	10/15/2014 08:30
136380007	X1B	Water	10/14/2014 11:27	10/15/2014 08:30
136380008	X2B1	Water	10/14/2014 10:06	10/15/2014 08:30
136380009	16-S	Water	10/14/2014 11:00	10/15/2014 08:30
136380010	16-D	Water	10/14/2014 11:38	10/15/2014 08:30
136380011	DW-1	Water	10/14/2014 09:32	10/15/2014 08:30
136380012	DW-7	Water	10/14/2014 12:17	10/15/2014 08:30
136380013	DW-2	Water	10/14/2014 10:05	10/15/2014 08:30

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380001** Date Received: 10/15/2014 08:30 Matrix: Water
Sample ID: **23-S** Date Collected: 10/14/2014 08:08

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**82**	ug/l	0.10	0.042	1			10/23/2014 13:22	BW	
Ethane	**0.14**	ug/l	0.025	0.0020	1			10/23/2014 13:22	BW	
Ethene	**0.087**	ug/l	0.025	0.0030	1			10/23/2014 13:22	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380002** Date Received: 10/15/2014 08:30 Matrix: Water

Sample ID: **28-MW** Date Collected: 10/14/2014 12:13

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**8500**	ug/l	0.10	0.042	1			10/23/2014 13:32	BW	
Ethane	**5.8**	ug/l	0.025	0.0020	1			10/23/2014 13:32	BW	
Ethene	**0.45**	ug/l	0.025	0.0030	1			10/23/2014 13:32	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380003** Date Received: 10/15/2014 08:30 Matrix: Water

Sample ID: **23-D** Date Collected: 10/14/2014 08:46

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.23**	ug/l	0.10	0.042	1			10/23/2014 13:42	BW	
Ethane	**0.0096J**	ug/l	0.025	0.0020	1			10/23/2014 13:42	BW	
Ethene	**0.11**	ug/l	0.025	0.0030	1			10/23/2014 13:42	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380004** Date Received: 10/15/2014 08:30 Matrix: Water
Sample ID: **PMW-2-1** Date Collected: 10/14/2014 08:51

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**11000**	ug/l	0.10	0.042	1			10/23/2014 13:53	BW	
Ethane	**18**	ug/l	0.025	0.0020	1			10/23/2014 13:53	BW	
Ethene	**100**	ug/l	0.025	0.0030	1			10/23/2014 13:53	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380005** Date Received: 10/15/2014 08:30 Matrix: Water

Sample ID: **PMW-2-3** Date Collected: 10/14/2014 09:30

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**12**	ug/l	0.10	0.042	1			10/23/2014 14:41	BW	
Ethane	**0.047**	ug/l	0.025	0.0020	1			10/23/2014 14:41	BW	
Ethene	**1.2**	ug/l	0.025	0.0030	1			10/23/2014 14:41	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380006** Date Received: 10/15/2014 08:30 Matrix: Water
Sample ID: **X2A** Date Collected: 10/14/2014 10:44

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**2700**	ug/l	0.10	0.042	1			10/23/2014 14:51	BW	
Ethane	**3.3**	ug/l	0.025	0.0020	1			10/23/2014 14:51	BW	
Ethene	**50**	ug/l	0.025	0.0030	1			10/23/2014 14:51	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380007** Date Received: 10/15/2014 08:30 Matrix: Water
Sample ID: **X1B** Date Collected: 10/14/2014 11:27

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**1700**	ug/l	0.10	0.042	1			10/23/2014 15:00	BW	
Ethane	**0.81**	ug/l	0.025	0.0020	1			10/23/2014 15:00	BW	
Ethene	**260**	ug/l	0.025	0.0030	1			10/23/2014 15:00	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380008** Date Received: 10/15/2014 08:30 Matrix: Water
Sample ID: **X2B1** Date Collected: 10/14/2014 10:06

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**7200**	ug/l	0.10	0.042	1			10/23/2014 15:12	BW	
Ethane	**9.9**	ug/l	0.025	0.0020	1			10/23/2014 15:12	BW	
Ethene	**47**	ug/l	0.025	0.0030	1			10/23/2014 15:12	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380009** Date Received: 10/15/2014 08:30 Matrix: Water
Sample ID: **16-S** Date Collected: 10/14/2014 11:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**1300**	ug/l	0.10	0.042	1			10/23/2014 15:25	BW	
Ethane	**1.4**	ug/l	0.025	0.0020	1			10/23/2014 15:25	BW	
Ethene	**1.6**	ug/l	0.025	0.0030	1			10/23/2014 15:25	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380010** Date Received: 10/15/2014 08:30 Matrix: Water
Sample ID: **16-D** Date Collected: 10/14/2014 11:38

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**5200**	ug/l	0.10	0.042	1			10/23/2014 15:36	BW	
Ethane	**3.4**	ug/l	0.025	0.0020	1			10/23/2014 15:36	BW	
Ethene	**20**	ug/l	0.025	0.0030	1			10/23/2014 15:36	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380011** Date Received: 10/15/2014 08:30 Matrix: Water

Sample ID: **DW-1** Date Collected: 10/14/2014 09:32

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**16000**	ug/l	0.10	0.042	1			10/23/2014 15:48	BW	
Ethane	**200**	ug/l	0.025	0.0020	1			10/23/2014 15:48	BW	
Ethene	**0.89**	ug/l	0.025	0.0030	1			10/23/2014 15:48	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380012** Date Received: 10/15/2014 08:30 Matrix: Water
Sample ID: **DW-7** Date Collected: 10/14/2014 12:17

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**290**	ug/l	0.10	0.042	1			10/23/2014 15:58	BW	
Ethane	**0.59**	ug/l	0.025	0.0020	1			10/23/2014 15:58	BW	
Ethene	**2.0**	ug/l	0.025	0.0030	1			10/23/2014 15:58	BW	

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ANALYTICAL RESULTS

Workorder: 13638 901 THOMPSON PLACE

Lab ID: **136380013** Date Received: 10/15/2014 08:30 Matrix: Water

Sample ID: **DW-2** Date Collected: 10/14/2014 10:05

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**16000**	ug/l	0.10	0.042	1			10/23/2014 16:08	BW	
Ethane	**1.1**	ug/l	0.025	0.0020	1			10/23/2014 16:08	BW	
Ethene	**0.21**	ug/l	0.025	0.0030	1			10/23/2014 16:08	BW	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 13638 901 THOMPSON PLACE

DEFINITIONS/QUALIFIERS

Disclaimer : The Pennsylvania Department of Environmental Protection (PADEP) has decided to no longer recognize analyses that do not produce data for primary compliance, for NELAP accreditation. The methods affected by this decision are AM20GAx, AM21G, SW846 7199 and AM4.02. The laboratory shall continue to administer the NELAP/TNI standard requirements in the performance of these methods.

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).

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QUALITY CONTROL DATA

Workorder: 13638 901 THOMPSON PLACE

QC Batch: DISG/4117 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 136380001, 136380002, 136380003, 136380004, 136380005, 136380006, 136380007, 136380008, 136380009, 136380010, 136380011, 136380012, 136380013

METHOD BLANK: 31092

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.10 U	0.10	
Ethane	ug/l	0.025 U	0.025	
Ethene	ug/l	0.025 U	0.025	

LABORATORY CONTROL SAMPLE & LCSD: 31093 31094

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	720	730	97	98	80-120	1	20	
Ethane	ug/l	38	39	40	102	104	80-120	1.9	20	
Ethene	ug/l	35	36	37	102	105	80-120	2.9	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 31139 31140 Original: 136510001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK											
Methane	ug/l	2	40	43	42	101	99	70-130	2	20	
Ethane	ug/l	0.37	76	74	73	97	96	70-130	1	20	
Ethene	ug/l	0.061	71	68	68	97	96	70-130	1	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 13638 901 THOMPSON PLACE

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
136380001	23-S			AM20GAX	DISG/4117
136380002	28-MW			AM20GAX	DISG/4117
136380003	23-D			AM20GAX	DISG/4117
136380004	PMW-2-1			AM20GAX	DISG/4117
136380005	PMW-2-3			AM20GAX	DISG/4117
136380006	X2A			AM20GAX	DISG/4117
136380007	X1B			AM20GAX	DISG/4117
136380008	X2B1			AM20GAX	DISG/4117
136380009	16-S			AM20GAX	DISG/4117
136380010	16-D			AM20GAX	DISG/4117
136380011	DW-1			AM20GAX	DISG/4117
136380012	DW-7			AM20GAX	DISG/4117
136380013	DW-2			AM20GAX	DISG/4117

CERTIFICATE OF ANALYSIS
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without the written consent of Microseeps/Pace Analytical Energy Services, LLC.

Microseeps Lab. Proj. # 13638

CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. # 320

Phone: (412) 826-5245 | Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 | Fax No. : (412) 826-3433

Company : Haley & Aldrich Inc.
Co. Address : 1956 Webster St. Suite 450
Phone # : (510) 879-4554 Fax # :
Proj. Manager : Mike Cathoun
Proj. Name/Number : 901 Thompson Place
Sampler's signature : [signature]

Cooler Temp. 2°C

Results to :

Invoice to :

Parameters Requested: Methane, Ethene, Ethane

	Sample ID	Sample Description	Sample Type: Water	Vapor	Solid	Date	Time	# bottles	Methane, Ethene, Ethane	Remarks :
1	23-S	GW	X			10/14/14	0808	2	X	
2	28-MW		X			10-14-14	1213	2	X	
3	23-D		X			10/14/14	0846	2	X	
4	PMW-2-1		X			10-14-14	0851	2	X	
5	PMW-2-3		X			10-14-14	0930	2	X	
6	X2A		X			10-14-14	1044	2	X	
7	X1B		X			10-14-14	1127	2	X	
8	X2B1		X			10-14-14	1006	2	X	
9	16-S		X			10/14/14	1100	2	X	
10	16-D		X			10/14/14	1138	2	X	
11	DW-1		X			10/14/14	0932	2	X	
12	DW-7		X			10/14/14	1217	2	X	

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
[signature]	F. S. I.	10/14/14	1430	[signature]	PAES	10.15.14	0830
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

Microseeps Lab. Proj. # 13638

CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. # 320

Phone: (412) 826-5245 | Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 | Fax No. : (412) 826-3433

Company : Haley & Aldrich, Inc
Co. Address : 1956 Webster St, Suite 450
Phone # : (510) 879-4554 Fax # :
Proj. Manager : Mike Calhoun
Proj. Name/Number : 901 Thompson Place
Sampler's signature : [signature]

Cooler Temp.

Results to :

Invoice to :

Sample ID	Sample Description	Sample Type Water	Vapor	Solid	Date	Time	# bottles	Methane Ethane Ethane										Remarks :
13 DW-2	GW	X			10/14/14	1005	2	X										

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
[signature]	F.S.I.	10/14/14	1430	[signature]	PTES	10.15.14	0830
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

Cooler Receipt Form

Client Name: Haley & Aldrich Project: 901 Thompson Place Lab Work Order: 13638

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 8041046266 64

Custody Seal on Cooler/Box Present: (Yes) No Seals Intact: (Yes) No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 2°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformanc
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC	✓			
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
Microseeps containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: LJ Date: 10.15.14

Project Manager Review: RL Date: 10/15/14

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 261947
ANALYTICAL REPORT

Haley & Aldrich, Inc. 1956 Webster Street Oakland, CA 94612	Project : 39751 Location : 901 Thompson Place Level : II

Sample ID	Lab ID
TB-1	261947-001
35-DDD	261947-002
53-D	261947-003
28-D	261947-004
EB-1	261947-005
15-S	261947-006
36-DD	261947-007
29-S	261947-008
29-D	261947-009
52-D	261947-010
27-DD	261947-011
36-D	261947-012
28-S	261947-013
EB-2	261947-014
27-D	261947-015
1-D	261947-016
36-S	261947-017
37-S	261947-018
22-DD	261947-019
27-S	261947-020
22-S	261947-021
EB-3	261947-022
2-D	261947-023

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 10/30/2014

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**261947**
Client:	**Haley & Aldrich, Inc.**
Project:	**39751**
Location:	**901 Thompson Place**
Request Date:	**10/22/14**
Samples Received:	**10/22/14**

This data package contains sample and QC results for twenty three water samples, requested for the above referenced project on 10/22/14. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Subject: RE: 901 Thompson - FW: 39751 - C&T Login Summary (261947)
From: "Jim Butera" <jbutera@fieldsolutionsinc.com>
Date: 10/24/2014 8:47 AM
To: "'Tracy Babjar'" <tracy.babjar@ctberk.com>
CC: "'Calhoun, Michael'" <MCalhoun@haleyaldrich.com>, "'Zlotoff, Michael'" <MZlotoff@haleyaldrich.com>, <placey@fieldsolutionsinc.com>

Tracy, I have attached a revised chain-of-custody for the samples you received on 10-22-14 from 901 Thompson Place. The COC that accompanied the samples had a few transcription errors that needed to be corrected, thank you for bringing this to our attention. The following changes or additions were made:

Page 1
53-D – Please make sure to run MS/MSD on this sample. Six additional VOA vials were provided.

Page 2
27-D was recorded on the original COC two times, one of these was removed.
1-D was recorded on the original COC three times, two of these were removed.
2-D was added to the COC. As you indicated below one of the 1-D samples on the original COC should have been 2-D (10/22/14 @11:10).

Please make these changes and if possible include the revised COC we provided attached to this email as the COC for the report. Please contact me with any questions or comments.

Jim Butera
Field Solutions, Inc.
6280 San Ignacio Avenue, Suite P
San Jose, California 95119
(408) 593-7510 cell
(408) 281-2322 office

From: Zlotoff, Michael [mailto:MZlotoff@haleyaldrich.com]
Sent: Thursday, October 23, 2014 8:20 AM
To: Jim Butera (jbutera@fieldsolutionsinc.com)
Cc: Calhoun, Michael
Subject: 901 Thompson - FW: 39751 - C&T Login Summary (261947)

Good morning Jim,

For 901 Thompson, it appears that the sampler inadvertently listed sample 1-D twice on the COC and left 2-D off the

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # _____

Project No: 39751
Project Name: 901 Thompson Place
Project P. O. No:
EDD Format: Report Level ☒ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Brook Avila Guevara
Report To: Mike Calhoun
Company: Haley & Aldrich
Telephone: (510) 879-4554
Email: MCalhoun@HaleyAldrich.com

Lab No.	Sample ID.	Sampling Date Collected	Sampling Time Collected	Matrix Water	Matrix Solid	# of Containers	Chemical Preservative HCl	H2SO4	HNO3	NaOH	None	ANALYTICAL REQUEST: 8260B + Freon 113 Surrogate Only
	TB-1	10/20/14	—	X		3	X					
	35-DDD	10/20/14	1213	X		3	X					X
	53-D	10/20/14	1357	X		9	X					X ← RUN MS/MSD (93) 10/24/14
	28-D	10/20/14	1446	X		3	X					X
	EB-1	10/20/14	1458	X		3	X					X
	15-S	10/21/14	1004	X		3	X					X
	36-DD	10/21/14	0929	X		3	X					X
	29-S	10/21/14	1048	X		3	X					X
	29-D	10/21/14	1048	X		3	X					X
	52-D	10-21-14	1214	X		3	X					X
	27-DD	10/21/14	1232	X		3	X					X
	36-D	10/21/14	1335	X		3	X					X
	28-S	10/21/14	1425	X		3	X					X

Notes:

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
[signature] DATE: 10/22/14 TIME: 1503
DATE: TIME:
DATE: TIME:

RECEIVED BY:
[signature] DATE: 10/22/14 TIME: 1503
DATE: TIME:
DATE: TIME:

CHAIN OF CUSTODY

Chain of Custody # _____

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # _____

Project No: 39751
Project Name: 901 Thompson
Project P. O. No:
EDD Format: Report Level ☒ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Bruk Avila Gallegos
Report To: Mike Calhoun
Company: Haley & Aldrich
Telephone: (510) 879-4554
Email: MCalhoun@haleyaldrich.com

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	ANALYTICAL REQUEST 8260 + Freon 113	USING 8010	457
	EB-2	10/21/14	14:40	X		3	X					X		
	27-D	10/22/14	00:00	X		3	X					X		
	1-D	10/22/14	00:10	X		3	X					X		
	36-S	10/22/14	08:41	X		3	X					X		
	37-S	10/22/14	08:40	X		3	X					X		
	22-DD	10/22/14	10:05	X		3	X					X		
	27-S	10/22/14	10:58	X		3	X					X		
	22-S	10/22/14	10:02	X		3	X					X		
	2-D	10/22/14	11:10	X		3	X					X		
	EB-3	10/22/14	11:36	X		3	X					X		

Notes:

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
LBruk DATE: 10/22/14 TIME: 1503
(GB) 10/24/14 DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: TIME:
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 261947 Date Received 10/22/14 Number of coolers 1
Client Haley & Aldrich Project 39751

Date Opened 10/22 By (print) " F " (sign) " "
Date Logged in " " By (print) " " (sign) " "

1. Did cooler come with a shipping slip (airbill, etc) ____ YES (NO)
   Shipping info ____
2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☑ NO
   How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO (N/A)
3. Were custody papers dry and intact when received? ____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ (YES) NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1-0

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES (NO)
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ (YES) NO
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ YES (NO)
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? ____ YES NO (N/A)
17. Did you document your preservative check? ____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO N/A
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS
10) Received sample 2-D w/ sampling date & time: 10/22/14 @ 1110

11) sampling time for -008 on COC is listed as 1048, sample label state 1049

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 261947

Results for any subcontracted analyses are not included in this summary.

Client : Haley & Aldrich, Inc.
Project : 39751
Location : 901 Thompson Place

Client Sample ID : TB-1 Laboratory Sample ID : 261947-001

No Detections

Client Sample ID : 35-DDD Laboratory Sample ID : 261947-002

No Detections

Client Sample ID : 53-D Laboratory Sample ID : 261947-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Trichloroethene	5.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 28-D Laboratory Sample ID : 261947-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	11		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	2.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	6.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,4-Dichlorobenzene	0.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	4.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : EB-1 Laboratory Sample ID : 261947-005

No Detections

Client Sample ID : 15-S Laboratory Sample ID : 261947-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
cis-1,2-Dichloroethene	1.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	2.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 36-DD Laboratory Sample ID : 261947-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	0.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	1.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	7.1		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Curtis & Tompkins, Ltd.

Client Sample ID : 29-S Laboratory Sample ID : 261947-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
cis-1,2-Dichloroethene	1.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1,1-Trichloroethane	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	23		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 29-D Laboratory Sample ID : 261947-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
1,1-Dichloroethene	0.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	0.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1,1-Trichloroethane	0.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	55		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	3.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 52-D Laboratory Sample ID : 261947-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
1,1-Dichloroethene	0.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	1.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1,1-Trichloroethane	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	33		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 27-DD Laboratory Sample ID : 261947-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
cis-1,2-Dichloroethene	4.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	44		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	1.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2,4-Trichlorobenzene	3.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 36-D Laboratory Sample ID : 261947-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
1,1-Dichloroethene	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	0.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	23		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	56		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	1.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Curtis & Tompkins, Ltd.

Client Sample ID : 28-S Laboratory Sample ID : 261947-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	62		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	1.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethane	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	10		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	1.4		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,4-Dichlorobenzene	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	10		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : EB-2 Laboratory Sample ID : 261947-014

No Detections

Client Sample ID : 27-D Laboratory Sample ID : 261947-015

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
1,1-Dichloroethene	0.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethane	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	2.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1,1-Trichloroethane	1.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	110		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Tetrachloroethene	5.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2,4-Trichlorobenzene	5.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 1-D Laboratory Sample ID : 261947-016

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
1,1-Dichloroethene	0.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethane	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	2.4		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1,1-Trichloroethane	1.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	99		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Tetrachloroethene	5.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2,4-Trichlorobenzene	5.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 36-S Laboratory Sample ID : 261947-017

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	1.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethene	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	0.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	13		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1,1-Trichloroethane	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	73		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	2.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Curtis & Tompkins, Ltd.

Client Sample ID : 37-S Laboratory Sample ID : 261947-018

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
cis-1,2-Dichloroethene	2.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	83		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	0.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 22-DD Laboratory Sample ID : 261947-019

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
cis-1,2-Dichloroethene	5.5		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
Trichloroethene	180		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B

Client Sample ID : 27-S Laboratory Sample ID : 261947-020

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
1,1-Dichloroethene	4.2		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	7.2		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	180		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Trichloroethene	210		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Tetrachloroethene	13		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
1,3-Dichlorobenzene	4.6		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
1,2,4-Trichlorobenzene	37		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B

Client Sample ID : 22-S Laboratory Sample ID : 261947-021

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	7.0		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethene	0.6		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	11		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	28		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	36		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	1.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	2.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,4-Dichlorobenzene	1.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichlorobenzene	24		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : EB-3 Laboratory Sample ID : 261947-022

No Detections

Curtis & Tompkins, Ltd.

Client Sample ID : 2-D Laboratory Sample ID : 261947-023

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	4.1		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
1,1-Dichloroethene	2.8		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	5.4		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	160		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
Trichloroethene	170		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
Tetrachloroethene	11		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
1,3-Dichlorobenzene	6.7		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
1,2,4-Trichlorobenzene	35		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
1,2,3-Trichlorobenzene	1.3		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	TB-1	Batch#:	216747
Lab ID:	261947-001	Sampled:	10/20/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	35-DDD	Batch#:	216747
Lab ID:	261947-002	Sampled:	10/20/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	89	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	53-D	Batch#:	216747
Lab ID:	261947-003	Sampled:	10/20/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	5.8	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	28-D	Batch#:	216747
Lab ID:	261947-004	Sampled:	10/20/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	11	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	2.0	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	6.8	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	0.5	0.5
1,2-Dichlorobenzene	4.0	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	EB-1	Batch#:	216747
Lab ID:	261947-005	Sampled:	10/20/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	15-S	Batch#:	216747
Lab ID:	261947-006	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	1.5	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	2.3	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	36-DD	Batch#:	216747
Lab ID:	261947-007	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	0.8	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	1.0	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	7.1	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	29-S	Batch#:	216747
Lab ID:	261947-008	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	1.3	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	0.7	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	23	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	0.6	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	29-D	Batch#:	216747
Lab ID:	261947-009	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	0.8	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	0.9	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	0.9	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	55	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	3.2	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	89	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	52-D	Batch#:	216747
Lab ID:	261947-010	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	0.5	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	1.3	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	0.7	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	33	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	27-DD	Batch#:	216748
Lab ID:	261947-011	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	4.6	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	44	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	1.6	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	3.2	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	113	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	36-D	Batch#:	216748
Lab ID:	261947-012	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	0.6	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	0.9	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	23	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	56	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	1.8	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	114	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	28-S	Batch#:	216748
Lab ID:	261947-013	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	62	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	1.3	0.5
1,1-Dichloroethane	0.6	0.5
cis-1,2-Dichloroethene	10	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	1.4	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	0.7	0.5
1,2-Dichlorobenzene	10	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	113	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	EB-2	Batch#:	216748
Lab ID:	261947-014	Sampled:	10/21/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	115	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	27-D	Units:	ug/L
Lab ID:	261947-015	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	1.0	1.000	216748	10/24/14
Vinyl Chloride	ND	0.5	1.000	216748	10/24/14
Bromomethane	ND	1.0	1.000	216748	10/24/14
Chloroethane	ND	1.0	1.000	216748	10/24/14
Trichlorofluoromethane	ND	1.0	1.000	216748	10/24/14
Freon 113	ND	2.0	1.000	216748	10/24/14
1,1-Dichloroethene	0.8	0.5	1.000	216748	10/24/14
Methylene Chloride	ND	20	1.000	216748	10/24/14
trans-1,2-Dichloroethene	ND	0.5	1.000	216748	10/24/14
1,1-Dichloroethane	0.6	0.5	1.000	216748	10/24/14
cis-1,2-Dichloroethene	2.2	0.5	1.000	216748	10/24/14
Chloroform	ND	1.0	1.000	216748	10/24/14
1,1,1-Trichloroethane	1.0	0.5	1.000	216748	10/24/14
Carbon Tetrachloride	ND	0.5	1.000	216748	10/24/14
1,2-Dichloroethane	ND	0.5	1.000	216748	10/24/14
Trichloroethene	110	1.7	3.333	216829	10/28/14
1,2-Dichloropropane	ND	0.5	1.000	216748	10/24/14
Bromodichloromethane	ND	0.5	1.000	216748	10/24/14
cis-1,3-Dichloropropene	ND	0.5	1.000	216748	10/24/14
trans-1,3-Dichloropropene	ND	0.5	1.000	216748	10/24/14
1,1,2-Trichloroethane	ND	0.5	1.000	216748	10/24/14
Tetrachloroethene	5.6	0.5	1.000	216748	10/24/14
Dibromochloromethane	ND	0.5	1.000	216748	10/24/14
Chlorobenzene	ND	0.5	1.000	216748	10/24/14
Bromoform	ND	0.5	1.000	216748	10/24/14
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	216748	10/24/14
1,3-Dichlorobenzene	ND	0.5	1.000	216748	10/24/14
1,4-Dichlorobenzene	ND	0.5	1.000	216748	10/24/14
1,2-Dichlorobenzene	ND	0.5	1.000	216748	10/24/14
1,2,4-Trichlorobenzene	5.2	0.5	1.000	216748	10/24/14
1,2,3-Trichlorobenzene	ND	0.5	1.000	216748	10/24/14

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
1,2-Dichloroethane-d4	105	75-139	1.000	216748	10/24/14
Toluene-d8	97	80-120	1.000	216748	10/24/14
Bromofluorobenzene	112	80-120	1.000	216748	10/24/14

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	1-D	Units:	ug/L
Lab ID:	261947-016	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	1.0	1.000	216748	10/24/14
Vinyl Chloride	ND	0.5	1.000	216748	10/24/14
Bromomethane	ND	1.0	1.000	216748	10/24/14
Chloroethane	ND	1.0	1.000	216748	10/24/14
Trichlorofluoromethane	ND	1.0	1.000	216748	10/24/14
Freon 113	ND	2.0	1.000	216748	10/24/14
1,1-Dichloroethene	0.8	0.5	1.000	216748	10/24/14
Methylene Chloride	ND	20	1.000	216748	10/24/14
trans-1,2-Dichloroethene	ND	0.5	1.000	216748	10/24/14
1,1-Dichloroethane	0.6	0.5	1.000	216748	10/24/14
cis-1,2-Dichloroethene	2.4	0.5	1.000	216748	10/24/14
Chloroform	ND	1.0	1.000	216748	10/24/14
1,1,1-Trichloroethane	1.0	0.5	1.000	216748	10/24/14
Carbon Tetrachloride	ND	0.5	1.000	216748	10/24/14
1,2-Dichloroethane	ND	0.5	1.000	216748	10/24/14
Trichloroethene	99	1.7	3.333	216829	10/28/14
1,2-Dichloropropane	ND	0.5	1.000	216748	10/24/14
Bromodichloromethane	ND	0.5	1.000	216748	10/24/14
cis-1,3-Dichloropropene	ND	0.5	1.000	216748	10/24/14
trans-1,3-Dichloropropene	ND	0.5	1.000	216748	10/24/14
1,1,2-Trichloroethane	ND	0.5	1.000	216748	10/24/14
Tetrachloroethene	5.9	0.5	1.000	216748	10/24/14
Dibromochloromethane	ND	0.5	1.000	216748	10/24/14
Chlorobenzene	ND	0.5	1.000	216748	10/24/14
Bromoform	ND	0.5	1.000	216748	10/24/14
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	216748	10/24/14
1,3-Dichlorobenzene	ND	0.5	1.000	216748	10/24/14
1,4-Dichlorobenzene	ND	0.5	1.000	216748	10/24/14
1,2-Dichlorobenzene	ND	0.5	1.000	216748	10/24/14
1,2,4-Trichlorobenzene	5.9	0.5	1.000	216748	10/24/14
1,2,3-Trichlorobenzene	ND	0.5	1.000	216748	10/24/14

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
1,2-Dichloroethane-d4	108	75-139	1.000	216748	10/24/14
Toluene-d8	98	80-120	1.000	216748	10/24/14
Bromofluorobenzene	114	80-120	1.000	216748	10/24/14

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	36-S	Batch#:	216748
Lab ID:	261947-017	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	1.7	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	0.6	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	0.8	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	13	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	0.6	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	73	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	2.2	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	111	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	37-S	Batch#:	216748
Lab ID:	261947-018	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	2.7	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	83	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	0.8	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	111	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	22-DD	Batch#:	216748
Lab ID:	261947-019	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	2.500		

Analyte	Result	RL
Chloromethane	ND	2.5
Vinyl Chloride	ND	1.3
Bromomethane	ND	2.5
Chloroethane	ND	2.5
Trichlorofluoromethane	ND	2.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	1.3
Methylene Chloride	ND	50
trans-1,2-Dichloroethene	ND	1.3
1,1-Dichloroethane	ND	1.3
cis-1,2-Dichloroethene	5.5	1.3
Chloroform	ND	2.5
1,1,1-Trichloroethane	ND	1.3
Carbon Tetrachloride	ND	1.3
1,2-Dichloroethane	ND	1.3
Trichloroethene	180	1.3
1,2-Dichloropropane	ND	1.3
Bromodichloromethane	ND	1.3
cis-1,3-Dichloropropene	ND	1.3
trans-1,3-Dichloropropene	ND	1.3
1,1,2-Trichloroethane	ND	1.3
Tetrachloroethene	ND	1.3
Dibromochloromethane	ND	1.3
Chlorobenzene	ND	1.3
Bromoform	ND	1.3
1,1,2,2-Tetrachloroethane	ND	1.3
1,3-Dichlorobenzene	ND	1.3
1,4-Dichlorobenzene	ND	1.3
1,2-Dichlorobenzene	ND	1.3
1,2,4-Trichlorobenzene	ND	1.3
1,2,3-Trichlorobenzene	ND	1.3

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	112	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	27-S	Batch#:	216748
Lab ID:	261947-020	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	3.333		

Analyte	Result	RL
Chloromethane	ND	3.3
Vinyl Chloride	ND	1.7
Bromomethane	ND	3.3
Chloroethane	ND	3.3
Trichlorofluoromethane	ND	3.3
Freon 113	ND	6.7
1,1-Dichloroethene	4.2	1.7
Methylene Chloride	ND	67
trans-1,2-Dichloroethene	7.2	1.7
1,1-Dichloroethane	ND	1.7
cis-1,2-Dichloroethene	180	1.7
Chloroform	ND	3.3
1,1,1-Trichloroethane	ND	1.7
Carbon Tetrachloride	ND	1.7
1,2-Dichloroethane	ND	1.7
Trichloroethene	210	1.7
1,2-Dichloropropane	ND	1.7
Bromodichloromethane	ND	1.7
cis-1,3-Dichloropropene	ND	1.7
trans-1,3-Dichloropropene	ND	1.7
1,1,2-Trichloroethane	ND	1.7
Tetrachloroethene	13	1.7
Dibromochloromethane	ND	1.7
Chlorobenzene	ND	1.7
Bromoform	ND	1.7
1,1,2,2-Tetrachloroethane	ND	1.7
1,3-Dichlorobenzene	4.6	1.7
1,4-Dichlorobenzene	ND	1.7
1,2-Dichlorobenzene	ND	1.7
1,2,4-Trichlorobenzene	37	1.7
1,2,3-Trichlorobenzene	ND	1.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	109	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	22-S	Batch#:	216748
Lab ID:	261947-021	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	7.0	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	0.6	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	11	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	28	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	36	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	1.2	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	2.2	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	1.3	0.5
1,2-Dichlorobenzene	24	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	109	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	EB-3	Batch#:	216748
Lab ID:	261947-022	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	114	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	2-D	Batch#:	216898
Lab ID:	261947-023	Sampled:	10/22/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/29/14
Diln Fac:	2.500		

Analyte	Result	RL
Chloromethane	ND	2.5
Vinyl Chloride	4.1	1.3
Bromomethane	ND	2.5
Chloroethane	ND	2.5
Trichlorofluoromethane	ND	2.5
Freon 113	ND	5.0
1,1-Dichloroethene	2.8	1.3
Methylene Chloride	ND	50
trans-1,2-Dichloroethene	5.4	1.3
1,1-Dichloroethane	ND	1.3
cis-1,2-Dichloroethene	160	1.3
Chloroform	ND	2.5
1,1,1-Trichloroethane	ND	1.3
Carbon Tetrachloride	ND	1.3
1,2-Dichloroethane	ND	1.3
Trichloroethene	170	1.3
1,2-Dichloropropane	ND	1.3
Bromodichloromethane	ND	1.3
cis-1,3-Dichloropropene	ND	1.3
trans-1,3-Dichloropropene	ND	1.3
1,1,2-Trichloroethane	ND	1.3
Tetrachloroethene	11	1.3
Dibromochloromethane	ND	1.3
Chlorobenzene	ND	1.3
Bromoform	ND	1.3
1,1,2,2-Tetrachloroethane	ND	1.3
1,3-Dichlorobenzene	6.7	1.3
1,4-Dichlorobenzene	ND	1.3
1,2-Dichlorobenzene	ND	1.3
1,2,4-Trichlorobenzene	35	1.3
1,2,3-Trichlorobenzene	1.3	1.3

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	128	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	216747
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Type: BS Lab ID: QC762943

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	12.84	103	65-134
Trichloroethene	12.50	12.33	99	80-120
Chlorobenzene	12.50	13.69	110	80-120
1,2,4-Trichlorobenzene	12.50	10.24	82	68-136
1,2,3-Trichlorobenzene	12.50	10.24	82	68-136

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-120

Type: BSD Lab ID: QC762944

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.03	104	65-134	2	20
Trichloroethene	12.50	12.11	97	80-120	2	20
Chlorobenzene	12.50	13.37	107	80-120	2	20
1,2,4-Trichlorobenzene	12.50	10.58	85	68-136	3	20
1,2,3-Trichlorobenzene	12.50	10.58	85	68-136	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC762945	Batch#:	216747
Matrix:	Water	Analyzed:	10/24/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	216748
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Type: BS Lab ID: QC762946

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	13.73	110	65-134
Trichloroethene	12.50	13.94	112	80-120
Chlorobenzene	12.50	13.36	107	80-120
1,2,4-Trichlorobenzene	12.50	10.38	83	68-136
1,2,3-Trichlorobenzene	12.50	8.910	71	68-136

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-120

Type: BSD Lab ID: QC762947

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.10	105	65-134	5	20
Trichloroethene	12.50	13.32	107	80-120	5	20
Chlorobenzene	12.50	12.83	103	80-120	4	20
1,2,4-Trichlorobenzene	12.50	9.761	78	68-136	6	20
1,2,3-Trichlorobenzene	12.50	8.862	71	68-136	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC762948	Batch#:	216748
Matrix:	Water	Analyzed:	10/24/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	112	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Field ID:	53-D	Batch#:	216747
MSS Lab ID:	261947-003	Sampled:	10/20/14
Matrix:	Water	Received:	10/22/14
Units:	ug/L	Analyzed:	10/24/14
Diln Fac:	1.000		

Type: MS Lab ID: QC763022

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	0.4060	12.50	12.50	97	69-129
Trichloroethene	5.779	12.50	17.26	92	70-127
Chlorobenzene	<0.1000	12.50	13.47	108	80-120
1,2,4-Trichlorobenzene	<0.1000	12.50	10.72	86	68-127
1,2,3-Trichlorobenzene	<0.1000	12.50	10.72	86	70-127

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	89	80-120

Type: MSD Lab ID: QC763023

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.17	102	69-129	5	26
Trichloroethene	12.50	17.29	92	70-127	0	21
Chlorobenzene	12.50	13.45	108	80-120	0	22
1,2,4-Trichlorobenzene	12.50	10.68	85	68-127	0	25
1,2,3-Trichlorobenzene	12.50	10.68	85	70-127	0	25

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	88	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	216829
Units:	ug/L	Analyzed:	10/27/14
Diln Fac:	1.000		

Type: BS Lab ID: QC763272

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	31.19	125	65-134
Trichloroethene	25.00	27.48	110	80-120
Chlorobenzene	25.00	24.74	99	80-120
1,2,4-Trichlorobenzene	25.00	24.08	96	68-136
1,2,3-Trichlorobenzene	25.00	22.11	88	68-136

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	89	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC763273

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	30.04	120	65-134	4	20
Trichloroethene	25.00	27.51	110	80-120	0	20
Chlorobenzene	25.00	24.52	98	80-120	1	20
1,2,4-Trichlorobenzene	25.00	24.43	98	68-136	1	20
1,2,3-Trichlorobenzene	25.00	22.34	89	68-136	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	89	80-120
Bromofluorobenzene	92	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC763274	Batch#:	216829
Matrix:	Water	Analyzed:	10/27/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	88	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC763535	Batch#:	216898
Matrix:	Water	Analyzed:	10/29/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	121	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	261947	Location:	901 Thompson Place
Client:	Haley & Aldrich, Inc.	Prep:	EPA 5030B
Project#:	39751	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	216898
Units:	ug/L	Analyzed:	10/29/14
Diln Fac:	1.000		

Type: BS Lab ID: QC763536

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	13.40	107	65-134
Trichloroethene	12.50	12.45	100	80-120
Chlorobenzene	12.50	12.92	103	80-120
1,2,4-Trichlorobenzene	12.50	12.22	98	68-136
1,2,3-Trichlorobenzene	12.50	11.69	94	68-136

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	117	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	97	80-120

Type: BSD Lab ID: QC763537

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.63	101	65-134	6	20
Trichloroethene	12.50	12.26	98	80-120	1	20
Chlorobenzene	12.50	12.84	103	80-120	1	20
1,2,4-Trichlorobenzene	12.50	12.36	99	68-136	1	20
1,2,3-Trichlorobenzene	12.50	12.46	100	68-136	6	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	117	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

APPENDIX E

Quality Assurance/Quality Control Data

Data Usability Summary Report (DUSR)
901 Thompson Place
Analytical Laboratory: Curtis & Tompkins, Ltd. – Berkeley, CA
Sample Delivery Group # 261713

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540-R-08-01) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-00-006)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID	Sample ID
23-S	DUP-1
28-MW	TB-1
23-D	
PMW-2-1	
PMW-2-3	
X2A	
X1B	
X2B1	
16-S	
16-D	
DW-1	
DW-7	
DW-2	

Project Samples were analyzed according to the following analytical methods

	Parameter	Analytical Method	Holding Time Criteria
1.	Organic Carbon, Total (TOC)	SM5310C	28 days
2.	VOCs	EPA 8260B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Field Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified “J” as shown in the table(s) below:

Target Analyte(s)	Original Sample ID. 23-D	FD Sample ID. DUP-1	%RPD	Flag Original and FD sample results with:
cis-1,2-Dichloroethene	4.7	4.6	2%	
Trichloroethene	260	280	7%	
Freon 113	6.7	6.3	6%	
1,1-Dichloroethene	1.7	0.9	62%	None, original ND
1,1-Dichloroethane	1.7	0.5	109%	None, original ND

Action:

If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Target Analyte(s)	Original Sample ID. 23-D	FD Sample ID. DUP-1	%RPD	Flag Original and FD sample results with:
Total Organic Carbon (TOC)	0.89	0.8	11%	

Action:

If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
901 Thompson Place
Analytical Laboratory: Microseeps/Pace Analytical Energy Services, LLC –Pittsburgh, PA
Sample Delivery Group # 13638

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
23-S
28-MW
23-D
PMW-2-1
PMW-2-3
X2A
X1B
X2B1
16-S
16-D
DW-1
DW-7
DW-2

Project Samples were analyzed according to the following analytical methods

	Parameter	Analytical Method	Holding Time Criteria
1.	Dissolved Gases in Water	AM20GAX	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
901 Thompson Place
Analytical Laboratory: Curtis & Tompkins, Ltd. – Berkeley, CA
Sample Delivery Group # 261947

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540-R-08-01) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-00-006)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID	Sample ID
TB-1	EB-2
35-DDD	27-D
53-D	1-D
28-D	36-S
EB-1	37-S
15-S	22-DD
36-DD	27-S
29-S	22-S
29-D	EB-3
52-D	2-D
27-DD	
36-D	
28-S	

Project Samples were analyzed according to the following analytical methods

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Field Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified "J" as shown in the table(s) below:

Target Analyte(s)	Original Sample ID. 27-D	FD Sample ID. 1-D	%RPD	Flag Original and FD sample results with:
1,1-Dichloroethene	0.8	0.8	0%	
1,1-Dichloroethane	0.6	0.6	0%	
cis-1,2-Dichloroethene	2.2	2.4	9%	
1,1,1-Trichloroethane	1	1	0%	
Trichloroethene	110	99	11%	
Tetrachloroethene	5.6	5.9	5%	
1,2,4-Trichlorobenzene	5.2	5.9	13%	

Target Analyte(s)	Original Sample ID. 27-S	FD Sample ID. 2-D	%RPD	Flag Original and FD sample results with:
1,1-Dichloroethene	4.2	2.8	40%	J
trans-1,2-Dichloroethene	7.2	5.4	29%	
cis-1,2-Dichloroethene	180	160	12%	
Trichloroethene	210	170	21%	
Tetrachloroethene	13	11	17%	
1,3-Dichlorobenzene	4.6	6.7	37%	J
1,2,4-Trichlorobenzene	37	35	6%	
1,2,3-Trichlorobenzene	1.7	1.3	27%	
Vinyl chloride	1.7	4.1	83%	J

Action:

If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

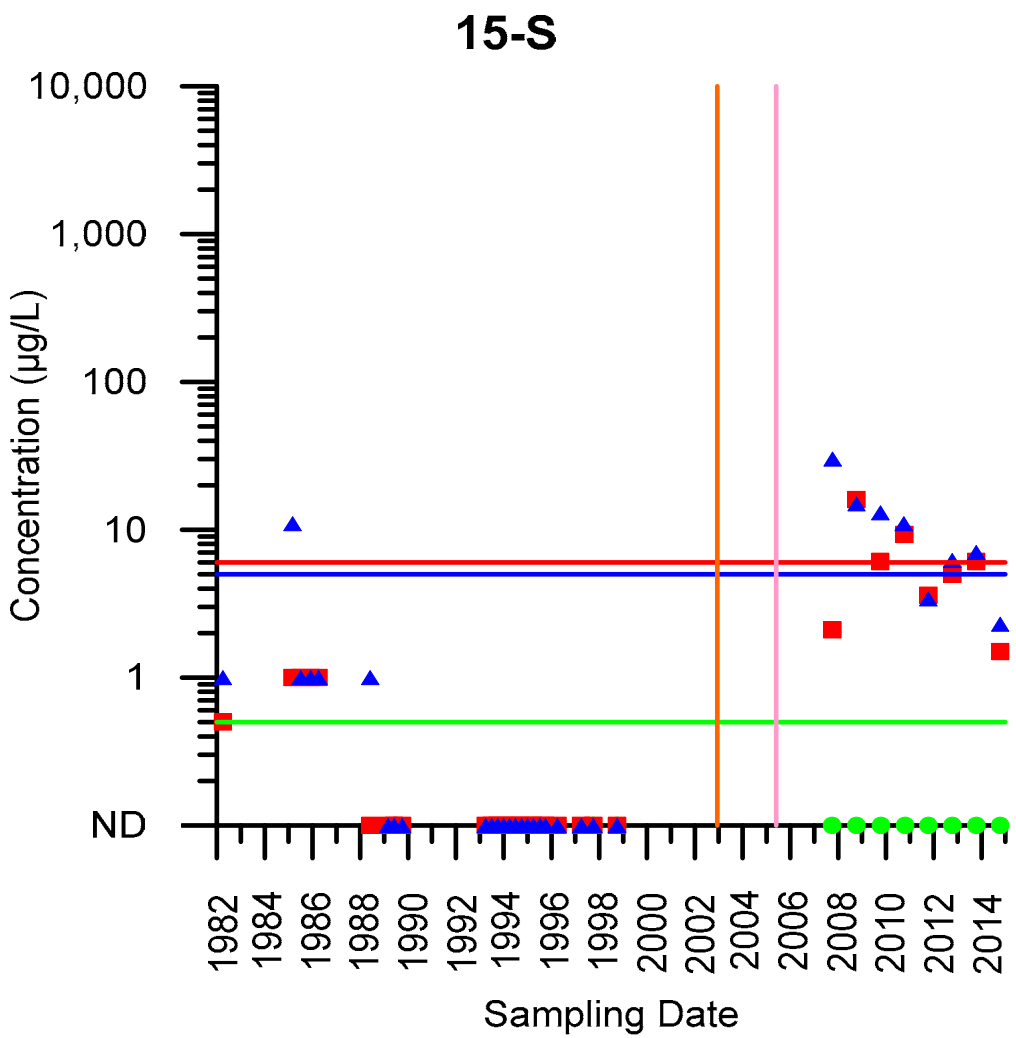
Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

APPENDIX F

Concentration Trend Plots for Site Monitoring Wells



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

HALEY & ALDRICH

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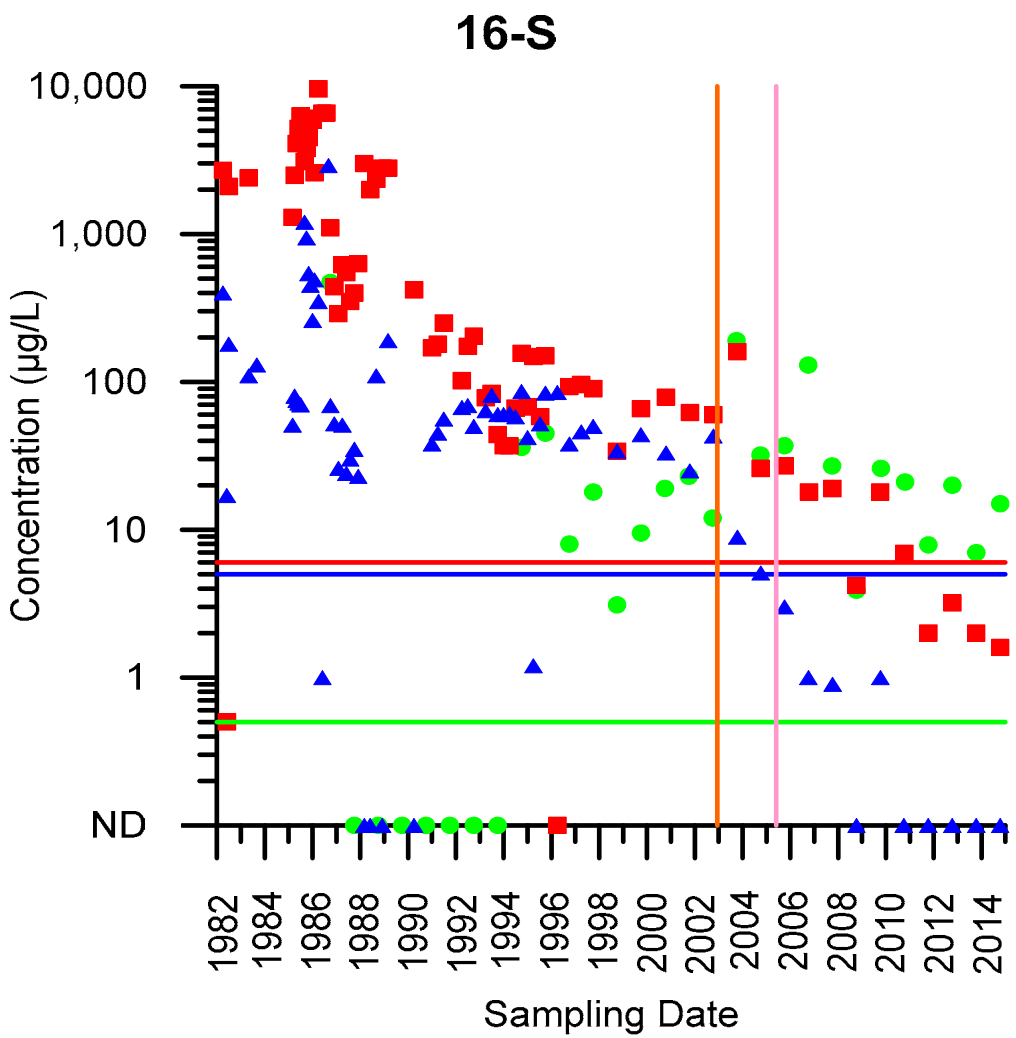
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 15-S

JANUARY 2015

FIGURE F-1

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\2014\7_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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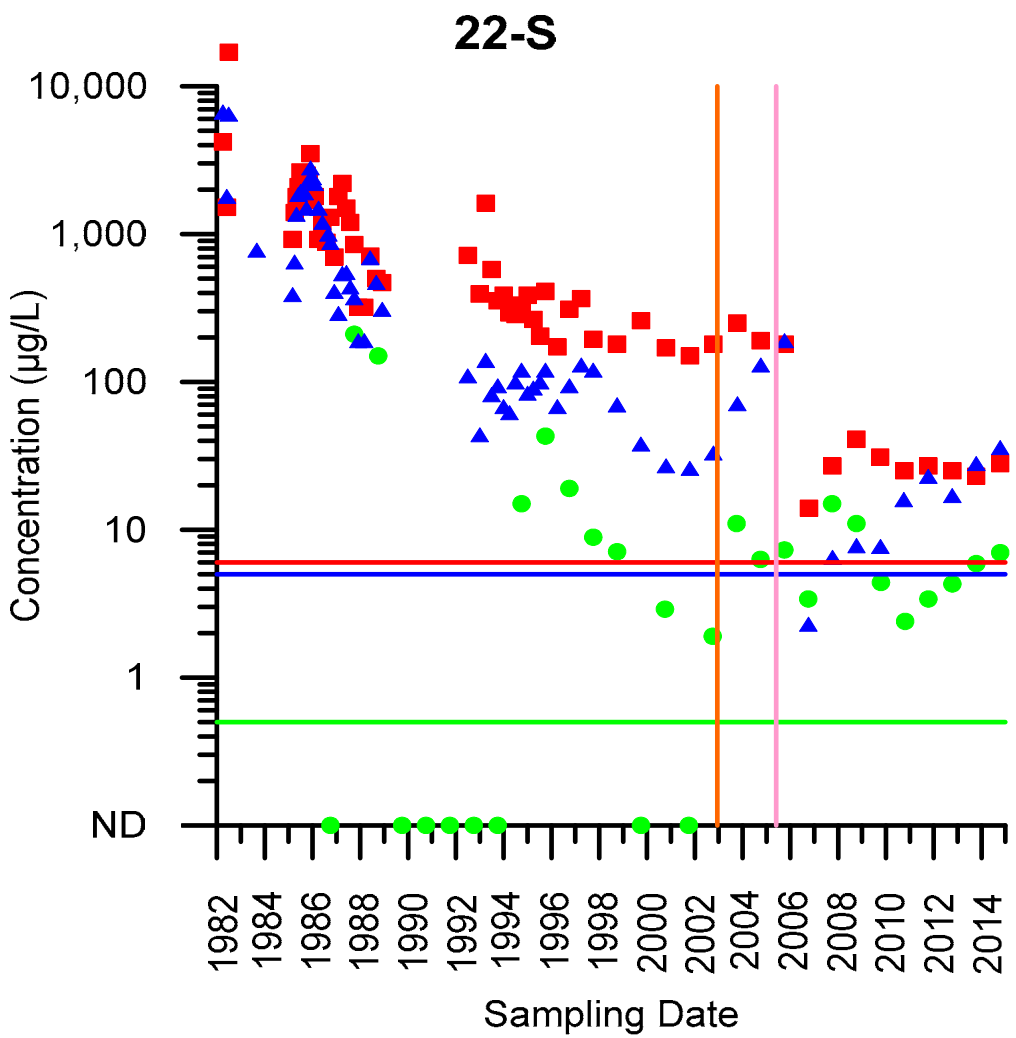
CONCENTRATION TRENDS FOR WELL 16-S

JANUARY 2015

FIGURE F-2

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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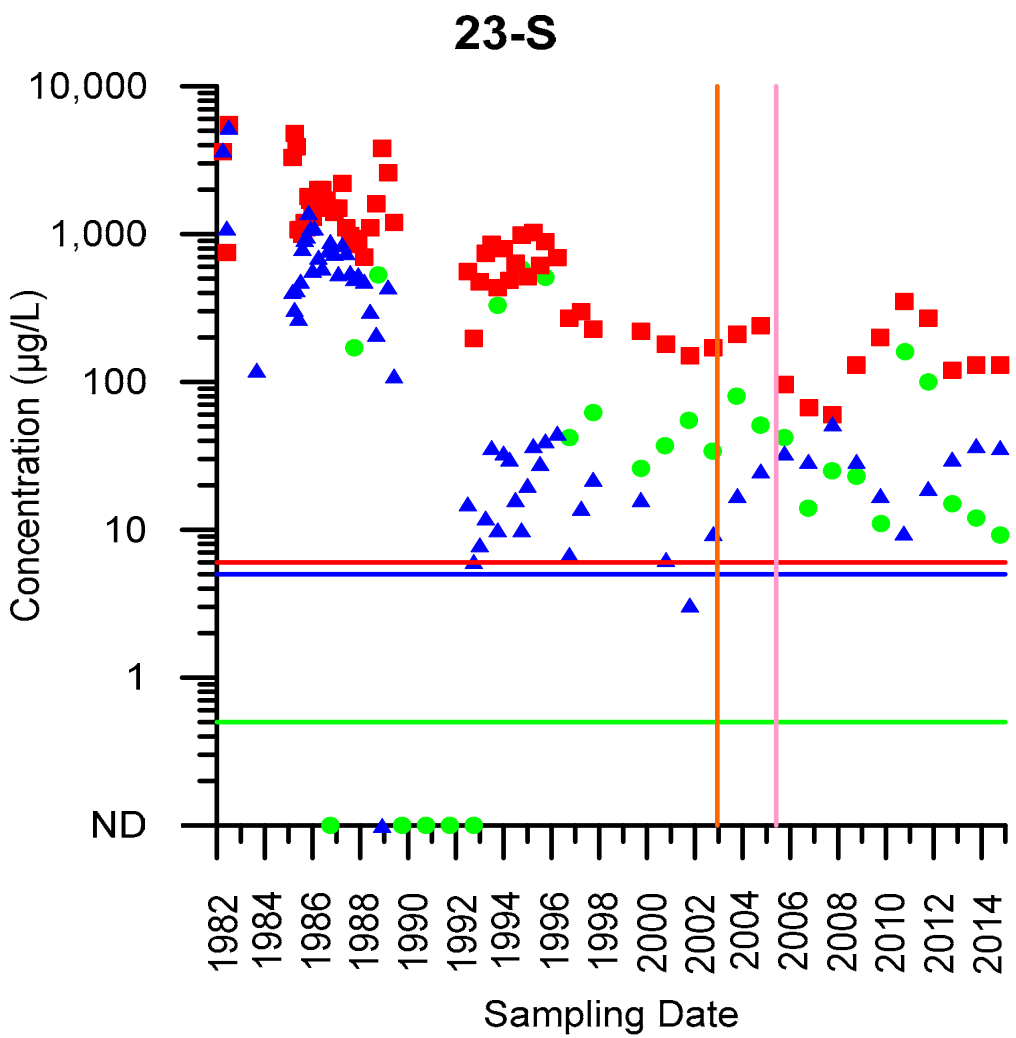
CONCENTRATION TRENDS FOR WELL 22-S

JANUARY 2015

FIGURE F-3

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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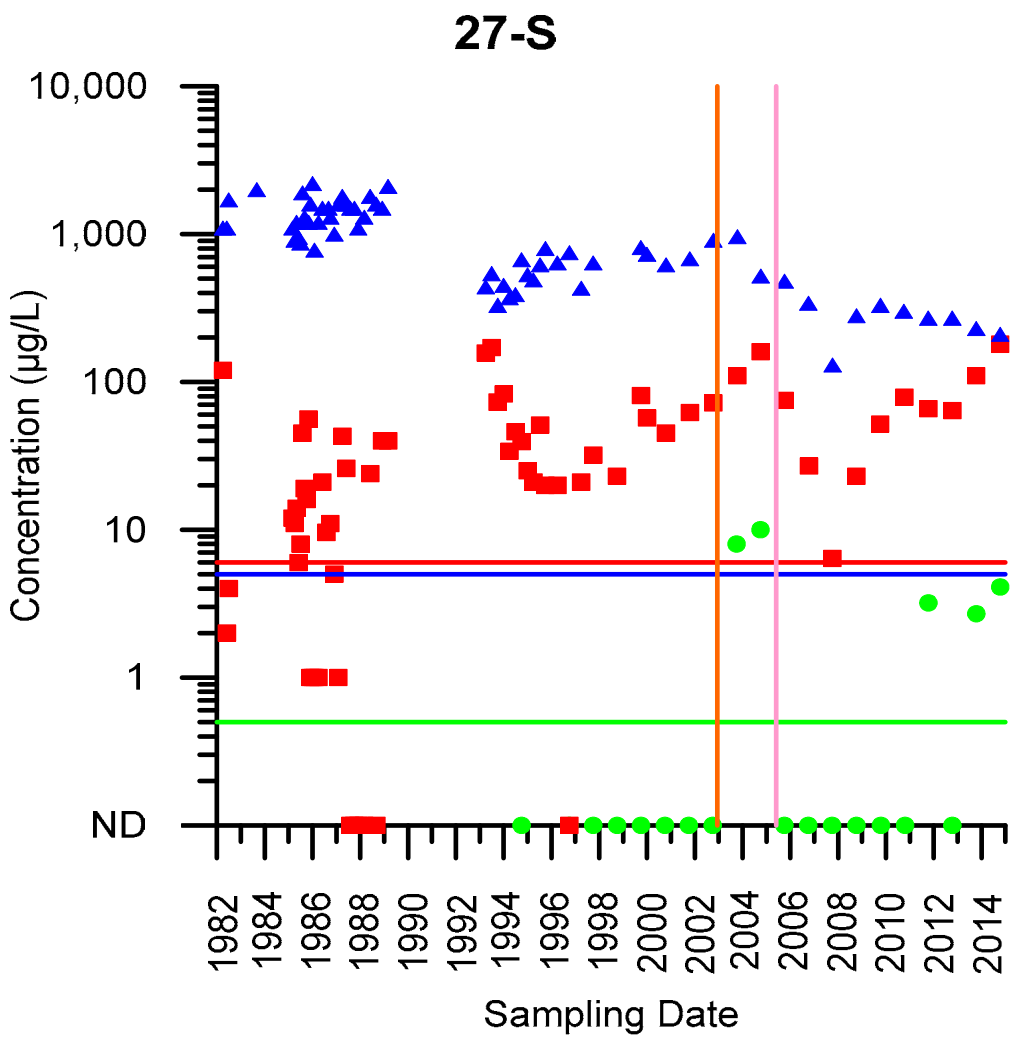
CONCENTRATION TRENDS FOR WELL 23-S

JANUARY 2015

FIGURE F-4

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\2014\7_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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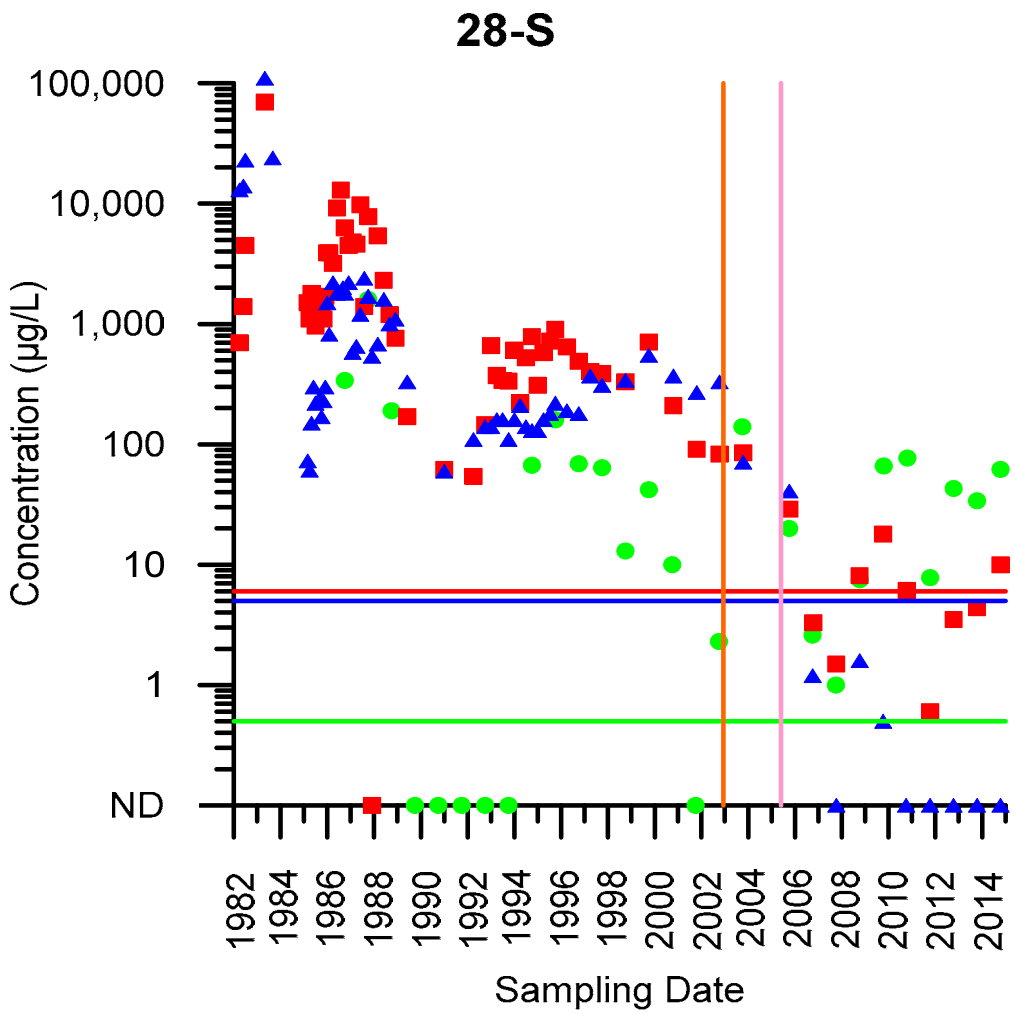
CONCENTRATION TRENDS FOR WELL 27-S

JANUARY 2015

FIGURE F-5

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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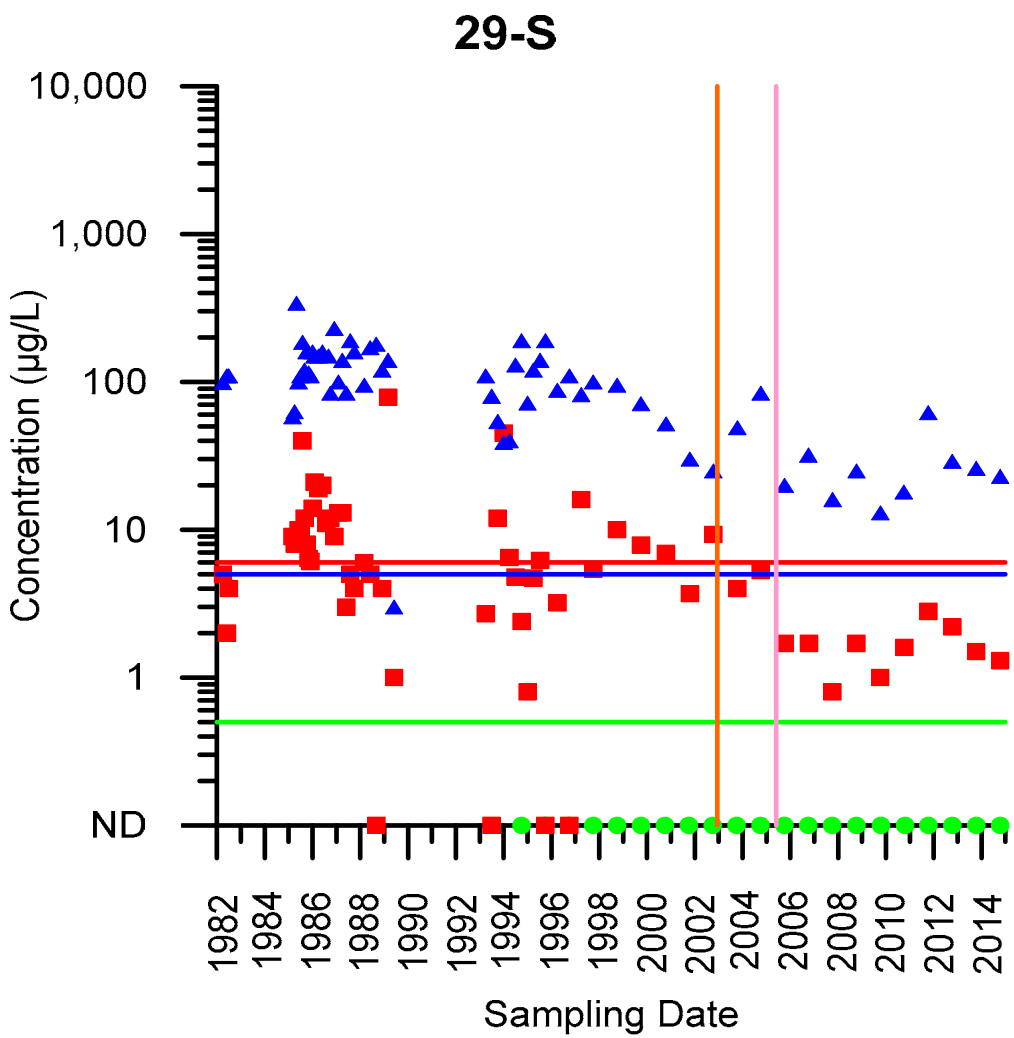
CONCENTRATION TRENDS FOR WELL 28-S

JANUARY 2015

FIGURE F-6

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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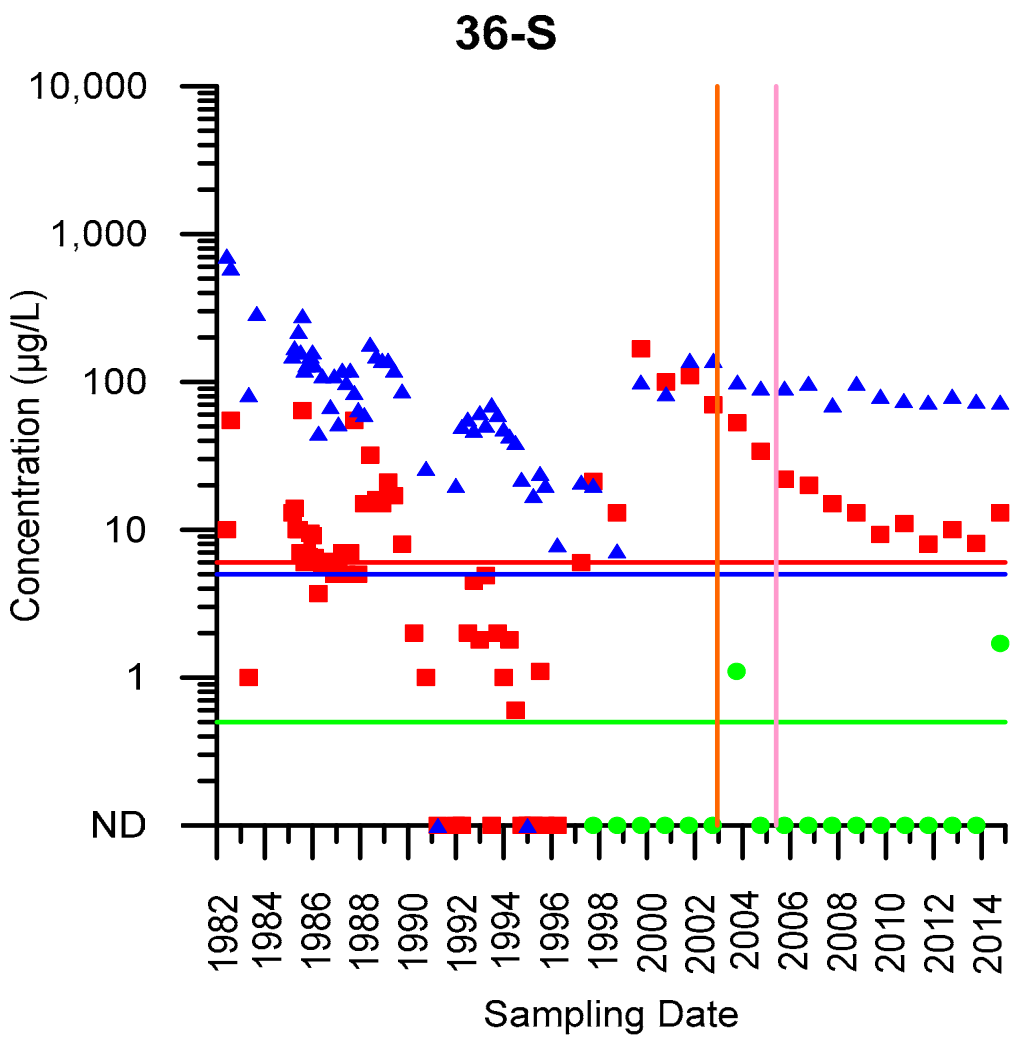
CONCENTRATION TRENDS FOR WELL 29-S

JANUARY 2015

FIGURE F-7

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

HALEY & ALDRICH

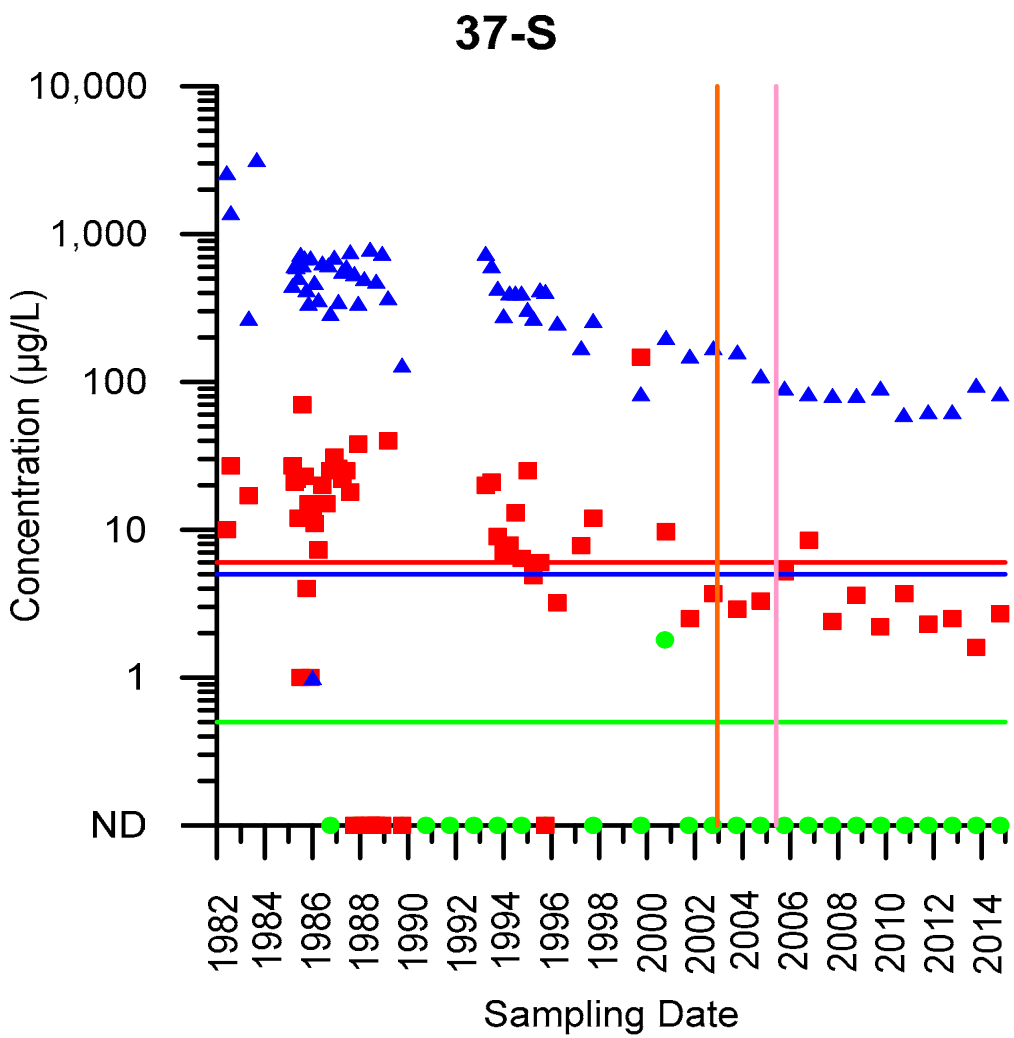
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 36-S

JANUARY 2015

FIGURE F-8

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\2014\7_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

HALEY & ALDRICH

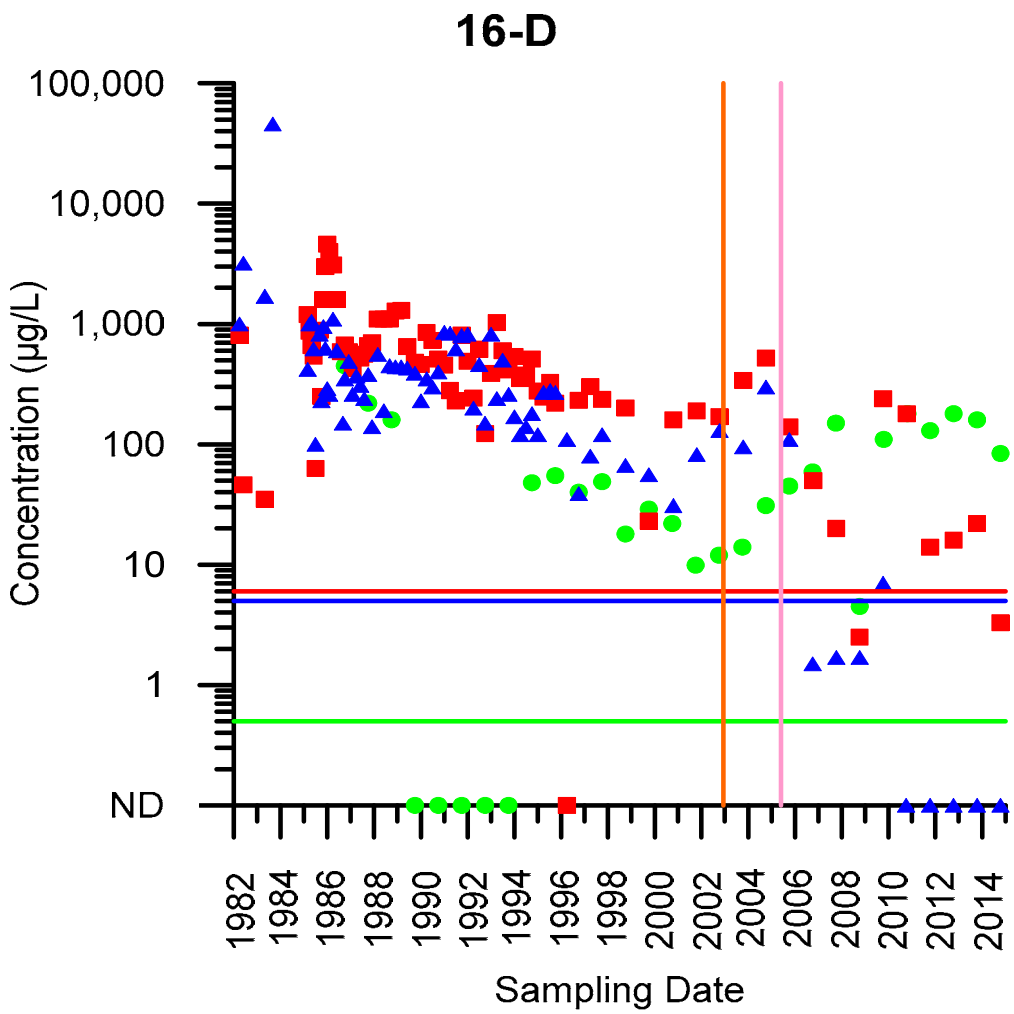
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 37-S

JANUARY 2015

FIGURE F-9

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

HALEY & ALDRICH

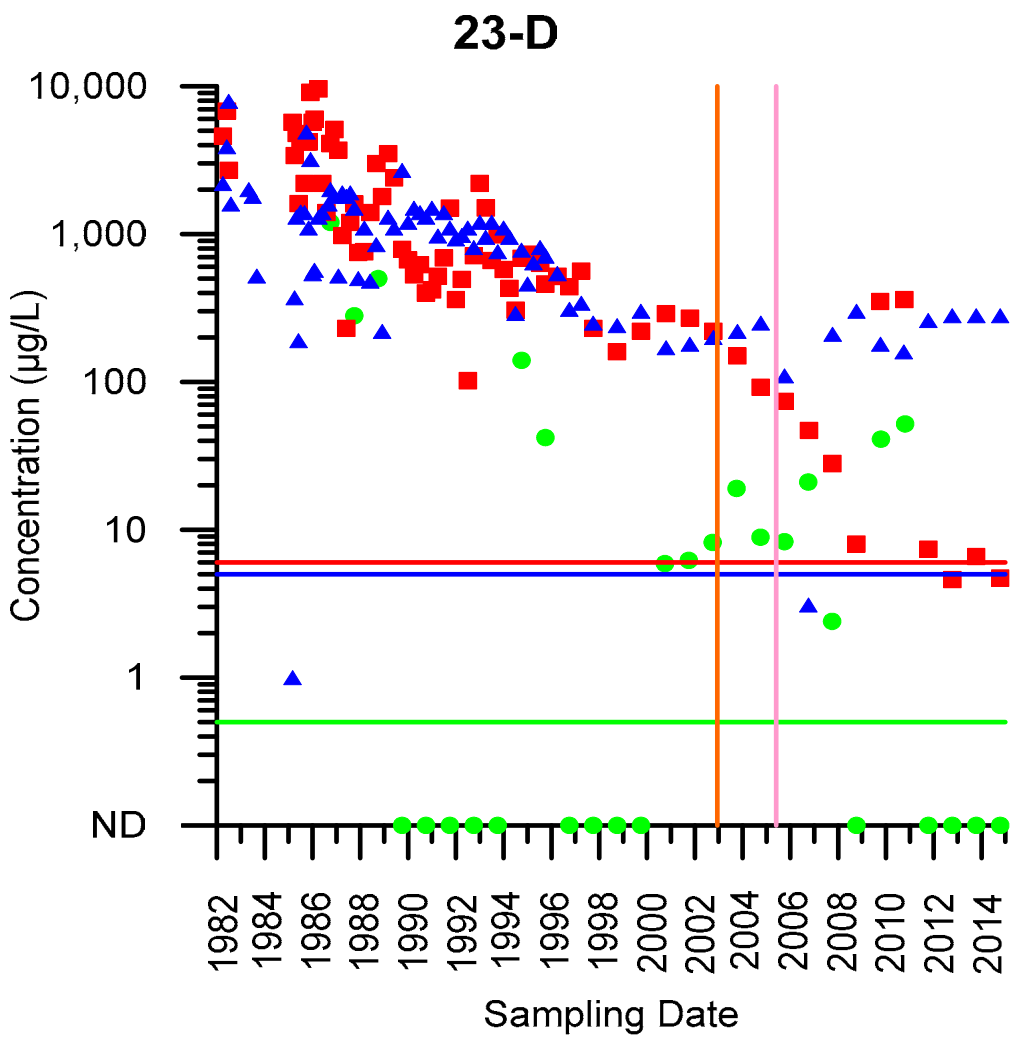
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 16-D

JANUARY 2015

FIGURE F-10

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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CONCENTRATION TRENDS FOR WELL 23-D

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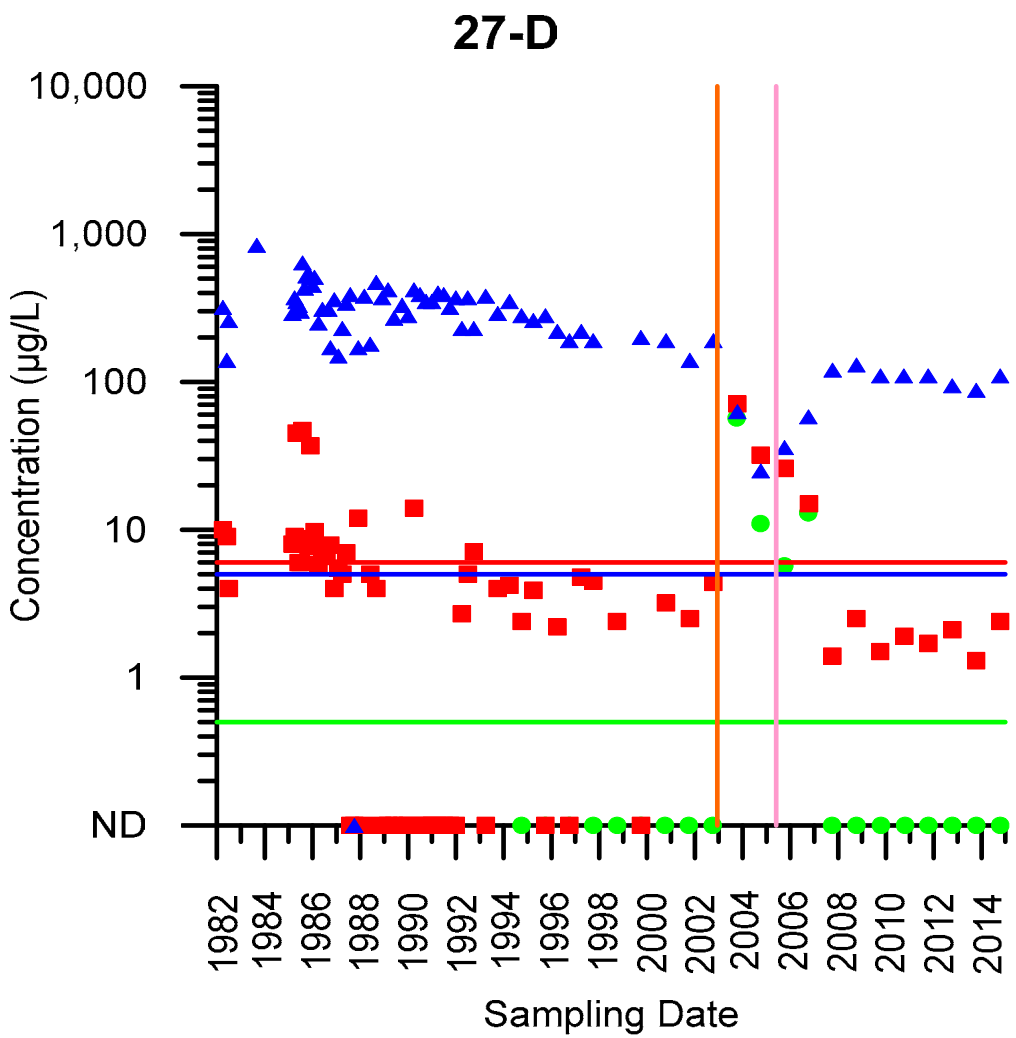
FIGURE F-11

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\2014\7_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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CONCENTRATION TRENDS FOR WELL 27-D

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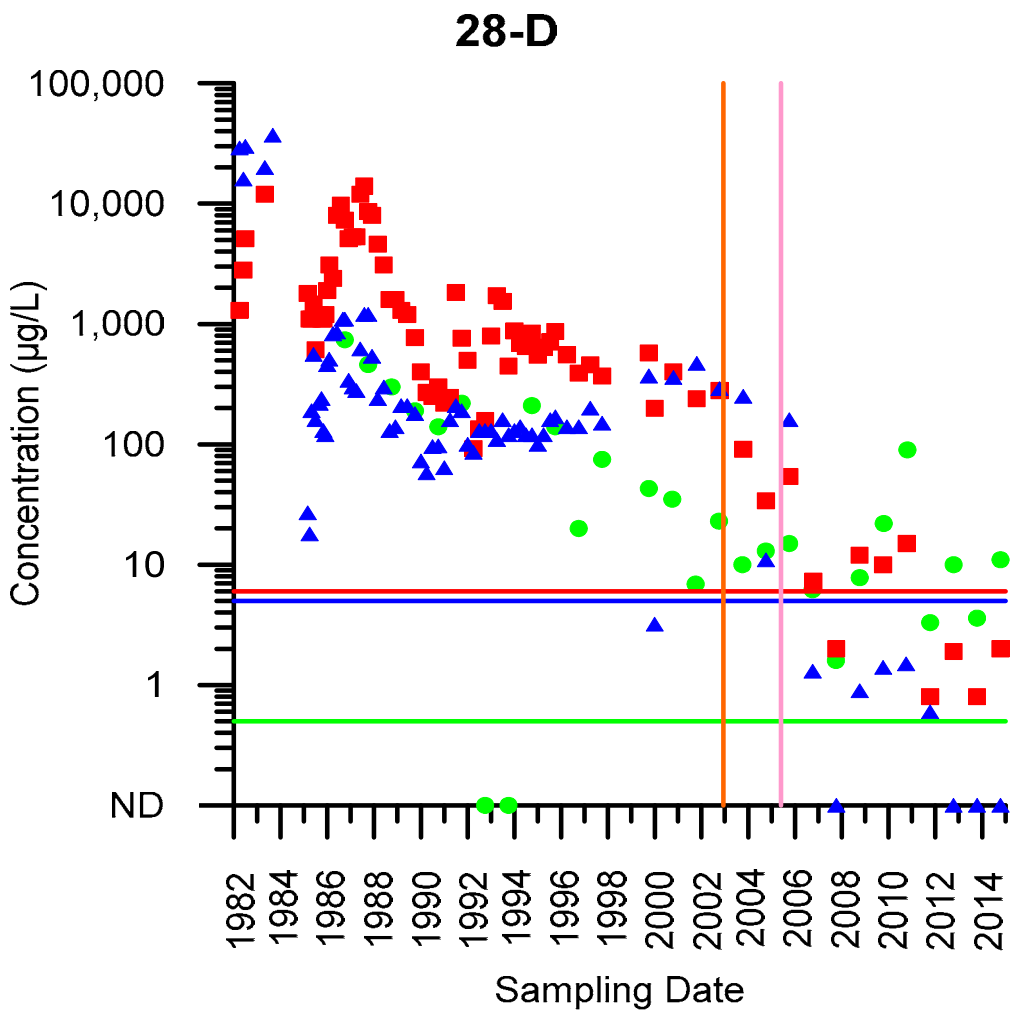
FIGURE F-12

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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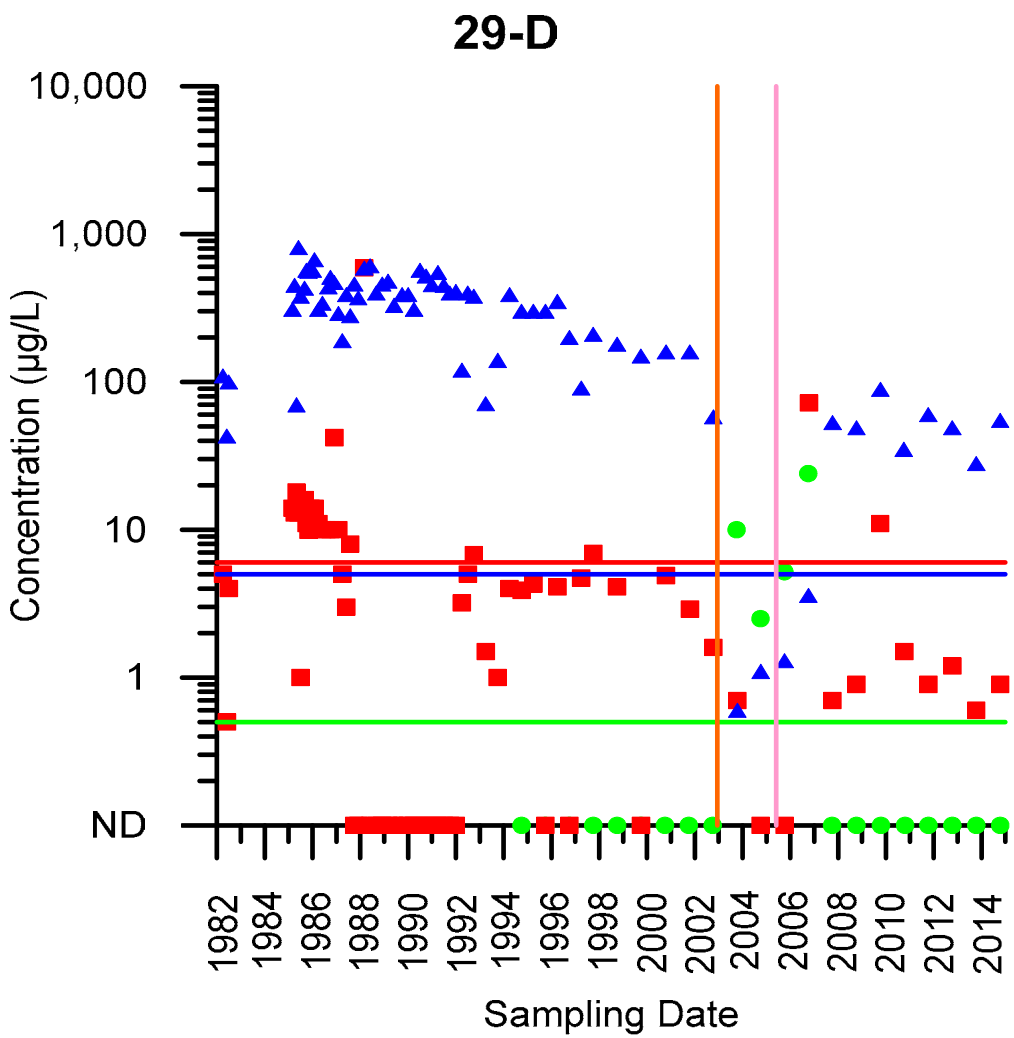
FIGURE F-13

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\2014\7_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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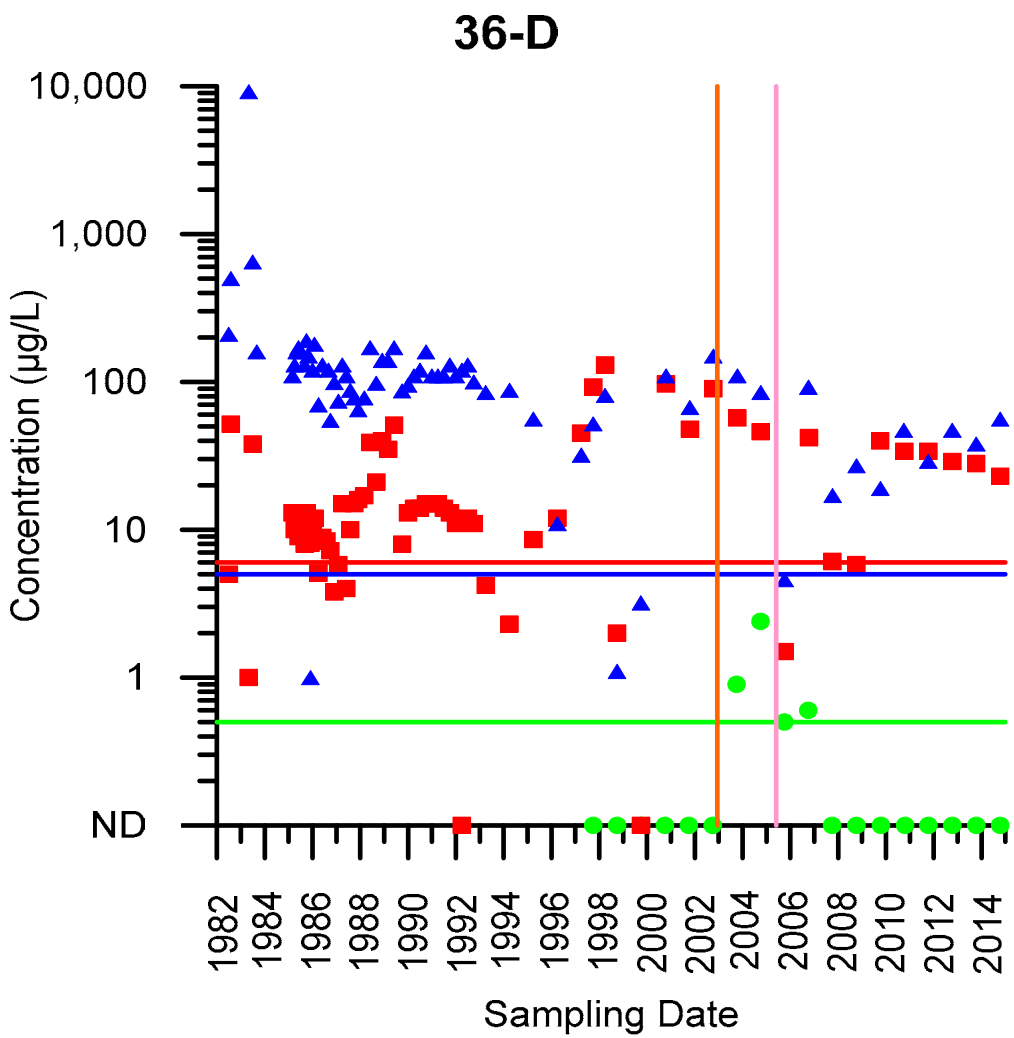
FIGURE F-14

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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CONCENTRATION TRENDS FOR WELL 36-D

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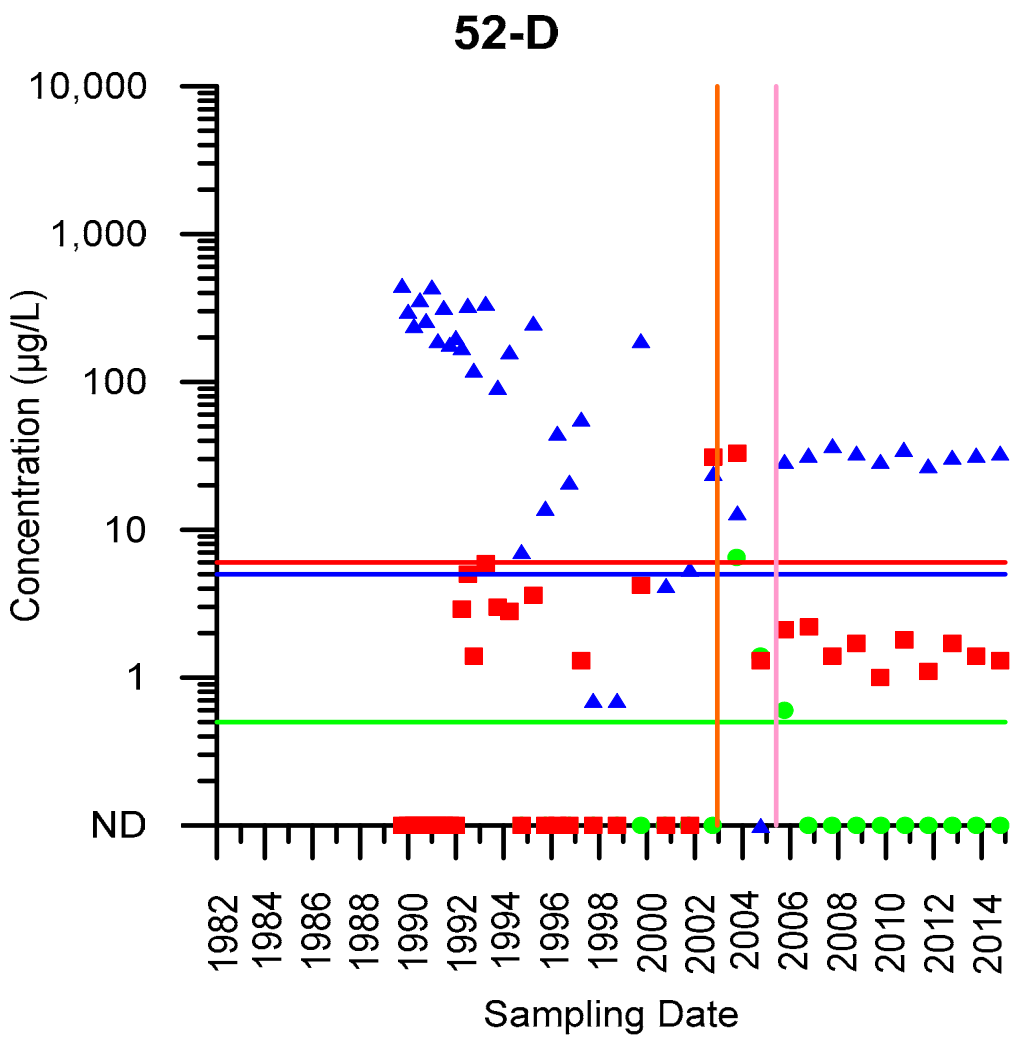
FIGURE F-15

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\2014\7_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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CONCENTRATION TRENDS FOR WELL 52-D

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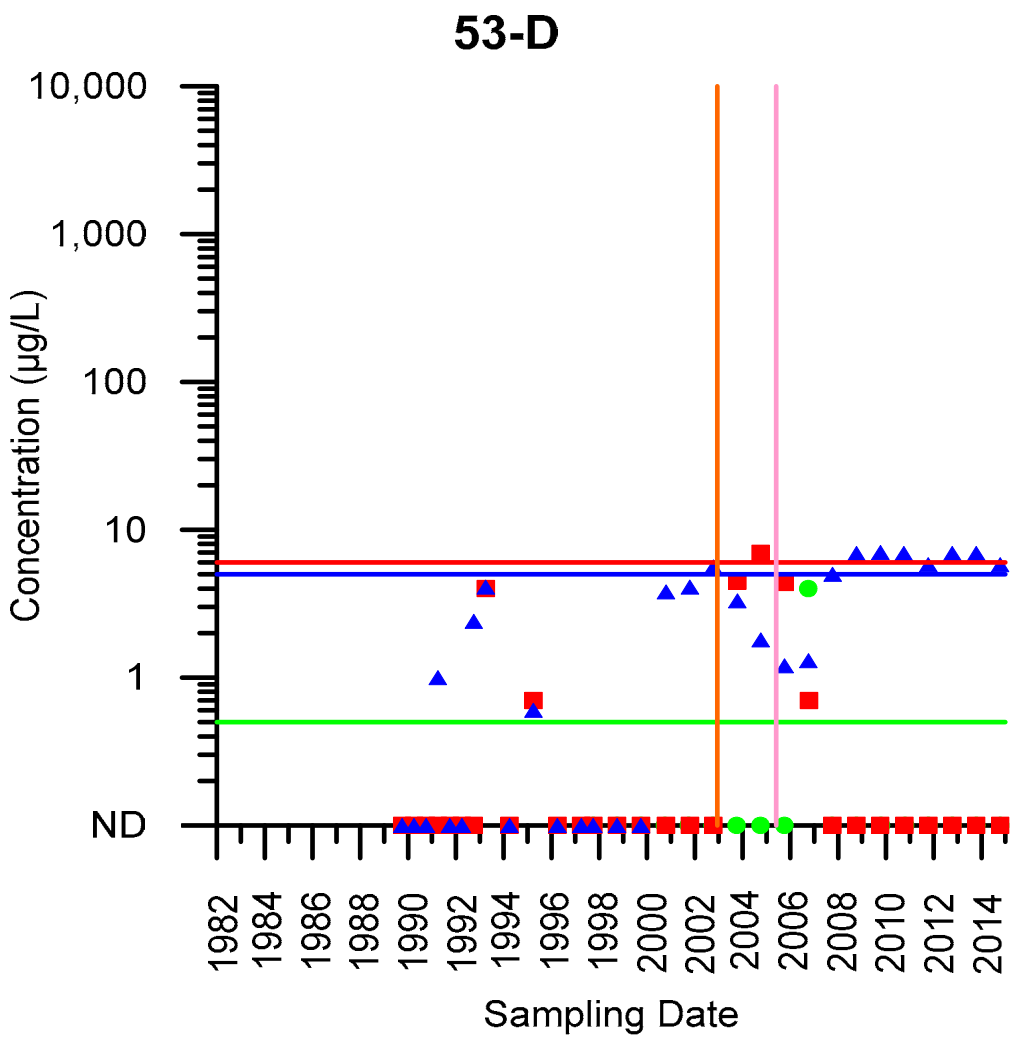
FIGURE F-16

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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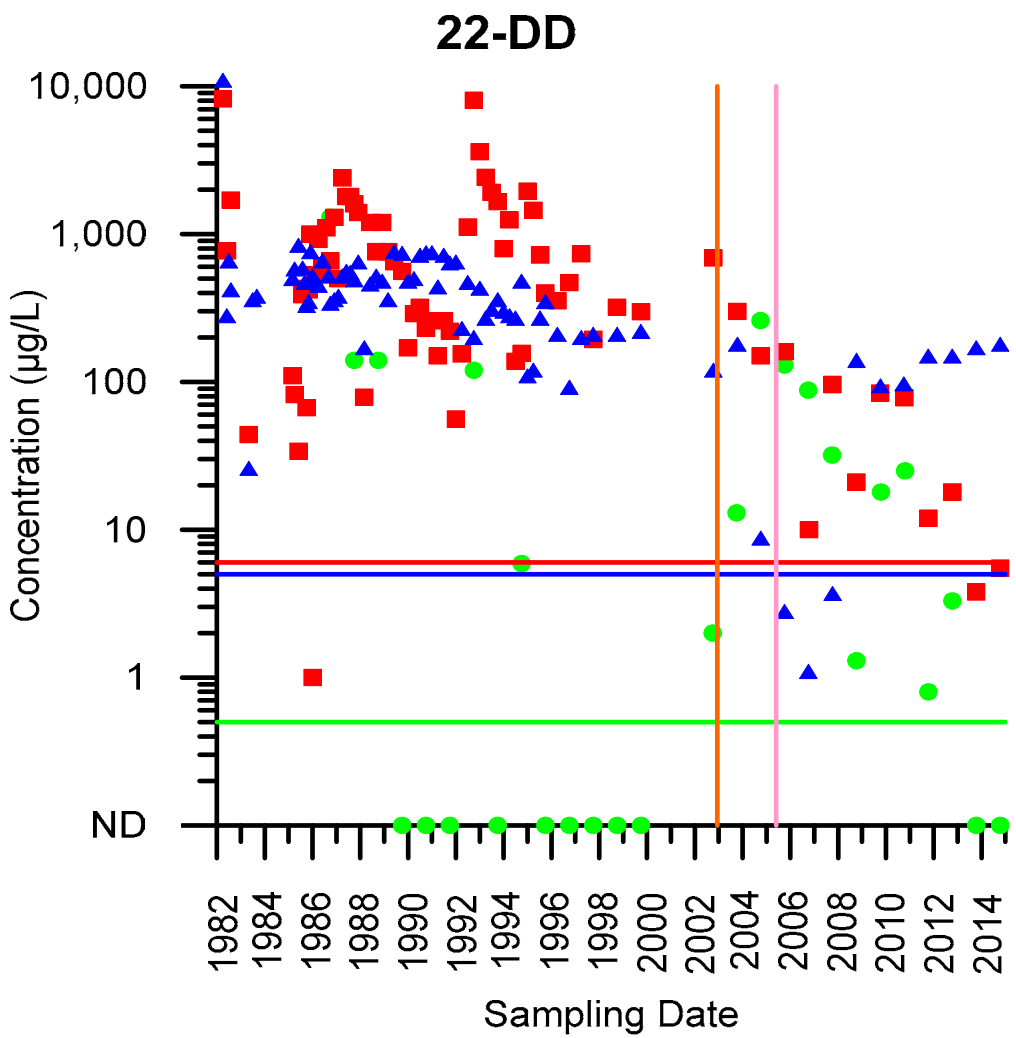
FIGURE F-17

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\2014\7_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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CONCENTRATION TRENDS FOR WELL 22-DD

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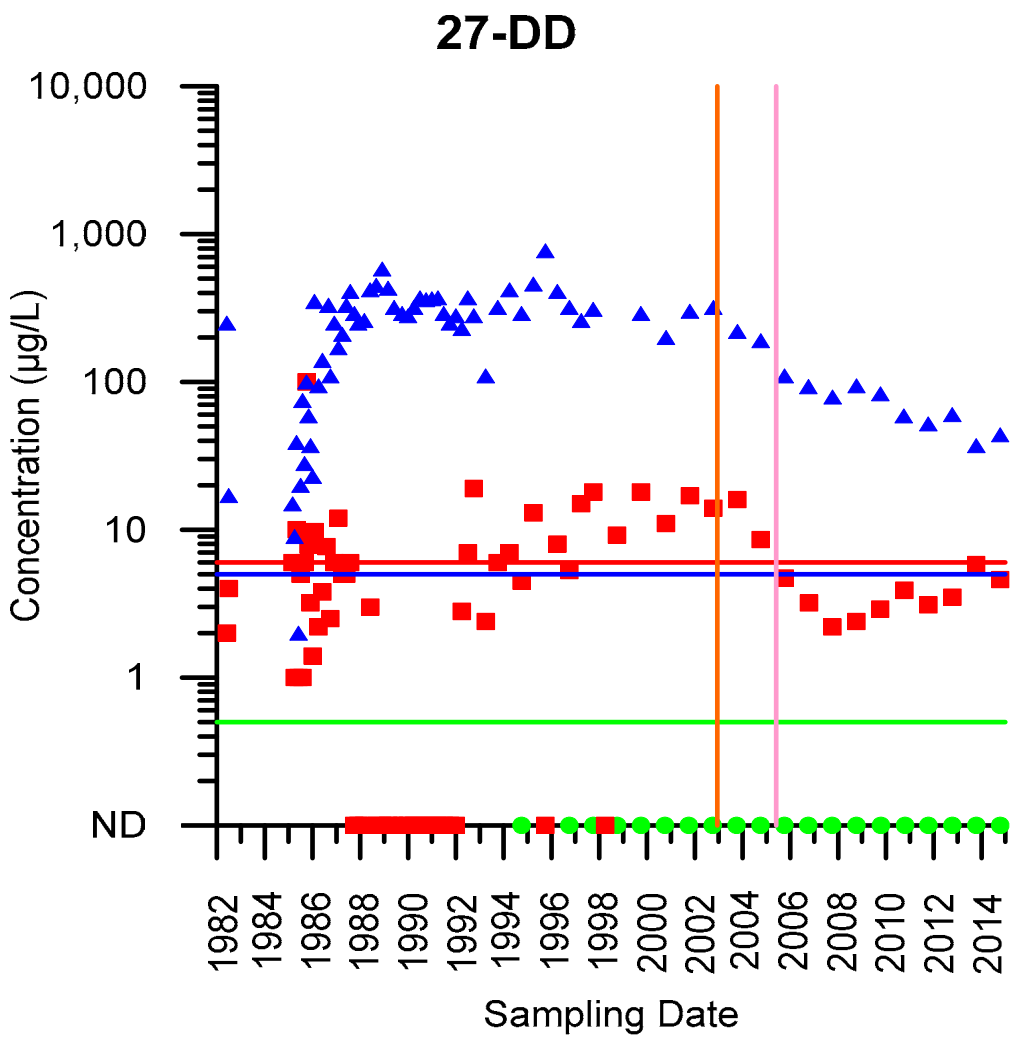
FIGURE F-18

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\2014\7_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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CONCENTRATION TRENDS FOR WELL 27-DD

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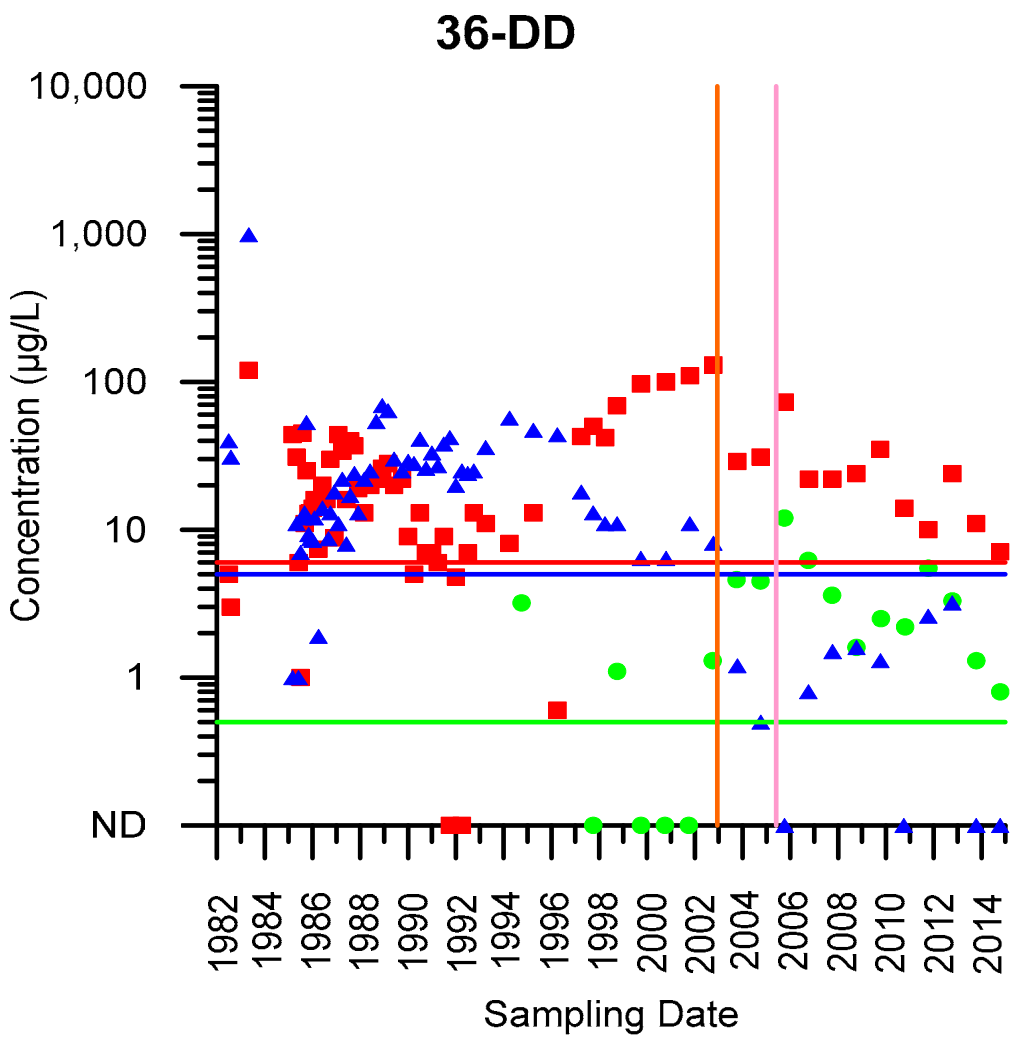
FIGURE F-19

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t



EXPLANATION

- TCE
- cDCE
- VC
- Cleanup Goal for TCE
- Cleanup Goal for cDCE
- Cleanup Goal for VC
- Start of ISB Pilot Test
- Start of full-scale ISB

ABBREVIATIONS

TCE = trichloroethene
cDCE = cis-1,2-dichloroethene
VC = vinyl chloride
ISB = in situ bioremediation

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FIGURE F-20

\\oak\Common\39751_AMD_Former 901-902 Thompson Place\Deliverables\Annual GWMR\201417_App F_concentration t