HALEY ALDRICH

www.haleyaldrich.com

2020 ANNUAL GROUNDWATER MONITORING REPORT
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

by
Haley & Aldrich, Inc.
Oakland, California

for
Advanced Micro Devices, Inc.
Austin, Texas

File No. 0127819-006
January 2021

HALEY & ALDRICH, INC.
1956 Webster Street
Suite 300
Oakland, CA 94612
510.879.4544

28 January 2021
File No. 0127819-006

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

Attention: Mr. Michael Schulman

Subject: 2020 Annual Groundwater Monitoring Report
Former 901/902 Thompson Place
Sunnyvale, California

Dear Mr. Schulman:

Please find enclosed the 2020 Annual Groundwater Monitoring Report (Report) prepared by Haley & Aldrich, Inc., on behalf of Advanced Micro Devices, Inc. (AMD). This Report documents the results of the 2020 annual groundwater monitoring program and provides a summary 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 questions regarding this report.

Sincerely yours,
HALEY & ALDRICH, INC.

Michael Calhoun, PG, CHG
Program Manager
CA PG #8525, CA CHG #976

Peter Bennett, PG, CHG
Principal Hydrogeologist
CA PG #7902, CA CHG #921

Enclosures

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

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\2020\1_text\2021_0128_HAI_2020 AGWMR Thompson_F.docx

HALEY & ALDRICH, INC.
1956 WEBSTER STREET
SUITE 300
OAKLAND, CA 94612
510.879.4544

SIGNATURE PAGE FOR

2020 ANNUAL GROUNDWATER MONITORING REPORT
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

PREPARED FOR
ADVANCED MICRO DEVICES, INC.
AUSTIN, TEXAS

PREPARED BY:

Akash Caveney
Scientist
Haley & Aldrich, Inc.

Michael Zlotoff, PE
Technical Specialist
Haley & Aldrich, Inc.

REVIEWED AND APPROVED BY:

Michael Calhoun, PG, CHG
Program Manager
Haley & Aldrich, Inc.

PROFESSIONAL GEOLOGIST
MICHAEL CALHOUN
No. 8525
CERTIFIED HYDROGEOLOGIST
STATE OF CALIFORNIA

Peter Bennett, PG, CHG
Principal Hydrogeologist
Haley & Aldrich, Inc.

ED_013213_00001031-00003

Table of Contents

		Page
List of Tables		**iii**
List of Figures		**iii**
List of Abbreviations		**iv**
1.	**Introduction**	**1**
2.	**Background**	**2**
2.1	SITE HISTORY AND CHEMICAL USE	2
2.2	HYDROGEOLOGIC CONDITIONS	2
2.3	CHEMICALS OF CONCERN	3
2.4	CURRENT REMEDIAL ALTERNATIVE	4
2.5	ROUTINE MONITORING ACTIVITIES	4
3.	**2020 Annual Groundwater Monitoring**	**5**
3.1	GROUNDWATER MONITORING METHODS	5
3.2	GROUNDWATER ELEVATION DATA	5
3.3	ANALYTICAL RESULTS	6
3.3.1	Concentrations in the ISB Treatment Area	6
3.3.2	Concentrations in the Area Upgradient of the ISB Treatment Area	7
3.3.3	Concentrations in Off-Site Monitoring Wells	7
3.4	QUALITY ASSURANCE/QUALITY CONTROL	7
3.5	DISCUSSION AND CONCLUSIONS	8
4.	**2020 In Situ Bioremediation Program Summary**	**9**
4.1	OVERVIEW OF THE ISB SYSTEM	9
4.2	ISB SYSTEM OPERATION IN 2020	9
4.3	ISB PERFORMANCE MONITORING	10
4.4	ISB ACTIVITIES PLANNED FOR 2021	11
References		**12**

Tables
Figures
Appendix A – Field Sampling Data Sheets
Appendix B – Historical Groundwater Elevation Data
Appendix C – Historical TCE, cDCE, and Total VOC Concentrations
Appendix D – Laboratory Analytical Reports
Appendix E – Quality Assurance/Quality Control Data

Table of Contents

Page

Appendix F – Concentration Trend Plots for Site Monitoring Wells
Appendix G – Concentration Trend Plots for ISB Performance Monitoring Wells

List of Tables

Table No.	Title
1	Well Construction Details
2	Groundwater Elevations, 12 October 2020
3	Analytical Results for Groundwater Samples, October 2020
4	Historical In Situ Bioremediation System Substrate Amendment Summary
5	In Situ Bioremediation Operational Summary – 2020
6	Analytical Results for ISB Program Groundwater Samples

List of Figures

Figure No.	Title
1	Project Locus
2	A-Zone Water Levels, October 2020
3	B1-Zone Water Levels, October 2020
4	B2-Zone Water Levels, October 2020
5	A-Zone TCE Contours, October 2020
6	B1-Zone TCE Contours, October 2020
7	B2-Zone TCE Contours, October 2020
8	A-Zone cDCE Contours, October 2020
9	B1-Zone cDCE Contours, October 2020
10	B2-Zone cDCE Contours, October 2020
11	Layout of the In Situ Bioremediation Program

HALEY ALDRICH

ED_013213_00001031-00006

List of Abbreviations

Abbreviation	Definition
<	not detected at or above the laboratory reporting limit shown
µg/L	micrograms per liter
AMD	Advanced Micro Devices, Inc.
bgs	below ground surface
ANS	acid neutralization system
cDCE	cis-1,2-dichloroethene
COC	chemical of concern
ERD	Enhanced Reductive Dechlorination
FFS	focused feasibility study
FSI	Field Solutions, Inc.
Geomatrix	Geomatrix Consultants, Inc.
Haley & Aldrich	Haley & Aldrich, Inc.
ISB	In Situ bioremediation
NAVD88	North American Vertical Datum of 1988
QA/QC	quality assurance/quality control
Q2/Q3 2020	second and third quarters of 2020
Report	2020 Annual Groundwater Monitoring Report
ROD	Record of Decision
Site	901/902 Thompson Place in Sunnyvale, California
TCE	trichloroethene
tDCE	trans-1,2-dichloroethene
TOC	total organic carbon
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound
Water Board	California Regional Water Quality Control Board, San Francisco Bay Region

HALEY ALDRICH

ED_013213_00001031-00007

1. Introduction

On behalf of Advanced Micro Devices, Inc. (AMD), Haley & Aldrich, Inc. (Haley & Aldrich) has prepared this *2020 Annual Groundwater Monitoring Report* (Report) for the former AMD facility located at 901/902 Thompson Place in Sunnyvale, California (Site; Figure 1). This Report documents the results of the 2020 annual groundwater monitoring program and provides a summary of the 2020 In Situ bioremediation (ISB) program for the Site.

The Site was added to the National Priorities List in June 1986, and a Record of Decision (ROD) was issued by the United States Environmental Protection Agency (USEPA) on 11 September 1991 (USEPA, 1991). The Site was regulated under Site Cleanup Requirements Order Number 91-102 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 2 May 1985 by the Water Board, the Department of Health Services, and the USEPA. However, the lead agency role was transferred from the Water Board back to the USEPA as described in a letter from USEPA to AMD, Northrop Grumman, and Philips Semiconductors dated 7 August 2014 (USEPA, 2014).

2. Background

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

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

A network of 21 wells is currently monitored for groundwater quality on an annual basis. A network of 12 wells in the ISB area is currently monitored on a semiannual basis to evaluate the performance of the ISB system. Well construction details for the current well network are provided in Table 1.

2.1 SITE HISTORY AND CHEMICAL USE

AMD designed and fabricated semiconductor devices at the Site between 1969 and 1992 (Engineering Science, 1992). Two underground acid neutralization system (ANS) tank vaults were located at the northern and southern ends of the former 901/902 Thompson Place buildings, respectively (Arcadis, 2001). Both ANS tanks were constructed of coated concrete, had 2,000-gallon capacities or less (Arcadis, 2001), and were used to contain acidic industrial wastewater for neutralization with caustic before discharge to the sanitary sewer (Parsons, 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; it has been inferred by others that trichloroethene (TCE) was used on-Site between 1969 and 1979 (Engineering Science, 1988). The primary on-Site source of TCE impacts to groundwater and soil beneath the Site appears to have been wastewater leaks containing volatile organic compounds (VOCs) from cracks in the ANS tanks that developed over time (Engineering Science, 1988). The two ANS tanks were removed between 1983 and 1984 and replaced by two sets of three underground storage tanks and associated vaulted containment systems (Arcadis, 2001). As of 1980, most 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 Commercial Properties in 2007 after which it was redeveloped as a self-storage facility.

2.2 HYDROGEOLOGIC CONDITIONS

The Site is in the central portion of the Santa Clara Valley within 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 (California Department of Water Resources, 1967). The alluvium is generally considered to be water-bearing, with coarse-grained alluvial deposits representing ancestral stream channels and levee deposits that convey groundwater from the forebay regions south and west of the Site near the Santa Cruz Mountains toward 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.

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

- The A-Zone, an approximately 5-foot-thick, relatively continuous sandy layer typically encountered between 7 and 20 feet below ground surface (bgs);
- The B1-Zone, an approximately 3-foot-thick, discontinuous, lenticular, sand and gravel unit typically encountered between 22 and 40 feet bgs;
- The B2-Zone, an approximately 4-foot-thick, discontinuous sequence of sand and gravel lenses typically encountered between 45 and 65 feet bgs; and
- The B3-Zone, a system of two sandy layers approximately 1 and 4 feet thick, respectively, typically encountered between approximately 70 and 80 feet bgs.

The depth intervals designated for each zone 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 uppermost groundwater surface is typically encountered at approximately 10 feet bgs and typically occurs under confined conditions. Upward vertical hydraulic gradient values were calculated between the three zones in 2020 (see Section 3.3), although downward vertical hydraulic gradient values have been reported at some locations during previous groundwater monitoring events (e.g., Geomatrix Consultants, Inc. [Geomatrix], 2007a). The horizontal hydraulic gradient trends to the north-northeast, toward the San Francisco Bay. This is consistent with the regional hydraulic gradient direction under natural conditions (USEPA, 1991).

2.3 CHEMICALS OF CONCERN

As part of a baseline public health evaluation (Clement Associates, 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) for groundwater at the Site. Ten COCs for groundwater were selected in the ROD for the Site:

- Tetrachloroethene;
- TCE;
- cis-1,2-Dichloroethene (cDCE);
- trans-1,2-Dichloroethene (tDCE);
- Vinyl chloride (VC);

- 1,1-Dichloroethene;
- 1,1-Dichloroethane;
- 1,2-Dichlorobenzene;
- 1,1,1-Trichloroethane; and
- Freon 113.

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 well, likely because of the upward gradient from the B3-Zone to the B2-Zone. VC has also been detected in groundwater samples collected from the ISB treatment area (VC is an interim breakdown product of TCE and cDCE during the microbially-mediated reductive dechlorination to ethene).

2.4 CURRENT REMEDIAL ALTERNATIVE

The ROD specifies groundwater extraction and treatment as the remedial alternative to be used for the Site. The groundwater extraction and treatment system was operated from 1983 until 2002, when it was discontinued with Water Board approval for the ISB pilot test. Based on the success of the pilot test, a full-scale ISB program was initiated in 2005 with Water Board approval. Under this program, extracted groundwater was treated with carbon filtration before carbohydrate was added as a substrate for ISB, followed by reinjection to form a groundwater treatment zone. A description of the ISB operational history and current status is included in Section 4.

In 2011, AMD submitted a *Focused Feasibility Study* ([FFS]; AMEC Environment & Infrastructure, Inc., 2011) to the Water Board and USEPA. The FFS proposed formally changing the ROD-selected remedy from groundwater extraction and treatment to ISB with monitored natural attenuation. The USEPA reviewed the FFS and provided comments to the Water Board and AMD in June 2013. Haley & Aldrich incorporated the comments and submitted a Revised FFS (Haley & Aldrich, 2013) on behalf of AMD in September 2013. The Revised FFS is currently under review by USEPA.

2.5 ROUTINE MONITORING ACTIVITIES

Annual groundwater monitoring is performed to evaluate the overall cleanup status at the Site. Annual monitoring activities are performed in accordance with the ROD and the revised monitoring program approved by the Water Board on 27 December 2007 (Geomatrix, 2008). A description of annual monitoring activities is included in Section 3.

ISB was implemented in the area of the former 901 Thompson source area. In accordance with the monitoring program provided in the *Full Scale In Situ Bioremediation Work Plan* (Geomatrix, 2005), a subset of on-Site monitoring wells located in the ISB groundwater treatment zone are monitored on a semiannual basis[1] to assess the performance of the ISB program.

[1] In an email dated 5 September 2019, USEPA approved a change in ISB performance monitoring frequency to a semiannual basis. ISB performance monitoring was conducted during the first and third quarters of 2020.

3. 2020 Annual Groundwater Monitoring

This section documents the methods and results of the 2020 annual groundwater monitoring event, which was completed in accordance with the revised monitoring program approved by the Water Board on 27 December 2007 (Geomatrix, 2008).

3.1 GROUNDWATER MONITORING METHODS

Field Solutions, Inc. (FSI) conducted the 2020 annual groundwater monitoring event on behalf of AMD. Water levels were measured at the Site on 12 October 2020 and were timed to coincide with water level measurement from other nearby cleanup sites (collected between 8 and 12 October 2020). Groundwater samples were collected from 21 Site monitoring wells on 13 and 14 October 2020.

All groundwater samples were collected using low-flow sampling methods where the pump intake was set at the approximate midpoint of the screened interval at each respective well. The wells were purged at approximately 100 to 500 milliliters per minute using Teflon®-lined tubing and a bladder pump. After water quality parameters stabilized, samples were collected from the pump effluent.

Samples were collected in 40-milliliter volatile organic analysis vials preserved with hydrochloric acid, then labeled, sealed in plastic bags, and placed in an ice-cooled chest pending shipment to the analytical laboratory under standard chain of custody procedures. Quality assurance/quality control (QA/QC) samples, including blind field duplicates, equipment blanks, and trip blanks were collected in addition to the groundwater samples. All reused, downhole equipment (e.g., pump) was decontaminated after each well with rinses of deionized water and Liquinox®. Purge water was discharged into the groundwater treatment system operating at the nearby AMD Former 915 DeGuigne Drive site. Field sampling data sheets documenting the sampling procedures are included in Appendix A.

Samples were analyzed for chlorinated VOCs consistent with USEPA Method 8260B by Eurofins TestAmerica of West Sacramento, California, a California- and National Environmental Laboratory Accreditation Program-certified laboratory.

3.2 GROUNDWATER ELEVATION DATA

Water levels measured on 12 October 2020 are summarized in Table 2. Historical groundwater elevation data are included in Appendix B. Interpretations of the potentiometric surfaces for the A, B1, and B2-Zones are shown on Figures 2, 3, and 4, 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 2020 were consistent with historical results, and ranged from:

- 35.28 to 42.18 feet relative to the North American Vertical Datum of 1988 (NAVD88) in A-Zone wells;
- 35.31 to 43.68 feet NAVD88 in B1-Zone wells;
- 36.75 to 42.83 feet NAVD88 in B2-Zone wells; and
- 41.59 feet NAVD88 in B3-Zone well 35-DDD.

As illustrated on Figures 2 through 4, the approximate direction of the horizontal hydraulic gradient is north to northeast except where locally influenced by groundwater extraction wells at the Philips Semiconductor and 915 DeGuigne Drive sites. At locations where water levels were measured for well pairs representing multiple depth intervals (i.e., 16-S/DW-7, 23-S/23-D, 27-S/27-D, 28-S/28-D, 29-S/29-D, 36-S/36-D, 27-D/27-DD, and 36-D/36-DD), the direction of the vertical hydraulic gradient is upwards.

3.3 ANALYTICAL RESULTS

Laboratory analytical results for groundwater samples collected in October 2020 are summarized in Table 3. 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 TCE, cDCE, tDCE, and VC were detected above their respective cleanup goals[2] during the 2020 annual groundwater monitoring event (Table 3). The distribution of these compounds is described in the sections below. The maximum concentration of primary and field duplicate sample results are considered for the purpose of these sections.

3.3.1 Concentrations in the ISB Treatment Area

There are nine wells included in the annual groundwater monitoring program in or near the ISB treatment area: 16-S, 22-S, 22-DD, 23-S, 23-D, 28-S, 28-D, 35-DDD, and DW-7. The range of concentrations (in micrograms per liter [µg/L]) detected in October 2020 for the primary COCs is summarized below:

Zone	TCE		cDCE		tDCE		VC	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
A	< 1.0	50	11	62	< 1.0	7.2	13	150
B1	< 5.0	280	3.5	120	< 2.0	1.3	< 2.0	250
B2*	130	130	5.0	5.0	< 2.0	< 2.0	< 2.0	< 2.0
B3*	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Notes:
< = not detected at or above the laboratory reporting limit shown
* There is only one annual monitoring well each for the B2 and B3-Zones.

The ISB area is the location of the former source area, and historically has had the highest COC concentrations. However, based on the source remediation and ongoing ISB in this area, concentrations have decreased substantially (up to several orders of magnitude since the start of remediation). The higher concentrations of breakdown products (cDCE and VC) relative to TCE in most wells in the ISB treatment area are indicative of ongoing ISB processes, as discussed in Section 4.

[2] The cleanup goal is the lower of the federal or California Maximum Contaminant Levels.

3.3.2 Concentrations in the Area Upgradient of the ISB Treatment Area

Eight on-Site wells located upgradient of the ISB treatment area monitor groundwater quality entering the Site from upgradient: 15-S, 27-S, 27-D, 27-DD, 29-S, 29-D, 52-D, and 53-D. The range of concentrations (in µg/L) detected in October 2020 for the primary COCs is summarized below:

Zone	TCE		cDCE		tDCE		VC	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
A	6.7	16	< 0.50	250	< 0.50	12	< 0.50	19
B1	8.0	72	< 0.50	2.4	< 0.50	< 0.50	< 0.50	< 1.0
B2*	19	19	6.0	6.0	0.94	0.94	< 0.50	< 0.50

Notes:

< = not detected at or above the laboratory reporting limit shown

* There is only one annual monitoring well for the B2-Zone.

Except for one well (27-S), the TCE concentrations in the samples collected from all upgradient monitoring wells were greater than cDCE, and exceeded the TCE cleanup goal of 5 µg/L. The TCE and cDCE concentrations observed at the well cluster of 27-S, 27-D, and 27-DD were greater than those at other upgradient wells within each well's respective aquifer. These wells are likely affected by off-Site, upgradient, non-AMD sources (Haley & Aldrich, 2013). Other off-Site wells located upgradient of this well cluster, upgradient of the Site in general (and also upgradient of source areas on the adjacent Philips Site) have TCE concentrations above the cleanup level. For example, off-Site wells S157A and S157B1 located hydraulically upgradient of 27-S and 27-D (monitored by Philips) reported TCE concentrations of 14 and 69 µg/L in the A and B1-Zones, respectively (Figures 5 and 6).

3.3.3 Concentrations in Off-Site Monitoring Wells

In the three downgradient, off-Site monitoring wells (36-S, 36-D, and 36-DD), the following concentrations (in µg/L) were observed:

Zone	TCE	cDCE	tDCE	VC
A	49	9.6	< 1.0	< 1.0
B1	28	34	2.0	< 0.50
B2	0.86	16	3.6	6.8

These concentrations are consistent with or lower than the range of concentrations observed in the ISB treatment area (Section 3.3.1).

In the cross-gradient, off-Site A-Zone monitoring well (37-S), TCE was detected at 35 µg/L, cDCE at 4.2 µg/L, and tDCE and VC were non-detect (less than 0.50 µg/L). This well is located at the southwest corner of the TRW Microwave site; based on the interpreted direction of groundwater flow, it is located approximately downgradient of the Philips source area south of Stewart Drive.

3.4 QUALITY ASSURANCE/QUALITY CONTROL

Laboratory analytical data were reviewed in accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2017). Appendix E summarizes QA/QC data. 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 valid and usable.

3.5 DISCUSSION AND CONCLUSIONS

TCE and cDCE concentrations within the A, B1, and B2-Zones are shown on Figures 5 through 7 and Figures 8 through 10, respectively. Isoconcentration contours for detections above the cleanup goal are also depicted on the figures. These figures incorporate data from the adjacent Philips Semiconductors, former TRW Microwave, Mohawk Laboratories, and The Companies' OffSite Operable Unit wells in the Site vicinity. The analytical results from the adjacent sites were provided by Locus Technologies (consultant for Philips Semiconductors), Groundwater and Environmental Services, Inc. (consultant for TRW Microwave), and Apex Companies (consultant for Mohawk Laboratories). Data tables are provided in their respective site monitoring reports.

As shown on Figures 5 through 10, TCE and cDCE were detected in groundwater samples from monitoring wells along the western side of the Site (e.g., 27-S, 27-D, and 27-DD) and southwest of the Site, indicating an off-Site upgradient source impacting groundwater beneath the western portion of the Site. COC detections at upgradient wells 15-S, 29-S, 29-D, and 53-D (as well as off-Site wells such as S157A and S157B1) also indicate upgradient, off-Site COC impacts, since these wells are not located downgradient of former AMD sources. These sources will continue to impact groundwater flowing beneath the Site for the foreseeable future.

As previously discussed, the highest COC concentrations beneath the Site are found in the former source area. However, because of the ongoing remediation efforts (including ISB), COC concentrations have decreased significantly and rapidly attenuate in the downgradient direction. This supports the recommendation of ISB and monitored natural attenuation as the remedial alternative proposed in the Revised FFS.

Concentration trends for A, B1, and B2-Zone monitoring wells are included in Appendix F. Primary COC concentrations detected in groundwater samples from most A, B1, and B2-Zone monitoring wells during the 2020 annual groundwater monitoring event were consistent with recent historical results, and with a long-term decreasing trend, which accelerated with the start of the full-scale ISB. Conclusions are summarized below:

- COC concentrations in samples collected in October 2020 from many wells were low when compared to concentrations detected before full-scale ISB treatment began in 2005, indicating the successful application of the alternative groundwater cleanup strategy towards expediting groundwater cleanup.
- Groundwater beneath the Site is impacted by off-Site sources at levels above COC cleanup goals. As a result, it may not be feasible to meet cleanup goals at the end of active remediation.
- Downgradient COC concentrations are similar to upgradient concentrations, indicating that natural attenuation processes enhanced with ISB are capable of mitigating impacts to groundwater from the former on-Site source area.

4. 2020 In Situ Bioremediation Program Summary

A detailed discussion of ISB operations and performance monitoring results are provided in separate semiannual progress updates submitted to USEPA. The sections below are intended to summarize the operation and monitoring of the ISB system for 2020. Please refer to the ISB progress updates for additional details.

4.1 OVERVIEW OF THE ISB SYSTEM

The ISB system is designed to increase the organic carbon content of the groundwater system, thereby enhancing anaerobic microbiological activity, and promoting In Situ biodegradation of COCs to environmentally benign end products (primarily chloride, ethene, and ethane). The primary components of the ISB system include:

- **Ex Situ COC Removal:** During ISB operation, groundwater pumped from the extraction well(s) in the former source area is treated with granular activated carbon to remove COCs before the groundwater is reinjected into the subsurface.
- **Substrate Delivery System:** Substrate delivery is performed by introducing an Enhanced Reductive Dechlorination (ERD) substrate to the subsurface and distributing it through a network of groundwater circulation wells. During previous operational events, ERD substrates have included potassium lactate solution, sodium lactate solution, molasses, and an emulsified vegetable oil solution. Following USEPA's recommendation (via email on 11 April 2019) to consider the application of longer-lasting (e.g., lecithin-based) ERD substrates, different ERD substrates were evaluated for the 2020 operational event, and Haley & Aldrich selected Provect-ERD CH4+™.
- **In Situ Biodegradation of COCs:** In Situ treatment processes are promoted by adding a fermentable organic substrate to groundwater to create and/or sustain anaerobic conditions. The organic substrate is fermented by indigenous microbes to produce hydrogen in the subsurface. Strains of *Dehalococcoides* bacteria proliferate in anaerobic groundwater and use the hydrogen from the fermentation of organics to reduce TCE to cDCE and then to VC and ultimately ethene (Löffler et al., 2013). This reductive dechlorination process was 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 in the monitoring results to date, where ethene concentrations have increased as TCE, cDCE, and VC have decreased.

Figure 11 shows the layout of the ISB system. Table 1 summarizes the construction details of the ISB program wells. Table 4 summarizes historical ISB operation details, including days operated, substrate type, quantity of substrate solution injected, and substrate delivery method.

4.2 ISB SYSTEM OPERATION IN 2020

The latest round of organic carbon substrate amendment and groundwater circulation was completed in the second and third quarters of 2020 (Q2/Q3 2020). The methods and results of the ISB system operation were provided in detail in the *Semiannual In Situ Bioremediation Program Progress Update, April through September 2020* (Q2/Q3 2020 Report; Haley & Aldrich, 2020b).

Table 5 summarizes the operation of the ISB system for 2020, including which extraction and injection wells were used for the Q2/Q3 2020 ISB event. Provect-ERD CH4+™, produced by Provectus Environmental Products, was used as the substrate during the round of active ISB operation.

The ISB system was operated between 15 June and 19 August 2020. For the first 38 days (15 June to 23 July), the extracted groundwater was treated, amended with ERD substrate, and reinjected as described above. However, as described in the Q2/Q3 2020 Report, there were several difficulties working with the new ERD substrate. As a result of these issues, the groundwater recirculation rates decreased significantly (by up to 90 percent) during operation. Therefore, FSI temporarily halted groundwater recirculation from 23 to 28 July and directly added the undiluted ERD substrate to the injection wells by gravity feed. After the remaining substrate volume was added to the injection wells, groundwater recirculation was resumed to enhance distribution of the previously introduced substrate in the subsurface. Due to the continuing low flow rates, groundwater recirculation was ended on 19 August 2020.

Overall, a total of approximately 57,000 gallons of groundwater were recirculated in the A and B-Zones. This is less than the target volume of 100,000 gallons, but slightly more than the estimated pore volume of 55,000 gallons. A total of 293 gallons of ERD substrate and 18 kilograms of ferrous iron supplement were introduced into the subsurface during the event. A breakdown of the volumes for each zone are provided in Table 5.

Additional details regarding the methods and results of ISB system operation are provided in the Q2/Q3 2020 Report.

4.3 ISB PERFORMANCE MONITORING

Semiannual ISB performance monitoring events were conducted in February and August 2020. The methods and results of the ISB performance monitoring events have been provided in separate reports to the USEPA (Haley & Aldrich, 2020a, 2020b).

Table 6 provides a summary of the performance monitoring results for 2020, and historical results are provided in Appendix C. To help visualize the progress of reductive dechlorination in the ISB area, Appendix G includes concentration trends for chlorinated COCs and the molar fraction of ethene and ethane. The molar fraction of ethene and ethane in Table 6 represents the percent conversion of TCE to non-chlorinated environmentally benign end-products. Total organic carbon (TOC) and methane concentrations are also plotted in Appendix G to evaluate the distribution of amendment and non-target amendment utilization (i.e., methane production). As can be seen in the trend plots, TCE concentrations have decreased from pre-ISB levels at most monitoring locations, and the proportion of ethene and ethane has increased, indicating complete conversion of TCE to non-chlorinated products at several locations.

Based on the results of the performance monitoring conducted in 2020, groundwater in the ISB treatment area typically shows negative ORP values, indicating that reducing conditions that promote reductive dechlorination of COCs are present. This is consistent with the presence of methane in groundwater (Table 6), which is an indication of strongly reducing (methanogenic) conditions. Higher proportions of breakdown products cDCE, VC, and ethene relative to TCE indicate that reductive processes are occurring at many locations. The complete breakdown of TCE to ethene indicates that native microbes are capable of complete dechlorination (i.e., no bioaugmentation is needed).

Due to the difficulty in distributing the ERD substrate, low TOC concentrations (< 10 mg/L) were observed following the latest ISB operational event at all ISB wells except DW-1 and DW-2, located closest to the injection wells (15 and 77 mg/L, respectively). Because a portion of the substrate was directly added to the injection wells without recirculation, there is likely an area surrounding the injection wells with a significantly higher concentration of TOC (and possibly non-dissolved substrate). Additional time may be needed for the substrate to naturally be distributed. The area surrounding the injection wells may also act as a reservoir of organic carbon compounds (electron donors) that can continue to stimulate ISB processes in the subsurface.

The performance monitoring results in 2020 support the conclusion that ongoing natural attenuation processes will continue to degrade COCs as they are transported in groundwater. Passive, intrinsic dechlorination processes continue to occur but may be limited in some areas by a depletion of ERD substrate (determined by TOC concentrations) in the subsurface; additional groundwater recirculation and/or substrate amendment is therefore warranted, as discussed below.

4.4 ISB ACTIVITIES PLANNED FOR 2021

Haley & Aldrich intends to operate the ISB system in the second quarter of 2021. The next ISB performance monitoring event is scheduled for February 2021. If the TOC values continue to remain low in monitoring wells (except for those that are located adjacent to the injection wells) then the next ISB operational event may focus on better distributing the previously-amended substrate via groundwater recirculation only. If additional substrate amendment is performed, Haley & Aldrich recommends using a fully soluble organic carbon substrate, such as sodium lactate.

Haley & Aldrich will also conduct semiannual ISB performance monitoring events in the first and third quarters of 2021. The methods and results of the ISB operational event and the ISB performance monitoring events will be detailed in semiannual ISB progress updates, to be submitted to USEPA on 30 April and 30 October 2021.

References

1. AMEC Environment & Infrastructure, Inc. 2011. Focused Feasibility Study, Former 901/902 Thompson Place, Sunnyvale, California. May.

2. Arcadis. 2001. Five-Year Review Report, Advanced Micro Devices, Inc. 901/902 Thompson Place, Sunnyvale, California. December.

3. California Department of Water Resources. 1967. Evaluation of Groundwater Resources, South Bay, Appendix A: Geology. Bulletin No. 118-1. August.

4. California Regional Water Quality Control Board, San Francisco Bay Region. 1991, Order No. 91-102, Site Cleanup Requirements and Revision of Order No. 89-56. June.

5. Clement Associates. 1990. Final Baseline Health Evaluation for the AMD/Signetics/TRW Site: prepared for the California Regional Water Quality Control Board. April.

6. Engineering Science. 1982. Fifth Progress Report of Groundwater and Soil Sampling Activities. October.

7. Engineering Science. 1986. Groundwater Investigation at AMD Buildings, 901/902 Facilities, Summary Report II. September.

8. Engineering Science. 1988. Evaluation of On-Site Soil Contamination, AMD Buildings 901/902. March.

9. Engineering Science. 1992. Completion of On-Site Soil Contamination, AMD Building 901. August.

10. Geomatrix Consultants, Inc. (Geomatrix). 2004. Enhanced In Situ Bioremediation Pilot Study Program, 901/902 Thompson Place Facility, Sunnyvale, California. February.

11. Geomatrix. 2005. Full Scale In Situ Bioremediation Work Plan, 901/902 Thompson Place Facility, Sunnyvale, California. February.

12. Geomatrix. 2007a. 2006 Annual Groundwater Monitoring Report, 901/902 Thompson Place, Sunnyvale, California. January.

13. Geomatrix. 2008. 2007 Annual Groundwater Monitoring Report, Former 901/902 Thompson Place, Sunnyvale, California. January.

14. Haley & Aldrich, Inc. (Haley & Aldrich). 2013. Revised Focused Feasibility Study, Former 901/902 Thompson Place, Sunnyvale, California. October.

15. Haley & Aldrich. 2018. Response to Comments on: In Situ Bioremediation Program, April through June 2018 Progress Update, Former 901/902 Thompson Place, Sunnyvale, California. August.

16. Haley & Aldrich. 2019a. Combined 2018 Annual Groundwater Monitoring Report and Annual In Situ Bioremediation Program Report. January.

17. Haley & Aldrich. 2019b. Response to Comments Memorandum: Combined 2018 Annual Groundwater Monitoring Report and Annual In Situ Bioremediation Report, Former 901/902 Thompson Place, Sunnyvale, California. May.

18. Haley & Aldrich. 2019c. In Situ Bioremediation Program, July through September 2019 Progress Update, Former 901/902 Thompson Place, Sunnyvale, California. October.

19. Haley & Aldrich. 2020a. Semiannual In Situ Bioremediation Program Progress Update – October 2019 through March 2020, Former 901/902 Thompson Place, Sunnyvale, California. April.

20. Haley & Aldrich. 2020b. Semiannual In Situ Bioremediation Program Progress Update – April through September 2020, Former 901/902 Thompson Place, Sunnyvale, California. October.

21. Helley, E.J., K.R. Lajoie, W.E. Spangle, and M.L. Blair. 1979. Flatland Deposits of the San Francisco Bay Region, California: Their Geology and Engineering Properties and Their Importance to Comprehensive Planning. USGS Professional Paper 943.

22. Löffler, F.E., J. Yan, K.M. Ritalahti, L. Adrian, E.A. Edwards, K.T. Konstantinidis, J. A. Müller, H. Fullerton, S.H. Zinder, and A.M. Sporman. 2013. Dehalococcoides mccartyi gen. nov., sp. nov., obligately organohalide-respiring anaerobic bacteria relevant to halogen cycling and bioremediation, belong to a novel bacterial class, Dehalococcoidia classis nov., order Dehalococcoidales ord. nov. and family Dehalococcoidaceae fam. nov., within the phylum Chloroflexi, *International Journal of Systematic and Evolutionary Microbiology*, 63, 625-635.

23. Parsons, E.S. 1996. Five-Year Review Report for the Advanced Micro Devices, Inc. 901/902 Thompson Place Facility. June.

24. United States Environmental Protection Agency (USEPA). 1991. Record of Decision: Advanced Micro Devices #901/902, Signetics, TRW Microwave Combined Superfund Sites, Sunnyvale, California. September.

25. USEPA. 2014. Notice of Lead Agency Transfer – California Regional Board to USEPA, Triple Site: AMD 901/902 Thompson Place Superfund Site, Philips (formerly Signetics) Site, and TRW Microwave Superfund Site and Offsite Operable Unit, Sunnyvale, California. 7 August.

26. USEPA. 2017. National Functional Guidelines for Organic Superfund Methods Data Review, EPA-540-R-2017-002. January.

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\2020\1_text\2021_0128_HAI_2020 AGWMR Thompson_F.docx

TABLES

TABLE 1
WELL CONSTRUCTION DETAILS
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Well ID	Installation Date	Location Coordinates[1]		Measuring Point Elevation[1,2] (feet NAVD 88)	Screen Interval (feet bgs)	Total Depth (feet bgs)	Borehole Diameter (inches)	Well Diameter (inches)
		Latitude	Longitude					
Annual Monitoring Wells								
A-Zone Wells								
15-S	3/25/1982	37.3811676	-122.0095588	50.82	8 - 16	16	8	4
22-S	4/5/1982	37.3830016	-122.0097448	46.37	11 - 16	16	8	4
27-S	4/13/1982	37.3820514	-122.0097588	50.71	9 - 14	14	8	4
28-S	4/14/1982	37.3829343	-122.0095214	47.88	10 - 16	16	8	4
29-S	4/15/1982	37.3817013	-122.009235	50.10	11 - 16	16	8	4
36-S	6/23/1982	37.3840505	-122.0088829	41.46	10 - 16	16	8	4
37-S	6/23/1982	37.3840517	-122.0101822	42.06	9 - 15	15	8	4
B1-Zone Wells								
27-D	4/13/1982	37.3820623	-122.0097589	50.59	21 - 31	31	8	4
28-D	4/14/1982	37.3829311	-122.0095314	47.74	15 - 25	25	8	4
29-D	4/15/1982	37.3816933	-122.0092343	50.17	21 - 31	31	8	4
36-D	6/24/1982	37.3840373	-122.0089171	41.26	15 - 20	20	8	4
52-D[3]	1989	37.3825718	-122.0092365	48.31	NA	37 (approx)	NA	NA
53-D[3]	1989	37.3812277	-122.0097105	50.94	NA	39 (approx)	NA	NA
B2-Zone Wells								
22-DD	4/6/1982	37.383013	-122.009745	46.45	43 - 53	53	8	4
27-DD	6/8/1982	37.382038	-122.0097599	50.72	45 - 55	55	8	4
36-DD	6/24/1982	37.3840511	-122.0088922	41.58	51.5 - 61.5	62	8	4
B3-Zone Wells								
35-DDD	6/8/1982	37.3829613	-122.0097299	46.47	70 - 80	80	8	4
ISB Wells								
A-Zone Wells								
16-S	4/2/1982	37.383028	-122.0094942	47.70	9 - 16	16	8	4
X2A	5/18/2005	37.3829821	-122.0096288	47.08	10.0 - 19.9	21.0	8.25	2
23-S	4/5/1982	37.3829232	-122.009706	47.03	9.0 - 16.0	16	8	4
DW-2	NA	37.3829037	-122.0095907	46.45	10.0 - 14.0	NA	NA	12
28-MW	12/11/2002	37.3829478	-122.0095259	47.42	10.0 - 16.3	17.5	8.25	2
ISB1AR	2/28/2007	37.3828575	-122.0096236	NA	10.0 - 24.4	24.6	8.25	2
ISB2AR	3/1/2007	37.3828577	-122.0095845	50.42	15.1 - 19.6	22.5	8.25	2
B1-Zone Wells								
DW-7	1992	37.3830608	-122.0095395	46.11	35 - 45	NA	NA	6
X1B	5/17/2005	37.3829772	-122.0095389	47.18	25.4 - 30.2	30.5	8.25	2
X2B1	5/18/2005	37.3829824	-122.0096398	46.83	26.5 - 36.5	39.5	8.25	2
DW-1	NA	37.3828903	-122.0095901	46.91	32 - 40	NA	NA	12
23-D	4/5/1982	37.3829332	-122.009716	47.04	40 - 50	50	8	4
PMW-1-1[4]	10/3/2005	37.3829419	-122.009538	47.45	26.0 - 27.4	27.5	5.5	1.1
PMW-1-2[4]	10/3/2005	37.3829419	-122.009538	47.45	31.0 - 32.4	32.4	5.5	1.1
PMW-1-3[4]	10/3/2005	37.3829419	-122.009538	47.45	35.9 - 38.5	42	5.5	1.1

TABLE 1
WELL CONSTRUCTION DETAILS
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Well ID	Installation Date	Location Coordinates[1]		Measuring Point Elevation[1,2] (feet NAVD 88)	Screen Interval (feet bgs)	Total Depth (feet bgs)	Borehole Diameter (inches)	Well Diameter (inches)
		Latitude	Longitude					
B1-Zone Wells								
PMW-2-1[4]	9/29/2005	37.382956	-122.0096339	47.26	26.7 - 28.1	28.1	5.5	1.1
PMW-2-2[4]	9/29/2005	37.382956	-122.0096339	47.26	36.7 - 38.1	38.2	5.5	1.1
ISB2BR[5]	3/6/2007	37.3828761	-122.0095924	NA	31.4 - 39.6	46.33	8.25	2
ISB3BR	3/1/2007	37.3828598	-122.0095298	51.20	25.7 - 43.3	40.8	8.25	2
B2-Zone Wells								
DW-8	NA	37.383061	-122.0096842	45.63	45 - 65	NA	NA	NA
PMW-2-3[4]	9/29/2005	37.382956	-122.0096339	47.26	45.5 - 48.2	50	5.5	1.1
ISB1BR	2/28/2007	37.3828588	-122.0096345	50.61	31.0 - 44.5	44.6	8.25	2

Notes:
feet bgs = Feet below ground surface
ISB = In situ bioremediation
NA = Not available
1. Horizontal coordinates are referenced to the North American Datum of 1983.
2. Top of casing elevations are relative to the North American Vertical Datum of 1988 (NAVD88).
3. Logs for wells 52-D and 53-D are not available. The total depth of the well is based on tagged total depth during monitoring.
4. The diameter of each PMW well is 1.1 inches. The diameter of each individual PMW well chamber is approximately 3/8 inch.
5. Well ISB2BR is angled at approximately 30 degrees from vertical running beneath the building. The true depth of the screened interval is 31.4 to 39.6 feet bgs.

TABLE 2

GROUNDWATER ELEVATIONS, 12 OCTOBER 2020

FORMER 901/901 THOMPSON FACILITY

SUNNYVALE, CALIFORNIA

Well ID	Aquifer Zone Screened	Top of Casing Elevation (feet NAVD88)	Depth to Groundwater (feet btoc)	Groundwater Elevation (feet NAVD88)
15-S	A	50.82	8.64	42.18
16-S		47.70	10.06	37.64
22-S		46.37	8.27	38.10
23-S		47.03	8.95	38.08
27-S		50.71	10.33	40.38
28-S		47.88	9.87	38.01
29-S		50.10	9.15	40.95
36-S		41.46	6.18	35.28
37-S		42.06	6.42	35.64
DW-7	B1	46.11	7.42	38.69
23-D		47.04	6.99	40.05
27-D		50.59	9.72	40.87
28-D		47.74	9.70	38.04
29-D		50.17	9.17	41.00
36-D		41.26	5.95	35.31
52-D		48.31	8.81	39.50
53-D		50.94	7.26	43.68
22-DD	B2	46.45	6.35	40.10
27-DD		50.72	7.89	42.83
36-DD		41.58	4.83	36.75
35-DDD	B3	46.47	4.88	41.59

Notes:

feet btoc = Feet below top of casing

feet NAVD88 = Elevation (in feet) relative to the North American Vertical Datum of 1988.

TABLE 3

ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, OCTOBER 2020[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	10/13/2020	< 0.50	**6.7**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
16-S		10/14/2020	< 1.0	< 1.0	**11**	< 1.0	**55**	< 1.0	< 1.0	< 1.0	< 1.0	**7.3**
22-S		10/14/2020	< 0.50	**3.6**	**32**	**3.4**	**16**	< 0.50	< 0.50	< 0.50	< 0.50	**12**
23-S		10/14/2020	**1.1**	**50**	**62**	**7.2**	**13**	< 1.0	< 1.0	< 1.0	< 1.0	**16**
27-S		10/14/2020	< 2.5 / < 2.5	**16 / 13**	**250 / 250**	**12 / 12**	**19 / 17**	< 2.5 / < 2.5	< 2.5 / < 2.5	< 2.5 / < 2.5	< 2.5 / < 2.5	< 2.5 / < 2.5
28-S		10/14/2020	< 2.0	< 2.0	**14**	< 2.0	**150**	< 2.0	< 2.0	< 2.0	< 2.0	**6.0**
29-S		10/13/2020	< 0.50	**14**	**3.8**	< 0.50	**0.51**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
36-S		10/13/2020	**1.2**	**49**	**9.6**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
37-S		10/13/2020	**0.58**	**35**	**4.2**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DW-7	B1	10/14/2020	< 1.0	**39**	**120**	**1.3**	**6.3**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
23-D		10/14/2020	< 2.0 / < 2.5	**220 / 280**	**3.5 / 4.2**	< 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
27-D		10/13/2020	**3.8 / 3.6**	**72 / 72**	**2.4 / 2.3**	< 1.0 / < 1.0	< 1.0 / < 1.0	< 1.0 / < 1.0	< 1.0 / < 1.0	< 1.0 / < 1.0	< 1.0 / < 1.0	< 1.0 / < 1.0
28-D		10/13/2020	< 5.0	< 5.0	**29**	< 5.0	**250**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
29-D		10/13/2020	**2.5**	**58**	**1.9**	< 0.50	< 0.50	**0.72**	< 0.50	**0.77**	**0.71**	< 0.50
36-D		10/13/2020	**0.78**	**28**	**34**	**2.0**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
52-D		10/13/2020	< 0.50	**16**	**0.82**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
53-D		10/13/2020	< 0.50	**8.0**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
22-DD	B2	10/14/2020	< 2.0	**130**	**5.0**	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
27-DD		10/14/2020	< 0.50	**19**	**6.0**	**0.94**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
36-DD		10/13/2020	< 0.50	**0.86**	**16**	**3.6**	**6.8**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
35-DDD	B3	10/13/2020	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Cleanup Goal[3]			**5.0**	**5.0**	**6.0**	**10**	**0.5**	**6.0**	**5.0**	**200**	**1,200**	**600**

TABLE 3

ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, OCTOBER 2020[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

Notes:

< = Constituent not detected above the laboratory reporting limit shown

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

Freon 113 = 1,1,2-Trichloro-1,2,2-Trifluoromethane

J = Concentration is estimated

PCE = Tetrachloroethene

TCE = Trichloroethene

tDCE = trans-1,2-Dichloroethene

VC = Vinyl chloride

1. Groundwater samples were collected by Field Solutions, Inc., of San Jose, California, and analyzed by Eurofins TestAmerica of West Sacramento, 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. Cleanup Goal is the lower of the Federal and California Maximum Contaminant Levels (MCLs).

Concentrations reported in micrograms per liter (µg/L).

Results in **bold** indicate the constituent was detected in the sample above the laboratory reporting limit.

Multiple results indicate primary / duplicate sample results.

TABLE 4
HISTORICAL IN SITU BIOREMEDIATION SYSTEM SUBSTRATE AMENDMENT SUMMARY
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

ISB Operation Event Period and Days Operated[1]	Substrate Type	Quantity of Substrate Solution Injected[2]	Substrate Delivery Method
December 2005-May 2008 (449 days)	Molasses	2,495 gallons	Extracted groundwater mixed in-line with substrate (added using a metering pump) and pumped into injection wells.
October 2011-February 2012 (114 days)	Molasses	275 gallons	Extracted groundwater mixed in-line with substrate (added using a metering pump) and pumped into injection wells
November 2012-February 2013 (99 days)	Molasses	276 gallons	Extracted groundwater mixed in-line with substrate (added using a metering pump) and pumped into injection wells
January-June 2014 (56 days)	60 percent sodium lactate solution	144 gallons	Substrate added directly into injection wells, followed by groundwater recirculation
January-February 2016 (29 days)	Emulsified vegetable oil solution (nutrient-enriched 60 percent vegetable oil / 4 percent sodium lactate solution)	268 gallons	Mixed in bulk with extracted groundwater in aboveground storage tanks and pumped into injection wells
May-June 2017 (27 days)	60 percent sodium lactate solution	165 gallons	Extracted groundwater mixed with substrate (added using a metering pump) in aboveground tanks and pumped into injection wells
May-June 2018 (41 days)	Combination of 60 percent sodium lactate solution and nutrient-enriched 30 percent potassium lactate solution	202 gallons	Extracted groundwater mixed with substrate (added using a metering pump) in tanks and pumped into injection wells
April-May 2019 (49 days)	Combination of 60 percent sodium lactate solution and nutrient-enriched 30 percent potassium lactate solution	339 gallons	Extracted groundwater mixed with substrate (added using a metering pump) in tanks and pumped into injection wells
June-August 2020 (65 days)	Provect ERD CH4+ (contains fermentable organics, micronutrients, antimethanogenic reagents, and a ferrous iron supplement)	293 gallons	Two methods: (1) Extracted groundwater mixed with substrate (added using a metering pump) in tanks and pumped into injection wells, and (2) substrate added directly into injection wells.

Notes:
ISB = In situ bioremediation
1. Days operated based on hours that groundwater circulation occurred with or without substrate amendment. The maximum duration is presented in this table for periods when the system operated longer in one zone than the other zone.
2. The substrate quantity is the sum of quantities injected into the A Zone and B Zone.

TABLE 5
IN SITU BIOREMEDIATION OPERATIONAL SUMMARY – 2020
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Period	Extraction Wells	Injection Wells	Substrate Amendment Method	Operation Time (hours)	Average Flow Rate (gpm)[1]	Volume of Groundwater Injected (gallons)	Substrate Volume Injected (gallons)[2]	Mass Fermentable Organics Injected (kilograms)[3]	Mass of Ferrous Iron Injected (kilograms)
A Zone									
6/15/20 - 7/23/20	16-S, X2A	ISB1AR, ISB2AR	Groundwater recirculation with addition of diluted substrate	976	0.50	29,485	83	181	12
7/23/20 - 7/28/20	16-S, X2A	ISB1AR, ISB2AR	Direct addition to wells	5	0.55	174	37	81	0
7/28/20 - 8/19/20	16-S, X2A	ISB1AR, ISB2AR	None (recirculation only)	529	0.18	5,665	0	0	0
B Zone									
6/15/20 - 7/23/20	X1B, X2B1	ISB1BR, ISB2BR, ISB3BR	Groundwater recirculation with addition of diluted substrate	908	0.36	19,432	69	151	6
7/23/20 - 7/28/20	X1B, X2B1	ISB1BR, ISB2BR, ISB3BR	Direct addition to wells	0	0.00	0	104	227	0
7/28/20 - 8/19/20	X1B, X2B1	ISB1BR, ISB2BR, ISB3BR	None (recirculation only)	529	0.07	2,268	0	0	0
Subtotals									
A Zone				1,510	0.39	35,324	120	262	12
B Zone				1,437	0.25	21,700	173	377	6
2020 Total				1,437	0.66	57,024	293	639	18

Notes:
gpm = Gallons per minute
1. The average flow rate shown is less than the instantaneous flow rates observed while the system was operating at maximum capacity (approximately 2.2 gpm into the A Zone and 2.0 gpm into the B Zone) due to the cyclical nature of the extraction pumps.
2. The substrate injected during this period was Provect-ERD CH4+™ which has a density of approximately 8 pounds per gallon, and contains 60 percent by weight fermentable organics.
3. Mass of fermentable organics injected is calculated as (gallons of substrate solution * density of solution * percent fermentable organics * 0.454 kilograms/lb).

TABLE 6

ANALYTICAL RESULTS FOR ISB PROGRAM GROUNDWATER SAMPLES[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

Sample ID	Sample Date	Micrograms per Liter (µg/L)								Micromoles per Liter (µM)	Percent (%)	µg/L	Milligrams per Liter (mg/L)
		TCE EPA 8260B	cDCE EPA 8260B	tDCE EPA 8260B	1,1-DCE EPA 8260B	VC EPA 8260B	Ethene AM20GAX	Ethane AM20GAX	TVOC EPA 8260B	Total Ethenes	Mole Fraction Ethene &	Methane AM20GAX	TOC EPA 5310B
A-Zone Wells													
16-S	02/05/2020	< 0.50	6.0	0.73	< 0.50	45 J	5.9	8.3	69	1.28	38%	7,600	2.4
	08/26/2020	< 0.50	11	< 0.50	< 0.50	49	5.6	5.0	80	1.26	29%	6,200	4.7
	10/14/2020	< 1.0	11	< 1.0	< 1.0	55	--	--	84	NA	NA	--	--
23-S	02/05/2020	46	43	3.2	1.1	< 0.50	< 0.1	< 0.1	108	0.84	0.0%	0.11 J	1.5
	08/26/2020	70	55	6.1	1.1	1.0	< 0.12	0.93 J	156	1.22	2.5%	1,000	1.4
	10/14/2020	50	62	7.2	< 1.0	13	--	--	149	NA	NA	--	--
28-MW	02/05/2020	< 0.50	23	< 0.50	< 0.50	91 J	12	7.2	133	2.36	28%	6,500	3.0
	08/26/2020	< 1.0	9.1	< 1.0	< 1.0	70	21	12	101	2.36	49%	13,000	5.3
DW-2	02/06/2020	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.03 J	0.059 J	1.5	0.003	100%	14,000	< 0.5
	08/27/2020	< 0.50	0.74	< 0.50	< 0.50	< 0.50	0.79 J	< 1.0 UJ	1.9	0.04	81%	16,000	77
X2A	02/06/2020	< 5.0	32	< 5.0	< 5.0	760	52	18	829	14.9	16%	6,000	< 0.5
	08/26/2020	< 2.0	170	< 2.0	< 2.0	530	48	14	730	12.4	18%	8,300	3.6
B1-Zone Wells													
23-D	02/06/2020	240 / 230	3.7 / 3.6	< 2.5 / < 2.5	< 2.5 / < 2.5	< 2.5 / < 2.5	0.041 J	0.0062 J	244 / 234	1.87	0.1%	0.65	< 1.0 / < 5.0
	08/26/2020	270 / 260	3.9 / 5.7	< 2.0 / < 2.0	< 2.0 / < 2.0	< 2.0 / < 2.0	< 0.12	0.19 J	277 / 269	2.12	0.3%	5.0 J	< 0.50 / < 0.50
	10/14/2020	220 / 280	3.5 / 4.2	< 2.0 / < 2.5	< 2.0 / < 2.5	< 2.0 / < 2.5	--	--	284	NA	NA	--	--
DW-1	02/07/2020	< 0.50	< 0.50	1.6	< 0.50	1.3	0.85	46	19	1.60	98%	19,000	75
	08/27/2020	< 25	2,100	< 25	< 25	1,600	660	280	3,700	80.1	41%	19,000	15
B1-Zone Wells													
DW-7	02/06/2020	26	150	1.5	0.5	5.6	0.087 J	0.13	184	1.86	0.4%	3.9	< 5.0
	08/26/2020	55	140	1.5	< 1.0	6.4	< 0.12	< 0.075	205	1.98	0.0%	31	< 0.50
	10/14/2020	39	120	1.3	< 1.0	6.3	--	--	168	NA	NA	--	--
PMW-2-1	02/07/2020	< 50	5,300	< 50	< 50	450	140	25	5,750	67.7	8.6%	6,300	1.4
	08/27/2020	< 50	5,000	< 50	< 50	360	130	31	5,360	63.0	9.0%	11,000	1.5
X1B	02/07/2020	< 0.50	1.9	3.2	< 0.50	1.4	0.65	16	4,528	0.63	88%	20,000	23
	08/26/2020	< 0.50	4.2	4.8	< 0.50	8.0	10	25	24	1.41	84%	4,400	1.8
X2B1	02/07/2020	1.5	16	2.5	< 0.50	22	8.2	22	46	1.58	65%	8,100	2.2
	08/26/2020	< 0.50	76	2.4	0.51	69	13	7.9	150	2.64	27%	800	0.77
PMW-2-3	02/07/2020	210	44	< 5.0	< 5.0	12	1.3	0.063 J	266	2.29	2.1%	17	< 0.5
	08/27/2020	200	36	< 2.0	< 2.0	18	1.5	< 0.075	254	2.23	2.4%	23	0.64

TABLE 6

ANALYTICAL RESULTS FOR ISB PROGRAM GROUNDWATER SAMPLES[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

Notes:

µg/L = Micrograms per liter

< = Compound not detected above indicated laboratory reporting limit

-- = Not analyzed

1,1-DCE = 1,1-dichloroethene

cDCE = cis-1,2-dichloroethene

EPA = United States Environmental Protection Agency

J = Associated numerical value is the approximate concentration of the analyte in the sample

J- = Associated numerical value is the approximate concentration of the analyte in the sample, biased low

NA = Not applicable

TCE = Trichloroethene

tDCE = trans-1,2-dichloroethene

TOC = Total organic carbon

TVOC = Total volatile organic compound

UJ = Analyte was not detected above the reporting limit; however, the reporting limit is approximate and may not represent the actual limit of quantitatior

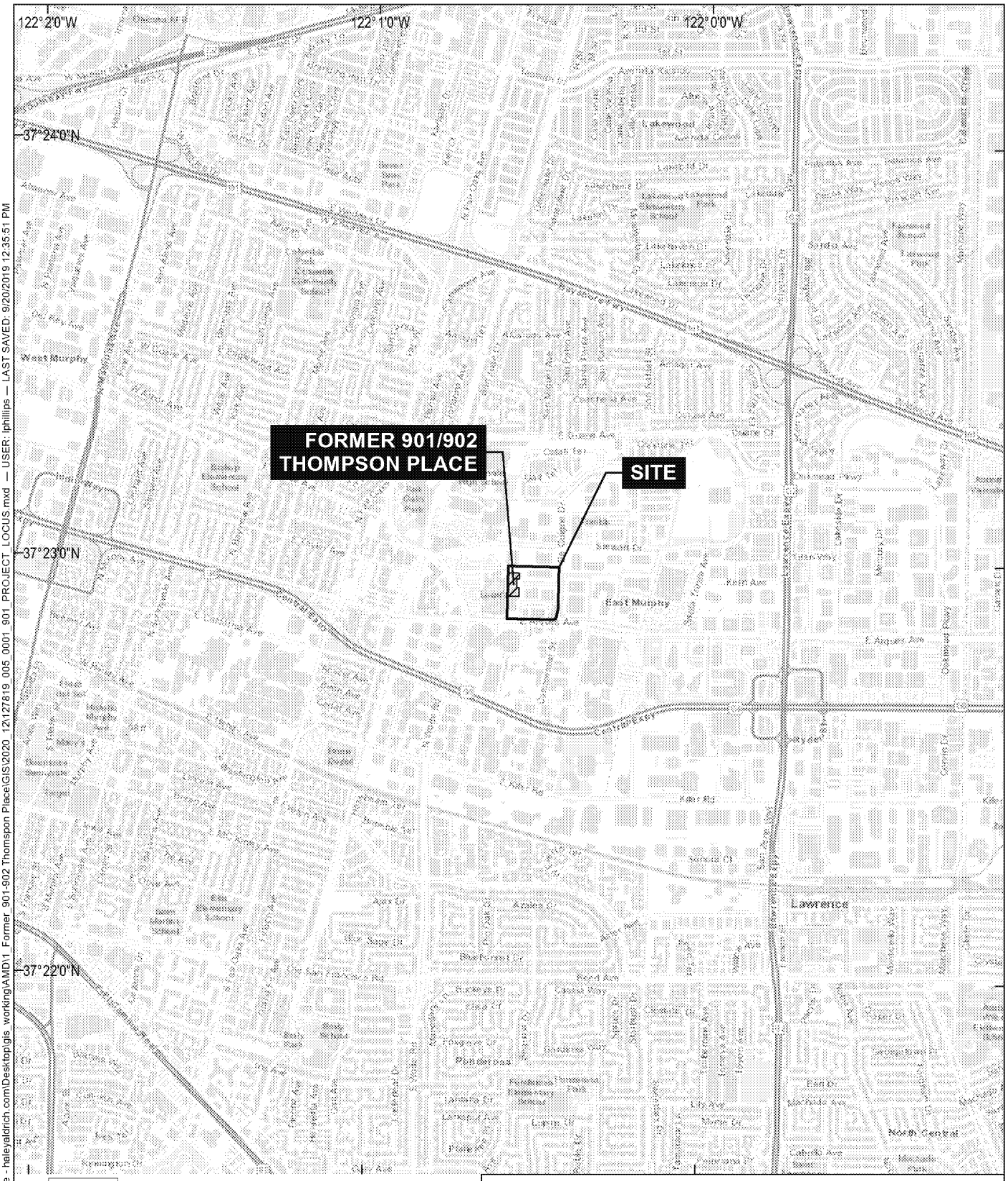
VC = Vinyl chloride

VOC = Volatile organic compound

1. Samples were collected by Field Solutions, Inc. of San Jose, California, and submitted to Eurofins TestAmerica of Pleasanton, California, West Sacramento, California, or Phoenix, Arizona, for VOC and TOC analyses. Ethene, ethane, and methane were analyzed by Pace Analytical Energy Services, LLC of Pittsburgh, Pennsylvania.
2. For clarity, this table presents the results for TCE and daughter products for the previous year of data; historical analytical results are depicted in the concentration trends provided as Appendix G. For a full list of VOCs analyzed, please see the laboratory analytical reports provided as Appendix D and in previous In Situ Bioremediation Program Progress Updates submitted to EPA.

Multiple results indicate primary / duplicate results.

FIGURES



MAP SOURCE: ESRI
SITE COORDINATES: 37°22'56"N, 122°00'30"W

HALEY ALDRICH

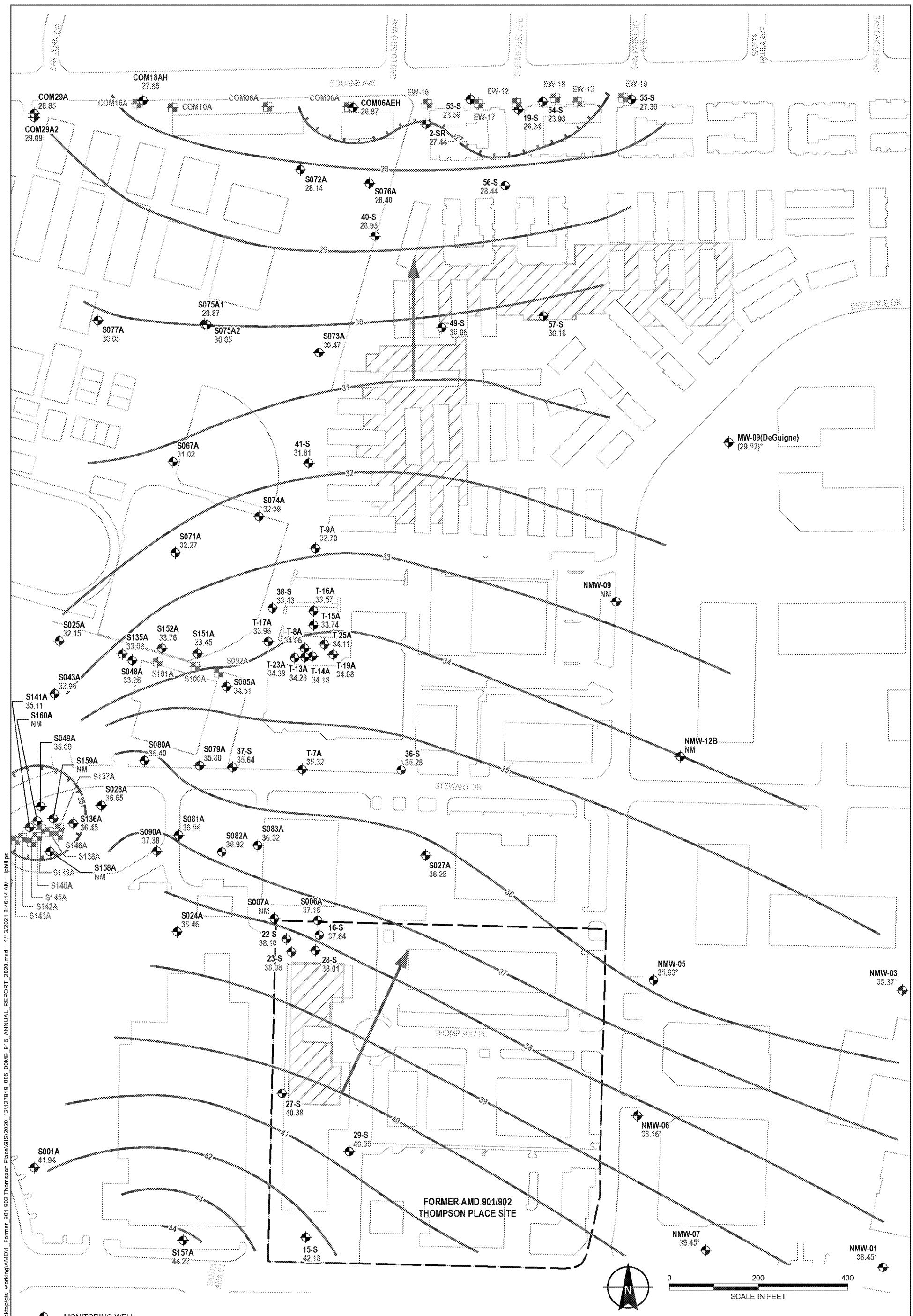
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
JANUARY 2021

FIGURE 1

GIS FILE PATH: C:\Users\lphillips\OneDrive - haleyaldrich.com\Desktop\gis_working\AMD\1_Former_901-902 Thomspon Place\GIS\2020_12\127819_005_0001_901_PROJECT_LOCUS.mxd — USER: lphillips — LAST SAVED: 9/20/2019 12:35:51 PM



MONITORING WELL

EXTRACTION WELL

GROUNDWATER ELEVATION CONTOUR, IN FEET

APPROXIMATE DIRECTION OF HYDRAULIC GRADIENT

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. *MOHAWK WELLS ARE SURVEYED TO A DIFFERENT VERTICAL DATUM (NGVD29), AND ARE OFFSET BY APPROXIMATELY 2.7 FEET. THE DISPLAYED DATA HAVE BEEN ADJUSTED ACCORDINGLY.
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. NM = NOT MEASURED

HALEY ALDRICH

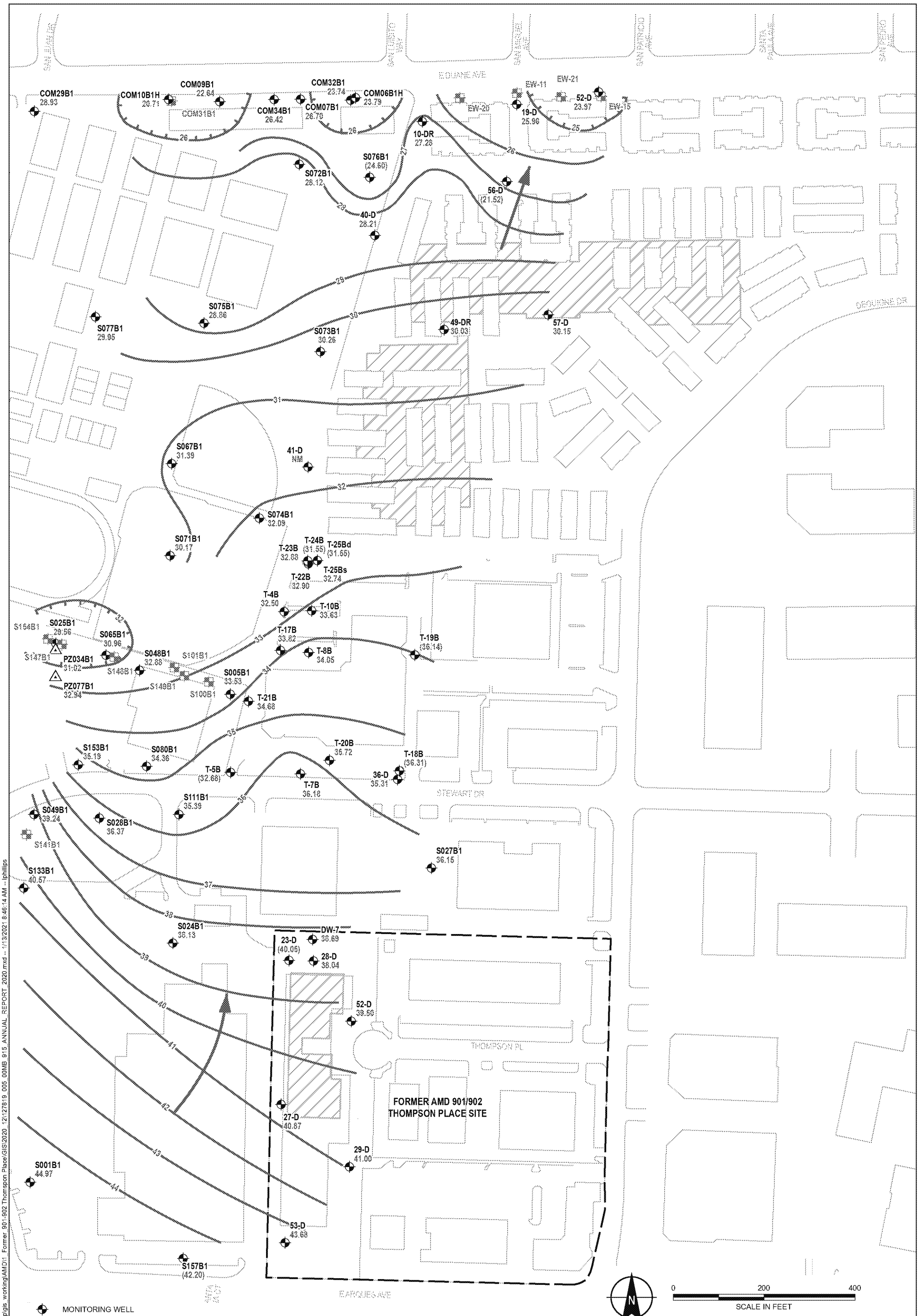
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

A-ZONE WATER LEVELS
OCTOBER 2020

JANUARY 2021

FIGURE 2

C:\Users\tphillips\OneDrive - haleyaldrich.com\Desktop\gis_working\AMD11_Former_901-902 Thompson Place\GIS\2020_12\127819_005_00MB_915_ANNUAL_REPORT_2020.mxd -- 1/13/2021 8:46:14 AM -- tphillips



MONITORING WELL

EXTRACTION WELL

PIEZOMETER

GROUNDWATER ELEVATION CONTOUR, IN FEET

APPROXIMATE DIRECTION OF HYDRAULIC GRADIENT

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. WATER LEVELS IN PARENTHESIS, 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. NM = NOT MEASURED

HALEY ALDRICH

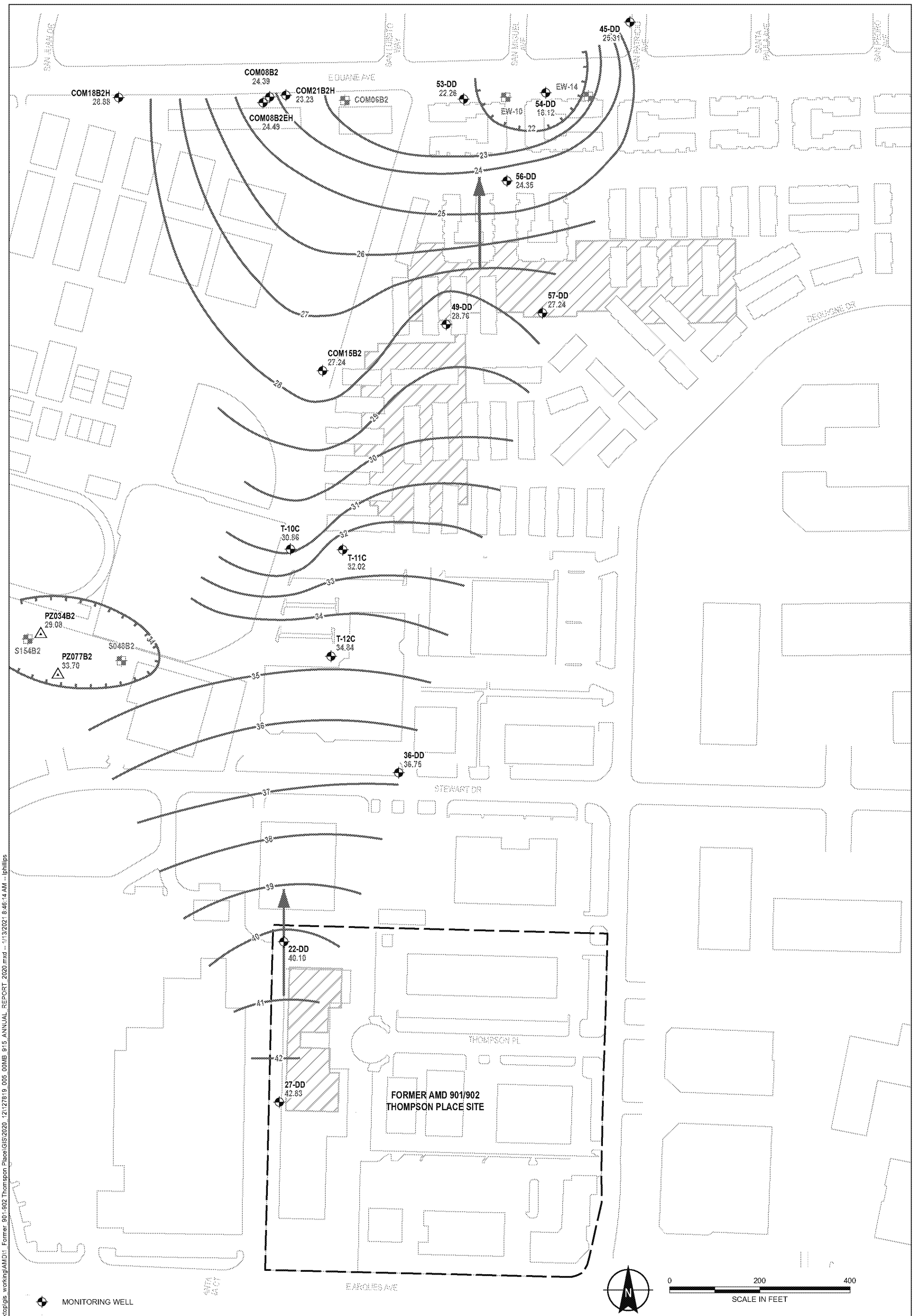
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B1-ZONE WATER LEVELS
OCTOBER 2020

JANUARY 2021

FIGURE 3

C:\Users\lphillips\OneDrive - haleyaldrich.com\Desktop\gis_working\AMD\1_Former_901-902 Thompson Place\GIS\2020_12\127819_005_00MB_915_ANNUAL_REPORT_2020.mxd -- 1/13/2021 8:46:14 AM -- lphillips



MONITORING WELL

EXTRACTION WELL

PIEZOMETER

GROUNDWATER ELEVATION CONTOUR, IN FEET

APPROXIMATE DIRECTION OF HYDRAULIC GRADIENT

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. WATER LEVELS IN PARENTHESIS, 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. NM = NOT MEASURED

HALEY ALDRICH

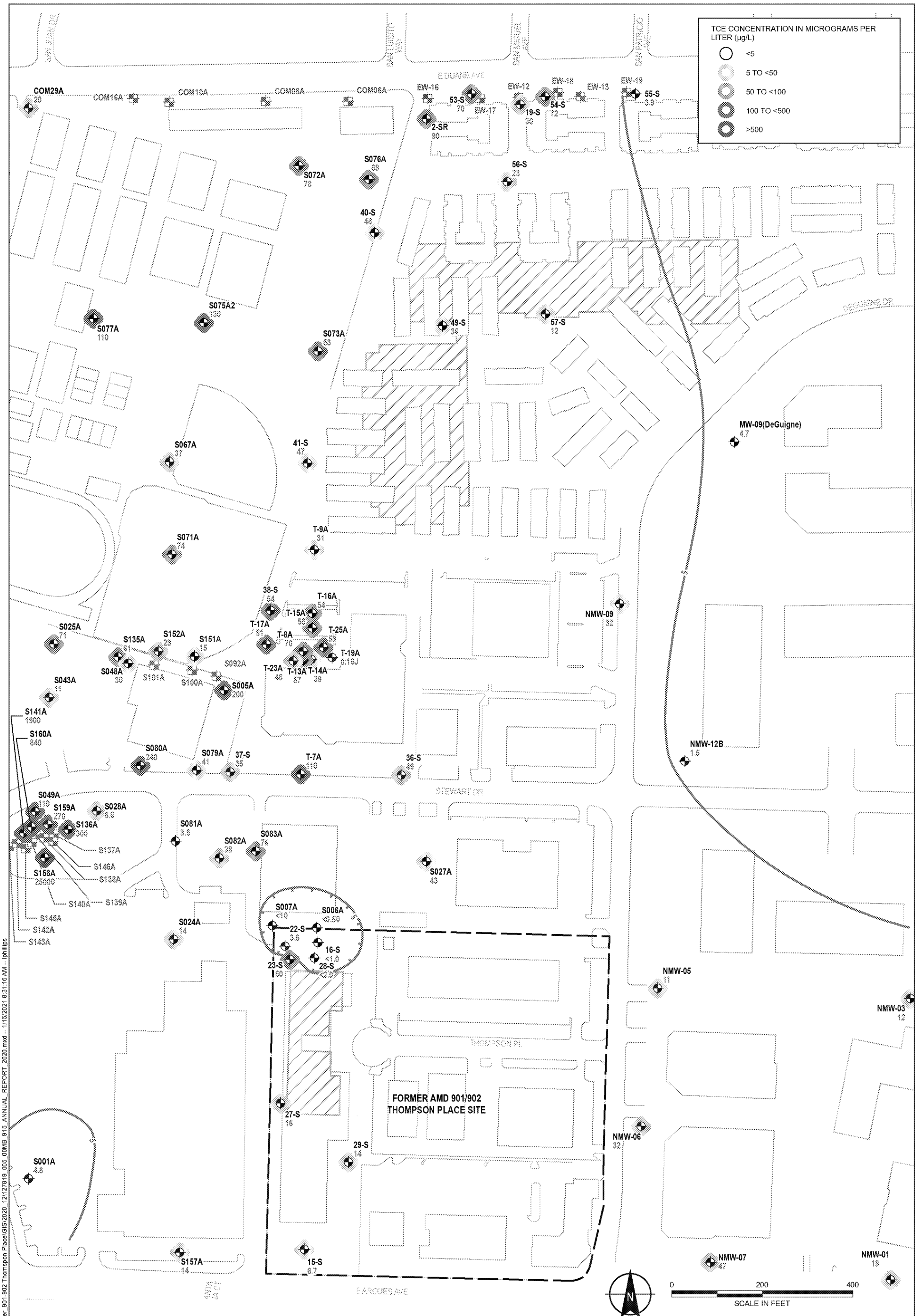
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B2-ZONE WATER LEVELS
OCTOBER 2020

JANUARY 2021

FIGURE 4

C:\Users\tphillips\OneDrive - haleyaldrich.com\Desktop\gis_working\AMD\1_Former_901-902 Thomspon Place\GIS\2020_12\127819_005_00MB_915_ANNUAL_REPORT_2020.mxd -- 1/13/2021 8:46:14 AM -- tphillips



MONITORING WELL

EXTRACTION WELL

5 MICROGRAMS PER LITER (µg/L) TCE ISOCONCENTRATION CONTOUR

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. ISOCONCENTRATION 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. CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER (µg/L).
3. TCE = TRICHLOROETHENE
4. J = ESTIMATED CONCENTRATION
5. ONLY PRIMARY SAMPLE RESULTS ARE SHOWN

HALEY ALDRICH

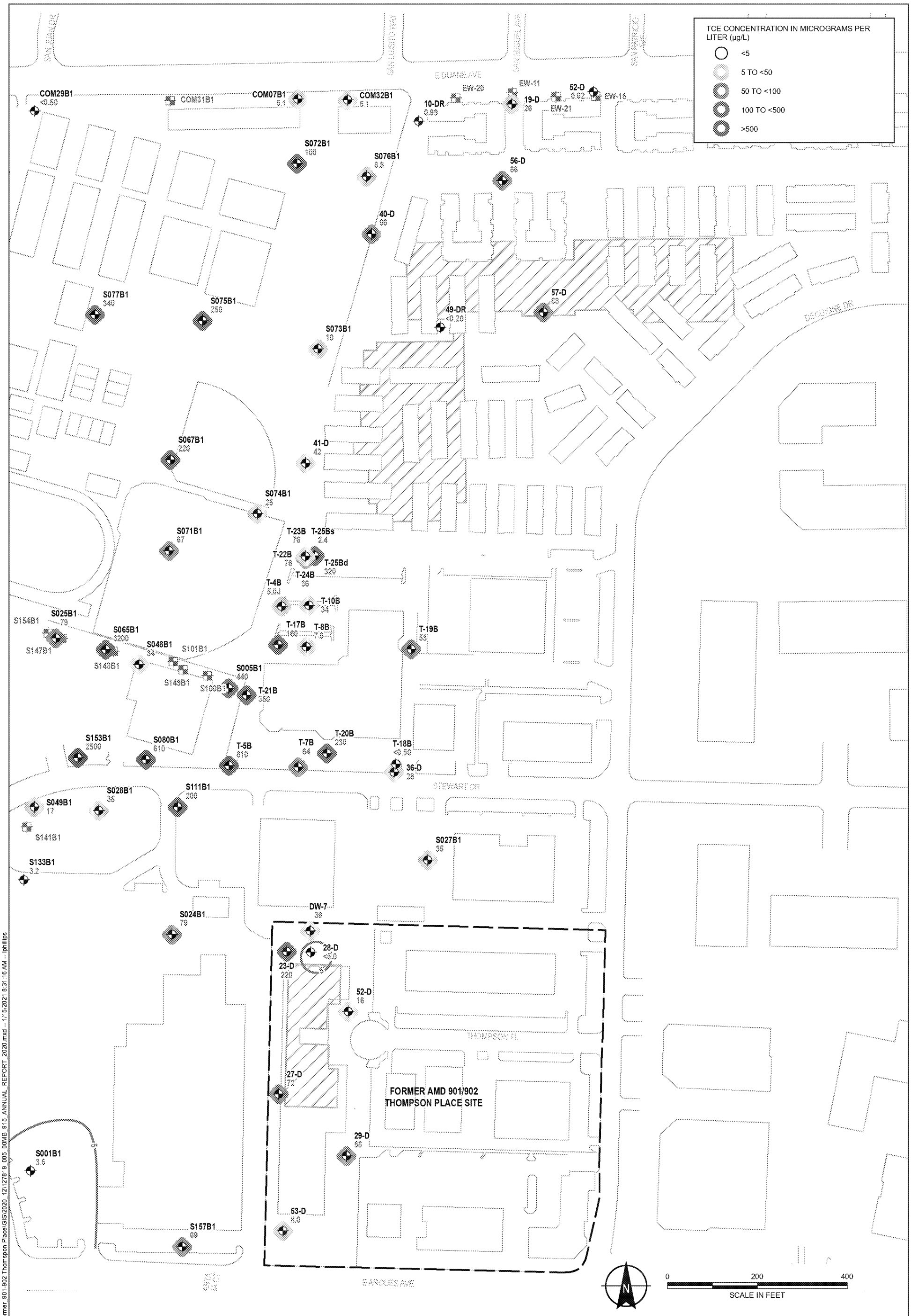
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

A-ZONE TCE CONTOURS
OCTOBER 2020

JANUARY 2021

FIGURE 5

C:\Users\phillips\Desktop\gis_working\AMD11_Former_901-902 Thompson Place\GIS\2020_12\12781\9_005_00MB_915_ANNUAL_REPORT_2020.mxd -- 1/15/2021 8:31:16 AM -- lphillips



MONITORING WELL

EXTRACTION WELL

5 MICROGRAMS PER LITER (µg/L) TCE ISOCONCENTRATION CONTOUR

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. ISOCONCENTRATION 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. CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER (µg/L).
3. TCE = TRICHLOROETHENE
4. < = NOT DETECTED ABOVE THE LABORATORY REPORTING LIMIT SHOWN
5. J = ESTIMATED CONCENTRATION
6. ONLY PRIMARY SAMPLE RESULTS ARE SHOWN

HALEY ALDRICH

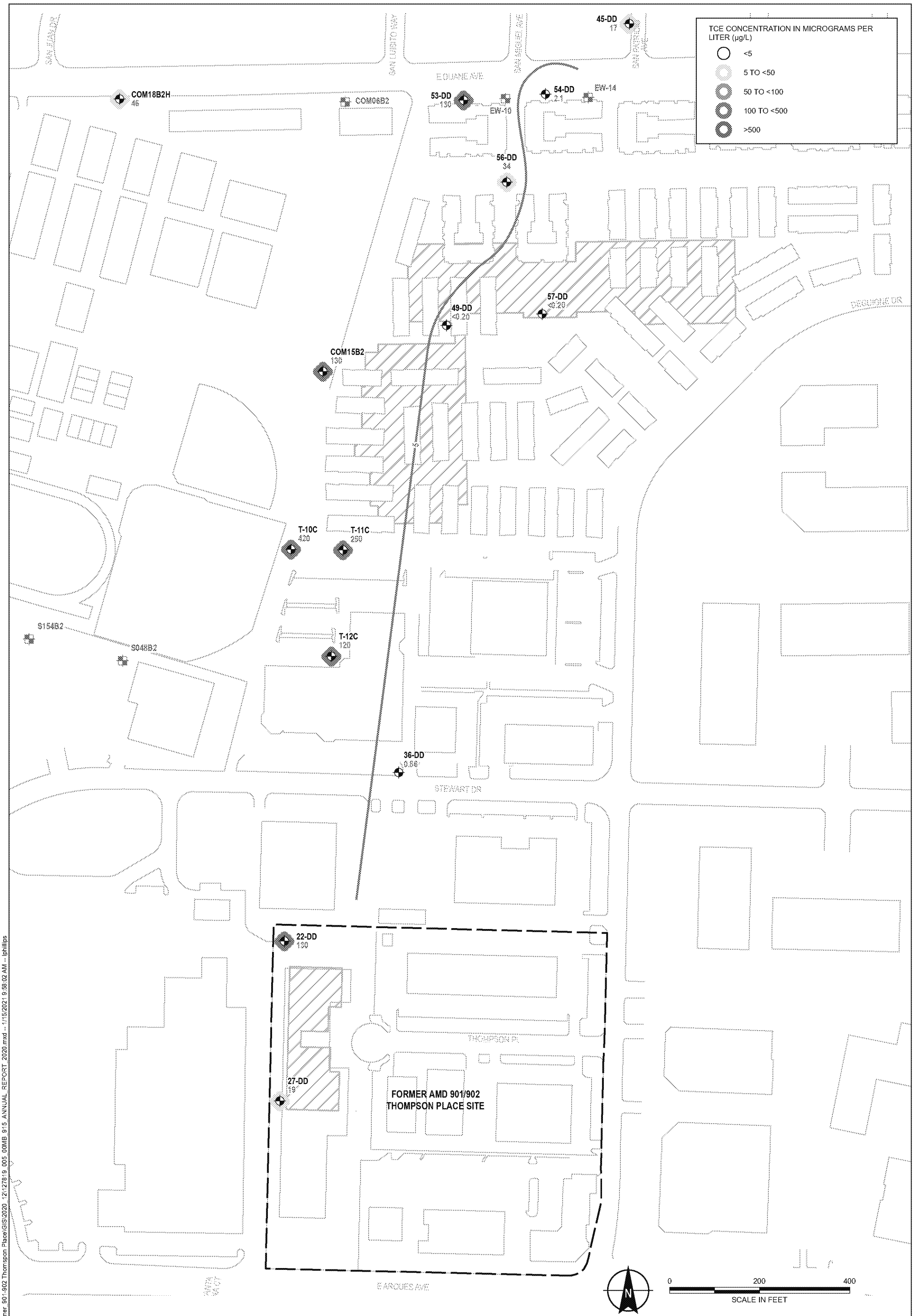
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B1-ZONE TCE CONTOURS
OCTOBER 2020

JANUARY 2021

FIGURE 6

C:\Users\lphillips\Desktop\gis_working\AMD\1_Former_901-902 Thompson Place\GIS\2020_12\127819_005_00MB_915_ANNUAL_REPORT_2020.mxd -- 1/15/2021 8:31:16 AM -- lphillips



MONITORING WELL

EXTRACTION WELL

5 MICROGRAMS PER LITER (µg/L) TCE ISOCONCENTRATION CONTOUR

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. ISOCONCENTRATION 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. CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER (µg/L).
3. CONCENTRATION OF TCE REPORTED FOR COM06B2, S154B2, AND S048B2 WERE 400, 97, AND 7,300 µg/L, RESPECTIVELY.
4. TCE = TRICHLOROETHENE
5. < = NOT DETECTED ABOVE THE LABORATORY REPORTING LIMIT SHOWN
6. ONLY PRIMARY SAMPLE RESULTS ARE SHOWN

HALEY ALDRICH

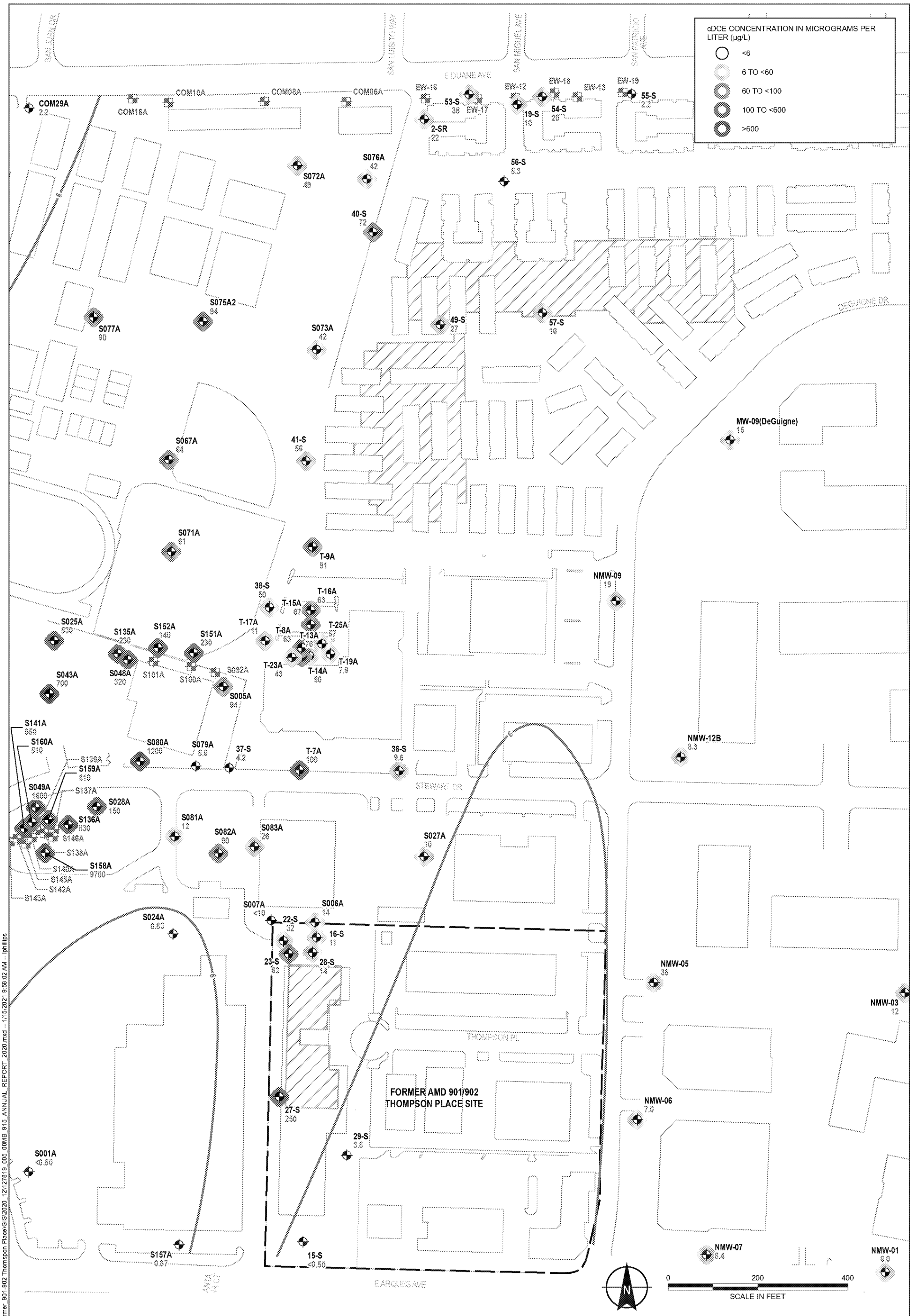
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B2-ZONE TCE CONTOURS
OCTOBER 2020

JANUARY 2021

FIGURE 7

C:\Users\lphillips\Desktop\gis_working\AMD1_Former_901-902 Thompson Place\GIS\2020_12\127819_005_00MB 9\5_ANNUAL_REPORT_2020.mxd -- 1/15/2021 9:58:02 AM -- lphillips



MONITORING WELL

EXTRACTION WELL

6 MICROGRAMS PER LITER (µg/L) cDCE ISOCONCENTRATION CONTOUR

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. ISOCONCENTRATION 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. CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER (µg/L).
3. cDCE = CIS-1,2-DICHLOROETHENE
4. < = NOT DETECTED ABOVE THE LABORATORY REPORTING LIMIT SHOWN
5. ONLY PRIMARY SAMPLE RESULTS ARE SHOWN

HALEY ALDRICH

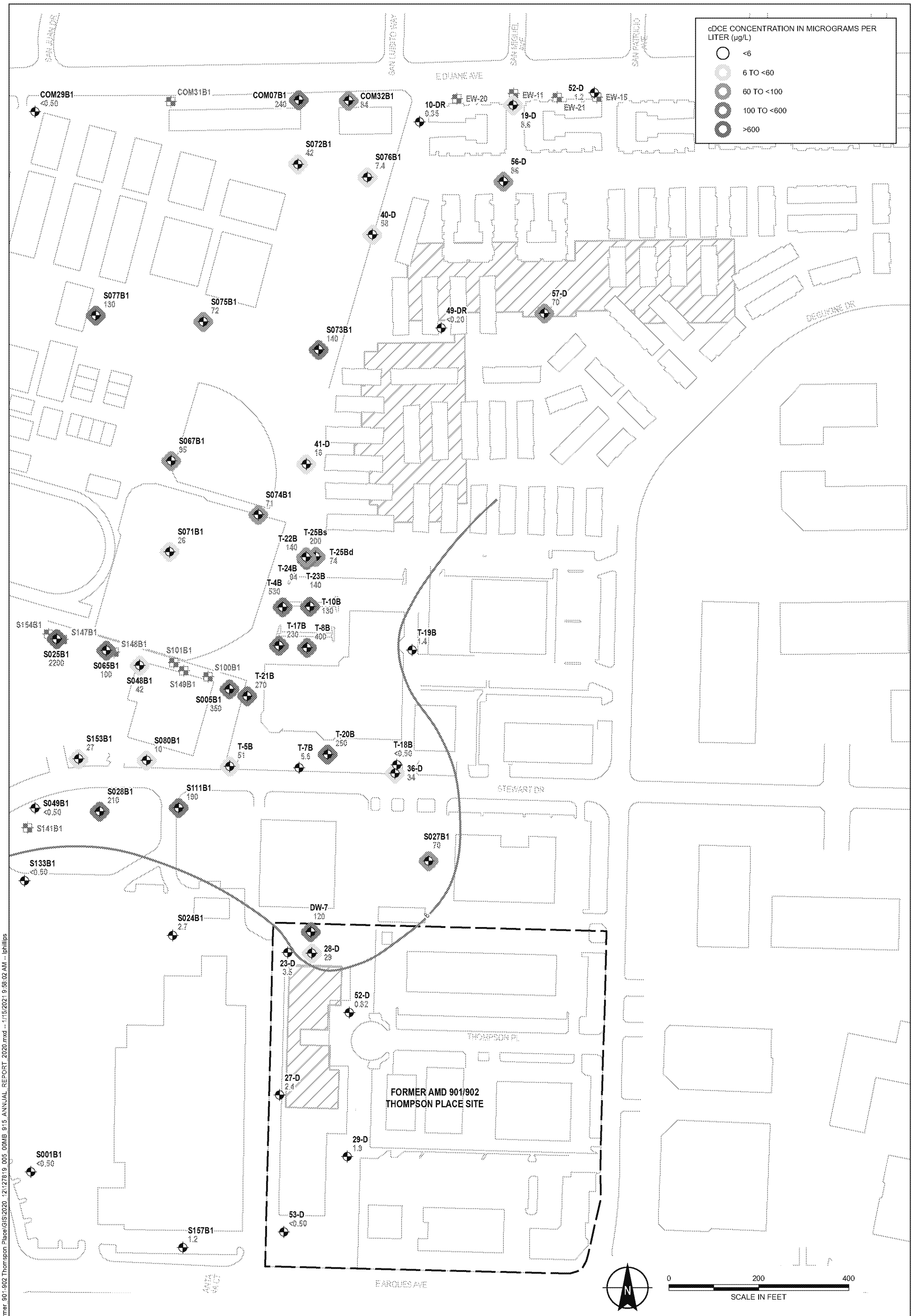
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

A-ZONE cDCE CONTOURS
OCTOBER 2020

JANUARY 2021

FIGURE 8

C:\Users\lphillips\Desktop\gis_working\AMD\1_Former_901-902 Thompson Place\GIS\2020_12\127819_005_00MB_915_ANNUAL_REPORT_2020.mxd -- 1/15/2021 9:58:02 AM -- lphillips



MONITORING WELL

EXTRACTION WELL

6 MICROGRAMS PER LITER (µg/L) cDCE ISOCONCENTRATION CONTOUR

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. ISOCONCENTRATION 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. CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER (µg/L).
3. cDCE = CIS-1,2-DICHLOROETHENE
4. < = NOT DETECTED ABOVE THE LABORATORY REPORTING LIMIT SHOWN
5. ONLY PRIMARY SAMPLE RESULTS ARE SHOWN

HALEY ALDRICH

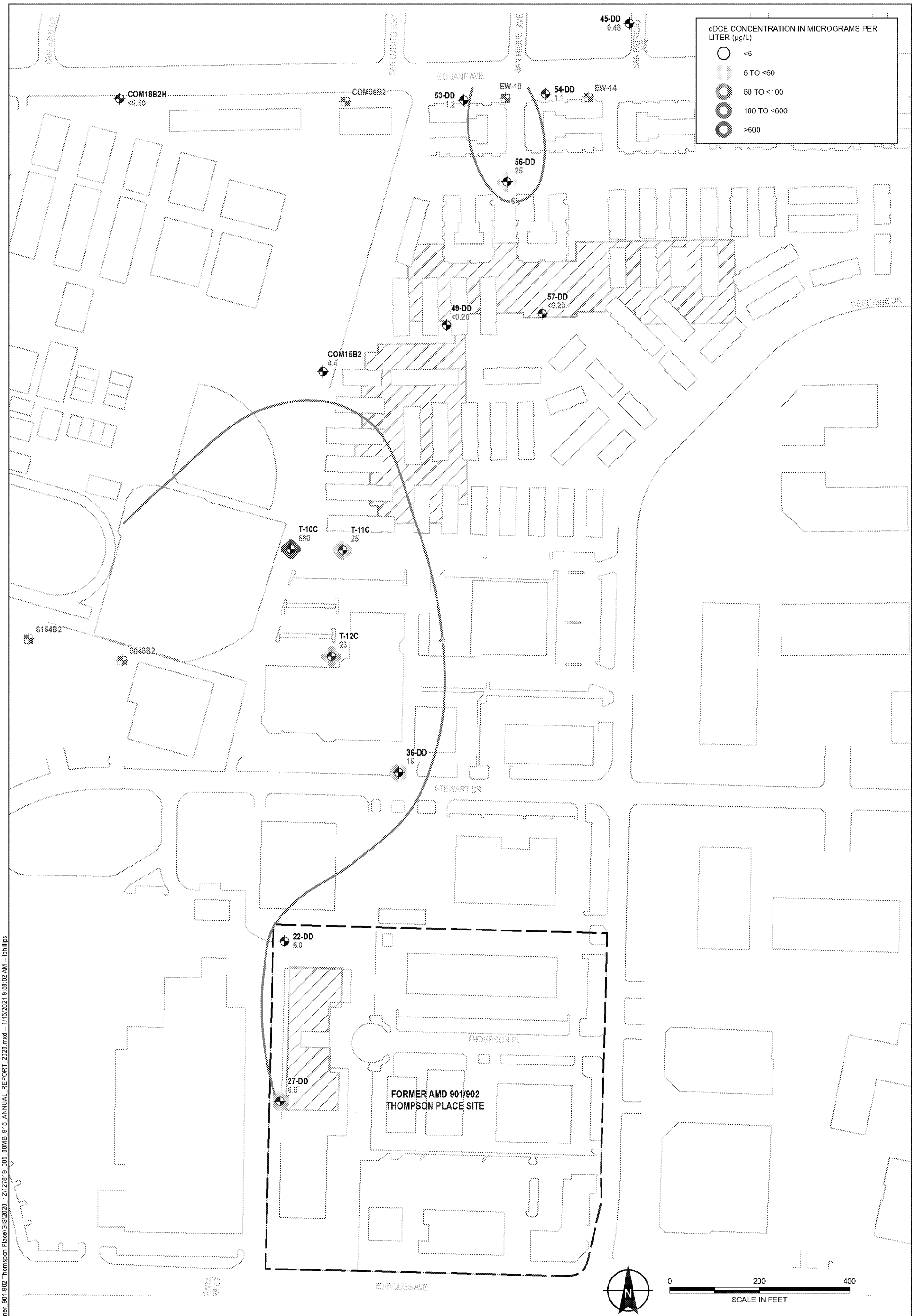
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

B1-ZONE cDCE CONTOURS
OCTOBER 2020

JANUARY 2021

FIGURE 9

C:\Users\lphillips\Desktop\gis_working\AMD11_Former_901-902 Thompson Place\GIS\2020_12\127819_005_00MB_915_ANNUAL_REPORT_2020.mxd -- 1/15/2021 9:58:02 AM -- lphillips



MONITORING WELL

EXTRACTION WELL

6 MICROGRAMS PER LITER (µg/L) cDCE ISOCONCENTRATION CONTOUR

SITE BOUNDARY

BUILDING FOOTPRINT

FORMER BUILDING FOOTPRINT

NOTES

1. ISOCONCENTRATION 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. CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER (µg/L).
3. CONCENTRATION OF cDCE REPORTED FOR COM06B2, S154B2, AND S048B2 WERE 9.9, 1.1, AND <100 RESPECTIVELY.
4. cDCE = CIS-1,2-DICHLOROETHENE
5. < = NOT DETECTED ABOVE THE LABORATORY REPORTING LIMIT SHOWN
6. ONLY PRIMARY SAMPLE RESULTS ARE SHOWN

HALEY ALDRICH

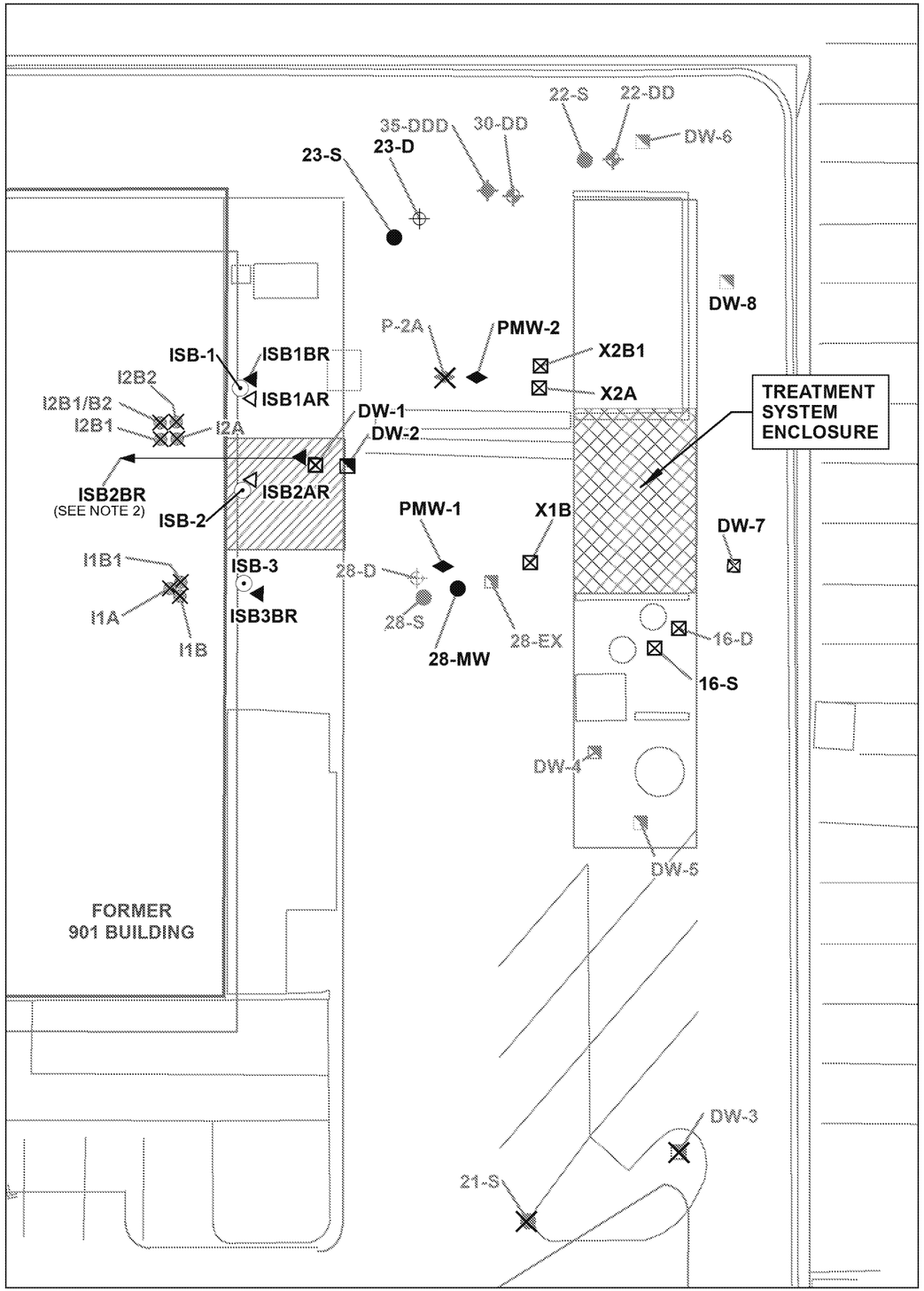
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

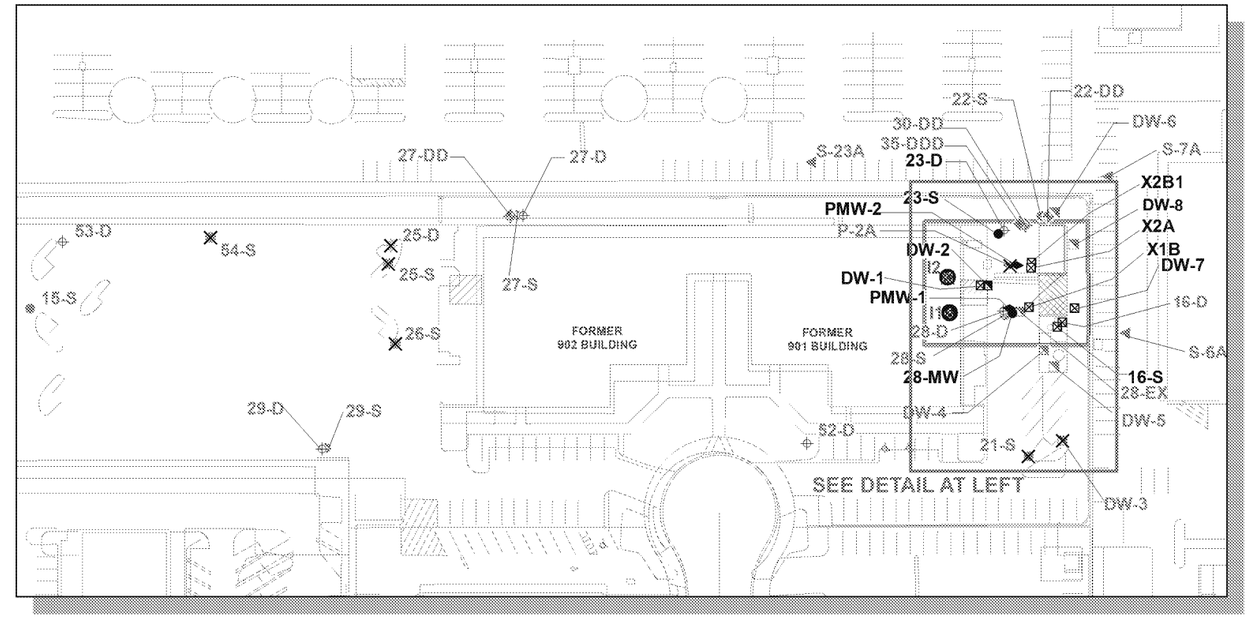
B2-ZONE cDCE CONTOURS
OCTOBER 2020

JANUARY 2021

FIGURE 10

C:\Users\jphillips\Desktop\gis_working\AMD1_Former_901-902 Thompson Place\GIS\2020_12\127819_005_00MB_915_ANNUAL_REPORT_2020.mxd -- 1/15/2021 9:58:02 AM -- jphillips





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-2, P-2A)
- IN SITU BIOREMEDIATION INJECTION OR EXTRACTION WELL
- SOIL BORING AND DEPTH-DISCRETE GROUNDWATER SAMPLING LOCATION
- 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 30° FROM VERTICAL, WITH A BEARING TO THE SOUTH.
3. BLACK SYMBOLS AND LABELS INDICATE WELL INCLUDED IN ISB PERFORMANCE MONITORING PROGRAM. REFER TO ISB MONITORING PROGRAM TABLE.
4. BASE MAP SOURCE: AMD

0 100 200
SCALE IN FEET

HALEY ALDRICH

FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

LAYOUT OF THE IN SITU BIOREMEDIATION PROGRAM

JANUARY 2021

FIGURE 11

GIS FILE PATH: C:\Users\jphillips\Desktop\gis_working\AMD\1_Former_901-902 Thompson Place\GIS\2020_12\127819_005_00011_BIOREMEDIATION_LAYOUT.mxd — USER: jphillips — LAST SAVED: 1/13/2021 9:40:08 AM

APPENDIX A

Field Sampling Data Sheets

4Q2020 Liquid Level Survey

901 Thompson Place, Sunnyvale, California

	Well ID	Aquifer	Casing	Depth	Notes	Analytical Parameters
	Record depth to liquid and well total depths in the wells listed below. Rinse and dry wipe the sounder between wells. Record well integrity issue on the field sheet in the comment section.					
X	15-S	A	4	9.2		Liquid Levels and Total Depths
X	16-S	A	4	17.6		
X	22-DD	B2	4	43.6		
X	22-S	A	4	15.2		
X	23-D	B1	4	45.1		
X	23-S	A	4	16.7		
X	27-D	B1	4	27.1		
X	27-DD	B2	4	52.2		
X	27-S	A	4	12.9		
X	28-D	B1	4	23.4		
X	28-S	A	4	16.1		
X	29-D	B1	4	26.5		
X	29-S	A	4	16.9		
X	35-DDD	B3	4	78.5		
X	36-D	B1	4	20.3		
X	36-DD	B2	4	55.1		
X	36-S	A	4	15.2		
X	37-S	A	4	13.3		
X	52-D	B1	4	38.6		
X	53-D	B1	4	37.1		
X	DW-7	B1	6	49.4		
X						

ED_013213_00001031-00044

Field Solutions, Inc.
6276 San Ignacio Avenue, Suite A
San Jose, California, 95119

Historical Monitoring Well Data
901 Thompson Place
Sunnyvale, California

Well ID	Date	First Depth to Water (ft.BTOC)	Second Depth to Water (ft.BTOC)	Total Depth (ft.BTOC)		Comments
15-S	10-12-20	8.64	8.64	16.7 /9.2		Time: 1011
16-S	10-12-20	10.06	10.06	16.8/17.6		* Soft bottom Time: 0819
22-DD	10-12-20	6.35	6.35	44.0/43.6		Time: 0947
22-S	10-12-20	8.27	8.27	15.1/15.2		Time: 0939
23-D	10-12-20	6.99	6.99	45.1/45.1		Time: 0844
23-S	10-12-20	8.95	8.95	16.7/16.7		Time: 0840
27-D	10-12-20	9.72	9.72	27.2/27.1		Time: 0947
27-DD	10-12-20	7.89	7.89	52.9/52.2		Time: 0943
27-S	10-12-20	10.33	10.33	12.9/12.9		Time: 0945
28-D	10-12-20	9.70	9.70	23.9/23.4		Time: 0815
28-S	10-12-20	9.87	9.87	16.2/16.1		Time: 0812
29-D	10-12-20	9.17	9.17	26.5/26.5		Time: 1007
29-S	10-12-20	9.15	9.15	14.8/16.9		Time: 1003

Completed By: NB/MG/RG

Field Solutions, Inc.
6276 San Ignacio Avenue, Suite A
San Jose, California, 95119

Historical Monitoring Well Data
901 Thompson Place
Sunnyvale, California

Well ID	Date	First Depth to Water (ft.BTOC)	Second Depth to Water (ft.BTOC)	Total Depth (ft.BTOC)		Comments
35-DDD	10-12-20	4.88	4.88	78.6/78.5		Time: 0924
36-D	10-12-20	5.95	5.95	20.3/20.3		Time: 1024
36-DD	10-12-20	4.83	4.83	55.1/55.1		Time: 1023
36-S	10-12-20	6.18	6.18	15.2/15.2		Time: 1022
37-S	10-12-20	6.42	6.42	13.3/13.3		Time: 1025
52-D	10-12-20	8.81	8.81	38.6/38.6		Time: 0955
53-D	10-12-20	7.26	7.26	37.0/37.1		Time: 1013
DW-7	10-12-20	7.42	7.42	49.4/49.4		Time: 0829

Completed By: NB/MG/RG

4Q2020 Annual Monitoring

901 Thompson Place, Sunnyvale, California

Well ID	Aquifer	Casing	Depth	Screens	Historical	Notes
Purge the wells below in the order listed using the SamplePro Bladder pump and low-flow sampling techniques (pump rate between 100-500 ml/minute). After the liquid level has stabilized, record temperature, pH, specific conductance, dissolved oxygen, and ORP at regular 3-5 minute intervals until stability has been achieved for three consecutive measurements. Collect bubble free VOAs at a pump rate of 100 ml or less. Discard and change the internal bladder and tripple rinse the stainless steel pump between wells. Temporarily contain all waste water and discharge to the influent tank/settling tank at 915 DeGuigne Site.						
Cluster 1 - Sample the following wells the order within this cluster.						***Place pump intake approximately midscreens.***
35-DDD	B3	4	78.5	70 - 80	0	
53-D	B1	4	37.1	NA	1.3	**Collect 6 additional VOAs for MS/MSD**
15-S	A	4	9.2	8 - 16	12	
29-S	A	4	16.9	11 - 16	23	
52-D	B1	4	38.6	NA	29	
29-D	B1	4	26.5	21 - 31	44	
27-D	B1	4	27.1	21 - 31	113	**Collect duplicate (1-D)**
Cluster 2 - Sample the following wells the order within this cluster.						***Place pump intake approximately midscreens.***
36-D	B1	4	20.3	15 - 20	15	
36-DD	B2	4	55.1	52 - 62	17	
28-D	B1	4	23.4	15 - 25	33	
36-S	A	4	15.2	10 - 16	70	
37-S	A	4	13.3	9 - 15	476	
Cluster 3 - Sample the following wells the order within this cluster.						***Place pump intake approximately midscreens.***
27-DD	B2	4	52.2	45 - 55	33	
22-S	A	4	15.2	11 - 16	93	
28-S	A	4	16.1	10 - 16	96	
22-DD	B2	4	43.6	43 - 53	180	
27-S	A	4	12.9	9 - 14	443	**Collect duplicate (2-D)**
Cluster 4 - Sample the following wells the order within this cluster.						***Place pump intake approximately midscreens.***
16-S	A	4	17.6	9-16	75	
23-S	A	4	16.7	9-16	112	
DW-7	B1	6	49.4	35-45	227	
23-D	B1	4	45.1	40-50	327	**Collect duplicate (3-D).**

Analytical Parameters

VOC's 8260B using 8010 List
(3 VOAs with HCL)

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

Collect a equipment blank from a clean pump bladder at the end of each day sampling day. Start with EB-1

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

25

ED_013213_00001031-00047

1 of 3 197587

TestAmerica Pleasanton
1220 Quarry Lane

Pleasanton, CA 94566-4756
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record for Haley & Aldrich, Inc. Blanket Service Agreement #2019-22-TestAmerica

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc..

Client Contact	H&A Project Manager: Mike Calhoun	H&A Site Contact:	Date: 10-14-20	COC No:
Haley & Aldrich	Tel/Fax: 510-879-4554	Lab Contact: Lee Ann Heathcote	Carrier:	1 of 3 COCs
1956 Webster Street, Suite 300	Analysis Turnaround Time			Sampler:
Oakland, CA 94612	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
510-879-4554 Phone	TAT if different from Below _____			Walk-in Client:
510-879-4579 FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 127819	☑ 1 week			
Site: Former 901/902 Thompson Place	☐ 2 days			Job / SDG No.:
H&A P O # 127819-005 SID 1	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8260B (8010 list)	Sample Specific Notes:
TB-1	10/13/20	—	G	W	3	N	N	X	
53-D	10/13/20	0903	G	GW	9	N	Y	X	
35-DDD	10/13/20	0908	G	GW	3	N	N	X	
15-S	10/13/20	0957	G	GW	3	N	N	X	
29-S	10/13/20	1002	G	GW	3	N	N	X	
52-D	10/13/20	1035	G	GW	3	N	N	X	
29-D	10/13/20	1040	G	GW	3	N	N	X	
27-D	10/13/20	1134	G	GW	3	N	N	X	
1-D	10/13/20	1139	G	GW	3	N	N	X	
36-D	10/13/20	1210	G	GW	3	N	N	X	
36-S	10/13/20	1238	G	GW	3	N	N	X	
36-DD	10/13/20	1302	G	GW	3	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for Months

Special Instructions/QC Requirements & Comments: EPA 8260B (8010 list) + Freon 113. Send report to: mcalhoun@haleyaldrich.com, mzlotoff@haleyaldrich.com, vgodard@haleyaldrich.com, acaveney@haleyaldrich.com

ANALYZE FOR VOCs WITHIN SEVEN DAYS OF SAMPLE COLLECTION

2.6°C

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature] Manuel Gallegos	F.S.I.	10/14/20 1510	[signature]	FAP/S	
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-045, Rev. 1.2, dated 1/8/2016

ED_013213_00001031-00048

3 of 3 [11540

TestAmerica Pleasanton
220 Quarry Lane
Pleasanton, CA 94566-4756
Phone 925.484.1919 fax 925.600.3002

Chain of Custody Record for Haley & Aldrich, Inc. Blanket Service Agreement #2019-22-TestAmerica

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc..

Client Contact	H&A Project Manager: Mike Calhoun	H&A Site Contact:	Date: 10-14-20	COC No:
Haley & Aldrich	Tel/Fax: 510-879-4554	Lab Contact: Lee Ann Heathcote	Carrier:	2 of 3 COCs
956 Webster Street, Suite 300	Analysis Turnaround Time			Sampler:
Oakland, CA 94612	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
510-879-4554 Phone	TAT if different from Below _____			Walk-in Client:
510-879-4579 FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 127819	☑ 1 week			
Site: Former 901/902 Thompson Place	☐ 2 days			Job / SDG No.:
H&A P O # 127819-005 SID 1	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8260B (8010 list)	Sample Specific Notes:
37-S	10/13/20	1311	GW	W	3	N	N	X	
EB-1	10/13/20	1330	G	W	3	N	N	X	
28-D	10/13/20	1336	GW	W	3	N	N	X	
27-DD	10/14/20	0838	G	GW	3	N	N	X	
28-S	10/14/20	0920	G	GW	3	N	N	X	
22-S	10/14/20	0917	G	GW	3	N	N	X	
22-DD	10/14/20	0944	G	GW	3	N	N	X	
23-S	10/14/20	1017	G	GW	3	N	N	X	
27-S	10/14/20	1008	G	GW	3	N	N	X	
2-D	10/14/20	1013	G	GW	3	N	N	X	
23-D	10/14/20	1043	G	GW	3	N	N	X	
3-D	10/14/20	1048	G	GW	3	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for Months

Special Instructions/QC Requirements & Comments: EPA 8260B (8010 list) + Freon 113. Send report to: mcalhoun@haleyaldrich.com, mzlotoff@haleyaldrich.com, vgodard@haleyaldrich.com, acaveney@haleyaldrich.com

2.6

ANALYZE FOR VOCs WITHIN SEVEN DAYS OF SAMPLE COLLECTION

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Manuel Gallegos	E.S.I.	10/14/20 1510		EA-PS	10/14/20 1510
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-045, Rev. 1.2, dated 1/8/2016

ED_013213_00001031-00049

2 of 3 197589

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566-4756
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record for Haley & Aldrich, Inc. Blanket Service Agreement #2019-22-TestAmerica

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc..

TestAmerica Laboratories, Inc

Client Contact	H&A Project Manager: Mike Calhoun	H&A Site Contact:	Date: 10-14-20	COC No:
Haley & Aldrich	Tel/Fax: 510-879-4554	Lab Contact: Lee Ann Heathcote	Carrier:	2 of 3 COCs
1956 Webster Street, Suite 300	Analysis Turnaround Time			Sampler:
Oakland, CA 94612	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
510-879-4554 Phone	TAT if different from Below _____			Walk-in Client:
510-879-4579 FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 127819	☑ 1 week			
Site: Former 901/902 Thompson Place	☐ 2 days			Job / SDG No.:
H&A P O # 127819-005 SID 1	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8260B (8010 list)	Sample Specific Notes:
16-5	10/14/20	1058	G	Gw	3	N	N	X	
DW-7	10/14/20	1126	G	Gw	3	N	N	X	
EB-2	10/14/20	1135	G	W	3	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: EPA 8260B (8010 list) + Freon 113. Send report to: mcalhoun@haleyaldrich.com, mzlotoff@haleyaldrich.com, vgodard@haleyaldrich.com, acaveney@haleyaldrich.com

ANALYZE FOR VOCs WITHIN SEVEN DAYS OF SAMPLE COLLECTION

2.6°C

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	F.S.I	10/14/20/1510	[signature]	EXA-MS	10/14/20 1510
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-045, Rev. 1.2, dated 1/8/2016

ED_013213_00001031-00050

HALEY ALDRICH

Instrument Calibration Log

Project	901 Thompson Place	File No.	
Location	901 Thompson Place	Date	10/13/20
Contractor	Field Solutions, Inc.	Field Rep.	R Cuellar
Weather	Clear	Outdoor Temp	53

Equipment ID: YSI Pro Plus

Time Calibration Started: 0720

Time Calibration Completed: 0800

Dissolved Oxygen (100%)

Reading Before Calibration: 100.5

Barometric Pressure: 762.2

Temperature (C°): 17.5

Reading after calibration: 100

Probe Type (Check One)

Membrane [X] Optical [ ]

pH 7

Reading Before Calibration: 7.42

Calibration Value: 7.00

Temperature (C°): 18.1

Lot/Expiration: CC667901 - 3/22

Reading After Calibration: 7.00

pH 10

Reading Before Calibration: 10.36

Calibration Value: 10.00

Temperature (C°): 18.3

Lot/Expiration: CC667662 - 3/22

Reading After Calibration: 10.00

pH 4

Reading Before Calibration: 4.42

Calibration Value: 4.00

Temperature (C°): 17.5

Lot/Expiration: CC675936 - 6/22

Reading After Calibration: 4.00

Specific Conductance/ Conductivity

Reading Before Calibration: 1465

Calibration Value: 1,413

Temperature (C°): 18.2

Lot/Expiration: CC19657 - 3/21

Reading After Calibration: 1413

ORP Standard (mv) at 25°C

Reading Before Calibration: 245.9

Calibration Value: 243.3

Temperature (C°): 16.3

Lot/Expiration: 20F100341 - 6/23

Reading After Calibration: 243.3

Dissolved Oxygen (0 mg/L)

Reading: 0.00

Temperature (C°): 16.9

Lot/Expiration: 683003 - 7/21

Reading less than 0.20 mg/L? yes

PM Calibration Check

Time Start: 1345 Time End: 1350 Temp: 25.6

DO 100 %: 99

pH 7: 7.04

Specific Conductivity: 1412

ORP (mv): 229.6

Notes:

HALEY ALDRICH

Instrument Calibration Log

Project	901 Thompson Place	File No.	
Location	901 Thompson Place	Date	10-13-20
Contractor	Field Solutions, Inc.	Field Rep.	Manny Callegos
Weather	Clear	Outdoor Temp	53°

Equipment ID: YSI Pro Plus

Time Calibration Started: 0720

Time Calibration Completed: 0805

Dissolved Oxygen (100%)

Reading Before Calibration: 124.0

Barometric Pressure: 762.2 ~~15.7~~

Temperature (C°): 15.7

Reading after calibration: 99.9

Probe Type (Check One)

Membrane [X] Optical [ ]

Specific Conductance/ Conductivity

Reading Before Calibration: 1485

Calibration Value: 1,413

Temperature (C°): 17.3

Lot/Expiration: CC19657 - 3/21

Reading After Calibration: ~~1365~~ 1,413

pH 7

Reading Before Calibration: 7.01

Calibration Value: 7.00

Temperature (C°): 18.8

Lot/Expiration: CC667901 - 3/22

Reading After Calibration: 7.00

ORP Standard (mv) at 25°C

Reading Before Calibration: 231.9

Calibration Value: 241.2

Temperature (C°): 17.9

Lot/Expiration: 20F100341 - 6/23

Reading After Calibration: 241.2

pH 10

Reading Before Calibration: 10.07

Calibration Value: 10.00

Temperature (C°): 19.1

Lot/Expiration: CC667662 - 3/22

Reading After Calibration: ~~9.92~~ 10.00

Dissolved Oxygen (0 mg/L)

Reading: 6.77 ~~124.0~~

Temperature (C°): 25.7

Lot/Expiration: 683003 - 7/21

Reading less than 0.20 mg/L? 0.00

PM Calibration Check

Time Start: 1340 Time End: 1350 Temp: 23.0

DO 100 %: 99.7

pH 7: 7.04

Specific Conductivity: 1365

ORP (mv): 230.8

pH 4

Reading Before Calibration: 4.03

Calibration Value: 4.00

Temperature (C°): 18.9

Lot/Expiration: CC675936 - 6/22

Reading After Calibration: 4.07

Notes:

NTU = 0.13 - 0.02

tier solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: DW-7
SAMPLE ID: DW-7
DATE PURGED: 10/14/20
DATE SAMPLED: 10/14/20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 6.0 Depth to liquid (ft): 7.43 Well depth (ft): 44.4 Screened interval (ft): 35-45

Wetted screened length (ft): 9.6 Depth to intake from TOC (ft): 40.0 Stabilized liquid level (ft): 7.50

WELL PURGING: Start Time (2400 Hr): 1110 End Time (2400 Hr): 1125 Volume purged: 3,050 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1119	2,050	7.50	20.3	7.51	974	1.30	-33	Cloudy
1122	2,550	7.50	20.2	7.51	974	1.30	-33	Cloudy
1125	3,050	7.50	20.2	7.51	974	1.30	-33	Cloudy
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1126 End Time (2400 Hr): 1129

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: EB-2, 1135

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: EB-2 collected through clean bladder using lab provided D.I. water

All Samples collected

Purged and sampled by (print): Rguevara

Signature:

Reviewed by: JB

Page 1 of 21

WATER SAMPLE FIELD DATA

WELL ID: 15-S

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 15-S

CLIENT: Haley & Aldrich

DATE PURGED: 10-13-20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10-13-20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 8.64 Well depth (ft): 16.7 Screened interval (ft): 8-16

Wetted screened length (ft): 7.34 Depth to intake from TOC (ft): 12.0 Stabilized liquid level (ft): 8.71

WELL PURGING: Start Time (2400 Hr): 0935 End Time (2400 Hr): 0954 Volume purged: 3.050 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
0950	2.050	8.71	22.6	6.74	1310	0.69	119	Clear
0953	2.550	8.71	22.6	6.74	1310	0.69	119	Clear
0954	3.050	8.71	22.6	6.74	1310	0.69	119	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 0957 End Time (2400 Hr): 0958

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: None

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples taken

Purged and sampled by (print): Manuel Gallegos

Signature: [signature]

Reviewed by: [signature]

Page 2 of 2

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: 27-D
SAMPLE ID: 27-D
DATE PURGED: 10/13/20
DATE SAMPLED: 10/13/20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 9.72 Well depth (ft): 27.1 Screened interval (ft): 21-31

Wetted screened length (ft): 10.0 Depth to intake from TOC (ft): 26.0 Stabilized liquid level (ft): 9.75

WELL PURGING: Start Time (2400 Hr): 1118 End Time (2400 Hr): 1133 Volume purged: 3,450 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1127	2,050	9.75	20.7	7.24	1114	0.23	120	cloudy
1130	2,750	9.75	20.7	7.24	1114	0.23	120	cloudy
1133	3,450	9.75	20.7	7.24	1114	0.23	120	cloudy
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1134 End Time (2400 Hr): 1138

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: 1-D, 1139

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All SAmples collected

Pump #2

Purged and sampled by (print): R Guevara/Magalgos

Signature: [signature]

Reviewed by: [signature]

WATER SAMPLE FIELD DATA

WELL ID: 28-D

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 28-D

CLIENT: Haley & Aldrich

DATE PURGED: 10/13/20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10/13/20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 9.65 Well depth (ft): 23.8 Screened interval (ft): 15-25

Wetted screened length (ft): 10.0 Depth to intake from TOC (ft): 20.0 Stabilized liquid level (ft): 9.71

WELL PURGING: Start Time (2400 Hr): 1319 End Time (2400 Hr): 1335 Volume purged: 2,650 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1329	1,650	9.71	23.6	7.10	1904	0.33	-126	cloudy
1332	2,150	9.71	23.6	7.10	1904	0.33	-126	cloudy
1335	2,650	9.71	23.7	7.10	1904	0.33	-126	cloudy
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1336 End Time (2400 Hr): 1338

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: NONE

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y/N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples collected

Pump #2

Purged and sampled by (print): R. Guevara

Signature:

Reviewed by:

Page 4 of 21

ED_013213_00001031-00056

WATER SAMPLE FIELD DATA

WELL ID: 29-D

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 29-D

CLIENT: Haley & Aldrich

DATE PURGED: 10/13/20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10/13/20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 9.20 Well depth (ft): 26.5 Screened interval (ft): 21-31

Wetted screened length (ft): 10.0 Depth to intake from TOC (ft): 24.5 Stabilized liquid level (ft): 9.20

WELL PURGING: Start Time (2400 Hr): 1023 End Time (2400 Hr): 1039 Volume purged: 3,450 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1033	2,050	9.20	22.4	7.36	1092	0.21	80	cloudy
1036	2,750	9.20	22.4	7.36	1092	0.21	80	clear
1039	3,450	9.20	22.4	7.36	1092	0.21	80	clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1040 End Time (2400 Hr): 1042

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: NONE

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y (N))

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: A lot of loose rock & Debris around well

All samples collected

pump #2

Purged and sampled by (print): R. Guerra

Signature: [signature]

Reviewed by: [signature]

Page 5 of 21

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: 29-S
SAMPLE ID: 29-S
DATE PURGED: 10/13/20
DATE SAMPLED: 10/13/20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 9.15 Well depth (ft): 14.8 Screened interval (ft): 11-16

Wetted screened length (ft): 3.8 Depth to intake from TOC (ft): 13.5 Stabilized liquid level (ft): 9.18

WELL PURGING: Start Time (2400 Hr): 0945 End Time (2400 Hr): 1001 Volume purged: 3,050 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
0955	2,050	9.18	22.8	7.26	1268	0.37	17	cloudy
0958	2,550	9.18	22.7	7.26	1268	0.37	17	clear
1001	3,050	9.18	22.7	7.26	1268	0.37	17	clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1002 End Time (2400 Hr): 1004

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: None

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: Lots of loose Rock around well
Leaves & Debris on pump when pulled out of well

pump #2 All Samples collected

Purged and sampled by (print): R. Guevara

Signature: [signature]

Reviewed by: [signature]

Page 6 of 21

WATER SAMPLE FIELD DATA

WELL ID: 35-DDD
SAMPLE ID: 35-DDD
DATE PURGED: 10/13/20
DATE SAMPLED: 10/13/20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 4.62 Well depth (ft): 78.7 Screened interval (ft): 70-80

Wetted screened length (ft): 10.0 Depth to intake from TOC (ft): 75.0 Stabilized liquid level (ft): 5.58

WELL PURGING: Start Time (2400 Hr): 0850 End Time (2400 Hr) 0907 Volume purged: 4,050 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
0901	3,050	5.58	18.8	7.81	661	0.37	12	Cloudy
0904	3,550	5.58	18.8	7.81	661	0.37	12	Clear
0907	4,050	5.58	18.9	7.81	661	0.37	12	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 0908 End Time (2400 Hr): 0911

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: NONE

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: Low yield well

All samples collected

pump #2

Purged and sampled by (print): R. Guevara

Signature: [signature]

Reviewed by: [signature]

Page 7 of 21

WATER SAMPLE FIELD DATA

WELL ID: 36-D

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 36-D

CLIENT: Haley & Aldrich

DATE PURGED: 10-13-20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10-13-20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 5.92 Well depth (ft): 20.2 Screened interval (ft): 15-20

Wetted screened length (ft): 5.0 Depth to intake from TOC (ft): 17.5 Stabilized liquid level (ft): 6.03

WELL PURGING: Start Time (2400 Hr): 1154 End Time (2400 Hr): 1209 Volume purged: 3,800 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1203	2,250	6.03	23.7	6.95	1214	0.39	43	Clear
1206	2950	6.03	23.7	6.95	1214	0.39	43	Clear
1209	3,500	6.03	23.7	6.95	1214	0.39	43	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1210 End Time (2400 Hr): 1211

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: none

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples Collected

Purged and sampled by (print): Manuel Pallegos

Signature:

Reviewed by:

Page 8 of 21

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: 36-DD
SAMPLE ID: 36-DD
DATE PURGED: 10/13/20
DATE SAMPLED: 10/13/20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 4.53 Well depth (ft): 55.1 Screened interval (ft): 52-62

Wetted screened length (ft): 10.0 Depth to intake from TOC (ft): 57 Stabilized liquid level (ft): 12.10

WELL PURGING: Start Time (2400 Hr): 1157 End Time (2400 Hr): 1301 Volume purged: 20,650 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1255	20,050	12.10	24.8	7.65	961	0.0	-191	clear
1258	20,350	12.10	24.8	7.65	961	0.0	-191	clear
1301	20,650	12.10	24.8	7.65	961	0.0	-191	clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1302 End Time (2400 Hr): 1304

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: None

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: Low yield well

All samples collected

pump #2

Purged and sampled by (print): R Guevara

Signature: [signature]

Reviewed by: [signature]

WATER SAMPLE FIELD DATA

WELL ID: 36-5

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 36-5

CLIENT: Haley & Aldrich

DATE PURGED: 10-13-20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10-13-20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 6.17 Well depth (ft): 15.0 Screened interval (ft): 10-16

Wetted screened length (ft): 6.0 Depth to intake from TOC (ft): 13.0 Stabilized liquid level (ft): 6.21

WELL PURGING: Start Time (2400 Hr): 1222 End Time (2400 Hr): 1237 Volume purged: 2,900 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1231	1500	6.21	26.1	6.89	1217	0.45	104	Clear
1234	2200	6.21	26.1	6.89	1217	0.45	104	Clear
1237	2,900	6.21	26.1	6.89	1217	0.45	104	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1238 End Time (2400 Hr): 1240

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: None

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y (N))

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples Collected

Purged and sampled by (print): Manuel Pallegos

Signature:

Reviewed by:

Page 10 of 21

WATER SAMPLE FIELD DATA

WELL ID: 37-S
SAMPLE ID: 37-S
DATE PURGED: 10-13-20
DATE SAMPLED: 10-13-20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 6.40 Well depth (ft): 13.2 Screened interval (ft): 9-15

Wetted screened length (ft): 4.2 Depth to intake from TOC (ft): _____ Stabilized liquid level (ft): 6.40

WELL PURGING: Start Time (2400 Hr): 1258 End Time (2400 Hr): 1310 Volume purged: 2,900 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1304	1,500	6.40	25.7	6.83	1,595	0.50	136	Clear
1307	2200	6.40	25.7	6.83	1595	0.50	136	Clear
1310	2,900	6.40	25.7	6.83	1595	0.50	134	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1311 End Time (2400 Hr): 1312

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: ~~MORC~~/EB-1 (1330)

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y/N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples Collected

Purged and sampled by (print): Manuel Gallegos

Signature: [signature]

Reviewed by: [signature]

Page 11 of 21

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: 52-D
SAMPLE ID: 52-D
DATE PURGED: 10-13-20
DATE SAMPLED: 10-13-20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 8.81 Well depth (ft): 38.6 Screened interval (ft): NA

Wetted screened length (ft): NA Depth to intake from TOC (ft): 37.4 Stabilized liquid level (ft): 8.96

WELL PURGING: Start Time (2400 Hr): 1019 End Time (2400 Hr): 1034 Volume purged: 2150 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1028	1150	8.96	23.7	7.07	989	0.31	135	Clear
1031	1650	8.96	23.7	7.07	989	0.31	135	Clear
1034	2150	8.96	23.7	7.07	989	0.31	135	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1035 End Time (2400 Hr): 1037

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: none

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All samples collected

Purged and sampled by (print): Manuel Gallegos

Signature: [signature]

Reviewed by: [signature]

Page 12 of 21

WATER SAMPLE FIELD DATA

WELL ID: 53-D
SAMPLE ID: 53-D
DATE PURGED: 10-13-20
DATE SAMPLED: 10-13-20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 7.26 Well depth (ft): 37.0 Screened interval (ft): NA

Wetted screened length (ft): NA Depth to intake from TOC (ft): 36.1 Stabilized liquid level (ft): 7.35

WELL PURGING: Start Time (2400 Hr): 0844 End Time (2400 Hr): 0902 Volume purged: 3,200 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
0854	2,000	7.35	20.6	7.05	974	0.46	6	Clear
0859	2,600	7.35	20.4	7.05	974	0.46	6	Clear
0902	3,200	7.35	20.6	7.05	974	0.46	6	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 0903 End Time (2400 Hr): 0906

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: MS/MSD

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All samples collected

Purged and sampled by (print): Manuel Gallegos

Signature:

Reviewed by:

Page 13 of 21

HALEY ALDRICH

Instrument Calibration Log

Project	901 Thompson Place	File No.	
Location	901 Thompson Place	Date	10-14-20
Contractor	Field Solutions, Inc.	Field Rep.	M. Gallegos
Weather	Clear	Outdoor Temp	57°

Equipment ID: YSI Pro Plus

Time Calibration Started: 0715 Time Calibration Completed: 0750

Dissolved Oxygen (100%)

Reading Before Calibration: 93.5 ~~7.08~~ (mv)
Barometric Pressure: 762.1
Temperature (C°): 19.4
Reading after calibration: 100.2

Probe Type (Check One)
Membrane [X] Optical [ ]

pH 7

Reading Before Calibration: 7.08
Calibration Value: 7.00
Temperature (C°): 22.1
Lot/Expiration: CC667901 - 3/22
Reading After Calibration: 7.00

pH 10

Reading Before Calibration: 10.01
Calibration Value: 10.00
Temperature (C°): 22.2
Lot/Expiration: CC667662 - 3/22
Reading After Calibration: 10.00

pH 4

Reading Before Calibration: 4.07
Calibration Value: 4.00
Temperature (C°): 22.3
Lot/Expiration: CC675936 - 6/22
Reading After Calibration: 4.00

Specific Conductance/ Conductivity

Reading Before Calibration: 1,389
Calibration Value: 1,413
Temperature (C°): 21.7
Lot/Expiration: CC19657 - 3/21
Reading After Calibration: 1,413

ORP Standard (mv) at 25°C

Reading Before Calibration: 232.3
Calibration Value: 236.4
Temperature (C°): 21.5
Lot/Expiration: AOF100341 - 6/23
Reading After Calibration: 236.7

Dissolved Oxygen (0 mg/L)

Reading: 0.04
Temperature (C°): 20.3
Lot/Expiration: 683003 - 7/21
Reading less than 0.20 mg/L? Yes

PM Calibration Check

Time Start: Time End: 1340 Temp: 25.1
DO 100 %: 69.5
pH 7: 7.09
Specific Conductivity: 1,410
ORP (mv): 231.5

Notes:

HALEY ALDRICH

Instrument Calibration Log

Project	901 Thompson Place	File No.	
Location	901 thompson place onsite	Date	10/14/20
Contractor	Field Solutions, Inc.	Field Rep.	R Guevara
Weather	Clear	Outdoor Temp	58

Equipment ID: YSI Pro Plus

Time Calibration Started: 0718

Time Calibration Completed: 0800

Dissolved Oxygen (100%)

Reading Before Calibration: 99.6

Barometric Pressure: 763.0

Temperature (C°): 18.4

Reading after calibration: 100

Probe Type (Check One)

Membrane [X] Optical [ ]

Specific Conductance/ Conductivity

Reading Before Calibration: 1382

Calibration Value: 1413

Temperature (C°): 19.3

Lot/Expiration: CC19657 - 3/21

Reading After Calibration: 1413

ORP Standard 241.6 (mv) at 25°C

Reading Before Calibration: 241.9

Calibration Value: 241.6

Temperature (C°): 17.6

Lot/Expiration: 20F100341 - 6/25

Reading After Calibration: 241.6

pH 7

Reading Before Calibration: 7.40

Calibration Value: 7.00

Temperature (C°): 19.4

Lot/Expiration: CC667901 - 3/22

Reading After Calibration: 7.00

pH 10

Reading Before Calibration: 10.36

Calibration Value: 10.00

Temperature (C°): 19.0

Lot/Expiration: CC667662 - 3/22

Reading After Calibration: 10.00

Dissolved Oxygen (0 mg/L)

Reading: 0.00

Temperature (C°): 17.8

Lot/Expiration: 683003 - 7/21

Reading less than 0.20 mg/L? yes

PM Calibration Check

Time Start: 1325 Time End: Temp: 27.4

DO 100 %: 102

pH 7: 7.05

Specific Conductivity: 1419

ORP (mv): 227.6

pH 4

Reading Before Calibration: 4.46

Calibration Value: 4.00

Temperature (C°): 19.3

Lot/Expiration: CC675936 - 6/22

Reading After Calibration: 4.00

Notes:

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: 16-S

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 16-S

CLIENT: Haley & Aldrich

DATE PURGED: 10/14/20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10/14/20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 10.26 Well depth (ft): 16.9 Screened interval (ft): 9-16

Wetted screened length (ft): _____ Depth to intake from TOC (ft): 13.0 Stabilized liquid level (ft): 10.35

WELL PURGING: Start Time (2400 Hr): 1040 End Time (2400 Hr): 1057 Volume purged: 3,850 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1051	2,450	10.35	20.4	6.82	1575	0.16	-127	cloudy
1054	3,150	10.35	20.3	6.82	1575	0.16	-127	cloudy
1057	3,850	10.35	20.3	6.82	1575	0.16	-127	cloudy
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1058 End Time (2400 Hr): 1101

QED Bladder Pump w/Disposable Bladder and Tubing Y

QC samples collected at well: None

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y (N))

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All samples collected

Purged and sampled by (print): R Guevara

Signature: [signature]

Reviewed by: [signature]

Page 14 of 21

WATER SAMPLE FIELD DATA

WELL ID: 22-DD

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 22-DD

CLIENT: Haley & Aldrich

DATE PURGED: 10-14-20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10-14-20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 6.35 Well depth (ft): 43.7 Screened interval (ft): 43-53

Wetted screened length (ft): ~~43-53~~ 10.0 Depth to intake from TOC (ft): 48.0 Stabilized liquid level (ft): 6.42

WELL PURGING: Start Time (2400 Hr): 0928 End Time (2400 Hr): 0943 Volume purged: 2,550 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
0937	1550	6.42	19.3	7.03	975	0.53	88	Clear
0940	2,050	6.42	19.3	7.03	975	0.53	88	Clear
0943	2550	6.42	19.3	7.03	975	0.53	88	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 0944 End Time (2400 Hr): 0946

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: none

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples taken

Purged and sampled by (print): Manuel Gallegos

Signature:

Reviewed by:

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: 22-5
SAMPLE ID: 22-5
DATE PURGED: 10-14-20
DATE SAMPLED: 10-14-20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 8.24 Well depth (ft): 14.8 Screened interval (ft): 11-14

Wetted screened length (ft): 5.0 Depth to intake from TOC (ft): 11.8 Stabilized liquid level (ft): 8.62

WELL PURGING: Start Time (2400 Hr): 0858 End Time (2400 Hr): 0916 Volume purged: 2.850 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
0910	1,850	8.62	19.1	6.71	1306	1.30	-7	Clear
0913	2,350	8.62	19.1	6.71	1306	1.30	-7	Clear
0916	2,850	8.62	19.1	6.71	1306	1.30	-7	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 0917 End Time (2400 Hr) 0920

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: none

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples collected.

Tree roots in well.

Purged and sampled by (print): Manuel Ballegos

Signature: [signature]

Reviewed by: [signature]

Page 16 of 21

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: 23-D
SAMPLE ID: 23-D
DATE PURGED: 10-14-20
DATE SAMPLED: 10-14-20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 6.97 Well depth (ft): 44.6 Screened interval (ft): 40-50

Wetted screened length (ft): 10.0 Depth to intake from TOC (ft): 45.0 Stabilized liquid level (ft): 7.25

WELL PURGING: Start Time (2400 Hr): 1027 End Time (2400 Hr): 1042 Volume purged: 3,150 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1036	1950	7.25	19.6	7.07	974	0.54	120	Clear
1039	2550	7.25	19.6	7.07	974	0.54	120	Clear
1042	3150	7.25	19.6	7.07	974	0.54	120	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1043 End Time (2400 Hr): 1046

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: 3-D (1048)

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples taken

Purged and sampled by (print): Manuel Gallegos

Signature: [signature]

Reviewed by: [signature]

WATER SAMPLE FIELD DATA

WELL ID: 23-S

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 23-S

CLIENT: Haley & Aldrich

DATE PURGED: 10-14-20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10-14-20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 8.92 Well depth (ft): 16.4 Screened interval (ft): 9-14

Wetted screened length (ft): 7.0 Depth to intake from TOC (ft): 12.5 Stabilized liquid level (ft): 8.99

WELL PURGING: Start Time (2400 Hr): 1001 End Time (2400 Hr): 1016 Volume purged: 2,500 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1010	1500	8.99	20.6	6.71	1,272	0.50	23	Clear
1013	2,000	8.99	20.6	6.71	1,272	0.50	23	Clear
1016	2,500	8.99	20.6	6.71	1,272	0.50	23	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1017 End Time (2400 Hr): 1019

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: none

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples taken

Purged and sampled by (print): Manuel Gallegos

Signature:

Reviewed by:

WATER SAMPLE FIELD DATA

WELL ID: 27-S
SAMPLE ID: 27-S
DATE PURGED: 10/14/20
DATE SAMPLED: 10/14/20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 10.20 Well depth (ft): 13.0 Screened interval (ft): 9-14

Wetted screened length (ft): 2.80 Depth to intake from TOC (ft): 12.0 Stabilized liquid level (ft): 10.42

WELL PURGING: Start Time (2400 Hr): 0952 End Time (2400 Hr): 1007 Volume purged: 2,450 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1001	1650	10.42	20.9	6.91	1160	0.55	62	cloudy
1004	2,050	10.42	20.9	6.91	1160	0.55	62	cloudy
1007	2,450	10.42	20.9	6.91	1160	0.55	62	cloudy
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1008 End Time (2400 Hr): 1013

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: 2-D, 1013

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: pump #2

All samples collected

Purged and sampled by (print): R. Guevara

Signature: [signature]

Reviewed by: [signature]

Page 19 of 21

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

WELL ID: 27-DD
SAMPLE ID: 27-DD
DATE PURGED: 10/14/20
DATE SAMPLED: 10/14/20

PROJECT NAME: 901 Thompson Place
CLIENT: Haley & Aldrich
SITE LOCATION: Sunnyvale, California

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 7.89 Well depth (ft): 52.8 Screened interval (ft): 45-55

Wetted screened length (ft): ~~5.0~~ 10.0 Depth to intake from TOC (ft): 50 Stabilized liquid level (ft): 8.55

WELL PURGING: Start Time (2400 Hr) 0817 End Time (2400 Hr): 0837 Volume purged: 3,250 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
0831	2,450	8.55	18.6	7.12	780	0.18	73	Cloudy
0834	2,850	8.55	18.6	7.12	780	0.18	73	Cloudy
0837	3,250	8.55	18.6	7.12	780	0.18	73	Cloudy
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 0838 End Time (2400 Hr) 0840

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: NONE

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: Low yield well

All samples collected

pump #2

Purged and sampled by (print): R Guevara / M Galleys

Signature: [signature]

Reviewed by: [signature]

Page 20 of 21

WATER SAMPLE FIELD DATA

WELL ID: 28-S

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 28-S

CLIENT: Haley & Aldrich

DATE PURGED: 10/14/20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10/14/20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 9.85 Well depth (ft): 16.2 Screened interval (ft): 10-16

Wetted screened length (ft): 6.0 Depth to intake from TOC (ft): 13.0 Stabilized liquid level (ft): 9.91

WELL PURGING: Start Time (2400 Hr): 0903 End Time (2400 Hr) 0919 Volume purged: 2,850 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
0913	1,850	9.91	19.2	6.80	1690	0.32	-99	cloudy
0916	2,350	9.91	19.2	6.80	1690	0.32	-99	cloudy
0919	2,850	9.91	19.2	6.80	1690	0.32	-99	cloudy
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 0920 End Time (2400 Hr) 0922

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: NONE

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y / N)

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All samples collected

Pump #2

Purged and sampled by (print): R. Guevara

Signature: [signature]

Reviewed by: [signature]

Page 21 of 21

ED_013213_00001031-00075

WATER SAMPLE FIELD DATA

WELL ID: 37-S

PROJECT NAME: 901 Thompson Place

SAMPLE ID: 37-S

CLIENT: Haley & Aldrich

DATE PURGED: 10-13-20

SITE LOCATION: Sunnyvale, California

DATE SAMPLED: 10-13-20

WELL INFORMATION

Casing diameter (in): 4.0 Depth to liquid (ft): 6.40 Well depth (ft): 13.2 Screened interval (ft): 9-15

Wetted screened length (ft): 4.2 Depth to intake from TOC (ft): 12.0 ng Stabilized liquid level (ft): 6.40

WELL PURGING: Start Time (2400 Hr): 1258 End Time (2400 Hr): 1310 Volume purged: 2,900 (ml)

QED Bladder Pump w/Disposable Bladder and Tubing X

Purge water disposal: Treatment System at 915 DeGuigne

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Turbidity (visual)
1304	1,500	6.40	25.7	6.83	1,595	0.50	136	Clear
1307	2200	6.40	25.7	6.83	1595	0.50	136	Clear
1310	2,900	6.40	25.7	6.83	1,595	0.50	136	Clear
		stable		± 0.1	± 3%	± 10%	± 10 mV	clear

WELL SAMPLING: Start Time (2400 Hr): 1311 End Time (2400 Hr): 1312

QED Bladder Pump w/Disposable Bladder and Tubing X

QC samples collected at well: ~~NONE~~, EB-1 (1330)

Did the sample react with HCL preservations in the sample containers causing bubbles in the VOAs? (Y (N))

If yes, resample using another set of VOAs, samples cannot contain bubbles.

REMARKS: All Samples collected

Purged and sampled by (print): Manuel Gallegos

Signature:

Reviewed by:

APPENDIX B

Historical Groundwater Elevation Data

APPENDIX B
HISTORICAL GROUNDWATER ELEVATION DATA
FORMER 901/901 THOMPSON PLACE FACILITY
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
A Aquifer																										
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
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
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
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
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
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
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
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
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
B1 Aquifer																										
DW-7	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NM	NM	NM	NM
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
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
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
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
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
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
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
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
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
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
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

Notes:

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

* 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

APPENDIX B
HISTORICAL GROUNDWATER ELEVATION DATA
FORMER 901/901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Well ID	Sep-93	Oct-93	Jan-94	Apr-94	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
A Aquifer																												
15-S	NM	34.11	34.28	34.41	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
16-S	34.24	32.57	29.19	29.08	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
22-S	32.49	33.03	30.65	30.49	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
23-S	31.92	33.00	30.54	30.21	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	38.40	37.83	38.11
27-S	32.56	32.41	32.61	32.62	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
28-S	31.45	32.81	30.29	30.67	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
29-S	NM	31.81	32.07	32.30	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
36-S	NM	27.83	27.55	27.71	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
37-S	NM	28.36	27.40	27.52	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
B1 Aquifer																												
DW-7	NM	NM	NM	NM	NM	12.32	NM	NM	NM	23.32	29.00	31.60	35.03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	36.61	36.65	37.31
23-D	23.97	11.53	16.33	16.68	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
27-D	32.60	32.42	32.60	32.68	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
28-D	31.47	32.81	30.29	29.96	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
29-D	NM	32.10	32.25	32.40	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
36-D	NM	27.89	27.64	27.80	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
52-D	29.03	27.93	28.46	28.63	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
53-D	NM	33.39	33.58	33.89	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
B2 Aquifer																												
22-DD	24.05	10.80	15.72	19.31	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
27-DD	29.86	27.42	29.18	29.28	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
36-DD	NM	26.87	26.74	26.76	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
B3 Aquifer																												
35-DDD	27.49	25.06	26.25	27.06	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

Notes:

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

* 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

APPENDIX B
HISTORICAL GROUNDWATER ELEVATION DATA
FORMER 901/901 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Well ID	Oct-11	Oct-12	Oct-13	Oct-14	Oct-15	Oct-16	Oct-17	Oct-18	Oct-19	Oct-20
A Aquifer										
15-S	42.17	41.97	41.84	41.35	40.43	40.15	41.73	42.13	42.26	42.18
16-S	38.09	37.56	37.29	37.03	36.46	36.02	36.94	37.39	37.40	37.64
22-S	38.59	38.19	37.87	37.57	36.65	36.69	37.83	38.34	38.15	38.10
23-S	38.74	38.28	38.02	37.65	36.74	36.74	37.80	38.30	38.20	38.08
27-S	40.66	40.39	40.21	39.73	38.80	38.78	40.05	40.45	40.48	40.38
28-S	38.47	37.93	37.71	37.42	36.65	36.56	37.90	38.09	38.09	38.01
29-S	40.99	40.78	40.57	40.12	39.11	39.20	40.66	40.99	41.03	40.95
36-S	35.21	35.06	34.78	34.87	34.29	34.37	35.05	35.46	35.37	35.28
37-S	35.63	35.52	35.05	35.24	34.34	34.48	35.36	35.95	35.78	35.64
B1 Aquifer										
DW-7	37.95	37.90	37.72	37.41	36.45	37.13	38.58	39.24	39.09	38.69
23-D	39.20	39.98*	38.68	38.29	37.38	38.31	39.89	40.63	40.69	40.05
27-D	41.08	40.81	40.62	40.19	39.18	39.19	40.41	40.98	40.90	40.87
28-D	38.55	37.99	37.79	37.52	36.75	36.78	38.15	38.27	38.17	38.04
29-D	41.05	40.82	40.66	40.17	39.17	39.17	40.57	41.14	41.07	41.00
36-D	35.24	35.09	34.82	34.90	34.15	34.36	35.08	35.52	35.40	35.31
52-D	39.32	39.13	38.82	38.51	37.33	37.71	39.10	39.35	39.40	39.50
53-D	43.47	43.18	42.98	42.21	41.38	41.86	43.50	43.96	43.95	43.68
B2 Aquifer										
22-DD	39.20	38.99	38.67	38.29	37.42	38.35	37.93	40.69	40.68	40.10
27-DD	42.60	42.26	41.84	40.97	39.98	40.91	42.49	43.38	43.53	42.83
36-DD	35.86	35.69	35.39	35.34	34.57	35.01	36.36	36.57	36.80	36.75
B3 Aquifer										
35-DDD	41.48	41.17	40.41	39.58	37.99	39.95	41.04	42.80	42.87	41.59

Notes:

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

* 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

APPENDIX C

Historical TCE, cDCE, and Total VOC Concentrations

APPENDIX C-1
HISTORICAL TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

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

APPENDIX C-1
HISTORICAL TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Date	A-Zone Wells									B1-Zone Wells								B2-Zone Wells			B3-Zone Well
	15-S	16-S	22-S	23-S	27-S	28-S	29-S	36-S	37-S	23-D	27-D	28-D	29-D	36-D	52-D	53-D	DW-7	22-DD	27-DD	36-DD	35-DDD
Apr-92	NS	67	NS	NS	NS	110	NS	50	NS	980	230	86	120	120	170	ND	NI	230	230	25	1.2
Jul-92	NS	69	110	15	NS	NS	NS	56	NS	1100	370	130	400	130	330	NS	NI	470	370	24	0.9
Oct-92	NS	50	NS	6	NS	140	NS	47	NS	810	230	130	380	100	120	2.4	NI	200	280	25	2
Jan-93	NS	NS	44	8	NS	140	NS	62	NS	1200	NS	130	NS	NS	NS	NS	790	430	NS	NS	ND
Apr-93	ND	64	140	12	440	160	110	51	740	950	380	110	71	85	340	4.1	400	270	110	36	2.9
Jul-93	ND	81	82	36	540	160	80	70	610	1200	NS	160	NS	NS	NS	NS	NS	310	NS	NS	4.4
Oct-93	ND	60	94	10	330	110	54	60	430	760	290	120	140	NS	92	NS	520	360	320	NS	4
Jan-94	ND	60	68	33	450	160	39	48	280	1100	NS	130	NS	NS	NS	NS	NS	300	NS	NS	3
Apr-94	ND	61	62	30	370	210	40	43	400	950	350	140	390	88	160	ND	390	280	420	57	2.3
Jul-94	ND	58	100	16	390	140	130	39	400	290	NS	120	NS	NS	NS	NS	440	270	NS	NS	5.2
Oct-94	ND	86	120	10	670	130	190	22	400	780	280	120	300	NS	7.1	NS	460	480	290	NS	2
Jan-95	ND	42	84	20	530	130	72	ND	310	460	NS	100	NS	NS	NS	NS	370	110	NS	NS	NS
Apr-95	ND	1.2	91	37	490	160	120	17	270	640	260	120	300	56	250	0.6	420	120	460	47	1.9
Jul-95	ND	52	100	28	620	180	140	24	420	810	NS	160	NS	NS	NS	NS	110	270	NS	NS	1.8
Oct-95	ND	84	120	40	800	220	190	20	410	710	280	170	300	NS	14	NS	390	350	770	NS	2.6
Apr-96	ND	85	68	45	640	190	88	7.9	250	540	220	140	350	11	45	ND	330	210	410	44	0.6
Oct-96	NS	38	94	7	750	180	110	NS	NS	310	190	140	200	NS	21	NS	240	92	320	NS	0.8
Apr-97	ND	46	130	14	430	370	82	21	170	340	220	200	91	32	56	ND	250	200	260	18	1.4
Oct-97	ND	50	120	22	640	310	100	20	260	250	190	150	210	52	0.7	ND	220	210	310	13	1.8
Apr-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	81	NS	NS	NS	NS	NS	11	NS
Oct-98	ND	34	70	NS	NS	340	95	7.2	NS	240	NS	NS	180	1.1	0.7	ND	NS	210	NS	11	1.6
May-99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	230	NS	NS	NS	NS
Oct-99	NS	44	38	16	810	550	71	100	83	300	200	370	150	3.2	190	ND	240	220	290	6.4	ND
Jan-00	NS	NS	NS	NS	730	NS	NS	NS	NS	NS	NS	3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-00	NS	33	27	6.3	620	370	52	83	200	170	190	360	160	110	4.2	3.8	210	NS	200	6.4	1
Oct-01	NS	25	26	3.1	680	270	30	140	150	180	140	470	160	67	5.4	4.1	250	NS	300	11	1
Oct/Nov-02	NS	43	33	9.4	910	330	25	140	170	200	190	290	58	150	24	5.6	210	120	320	8.1	0.6
Oct-03	NS	8.9	71	17	960	71	49	100	160	220	63	250	0.6	110	13	3.3	250	180	220	1.2	ND
Oct-04	NS	5.1	130	25	520	NS	84	91	110	250	25	11	1.1	85	ND	1.8	230	9	190	0.5	ND
Oct-05	NS	3	190	33	480	41	20	91	91	110	36	160	1.3	4.6	29	1.2	NS	2.8	110	ND	ND
Oct-06	NS	1	2.3	29	340	1.2	32	98	83	3.1	58	1.3	3.6	92	32	1.3	NS	1.1	93	0.8	0.5
Oct-07	30	0.9	6.5	52	130	ND	16	70	81	210	120	ND	53	17	37	5.0	160	3.7	79	1.5	ND
Oct-08	15	ND	7.8	29	280	1.6	25	98	81	300	130	0.9	49	27	33	6.9	17	140	94	1.6	ND
Oct-09	13	1	7.7	17	330	0.5	13	80	91	180	110	1.4	89	19	29	7	6	94	83	1.3	ND
Oct-10	11	ND	16	9.5	300	ND	18	75	60	160	110	1.5	35	47	35	6.9	5.2	97	59	ND	ND
Oct-11	3.4	ND	23	19	270	ND	62	73	63	260	110	0.6	60	29	27	5.8	2.1	150	52	2.6	ND
Oct-12	6.2	ND	17	30	270	ND	29	80	63	280	94	ND	49	47	31	6.9	1.6	150	60	3.2	ND
Oct-13	7.0	ND	28	37	230	ND	26	74	95	280	88	ND	28	38	32	6.9	11	170	37	ND	ND
Oct-14	2.3	ND	36	36	210	ND	23	73	83	280	110	ND	55	56	33	5.8	ND	180	44	ND	ND

APPENDIX C-1
HISTORICAL TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

Date	A-Zone Wells									B1-Zone Wells								B2-Zone Wells			B3-Zone Well
	15-S	16-S	22-S	23-S	27-S	28-S	29-S	36-S	37-S	23-D	27-D	28-D	29-D	36-D	52-D	53-D	DW-7	22-DD	27-DD	36-DD	35-DDD
Oct-15	0.9	ND	45	20	100	ND	54	71	49	260	95	0.5	56	40	34	5.0	ND	170	30	ND	ND
Oct-16	0.7	ND	47	6.9	64	ND	20	71	43	270	95	ND	37	2.7	34	1.7	6.7	190	45	ND	ND
Oct-17	9.9	ND	34	23	34	ND	20	59	420	200	100	ND	41	4.2	28	1.3	ND	150	26	4.3	ND
Oct-18	14	ND	43	38	58	ND	17	59	33	290	99	ND	29	6.1	27	2.0	69	150	31	0.84	ND
Oct-19	4.6	ND	4.9	43	35	ND	15	58	37	290	67	ND	63	43	22	6.9	39	150	22	1.0	ND
Oct-20	6.7	ND	3.6	50	16	ND	14	49	35	280	72	ND	58	28	16	8.0	39	130	19	0.86	ND

Notes:
ND = Not detected
NI = Not installed
NS = Not sampled
NR = Not recorded/not available
Concentrations reported in micrograms per liter (µg/L).
Maximum of primary and duplicate concentrations presented in table.
Table includes wells in current annual monitoring program.

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

Date	A-Zone Wells									B1-Zone Wells								B2-Zone Wells			B3-Zone Well
	15-S	16-S	22-S	23-S	27-S	28-S	29-S	36-S	37-S	23-D	27-D	28-D	29-D	36-D	52-D	53-D	DW-7	22-DD	27-DD	36-DD	35-DDD
Apr-82	1	2700	4200	3600	120	700	5	NS	NS	4600	10	1300	5	NS	NI	NI	NI	8200	NS	NS	NI
Jun-82	NS	1	1520	750	2	1400	2	10	10	6800	9	2800	1	NS	NI	NI	NI	770	2	NS	NI
Jul-82	NS	2100	17000	5500	4	4500	4	NS	NS	2700	4	5100	4	5	NI	NI	NI	NS	4	5	NI
Aug-82	NS	NS	NS	NS	NS	NS	NS	55	27	NS	NS	NS	NS	52	NI	NI	NI	1700	NS	3	NI
May-83	NS	2400	NS	NS	NS	70000	NS	1	17	NS	NS	12000	NS	1	NI	NI	NI	44	NS	120	NI
Jul-83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	38	NI	NI	NI	NS	NS	NS	NI
Mar-85	1	1300	920	3300	12	1500	9	13	27	5700	8	1800	14	13	NI	NI	NI	110	6	44	NI
Apr-85	NS	2500	1400	4800	11	1100	8	14	21	3400	9	1100	13	10	NI	NI	NI	82	1	NS	NI
May-85	NS	4100	1800	3900	14	1800	8	10	22	4800	45	1100	18	13	NI	NI	NI	NS	10	31	NI
Jun-85	NS	5200	2090	1070	6	1420	10	10	12	1610	6	1470	13	9	NI	NI	NI	34	1	6	NI
Jul-85	1	6300	2630	1071	8	960	10	7	1	4300	6	610	1	11	NI	NI	NI	NS	5	1	NI
Aug-85	NS	NS	NS	1000	45	NS	40	64	70	NS	47	NS	NS	NS	NI	NI	NI	390	1	45	NS
Sep-85	NS	3100	2300	1200	19	1400	12	6	23	2200	8	1200	16	8	NI	NI	NI	430	6	11	2
Oct-85	NS	3800	2500	1100	16	1200	8	7	4	4200	8	1100	11	13	NI	NI	NI	67	100	25	1
Nov-85	NS	4500	2200	1800	56	1100	6	7	15	4200	8	1100	10	9	NI	NI	NI	420	8	13	1
Dec-85	1	6100	3500	1700	1	1700	6	10	1	9100	37	1200	14	8	NI	NI	NI	1000	3	13	1
Jan-86	NS	5900	1700	1300	1	3900	14	9	14	5700	9	1900	13	10	NI	NI	NI	1	1	14	NS
Feb-86	NS	2600	1800	1700	1	3900	21	7	11	6000	10	3100	14	12	NI	NI	NI	530	10	16	1
Apr-86	1	9600	920	2000	1	3200	19	4	7	9600	6	2400	11	5	NI	NI	NI	920	2	7	8
Jun-86	NS	6600	1200	2000	21	9200	20	6	20	2200	8	8000	10	9	NI	NI	NI	610	4	20	10
Aug-86	NS	6600	880	1700	10	13000	11	NS	15	1400	7	9700	10	8	NI	NI	NI	1100	8	16	1
Oct-86	NS	1100	1300	1500	11	6300	12	6	25	4100	8	7300	10	7	NI	NI	NI	660	3	30	4
Dec-86	NS	440	700	1400	5	4500	9	5	31	5100	4	5100	42	4	NI	NI	NI	1300	6	9	1
Feb-87	NS	290	1800	1500	1	4800	13	6	26	3700	6	5300	10	6	NI	NI	NI	500	12	44	3
Apr-87	NS	620	2200	2200	43	4600	13	7	22	980	5	5300	5	15	NI	NI	NI	2400	5	34	1
Jun-87	NS	550	1500	1100	26	9800	3	5	25	230	7	12000	3	4	NI	NI	NI	1800	5	16	1
Aug-87	NS	350	1200	980	ND	1400	5	7	18	1200	ND	14000	8	10	NI	NI	NI	1800	6	40	1
Oct-87	NS	400	850	930	ND	7800	4	55	ND	1600	ND	8600	ND	15	NI	NI	NI	1600	ND	37	1
Dec-87	NS	630	320	850	ND	ND	NS	5	38	750	12	8000	ND	16	NI	NI	NI	1400	ND	19	2
Mar-88	NS	3000	320	700	ND	5400	6	15	ND	760	ND	4600	590	17	NI	NI	NI	79	ND	13	ND
Jun-88	ND	2000	710	1100	24	2300	5	32	ND	1400	5	3100	ND	39	NI	NI	NI	1200	3	20	ND
Sep-88	NS	2353	500	1600	ND	1200	ND	16	ND	3000	4	1600	ND	21	NI	NI	NI	760	ND	22	ND
Dec-88	NS	2800	470	3800	40	760	4	15	ND	1800	ND	1600	ND	40	NI	NI	NI	1200	ND	26	ND
Mar-89	ND	2800	NS	2600	40	NS	79	21	40	3500	ND	1300	ND	35	NI	NI	NI	760	ND	28	ND
Jun-89	ND	NS	NS	1200	NS	170	1	17	NS	2400	ND	1200	ND	51	NI	NI	NI	650	ND	20	ND
Oct-89	ND	NS	NS	NS	NS	NS	NS	8	ND	790	ND	770	ND	8	ND	ND	NI	560	ND	22	ND
Jan-90	NS	NS	NS	NS	NS	NS	NS	NS	NS	670	ND	400	ND	13	ND	NS	NI	170	ND	9	1
Apr-90	NS	420	NS	NS	NS	NS	NS	2	NS	530	14	270	ND	14	ND	ND	NI	290	ND	5	ND
Jul-90	NS	NS	NS	NS	NS	NS	NS	NS	NS	620	ND	250	ND	14	ND	NS	NI	320	ND	13	ND
Oct-90	NS	NS	NS	NS	NS	NS	NS	1	NS	400	ND	300	ND	15	ND	ND	NI	230	ND	7	ND
Jan-91	NS	170	NS	NS	NS	62	NS	NS	NS	420	ND	220	ND	15	ND	NS	NI	260	ND	7	ND
Apr-91	NS	180	NS	NS	NS	NS	NS	ND	NS	520	ND	245	ND	15	ND	ND	NI	150	ND	6	ND
Jul-91	NS	250	NS	NS	NS	NS	NS	NS	NS	690	ND	1830	ND	14	ND	NS	NI	260	ND	9	1
Oct-91	NS	NS	NS	NS	NS	NS	NS	NS	NS	1500	ND	760	ND	13	ND	ND	NI	220	ND	ND	ND
Jan 92	NS	NS	NS	NS	NS	NS	NS	ND	NS	360	ND	500	ND	11	ND	NS	NI	56	ND	5	ND
Apr 92	NS	102	NS	NS	NS	54	NS	ND	NS	494	3	92	3	ND	3	ND	NI	155	3	ND	ND

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

Date	A-Zone Wells									B1-Zone Wells								B2-Zone Wells			B3-Zone Well
	15-S	16-S	22-S	23-S	27-S	28-S	29-S	36-S	37-S	23-D	27-D	28-D	29-D	36-D	52-D	53-D	DW-7	22-DD	27-DD	36-DD	35-DDD
Apr-82	1	2700	4200	3600	120	700	5	NS	NS	4600	10	1300	5	NS	NI	NI	NI	8200	NS	NS	NI
Jul 92	NS	174	717	558	NS	NS	NS	2	NS	102	5	135	5	12	5	NS	NI	1115	7	7	ND
Oct 92	NS	205	NS	197	NS	146	NS	5	NS	715	7	158	7	11	1	ND	NI	8053	19	13	ND
Jan 93	NS	NS	394	475	NS	660	NS	2	NS	2203	NS	795	NS	NS	NS	NS	59	3613	NS	NS	ND
Apr 93	ND	78	1616	741	157	373	3	5	20	1504	ND	1720	2	4	6	4	81	2420	2	11	ND
Jul 93	ND	84	575	854	171	340	ND	ND	21	663	NS	1538	NS	NS	NS	NS	NS	1917	NS	NS	1
Oct 93	ND	44	354	434	73	336	12	2	9	990	4	448	1	NS	3	NS	146	1660	6	NS	1
Jan 94	ND	37	386	797	83	605	45	1	7	577	NS	879	NS	NS	NS	NS	NS	798	NS	NS	1
Apr 94	ND	37	293	487	34	222	7	2	8	430	4	696	4	2	3	ND	118	1246	7	8	ND
Jul 94	ND	67	285	637	46	525	5	0.6	13	306	NS	648	NS	NS	NS	NS	115.3	138	NS	NS	1
Oct-94	ND	156	331	985	40	786	2	ND	6	687	2	837	4	NS	ND	NS	72	156	5	NS	0.6
Jan-95	ND	68	386	515	25	309	0.8	ND	25	733	NS	550	NS	NS	NS	NS	84	1948	NS	NS	ND
Apr-95	ND	149	264	1025	21	577	4.7	ND	4.9	686	3.9	640	4.3	8.6	3.6	0.7	98.7	1448	13	13	ND
Jul-95	ND	58	204	613	51	719	6.2	1.1	6	633	NS	709	NS	NS	NS	NS	499	723	NS	NS	ND
Oct-95	ND	150	410	888	20	903	ND	ND	ND	460	ND	864	ND	NS	ND	NS	84	400	ND	NS	ND
Apr-96	ND	ND	172.3	693	20	644	3.2	ND	3.2	518	2.2	556	4.1	12	ND	ND	146.6	354	8	0.6	ND
Oct-96	NS	93	310	270	ND	490	ND	NS	NS	440	ND	390	ND	NS	ND	NS	54	470	5.3	NS	ND
Apr-97	ND	96	366	299	21	404	16	6	7.8	562	4.8	459	4.7	45	1.3	ND	80	736	15	42.7	ND
Oct-97	ND	90	194	228	32	387	5.4	21	12	230	4.5	371	6.9	92	ND	ND	86	194	18	50	ND
Apr-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130	NS	NS	NS	NS	ND	42	NS
Oct-98	ND	34	180	NS	23	330	10	13	NS	160	2.4	NS	4.1	2	ND	ND	NS	320	9.2	69	ND
May-99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	86	NS	NS	NS	NS
Oct-99	NS	66	260	220	81	708	7.9	167.7	147.1	220	ND	575	ND	ND	4.2	ND	91.5	298.5	18	97	ND
Jan-00	NS	NS	NS	NS	57	NS	NS	NS	NS	NS	NS	199	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-00	NS	79	170	180	45	210	6.9	100	9.7	290	3.2	400	4.9	97	ND	ND	68	NS	11	100	ND
Oct-01	NS	62	150	150	62	91	3.7	110	2.5	270	2.5	240	2.9	48	ND	ND	82	NS	17	110	ND
Oct/Nov-02	NS	60	180	170	72	83	9.3	70	3.7	220	4.4	280	1.6	90	31	ND	88	690	14	130	ND
Oct-03	NS	160	250	210	110	85	4	53	2.9	150	71	91	0.7	57	33	4.5	97	300	16	29	ND
Oct-04	NS	26	190	240	160	NS	5.3	34	3.3	92	32	34	ND	46	1.3	6.9	100	150	8.6	31	ND
Oct-05	NS	27	180	96	75	29	1.7	22	5.2	74	26	54	ND	1.5	2.1	4.4	NS	160	4.7	73	ND
Oct-06	NS	18	14	67	27	3.3	1.7	20	8.5	47	15	7.3	72	42	2.2	0.7	69	10	3.2	22	ND
Oct-07	2.1	19	27	60	6.4	1.5	0.8	15	2.4	28	1.4	2.0	0.7	6.1	1.4	ND	NS	96	2.2	22	ND
Oct-08	16	4.2	41	130	23	8.1	1.7	13	3.6	8	2.5	12	0.9	5.8	1.7	ND	NS	21	2.4	24	ND
Oct-09	6.1	18	31	200	52	18	1	9.3	2.2	350	1.5	10	11	40	1	ND	NS	84	2.9	35	ND
Oct-10	9.3	6.9	25	350	79	6.1	1.6	11	3.7	360	1.9	15	1.5	34	1.8	ND	52	78	3.9	14	ND
Oct-11	3.6	2	27	270	66	0.6	2.8	8	2.3	7.4	1.7	0.8	0.9	34	1.1	ND	36	12	3.1	10	ND
Oct-12	5.0	3.2	25	120	64	3.5	2.2	10	2.5	4.6	2.1	1.9	1.2	29	1.7	ND	26	18	3.5	24	ND
Oct-13	6.1	2.0	23	130	110	4.4	1.5	8.1	1.6	6.6	1.3	0.8	0.6	28	1.4	ND	150	3.8	5.8	11	ND
Oct-14	1.5	1.6	28	130	180	10	1.3	13	2.7	4.7	2.4	2.0	0.9	23	1.3	ND	9.3	5.5	4.6	7.1	ND

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

Date	A-Zone Wells									B1-Zone Wells								B2-Zone Wells			B3-Zone Well
	15-S	16-S	22-S	23-S	27-S	28-S	29-S	36-S	37-S	23-D	27-D	28-D	29-D	36-D	52-D	53-D	DW-7	22-DD	27-DD	36-DD	35-DDD
Apr-82	1	2700	4200	3600	120	700	5	NS	NS	4600	10	1300	5	NS	NI	NI	NI	8200	NS	NS	NI
Oct-15	ND	1.8	24	91	220	6.1	6.1	9.0	3.8	6.0	1.9	100	1.2	12	1.4	ND	4.2	10	7.2	5.7	ND
Oct-16	0.8	1.7	24	570	300	9.1	1.8	9.3	4.1	4.2	2.0	26	0.73	0.84	1.1	ND	120	9.9	3.4	1.8	ND
Oct-17	1.0	1.3	25	110	350	7.4	3.4	9.8	43	3.5	2.5	2.3	1.1	2.2	1.1	ND	130	27	3.7	2.4	ND
Oct-18	1.1	3.0	23	42	310	ND	1.4	9.4	4.6	3.7	3.3	0.53	0.79	13	0.86	ND	130	6.4	3.5	9.8	ND
Oct-19	ND	4.1	36	52	290	4.8	1.8	12	7.0	4.1	2.1	6.5	2.0	21	0.71	ND	160	10	7.6	12	ND
Oct-20	ND	11	32	62	250	14	3.8	9.6	4.2	4.2	2.4	29	1.9	34	0.82	ND	120	5.0	6.0	16	ND

Notes:
ND = Not detected
NI = Not installed
NS = Not sampled
Concentrations reported in micrograms per liter (µg/L).
Maximum of primary and duplicate concentrations presented in table.
Table includes wells in current annual monitoring program.

APPENDIX C-3

HISTORICAL TOTAL VOLATILE ORGANIC COMPOUND CONCENTRATIONS IN GROUNDWATER

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

Date	A-Zone Wells									B1-Zone Wells								B2-Zone Wells			B3-Zone Well
	15-S	16-S	22-S	23-S	27-S	28-S	29-S	36-S	37-S	23-D	27-D	28-D	29-D	36-D	52-D	53-D	DW-7	22-DD	27-DD	36-DD	35-DDD
Jan-91	NS	208	NS	NS	NS	122	NS	NS	NS	1920	369	348	486	125	462	NS	NI	1010	384	40	2
Apr-91	NS	235	NS	NS	NS	NS	NS	ND	NS	1515	432	405	582	125	197	4	NI	590	399	33	1
Jul-91	NS	363	NS	NS	NS	NS	NS	NS	NS	2090	410	2830	483	129	341	NS	NI	987	304	48	1
Oct-91	NS	NS	NS	NS	NS	NS	NS	NS	NS	2600	320	1170	400	143	190	4.4	NI	898	250	42	0.8
Jan-92	NS	NS	NS	NS	NS	NS	NS	21	NS	1290	393	820	436	121	211	NS	NI	706	290	25	ND
Apr-92	NS	217	NS	NS	NS	169	NS	53	NS	1485	262	202	133	123	197	ND	NI	441	259	25	1.2
Jul-92	NS	263	841	757	NS	NS	NS	64	NS	1238	411	287	441	149	366	NS	NI	1660	408	31	0.9
Oct-92	NS	352	NS	445	NS	330	NS	57	NS	1554	254	339	415	119	132	4.6	NI	8392	318	40	1.6
Jan-93	NS	NS	454	584	NS	920	NS	64	NS	3453	NS	1124	NS	NS	NS	NS	850	4069	NS	NS	ND
Apr-93	ND	154	1932	2375	616	751	128	60	767	2577	423	2115	81	94	390	9.9	536	2806	152	49	2.9
Jul-93	8.2	173	679	1996	737	689	97	74	640	1949	NS	2036	NS	NS	NS	NS	NS	2314	NS	NS	5.1
Oct-93	ND	128	465	815	439	574	81	69	444	1789	321	599	145	NS	112	NS	706	2089	350	NS	4.7
Jan-94	ND	101	480	1384	563	936	94	50	291	1740	NS	1137	NS	NS	NS	NS	NS	1146	NS	NS	3.7
Apr-94	ND	103	361	923	419	515	54	45	414	1444	385	965	424	92	177	ND	548	1567	450	65	2.9
Jul-94	ND	139	475	1370	464	806	147	41	416	650	NS	891	NS	NS	NS	NS	584	420	NS	NS	6.5
Oct-94	ND	299	518	1629	735	1000	208	23	417	1631	304	1196	329	NS	8.8	NS	560	660	306	NS	2.6
Jan-95	ND	153	492	986	576	517	77	ND	323	1238	NS	935	NS	NS	NS	NS	476	2106	NS	NS	ND
Apr-95	ND	280	429	1515	537	848	138	18	280	1360	289	877	330	67	277	1.3	550	1608	490	62	1.9
Jul-95	ND	151	427	1032	730	1080	163	27	432	1515	NS	1061	NS	NS	NS	NS	681	1015	NS	NS	1.8
Oct-95	ND	313	628	1466	842	1283	190	22	410	1212	280	1174	300	NS	16	NS	474	750	770	NS	2.6
Apr-96	ND	172	281	911	681	910	94	7.9	256	1084	233	804	375	26	46	0.6	507	575	431	65	0.6
Oct-96	NS	154	455	327	750	739	110	NS	NS	750	190	563	200	NS	21	NS	294	562	333	NS	0.8
Apr-97	ND	192	560	384	468	845	103	27	178	954	247	766	115	77	63	ND	363	997	294	61	1.4
Oct-97	ND	198	380	346	695	792	111	41	272	485	215	645	225	147	0.7	ND	327	417	339	64	1.8
Apr-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	211	NS	NS	NS	NS	250	53	NS
Oct-98	ND	104	312	NS	236	712	109	20	NS	404	202	NS	205	3.1	0.7	ND	NS	549	299	81	1.6
May-99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	344	NS	NS	NS	NS
Oct-99	0	169	351	302	957	1329	79	270	230	520	218	1009	156	3	226	0	337	519	336	103	ND
Jan-00	NS	NS	NS	NS	844	NS	NS	NS	NS	NS	NS	374	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oct-00	NS	197	263	287	689	623	62	195	216	478	207	842	176	217	6.2	6	298	NS	218	109	1
Oct-01	NS	179	235	291	773	388	35	261	155	470	152	748	171	120	8	6	354	NS	331	125	1
Oct/Nov-02	NS	176	285	302	1011	442	37	218	175	444	203	642	62	251	56	8	316	832	344	143	1
Oct-03	NS	429	410	362	1120	340	56	160	164	403	198	377	11	176	57	9	360	505	246	37	1
Oct-04	NS	156	416	363	727	NS	97	132	116	365	73	121	4	142	3	10	343	446	207	39	0.7
Oct-05	NS	152	476	217	579	146	23	118	97	201	74	261	7	7	36	6	NS	343	119	89	1.5
Oct-06	NS	94	171	169	387	60	36	124	95	89	93	61	103	142	38	7	103	118	101	31	0.5
Oct-07	34	132	108	153	144	42	19	88	86	247	128	51	59	24	42	6	NS	147	84	28	ND
Oct-08	32	19	83	221	321	27	29	115	86	308	138	28	54	34	35	9	NS	167	101	28	ND
Oct-09	19	71	77	265	411	96	15	92	95	597	118	44	107	61	31	8	NS	212	90	41	ND
Oct-10	20	47	85	557	396	104	20	90	65	603	118	117	39	84	38	7	199	207	65	17	ND
Oct-11	7	24	97	428	350	25	68	84	66	247	116	11	66	66	29	6	180	165	57	20	ND
Oct-12	11	53	92	195	350	63	33	93	66	285	104	27	54	79	34	7	140	174	66	32	ND
Oct-13	13	17	98	215	361	49	29	85	98	287	94	8.4	30	68	34	6.9	262	174	44	13	ND
Oct-14	3.8	50	111	204	456	86	26	92	87	292	127	24	61	82	36	5.8	112	186	53	8.9	ND

APPENDIX C-3

HISTORICAL TOTAL VOLATILE ORGANIC COMPOUND CONCENTRATIONS IN GROUNDWATER

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

Date	A-Zone Wells									B1-Zone Wells								B2-Zone Wells			B3-Zone Well
	15-S	16-S	22-S	23-S	27-S	28-S	29-S	36-S	37-S	23-D	27-D	28-D	29-D	36-D	52-D	53-D	DW-7	22-DD	27-DD	36-DD	35-DDD
Oct-15	0.9	38	120	194	382	89	64	83	54	266	108	145	62	54	37	5.0	91	180	41	8.5	ND
Oct-16	2.1	38	115	732	418	62	22	83	48	277	110	111	40	29	36	1.7	189	202	54	11	ND
Oct-17	12	17	93	166	443	96	23	70	476	204	113	33	44	15	29	1.3	151	180	33	17	ND
Oct-18	16	54	103	107	461	16	18	71	38	296	122	17	31	20	28	2.0	208	158	39	13	ND
Oct-19	4.6	45	100	116	406	64	17	72	45	297	75	66	72	67	23	6.9	209	161	34	16	ND
Oct-20	6.7	84	69	150	340	180	18	60	40	290	83	290	67	65	17	8.0	170	140	27	27	ND

Notes:

ND = Not detected

NI = Not installed

NS = Not sampled

Concentrations reported in micrograms per liter (µg/L).

Maximum of primary and duplicate concentrations presented in table.

Table includes wells in current annual monitoring program.

APPENDIX C-4

ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
23-S	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	180	--	--	--	--
	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	213	--	--	--	--
	5/2/2006	<1.0	18	210	15	1.9	15	<1.0	<1.0	11	<1.0	<1.0	<1.0	<1	<2	271	--	--	--	--
	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	111	--	--	--	--
	11/7/2006	<0.5	29 J	67	25	1.7	14	0.5	16	12	<0.5	0.8	<0.5 UJ	<0.5	3	169	--	--	--	--
	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	145	1.5	<0.025	58	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	212	4.0	0.52	59	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	151	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	104	1.9	0.028	1,700	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	359	42	0.12	2,300	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	157	1.8	<0.025	500	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	227	0.99	0.070	1,900	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	135	0.25	<0.025	190	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	171	0.26	0.036	270	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	204	0.30	0.029	420	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	267	0.59	0.052	410	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	107	0.038	<0.025	70	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	106	0.051	<0.025	36	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	193	0.18	<0.025	93	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	558	5.4	0.036	370	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	112	0.07	<0.025	6.3	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	96	<0.025	<0.025	3.4	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	164	0.12	<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	429	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	143	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	89	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	129	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	195	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	98	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	115	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	196	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	215	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	161	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	141	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	208	0.10 J-	0.21 J-	130 J-	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	204	0.087	0.14	82	2.2
	2/5/2015	0.8	27	90	7.6	0.6	1.5	<0.6	<0.6	7.0	<0.6	<0.6	<2.5	<0.6	<1.3	135	0.0086 J	0.0085 J	2.3	2.4
	5/11/2015	0.9	25	68	5.7	<0.6	<0.6	<0.6	<0.6	7.7	<0.6	<0.6	<2.5	<0.6	<1.3	107	0.031 J	0.026 J	3.2	3.1
	8/6/2015	1.0	38	84	6.7	0.9	2.2	<0.5	<0.5	18	<0.5	0.7	<2.0	<0.5	<1.0	152	0.042 J	0.024 J	10	2.3
	10/12/2015	0.8	20	91	12	0.9	48	<0.5	0.5	20	<0.5	0.8	<2.0	<0.5	<1.0	194	0.72	0.050 J	80	3.0
	2/29/2016	0.6	22	54	4.5	0.5	1.0	<0.5	<0.5	5.9	<0.5	<0.5	<2.0	<0.5	<1.0	89	0.053 J	0.021 J	1.3	2.7
	5/11/2016	0.58	14	230	18	1.0	19	<0.50	0.76	11	<0.50	0.64	<0.50	<0.50	<1.0	295	0.33	0.090 J	16	4.3
	8/15/2016	<0.50	12	81	6.3	0.61	1.8	<0.50	<0.50	14	<0.50	0.50	<0.50	<0.50	<1.0	116	0.11 J-	0.43 J-	120 J-	2.1
	10/12/2016	<0.50	6.9	570	40	1.5	88	0.55	1.1	23	<0.50	0.83	<0.50	<0.50	<1.0	732	1.1	0.13	120	2.4
	2/13/2017	0.74	23	50	3.7	0.51	<0.50	<0.50	<0.50	8.4	<0.50	0.58	<0.50	<0.50	<1.0	87	0.028 J	0.060 J	5.6	4.1
	06/14/2017	<0.50	27	40	3.7	0.51	3.2	<0.50	<0.50	4.8	<0.50	<0.50	<0.50	<0.50	<1.0	79	0.092 J	0.095 J	310	2.0
	08/21/2017	0.75	30	66	7.2	0.77	1.5	<0.50	<0.50	19	<0.50	0.67	<0.50	<0.50	<1.0	126	0.13 J	0.80 J	700 J	2.0
	10/10/2017	<0.50	23	110	8.1	0.63	8.0	<0.50	<0.50	16	<0.50	<0.50	<0.50	<0.50	<1.0	166	0.22 J-	0.91 J-	870 J-	2.0
	02/05/2018	0.78	40	83	5.2	0.70	9.3	<0.50	<0.50	17	<0.50	0.58	<0.50	<0.50	<1.0	157	0.99	0.12	78	2.3
	06/15/2018	1.3	40	48	4.4	<0.50	0.91	<0.50	<0.50	17	<0.50	0.73	<0.50	<0.50	<1.0	112	0.088 J	0.11	39	1.4
	08/21/2018	1.2	43	62	7.7	1.0	0.98	<0.50	<0.50	22	<0.50	0.95	<0.50	<0.50	<1.0	159	0.040 J	2.7	1,300	1.8
	10/09/2018	1.2	38 J	42	4.4	0.75	0.60	<0.50	<0.50	19	<0.50	0.72	<0.50	<0.50	<1.0	127	0.033 J	0.70	240	1.8
	02/06/2019	0.89	37	52	4.5	0.81	3.2	<0.50	<0.50	15	<0.50	0.57	<0.50	<0.50	<1.0	114	0.22	0.12	52	2.3
	06/12/2019	1.3	38	51	5.4	0.76	6.6	<0.50	<0.50	17	<0.50	0.68	<0.50	<0.50	<1.0	121	0.28	1.6	1,400	2.1
	08/16, 09/16/2019	0.98	35	43	3.7	0.79	0.69	<0.50	<0.50	16	<0.50	0.63	<0.50	<0.50	<1.0	101	0.10	1.80	660	2.2
	10/17/2019	1.2	43	52	4.3	1.0	<0.50	<0.50	<0.50	14	<0.50	0.70	<0.50	<0.50	<1.0	116	--	--	--	--
	02/05/2020	1.2	46	43	3.2	1.1	< 0.50	< 0.50	< 0.50	13	< 0.50	0.72	< 0.50	< 0.50	< 1.0	110	< 0.10	< 0.10	0.11 J	1.5
	08/26/2020	2.4	70	55	6.1	1.1	1.0	< 0.50	< 0.50	20	< 0.50	0.81	< 0.50	< 0.50	< 1.0	160	< 1.0	0.93 J	1,000	1.4
	10/14/2020	1.1	50	62	7.2	< 1.0	13	< 1.0	< 1.0	16	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	150	--	--	--	--

APPENDIX C-4
ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
23-D	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	709	0.67	0.026	11	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	343	0.28	0.067	41	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	581	0.62	0.080	130	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	217	60 J	0.11 J	2,700 J	22
	11/07/2006 [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	89	--	--	--	--
	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	129	14	0.043	130	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	118	6.3	0.041	130	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	207	9.0	0.11	36	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	247	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	130	<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	294	0.060	<0.025	1.6	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	297	0.18	<0.025	0.50	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	314	0.30	<0.025	2.9	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	479	0.055	<0.025	0.69	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	430	0.16	<0.025	0.86	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	483	0.10	<0.025	1.1	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	597	2.6	0.031	130	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	300	0.075	<0.025	2.8	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	389	0.045	<0.025	5.2	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	572	0.42	<0.025	14	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	608	1.6	<0.025	110	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	277	0.054	<0.025	0.32	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	294	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	288	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	267	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	296	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	308	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	317	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	285	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	294	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	275	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	286	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	287	0.22	0.017 J	0.58	0.64 / 0.72
	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	256	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	285	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	266	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	292	0.11	0.0096 J	0.23	0.89 / 0.80
	2/5/2015	<1.7 / <1.7	280 / 270	5.5 / 5.8	<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	286	0.068	0.0054 J	0.12	<0.50 / 2.8
	5/11/2015	<1.7 / <2.0	260 / 250	5.7 / 5.8	<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	266	0.15	0.080 J	2.0	0.71 / 0.86
	8/6/2015	<1.7 / <2.0	300 / 280	6.1 / 5.5	<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	306	0.080 J	0.016 J	4.5	<0.50 / <0.50
	10/13/2015	<1.7	260	6.0	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	266	0.17	0.0075 J	0.39 J	<0.50
	2/29/2016	<1.7 / <1.7	240 / 210	9.2 / 8.3	<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	249	0.051 J	0.034 J	0.76	<0.50 / <0.50
	5/11/2016	<2.5 / <2.5	250 / 240	5.8 / 6.0	<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 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<5.0 / <5.0	256	0.031 J	0.0061 J	0.14 J	<1.0 / <1.0
	8/15/2016	<2.5/ <2.5	230 /240	4.5 / 4.2	<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 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<5.0 / <5.0	245	0.084 J-	0.24 J-	0.24 J-	<1.0 / <1.0
	10/12/2016	<2.5 / <2.5	260 / 270	4.1 / 4.2	<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 / <2.5	<2.5 / <2.5	3.1 / 3.1	<2.5 / <2.5	<5.0 / <5.0	274	0.10	0.0084 J	0.38 J	<1.0 / <1.0
	2/13/2017	<2.5 / <2.5	290 / 290	5.1 / 5.3	<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 / <2.5	<2.5 / <2.5	2.6 / 2.6	<2.5 / <2.5	<5.0 / <5.0	298	0.10	0.012 J	0.25 J	<1.0 / <1.0
	06/14/2017	<2.5 / <2.5	190 / 190	3.2 / 3.2	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5 J	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5 J	<2.5 / <2.5 J	<2.5 / <2.5 J	<2.5 / <2.5	<2.5 / <2.5	<5.0 / <5.0	193	0.38	0.049 J	8.6	<1.0 / <1.0
	08/21/2017	<2.5 / <2.5	260 / 240	3.9 / 3.8	<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 / <2.5	<2.5 / <2.5	3.0 / <2.5	<2.5 / <2.5	<5.0 / <5.0	267	0.061 J	0.017 J	2.0 J	<1.0 / <1.0
	10/10/2017	<2.5 J /<2.5	200 J- / 200	2.9 J- / 3.5	<2.5 J /<2.5	<2.5 J /<2.5	<2.5 J /<2.5	<2.5 J /<2.5	<2.5 J /<2.5	<2.5 J /<2.5	<2.5 J /<2.5	<2.5 J /<2.5	<2.5 R /<2.5	<2.5 J /<2.5	<5.0 J / <5.0	204	0.12	0.010 J	0.42 J	<1.0 / <1.0
	02/05/2018	<2.5 / <2.5	290 / 280	3.6 / 4.3	<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 / <2.5	<2.5 / <2.5	2.7 / <2.5	<2.5 / <2.5	<5.0 / <5.0	297	0.041 J	<0.10	0.23 J	<1.0 / <1.0
	06/15/2018	<2.5 J / <2.5	320 J- / 310	4.1 J- / 3.9	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	3.1 J- / 2.5	<2.5 J / <2.5	<5.0 J / <5.0	327	0.037 J	<.10	0.32 J	<1.0 / <1.0
	08/21/2018	<2.5 J / <2.5	320 J- / 320	<2.5 R / 4.5 J	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	<2.5 J / <2.5	3.8 J- / 3.8	<2.5 J / <2.5	<5.0 J / <5.0	441	0.048 J	0.0070 J	0.29 J	<1.0 / <1.0
	10/09/2018	<2.5 J / <2.5 J	290 J- / 290 J-	3.7 J- / 3.2 J-	<2.5 J / <2.5 J	<2.5 J / <2.5 J	<2.5 J / <2.5 J	<2.5 J / <2.5 J	<2.5 J / <2.5 J	<2.5 J / <2.5 J	<2.5 J / <2.5 J	<2.5 J / <2.5 J	2.6 J- / <2.5 R	<2.5 J / <2.5 J	<5.0 J / <5.0 J	409	0.036 J	<0.10	0.25 J	<1.0 / <1.0
	02/06/2019	<2.5 / <2.5	230 / 230	3.5 / 3.4	<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 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<2.5 / <2.5	<5.0 / <5.0	234	0.034 J	0.0074 J	0.26 J	<1.0 / <1.0
	06/12/2019	<2.5 / <2.5	280 / 280	4.0 / 3.9	<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 / <2.5	<2.5 / <2.5	3.0 / 2.7	<2.5 / <2.5	<5.0 / <5.0	287 / 287	0.032 J	<0.10	0.64	<1.0 / <1.0
	08/16/2019	<2.5 / <2.5	300 / 300	3.9 / 3.7	<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 / <2.5	<2.5 / <2.5	<10 / <10	<2.5 / <2.5	<5.0 / <5.0	304 / 304	<0.0080	<0.011	0.13 J	<1.0 / <1.0
	10/17/2019	<2.5 / <0.50 J	240 / 290 J-	4.1 / 4.1 J-	<2.5 / <0.50 J	<2.5 / <0.50 J	<2.5 / <0.50 J	<2.5 / <0.50 J	<2.5 / <0.50 J	<2.5 / <0.50 J	<2.5 / <0.50 J	<2.5 / <0.50 J	<2.5 / 2.5 J-	<2.5 / <0.50 J	<5.0 / <1.0 J	244 / 297	--	--	--	--
	02/06/2020	< 2.5 / < 2.5	240 / 230	3.7 / 3.6	< 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 / < 2.5	< 2.5 / < 2.5	< 2.5 / < 2.5	< 2.5 / < 2.5	< 5.0 / < 5.0	240 / 230	0.041 J	0.0062 J	0.65	< 1.0 / < 5.0
	08/26/2020	< 2.0 / < 2.0	270 / 260	3.9 / 5.7	< 2.0 / < 2.0	< 2.0 / < 2.0	< 2.0 / < 2.0	< 2.0 / < 2.0	< 2.0 / < 2.0	< 2.0 / < 2.0	< 2.0 / < 2.0	< 2.0 / < 2.0	2.8 / 3.3	< 2.0 / < 2.0	< 4.0 / < 4.0	280 / 270	< 1.0	0.19 J	5.0 J	< 0.50 / < 0.50
	10/14/2020	< 2.0 / < 2.5	220 / 280	3.5 / 4.2	< 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	< 2.0 / < 2.5	< 2.0 / < 2.5	< 4.0 / < 5.0	220 / 280	--	--	--	--

APPENDIX C-4

ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
DW-1[4]	12/6/2005	<17	440	3,700	110	<17	32	<17	<17	<17	<17	<17	<17	<17	<33	4,282	--	--	--	--
	2/14/2006	<31	540	5,900	39	<31	<31	<31	<31	<31	<31	<31	<31	<31	<63	6,479	0.18	0.85	7.7	1.8
	5/3/2006	<36	<36	28,000	110	73	4,100	<36	<36	<36	<36	<36	<36	<36	<71	32,283	14	2.1	3,600	140
	2/12/2007	<0.5	1.2	6	<0.5	<0.5	8.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<1	17	82	0.74	22,000	32
	4/11-13/2007	<5.0	310	3,200	17	8.8	290	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<10	3,826	190	0.65	6,700	14
	4/30/2007	<17	<17	2,800	<17	<17	300	<17	<17	<17	<17	<17	<17	<17	<33	3,100	400	0.83	8,900	35
	5/31/2007	<10 / <20	<10 / <20	2,200 / 2,500	12 / <20	<10 / <20	370 / 320	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<10 / <20	<20 / <40	2,882	270 / 340	0.82 / 0.91	9,100/10,000	18/39
	6/27/2007	<20	<20	2,400	21.0	<20	580	<20	<20	<20	<20	<20	<20	<20	<40	3,001	250	0.31	12,000	750
	9/14/2007	<20	<20	2,700	22	<20	930	<20	<20	<20	<20	<20	<20	<20	<40	3,652	310	2.4	15,000	21.000
	10/15/2007	<13	<13	1,200	<13	<13	820	<13	<13	<13	<13	<13	<13	<13	<25	2,020	260	1.5	13,000	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	1,680	320	2.7	12,000	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	867	340 B	5.4	14,000	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	400	270	3.7	13,000	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	482	220	6.3	7,700	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	51	62	3.3	14,000	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	49	74	12	18,000	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	7.5	1.1	140	17,000	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	13	11	280	20,000	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	10	1.6	240	19,000	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	8.7	3.6	390	24,000	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	8.7	0.69	81	14,000	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	11	1.3	82	12,000	17
	7/7/2010	<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	15	1.3	81	11,000	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	18	0.52	170	19,000	23
	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	30	0.48	120	11,000	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	45	0.30	310	13,000	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	284	58	570	17,000	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	29	1.7	9.0	7,600	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	1.1	1.7	0.25	1,300	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	86	17	24	12,000	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	22	8.6	130	18,000	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	5.3	1.4	29	3,700	9.6
	3/12/2013	<50	64	<50	<50	<50	<50	<50	<50	<50	<50	<50	<200	<50	<100	64	1.6	2.2	11,000	1,100
	6/4/2013	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<100	<25	<50	0	4.2	6.3	13,000	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	3.0	2.4	33	16,000	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	12	2.9	68	14,000	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	8.7	12	130	17,000	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	81	57	56	20,000	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	10	1.6	100	15,000	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	4.9	0.89	200	16,000	18
	2/5/2015	<0.5	1.1	1.2	0.8	<0.5	2.9	<0.5	0.8	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	7.4	4.2	240	15,000	9.4
	5/11/2015	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	3.0	0.042 J	2.4	7,600	12
	8/7/2015	<0.5	1.3	1.7	3.7	<0.5	3.2	<0.5	2.8	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	14	1.1	290	18,000	13
	10/13/2015	<0.5	2.2	3.2	5.7	<0.5	2.5	<0.5	2.0	0.5	<0.5	<0.5	<2.0	<0.5	<1.0	16	0.59	220	12,000	12
	2/29/2016	<0.5	0.7	4.4	7.3	<0.5	50	<0.5	4.6	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	68	63	200	18,000	27
	5/11/2016	<0.50	<0.50	1.9	17	<0.50	11	<0.50	2.1	0.83	<0.50	<0.50	<0.50	<0.50	<1.0	33	27	100	17,000	19
	8/15/2016	<0.50	0.50	1.2	15	<0.50	1.7	<0.50	1.4	0.52	<0.50	<0.50	<0.50	<0.50	<1.0	20	18 J-	200 J-	15,000 J-	18
	10/12/2016	<0.50	<0.50	1.0	4.9	<0.50	3.3	<0.50	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	11	7.7 J-	310 J-	14,000 J-	17
	2/13/2017	<0.50	0.77	0.75	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	1.5	0.10	20	630	6.4
	06/14/2017	<0.50	2.0	<0.50	<0.50	<0.50	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	2.5	0.56	0.55	180	79
	08/21/2017	<0.50	0.63	0.86	0.98	<0.50	2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	4.5	2.0 J	37 J	12,000 J	3.2
	10/10/2017	<0.50 J	0.87 J-	1.7 J-	0.53 J-	<0.50 J	1.2 J-	<0.50 J	<0.50 J	<0.50 J	<0.50 J	<0.50 J	<0.50 J	<0.50 J	<1.0 J	4.3	0.68 J-	16 J-	5,600 J-	4.6
	02/05/2018	<0.50	<0.50	<0.50	1.8	<0.50	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	4.8	0.55	49	10,000	4.6
	06/15/2018	<0.50 R	<0.50 R	0.77 J-	<0.50 R	<0.50 R	5.0 J-	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<1.0 R	5.8	13 J-	12 J-	11,000 J-	650
	08/21/2018	<0.50 R	<0.50 R	<0.50 R	3.5 J-	<0.50 R	1.1 J-	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<1.0 R	4.6	0.60	36	17,000	4.6
	10/10/2018	<0.50 J	<0.50 R	0.78 J-	3.2 J-	<0.50 J	1.5 J-	<0.50 J	<0.50 J	<0.50 J	<0.50 J	<0.50 J	<0.50 J	<0.50 J	<1.0 J	27	0.76 J-	41 J-	13,000 J-	4.7
	02/06/2019	<0.50	<0.50	8.0	1.7	<0.50	52	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	62	46	350	19,000	8.1
	06/12/2019	<0.50	2.2	9.3	<0.50	<0.50	3.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	15	0.77 J-	1.6 J-	10,000 J-	2,000
	08/16, 09/16/2019	<0.50	<0.50	<0.50	0.77	<0.50	4.4	<0.50	0.57	1.7	<0.50	<0.50	<0.50	<0.50	<1.0	7.4	0.65	3.0	14,000	520
	02/07/2020	< 0.50	< 0.50	< 0.50	1.6	< 0.50	1.3	< 0.50	< 0.50	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	3.9	0.85	46	19,000	75
	08/27/2020	< 25	< 25	2,100	< 25	< 25	1,600	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 50	4000	660	280	19,000	15

APPENDIX C-4
ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
28-MW [4]	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	107	33	0.063	1,400	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	46	52	0.16	7,700	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	39	2.0	0.30	15,000	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	59	1.5 J	0.048 J	26,000 J	1,000
	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	128	31	0.33	14,000	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	46	22	0.44	16,000	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	38	16	0.52	15,000	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	45	29	0.89	14,000	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	41	9.4	1.0	14,000	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	76	19	1.4	8,800	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	143	38	7.1	15,000	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	28	25	9.7	18,000	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	36	16	13	14,000	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	106	11	12	7,900	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	192	21	11	5,900	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	161	12	7.8	5,100	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	94	11	13	11,000	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	102	7.0	4.2	4,700	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	101	6.9	3.1	3,200	7.8
	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	134	8.4	1.8	2,000	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	101	7.7	1.0	1,300	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	72	3.9	1.2	1,100	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	60	2.2	1.1	900	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	56	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	17	0.61	4.0	12,000	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	24	0.69	11	13,000	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	24	0.42	3.5	7,200	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	25	0.64	3.1	7,200	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	21	0.16	2.3	4,600	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	19	0.30	9.2	14,000	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	18	0.05	2.4	9,800	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	18	0.57	2.0	4,500	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	23	0.66	1.4	2,300	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	17	0.46	4.7	12,000	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	14	0.07	3.3	11,000	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	12	0.07	4.0	9,100	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	19	0.45	5.8	8,500	6.5
	2/5/2015	<0.5	<0.5	2.7	<0.5	<0.5	3.7	<0.5	6.5	5.0	<0.5	<0.5	<2.0	<0.5	<1.0	18	0.28	3.5	7,600	7.0
	5/11/2015	<0.5 UJ	0.5	3.6	<0.5 UJ	<0.5 UJ	8.0	<0.5 UJ	5.1	4.2	<0.5 UJ	<0.5 UJ	<2.0 UJ	<0.5 UJ	<1.0 UJ	21	0.60	1.6	3,500	8.9
	8/6/2015	<0.5	0.6	55	1.0	<0.5	22	<0.5	5.9	4.8	<0.5	<0.5	<2.0	<0.5	<1.0	89	1.1	3.2	6,200	9.0
	10/12/2015	<0.5 / <0.5	<0.5 / <0.5	66 / 63	0.9 / 1.1	<0.5 / <0.5	32 / 31	<0.5 / <0.5	8.0 / 7.7	6.0 / 5.9	<0.5 / <0.5	0.5 / 0.5	<2.0 / <2.0	<0.5 / <0.5	<1.0 / 1.0	111	1.9	4.4	6,700	7.4 / 7.5
	2/29/2016	<0.5	<0.5	1.6	<0.5	<0.5	9.0	<0.5	7.7	8.2	<0.5	0.7	<2.0	<0.5	<1.0	27	18	9.6	12,000	8.0
	5/11/2016	<0.50	<0.50	6.1	0.66	<0.50	9.1	<0.50	8.0	7.5	<0.50	0.60	<0.50	<0.50	<1.0	32	5.8	3.7	15,000	6.5
	8/15/2016	<0.50	<0.50	6.4	0.51	<0.50	3.4	<0.50	8.5	7.0	<0.50	0.59	<0.50	<0.50	<1.0	26	1.2 J-	5.7 J-	16,000 J-	5.6
	10/12/2016	<0.50	<0.50	4.6	<0.50	<0.50	12	<0.50	9.0	9.3	<0.50	0.70	<0.50	<0.50	<1.0	36	2.8 J-	6.3 J-	14,000 J-	4.2
	2/13/2017	<0.50	<0.50	28	0.75	<0.50	58	<0.50	7.8	9.1	<0.50	0.63	<0.50	<0.50	<1.0	104	6.5	3.6	4,000	3.9
	06/14/2017	<0.50	0.59	48	2.7	<0.50	27	<0.50	6.7	8.9	<0.50	0.55	<0.50	<0.50	<1.0	94	31	13	15,000	35
	08/21/2017	<0.50	<0.50	4.3	<0.50	<0.50	7.4	<0.50	9.0	7.1	<0.50	0.60	<0.50	<0.50	<1.0	28	3.3 J	10 J	16,000 J	4.1
	10/10/2017	<0.50	<0.50	1.5	<0.50	<0.50	11 J	<0.50	8.0	8.1	<0.50	0.53	<0.50	<0.50	<1.0	29	4.2 J-	12 J-	13,000 J-	3.2
	02/05/2018	<0.50	<0.50	3.5	<0.50	<0.50	34	<0.50	7.2	10	<0.50	0.57	<0.50	<0.50	<1.0	55	2.8	0.79	1,500	2.9
	06/15/2018	<0.50 R	1.2 J-	74 J	4.7 J-	<0.50 R	32 J	<0.50 R	9.8 J-	8.9 J-	<0.50 R	0.57 J-	<0.50 R	<0.50 R	<1.0 R	131	42	25	18,000	4.3
	08/21/2018	<0.50	<0.50	0.65	<0.50	<0.50	8.5	<0.50	11	7.4	<0.50	0.64	<0.50	<0.50	<1.0	50	2.7	12	15,000	4.4
	10/09/2018	<0.50	<0.50	0.71	<0.50	<0.50	14	<0.50	10	7.5	<0.50	0.58	<0.50	<0.50	<1.0	54	1.2 J-	9.2 J-	8,300 J-	3.8
	02/06/2019	<0.50	<0.50	5.1	<0.50	<0.50	47	<0.50	9.0	8.5	<0.50	0.53	<0.50	<0.50	<1.0	70	7.0	5.0	5,700	3.1
	06/12/2019	<0.50	<0.50	2.4	<0.50	<0.50	1.8	<0.50	11	8.2	<0.50	0.80	<0.50	<0.50	<1.0	24	3.2	6.0	16,000	7.4
	08/16/2019	<0.50	<0.50	3.0	<0.50	<0.50	15	<0.50	12	7.9	<0.50	0.67	<2.0	<0.50	<1.0	39	2.9	8.7	15,000	3.8
	02/05/2020	< 0.50	< 0.50	23	< 0.50	< 0.50	91 J	< 0.50	12	6.1	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	130	12	7.2	6,500	3.0
	08/26/2020	< 1.0	< 1.0	9.1	< 1.0	< 1.0	70	< 1.0	13	9.1	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	100	21	12	13,000	5.3

APPENDIX C-4

ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
PMW-2-1	12/7/2005	<31	82	6,700	72	<31	2,300	<31	<31	<31	<31	<31	<31	<31	<63	9,154	0.81	0.24	2.4	2.0
	2/14/2006	<71	140	7,500	<71	<71	1,600	<71	<71	<71	<71	<71	<71	<71	<140	9,240	16	0.49	3.8	2.4
	5/2/2006	<63	140	6,400	<63	<63	1,500	<63	<63	<63	<63	<63	<63	<63	<130	8,040	29	1.90	11	3.3
	8/2/2006	<25	130	6,700	42	<25	2,200	<25	<25	<25	<25	<25	<25	<25	<50	9,072	48 J	2.1 J	1,400 J	1.9
	11/13/2006	<63	<63	5,700	<63	<63	2,800	<63	<63	<63	<63	<63	<63	<63	<130	8,500	130	2.1	6,800	3.2
	2/12/2007	<50	<50	6,300	74	<50	2,600	<50	<50	<50	<50	<50	<50	<50	<100	8,974	160	1.7	8,900	2.6
	5/31/2007	<42	48	5,100	46	<42	2,400	<42	<42	<42	<42	<42	<42	<42	<83	7,594	170	1.8	11,000	2.3
	8/21/2007	<42	64	6,500	54	<42	2,600	<42	<42	<42	<42	<42	<42	<42	<83	9,218	140	1.6	9,400	2.1
	11/1/2007	<31	57	5,700	62	<31	2,500	<31	<31	<31	<31	<31	<31	<31	<63	8,319	110	1.5	8,000	1.6
	2/5/2008	<42	<42	4,600	55	<42	1,200	<42	<42	<42	<42	<42	<42	<42	<83	5,855	71	0.9	4,500	1.4
	5/2/2008	<42	66	5,500	51	<42	2,400	<42	<42	<42	<42	<42	<42	<42	<83	8,017	320	1.8	8,200	2.5
	7/18/2008	<42	72	6,300	55	<42	2,300	<42	<42	<42	<42	<42	<42	<42	<83	8,727	360	2.5	12,000	2
	10/7/2008	<42	58	4,900	<42	<42	1,700	<42	<42	<42	<42	<42	<170	<42	<83	6,658	340	2.7	14,000	2.3
	2/10/2009	<42	68	4,800	46	<42	1,500	<42	<42	<42	<42	<42	<170	<42	<83	6,414	280	2.7	13,000	1.3
	6/1/2009	<42	58	4,500	<42	<42	1,500	<42	<42	<42	<42	<42	<170	<42	<83	6,058	260	2.6	12,000	1.8
	7/13/2009	<42	71	5,500	74	<42	1,700	<42	<42	<42	<42	<42	<170	<42	<83	7,345	190	1.6	11,000	1.8
	10/16/2009	<42	75	5,600	49	<42	1,500	<42	<42	<42	<42	<42	<170	<42	<83	7,224	270	2.7	14,000	1.9
	2/18/2010	<42	61	5,600	76	<42	1,800	<42	<42	<42	<42	<42	<170	<42	<83	7,537	270	2.9	16,000	2
	4/23/2010	<42	75	6,500	47	<42	1,600	<42	<42	<42	<42	<42	<170	<42	<83	8,222	260	2.5	14,000	1.6
	7/6/2010	<42	69	6,100	54	<42	2,000	<42	<42	<42	<42	<42	<170	<42	<83	8,223	260	2.7	14,000	1.4
	10/21/2010	<42	79	6,800	54	<42	1,800	<42	<42	<42	<42	<42	<170	<42	<83	8,733	240	2.5	14,000	1.6
	2/1/2011	<42	70	6,800	47	<42	1,700	<42	<42	<42	<42	<42	<170	<42	<83	8,617	220	2.2	12,000	1.9
	4/14/2011	<42	83	7,300	62	<42	1,800	<42	<42	<42	<42	<42	<170	<42	<83	9,245	200	1.9	11,000	1.6
	7/22/2011	<42	66	5,600	43	<42	1,500	<42	<42	<42	<42	<42	<170	<42	<83	7,209	230	2.1	11,000	1.7
	10/26/2011	<36	67	5,600	85	<36	1,500	<36	<36	<36	<36	<36	<140	<36	<71	7,252	220	2.4	11,000	1.6
	2/9/2012	<36	61	6,500	<36	<36	1,400	<36	<36	<36	<36	<36	<140	<36	<71	7,961	320	24	12,000	1.5
	4/19/2012	<36	51	5,700	63	<36	1,600	<36	<36	<36	<36	<36	<140	<36	<71	7,414	360	17	12,000	2.2
	7/23/2012	<36	60	5,500	140	<36	1,600	<36	<36	<36	<36	<36	<140	<36	<71	7,300	360	21	10,000	1.5
	10/11/2012	<50	72	7,100	55	<50	1,900	<50	<50	<50	<50	<50	<200	<50	<100	9,127	310	16	9,400	1.6
	3/12/2013	<42	51	4,400	<42	<42	1,600	<42	<42	<42	<42	<42	<83	<42	<83	6,051	380	21	12,000	2.4
	6/4/2013	<36	57	5,600	46	<36	1,600	<36	<36	<36	<36	<36	<140	<36	<71	7,303	380	23	14,000	2.3
	8/29/2013	<36	60	5,000	<36	<36	1,400	<36	<36	<36	<36	<36	<140	<36	<71	6,460	360	24	13,000	2.1
	10/17/2013	<36	57	6,500	51	<36	2,100	<36	<36	<36	<36	<36	<140	<36	<71	8,708	370	24	13,000	2.3
	3/5/2014	<36	60	5,000	37	<36	1,500	<36	<36	<36	<36	<36	<140	<36	<71	6,597	320	24	14,000	1.4
	5/27/2014	<36	50	4,200	55	<36	1,000	<36	<36	<36	<36	<36	<140	<36	<71	5,305	150	19	12,000	1.4
	8/18/2014	<36	48	4,800	36	<36	790	<36	<36	<36	<36	<36	<140	<36	<71	5,674	86	15	10,000	2.0
	10/14/2014	<42	48	5,100	<42	<42	760	<42	<42	<42	<42	<42	<170	<42	<83	5,908	100	18	11,000	2.1
	2/5/2015	<42	52	5,400	<42	<42	640	<42	<42	<42	<42	<42	<170	<42	<83	6,092	75	16	11,000	0.73
	5/11/2015	<42	48	5,200	<42	<42	470	<42	<42	<42	<42	<42	<170	<42	<83	5,718	58	17	11,000	2.3
	8/7/2015	<42	<42	3,700	<42	<42	310	<42	<42	<42	<42	<42	<170	<42	<83	4,010	53	17	12,000	1.8
	10/13/2015	<4.2	<4.2	840	31	<4.2	1,500	<4.2	<4.2	<4.2	<4.2	<4.2	<17	<4.2	<8.3	2,371	110	6.4	4,800	1.2
	2/29/2016	<10	47	5,400	120	10	490	<10	<10	<10	<10	<10	<40	<10	<20	6,067	38	17	10,000	1.0
	5/11/2016	<0.50	51	6,200	39	10	430	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	20	6,751	39	17	11,000	1.6
	8/15/2016	<50	<50	6,800	54	<50	290	<50	<50	<50	<50	<50	<50	<50	<100	7,144	38 J-	16 J-	8,800 J-	1.6
	10/12/2016	<50	<50	5,600	56	<50	380	<50	<50	<50	<50	<50	<50	<50	<100	6,036	28	15	8,700	<1.0
	2/13/2017	<50	51	5,300	<50	<50	500	<50	<50	<50	<50	<50	<50	<50	<100	5,851	37	11	6,000	<1.0
	06/14/2017	<50	<50	4,800	<50	<50	380	<50	<50	<50	<50	<50	<50	<50	<100	5,180	110	12	7,500	1.1
	08/21/2017	<50	<50	4,900	<50	<50	350	<50	<50	<50	<50	<50	<50	<50	<100	5,250	94 J	14 J	8,200 J	1.4
	10/10/2017	<50	<50	6,100	<50	<50	430	<50	<50	<50	<50	<50	<50	<50	<100	6,530	51 J-	17 J-	12,000 J-	1.3
	02/05/2018	<50	<50	6,100	<50	<50	540	<50	<50	<50	<50	<50	<50	<50	<100	6,640	100	15	7,600	1.7
	06/15/2018	<50	<50	5,200	<50	<50	330	<50	<50	<50	<50	<50	<50	<50	<100	5,530	85	21	12,000	1.3
	08/21/2018	<50	<50	4,600	<50	<50	350	<50	<50	<50	<50	<50	<50	<50	<100	7,250	120	23	12,000	1.5
	10/09/2018	<50 J	<50 J	4,800 J-	<50 J	<50 J	430 J-	<50 J	<50 J	<50 J	<50 J	<50 J	<50 J	<50 J	<100 J	7,530	72	9.5	4,300	1.5
	02/06/2019	<50	<50	5,200	<50	<50	430	<50	<50	<50	<50	<50	<50	<50	<100	5,630	170	20	7,300	1.4
	06/12/2019	<50	<50	4,900	50	<50	290	<50	<50	<50	<50	<50	<50	<50	<100	5,240	130	20	8,600	1.9
	08/16/2019	<50	<50	3,100	<50	<50	450	<50	<50	<50	<50	<50	<200	<50	<100	3,550	63	16	10,000	2.2
	02/07/2020	< 50	< 50	5,300	< 50	< 50	450	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 100	6000	140	25	6,300	1.4
	08/27/2020	< 50	< 50	5,000	< 50	< 50	360	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 100	5000	130	31	11,000	1.5

APPENDIX C-4

ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	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	766	22	1.3	6.0	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	831	0.065	0.19	3.0	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	750	0.30	0.09	16	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	611	0.520 J	0.096 J	46 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	682	1.5	0.09	44	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	713	1.9	0.12	49	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	700	3.1	0.066	63	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	664	1.6	0.11	52	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	545	1.5	0.048	31	<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	491	0.85	0.033	14	<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	507	2.3	0.041	19	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	504	3.1	0.034	22	<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	493	3.3	0.049	26	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	393	2.1	0.042	20	<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	436	2.6	0.048	22	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	430	2.1	0.034	19	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	438	2.5	0.052	28	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	437	1.8	0.030	15	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	516	6.7	0.044	25	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	494	3.2	0.036	24	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	507	3.1	0.031	17	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	448	2.1	<0.025	13	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	530	5.5	<0.025	28	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	404	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	423	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	459	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	426	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	434	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	402	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	376	2.2	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	376	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	332	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	372	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	407	7.1	0.079	51	<0.50
	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	344	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	364	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	312	1.2	0.047	12	0.73
	2/5/2015	<1.7	240	96	1.8	<1.7	12	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	350	0.93	0.030	7.7	<0.50
	5/11/2015	<1.7	240	130	3.0	<1.7	41	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	414	2.4	0.15	35	0.89
	8/7/2015	<1.7	220	110	5.0	<1.7	86	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	421	2.2	0.12	22	0.52
	10/13/2015	<1.7	240	120	4.0	<1.7	32	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	396	3.8	0.092 J	21	<0.50
	2/29/2016	<1.7	210	95	2.7	<1.7	27	<1.7	<1.7	<1.7	<1.7	<1.7	<6.7	<1.7	<3.3	335	8.2	0.22	67	<0.50
	5/11/2016	<0.50	200	130	<0.50	<0.50	130	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	460	23	0.34	140	<1.0
	8/15/2016	<2.5	200	110	<2.5	<2.5	23	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	333	3.1 J-	0.71 J-	23 J-	<1.0
	10/12/2016	<2.5	140	170	5.9	<2.5	180	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	496	38	1.0	250	<1.0
	2/13/2017	<2.5	230	95	3.0	<2.5	59	<2.5	<2.5	<2.5	<2.5	<2.5	2.5	<2.5	<5.0	390	7.9	0.25	53	<1.0
	06/14/2017	<2.5	180	76	<2.5	<2.5	20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	276	12	0.28	66	<1.0
	08/21/2017	<2.5	210	69	<2.5	<2.5	10	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	289	0.67 J	0.044 J	7.1 J	<1.0
	10/10/2017	<2.5 J	76 J-	210 J-	8.5 J-	<2.5 J	440 J-	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<5.0 J	735	87	1.6	650	<1.0
	02/05/2018	<2.5	250	130	4.9	<2.5	100	<2.5	<2.5	<2.5	<2.5	<2.5	3.4	<2.5	<5.0	488	13	0.67	340	<1.0
	06/15/2018	<2.5 J	240 J-	55 J-	<2.5 R	<2.5 J	9.4 J-	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<2.5 J	2.7 J-	<2.5 J	<5.0 J	307	1.3	0.062 J	14	<1.0
	08/21/2018	<2.5	230	53	<2.5	<2.5	9.9	<2.5	<2.5	<2.5	<2.5	<2.5	2.7	<2.5	<5.0	406	1.2	0.046 J	10	<1.0
	10/09/2018	<5.0 J	270 J-	75 J-	<5.0 R	<5.0 J	11 J-	<5.0 J	<5.0 J	<5.0 J	<5.0 J	<5.0 J	<5.0 R	<5.0 J	<10 J	571	0.99	0.095 J	3.7	<1.0
	02/06/2019	<5.0	250	49	<5.0	<5.0	8.3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	307	1.2	0.043 J	13	<1.0
	06/12/2019	<5.0	290	48	<5.0	<5.0	8.9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	347	1.0	0.032 J	9.4	<1.0
	08/16/2019	<1.3	200	75	2.9	<1.3	72	<1.3	<1.3	<1.3	<1.3	<1.3	<5.0	<1.3	<2.5	358	1.9	0.073 J	22	<1.0
	02/07/2020	< 5.0	210	44	< 5.0	< 5.0	12	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	300	1.3	0.063 J	17	< 0.50
	08/27/2020	< 2.0	200	36	< 2.0	< 2.0	18	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	250	1.5	< 1.0	23	0.64

APPENDIX C-4

ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
DW-2[4]	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	116	0.56	0.26	1,300	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	10	0.46	0.13	1,200	1,700
	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	5.7	0.51	0.066	20,000	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	9.4	0.21	0.45	19,000	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	0	2.0	0.028	6,300	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	2.2	0.24	<0.025	5,800	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	1.3	0.20	0.12	5,900	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	1.7	0.24	0.81	13,000	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	1.3	0.052	0.56	11,000	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	3.2	0.22	2.3	14,000	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	1.3	0.054	1.5	7,400	17
	4/23/2010	<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	2.9	0.12	1.9	7,100	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	3.7	0.065	4.7	8,700	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	3.2	0.10	0.49	860	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	2.3	0.042	0.62	1,000	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	4.6	<0.025	0.86	610	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	13	0.13	8.4	2,500	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	6.6	0.22	0.64	3,500	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	2.8	0.21	0.078	5,300	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	3.6	0.21	0.80	10,000	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	0.10	0.58	2,900	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	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	0.14	3.7	8,500	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	0.061	0.066	19,000	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	2.5	0.16	0.35	11,000	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	4.0	0.17	0.43	16,000	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	2.6	0.40	0.093	16,000	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	1.5	0.11	0.40	14,000	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	1.8	0.11	0.54	6,800	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	2.8	0.21	1.1	16,000	14
	2/5/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	0.5	<0.5	<0.5	<2.0	<0.5	<1.0	1.1	0.03	1.7	9,400	8.6
	5/11/2015	<0.5	1.2	1.4	0.9	<0.5	3.1	<0.5	2.4	0.6	<0.5	<0.5	<2.0	<0.5	<1.0	10	1.7	250	18,000	16
	8/6/2015	<0.5	0.6	1.0	0.7	<0.5	<0.5	<0.5	1.4	1.0	<0.5	<0.5	<2.0	<0.5	<1.0	4.7	0.12	3.4	12,000	12
	10/12/2015	<0.5	<0.5	0.8	0.9	<0.5	<0.5	<0.5	1.3	0.8	<0.5	<0.5	<2.0	<0.5	<1.0	3.8	0.10	3.8	12,000	11
	2/29/2016	<0.5	3.3	4.0	0.5	<0.5	2.0	<0.5	3.0	2.3	<0.5	<0.5	<2.0	<0.5	<1.0	15	1.2	2.8	8,300	270
	5/11/2016	<0.50	<0.50	1.6	<0.50	<0.50	0.50	<0.50	1.5	1.8	<0.50	<0.50	<0.50	<0.50	<1.0	5.4	0.091 J	0.087 J	18,000	83
	8/15/2016	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	0.69	<0.50	<0.50	<0.50	<0.50	<1.0	1.3	0.10 J-	0.54 J-	15,000 J-	34
	10/12/2016	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	0.76	<0.50	<0.50	<0.50	<0.50	<1.0	1.3	0.096 J-	0.042 J-	15,000 J-	31
	2/13/2017	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.69	0.68	<0.50	<0.50	<0.50	<0.50	<1.0	1.4	0.16	2.4	8,500	20
	06/14/2017	<0.50	<0.50	<0.50	<0.50	<0.50	0.99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	1.0	0.84	0.30	4,900	150
	08/21/2017	<0.50	<0.50	0.60	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	0.60	0.13 J	0.28 J	16,000 J	9.1
	10/10/2017	<0.50 R	<0.50 R	0.61 J	0.53 J	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<1.0 R	1.1	0.11 J-	0.30 J-	13,000 J-	19
	02/05/2018	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	0	0.033 J	2.2	4,600	8.6
	06/15/2018	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	0	0.26	0.13	11,000	160
	08/21/2018	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<1.0 R	0	0.044 J	0.033 J	7,500	27
	10/09/2018	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<0.50 R	<1.0 R	0	0.042 J-	0.038 J-	11,000 J-	23
	02/06/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	0	0.036 J	0.011 J	1,100	1.8
	06/12/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	0	0.029 J	<0.10	17,000	200
	08/16, 09/16/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	0.0	0.044 J	< 0.011	1,100	23
	02/06/2020	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	0.0	0.030 J	0.059 J	14,000	< 0.50
	08/27/2020	< 0.50	< 0.50	0.74	< 0.50	< 0.50	< 0.50	< 0.50	0.69	0.51	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	1.9	0.79 J	< 1.0	16,000	77
X2B1[4]	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	907	--	--	--	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	899	--	--	--	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	982	--	--	--	1.2
	5/1/2006	<3.1	570	1,000	29	4.7	130	<3.1	<3.1	<3.1	<3.1	<3.1	6.9	<3.1	<6.3	1,741	--	--	--	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	1,470	--	--	--	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	1,412	--	--	--	1.1
	9/18/2006	<6.3	540	1,400	19	<6.3	130	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	2,089	3.7	0.31	340	0.75
	10/18/2006	<10	480	1,600	21	<10	130	<10	<10	<10	<10	<10	<20	<10	<20	2,231	--	--	--	1.0
	11/14/2006	<6.3	510	1,300	20	<6.3	140	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	1,970	6.4	0.20	490	0.89
	12/11/2006	<20	450	1,900	21	<20	190	<20	<20	<20	<20	<20	<200	<20	<40	2,561	13	0.18	1,200	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	1,253	230	0.41	1,500	5.4

APPENDIX C-4
ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
X2B1[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	450	120	0.81	330	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	253	130	0.54	2,400	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	729	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	605	36	1.4	6,000	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	1,496	25	0.31	730	1.1
	5/2/2008	<6.3	380	1,100	18	<6.3	140	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	1,638	4.7	0.14	140	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	471	51	0.87	210	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	596	44	0.42	68	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	1,277	140	0.40	310	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	1,630	110	0.32	260	1.1
	7/13/2009	<8.3	100	1,200	23	<8.3	530	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	1,853	73	0.26	230	1.1
	10/16/2009	<8.3	71	1,100	17	<8.3	510	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	1,698	73	0.41	280	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	1,237	26	0.20	150	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	957	25	0.17	130	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	1,564	32	0.22	200	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	1,232	74	0.47	260	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	567	13	0.18	80	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	338	12	0.27	34	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	1,534	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	696	21	1.1	330	0.65
	11/21/2011	0.87	470	1,100	10	4.2	150	0.91	<0.5	0.78	<0.5	<0.5	6.1	1.2	<1.0	1,744	13	1.8	540	0.57
	2/9/2012	<2.5	330	1,200	16	3.8	160	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<5.0	1,710	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	893	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	1,151	18	0.52	150	0.72
	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	561	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	1,370	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	1,340	15	1.5	1,100	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	1,267	7.2	1.5	1,100	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	1,208	6.9	4.6	2,600	1.4
	6/4/2013	<8.3	110	1,200	19	<8.3	82	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	1,411	1.6	1.1	450	1.0
	8/29/2013	<7.1	250	1,100	15	<7.1	66	<7.1	<7.1	<7.1	<7.1	<7.1	<29	<7.1	<14	1,431	4.1	0.64	280	2.0
	10/17/2013	<7.1	100	1,700	52	<7.1	200	<7.1	<7.1	<7.1	<7.1	<7.1	<29	<7.1	<14	2,052	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	69	470	6.9	7,000	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	404	150	9.6	9,200	4,200
	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	169	47	9.9	7,200	3,700
	2/5/2015	<2.5	<2.5	<2.5	<2.5	<2.5	2.6	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<5.0	2.6	4.1	5.6	18,000	2,300
	5/11/2015	<0.5	<0.5	1.8	0.5	<0.5	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	4.7	1.1	12	17,000	37
	8/7/2015	<0.5	1.3	23	0.8	<0.5	13	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	38	5.2	45	22,000	8.5
	10/13/2015	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	1.0	0.065 J	22	17,000	4.5
	2/29/2016	<0.5	12	220	3.0	0.5	110	0.6	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	346	22	26	10,000	7.0
	5/11/2016	<0.50	<0.50	300	3.8	<0.50	280	0.56	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	584	28	48	20,000	1.3
	8/15/2016	<5.0	<5.0	230	<5.0	<5.0	140	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	370	15 J-	40 J-	15,000 J-	1.2
	10/12/2016	<2.5	<2.5	140	2.5	<2.5	170	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	313	13	48	16,000	<1.0
	2/13/2017	<2.5	<2.5	730	5.6	<2.5	360	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	1,096	15	21	6,100	<1.0
	06/14/2017	<2.5	47	710	5.3	<2.5	150	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	912	13	9.5	4,000	2.7
	08/21/2017	<2.5	13	2000	12	4.3	130	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	2,159	6.4 J	33 J	5,900 J	<1.0
	10/10/2017	<25 J	<25 J	1,400 J-	<25 J	<25 J	140 J-	<25 J	<25 J	<25 J	<25 J	<25 J	<25 J	<25 J	<50 J	1,540	9.4	54	8,500	<1.0
	02/05/2018	<25	<25	1,100	<25	<25	250	<25	<25	<25	<25	<25	<25	<25	<50	1,350	5.8	40	5,700	<1.0
	06/15/2018	<5.0	88	230	<5.0	<5.0	12	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	330	1.7	3.2	380	<1.0
	08/21/2018	<5.0	170	230	<5.0	<5.0	25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	650	1.3	4.5	390	<1.0
	10/10/2018	<2.5 J	150 J-	110 J-	<2.5 J	<2.5 R	7.8 J-	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<2.5 J	<5.0 J	378	0.49	3.6	250	<1.0
	02/06/2019	<2.5	170	100	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2.7	<2.5	<5.0	273	0.13	3.6	220	<1.0
	06/12/2019	<2.5	8.6	130	<2.5	<2.5	6.9	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	146	2.1 J-	1.4 J-	13,000 J-	2,000
	08/16, 09/16/2019	<2.5	<2.5	<10	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	0.0	4.7	11	13,000	270
	02/07/2020	< 0.50	1.5	16	2.5	< 0.50	22	0.56	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	43	8.2	22	8,100	2.2
	08/26/2020	< 0.50	< 0.50	76	2.4	0.51	69	0.80	< 0.50	< 0.50	< 0.50	< 0.50	1.7	< 0.50	< 1.0	150	13	7.9	800	0.77

APPENDIX C-4

ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
X2A[4]	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	559	--	--	--	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	1,083	--	--	--	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	1,204	--	--	--	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	1,385	--	--	--	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	1,374	--	--	--	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	659	--	--	--	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	639	150 J	0.470 J	3,900 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	127	54	0.66	13,000	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	104	24	3.6	15,000	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	182	220	3.6	7,100	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	328	280 / 280	3.6 / 3.3	9,200/8,000	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	199	51	3.3	9,300	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	198	48	2.0	12,000	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	330	54	1.6	10,000	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	1,361	13	0.38	1,800	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	497	340	1.1	5,400	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	934	380	3.7	12,000	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	218	190	5.2	7,800	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	286	93	9.0	9,500	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	353	79	8.5	10,000	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	412	83	11	12,000	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	274	39	10	7,500	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	287	47	8.6	5,700	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	622	71	8.5	5,400	4.4
	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	898	78	6.3	4,200	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	855	68	4.7	3,200	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	908	59	4.0	2,900	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	937	63	3.7	2,900	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	955	52	3.4	2,400	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	196	7.4	1.6	4,700	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	460	64	2.3	5,400	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	708	69	3.1	5,900	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	729	73	4.1	5,600	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	888	90	4.3	4,800	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	300	9.0	1.4	4,500	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	248	12	2.9	8,100	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	192	24	4.0	7,300	<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	60	31	4.2	9,700	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	74	33	2.6	10,000	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	125	46	2.8	9,300	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	171	38	3.6	8,600	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	212	6.5	1.1	1,400	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	281	21	1.8	2,000	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	336	28	1.6	2,100	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	372	29	2.4	2,000	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	565	50	3.3	2,700	3.8
	2/5/2015	<3.1	<3.1	10	<3.1	<3.1	560	<3.1	14	15	<3.1	<3.1	<13	<3.1	<6.3	599	68	3.3	2,900	2.7
	5/11/2015	<0.5	<0.5	5.2	<0.5	<0.5	510	0.6	17	19	<0.5	<0.5	<2.0	<0.5	<1.0	552	61	3.2	2,300	4.4
	8/6/2015	<5.0	<5.0	<5.0	<5.0	<5.0	530	<5.0	16	17	<5.0	<5.0	<20	<5.0	<10	563	55	2.6	2,100	4.0
	10/12/2015	<1.7	<1.7	2.1	<1.7	<1.7	520	<1.7	15	13	<1.7	2.0	<6.7	<1.7	<3.3	552	76	3.6	2,500	3.3
	2/29/2016	<0.5	<0.5	24	0.9	<0.5	45	<0.5	2.7	2.9	<0.5	<0.5	<2.0	<0.5	<1.0	76	1.7	0.56	210	4.7
	5/11/2016	<0.50	1.0	48	1.4	<0.50	120	<0.50	3.7	4.0	<0.50	<0.50	<0.50	<0.50	<1.0	178	3.6	0.20	160	3.6
	8/15/2016	<0.50	<0.50	32	1.1	<0.50	640	0.59	10	8.9	<0.50	<0.50	<0.50	<0.50	<1.0	693	43 J-	3.6 J-	2,100 J-	2.8
	10/12/2016	<5.0	<5.0	21	<5.0	<5.0	600	<5.0	16	19	<5.0	<5.0	<5.0	<5.0	<10	656	50 J-	5.6 J-	2,300 J-	2.5
	2/13/2017	<5.0	<5.0	15	<5.0	<5.0	340	<5.0	9.7	12	<5.0	<5.0	<5.0	<5.0	<10	377	11	1.0	270	2.0
	06/14/2017	<0.50	0.88	24	0.94	<0.50	69	<0.50	2.8	1.9	<0.50	<0.50	<0.50	<0.50	<1.0	100	5.7	2.0	4,000	27
	08/21/2017	<0.50	<0.50	5.7	<0.50	<0.50	370	<0.50	14	14	<0.50	<0.50	<0.50	<0.50	<1.0	404	110 J	7.5 J	6700 J	5.2
	10/10/2017	<5.0	<5.0	7.5	<5.0	<5.0	610	<5.0	15	15	<5.0	<5.0	<5.0	<5.0	<10	648	78 J-	7.9 J-	6,500 J-	3.0
	02/05/2018	<5.0	<5.0	9.7	<5.0	<5.0	770	<5.0	18	19	<5.0	<5.0	<5.0	<5.0	<10	817	66	6.6	4,400	3.2
	06/15/2018	<5.0 R	<5.0 R	85 J-	<5.0 R	<5.0 R	320 J-	<5.0 R	12 J-	15 J-	<5.0 R	<5.0 R	<5.0 R	<5.0 R	<10 R	432	180	11	8,800	11
	08/21/2018	<5.0	<5.0	85	<5.0	<5.0	640	<5.0	15	21	<5.0	<5.0	<5.0	<5.0	<10	981	120	12	8,300	3.3
	10/09/2018	<5.0	<5.0	49	<5.0	<5.0	980	<5.0	16	20	<5.0	<5.0	<5.0	<5.0	<10	1,285	50 J-	5.5 J-	3,100 J-	4.4

APPENDIX C-4

ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
X2A[4]	02/06/2019	<5.0	<5.0	53	<5.0	<5.0	720	<5.0	14	18	<5.0	<5.0	<5.0	<5.0	<10	805	82	9.3	6,200	2.7
	06/12/2019	<5.0	<5.0	160	<5.0	<5.0	380	<5.0	13	18	<5.0	<5.0	<5.0	<5.0	<10	571	70	17	8,800	8.0
	08/16/2019	<5.0	<5.0	130	<5.0	<5.0	1,100	<5.0	17	20	<5.0	<5.0	<20	<5.0	<10	1,267	73	12	8,200	4.1
	02/06/2020	< 5.0	< 5.0	32	< 5.0	< 5.0	760	< 5.0	16	21	< 5.0	< 5.0	< 5.0	< 5.0	< 10	800	52	18	6,000	< 0.50
	08/26/2020	< 2.0	< 2.0	170	< 2.0	< 2.0	530	< 2.0	14	16	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	730	48	14	8,300	3.6
X1B[4]	12/12/2005	<8.3	360	1,600	29	10	120	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<17	2,119	--	--	--	0.72
	1/13/2006	5.8	350	1,100	36	7.8	110	2.1	<2.0	9.7	<2.0	<2.0	2.3	<2.0	<4.0	1,624	--	--	--	0.72
	2/10/2006	<8.3	300	940	33	8.7	110	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<17	1,392	--	--	--	1.5
	4/19/2006	<7.1	340	880	61	<7.1	84	<7.1	<7.1	9.3	<7.1	<7.1	<7.1	<7.1	<14	1,374	--	--	--	2.1
	5/1/2006	7.4	310	970	37	<7.1	120	<7.1	<7.1	9.6	<7.1	<7.1	<7.1	<7.1	<14	1,454	--	--	--	0.73
	7/6/2006	2	290	860	22.0	5.8	75	<5.0	<5.0	7.7	<5.0	<5.0	<5.0	<5.0	<10	1,263	--	--	--	0.71
	8/2/2006	<7.1	240	850	19.0	<7.1	81	<7.1	<7.1	7.6	<7.1	<7.1	<7.1	<7.1	<14	1,198	--	--	--	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	1,265	3.5	0.22	310	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	1,246	--	--	--	0.94
	11/14/2006	<5.0	250	840	28	5.5	140	<5.0	<5.0	6.7	<5.0	<5.0	<5.0	<5.0	<10	1,270	21	0.35	12,000	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	1,357	22	0.33	13,000	1.0
	5/31/2007	<6.3	140	1,700	47	<6.3	350	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	2,237	35	0.35	12,000	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	1,205	14	0.40	4,000	1.7
	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	996	20	0.19	2,400	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	1,314	18	0.24	3,800	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	883	32	0.63	7,900	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	1,253	20	0.55	3,800	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	1,281	7.9	0.38	2,200	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	927	19	0.20	1,300	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	1,047	21	0.28	1,800	1.6
	2/10/2009	<7.1	140	1,000	25	<7.1	160	<7.1	<7.1	7.6	<7.1	<7.1	<29	<7.1	<14	1,333	36	1.2	11,000	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	1,253	28	0.87	7,500	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	1,312	20	0.51	6,900	1.5
	10/16/2009	<5.0	140	1,300	27	7.0	400	<5.0	<5.0	7.0	<5.0	<5.0	<20	<5.0	<10	1,881	11	1.2	9,600	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	1,208	9.9	0.99	5,600	1.5
	4/22/2010	<5.0	62	1,500	25	<5.0	340	<5.0	<5.0	5.3	<5.0	<5.0	<20	<5.0	<10	1,932	7.6	1.6	4,300	1.5
	7/6/2010	<10	29	1,100	21	<10	300	<10	<10	<10	<10	<10	<40	<10	<20	1,450	4.0	0.79	1,700	1.1
	10/21/2010	<8.3	240	2,400	32	12	49	<8.3	<8.3	<8.3	<8.3	<8.3	<33	<8.3	<17	2,733	0.60	1.7	4,300	1.3
	2/1/2011	<17	87	1,900	24	<17	83	<17	<17	<17	<17	<17	<67	<17	<33	2,094	0.51	0.52	950	0.96
	4/15/2011	<10	110	1,300	17	<10	28	<10	<10	<10	<10	<10	<40	<10	<20	1,455	0.17	0.18	320	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	1,073	0.82	0.17	360	0.89
	10/27/2011	<6.3	200	1,000	23	<6.3	110	<6.3	<6.3	<6.3	<6.3	<6.3	<25	<6.3	<13	1,333	11	5.2	1,400	0.79
	11/21/2011	7.4	360	1,700	28	8.7	130	2.2	<0.5	11	<0.5	<0.5	1.7	1.1	<1.0	2,250	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	1,084	7.1	1.8	1,200	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	826	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	797	0.15	0.47	240	0.62
	10/11/2012	<10	100	940	18	<10	64	<10	<10	<10	<10	<10	<40	<10	<20	1,122	0.25	0.50	210	0.61
	12/12/2012	<7.1	260	1,100	16	<7.1	44	<7.1	<7.1	7.9	<7.1	<7.1	<7.1	<7.1	<14	1,428	5.3	2.9	1,600	0.81
	1/28/2013	<10	210	950	24	<10	30	<10	<10	<10	<10	<10	<10	<10	<20	1,214	3.4	3.2	2,600	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	1,115	0.92	2.9	1,900	0.92
	3/12/2013	<10	200	1,200	25	<10	21	<10	<10	<10	<10	<10	<40	<10	<20	1,446	0.17	2.8	1,200	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	1,026	0.24	3.0	1,500	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	694	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	862	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	1,172	5.0	3.0	1,100	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	65	820	1.5	1,100	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	470	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	525	260	0.81	1,700	1.6
	2/5/2015	<2.0	<2.0	250	12	<2.0	390	<2.0	<2.0	3.7	<2.0	<2.0	<8.0	<2.0	<4.0	656	88	2.0	5,200	<0.50
	5/11/2015	<2.0	<2.0	250	10	<2.0	340	<2.0	<2.0	3.4	<2.0	<2.0	<8.0	<2.0	<4.0	603	56	5.9	4,000	2.0
	8/7/2015	<2.0	<2.0	200	8.9	<2.0	330	<2.0	<2.0	3.4	<2.0	<2.0	<8.0	<2.0	<4.0	542	45	7.0	2,200	1.1
	10/13/2015	<2.0	<2.0	160	7.4	<2.0	210	<2.0	<2.0	3.6	<2.0	<2.0	<8.0	<2.0	<4.0	381	36	5.0	1,500	5.3
	2/29/2016	<2.0	2.3	210	9.5	<2.0	140	<2.0	<2.0	2.6	<2.0	<2.0	<8.0	<2.0	<4.0	364	67	31	10,000	0.89
	5/11/2016	<0.50	2.0	270	10	0.69	210	1.0	<0.50	3.4	<0.50	<0.50	<0.50	<0.50	<1.0	497	29	9.1	14,000	<1.0
	8/15/2016	<2.5	<2.5	250	7.0	<2.5	190	<2.5	<2.5	2.5	<2.5	<2.5	<2.5	<2.5	<5.0	450	13 J-	10 J-	14,000 J-	<1.0
	10/12/2016	<2.5	<2.5	210	6.4	<2.5	190	<2.5	<2.5	3.1	<2.5	<2.5	<2.5	<2.5	<5.0	410	8.4	4.9	4,200	<1.0
	2/13/2017	<2.5	<2.5	200	7.5	<2.5	310	<2.5	<2.5	2.9	<2.5	<2.5	<2.5	<2.5	<5.0	520	6.6	2.6	700	<1.0

APPENDIX C-4
ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
X1B[4]	06/14/2017	<2.5	30	1,100	14	3.2	120	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	1,267	38	20	15,000	1.4
	08/21/2017	<10	<10	480	12	<10	430	<10	<10	<10	<10	<10	<10	<10	<20	922	10 J	9.2 J	3,900 J	1.0
	10/10/2017	<10	<10	410	<10	<10	340	<10	<10	<10	<10	<10	<10	<10	<20	750	5.9 J-	4.8 J-	1,100 J-	<1.0
	02/05/2018	<10	<10	430	11	<10	270	<10	<10	<10	<10	<10	<10	<10	<20	711	2.5	2.7	500	<1.0
	06/15/2018	<10 R	21 J-	950 J-	20 J-	<10 R	90 J-	<10 R	<10 R	<10 R	<10 R	<10 R	<10 R	<10 R	<20 R	1,081	25	12	7,000	<1.0
	08/21/2018	<10	<10	360	12	<10	170	<10	<10	<10	<10	<10	<10	<10	<20	992	2.8	4.7	1,200	<1.0
	10/09/2018	<10	<10	300	<10	<10	140	<10	<10	<10	<10	<10	<10	<10	<20	900	2.0	3.6	470	<1.0
	02/06/2019	<10	<10	450	<10	<10	98	<10	<10	<10	<10	<10	<10	<10	<20	548	1.2	3.9	290	<1.0
	06/12/2019	<0.50	5.8	110	3.9	<0.50	15	<0.50	<0.50	0.71	<0.50	<0.50	<0.50	<0.50	<1.0	135	2.6 J-	0.57 J-	8,000 J-	2,400
	08/16, 09/16/2019	<0.50	<0.50	340	7.8	<0.50	48	<0.50	0.64	4.4	<0.50	<0.50	<0.50	<0.50	<1.0	403	18	1.7	13,000	1,800
	02/07/2020	< 0.50	< 0.50	1.9	3.2	< 0.50	1.4	< 0.50	9.2	1.9	2.0	7.4	< 0.50	< 0.50	< 1.0	27	0.65	16	20,000	23
	08/26/2020	< 0.50	< 0.50	4.2	4.8	< 0.50	8.0	1.0	1.0	2.4	1.7	1.0	< 0.50	< 0.50	< 1.0	24	10	25	4,400	1.8
16-S[4]	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	143	--	--	--	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	153	--	--	--	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	127	--	--	--	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	1,284	--	--	--	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	1,314	--	--	--	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	134	--	--	--	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	114	--	--	--	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	111	18	0.13	11,000	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	106	4.5	0.24	5,800	4.93
	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	121	9.9	2.1	6,500	8.9
	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	132	13	1.1	7,300	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	108	5.4	1.0	8,800	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	77	20	0.44	10,000	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	85	19	0.47	13,000	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	131	19	0.66	13,000	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	46	10	0.14	9,900	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	57	13	0.32	12,000	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	50	7.0	2.2	8,800	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	78	4.4	4.5	6,000	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	93	3.9	3.6	4,500	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	103	4.4	4.6	3,800	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	79	3.2	4.4	3,300	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	67	2.2	4.8	3,000	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	90	1.8	4.0	2,800	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	65	2.0	2.7	1,600	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	58	1.5	2.9	1,400	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	56	1.2	2.8	1,100	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	44	0.58	3.0	1,400	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	37	2.5	3.3	1,300	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	34	0.38	2.7	5,700	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	39	0.66	2.5	6,000	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	50	1.2	1.6	3,800	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	53	1.2	1.3	1,700	4.8
	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	47	2.0	2.0	6,700	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	45	0.81	2.4	9,600	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	51	1.8	2.1	10,000	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	35	2.2	1.3	10,000	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	34	0.65	0.59	12,000	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	35	0.61	1.4	6,000	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	43	0.70	1.4	2,800	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	41	0.61	0.70	2,600	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	30	0.62	1.0	2,700	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	45	1.5	1.3	2,000	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	37	1.6	1.8	3,100	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	50	1.6	1.4	1,300	5.9
	2/5/2015	<0.5	<0.5	2.7	0.5	<0.5	15	<0.5	16	9.1	<0.5	2.1	<2.0	<0.5	<1.0	45	0.93	1.6	2,400	4.3
	5/21/2015	<0.5	<0.5	2.2	<0.5	<0.5	10	<0.5	15	9.2	<0.5	2.0	<2.0	<0.5	<1.0	38	0.60	0.87	780	9.2
	8/6/2015	<0.5	<0.5	2.0	<0.5	<0.5	12	<0.5	17	9.8	<0.5	2.2	<2.0	<0.5	<1.0	43	0.78	0.82	1,000	6.1
	10/12/2015	<0.5	<0.5	1.8	<0.5	<0.5	9.2	<0.5	17	7.8	<0.5	1.7	<2.0	<0.5	<1.0	38	0.68	1.0	1,400	4.8
	2/29/2016	<0.5	0.5	2.3	0.8	<0.5	9.6	<0.5	7.1	4.9	<0.5	1.1	<2.0	<0.5	<1.0	26	1.5	1.1	1,600	5.8

APPENDIX C-4
ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]
FORMER 901/902 THOMPSON PLACE FACILITY
SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
16-S[4]	5/11/2016	<0.50	<0.50	5.2	2.3	<0.50	26	<0.50	12	7.5	<0.50	1.5	<0.50	<0.50	<1.0	55	2.6	2.4	4,800	4.5
	8/15/2016	<0.50	<0.50	1.8	<0.50	<0.50	10	<0.50	7.2	4.5	<0.50	0.76	<0.50	<0.50	<1.0	24	1.2 J-	1.6 J-	2,200 J-	8.3
	10/12/2016	<0.50	<0.50	1.7	<0.50	<0.50	15	<0.50	11	8.7	<0.50	1.7	<0.50	<0.50	<1.0	38	1.3 J-	0.60 J-	1,300 J-	3.9
	2/13/2017	<0.50	<0.50	2.4	0.51	<0.50	20	<0.50	12	8.4	<0.50	1.6	<0.50	<0.50	<1.0	45	1.3	2.0	3,500	3.4
	06/14/2017	<0.50	<0.50	6.3	0.81	<0.50	17	<0.50	5.6	5.1	<0.50	0.71	<0.50	<0.50	<1.0	36	7.6	4.4	5,100	4.6
	08/21/2017	<0.50	<0.50	2.7	0.66	<0.50	7.4	<0.50	9.7	7.5	<0.50	1.2	<0.50	<0.50	<1.0	29	2.2 J	4.2 J	8,200 J	5.5
	10/10/2017	<0.50	<0.50	1.3	<0.50	<0.50	4.8	<0.50	6.3	4.2	<0.50	0.76	<0.50	<0.50	<1.0	17	1.0 J-	2.4 J-	4,900 J-	5.9
	02/05/2018	<0.50	<0.50	2.1	<0.50	<0.50	19	<0.50	8.0	5.8	<0.50	0.78	<0.50	<0.50	<1.0	36	2.1	6.2	6,500	4.3
	06/15/2018	<0.50	<0.50	7.9	2.4	<0.50	45	<0.50	8.9	9.2	<0.50	1.5	<0.50	<0.50	<1.0	75	12	14	8,900	3.0
	08/21/2018	<0.50	<0.50	3.5	0.64	<0.50	23	<0.50	10	10	<0.50	1.6	<0.50	<0.50	<1.0	70	2.7	6.3	6,000	4.3
	10/09/2018	<0.50	<0.50	3.0	<0.50	<0.50	29	<0.50	9.6	11	<0.50	1.7	<0.50	<0.50	<1.0	76	2.0 J-	3.7 J-	5,300 J-	3.9
	02/06/2019	<0.50	<0.50	2.7	<0.50	<0.50	29	<0.50	8.5	7.6	<0.50	1.1	<0.50	<0.50	<1.0	49	3.2	10	7,500	3.3
	06/12/2019	<0.50 J	<0.50 J	2.3 J-	0.80 J-	<0.50 J	6.3 J-	<0.50 J	8.6 J-	7.8 J-	<0.50 J	1.2 J-	<0.50 J	<0.50 J	<1.0 J	27	8.6	4.0	8,800	4.6
	08/16, 09/16/2019	<0.50	<0.50	5.1	0.60	<0.50	56	<0.50	11	11	<0.50	1.5	<0.50	<0.50	<1.0	85	2.0	4.4	7,000	3.8
	10/17/2019	<0.50	<0.50	4.1	<0.50	<0.50	27	<0.50	6.0	6.7	<0.50	0.97	<0.50	<0.50	<1.0	45	--	--	--	--
	02/05/2020	< 0.50	< 0.50	6.0	0.73	< 0.50	45 J	< 0.50	7.8	8.2	< 0.50	1.1	< 0.50	< 0.50	< 1.0	69	5.9	8.3	7,600	2.4
	08/26/2020	< 0.50	< 0.50	11	< 0.50	< 0.50	49	< 0.50	9.1	9.5	< 0.50	1.3	< 0.50	< 0.50	< 1.0	80	5.6	5.0	6,200	4.7
	10/14/2020	< 1.0	< 1.0	11	< 1.0	< 1.0	55	< 1.0	8.0	7.3	1.5	1.2	< 1.0	< 1.0	< 2.0	84	--	--	--	--
DW-7[4]	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	419	--	--	--	<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	580	--	--	--	<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	431	--	--	--	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	485	--	--	--	1.7
	5/1/2006	<2.0	110	2,000	17	6.4	42	<2.0	<2.0	4.8	<2.0	<2.0	3.8	<2.0	<4.0	2,184	--	--	--	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	738	--	--	--	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	400	170 J	0.16 J	4,700 J	200
	11/14/2006	<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	351	--	--	--	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	298	2.5	0.15	66	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	310	2.0	0.27	160	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	268	0.94	0.11	42	<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	329	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	<1.3	<2.5	340	18	0.082	560	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	326	36	0.72	5,500	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	386	6.5	0.075	570	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	285	4.5	0.49	220	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	280	2.9	0.45	150	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	246	2.4	0.16	270	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	173	0.96	0.28	53	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	191	1.4	0.34	58	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	189	2.7	0.61	64	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	74	0.45	0.23	6.1	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	128	0.36	0.29	9.3	0.73
	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	173	1.5	0.41	14	<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	199	2.5	0.53	12	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	55	0.23	0.14	3.4	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	110	0.37	0.20	3.8	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	146	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	180	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	73	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	83	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	144	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	140	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	85	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	52	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	122	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	262	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	67	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	36	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	144	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	112	2.0	0.59	290	0.60
	2/5/2015	<0.5	<0.5	20	1.0	<0.5	29	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	50	0.43	0.12	10	<0.50
	5/11/2015	<0.5	2.0	34	1.3	<0.5	17	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	54	0.25	0.15	9.4	1.0
	8/7/2015	<0.5	0.8	23	1.4	<0.5	66	0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	92	1.1	0.42	20	<0.50

APPENDIX C-4

ANALYTICAL RESULTS FOR DETECTED COMPOUNDS[1,2]

FORMER 901/902 THOMPSON PLACE FACILITY

SUNNYVALE, CALIFORNIA

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	Total VOCs [3]	Ethene AM20GAX	Ethane AM20GAX	Methane AM20GAX	TOC EPA 415.2 (mg/L)
DW-7[4]	10/13/2015	<0.5	<0.5	4.2	1.4	<0.5	85	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	91	1.8	0.33	19	<0.50
	2/29/2016	<0.5	90	100	1.1	0.8	6.7	0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.0	199	0.39	0.20	8.8	0.83
	5/11/2016	<0.50	7.6	130	2.1	<0.50	44	0.57	<0.50	<0.50	<0.50	<0.50	0.50	<0.50	<1.0	185	0.42	0.31	36	<1.0
	8/15/2016	<0.50	4.3	120	1.7	<0.50	50	0.56	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	177	0.59 J-	1.3 J-	83 J-	<1.0
	10/12/2016	<0.50	6.7	120	1.4	<0.50	60	0.59	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	189	0.50	0.33	65	<1.0
	2/13/2017	<0.50	0.68	43	0.90	<0.50	12	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	57	0.13	0.14	6.9	<1.0
	06/14/2017	<0.50	80	120	1.1	0.62	22	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	<0.50	<1.0	225	7.7	3.7	1,200	14
	08/21/2017	<0.50	44	140	2.0	0.52	8.4	0.50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<1.0	197	0.27 J	0.14 J	16 J	<1.0
	10/10/2017	<0.50	<0.50	130	1.2	<0.50	20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	151	0.36	0.38	16	<1.0
	02/05/2018	<0.50	6.1	140	1.8	0.60	15	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	164	0.13	0.16	2.7	<1.0
	06/15/2018	<0.50	58	160	3.0	0.63	3.3	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	<0.50	<1.0	227	0.060 J	0.12	36	<1.0
	08/21/2018	<0.50	70	150	2.2	0.81	5.1	0.57	<0.50	<0.50	<0.50	<0.50	2.0	<0.50	<1.0	251	0.064 J	0.12	52	<1.0
	10/09/2018	<0.50	69	130	2.0	0.72	4.3	0.51	<0.50	<0.50	<0.50	<0.50	1.8	<0.50	<1.0	229	0.077 J	0.072 J	11	<1.0
	02/06/2019	<0.50	60	130	1.1	0.54	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<1.0	194	0.017 J	0.065 J	2.1	<1.0
	06/12/2019	<0.50	26	140	2.3	0.58	3.2	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<1.0	173	1.8	0.31	300	<1.0
	08/16/2019	<0.50	41	140	20	<0.50	6.8	0.55	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<1.0	208	0.17	0.11	18	<1.0
	10/17/2019	<0.50	39	160	1.9	0.58	7.0	<0.50	<0.50	<0.50	<0.50	<0.50	0.96	<0.50	<1.0	209	--	--	--	--
	02/06/2020	< 0.50	26	150	1.5	0.50	5.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.78	< 0.50	< 1.0	180	0.087 J	0.13	3.9	< 5.0
	08/26/2020	< 1.0	55	140	1.5	< 1.0	6.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.6	< 1.0	< 2.0	200	< 1.0	< 1.0	31	< 0.50
	10/14/2020	< 1.0	39	120	1.3	< 1.0	6.3	< 1.0	< 1.0	< 1.0	1.1	< 1.0	< 1.0	< 1.0	< 2.0	170	--	--	--	--

Notes:

< = 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

1,2-DCB = 1,2-Dichlorobenzene

1,3-DCB = 1,3-Dichlorobenzene

1,4-DCB = 1,4-Dichlorobenzene

CB = Chlorobenzene

cDCE = cis-1,2-Dichloroethene

CE = Chloroethane

EPA = United States Environmental Protection Agency

Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane

J- = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, but is biased low, based on method blanks, surrogates, quantitation, and/or matrix spikes.

J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

mg/L = Milligrams per liter

PCE = Tetrachloroethene

R = Result is rejected as unusable.

TCE = Trichloroethene

tDCE = trans-1,2-Dichloroethene

TOC = Total organic carbon

U = Analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = 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.

VC = Vinyl chloride

VOC = Volatile organic compound

1. Samples were collected by AMEC Geomatrix, Field Solutions, Inc. or Blaine Tech Services, Inc., or Field Solutions, Inc. of San Jose, California and submitted to Curtis and Tompkins, Ltd. of Berkeley, California, or Eurofins TestAmerica of Pleasanton, California, West Sacramento, California, or Phoenix, Arizona, for VOC and TOC analyses. Ethene, ethane, and methane were analyzed by Microseeps, Inc. or Pace Analytical Energy Services, LLC of Pittsburgh, Pennsylvania.

2. Baseline sampling was conducted on 6 and 7 December 2005.

3. Total VOCs shown on this table refers specifically to the sum of the VOCs displayed on this table. Refer to analytical laboratory reports for a complete list of detected compounds.

4. Well has been used for extraction and/or injection during active in situ bioremediation system operations.

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

APPENDIX D

Laboratory Analytical Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

Laboratory Job ID: 720-100214-1
Client Project/Site: 901/902 Thompson Place
Revision: 2

For:
Haley & Aldrich, Inc.
1956 Webster Street
Suite 300
Oakland, California 94612

Attn: Michael Calhoun

Authorized for release by:
11/3/2020 2:58:56 PM

Lee Ann Heathcote, Project Manager II
(916)374-4333
LeeAnn.Heathcote@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 9
Surrogate Summary 36
QC Sample Results 37
QC Association Summary 48
Lab Chronicle 49
Certification Summary 53
Method Summary 54
Sample Summary 55
Chain of Custody 56
Field Data Sheets 63
Receipt Checklists 64

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 720-100214-1

Laboratory: Eurofins TestAmerica, Pleasanton

Narrative

Job Narrative
720-100214-1

Revision
This report was revised on 11/3/2020 to issue results to the reporting limit (RL).

This report was revised on 10/27/2020 to remove comment from this narrative stating that the Trip Blank had not been received (sample 720-100214-1). It was received and analyzed.

Receipt
The samples were received on 10/14/2020 3:10 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

GC/MS VOA
Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: 27-D (720-100214-8), 1-D (720-100214-9), 36-S (720-100214-11), 16-S (720-100214-13), DW-7 (720-100214-14), 28-D (720-100214-18), 28-S (720-100214-20), 22-DD (720-100214-22), 23-S (720-100214-23), 27-S (720-100214-24), 2-D (720-100214-25), 23-D (720-100214-26) and 3-D (720-100214-27). Elevated reporting limits (RLs) are provided.

Method 8260B: Insufficient sample volume was available to perform a matrix spike / matrix spike duplicate (MS/MSD) associated with analytical batch 320-422375. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8260B: The matrix spike (MS) recoveries for analytical batch 320-423188 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The laboratory control sample (LCS) for analytical batch 320-422370 recovered outside control limits for the following analytes: Bromoform. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: TB-1 — Lab Sample ID: 720-100214-1

No Detections.

Client Sample ID: 53-D — Lab Sample ID: 720-100214-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	8.0		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 35-DDD — Lab Sample ID: 720-100214-3

No Detections.

Client Sample ID: 15-S — Lab Sample ID: 720-100214-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	6.7		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 29-S — Lab Sample ID: 720-100214-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.8		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	14		0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	0.51		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 52-D — Lab Sample ID: 720-100214-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.82		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	16		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 29-D — Lab Sample ID: 720-100214-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.77		0.50	ug/L	1		8260B	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.71		0.50	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.72		0.50	ug/L	1		8260B	Total/NA
1,2,4-Trichlorobenzene	2.2		1.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.9		0.50	ug/L	1		8260B	Total/NA
Tetrachloroethene	2.5		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	58		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 27-D — Lab Sample ID: 720-100214-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	4.3		2.0	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	ug/L	2		8260B	Total/NA
Tetrachloroethene	3.8		1.0	ug/L	2		8260B	Total/NA
Trichloroethene	72		1.0	ug/L	2		8260B	Total/NA

Client Sample ID: 1-D — Lab Sample ID: 720-100214-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	4.6		2.0	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	2.3		1.0	ug/L	2		8260B	Total/NA
Tetrachloroethene	3.6		1.0	ug/L	2		8260B	Total/NA
Trichloroethene	72		1.0	ug/L	2		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 36-D — Lab Sample ID: 720-100214-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	34		0.50	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.78		0.50	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.0		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	28		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 36-S — Lab Sample ID: 720-100214-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	9.6		1.0	ug/L	2		8260B	Total/NA
Tetrachloroethene	1.2		1.0	ug/L	2		8260B	Total/NA
Trichloroethene	49		1.0	ug/L	2		8260B	Total/NA

Client Sample ID: 36-DD — Lab Sample ID: 720-100214-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	16		0.50	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	3.6		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	0.86		0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	6.8		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 16-S — Lab Sample ID: 720-100214-13

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	7.3		1.0	ug/L	2		8260B	Total/NA
1,3-Dichlorobenzene	1.5		1.0	ug/L	2		8260B	Total/NA
1,4-Dichlorobenzene	1.2		1.0	ug/L	2		8260B	Total/NA
Chlorobenzene	8.0		1.0	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	11		1.0	ug/L	2		8260B	Total/NA
Vinyl chloride	55		1.0	ug/L	2		8260B	Total/NA

Client Sample ID: DW-7 — Lab Sample ID: 720-100214-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	1.1		1.0	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	120		1.0	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	1.3		1.0	ug/L	2		8260B	Total/NA
Trichloroethene	39		1.0	ug/L	2		8260B	Total/NA
Vinyl chloride	6.3		1.0	ug/L	2		8260B	Total/NA

Client Sample ID: EB-2 — Lab Sample ID: 720-100214-15

No Detections.

Client Sample ID: 37-S — Lab Sample ID: 720-100214-16

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.2		0.50	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.58		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	35		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: EB-1 — Lab Sample ID: 720-100214-17

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 28-D — Lab Sample ID: 720-100214-18

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	7.6		5.0	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	29		5.0	ug/L	10		8260B	Total/NA
Vinyl chloride	250		5.0	ug/L	10		8260B	Total/NA

Client Sample ID: 27-DD — Lab Sample ID: 720-100214-19

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	1.1		1.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	6.0		0.50	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.94		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	19		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 28-S — Lab Sample ID: 720-100214-20

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	6.0		2.0	ug/L	4		8260B	Total/NA
Chlorobenzene	10		2.0	ug/L	4		8260B	Total/NA
cis-1,2-Dichloroethene	14		2.0	ug/L	4		8260B	Total/NA
Vinyl chloride	150		2.0	ug/L	4		8260B	Total/NA

Client Sample ID: 22-S — Lab Sample ID: 720-100214-21

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	12		0.50	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.57		0.50	ug/L	1		8260B	Total/NA
Chlorobenzene	1.8		0.50	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	32		0.50	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	3.4		0.50	ug/L	1		8260B	Total/NA
Trichloroethene	3.6		0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	16		0.50	ug/L	1		8260B	Total/NA

Client Sample ID: 22-DD — Lab Sample ID: 720-100214-22

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.0		2.0	ug/L	4		8260B	Total/NA
Trichloroethene	130		2.0	ug/L	4		8260B	Total/NA

Client Sample ID: 23-S — Lab Sample ID: 720-100214-23

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	16		1.0	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	62		1.0	ug/L	2		8260B	Total/NA
Tetrachloroethene	1.1		1.0	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	7.2		1.0	ug/L	2		8260B	Total/NA
Trichloroethene	50		1.0	ug/L	2		8260B	Total/NA
Vinyl chloride	13		1.0	ug/L	2		8260B	Total/NA

Client Sample ID: 27-S — Lab Sample ID: 720-100214-24

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	9.6		5.0	ug/L	5		8260B	Total/NA
1,3-Dichlorobenzene	25		2.5	ug/L	5		8260B	Total/NA
1,4-Dichlorobenzene	4.5		2.5	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	250		2.5	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 27-S (Continued) — Lab Sample ID: 720-100214-24

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	12		2.5	ug/L	5		8260B	Total/NA
Trichloroethene	16		2.5	ug/L	5		8260B	Total/NA
Vinyl chloride	19		2.5	ug/L	5		8260B	Total/NA

Client Sample ID: 2-D — Lab Sample ID: 720-100214-25

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	8.6		5.0	ug/L	5		8260B	Total/NA
1,3-Dichlorobenzene	25		2.5	ug/L	5		8260B	Total/NA
1,4-Dichlorobenzene	4.4		2.5	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	250		2.5	ug/L	5		8260B	Total/NA
trans-1,2-Dichloroethene	12		2.5	ug/L	5		8260B	Total/NA
Trichloroethene	13		2.5	ug/L	5		8260B	Total/NA
Vinyl chloride	17		2.5	ug/L	5		8260B	Total/NA

Client Sample ID: 23-D — Lab Sample ID: 720-100214-26

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.5		2.0	ug/L	4		8260B	Total/NA
Trichloroethene	220		2.0	ug/L	4		8260B	Total/NA

Client Sample ID: 3-D — Lab Sample ID: 720-100214-27

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.2		2.5	ug/L	5		8260B	Total/NA
Trichloroethene	280		2.5	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: TB-1

Date Collected: 10/13/20 00:00
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 12:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 12:50	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 12:50	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 12:50	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 12:50	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 12:50	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:50	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 12:50	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 12:50	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:50	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:50	1
Bromoform	ND	*	1.0	ug/L			10/16/20 12:50	1
Bromomethane	ND		1.0	ug/L			10/16/20 12:50	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 12:50	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 12:50	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 12:50	1
Chloroethane	ND		1.0	ug/L			10/16/20 12:50	1
Chloroform	ND		1.0	ug/L			10/16/20 12:50	1
Chloromethane	ND		1.0	ug/L			10/16/20 12:50	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:50	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:50	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 12:50	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 12:50	1
EDB	ND		0.50	ug/L			10/16/20 12:50	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 12:50	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 12:50	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:50	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:50	1
Trichloroethene	ND		0.50	ug/L			10/16/20 12:50	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 12:50	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*72 - 123*		*10/16/20 12:50*	*1*
4-Bromofluorobenzene (Surr)	*112*		*74 - 120*		*10/16/20 12:50*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 123*		*10/16/20 12:50*	*1*
Toluene-d8 (Surr)	*100*		*78 - 120*		*10/16/20 12:50*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 53-D

Date Collected: 10/13/20 09:03
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 13:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 13:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 13:13	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 13:13	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 13:13	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 13:13	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 13:13	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:13	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 13:13	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 13:13	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:13	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:13	1
Bromoform	ND	*	1.0	ug/L			10/16/20 13:13	1
Bromomethane	ND		1.0	ug/L			10/16/20 13:13	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 13:13	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 13:13	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 13:13	1
Chloroethane	ND		1.0	ug/L			10/16/20 13:13	1
Chloroform	ND		1.0	ug/L			10/16/20 13:13	1
Chloromethane	ND		1.0	ug/L			10/16/20 13:13	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 13:13	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:13	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 13:13	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 13:13	1
EDB	ND		0.50	ug/L			10/16/20 13:13	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 13:13	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 13:13	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 13:13	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:13	1
Trichloroethene	**8.0**		0.50	ug/L			10/16/20 13:13	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 13:13	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 123*		*10/16/20 13:13*	*1*
4-Bromofluorobenzene (Surr)	*111*		*74 - 120*		*10/16/20 13:13*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 123*		*10/16/20 13:13*	*1*
Toluene-d8 (Surr)	*102*		*78 - 120*		*10/16/20 13:13*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 35-DDD

Date Collected: 10/13/20 09:08
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 13:37	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 13:37	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 13:37	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 13:37	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 13:37	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 13:37	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:37	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 13:37	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 13:37	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:37	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:37	1
Bromoform	ND	*	1.0	ug/L			10/16/20 13:37	1
Bromomethane	ND		1.0	ug/L			10/16/20 13:37	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 13:37	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 13:37	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 13:37	1
Chloroethane	ND		1.0	ug/L			10/16/20 13:37	1
Chloroform	ND		1.0	ug/L			10/16/20 13:37	1
Chloromethane	ND		1.0	ug/L			10/16/20 13:37	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 13:37	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:37	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 13:37	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 13:37	1
EDB	ND		0.50	ug/L			10/16/20 13:37	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 13:37	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 13:37	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 13:37	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:37	1
Trichloroethene	ND		0.50	ug/L			10/16/20 13:37	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 13:37	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*72 - 123*		*10/16/20 13:37*	*1*
4-Bromofluorobenzene (Surr)	*111*		*74 - 120*		*10/16/20 13:37*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 123*		*10/16/20 13:37*	*1*
Toluene-d8 (Surr)	*103*		*78 - 120*		*10/16/20 13:37*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 15-S

Date Collected: 10/13/20 09:57
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 14:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 14:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 14:00	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 14:00	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 14:00	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 14:00	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 14:00	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:00	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 14:00	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 14:00	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:00	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:00	1
Bromoform	ND	*	1.0	ug/L			10/16/20 14:00	1
Bromomethane	ND		1.0	ug/L			10/16/20 14:00	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 14:00	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 14:00	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 14:00	1
Chloroethane	ND		1.0	ug/L			10/16/20 14:00	1
Chloroform	ND		1.0	ug/L			10/16/20 14:00	1
Chloromethane	ND		1.0	ug/L			10/16/20 14:00	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 14:00	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:00	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 14:00	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 14:00	1
EDB	ND		0.50	ug/L			10/16/20 14:00	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 14:00	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 14:00	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 14:00	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:00	1
Trichloroethene	**6.7**		0.50	ug/L			10/16/20 14:00	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 14:00	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*72 - 123*		*10/16/20 14:00*	*1*
4-Bromofluorobenzene (Surr)	*114*		*74 - 120*		*10/16/20 14:00*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 123*		*10/16/20 14:00*	*1*
Toluene-d8 (Surr)	*100*		*78 - 120*		*10/16/20 14:00*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 29-S

Date Collected: 10/13/20 10:02
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 14:23	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 14:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 14:23	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 14:23	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 14:23	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 14:23	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 14:23	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:23	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 14:23	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 14:23	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:23	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:23	1
Bromoform	ND	*	1.0	ug/L			10/16/20 14:23	1
Bromomethane	ND		1.0	ug/L			10/16/20 14:23	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 14:23	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 14:23	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 14:23	1
Chloroethane	ND		1.0	ug/L			10/16/20 14:23	1
Chloroform	ND		1.0	ug/L			10/16/20 14:23	1
Chloromethane	ND		1.0	ug/L			10/16/20 14:23	1
cis-1,2-Dichloroethene	**3.8**		0.50	ug/L			10/16/20 14:23	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:23	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 14:23	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 14:23	1
EDB	ND		0.50	ug/L			10/16/20 14:23	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 14:23	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 14:23	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 14:23	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:23	1
Trichloroethene	**14**		0.50	ug/L			10/16/20 14:23	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 14:23	1
Vinyl chloride	**0.51**		0.50	ug/L			10/16/20 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 123*		*10/16/20 14:23*	*1*
4-Bromofluorobenzene (Surr)	*111*		*74 - 120*		*10/16/20 14:23*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 123*		*10/16/20 14:23*	*1*
Toluene-d8 (Surr)	*99*		*78 - 120*		*10/16/20 14:23*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 52-D

Date Collected: 10/13/20 10:35
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 14:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 14:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 14:45	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 14:45	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 14:45	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 14:45	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 14:45	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:45	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 14:45	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 14:45	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:45	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:45	1
Bromoform	ND	*	1.0	ug/L			10/16/20 14:45	1
Bromomethane	ND		1.0	ug/L			10/16/20 14:45	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 14:45	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 14:45	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 14:45	1
Chloroethane	ND		1.0	ug/L			10/16/20 14:45	1
Chloroform	ND		1.0	ug/L			10/16/20 14:45	1
Chloromethane	ND		1.0	ug/L			10/16/20 14:45	1
cis-1,2-Dichloroethene	**0.82**		0.50	ug/L			10/16/20 14:45	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:45	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 14:45	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 14:45	1
EDB	ND		0.50	ug/L			10/16/20 14:45	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 14:45	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 14:45	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 14:45	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:45	1
Trichloroethene	**16**		0.50	ug/L			10/16/20 14:45	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 14:45	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*72 - 123*		*10/16/20 14:45*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 120*		*10/16/20 14:45*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 123*		*10/16/20 14:45*	*1*
Toluene-d8 (Surr)	*100*		*78 - 120*		*10/16/20 14:45*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 29-D

Date Collected: 10/13/20 10:40
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.77**		0.50	ug/L			10/16/20 15:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 15:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.71**		0.50	ug/L			10/16/20 15:08	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 15:08	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 15:08	1
1,1-Dichloroethene	**0.72**		0.50	ug/L			10/16/20 15:08	1
1,2,4-Trichlorobenzene	**2.2**		1.0	ug/L			10/16/20 15:08	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 15:08	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 15:08	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 15:08	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 15:08	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 15:08	1
Bromoform	ND	*	1.0	ug/L			10/16/20 15:08	1
Bromomethane	ND		1.0	ug/L			10/16/20 15:08	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 15:08	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 15:08	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 15:08	1
Chloroethane	ND		1.0	ug/L			10/16/20 15:08	1
Chloroform	ND		1.0	ug/L			10/16/20 15:08	1
Chloromethane	ND		1.0	ug/L			10/16/20 15:08	1
cis-1,2-Dichloroethene	**1.9**		0.50	ug/L			10/16/20 15:08	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 15:08	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 15:08	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 15:08	1
EDB	ND		0.50	ug/L			10/16/20 15:08	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 15:08	1
Tetrachloroethene	**2.5**		0.50	ug/L			10/16/20 15:08	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 15:08	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 15:08	1
Trichloroethene	**58**		0.50	ug/L			10/16/20 15:08	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 15:08	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*72 - 123*		*10/16/20 15:08*	*1*
4-Bromofluorobenzene (Surr)	*110*		*74 - 120*		*10/16/20 15:08*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 123*		*10/16/20 15:08*	*1*
Toluene-d8 (Surr)	*100*		*78 - 120*		*10/16/20 15:08*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 27-D

Date Collected: 10/13/20 11:34
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			10/16/20 19:43	2
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			10/16/20 19:43	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			10/16/20 19:43	2
1,1,2-Trichloroethane	ND		1.0	ug/L			10/16/20 19:43	2
1,1-Dichloroethane	ND		1.0	ug/L			10/16/20 19:43	2
1,1-Dichloroethene	ND		1.0	ug/L			10/16/20 19:43	2
1,2,4-Trichlorobenzene	**4.3**		2.0	ug/L			10/16/20 19:43	2
1,2-Dichlorobenzene	ND		1.0	ug/L			10/16/20 19:43	2
1,2-Dichloroethane	ND		1.0	ug/L			10/16/20 19:43	2
1,2-Dichloropropane	ND		1.0	ug/L			10/16/20 19:43	2
1,3-Dichlorobenzene	ND		1.0	ug/L			10/16/20 19:43	2
1,4-Dichlorobenzene	ND		1.0	ug/L			10/16/20 19:43	2
Bromoform	ND	*	2.0	ug/L			10/16/20 19:43	2
Bromomethane	ND		2.0	ug/L			10/16/20 19:43	2
Carbon tetrachloride	ND		1.0	ug/L			10/16/20 19:43	2
Chlorobenzene	ND		1.0	ug/L			10/16/20 19:43	2
Chlorodibromomethane	ND		1.0	ug/L			10/16/20 19:43	2
Chloroethane	ND		2.0	ug/L			10/16/20 19:43	2
Chloroform	ND		2.0	ug/L			10/16/20 19:43	2
Chloromethane	ND		2.0	ug/L			10/16/20 19:43	2
cis-1,2-Dichloroethene	**2.4**		1.0	ug/L			10/16/20 19:43	2
cis-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 19:43	2
Dichlorobromomethane	ND		1.0	ug/L			10/16/20 19:43	2
Dichlorodifluoromethane	ND		2.0	ug/L			10/16/20 19:43	2
EDB	ND		1.0	ug/L			10/16/20 19:43	2
Methylene Chloride	ND		2.0	ug/L			10/16/20 19:43	2
Tetrachloroethene	**3.8**		1.0	ug/L			10/16/20 19:43	2
trans-1,2-Dichloroethene	ND		1.0	ug/L			10/16/20 19:43	2
trans-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 19:43	2
Trichloroethene	**72**		1.0	ug/L			10/16/20 19:43	2
Trichlorofluoromethane	ND		2.0	ug/L			10/16/20 19:43	2
Vinyl chloride	ND		1.0	ug/L			10/16/20 19:43	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*72 - 123*		*10/16/20 19:43*	*2*
4-Bromofluorobenzene (Surr)	*112*		*74 - 120*		*10/16/20 19:43*	*2*
Dibromofluoromethane (Surr)	*106*		*80 - 123*		*10/16/20 19:43*	*2*
Toluene-d8 (Surr)	*103*		*78 - 120*		*10/16/20 19:43*	*2*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 1-D

Date Collected: 10/13/20 11:39
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			10/16/20 15:06	2
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			10/16/20 15:06	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			10/16/20 15:06	2
1,1,2-Trichloroethane	ND		1.0	ug/L			10/16/20 15:06	2
1,1-Dichloroethane	ND		1.0	ug/L			10/16/20 15:06	2
1,1-Dichloroethene	ND		1.0	ug/L			10/16/20 15:06	2
1,2,4-Trichlorobenzene	**4.6**		2.0	ug/L			10/16/20 15:06	2
1,2-Dichlorobenzene	ND		1.0	ug/L			10/16/20 15:06	2
1,2-Dichloroethane	ND		1.0	ug/L			10/16/20 15:06	2
1,2-Dichloropropane	ND		1.0	ug/L			10/16/20 15:06	2
1,3-Dichlorobenzene	ND		1.0	ug/L			10/16/20 15:06	2
1,4-Dichlorobenzene	ND		1.0	ug/L			10/16/20 15:06	2
Bromoform	ND		2.0	ug/L			10/16/20 15:06	2
Bromomethane	ND		2.0	ug/L			10/16/20 15:06	2
Carbon tetrachloride	ND		1.0	ug/L			10/16/20 15:06	2
Chlorobenzene	ND		1.0	ug/L			10/16/20 15:06	2
Chlorodibromomethane	ND		1.0	ug/L			10/16/20 15:06	2
Chloroethane	ND		2.0	ug/L			10/16/20 15:06	2
Chloroform	ND		2.0	ug/L			10/16/20 15:06	2
Chloromethane	ND		2.0	ug/L			10/16/20 15:06	2
cis-1,2-Dichloroethene	**2.3**		1.0	ug/L			10/16/20 15:06	2
cis-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 15:06	2
Dichlorobromomethane	ND		1.0	ug/L			10/16/20 15:06	2
Dichlorodifluoromethane	ND		2.0	ug/L			10/16/20 15:06	2
EDB	ND		1.0	ug/L			10/16/20 15:06	2
Methylene Chloride	ND		2.0	ug/L			10/16/20 15:06	2
Tetrachloroethene	**3.6**		1.0	ug/L			10/16/20 15:06	2
trans-1,2-Dichloroethene	ND		1.0	ug/L			10/16/20 15:06	2
trans-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 15:06	2
Trichloroethene	**72**		1.0	ug/L			10/16/20 15:06	2
Trichlorofluoromethane	ND		2.0	ug/L			10/16/20 15:06	2
Vinyl chloride	ND		1.0	ug/L			10/16/20 15:06	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 123*		*10/16/20 15:06*	*2*
4-Bromofluorobenzene (Surr)	*91*		*74 - 120*		*10/16/20 15:06*	*2*
Dibromofluoromethane (Surr)	*88*		*80 - 123*		*10/16/20 15:06*	*2*
Toluene-d8 (Surr)	*88*		*78 - 120*		*10/16/20 15:06*	*2*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 36-D

Date Collected: 10/13/20 12:10
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 13:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 13:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 13:11	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 13:11	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 13:11	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 13:11	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 13:11	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:11	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 13:11	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 13:11	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:11	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:11	1
Bromoform	ND		1.0	ug/L			10/16/20 13:11	1
Bromomethane	ND		1.0	ug/L			10/16/20 13:11	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 13:11	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 13:11	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 13:11	1
Chloroethane	ND		1.0	ug/L			10/16/20 13:11	1
Chloroform	ND		1.0	ug/L			10/16/20 13:11	1
Chloromethane	ND		1.0	ug/L			10/16/20 13:11	1
cis-1,2-Dichloroethene	**34**		0.50	ug/L			10/16/20 13:11	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:11	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 13:11	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 13:11	1
EDB	ND		0.50	ug/L			10/16/20 13:11	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 13:11	1
Tetrachloroethene	**0.78**		0.50	ug/L			10/16/20 13:11	1
trans-1,2-Dichloroethene	**2.0**		0.50	ug/L			10/16/20 13:11	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:11	1
Trichloroethene	**28**		0.50	ug/L			10/16/20 13:11	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 13:11	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 123*		*10/16/20 13:11*	*1*
4-Bromofluorobenzene (Surr)	*90*		*74 - 120*		*10/16/20 13:11*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 123*		*10/16/20 13:11*	*1*
Toluene-d8 (Surr)	*85*		*78 - 120*		*10/16/20 13:11*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 36-S

Date Collected: 10/13/20 12:38
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			10/16/20 15:30	2
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			10/16/20 15:30	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			10/16/20 15:30	2
1,1,2-Trichloroethane	ND		1.0	ug/L			10/16/20 15:30	2
1,1-Dichloroethane	ND		1.0	ug/L			10/16/20 15:30	2
1,1-Dichloroethene	ND		1.0	ug/L			10/16/20 15:30	2
1,2,4-Trichlorobenzene	ND		2.0	ug/L			10/16/20 15:30	2
1,2-Dichlorobenzene	ND		1.0	ug/L			10/16/20 15:30	2
1,2-Dichloroethane	ND		1.0	ug/L			10/16/20 15:30	2
1,2-Dichloropropane	ND		1.0	ug/L			10/16/20 15:30	2
1,3-Dichlorobenzene	ND		1.0	ug/L			10/16/20 15:30	2
1,4-Dichlorobenzene	ND		1.0	ug/L			10/16/20 15:30	2
Bromoform	ND		2.0	ug/L			10/16/20 15:30	2
Bromomethane	ND		2.0	ug/L			10/16/20 15:30	2
Carbon tetrachloride	ND		1.0	ug/L			10/16/20 15:30	2
Chlorobenzene	ND		1.0	ug/L			10/16/20 15:30	2
Chlorodibromomethane	ND		1.0	ug/L			10/16/20 15:30	2
Chloroethane	ND		2.0	ug/L			10/16/20 15:30	2
Chloroform	ND		2.0	ug/L			10/16/20 15:30	2
Chloromethane	ND		2.0	ug/L			10/16/20 15:30	2
cis-1,2-Dichloroethene	**9.6**		1.0	ug/L			10/16/20 15:30	2
cis-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 15:30	2
Dichlorobromomethane	ND		1.0	ug/L			10/16/20 15:30	2
Dichlorodifluoromethane	ND		2.0	ug/L			10/16/20 15:30	2
EDB	ND		1.0	ug/L			10/16/20 15:30	2
Methylene Chloride	ND		2.0	ug/L			10/16/20 15:30	2
Tetrachloroethene	**1.2**		1.0	ug/L			10/16/20 15:30	2
trans-1,2-Dichloroethene	ND		1.0	ug/L			10/16/20 15:30	2
trans-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 15:30	2
Trichloroethene	**49**		1.0	ug/L			10/16/20 15:30	2
Trichlorofluoromethane	ND		2.0	ug/L			10/16/20 15:30	2
Vinyl chloride	ND		1.0	ug/L			10/16/20 15:30	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 123*		*10/16/20 15:30*	*2*
4-Bromofluorobenzene (Surr)	*91*		*74 - 120*		*10/16/20 15:30*	*2*
Dibromofluoromethane (Surr)	*86*		*80 - 123*		*10/16/20 15:30*	*2*
Toluene-d8 (Surr)	*86*		*78 - 120*		*10/16/20 15:30*	*2*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 36-DD

Date Collected: 10/13/20 13:02
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 13:34	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 13:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 13:34	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 13:34	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 13:34	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 13:34	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 13:34	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:34	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 13:34	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 13:34	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:34	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:34	1
Bromoform	ND		1.0	ug/L			10/16/20 13:34	1
Bromomethane	ND		1.0	ug/L			10/16/20 13:34	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 13:34	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 13:34	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 13:34	1
Chloroethane	ND		1.0	ug/L			10/16/20 13:34	1
Chloroform	ND		1.0	ug/L			10/16/20 13:34	1
Chloromethane	ND		1.0	ug/L			10/16/20 13:34	1
cis-1,2-Dichloroethene	**16**		0.50	ug/L			10/16/20 13:34	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:34	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 13:34	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 13:34	1
EDB	ND		0.50	ug/L			10/16/20 13:34	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 13:34	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 13:34	1
trans-1,2-Dichloroethene	**3.6**		0.50	ug/L			10/16/20 13:34	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:34	1
Trichloroethene	**0.86**		0.50	ug/L			10/16/20 13:34	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 13:34	1
Vinyl chloride	**6.8**		0.50	ug/L			10/16/20 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 123*		*10/16/20 13:34*	*1*
4-Bromofluorobenzene (Surr)	*93*		*74 - 120*		*10/16/20 13:34*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 123*		*10/16/20 13:34*	*1*
Toluene-d8 (Surr)	*87*		*78 - 120*		*10/16/20 13:34*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 16-S

Date Collected: 10/14/20 10:58
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			10/16/20 15:53	2
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			10/16/20 15:53	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			10/16/20 15:53	2
1,1,2-Trichloroethane	ND		1.0	ug/L			10/16/20 15:53	2
1,1-Dichloroethane	ND		1.0	ug/L			10/16/20 15:53	2
1,1-Dichloroethene	ND		1.0	ug/L			10/16/20 15:53	2
1,2,4-Trichlorobenzene	ND		2.0	ug/L			10/16/20 15:53	2
1,2-Dichlorobenzene	**7.3**		1.0	ug/L			10/16/20 15:53	2
1,2-Dichloroethane	ND		1.0	ug/L			10/16/20 15:53	2
1,2-Dichloropropane	ND		1.0	ug/L			10/16/20 15:53	2
1,3-Dichlorobenzene	**1.5**		1.0	ug/L			10/16/20 15:53	2
1,4-Dichlorobenzene	**1.2**		1.0	ug/L			10/16/20 15:53	2
Bromoform	ND		2.0	ug/L			10/16/20 15:53	2
Bromomethane	ND		2.0	ug/L			10/16/20 15:53	2
Carbon tetrachloride	ND		1.0	ug/L			10/16/20 15:53	2
Chlorobenzene	**8.0**		1.0	ug/L			10/16/20 15:53	2
Chlorodibromomethane	ND		1.0	ug/L			10/16/20 15:53	2
Chloroethane	ND		2.0	ug/L			10/16/20 15:53	2
Chloroform	ND		2.0	ug/L			10/16/20 15:53	2
Chloromethane	ND		2.0	ug/L			10/16/20 15:53	2
cis-1,2-Dichloroethene	**11**		1.0	ug/L			10/16/20 15:53	2
cis-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 15:53	2
Dichlorobromomethane	ND		1.0	ug/L			10/16/20 15:53	2
Dichlorodifluoromethane	ND		2.0	ug/L			10/16/20 15:53	2
EDB	ND		1.0	ug/L			10/16/20 15:53	2
Methylene Chloride	ND		2.0	ug/L			10/16/20 15:53	2
Tetrachloroethene	ND		1.0	ug/L			10/16/20 15:53	2
trans-1,2-Dichloroethene	ND		1.0	ug/L			10/16/20 15:53	2
trans-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 15:53	2
Trichloroethene	ND		1.0	ug/L			10/16/20 15:53	2
Trichlorofluoromethane	ND		2.0	ug/L			10/16/20 15:53	2
Vinyl chloride	**55**		1.0	ug/L			10/16/20 15:53	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 123*		*10/16/20 15:53*	*2*
4-Bromofluorobenzene (Surr)	*92*		*74 - 120*		*10/16/20 15:53*	*2*
Dibromofluoromethane (Surr)	*88*		*80 - 123*		*10/16/20 15:53*	*2*
Toluene-d8 (Surr)	*89*		*78 - 120*		*10/16/20 15:53*	*2*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: DW-7

Date Collected: 10/14/20 11:26
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-14

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			10/16/20 16:16	2
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			10/16/20 16:16	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			10/16/20 16:16	2
1,1,2-Trichloroethane	ND		1.0	ug/L			10/16/20 16:16	2
1,1-Dichloroethane	ND		1.0	ug/L			10/16/20 16:16	2
1,1-Dichloroethene	ND		1.0	ug/L			10/16/20 16:16	2
1,2,4-Trichlorobenzene	ND		2.0	ug/L			10/16/20 16:16	2
1,2-Dichlorobenzene	ND		1.0	ug/L			10/16/20 16:16	2
1,2-Dichloroethane	ND		1.0	ug/L			10/16/20 16:16	2
1,2-Dichloropropane	ND		1.0	ug/L			10/16/20 16:16	2
1,3-Dichlorobenzene	**1.1**		1.0	ug/L			10/16/20 16:16	2
1,4-Dichlorobenzene	ND		1.0	ug/L			10/16/20 16:16	2
Bromoform	ND		2.0	ug/L			10/16/20 16:16	2
Bromomethane	ND		2.0	ug/L			10/16/20 16:16	2
Carbon tetrachloride	ND		1.0	ug/L			10/16/20 16:16	2
Chlorobenzene	ND		1.0	ug/L			10/16/20 16:16	2
Chlorodibromomethane	ND		1.0	ug/L			10/16/20 16:16	2
Chloroethane	ND		2.0	ug/L			10/16/20 16:16	2
Chloroform	ND		2.0	ug/L			10/16/20 16:16	2
Chloromethane	ND		2.0	ug/L			10/16/20 16:16	2
cis-1,2-Dichloroethene	**120**		1.0	ug/L			10/16/20 16:16	2
cis-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 16:16	2
Dichlorobromomethane	ND		1.0	ug/L			10/16/20 16:16	2
Dichlorodifluoromethane	ND		2.0	ug/L			10/16/20 16:16	2
EDB	ND		1.0	ug/L			10/16/20 16:16	2
Methylene Chloride	ND		2.0	ug/L			10/16/20 16:16	2
Tetrachloroethene	ND		1.0	ug/L			10/16/20 16:16	2
trans-1,2-Dichloroethene	**1.3**		1.0	ug/L			10/16/20 16:16	2
trans-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 16:16	2
Trichloroethene	**39**		1.0	ug/L			10/16/20 16:16	2
Trichlorofluoromethane	ND		2.0	ug/L			10/16/20 16:16	2
Vinyl chloride	**6.3**		1.0	ug/L			10/16/20 16:16	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*72 - 123*		*10/16/20 16:16*	*2*
4-Bromofluorobenzene (Surr)	*92*		*74 - 120*		*10/16/20 16:16*	*2*
Dibromofluoromethane (Surr)	*86*		*80 - 123*		*10/16/20 16:16*	*2*
Toluene-d8 (Surr)	*85*		*78 - 120*		*10/16/20 16:16*	*2*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: EB-2

Date Collected: 10/14/20 11:35
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 12:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 12:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 12:25	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 12:25	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 12:25	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 12:25	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 12:25	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:25	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 12:25	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 12:25	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:25	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:25	1
Bromoform	ND		1.0	ug/L			10/16/20 12:25	1
Bromomethane	ND		1.0	ug/L			10/16/20 12:25	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 12:25	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 12:25	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 12:25	1
Chloroethane	ND		1.0	ug/L			10/16/20 12:25	1
Chloroform	ND		1.0	ug/L			10/16/20 12:25	1
Chloromethane	ND		1.0	ug/L			10/16/20 12:25	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:25	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:25	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 12:25	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 12:25	1
EDB	ND		0.50	ug/L			10/16/20 12:25	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 12:25	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 12:25	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:25	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:25	1
Trichloroethene	ND		0.50	ug/L			10/16/20 12:25	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 12:25	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 123*		*10/16/20 12:25*	*1*
4-Bromofluorobenzene (Surr)	*90*		*74 - 120*		*10/16/20 12:25*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 123*		*10/16/20 12:25*	*1*
Toluene-d8 (Surr)	*85*		*78 - 120*		*10/16/20 12:25*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 37-S

Date Collected: 10/13/20 13:11
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-16

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 13:57	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 13:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 13:57	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 13:57	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 13:57	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 13:57	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 13:57	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:57	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 13:57	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 13:57	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:57	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 13:57	1
Bromoform	ND		1.0	ug/L			10/16/20 13:57	1
Bromomethane	ND		1.0	ug/L			10/16/20 13:57	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 13:57	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 13:57	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 13:57	1
Chloroethane	ND		1.0	ug/L			10/16/20 13:57	1
Chloroform	ND		1.0	ug/L			10/16/20 13:57	1
Chloromethane	ND		1.0	ug/L			10/16/20 13:57	1
cis-1,2-Dichloroethene	**4.2**		0.50	ug/L			10/16/20 13:57	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:57	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 13:57	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 13:57	1
EDB	ND		0.50	ug/L			10/16/20 13:57	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 13:57	1
Tetrachloroethene	**0.58**		0.50	ug/L			10/16/20 13:57	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 13:57	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 13:57	1
Trichloroethene	**35**		0.50	ug/L			10/16/20 13:57	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 13:57	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 123*		*10/16/20 13:57*	*1*
4-Bromofluorobenzene (Surr)	*90*		*74 - 120*		*10/16/20 13:57*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 123*		*10/16/20 13:57*	*1*
Toluene-d8 (Surr)	*85*		*78 - 120*		*10/16/20 13:57*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: EB-1

Lab Sample ID: 720-100214-17

Date Collected: 10/13/20 13:30
Date Received: 10/14/20 15:10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 12:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 12:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 12:48	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 12:48	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 12:48	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 12:48	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 12:48	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:48	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 12:48	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 12:48	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:48	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:48	1
Bromoform	ND		1.0	ug/L			10/16/20 12:48	1
Bromomethane	ND		1.0	ug/L			10/16/20 12:48	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 12:48	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 12:48	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 12:48	1
Chloroethane	ND		1.0	ug/L			10/16/20 12:48	1
Chloroform	ND		1.0	ug/L			10/16/20 12:48	1
Chloromethane	ND		1.0	ug/L			10/16/20 12:48	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:48	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:48	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 12:48	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 12:48	1
EDB	ND		0.50	ug/L			10/16/20 12:48	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 12:48	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 12:48	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:48	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:48	1
Trichloroethene	ND		0.50	ug/L			10/16/20 12:48	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 12:48	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 123*		*10/16/20 12:48*	*1*
4-Bromofluorobenzene (Surr)	*93*		*74 - 120*		*10/16/20 12:48*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 123*		*10/16/20 12:48*	*1*
Toluene-d8 (Surr)	*84*		*78 - 120*		*10/16/20 12:48*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 28-D

Date Collected: 10/13/20 13:36
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-18

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	ug/L			10/19/20 17:27	10
1,1,2,2-Tetrachloroethane	ND		5.0	ug/L			10/19/20 17:27	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			10/19/20 17:27	10
1,1,2-Trichloroethane	ND		5.0	ug/L			10/19/20 17:27	10
1,1-Dichloroethane	ND		5.0	ug/L			10/19/20 17:27	10
1,1-Dichloroethene	ND		5.0	ug/L			10/19/20 17:27	10
1,2,4-Trichlorobenzene	ND		10	ug/L			10/19/20 17:27	10
1,2-Dichlorobenzene	ND		5.0	ug/L			10/19/20 17:27	10
1,2-Dichloroethane	ND		5.0	ug/L			10/19/20 17:27	10
1,2-Dichloropropane	ND		5.0	ug/L			10/19/20 17:27	10
1,3-Dichlorobenzene	ND		5.0	ug/L			10/19/20 17:27	10
1,4-Dichlorobenzene	ND		5.0	ug/L			10/19/20 17:27	10
Bromoform	ND		10	ug/L			10/19/20 17:27	10
Bromomethane	ND		10	ug/L			10/19/20 17:27	10
Carbon tetrachloride	ND		5.0	ug/L			10/19/20 17:27	10
Chlorobenzene	**7.6**		5.0	ug/L			10/19/20 17:27	10
Chlorodibromomethane	ND		5.0	ug/L			10/19/20 17:27	10
Chloroethane	ND		10	ug/L			10/19/20 17:27	10
Chloroform	ND		10	ug/L			10/19/20 17:27	10
Chloromethane	ND		10	ug/L			10/19/20 17:27	10
cis-1,2-Dichloroethene	**29**		5.0	ug/L			10/19/20 17:27	10
cis-1,3-Dichloropropene	ND		5.0	ug/L			10/19/20 17:27	10
Dichlorobromomethane	ND		5.0	ug/L			10/19/20 17:27	10
Dichlorodifluoromethane	ND		10	ug/L			10/19/20 17:27	10
EDB	ND		5.0	ug/L			10/19/20 17:27	10
Methylene Chloride	ND		10	ug/L			10/19/20 17:27	10
Tetrachloroethene	ND		5.0	ug/L			10/19/20 17:27	10
trans-1,2-Dichloroethene	ND		5.0	ug/L			10/19/20 17:27	10
trans-1,3-Dichloropropene	ND		5.0	ug/L			10/19/20 17:27	10
Trichloroethene	ND		5.0	ug/L			10/19/20 17:27	10
Trichlorofluoromethane	ND		10	ug/L			10/19/20 17:27	10
Vinyl chloride	**250**		5.0	ug/L			10/19/20 17:27	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 123*		*10/19/20 17:27*	*10*
4-Bromofluorobenzene (Surr)	*110*		*74 - 120*		*10/19/20 17:27*	*10*
Dibromofluoromethane (Surr)	*97*		*80 - 123*		*10/19/20 17:27*	*10*
Toluene-d8 (Surr)	*92*		*78 - 120*		*10/19/20 17:27*	*10*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 27-DD

Date Collected: 10/14/20 08:38
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-19

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 14:20	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 14:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 14:20	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 14:20	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 14:20	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 14:20	1
1,2,4-Trichlorobenzene	**1.1**		1.0	ug/L			10/16/20 14:20	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:20	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 14:20	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 14:20	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:20	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:20	1
Bromoform	ND		1.0	ug/L			10/16/20 14:20	1
Bromomethane	ND		1.0	ug/L			10/16/20 14:20	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 14:20	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 14:20	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 14:20	1
Chloroethane	ND		1.0	ug/L			10/16/20 14:20	1
Chloroform	ND		1.0	ug/L			10/16/20 14:20	1
Chloromethane	ND		1.0	ug/L			10/16/20 14:20	1
cis-1,2-Dichloroethene	**6.0**		0.50	ug/L			10/16/20 14:20	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:20	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 14:20	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 14:20	1
EDB	ND		0.50	ug/L			10/16/20 14:20	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 14:20	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 14:20	1
trans-1,2-Dichloroethene	**0.94**		0.50	ug/L			10/16/20 14:20	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:20	1
Trichloroethene	**19**		0.50	ug/L			10/16/20 14:20	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 14:20	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 123*		*10/16/20 14:20*	*1*
4-Bromofluorobenzene (Surr)	*91*		*74 - 120*		*10/16/20 14:20*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 123*		*10/16/20 14:20*	*1*
Toluene-d8 (Surr)	*88*		*78 - 120*		*10/16/20 14:20*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 28-S

Date Collected: 10/14/20 09:20
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	ug/L			10/16/20 17:03	4
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			10/16/20 17:03	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ug/L			10/16/20 17:03	4
1,1,2-Trichloroethane	ND		2.0	ug/L			10/16/20 17:03	4
1,1-Dichloroethane	ND		2.0	ug/L			10/16/20 17:03	4
1,1-Dichloroethene	ND		2.0	ug/L			10/16/20 17:03	4
1,2,4-Trichlorobenzene	ND		4.0	ug/L			10/16/20 17:03	4
1,2-Dichlorobenzene	**6.0**		2.0	ug/L			10/16/20 17:03	4
1,2-Dichloroethane	ND		2.0	ug/L			10/16/20 17:03	4
1,2-Dichloropropane	ND		2.0	ug/L			10/16/20 17:03	4
1,3-Dichlorobenzene	ND		2.0	ug/L			10/16/20 17:03	4
1,4-Dichlorobenzene	ND		2.0	ug/L			10/16/20 17:03	4
Bromoform	ND		4.0	ug/L			10/16/20 17:03	4
Bromomethane	ND		4.0	ug/L			10/16/20 17:03	4
Carbon tetrachloride	ND		2.0	ug/L			10/16/20 17:03	4
Chlorobenzene	**10**		2.0	ug/L			10/16/20 17:03	4
Chlorodibromomethane	ND		2.0	ug/L			10/16/20 17:03	4
Chloroethane	ND		4.0	ug/L			10/16/20 17:03	4
Chloroform	ND		4.0	ug/L			10/16/20 17:03	4
Chloromethane	ND		4.0	ug/L			10/16/20 17:03	4
cis-1,2-Dichloroethene	**14**		2.0	ug/L			10/16/20 17:03	4
cis-1,3-Dichloropropene	ND		2.0	ug/L			10/16/20 17:03	4
Dichlorobromomethane	ND		2.0	ug/L			10/16/20 17:03	4
Dichlorodifluoromethane	ND		4.0	ug/L			10/16/20 17:03	4
EDB	ND		2.0	ug/L			10/16/20 17:03	4
Methylene Chloride	ND		4.0	ug/L			10/16/20 17:03	4
Tetrachloroethene	ND		2.0	ug/L			10/16/20 17:03	4
trans-1,2-Dichloroethene	ND		2.0	ug/L			10/16/20 17:03	4
trans-1,3-Dichloropropene	ND		2.0	ug/L			10/16/20 17:03	4
Trichloroethene	ND		2.0	ug/L			10/16/20 17:03	4
Trichlorofluoromethane	ND		4.0	ug/L			10/16/20 17:03	4
Vinyl chloride	**150**		2.0	ug/L			10/16/20 17:03	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 123*		*10/16/20 17:03*	*4*
4-Bromofluorobenzene (Surr)	*92*		*74 - 120*		*10/16/20 17:03*	*4*
Dibromofluoromethane (Surr)	*87*		*80 - 123*		*10/16/20 17:03*	*4*
Toluene-d8 (Surr)	*87*		*78 - 120*		*10/16/20 17:03*	*4*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 22-S

Date Collected: 10/14/20 09:17
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-21

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 14:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 14:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 14:43	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 14:43	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 14:43	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 14:43	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 14:43	1
1,2-Dichlorobenzene	**12**		0.50	ug/L			10/16/20 14:43	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 14:43	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 14:43	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 14:43	1
1,4-Dichlorobenzene	**0.57**		0.50	ug/L			10/16/20 14:43	1
Bromoform	ND		1.0	ug/L			10/16/20 14:43	1
Bromomethane	ND		1.0	ug/L			10/16/20 14:43	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 14:43	1
Chlorobenzene	**1.8**		0.50	ug/L			10/16/20 14:43	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 14:43	1
Chloroethane	ND		1.0	ug/L			10/16/20 14:43	1
Chloroform	ND		1.0	ug/L			10/16/20 14:43	1
Chloromethane	ND		1.0	ug/L			10/16/20 14:43	1
cis-1,2-Dichloroethene	**32**		0.50	ug/L			10/16/20 14:43	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:43	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 14:43	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 14:43	1
EDB	ND		0.50	ug/L			10/16/20 14:43	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 14:43	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 14:43	1
trans-1,2-Dichloroethene	**3.4**		0.50	ug/L			10/16/20 14:43	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 14:43	1
Trichloroethene	**3.6**		0.50	ug/L			10/16/20 14:43	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 14:43	1
Vinyl chloride	**16**		0.50	ug/L			10/16/20 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 123*		*10/16/20 14:43*	*1*
4-Bromofluorobenzene (Surr)	*94*		*74 - 120*		*10/16/20 14:43*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 123*		*10/16/20 14:43*	*1*
Toluene-d8 (Surr)	*88*		*78 - 120*		*10/16/20 14:43*	*1*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 22-DD

Date Collected: 10/14/20 09:44
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-22

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	ug/L			10/16/20 17:26	4
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			10/16/20 17:26	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ug/L			10/16/20 17:26	4
1,1,2-Trichloroethane	ND		2.0	ug/L			10/16/20 17:26	4
1,1-Dichloroethane	ND		2.0	ug/L			10/16/20 17:26	4
1,1-Dichloroethene	ND		2.0	ug/L			10/16/20 17:26	4
1,2,4-Trichlorobenzene	ND		4.0	ug/L			10/16/20 17:26	4
1,2-Dichlorobenzene	ND		2.0	ug/L			10/16/20 17:26	4
1,2-Dichloroethane	ND		2.0	ug/L			10/16/20 17:26	4
1,2-Dichloropropane	ND		2.0	ug/L			10/16/20 17:26	4
1,3-Dichlorobenzene	ND		2.0	ug/L			10/16/20 17:26	4
1,4-Dichlorobenzene	ND		2.0	ug/L			10/16/20 17:26	4
Bromoform	ND		4.0	ug/L			10/16/20 17:26	4
Bromomethane	ND		4.0	ug/L			10/16/20 17:26	4
Carbon tetrachloride	ND		2.0	ug/L			10/16/20 17:26	4
Chlorobenzene	ND		2.0	ug/L			10/16/20 17:26	4
Chlorodibromomethane	ND		2.0	ug/L			10/16/20 17:26	4
Chloroethane	ND		4.0	ug/L			10/16/20 17:26	4
Chloroform	ND		4.0	ug/L			10/16/20 17:26	4
Chloromethane	ND		4.0	ug/L			10/16/20 17:26	4
cis-1,2-Dichloroethene	**5.0**		2.0	ug/L			10/16/20 17:26	4
cis-1,3-Dichloropropene	ND		2.0	ug/L			10/16/20 17:26	4
Dichlorobromomethane	ND		2.0	ug/L			10/16/20 17:26	4
Dichlorodifluoromethane	ND		4.0	ug/L			10/16/20 17:26	4
EDB	ND		2.0	ug/L			10/16/20 17:26	4
Methylene Chloride	ND		4.0	ug/L			10/16/20 17:26	4
Tetrachloroethene	ND		2.0	ug/L			10/16/20 17:26	4
trans-1,2-Dichloroethene	ND		2.0	ug/L			10/16/20 17:26	4
trans-1,3-Dichloropropene	ND		2.0	ug/L			10/16/20 17:26	4
Trichloroethene	**130**		2.0	ug/L			10/16/20 17:26	4
Trichlorofluoromethane	ND		4.0	ug/L			10/16/20 17:26	4
Vinyl chloride	ND		2.0	ug/L			10/16/20 17:26	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 123*		*10/16/20 17:26*	*4*
4-Bromofluorobenzene (Surr)	*91*		*74 - 120*		*10/16/20 17:26*	*4*
Dibromofluoromethane (Surr)	*87*		*80 - 123*		*10/16/20 17:26*	*4*
Toluene-d8 (Surr)	*89*		*78 - 120*		*10/16/20 17:26*	*4*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 23-S

Date Collected: 10/14/20 10:17
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-23

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			10/16/20 16:40	2
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			10/16/20 16:40	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			10/16/20 16:40	2
1,1,2-Trichloroethane	ND		1.0	ug/L			10/16/20 16:40	2
1,1-Dichloroethane	ND		1.0	ug/L			10/16/20 16:40	2
1,1-Dichloroethene	ND		1.0	ug/L			10/16/20 16:40	2
1,2,4-Trichlorobenzene	ND		2.0	ug/L			10/16/20 16:40	2
1,2-Dichlorobenzene	**16**		1.0	ug/L			10/16/20 16:40	2
1,2-Dichloroethane	ND		1.0	ug/L			10/16/20 16:40	2
1,2-Dichloropropane	ND		1.0	ug/L			10/16/20 16:40	2
1,3-Dichlorobenzene	ND		1.0	ug/L			10/16/20 16:40	2
1,4-Dichlorobenzene	ND		1.0	ug/L			10/16/20 16:40	2
Bromoform	ND		2.0	ug/L			10/16/20 16:40	2
Bromomethane	ND		2.0	ug/L			10/16/20 16:40	2
Carbon tetrachloride	ND		1.0	ug/L			10/16/20 16:40	2
Chlorobenzene	ND		1.0	ug/L			10/16/20 16:40	2
Chlorodibromomethane	ND		1.0	ug/L			10/16/20 16:40	2
Chloroethane	ND		2.0	ug/L			10/16/20 16:40	2
Chloroform	ND		2.0	ug/L			10/16/20 16:40	2
Chloromethane	ND		2.0	ug/L			10/16/20 16:40	2
cis-1,2-Dichloroethene	**62**		1.0	ug/L			10/16/20 16:40	2
cis-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 16:40	2
Dichlorobromomethane	ND		1.0	ug/L			10/16/20 16:40	2
Dichlorodifluoromethane	ND		2.0	ug/L			10/16/20 16:40	2
EDB	ND		1.0	ug/L			10/16/20 16:40	2
Methylene Chloride	ND		2.0	ug/L			10/16/20 16:40	2
Tetrachloroethene	**1.1**		1.0	ug/L			10/16/20 16:40	2
trans-1,2-Dichloroethene	**7.2**		1.0	ug/L			10/16/20 16:40	2
trans-1,3-Dichloropropene	ND		1.0	ug/L			10/16/20 16:40	2
Trichloroethene	**50**		1.0	ug/L			10/16/20 16:40	2
Trichlorofluoromethane	ND		2.0	ug/L			10/16/20 16:40	2
Vinyl chloride	**13**		1.0	ug/L			10/16/20 16:40	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 123*		*10/16/20 16:40*	*2*
4-Bromofluorobenzene (Surr)	*92*		*74 - 120*		*10/16/20 16:40*	*2*
Dibromofluoromethane (Surr)	*86*		*80 - 123*		*10/16/20 16:40*	*2*
Toluene-d8 (Surr)	*87*		*78 - 120*		*10/16/20 16:40*	*2*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 27-S

Date Collected: 10/14/20 10:08
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-24

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.5	ug/L			10/16/20 18:35	5
1,1,2,2-Tetrachloroethane	ND		2.5	ug/L			10/16/20 18:35	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	ug/L			10/16/20 18:35	5
1,1,2-Trichloroethane	ND		2.5	ug/L			10/16/20 18:35	5
1,1-Dichloroethane	ND		2.5	ug/L			10/16/20 18:35	5
1,1-Dichloroethene	ND		2.5	ug/L			10/16/20 18:35	5
1,2,4-Trichlorobenzene	**9.6**		5.0	ug/L			10/16/20 18:35	5
1,2-Dichlorobenzene	ND		2.5	ug/L			10/16/20 18:35	5
1,2-Dichloroethane	ND		2.5	ug/L			10/16/20 18:35	5
1,2-Dichloropropane	ND		2.5	ug/L			10/16/20 18:35	5
1,3-Dichlorobenzene	**25**		2.5	ug/L			10/16/20 18:35	5
1,4-Dichlorobenzene	**4.5**		2.5	ug/L			10/16/20 18:35	5
Bromoform	ND		5.0	ug/L			10/16/20 18:35	5
Bromomethane	ND		5.0	ug/L			10/16/20 18:35	5
Carbon tetrachloride	ND		2.5	ug/L			10/16/20 18:35	5
Chlorobenzene	ND		2.5	ug/L			10/16/20 18:35	5
Chlorodibromomethane	ND		2.5	ug/L			10/16/20 18:35	5
Chloroethane	ND		5.0	ug/L			10/16/20 18:35	5
Chloroform	ND		5.0	ug/L			10/16/20 18:35	5
Chloromethane	ND		5.0	ug/L			10/16/20 18:35	5
cis-1,2-Dichloroethene	**250**		2.5	ug/L			10/16/20 18:35	5
cis-1,3-Dichloropropene	ND		2.5	ug/L			10/16/20 18:35	5
Dichlorobromomethane	ND		2.5	ug/L			10/16/20 18:35	5
Dichlorodifluoromethane	ND		5.0	ug/L			10/16/20 18:35	5
EDB	ND		2.5	ug/L			10/16/20 18:35	5
Methylene Chloride	ND		5.0	ug/L			10/16/20 18:35	5
Tetrachloroethene	ND		2.5	ug/L			10/16/20 18:35	5
trans-1,2-Dichloroethene	**12**		2.5	ug/L			10/16/20 18:35	5
trans-1,3-Dichloropropene	ND		2.5	ug/L			10/16/20 18:35	5
Trichloroethene	**16**		2.5	ug/L			10/16/20 18:35	5
Trichlorofluoromethane	ND		5.0	ug/L			10/16/20 18:35	5
Vinyl chloride	**19**		2.5	ug/L			10/16/20 18:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 123*		*10/16/20 18:35*	*5*
4-Bromofluorobenzene (Surr)	*91*		*74 - 120*		*10/16/20 18:35*	*5*
Dibromofluoromethane (Surr)	*90*		*80 - 123*		*10/16/20 18:35*	*5*
Toluene-d8 (Surr)	*86*		*78 - 120*		*10/16/20 18:35*	*5*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 2-D

Date Collected: 10/14/20 10:13
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-25

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.5	ug/L			10/16/20 18:58	5
1,1,2,2-Tetrachloroethane	ND		2.5	ug/L			10/16/20 18:58	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	ug/L			10/16/20 18:58	5
1,1,2-Trichloroethane	ND		2.5	ug/L			10/16/20 18:58	5
1,1-Dichloroethane	ND		2.5	ug/L			10/16/20 18:58	5
1,1-Dichloroethene	ND		2.5	ug/L			10/16/20 18:58	5
1,2,4-Trichlorobenzene	**8.6**		5.0	ug/L			10/16/20 18:58	5
1,2-Dichlorobenzene	ND		2.5	ug/L			10/16/20 18:58	5
1,2-Dichloroethane	ND		2.5	ug/L			10/16/20 18:58	5
1,2-Dichloropropane	ND		2.5	ug/L			10/16/20 18:58	5
1,3-Dichlorobenzene	**25**		2.5	ug/L			10/16/20 18:58	5
1,4-Dichlorobenzene	**4.4**		2.5	ug/L			10/16/20 18:58	5
Bromoform	ND		5.0	ug/L			10/16/20 18:58	5
Bromomethane	ND		5.0	ug/L			10/16/20 18:58	5
Carbon tetrachloride	ND		2.5	ug/L			10/16/20 18:58	5
Chlorobenzene	ND		2.5	ug/L			10/16/20 18:58	5
Chlorodibromomethane	ND		2.5	ug/L			10/16/20 18:58	5
Chloroethane	ND		5.0	ug/L			10/16/20 18:58	5
Chloroform	ND		5.0	ug/L			10/16/20 18:58	5
Chloromethane	ND		5.0	ug/L			10/16/20 18:58	5
cis-1,2-Dichloroethene	**250**		2.5	ug/L			10/16/20 18:58	5
cis-1,3-Dichloropropene	ND		2.5	ug/L			10/16/20 18:58	5
Dichlorobromomethane	ND		2.5	ug/L			10/16/20 18:58	5
Dichlorodifluoromethane	ND		5.0	ug/L			10/16/20 18:58	5
EDB	ND		2.5	ug/L			10/16/20 18:58	5
Methylene Chloride	ND		5.0	ug/L			10/16/20 18:58	5
Tetrachloroethene	ND		2.5	ug/L			10/16/20 18:58	5
trans-1,2-Dichloroethene	**12**		2.5	ug/L			10/16/20 18:58	5
trans-1,3-Dichloropropene	ND		2.5	ug/L			10/16/20 18:58	5
Trichloroethene	**13**		2.5	ug/L			10/16/20 18:58	5
Trichlorofluoromethane	ND		5.0	ug/L			10/16/20 18:58	5
Vinyl chloride	**17**		2.5	ug/L			10/16/20 18:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 123*		*10/16/20 18:58*	*5*
4-Bromofluorobenzene (Surr)	*90*		*74 - 120*		*10/16/20 18:58*	*5*
Dibromofluoromethane (Surr)	*92*		*80 - 123*		*10/16/20 18:58*	*5*
Toluene-d8 (Surr)	*85*		*78 - 120*		*10/16/20 18:58*	*5*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 23-D

Date Collected: 10/14/20 10:43
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-26

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	ug/L			10/16/20 17:49	4
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			10/16/20 17:49	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	ug/L			10/16/20 17:49	4
1,1,2-Trichloroethane	ND		2.0	ug/L			10/16/20 17:49	4
1,1-Dichloroethane	ND		2.0	ug/L			10/16/20 17:49	4
1,1-Dichloroethene	ND		2.0	ug/L			10/16/20 17:49	4
1,2,4-Trichlorobenzene	ND		4.0	ug/L			10/16/20 17:49	4
1,2-Dichlorobenzene	ND		2.0	ug/L			10/16/20 17:49	4
1,2-Dichloroethane	ND		2.0	ug/L			10/16/20 17:49	4
1,2-Dichloropropane	ND		2.0	ug/L			10/16/20 17:49	4
1,3-Dichlorobenzene	ND		2.0	ug/L			10/16/20 17:49	4
1,4-Dichlorobenzene	ND		2.0	ug/L			10/16/20 17:49	4
Bromoform	ND		4.0	ug/L			10/16/20 17:49	4
Bromomethane	ND		4.0	ug/L			10/16/20 17:49	4
Carbon tetrachloride	ND		2.0	ug/L			10/16/20 17:49	4
Chlorobenzene	ND		2.0	ug/L			10/16/20 17:49	4
Chlorodibromomethane	ND		2.0	ug/L			10/16/20 17:49	4
Chloroethane	ND		4.0	ug/L			10/16/20 17:49	4
Chloroform	ND		4.0	ug/L			10/16/20 17:49	4
Chloromethane	ND		4.0	ug/L			10/16/20 17:49	4
cis-1,2-Dichloroethene	**3.5**		2.0	ug/L			10/16/20 17:49	4
cis-1,3-Dichloropropene	ND		2.0	ug/L			10/16/20 17:49	4
Dichlorobromomethane	ND		2.0	ug/L			10/16/20 17:49	4
Dichlorodifluoromethane	ND		4.0	ug/L			10/16/20 17:49	4
EDB	ND		2.0	ug/L			10/16/20 17:49	4
Methylene Chloride	ND		4.0	ug/L			10/16/20 17:49	4
Tetrachloroethene	ND		2.0	ug/L			10/16/20 17:49	4
trans-1,2-Dichloroethene	ND		2.0	ug/L			10/16/20 17:49	4
trans-1,3-Dichloropropene	ND		2.0	ug/L			10/16/20 17:49	4
Trichloroethene	**220**		2.0	ug/L			10/16/20 17:49	4
Trichlorofluoromethane	ND		4.0	ug/L			10/16/20 17:49	4
Vinyl chloride	ND		2.0	ug/L			10/16/20 17:49	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 123*		*10/16/20 17:49*	*4*
4-Bromofluorobenzene (Surr)	*90*		*74 - 120*		*10/16/20 17:49*	*4*
Dibromofluoromethane (Surr)	*88*		*80 - 123*		*10/16/20 17:49*	*4*
Toluene-d8 (Surr)	*87*		*78 - 120*		*10/16/20 17:49*	*4*

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 3-D

Date Collected: 10/14/20 10:48
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-27

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.5	ug/L			10/16/20 18:12	5
1,1,2,2-Tetrachloroethane	ND		2.5	ug/L			10/16/20 18:12	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	ug/L			10/16/20 18:12	5
1,1,2-Trichloroethane	ND		2.5	ug/L			10/16/20 18:12	5
1,1-Dichloroethane	ND		2.5	ug/L			10/16/20 18:12	5
1,1-Dichloroethene	ND		2.5	ug/L			10/16/20 18:12	5
1,2,4-Trichlorobenzene	ND		5.0	ug/L			10/16/20 18:12	5
1,2-Dichlorobenzene	ND		2.5	ug/L			10/16/20 18:12	5
1,2-Dichloroethane	ND		2.5	ug/L			10/16/20 18:12	5
1,2-Dichloropropane	ND		2.5	ug/L			10/16/20 18:12	5
1,3-Dichlorobenzene	ND		2.5	ug/L			10/16/20 18:12	5
1,4-Dichlorobenzene	ND		2.5	ug/L			10/16/20 18:12	5
Bromoform	ND		5.0	ug/L			10/16/20 18:12	5
Bromomethane	ND		5.0	ug/L			10/16/20 18:12	5
Carbon tetrachloride	ND		2.5	ug/L			10/16/20 18:12	5
Chlorobenzene	ND		2.5	ug/L			10/16/20 18:12	5
Chlorodibromomethane	ND		2.5	ug/L			10/16/20 18:12	5
Chloroethane	ND		5.0	ug/L			10/16/20 18:12	5
Chloroform	ND		5.0	ug/L			10/16/20 18:12	5
Chloromethane	ND		5.0	ug/L			10/16/20 18:12	5
cis-1,2-Dichloroethene	**4.2**		2.5	ug/L			10/16/20 18:12	5
cis-1,3-Dichloropropene	ND		2.5	ug/L			10/16/20 18:12	5
Dichlorobromomethane	ND		2.5	ug/L			10/16/20 18:12	5
Dichlorodifluoromethane	ND		5.0	ug/L			10/16/20 18:12	5
EDB	ND		2.5	ug/L			10/16/20 18:12	5
Methylene Chloride	ND		5.0	ug/L			10/16/20 18:12	5
Tetrachloroethene	ND		2.5	ug/L			10/16/20 18:12	5
trans-1,2-Dichloroethene	ND		2.5	ug/L			10/16/20 18:12	5
trans-1,3-Dichloropropene	ND		2.5	ug/L			10/16/20 18:12	5
Trichloroethene	**280**		2.5	ug/L			10/16/20 18:12	5
Trichlorofluoromethane	ND		5.0	ug/L			10/16/20 18:12	5
Vinyl chloride	ND		2.5	ug/L			10/16/20 18:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 123*		*10/16/20 18:12*	*5*
4-Bromofluorobenzene (Surr)	*89*		*74 - 120*		*10/16/20 18:12*	*5*
Dibromofluoromethane (Surr)	*88*		*80 - 123*		*10/16/20 18:12*	*5*
Toluene-d8 (Surr)	*88*		*78 - 120*		*10/16/20 18:12*	*5*

Surrogate Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	**Client Sample ID**	**(72-123)**	**(74-120)**	**(80-123)**	**(78-120)**
720-100214-1	TB-1	113	112	104	100
720-100214-2	53-D	115	111	104	102
720-100214-2 MS	53-D	115	113	105	102
720-100214-2 MSD	53-D	118	113	109	103
720-100214-3	35-DDD	117	111	106	103
720-100214-4	15-S	108	114	101	100
720-100214-5	29-S	115	111	104	99
720-100214-6	52-D	116	109	106	100
720-100214-7	29-D	114	110	104	100
720-100214-8	27-D	120	112	106	103
720-100214-9	1-D	89	91	88	88
720-100214-10	36-D	91	90	89	85
720-100214-11	36-S	87	91	86	86
720-100214-12	36-DD	88	93	89	87
720-100214-13	16-S	89	92	88	89
720-100214-14	DW-7	85	92	86	85
720-100214-15	EB-2	91	90	90	85
720-100214-16	37-S	92	90	92	85
720-100214-17	EB-1	90	93	91	84
720-100214-18	28-D	101	110	97	92
720-100214-19	27-DD	89	91	89	88
720-100214-20	28-S	86	92	87	87
720-100214-21	22-S	89	94	89	88
720-100214-22	22-DD	90	91	87	89
720-100214-23	23-S	86	92	86	87
720-100214-24	27-S	91	91	90	86
720-100214-25	2-D	91	90	92	85
720-100214-26	23-D	88	90	88	87
720-100214-27	3-D	89	89	88	88
LCS 320-422370/3	Lab Control Sample	112	111	104	103
LCS 320-422375/3	Lab Control Sample	88	91	90	86
LCS 320-423188/4	Lab Control Sample	100	108	98	92
LCSD 320-422370/4	Lab Control Sample Dup	115	108	108	103
LCSD 320-422375/4	Lab Control Sample Dup	90	89	90	86
LCSD 320-423188/5	Lab Control Sample Dup	103	108	99	90
MB 320-422370/6	Method Blank	113	113	98	100
MB 320-422375/6	Method Blank	91	91	90	85
MB 320-423188/7	Method Blank	99	108	99	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 320-422370/6
Matrix: Water
Analysis Batch: 422370

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/16/20 12:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/16/20 12:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/16/20 12:05	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/16/20 12:05	1
1,1-Dichloroethane	ND		0.50	ug/L			10/16/20 12:05	1
1,1-Dichloroethene	ND		0.50	ug/L			10/16/20 12:05	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/16/20 12:05	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:05	1
1,2-Dichloroethane	ND		0.50	ug/L			10/16/20 12:05	1
1,2-Dichloropropane	ND		0.50	ug/L			10/16/20 12:05	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:05	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/16/20 12:05	1
Bromoform	ND		1.0	ug/L			10/16/20 12:05	1
Bromomethane	ND		1.0	ug/L			10/16/20 12:05	1
Carbon tetrachloride	ND		0.50	ug/L			10/16/20 12:05	1
Chlorobenzene	ND		0.50	ug/L			10/16/20 12:05	1
Chlorodibromomethane	ND		0.50	ug/L			10/16/20 12:05	1
Chloroethane	ND		1.0	ug/L			10/16/20 12:05	1
Chloroform	ND		1.0	ug/L			10/16/20 12:05	1
Chloromethane	ND		1.0	ug/L			10/16/20 12:05	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:05	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:05	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 12:05	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 12:05	1
EDB	ND		0.50	ug/L			10/16/20 12:05	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 12:05	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 12:05	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:05	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:05	1
Trichloroethene	ND		0.50	ug/L			10/16/20 12:05	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 12:05	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*72 - 123*		*10/16/20 12:05*	*1*
4-Bromofluorobenzene (Surr)	*113*		*74 - 120*		*10/16/20 12:05*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 123*		*10/16/20 12:05*	*1*
Toluene-d8 (Surr)	*100*		*78 - 120*		*10/16/20 12:05*	*1*

Lab Sample ID: LCS 320-422370/3
Matrix: Water
Analysis Batch: 422370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.6		ug/L		108	79 - 121
1,1,2,2-Tetrachloroethane	20.0	20.7		ug/L		104	74 - 137
1,1,2-Trichloro-1,2,2-trifluoroetha ne	20.0	20.0		ug/L		100	64 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-422370/3
Matrix: Water
Analysis Batch: 422370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	20.0	20.8		ug/L		104	79 - 127
1,1-Dichloroethane	20.0	20.9		ug/L		104	79 - 120
1,1-Dichloroethene	20.0	20.7		ug/L		104	74 - 120
1,2,4-Trichlorobenzene	20.0	21.7		ug/L		108	61 - 130
1,2-Dichlorobenzene	20.0	21.6		ug/L		108	77 - 120
1,2-Dichloroethane	20.0	22.6		ug/L		113	77 - 128
1,2-Dichloropropane	20.0	19.5		ug/L		97	75 - 125
1,3-Dichlorobenzene	20.0	21.2		ug/L		106	78 - 120
1,4-Dichlorobenzene	20.0	20.6		ug/L		103	74 - 120
Bromoform	20.0	24.2	*	ug/L		121	80 - 120
Bromomethane	20.0	20.7		ug/L		103	65 - 132
Carbon tetrachloride	20.0	22.4		ug/L		112	78 - 124
Chlorobenzene	20.0	20.8		ug/L		104	78 - 120
Chlorodibromomethane	20.0	23.0		ug/L		115	80 - 122
Chloroethane	20.0	19.7		ug/L		99	65 - 123
Chloroform	20.0	22.1		ug/L		111	80 - 120
Chloromethane	20.0	21.0		ug/L		105	62 - 129
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	78 - 120
cis-1,3-Dichloropropene	20.0	21.0		ug/L		105	80 - 131
Dichlorobromomethane	20.0	22.5		ug/L		112	80 - 124
Dichlorodifluoromethane	20.0	18.9		ug/L		94	39 - 161
EDB	20.0	21.3		ug/L		107	78 - 120
Methylene Chloride	20.0	20.8		ug/L		104	77 - 120
Tetrachloroethene	20.0	21.8		ug/L		109	74 - 120
trans-1,2-Dichloroethene	20.0	21.3		ug/L		106	76 - 120
trans-1,3-Dichloropropene	20.0	21.7		ug/L		109	75 - 133
Trichloroethene	20.0	21.1		ug/L		106	74 - 120
Trichlorofluoromethane	20.0	20.0		ug/L		100	60 - 135
Vinyl chloride	20.0	20.0		ug/L		100	68 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 123*
4-Bromofluorobenzene (Surr)	*111*		*74 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 123*
Toluene-d8 (Surr)	*103*		*78 - 120*

Lab Sample ID: LCSD 320-422370/4
Matrix: Water
Analysis Batch: 422370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.6		ug/L		103	79 - 121	5	25
1,1,2,2-Tetrachloroethane	20.0	19.3		ug/L		97	74 - 137	7	27
1,1,2-Trichloro-1,2,2-trifluoroetha ne	20.0	19.1		ug/L		95	64 - 125	5	40
1,1,2-Trichloroethane	20.0	19.3		ug/L		97	79 - 127	7	30
1,1-Dichloroethane	20.0	19.3		ug/L		97	79 - 120	8	21
1,1-Dichloroethene	20.0	18.9		ug/L		95	74 - 120	9	22
1,2,4-Trichlorobenzene	20.0	20.9		ug/L		104	61 - 130	4	40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-422370/4
Matrix: Water
Analysis Batch: 422370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	20.0	20.0		ug/L		100	77 - 120	8	19
1,2-Dichloroethane	20.0	21.9		ug/L		110	77 - 128	3	25
1,2-Dichloropropane	20.0	18.7		ug/L		93	75 - 125	4	27
1,3-Dichlorobenzene	20.0	20.3		ug/L		101	78 - 120	4	17
1,4-Dichlorobenzene	20.0	19.7		ug/L		98	74 - 120	5	15
Bromoform	20.0	21.8		ug/L		109	80 - 120	10	16
Bromomethane	20.0	19.3		ug/L		97	65 - 132	7	40
Carbon tetrachloride	20.0	21.4		ug/L		107	78 - 124	5	25
Chlorobenzene	20.0	19.4		ug/L		97	78 - 120	7	15
Chlorodibromomethane	20.0	20.6		ug/L		103	80 - 122	11	17
Chloroethane	20.0	19.1		ug/L		95	65 - 123	3	40
Chloroform	20.0	20.7		ug/L		103	80 - 120	7	22
Chloromethane	20.0	19.6		ug/L		98	62 - 129	7	25
cis-1,2-Dichloroethene	20.0	19.1		ug/L		96	78 - 120	7	18
cis-1,3-Dichloropropene	20.0	19.6		ug/L		98	80 - 131	7	24
Dichlorobromomethane	20.0	20.9		ug/L		104	80 - 124	7	20
Dichlorodifluoromethane	20.0	17.0		ug/L		85	39 - 161	10	51
EDB	20.0	19.0		ug/L		95	78 - 120	11	15
Methylene Chloride	20.0	19.3		ug/L		97	77 - 120	7	20
Tetrachloroethene	20.0	20.5		ug/L		102	74 - 120	6	18
trans-1,2-Dichloroethene	20.0	19.5		ug/L		97	76 - 120	9	20
trans-1,3-Dichloropropene	20.0	20.9		ug/L		105	75 - 133	4	29
Trichloroethene	20.0	19.5		ug/L		98	74 - 120	8	20
Trichlorofluoromethane	20.0	19.1		ug/L		95	60 - 135	5	41
Vinyl chloride	20.0	18.8		ug/L		94	68 - 121	6	33

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 123*
4-Bromofluorobenzene (Surr)	*108*		*74 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 123*
Toluene-d8 (Surr)	*103*		*78 - 120*

Lab Sample ID: 720-100214-2 MS
Matrix: Water
Analysis Batch: 422370

Client Sample ID: 53-D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		23.3	27.0		ug/L		116	79 - 121
1,1,2,2-Tetrachloroethane	ND		23.3	22.9		ug/L		99	74 - 137
1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		23.3	27.0		ug/L		115	64 - 125
1,1,2-Trichloroethane	ND		23.3	22.7		ug/L		97	79 - 127
1,1-Dichloroethane	ND		23.3	24.6		ug/L		105	79 - 120
1,1-Dichloroethene	ND		23.3	25.2		ug/L		107	74 - 120
1,2,4-Trichlorobenzene	ND		23.3	25.7		ug/L		110	61 - 130
1,2-Dichlorobenzene	ND		23.3	25.0		ug/L		107	77 - 120
1,2-Dichloroethane	ND		23.3	26.5		ug/L		114	77 - 128
1,2-Dichloropropane	ND		23.3	22.6		ug/L		97	75 - 125
1,3-Dichlorobenzene	ND		23.3	24.3		ug/L		105	78 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-100214-2 MS
Matrix: Water
Analysis Batch: 422370

Client Sample ID: 53-D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	ND		23.3	23.6		ug/L		101	74 - 120
Bromoform	ND	*	23.3	23.9		ug/L		103	80 - 120
Bromomethane	ND		23.3	23.7		ug/L		102	65 - 132
Carbon tetrachloride	ND		23.3	28.2		ug/L		121	78 - 124
Chlorobenzene	ND		23.3	24.6		ug/L		106	78 - 120
Chlorodibromomethane	ND		23.3	24.3		ug/L		104	80 - 122
Chloroethane	ND		23.3	23.8		ug/L		102	65 - 123
Chloroform	ND		23.3	25.9		ug/L		111	80 - 120
Chloromethane	ND		23.3	24.8		ug/L		107	62 - 129
cis-1,2-Dichloroethene	ND		23.3	23.9		ug/L		103	78 - 120
cis-1,3-Dichloropropene	ND		23.3	22.1		ug/L		95	80 - 131
Dichlorobromomethane	ND		23.3	25.5		ug/L		110	80 - 124
Dichlorodifluoromethane	ND		23.3	23.9		ug/L		103	39 - 161
EDB	ND		23.3	23.9		ug/L		103	78 - 120
Methylene Chloride	ND		23.3	23.7		ug/L		102	77 - 120
Tetrachloroethene	ND		23.3	26.3		ug/L		113	74 - 120
trans-1,2-Dichloroethene	ND		23.3	24.5		ug/L		106	76 - 120
trans-1,3-Dichloropropene	ND		23.3	23.8		ug/L		102	75 - 133
Trichloroethene	8.0		23.3	32.2		ug/L		104	74 - 120
Trichlorofluoromethane	ND		23.3	27.6		ug/L		119	60 - 135
Vinyl chloride	ND		23.3	24.5		ug/L		105	68 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*72 - 123*
4-Bromofluorobenzene (Surr)	*113*		*74 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 123*
Toluene-d8 (Surr)	*102*		*78 - 120*

Lab Sample ID: 720-100214-2 MSD
Matrix: Water
Analysis Batch: 422370

Client Sample ID: 53-D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		23.3	27.4		ug/L		118	79 - 121	1	25
1,1,2,2-Tetrachloroethane	ND		23.3	23.2		ug/L		100	74 - 137	1	27
1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		23.3	27.8		ug/L		119	64 - 125	3	40
1,1,2-Trichloroethane	ND		23.3	24.3		ug/L		104	79 - 127	7	30
1,1-Dichloroethane	ND		23.3	24.7		ug/L		105	79 - 120	0	21
1,1-Dichloroethene	ND		23.3	25.6		ug/L		109	74 - 120	2	22
1,2,4-Trichlorobenzene	ND		23.3	25.4		ug/L		109	61 - 130	1	40
1,2-Dichlorobenzene	ND		23.3	24.8		ug/L		106	77 - 120	1	19
1,2-Dichloroethane	ND		23.3	27.4		ug/L		118	77 - 128	3	25
1,2-Dichloropropane	ND		23.3	23.1		ug/L		99	75 - 125	2	27
1,3-Dichlorobenzene	ND		23.3	24.3		ug/L		104	78 - 120	0	17
1,4-Dichlorobenzene	ND		23.3	23.6		ug/L		102	74 - 120	0	15
Bromoform	ND	*	23.3	24.0		ug/L		103	80 - 120	0	16
Bromomethane	ND		23.3	24.3		ug/L		104	65 - 132	2	40
Carbon tetrachloride	ND		23.3	28.8		ug/L		124	78 - 124	2	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-100214-2 MSD
Matrix: Water
Analysis Batch: 422370

Client Sample ID: 53-D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	ND		23.3	24.3		ug/L		104	78 - 120	1	15
Chlorodibromomethane	ND		23.3	24.3		ug/L		105	80 - 122	0	17
Chloroethane	ND		23.3	23.1		ug/L		99	65 - 123	3	40
Chloroform	ND		23.3	26.3		ug/L		113	80 - 120	2	22
Chloromethane	ND		23.3	23.5		ug/L		101	62 - 129	5	25
cis-1,2-Dichloroethene	ND		23.3	24.6		ug/L		106	78 - 120	3	18
cis-1,3-Dichloropropene	ND		23.3	23.5		ug/L		101	80 - 131	6	24
Dichlorobromomethane	ND		23.3	25.9		ug/L		111	80 - 124	2	20
Dichlorodifluoromethane	ND		23.3	25.6		ug/L		110	39 - 161	7	51
EDB	ND		23.3	24.3		ug/L		105	78 - 120	2	15
Methylene Chloride	ND		23.3	24.5		ug/L		105	77 - 120	3	20
Tetrachloroethene	ND		23.3	26.4		ug/L		113	74 - 120	0	18
trans-1,2-Dichloroethene	ND		23.3	24.4		ug/L		105	76 - 120	1	20
trans-1,3-Dichloropropene	ND		23.3	24.0		ug/L		103	75 - 133	1	29
Trichloroethene	8.0		23.3	32.7		ug/L		106	74 - 120	1	20
Trichlorofluoromethane	ND		23.3	28.3		ug/L		122	60 - 135	3	41
Vinyl chloride	ND		23.3	24.5		ug/L		105	68 - 121	0	33

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*118*		*72 - 123*
4-Bromofluorobenzene (Surr)	*113*		*74 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 123*
Toluene-d8 (Surr)	*103*		*78 - 120*

Lab Sample ID: MB 320-422375/6
Matrix: Water
Analysis Batch: 422375

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50		ug/L			10/16/20 12:02	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/16/20 12:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			10/16/20 12:02	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/16/20 12:02	1
1,1-Dichloroethane	ND		0.50		ug/L			10/16/20 12:02	1
1,1-Dichloroethene	ND		0.50		ug/L			10/16/20 12:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/16/20 12:02	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/16/20 12:02	1
1,2-Dichloroethane	ND		0.50		ug/L			10/16/20 12:02	1
1,2-Dichloropropane	ND		0.50		ug/L			10/16/20 12:02	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/16/20 12:02	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/16/20 12:02	1
Bromoform	ND		1.0		ug/L			10/16/20 12:02	1
Bromomethane	ND		1.0		ug/L			10/16/20 12:02	1
Carbon tetrachloride	ND		0.50		ug/L			10/16/20 12:02	1
Chlorobenzene	ND		0.50		ug/L			10/16/20 12:02	1
Chlorodibromomethane	ND		0.50		ug/L			10/16/20 12:02	1
Chloroethane	ND		1.0		ug/L			10/16/20 12:02	1
Chloroform	ND		1.0		ug/L			10/16/20 12:02	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-422375/6
Matrix: Water
Analysis Batch: 422375

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	ug/L			10/16/20 12:02	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:02	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:02	1
Dichlorobromomethane	ND		0.50	ug/L			10/16/20 12:02	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/16/20 12:02	1
EDB	ND		0.50	ug/L			10/16/20 12:02	1
Methylene Chloride	ND		1.0	ug/L			10/16/20 12:02	1
Tetrachloroethene	ND		0.50	ug/L			10/16/20 12:02	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/16/20 12:02	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/16/20 12:02	1
Trichloroethene	ND		0.50	ug/L			10/16/20 12:02	1
Trichlorofluoromethane	ND		1.0	ug/L			10/16/20 12:02	1
Vinyl chloride	ND		0.50	ug/L			10/16/20 12:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 123*		*10/16/20 12:02*	*1*
4-Bromofluorobenzene (Surr)	*91*		*74 - 120*		*10/16/20 12:02*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 123*		*10/16/20 12:02*	*1*
Toluene-d8 (Surr)	*85*		*78 - 120*		*10/16/20 12:02*	*1*

Lab Sample ID: LCS 320-422375/3
Matrix: Water
Analysis Batch: 422375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.1		ug/L		96	79 - 121
1,1,2,2-Tetrachloroethane	20.0	19.5		ug/L		98	74 - 137
1,1,2-Trichloro-1,2,2-trifluoroetha ne	20.0	16.8		ug/L		84	64 - 125
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	79 - 127
1,1-Dichloroethane	20.0	19.5		ug/L		98	79 - 120
1,1-Dichloroethene	20.0	18.9		ug/L		94	74 - 120
1,2,4-Trichlorobenzene	20.0	21.4		ug/L		107	61 - 130
1,2-Dichlorobenzene	20.0	18.7		ug/L		94	77 - 120
1,2-Dichloroethane	20.0	19.1		ug/L		95	77 - 128
1,2-Dichloropropane	20.0	19.4		ug/L		97	75 - 125
1,3-Dichlorobenzene	20.0	19.3		ug/L		97	78 - 120
1,4-Dichlorobenzene	20.0	18.7		ug/L		93	74 - 120
Bromoform	20.0	18.9		ug/L		94	80 - 120
Bromomethane	20.0	16.7		ug/L		84	65 - 132
Carbon tetrachloride	20.0	18.9		ug/L		94	78 - 124
Chlorobenzene	20.0	19.1		ug/L		96	78 - 120
Chlorodibromomethane	20.0	19.1		ug/L		95	80 - 122
Chloroethane	20.0	17.5		ug/L		88	65 - 123
Chloroform	20.0	19.1		ug/L		96	80 - 120
Chloromethane	20.0	19.0		ug/L		95	62 - 129
cis-1,2-Dichloroethene	20.0	19.1		ug/L		96	78 - 120
cis-1,3-Dichloropropene	20.0	19.1		ug/L		96	80 - 131
Dichlorobromomethane	20.0	19.1		ug/L		96	80 - 124

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-422375/3
Matrix: Water
Analysis Batch: 422375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	20.0	14.9		ug/L		75	39 - 161
EDB	20.0	19.2		ug/L		96	78 - 120
Methylene Chloride	20.0	18.6		ug/L		93	77 - 120
Tetrachloroethene	20.0	18.6		ug/L		93	74 - 120
trans-1,2-Dichloroethene	20.0	19.0		ug/L		95	76 - 120
trans-1,3-Dichloropropene	20.0	19.2		ug/L		96	75 - 133
Trichloroethene	20.0	19.0		ug/L		95	74 - 120
Trichlorofluoromethane	20.0	17.3		ug/L		86	60 - 135
Vinyl chloride	20.0	17.1		ug/L		86	68 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 123*
4-Bromofluorobenzene (Surr)	*91*		*74 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 123*
Toluene-d8 (Surr)	*86*		*78 - 120*

Lab Sample ID: LCSD 320-422375/4
Matrix: Water
Analysis Batch: 422375

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	18.6		ug/L		93	79 - 121	3	25
1,1,2,2-Tetrachloroethane	20.0	19.3		ug/L		96	74 - 137	1	27
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	15.7		ug/L		78	64 - 125	7	40
1,1,2-Trichloroethane	20.0	18.2		ug/L		91	79 - 127	5	30
1,1-Dichloroethane	20.0	18.9		ug/L		95	79 - 120	3	21
1,1-Dichloroethene	20.0	17.9		ug/L		90	74 - 120	5	22
1,2,4-Trichlorobenzene	20.0	20.0		ug/L		100	61 - 130	7	40
1,2-Dichlorobenzene	20.0	18.0		ug/L		90	77 - 120	4	19
1,2-Dichloroethane	20.0	18.6		ug/L		93	77 - 128	3	25
1,2-Dichloropropane	20.0	18.8		ug/L		94	75 - 125	3	27
1,3-Dichlorobenzene	20.0	18.2		ug/L		91	78 - 120	6	17
1,4-Dichlorobenzene	20.0	18.0		ug/L		90	74 - 120	3	15
Bromoform	20.0	17.6		ug/L		88	80 - 120	7	16
Bromomethane	20.0	16.7		ug/L		83	65 - 132	0	40
Carbon tetrachloride	20.0	18.0		ug/L		90	78 - 124	5	25
Chlorobenzene	20.0	18.2		ug/L		91	78 - 120	5	15
Chlorodibromomethane	20.0	18.2		ug/L		91	80 - 122	5	17
Chloroethane	20.0	16.9		ug/L		85	65 - 123	3	40
Chloroform	20.0	18.9		ug/L		94	80 - 120	1	22
Chloromethane	20.0	18.8		ug/L		94	62 - 129	1	25
cis-1,2-Dichloroethene	20.0	18.9		ug/L		94	78 - 120	2	18
cis-1,3-Dichloropropene	20.0	18.4		ug/L		92	80 - 131	4	24
Dichlorobromomethane	20.0	18.5		ug/L		92	80 - 124	3	20
Dichlorodifluoromethane	20.0	14.0		ug/L		70	39 - 161	6	51
EDB	20.0	18.1		ug/L		91	78 - 120	6	15
Methylene Chloride	20.0	18.1		ug/L		90	77 - 120	3	20
Tetrachloroethene	20.0	18.0		ug/L		90	74 - 120	4	18

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-422375/4
Matrix: Water
Analysis Batch: 422375

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	20.0	18.6		ug/L		93	76 - 120	2	20
trans-1,3-Dichloropropene	20.0	18.0		ug/L		90	75 - 133	7	29
Trichloroethene	20.0	18.4		ug/L		92	74 - 120	3	20
Trichlorofluoromethane	20.0	16.4		ug/L		82	60 - 135	5	41
Vinyl chloride	20.0	16.9		ug/L		84	68 - 121	1	33

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 123*
4-Bromofluorobenzene (Surr)	*89*		*74 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 123*
Toluene-d8 (Surr)	*86*		*78 - 120*

Lab Sample ID: MB 320-423188/7
Matrix: Water
Analysis Batch: 423188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	ug/L			10/19/20 13:12	1
1,1,2,2-Tetrachloroethane	ND		0.50	ug/L			10/19/20 13:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	ug/L			10/19/20 13:12	1
1,1,2-Trichloroethane	ND		0.50	ug/L			10/19/20 13:12	1
1,1-Dichloroethane	ND		0.50	ug/L			10/19/20 13:12	1
1,1-Dichloroethene	ND		0.50	ug/L			10/19/20 13:12	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			10/19/20 13:12	1
1,2-Dichlorobenzene	ND		0.50	ug/L			10/19/20 13:12	1
1,2-Dichloroethane	ND		0.50	ug/L			10/19/20 13:12	1
1,2-Dichloropropane	ND		0.50	ug/L			10/19/20 13:12	1
1,3-Dichlorobenzene	ND		0.50	ug/L			10/19/20 13:12	1
1,4-Dichlorobenzene	ND		0.50	ug/L			10/19/20 13:12	1
Bromoform	ND		1.0	ug/L			10/19/20 13:12	1
Bromomethane	ND		1.0	ug/L			10/19/20 13:12	1
Carbon tetrachloride	ND		0.50	ug/L			10/19/20 13:12	1
Chlorobenzene	ND		0.50	ug/L			10/19/20 13:12	1
Chlorodibromomethane	ND		0.50	ug/L			10/19/20 13:12	1
Chloroethane	ND		1.0	ug/L			10/19/20 13:12	1
Chloroform	ND		1.0	ug/L			10/19/20 13:12	1
Chloromethane	ND		1.0	ug/L			10/19/20 13:12	1
cis-1,2-Dichloroethene	ND		0.50	ug/L			10/19/20 13:12	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			10/19/20 13:12	1
Dichlorobromomethane	ND		0.50	ug/L			10/19/20 13:12	1
Dichlorodifluoromethane	ND		1.0	ug/L			10/19/20 13:12	1
EDB	ND		0.50	ug/L			10/19/20 13:12	1
Methylene Chloride	ND		1.0	ug/L			10/19/20 13:12	1
Tetrachloroethene	ND		0.50	ug/L			10/19/20 13:12	1
trans-1,2-Dichloroethene	ND		0.50	ug/L			10/19/20 13:12	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			10/19/20 13:12	1
Trichloroethene	ND		0.50	ug/L			10/19/20 13:12	1
Trichlorofluoromethane	ND		1.0	ug/L			10/19/20 13:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 320-423188/7
Matrix: Water
Analysis Batch: 423188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.50	ug/L			10/19/20 13:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 123*		*10/19/20 13:12*	*1*
4-Bromofluorobenzene (Surr)	*108*		*74 - 120*		*10/19/20 13:12*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 123*		*10/19/20 13:12*	*1*
Toluene-d8 (Surr)	*92*		*78 - 120*		*10/19/20 13:12*	*1*

Lab Sample ID: LCS 320-423188/4
Matrix: Water
Analysis Batch: 423188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.1		ug/L		100	79 - 121
1,1,2,2-Tetrachloroethane	20.0	18.7		ug/L		94	74 - 137
1,1,2-Trichloro-1,2,2-trifluoroetha ne	20.0	18.6		ug/L		93	64 - 125
1,1,2-Trichloroethane	20.0	18.8		ug/L		94	79 - 127
1,1-Dichloroethane	20.0	19.0		ug/L		95	79 - 120
1,1-Dichloroethene	20.0	18.8		ug/L		94	74 - 120
1,2,4-Trichlorobenzene	20.0	21.4		ug/L		107	61 - 130
1,2-Dichlorobenzene	20.0	18.4		ug/L		92	77 - 120
1,2-Dichloroethane	20.0	18.9		ug/L		94	77 - 128
1,2-Dichloropropane	20.0	19.2		ug/L		96	75 - 125
1,3-Dichlorobenzene	20.0	18.5		ug/L		93	78 - 120
1,4-Dichlorobenzene	20.0	18.6		ug/L		93	74 - 120
Bromoform	20.0	20.4		ug/L		102	80 - 120
Bromomethane	20.0	19.1		ug/L		95	65 - 132
Carbon tetrachloride	20.0	19.4		ug/L		97	78 - 124
Chlorobenzene	20.0	19.2		ug/L		96	78 - 120
Chlorodibromomethane	20.0	19.2		ug/L		96	80 - 122
Chloroethane	20.0	19.5		ug/L		98	65 - 123
Chloroform	20.0	18.6		ug/L		93	80 - 120
Chloromethane	20.0	18.1		ug/L		90	62 - 129
cis-1,2-Dichloroethene	20.0	18.9		ug/L		94	78 - 120
cis-1,3-Dichloropropene	20.0	18.9		ug/L		95	80 - 131
Dichlorobromomethane	20.0	19.2		ug/L		96	80 - 124
Dichlorodifluoromethane	20.0	16.8		ug/L		84	39 - 161
EDB	20.0	19.0		ug/L		95	78 - 120
Methylene Chloride	20.0	19.1		ug/L		95	77 - 120
Tetrachloroethene	20.0	19.9		ug/L		100	74 - 120
trans-1,2-Dichloroethene	20.0	19.2		ug/L		96	76 - 120
trans-1,3-Dichloropropene	20.0	18.8		ug/L		94	75 - 133
Trichloroethene	20.0	18.8		ug/L		94	74 - 120
Trichlorofluoromethane	20.0	18.1		ug/L		91	60 - 135
Vinyl chloride	20.0	18.7		ug/L		94	68 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 320-423188/4
Matrix: Water
Analysis Batch: 423188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 123*
4-Bromofluorobenzene (Surr)	*108*		*74 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 123*
Toluene-d8 (Surr)	*92*		*78 - 120*

Lab Sample ID: LCSD 320-423188/5
Matrix: Water
Analysis Batch: 423188

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	19.8		ug/L		99	79 - 121	1	25
1,1,2,2-Tetrachloroethane	20.0	18.3		ug/L		91	74 - 137	3	27
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.5		ug/L		93	64 - 125	1	40
1,1,2-Trichloroethane	20.0	17.9		ug/L		90	79 - 127	5	30
1,1-Dichloroethane	20.0	19.1		ug/L		96	79 - 120	1	21
1,1-Dichloroethene	20.0	18.8		ug/L		94	74 - 120	0	22
1,2,4-Trichlorobenzene	20.0	22.1		ug/L		111	61 - 130	3	40
1,2-Dichlorobenzene	20.0	19.1		ug/L		95	77 - 120	4	19
1,2-Dichloroethane	20.0	18.4		ug/L		92	77 - 128	2	25
1,2-Dichloropropane	20.0	18.4		ug/L		92	75 - 125	4	27
1,3-Dichlorobenzene	20.0	18.6		ug/L		93	78 - 120	0	17
1,4-Dichlorobenzene	20.0	18.5		ug/L		93	74 - 120	0	15
Bromoform	20.0	19.8		ug/L		99	80 - 120	3	16
Bromomethane	20.0	18.6		ug/L		93	65 - 132	2	40
Carbon tetrachloride	20.0	19.4		ug/L		97	78 - 124	0	25
Chlorobenzene	20.0	18.7		ug/L		94	78 - 120	2	15
Chlorodibromomethane	20.0	18.5		ug/L		92	80 - 122	4	17
Chloroethane	20.0	18.9		ug/L		95	65 - 123	3	40
Chloroform	20.0	18.9		ug/L		95	80 - 120	2	22
Chloromethane	20.0	18.1		ug/L		91	62 - 129	0	25
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	78 - 120	1	18
cis-1,3-Dichloropropene	20.0	18.2		ug/L		91	80 - 131	4	24
Dichlorobromomethane	20.0	18.6		ug/L		93	80 - 124	3	20
Dichlorodifluoromethane	20.0	17.0		ug/L		85	39 - 161	1	51
EDB	20.0	18.7		ug/L		93	78 - 120	2	15
Methylene Chloride	20.0	19.0		ug/L		95	77 - 120	0	20
Tetrachloroethene	20.0	19.8		ug/L		99	74 - 120	1	18
trans-1,2-Dichloroethene	20.0	19.3		ug/L		96	76 - 120	0	20
trans-1,3-Dichloropropene	20.0	17.6		ug/L		88	75 - 133	7	29
Trichloroethene	20.0	18.7		ug/L		94	74 - 120	0	20
Trichlorofluoromethane	20.0	18.2		ug/L		91	60 - 135	0	41
Vinyl chloride	20.0	18.6		ug/L		93	68 - 121	0	33

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 123*
4-Bromofluorobenzene (Surr)	*108*		*74 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 123*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 320-423188/5
Matrix: Water
Analysis Batch: 423188

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*90*		*78 - 120*

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

GC/MS VOA

Analysis Batch: 422370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-100214-1	TB-1	Total/NA	Water	8260B	
720-100214-2	53-D	Total/NA	Water	8260B	
720-100214-3	35-DDD	Total/NA	Water	8260B	
720-100214-4	15-S	Total/NA	Water	8260B	
720-100214-5	29-S	Total/NA	Water	8260B	
720-100214-6	52-D	Total/NA	Water	8260B	
720-100214-7	29-D	Total/NA	Water	8260B	
720-100214-8	27-D	Total/NA	Water	8260B	
MB 320-422370/6	Method Blank	Total/NA	Water	8260B	
LCS 320-422370/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 320-422370/4	Lab Control Sample Dup	Total/NA	Water	8260B	
720-100214-2 MS	53-D	Total/NA	Water	8260B	
720-100214-2 MSD	53-D	Total/NA	Water	8260B	

Analysis Batch: 422375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-100214-9	1-D	Total/NA	Water	8260B	
720-100214-10	36-D	Total/NA	Water	8260B	
720-100214-11	36-S	Total/NA	Water	8260B	
720-100214-12	36-DD	Total/NA	Water	8260B	
720-100214-13	16-S	Total/NA	Water	8260B	
720-100214-14	DW-7	Total/NA	Water	8260B	
720-100214-15	EB-2	Total/NA	Water	8260B	
720-100214-16	37-S	Total/NA	Water	8260B	
720-100214-17	EB-1	Total/NA	Water	8260B	
720-100214-19	27-DD	Total/NA	Water	8260B	
720-100214-20	28-S	Total/NA	Water	8260B	
720-100214-21	22-S	Total/NA	Water	8260B	
720-100214-22	22-DD	Total/NA	Water	8260B	
720-100214-23	23-S	Total/NA	Water	8260B	
720-100214-24	27-S	Total/NA	Water	8260B	
720-100214-25	2-D	Total/NA	Water	8260B	
720-100214-26	23-D	Total/NA	Water	8260B	
720-100214-27	3-D	Total/NA	Water	8260B	
MB 320-422375/6	Method Blank	Total/NA	Water	8260B	
LCS 320-422375/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 320-422375/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 423188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-100214-18	28-D	Total/NA	Water	8260B	
MB 320-423188/7	Method Blank	Total/NA	Water	8260B	
LCS 320-423188/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 320-423188/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: TB-1
Date Collected: 10/13/20 00:00
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422370	10/16/20 12:50	SS	TAL SAC

Client Sample ID: 53-D
Date Collected: 10/13/20 09:03
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422370	10/16/20 13:13	SS	TAL SAC

Client Sample ID: 35-DDD
Date Collected: 10/13/20 09:08
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422370	10/16/20 13:37	SS	TAL SAC

Client Sample ID: 15-S
Date Collected: 10/13/20 09:57
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422370	10/16/20 14:00	SS	TAL SAC

Client Sample ID: 29-S
Date Collected: 10/13/20 10:02
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422370	10/16/20 14:23	SS	TAL SAC

Client Sample ID: 52-D
Date Collected: 10/13/20 10:35
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422370	10/16/20 14:45	SS	TAL SAC

Client Sample ID: 29-D
Date Collected: 10/13/20 10:40
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422370	10/16/20 15:08	SS	TAL SAC

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 27-D
Lab Sample ID: 720-100214-8
Date Collected: 10/13/20 11:34
Matrix: Water
Date Received: 10/14/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	50 mL	50 mL	422370	10/16/20 19:43	SS	TAL SAC

Client Sample ID: 1-D
Lab Sample ID: 720-100214-9
Date Collected: 10/13/20 11:39
Matrix: Water
Date Received: 10/14/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	50 mL	50 mL	422375	10/16/20 15:06	SS	TAL SAC

Client Sample ID: 36-D
Lab Sample ID: 720-100214-10
Date Collected: 10/13/20 12:10
Matrix: Water
Date Received: 10/14/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422375	10/16/20 13:11	SS	TAL SAC

Client Sample ID: 36-S
Lab Sample ID: 720-100214-11
Date Collected: 10/13/20 12:38
Matrix: Water
Date Received: 10/14/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	50 mL	50 mL	422375	10/16/20 15:30	SS	TAL SAC

Client Sample ID: 36-DD
Lab Sample ID: 720-100214-12
Date Collected: 10/13/20 13:02
Matrix: Water
Date Received: 10/14/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422375	10/16/20 13:34	SS	TAL SAC

Client Sample ID: 16-S
Lab Sample ID: 720-100214-13
Date Collected: 10/14/20 10:58
Matrix: Water
Date Received: 10/14/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	50 mL	50 mL	422375	10/16/20 15:53	SS	TAL SAC

Client Sample ID: DW-7
Lab Sample ID: 720-100214-14
Date Collected: 10/14/20 11:26
Matrix: Water
Date Received: 10/14/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	50 mL	50 mL	422375	10/16/20 16:16	SS	TAL SAC

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: EB-2
Date Collected: 10/14/20 11:35
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422375	10/16/20 12:25	SS	TAL SAC

Client Sample ID: 37-S
Date Collected: 10/13/20 13:11
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422375	10/16/20 13:57	SS	TAL SAC

Client Sample ID: EB-1
Date Collected: 10/13/20 13:30
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422375	10/16/20 12:48	SS	TAL SAC

Client Sample ID: 28-D
Date Collected: 10/13/20 13:36
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	50 mL	50 mL	423188	10/19/20 17:27	AP1	TAL SAC

Client Sample ID: 27-DD
Date Collected: 10/14/20 08:38
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422375	10/16/20 14:20	SS	TAL SAC

Client Sample ID: 28-S
Date Collected: 10/14/20 09:20
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	50 mL	50 mL	422375	10/16/20 17:03	SS	TAL SAC

Client Sample ID: 22-S
Date Collected: 10/14/20 09:17
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	50 mL	50 mL	422375	10/16/20 14:43	SS	TAL SAC

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Client Sample ID: 22-DD
Date Collected: 10/14/20 09:44
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	50 mL	50 mL	422375	10/16/20 17:26	SS	TAL SAC

Client Sample ID: 23-S
Date Collected: 10/14/20 10:17
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	50 mL	50 mL	422375	10/16/20 16:40	SS	TAL SAC

Client Sample ID: 27-S
Date Collected: 10/14/20 10:08
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	50 mL	50 mL	422375	10/16/20 18:35	SS	TAL SAC

Client Sample ID: 2-D
Date Collected: 10/14/20 10:13
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	50 mL	50 mL	422375	10/16/20 18:58	SS	TAL SAC

Client Sample ID: 23-D
Date Collected: 10/14/20 10:43
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-26
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	50 mL	50 mL	422375	10/16/20 17:49	SS	TAL SAC

Client Sample ID: 3-D
Date Collected: 10/14/20 10:48
Date Received: 10/14/20 15:10

Lab Sample ID: 720-100214-27
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	50 mL	50 mL	422375	10/16/20 18:12	SS	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAC
5030B	Purge and Trap	SW846	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: 901/902 Thompson Place

Job ID: 720-100214-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
720-100214-1	TB-1	Water	10/13/20 00:00	10/14/20 15:10	
720-100214-2	53-D	Water	10/13/20 09:03	10/14/20 15:10	
720-100214-3	35-DDD	Water	10/13/20 09:08	10/14/20 15:10	
720-100214-4	15-S	Water	10/13/20 09:57	10/14/20 15:10	
720-100214-5	29-S	Water	10/13/20 10:02	10/14/20 15:10	
720-100214-6	52-D	Water	10/13/20 10:35	10/14/20 15:10	
720-100214-7	29-D	Water	10/13/20 10:40	10/14/20 15:10	
720-100214-8	27-D	Water	10/13/20 11:34	10/14/20 15:10	
720-100214-9	1-D	Water	10/13/20 11:39	10/14/20 15:10	
720-100214-10	36-D	Water	10/13/20 12:10	10/14/20 15:10	
720-100214-11	36-S	Water	10/13/20 12:38	10/14/20 15:10	
720-100214-12	36-DD	Water	10/13/20 13:02	10/14/20 15:10	
720-100214-13	16-S	Water	10/14/20 10:58	10/14/20 15:10	
720-100214-14	DW-7	Water	10/14/20 11:26	10/14/20 15:10	
720-100214-15	EB-2	Water	10/14/20 11:35	10/14/20 15:10	
720-100214-16	37-S	Water	10/13/20 13:11	10/14/20 15:10	
720-100214-17	EB-1	Water	10/13/20 13:30	10/14/20 15:10	
720-100214-18	28-D	Water	10/13/20 13:36	10/14/20 15:10	
720-100214-19	27-DD	Water	10/14/20 08:38	10/14/20 15:10	
720-100214-20	28-S	Water	10/14/20 09:20	10/14/20 15:10	
720-100214-21	22-S	Water	10/14/20 09:17	10/14/20 15:10	
720-100214-22	22-DD	Water	10/14/20 09:44	10/14/20 15:10	
720-100214-23	23-S	Water	10/14/20 10:17	10/14/20 15:10	
720-100214-24	27-S	Water	10/14/20 10:08	10/14/20 15:10	
720-100214-25	2-D	Water	10/14/20 10:13	10/14/20 15:10	
720-100214-26	23-D	Water	10/14/20 10:43	10/14/20 15:10	
720-100214-27	3-D	Water	10/14/20 10:48	10/14/20 15:10	

1 of 3 197587

TestAmerica Pleasanton
1220 Quarry Lane

Pleasanton, CA 94566-4756
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record for Haley & Aldrich, Inc. Blanket Service Agreement #2019-22-TestAmerica

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc..

Client Contact	H&A Project Manager: Mike Calhoun	H&A Site Contact:	Date:	COC No:
Haley & Aldrich	Tel/Fax: 510-879-4554	Lab Contact: Lee Ann Heathcote	Carrier:	____ of ____ COCs
1956 Webster Street, Suite 300	Analysis Turnaround Time			Sampler:
Oakland, CA 94612	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
510-879-4554 Phone	TAT if different from Below ____			Walk-in Client:
510-879-4579 FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 127819	☑ 1 week			
Site: Former 901/902 Thompson Place	☐ 2 days			Job / SDG No.:
H&A P O # 127819-005 SID 1	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8260B (8010 list)	Sample Specific Notes:
TB-1	10/13/20	—	G	W	3	N	N	X	
53-D	10/13/20	0903	G	GW	9	N	Y	X	
35-DDD	10/13/20	0908	G	GW	3	N	N	X	
15-S	10/13/20	0957	G	GW	3	N	N	X	
29-S	10/13/20	1002	G	GW	3	N	N	X	
52-D	10/13/20	1035	G	GW	3	N	N	X	
29-D	10/13/20	1040	G	GW	3	N	N	X	
27-D	10/13/20	1134	G	GW	3	N	N	X	
1-D	10/13/20	1139	G	GW	3	N	N	X	
36-D	10/13/20	1210	G	GW	3	N	N	X	
36-S	10/13/20	1238	G	GW	3	N	N	X	
36-DD	10/13/20	1302	G	GW	3	N	N	X	

720-100214 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments: EPA 8260B (8010 list) + Freon 113. Send report to: mcalhoun@haleyaldrich.com, mzlotoff@haleyaldrich.com, vgodard@haleyaldrich.com, acaveney@haleyaldrich.com

ANALYZE FOR VOCs WITHIN SEVEN DAYS OF SAMPLE COLLECTION

2.6°C

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____		Therm ID No.: ____
Relinquished by: Manuel Gallegos	Company: F.S.I.	Date/Time: 10/14/20 1510	Received by:	Company: FYA-PIS	Date/Time: 10/14/20 1510
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-045, Rev. 1.2, dated 1/8/2016

2 of 3 197589

TestAmerica Pleasanton
1220 Quarry Lane

Pleasanton, CA 94566-4756
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record for Haley & Aldrich, Inc. Blanket Service Agreement #2019-22-TestAmerica

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc..

Client Contact	H&A Project Manager: Mike Calhoun	H&A Site Contact:	Date:	COC No:
Haley & Aldrich	Tel/Fax: 510-879-4554	Lab Contact: Lee Ann Heathcote	Carrier:	____ of ____ COCs
1956 Webster Street, Suite 300	Analysis Turnaround Time			Sampler:
Oakland, CA 94612	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
510-879-4554 Phone	TAT if different from Below ____			Walk-in Client:
510-879-4579 FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 127819	☑ 1 week			
Site: Former 901/902 Thompson Place	☐ 2 days			Job / SDG No.:
H&A P O # 127819-005 SID 1	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8260B (8010 list)	Sample Specific Notes:
16-5	10/14/20	1058	G	Gw	3	N	N	X	
DW-7	10/14/20	1126	G	Gw	3	N	N	X	
EB-2	10/14/20	1135	G	W	3	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments: EPA 8260B (8010 list) + Freon 113. Send report to: mcalhoun@haleyaldrich.com, mzlotoff@haleyaldrich.com, vgodard@haleyaldrich.com, acaveney@haleyaldrich.com

2.6°

ANALYZE FOR VOCs WITHIN SEVEN DAYS OF SAMPLE COLLECTION

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:____ Corr'd:____ | Therm ID No.:____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	P.S.I.	10/14/20 1510		EA-NS	10/16/20 1510
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-045, Rev. 1.2, dated 1/8/2016

3 of 3 197590

TestAmerica Pleasanton
1220 Quarry Lane

Pleasanton, CA 94566-4756
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record for Haley & Aldrich, Inc. Blanket Service Agreement #2019-22-TestAmerica

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc.

Client Contact	H&A Project Manager: Mike Calhoun	H&A Site Contact:	Date:	COC No:
Haley & Aldrich	Tel/Fax: 510-879-4554	Lab Contact: Lee Ann Heathcote	Carrier:	____ of ____ COCs
1956 Webster Street, Suite 300	Analysis Turnaround Time			Sampler:
Oakland, CA 94612	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
510-879-4554 Phone	TAT if different from Below ____			Walk-in Client:
510-879-4579 FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 127819	☑ 1 week			
Site: Former 901/902 Thompson Place	☐ 2 days			Job / SDG No.:
H&A P O # 127819-005 SID 1	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8260B (8010 list)	Sample Specific Notes:
37-S	10/13/20	1311	GW	W	3	N	N	X	
EB-1	10/13/20	1330	G	W	3	N	N	X	
28-D	10/13/20	1336	GW	W	3	N	N	X	
27-DD	10/14/20	0835	G	GW	3	N	N	X	
28-S	10/14/20	0920	G	GW	3	N	N	X	
22-S	10/14/20	0917	G	GW	3	N	N	X	
22-DD	10/14/20	0944	G	GW	3	N	N	X	
23-S	10/14/20	1017	G	GW	3	N	N	X	
27-S	10/14/20	1005	G	GW	3	N	N	X	
2-D	10/14/20	1013	G	GW	3	N	N	X	
23-D	10/14/20	1043	G	GW	3	N	N	X	
3-D	10/14/20	1048	G	GW	3	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments: EPA 8260B (8010 list) + Freon 113. Send report to: mcalhoun@haleyaldrich.com, mzlotoff@haleyaldrich.com, vgodard@haleyaldrich.com, acaveney@haleyaldrich.com

2.6

ANALYZE FOR VOCs WITHIN SEVEN DAYS OF SAMPLE COLLECTION

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ | Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Manuel Gallegos	F.S.I.	10/14/20 1515		EAN	10/14/20 1510
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-045, Rev. 1.2, dated 1/8/2016

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone: 925-484-1919 Fax: 925-600-3002

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Heathcote, Lee Ann	Carrier Tracking No(s):	COC No: 720-50237.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: LeeAnn.Heathcote@Eurofinset.com	State of Origin: California	Page: Page 1 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 720-100214-1
Address: 880 Riverside Parkway	Due Date Requested: 10/20/2020			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: 901/902 Thompson Place-Advanced Micro	Project #: 72011792			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wheater, Sheeter, Onwatered, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5030B (MOD) HVOC 8260B + add on	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
* TB-1 (720-100214-1)	10/13/20	Pacific		Water			X	3	
53-D (720-100214-2)	10/13/20	09:03 Pacific		Water			X	3	
53-D (720-100214-2MS)	10/13/20	09:03 Pacific	MS	Water			X	3	
53-D (720-100214-2MSD)	10/13/20	09:03 Pacific	MSD	Water			X	3	
35-DDD (720-100214-3)	10/13/20	09:08 Pacific		Water			X	3	
15-S (720-100214-4)	10/13/20	09:57 Pacific		Water			X	3	
29-S (720-100214-5)	10/13/20	10:02 Pacific		Water			X	3	
52-D (720-100214-6)	10/13/20	10:35 Pacific		Water			X	3	
29-D (720-100214-7)	10/13/20	10:40 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
[signature]	10-15-2020 1010	PIS	[signature]	10-15-20 1010	PIS
[signature]	10/15/2020 1308		[signature]	10/15/20 1308	Eurofins

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

* (2/3) RECEIVED #1-C NOT IN COOLER [signature] 10/15/20

Ver: 01/16/2019

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone: 925-484-1919 Fax: 925-600-3002

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Heathcote, Lee Ann	Carrier Tracking No(s):	COC No: 720-50237.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: LeeAnn.Heathcote@Eurofinset.com	State of Origin: California	Page: Page 2 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 720-100214-1
Address: 880 Riverside Parkway,	Due Date Requested: 10/20/2020			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: 901/902 Thompson Place-Advanced Micro	Project #: 72011792			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5030B (MOD) HVOC 8260B + add on	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
27-D (720-100214-8)	10/13/20	11:34 Pacific		Water			X	3	
1-D (720-100214-9)	10/13/20	11:39 Pacific		Water			X	3	
36-D (720-100214-10)	10/13/20	12:10 Pacific		Water			X	3	
36-S (720-100214-11)	10/13/20	12:38 Pacific		Water			X	3	
36-DD (720-100214-12)	10/13/20	13:02 Pacific		Water			X	3	
16-S (720-100214-13)	10/14/20	10:58 Pacific		Water			X	3	
DW-7 (720-100214-14)	10/14/20	11:26 Pacific		Water			X	3	
EB-2 (720-100214-15)	10/14/20	11:35 Pacific		Water			X	3	
37-S (720-100214-16)	10/13/20	13:11 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10-15-2020 1010	PIS	[signature]	10-15-20 1010	PIS
[signature]	10/15/2020 1508		[signature]	10/15/20 1508	EDSX

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 07/16/2019

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone: 925-484-1919 Fax: 925-600-3002

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Heathcote, Lee Ann	Carrier Tracking No(s):	COC No: 720-50237.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: LeeAnn.Heathcote@Eurofinset.com	State of Origin: California	Page: Page 3 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 720-100214-1
Address: 880 Riverside Parkway,	Due Date Requested: 10/20/2020			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: 901/902 Thompson Place-Advanced Micro	Project #: 72011792			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wastewater, Sewage, Onwasteland, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5030B (MOD) HVOC 8260B + add on	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
EB-1 (720-100214-17)	10/13/20	13:30 Pacific		Water			X	3	
28-D (720-100214-18)	10/13/20	13:36 Pacific		Water			X	3	
27-DD (720-100214-19)	10/14/20	08:38 Pacific		Water			X	3	
28-S (720-100214-20)	10/14/20	09:20 Pacific		Water			X	3	
22-S (720-100214-21)	10/14/20	09:17 Pacific		Water			X	3	
22-DD (720-100214-22)	10/14/20	09:44 Pacific		Water			X	3	
23-S (720-100214-23)	10/14/20	10:17 Pacific		Water			X	3	
27-S (720-100214-24)	10/14/20	10:08 Pacific		Water			X	3	
2-D (720-100214-25)	10/14/20	10:13 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10-15-2020 1010	PLS	[signature]	10-15-20 1010	PLS
[signature]	10/15/2020 1308		[signature]	10/15/20 1308	[signature]

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/16/2019

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone: 925-484-1919 Fax: 925-600-3002

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Heathcote, Lee Ann	Carrier Tracking No(s):	COC No: 720-50237.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: LeeAnn.Heathcote@Eurofinset.com	State of Origin: California	Page: Page 4 of 4
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 720-100214-1
Address: 880 Riverside Parkway,	Due Date Requested: 10/20/2020			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: 901/902 Thompson Place-Advanced Micro	Project #: 72011792			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5030B (MOD) HVOC 8260B + add ons	Total Number of Containers	Special Instructions/Note:
		Preservation Code:							
23-D (720-100214-26)	10/14/20	10:43 Pacific		Water			X	3	
3-D (720-100214-27)	10/14/20	10:48 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: [signature]	Date/Time: 10-15-2020 1010	Company: PLS	Received by: [signature]	Date/Time: 10/15/20 1010	Company: PLS
Relinquished by: [signature]	Date/Time: 10/15/2020 1308	Company:	Received by: [signature]	Date/Time: 10/15/20 1308	Company: ETA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

eurofins | Environment Testing TestAmerica

Sacramento
Sample Receiving Notes

720-100214 Field Sheet

Job: _____

Tracking # : _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: AK-5 Corr. Factor: (+ ⊖) 0.5 °C

Ice X Wet X Gel _____ Other _____

Cooler Custody Seal: _____

Cooler ID: _____

Temp Observed: 0.9 °C Corrected: 0.4 °C

From: Temp Blank ☑ Sample ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐

Initials: [illegible] Date: 10/15/20

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample custody seal?	☐	☐	☑
Containers are not broken or leaking?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Samples w/o discrepancies?	☐	☑	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: [illegible] Date: 10/15/20

Notes: X SAMPLE #1-C NOT RECEIVED.
[illegible] 10/15/20

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☑	☐	☐
Log Release checked in TALS?	☐	☐	☑

Initials: [illegible] Date: 10/15/20

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-100214-1

Login Number: 100214
List Number: 1
Creator: Arauz, Dennis

List Source: Eurofins TestAmerica, Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-100214-1

Login Number: 100214
List Number: 2
Creator: Saephan, Kae C

List Source: Eurofins TestAmerica, Sacramento
List Creation: 10/15/20 02:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	ob: 0.9c corr: 0.4c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX E

Quality Assurance/Quality Control Data

Haley & Aldrich, Inc.
600 South Meyer Ave
Suite 100
Tucson, AZ 85701
520.289.8621

Data Usability Summary Report

Project Name: 901/902 Thompson Place – Annual Event

Analytical Laboratory: Eurofins TestAmerica Laboratories, Inc. – Pleasanton, CA

Validation Performed by: Vanessa Godard

Validation Reviewed by: Katherine Miller

Validation Date: 7 November 2020

Haley & Aldrich, Inc., prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the 901/902 Thompson Place groundwater samples collected on 13 and 14 October 2020 and submitted to Eurofins TestAmerica Laboratories, Inc. of Pleasanton, California. The analytical results for the Sample Delivery Group(s) (SDG) listed below were reviewed to determine the data's usability.

This data validation and usability assessment was performed as per the guidance and requirements established by the United States Environmental Protection Agency's (EPA) *National Functional Guidelines for Organic Data Review*. The following quality assurance/quality control (QA/QC) criteria from the analysis of the project samples were reviewed as applicable:

1. Sample Delivery Group Number 720-100214-1

- Holding Times/Preservation
- Reporting Limits and Sample Dilution
- Blank Sample Analysis
- Surrogate Recovery Compliance
- Laboratory Control Samples
- Matrix Spike Samples
- Laboratory and Field Duplicate Sample Analysis
- System Performance and Overall Assessment

Analytical precision and accuracy were evaluated based on the laboratory control, matrix spike, or laboratory duplicate analyses performed concurrently with the project samples or based on field duplicates collected at the site.

Data reported in this sampling event were reported to the laboratory reporting limit (RL).

Sample data were qualified in accordance with laboratory's standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives for the project and therefore usable; any exceptions are noted in the following pages.

ED_013213_00001031-00170

1. Sample Delivery Group Number 720-100214-1

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 720-100214-1, dated 3 November 2020. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the chain of custody. COCs were appropriately signed and dated by the field and/or laboratory personnel with the following exceptions:

- Custody seals were not used on the sample cooler(s).
- Samples were sent to the West Sacramento facility for analysis.
- The lab report was revised once to remove the comment insinuating the trip blank was not received/analyzed and again to report the data to the reporting limit, not the method detection limit.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Method(s)	Holding Time
TB-1	TB	720-100214-1	10/13/2020	Blank	Volatile Organic Compounds (VOCs) by EPA 8260B	7 days un-preserved, 14 days preserved
53-D	N	720-100214-2	10/13/2020	Groundwater		
35-DDD	N	720-100214-3	10/13/2020	Groundwater		
15-S	N	720-100214-4	10/13/2020	Groundwater		
29-S	N	720-100214-5	10/13/2020	Groundwater		
52-D	N	720-100214-6	10/13/2020	Groundwater		
29-D	N	720-100214-7	10/13/2020	Groundwater		
27-D	N	720-100214-8	10/13/2020	Groundwater		
1-D	FD	720-100214-9	10/13/2020	Groundwater		
36-D	N	720-100214-10	10/13/2020	Groundwater		
36-S	N	720-100214-11	10/13/2020	Groundwater		
36-DD	N	720-100214-12	10/13/2020	Groundwater		
16-S	N	720-100214-13	10/14/2020	Groundwater		
DW-7	N	720-100214-14	10/14/2020	Groundwater		
EB-2	EB	720-100214-15	10/14/2020	Blank		
37-S	N	720-100214-16	10/13/2020	Groundwater		
EB-1	EB	720-100214-17	10/13/2020	Blank		
28-D	N	720-100214-18	10/13/2020	Groundwater		
27-DD	N	720-100214-19	10/14/2020	Groundwater		
28-S	N	720-100214-20	10/14/2020	Groundwater		
22-S	N	720-100214-21	10/14/2020	Groundwater		
22-DD	N	720-100214-22	10/14/2020	Groundwater		
23-S	N	720-100214-23	10/14/2020	Groundwater		
27-S	N	720-100214-24	10/14/2020	Groundwater		
2-D	FD	720-100214-25	10/14/2020	Groundwater		
23-D	N	720-100214-26	10/14/2020	Groundwater		
3-D	FD	720-100214-27	10/14/2020	Groundwater		

1.2 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol.

Cooler temperature on arrival to the laboratory was: 2.6; 0.4 degrees Celsius.

1.3 REPORTING LIMITS AND SAMPLE DILUTION

All dilutions were reviewed and found to be justified. Any non-detects with elevated reported limits are noted and explained below.

Sample ID	Lab ID	Analyte/ Method	Dilution Factor	Issue/Explanation
27-D	720-100214-8	VOCs by EPA 8260B	2x	Dilution required due to high target analyte concentration.
1-D	720-100214-9			
36-S	720-100214-11			
16-S	720-100214-13			
DW-7	720-100214-14			
28-D	720-100214-18		10	
28-S	720-100214-20		4x	
22-DD	720-100214-22			
23-S	720-100214-23		2	
27-S	720-100214-24		5x	
2-D	720-100214-25			
23-D	720-100214-26		4	
3-D	720-100214-27		5	

1.4 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport. The analysis of the blank samples for field quality control was free of target compounds.

1.5 SURROGATE RECOVERY COMPLIANCE

Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to preparing samples for determining the efficiency of the extraction procedure by evaluating the percent recovery (%R) of the compounds. The %R for each surrogate compound added to each project samples was determined to be within the laboratory specified quality control limits.

1.6 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS/LCSD analyses exhibited recoveries and relative percent differences (RPDs) within the specified limits with the following exceptions:

Sample Type	Method	Batch ID	Analyte	%R	Qualifier	Affected Samples
LCS	EPA 8260C	422370	Bromoform	121%	NA	None, samples ND.

1.7 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies. The sample(s) below were used for MS/MSD:

Lab Sample Number	Matrix Spike/ Matrix Spike Duplicate Sample Client ID	Method(s)
720-100214-2	53-D	VOCs by EPA 8260B

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits.

1.8 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. The laboratory did not analyze any laboratory duplicates in this SDG.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The following sample(s) were used for field duplicate analysis and the RPDs were all below 35% for water (or the absolute difference rule was satisfied if detects were less than 5x the RL).

Primary Sample ID	Duplicate Sample ID	Method(s)
27-D	1-D	VOCs by EPA 8260B
27-S	2-D	VOCs by EPA 8260B
23-D	3-D	VOCs by EPA 8260B

Field Duplicate RPD Calculations:

Method(s): EPA 8260B				
Analyte (µg/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	27-D	**1-D**		
1,2,4-Trichlorobenzene	**4.3**	**4.6**	NA	None, Abs. Diff. < RL
cis-1,2-Dichloroethene	**2.4**	**2.3**	NA	None, Abs. Diff. < RL
Tetrachloroethene	**3.8**	**3.6**	NA	None, Abs. Diff. < RL
Trichloroethene	**72**	**72**	0	None, RPD < 35%
All Remaining VOCs	ND U	ND U	NA	None, Both ND
Analyte (µg/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	27-S	**2-D**		
1,2,4-Trichlorobenzene	**9.6**	**8.6**	NA	None, Abs. Diff. < RL
1,3-Dichlorobenzene	**25**	**25**	0	None, RPD < 35%
1,4-Dichlorobenzene	**4.5**	**4.4**	NA	None, Abs. Diff. < RL
cis-1,2-Dichloroethene	**250**	**250**	0	None, RPD < 35%
trans-1,2-Dichloroethene	**12**	**12**	NA	None, Abs. Diff. < RL
Trichloroethene	**16**	**13**	21	None, RPD < 35%
Vinyl chloride	**19**	**17**	11	None, RPD < 35%
All Remaining VOCs	ND U	ND U	NA	None, Both ND
Analyte (µg/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	23-D	**3-D**		
cis-1,2-Dichloroethene	**3.5**	**4.2**	NA	None, Abs. Diff. < RL
Trichloroethene	**220**	**280**	24	None, RPD < 35%
All Remaining VOCs	ND U	ND U	NA	None, Both ND

1.9 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the data quality objectives for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are 100% useable. No qualifiers were applied to any data in this report.

Glossary

- Sample Types:
  - N — Primary Sample
  - FD — Field Duplicate Sample
  - EB — Equipment Blank Sample
  - TB — Trip Blank Sample
- Units:
  - µg/L or ug/L — micrograms per liter
- Table Footnotes
  - NA — Not applicable
  - ND — Non-detect
  - NR — Not reported
- Abbreviations
  - DUSR — Data Usability Summary Report
  - SDG — Sample Delivery Group
  - EPA — Environmental Protection Agency
  - NFG — National Functional Guidelines
  - QA/QC — Quality Assurance/Quality Control
  - RL — Reporting Limit
  - MDL — Method Detection Limit
  - SOP — Standard Operating Procedures
  - COC — Chain of Custody
  - % — Percent
  - %R — Percent Recovery
  - RPD — Relative Percent Difference
  - LCS/LCSD — Laboratory Control Sample/Laboratory Control Sample Duplicate
  - MS/MSD — Matrix Spike/Matrix Spike Duplicate

Qualifiers

Results are qualified with the following codes in accordance with EPA National Functional Guidelines:

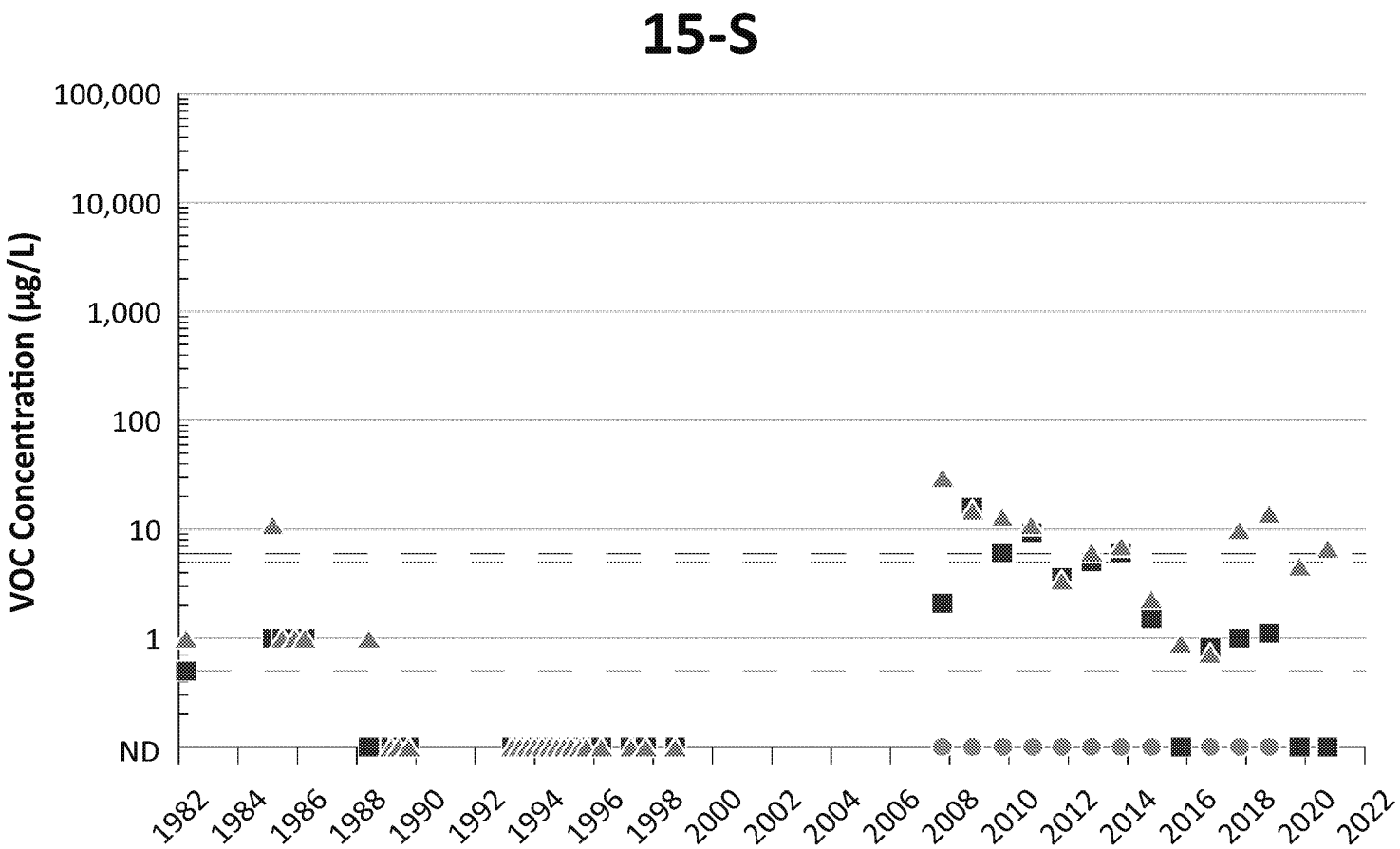
- Concentration (C) Qualifiers:
  - U — The compound was analyzed for but not detected. The associated value is the compound quantitation limit. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".
  - B — The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers:
  - E — The compound was quantitated above the calibration range.
  - D — The concentration is based on a diluted sample analysis.
- Validation Qualifiers:
  - J — The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - J+ — The result is an estimated quantity, but the result may be biased high.
  - J- — The result is an estimated quantity, but the result may be biased low.
  - UJ — The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.
  - NJ — The analysis indicated the presence of a compound for which there was presumptive evidence to make a tentative identification; the associated numerical value is therefore an estimated concentration only.
  - R — The sample results were rejected as unusable; the compound may or may not be present in the sample.

References

1. United States Environmental Protection Agency, 2017b. National Functional Guidelines for Organic Superfund Methods Data Review. EPA-540-R-2017-002. January.

APPENDIX F

Concentration Trend Plots for Site Monitoring Wells



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

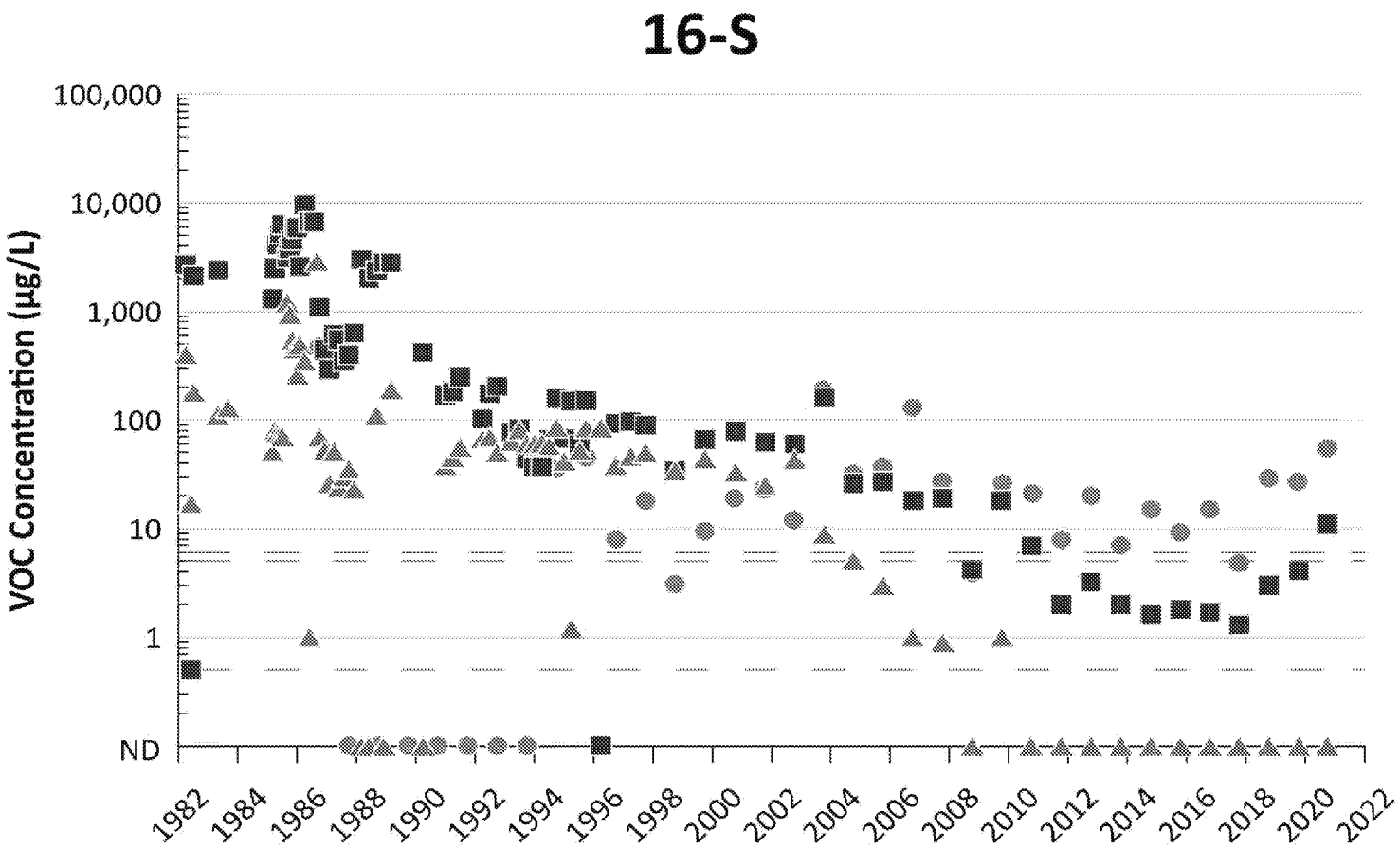
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 15-S

JANUARY 2021

FIGURE F-1

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F1_15-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

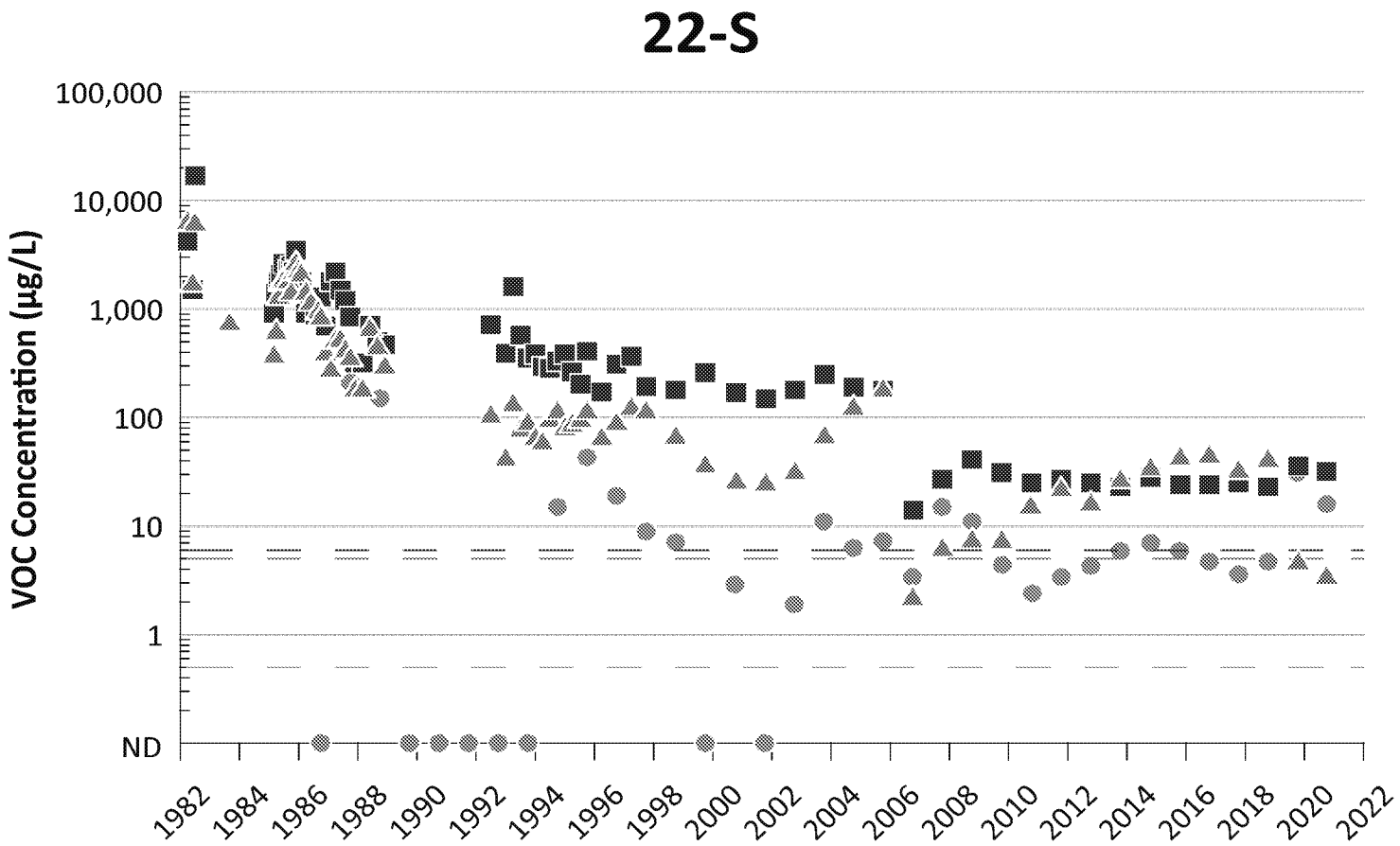
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 16-S

January 2021

FIGURE F-2

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F2_16-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

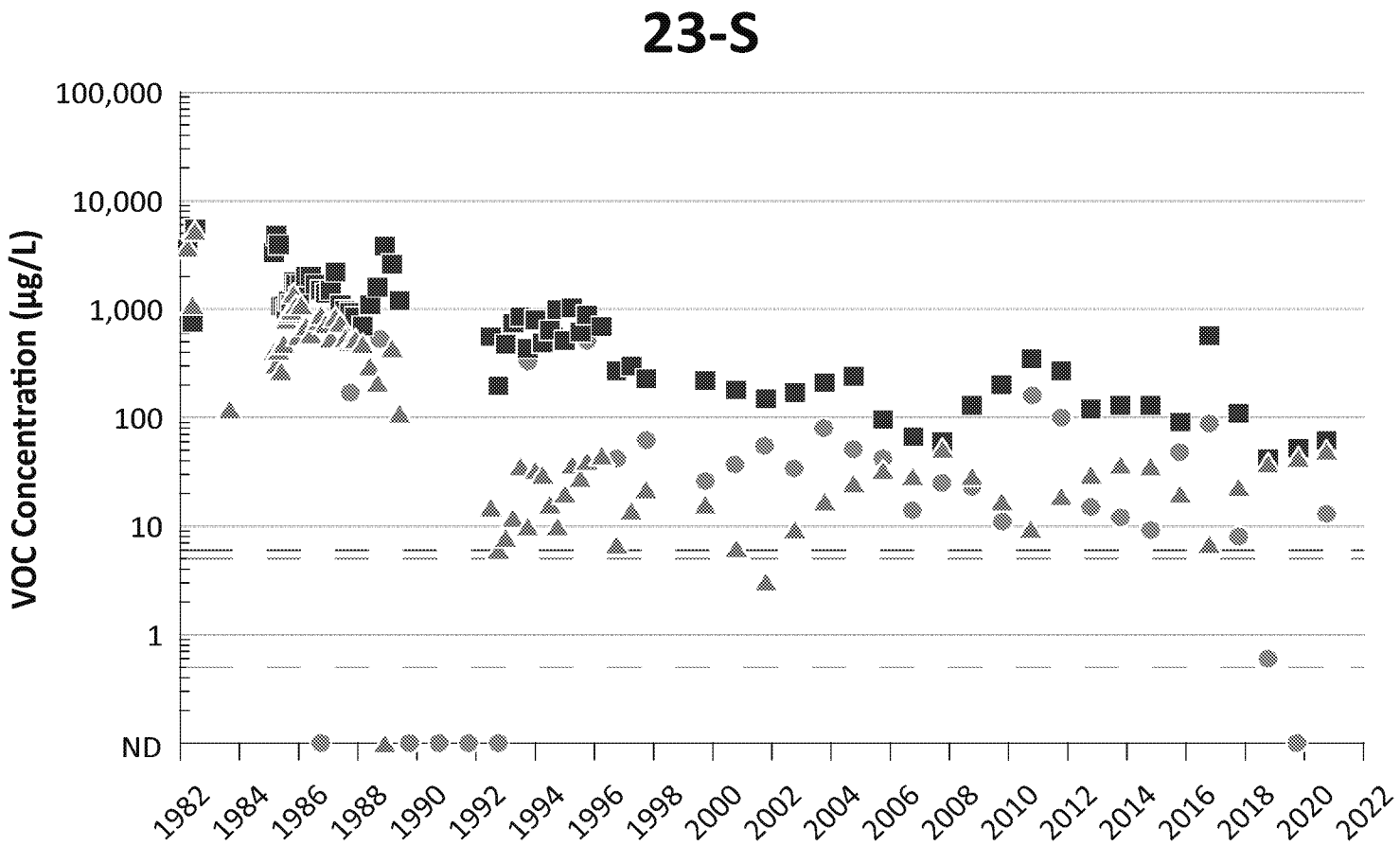
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 22-S

January 2021

FIGURE F-3

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F3_22-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

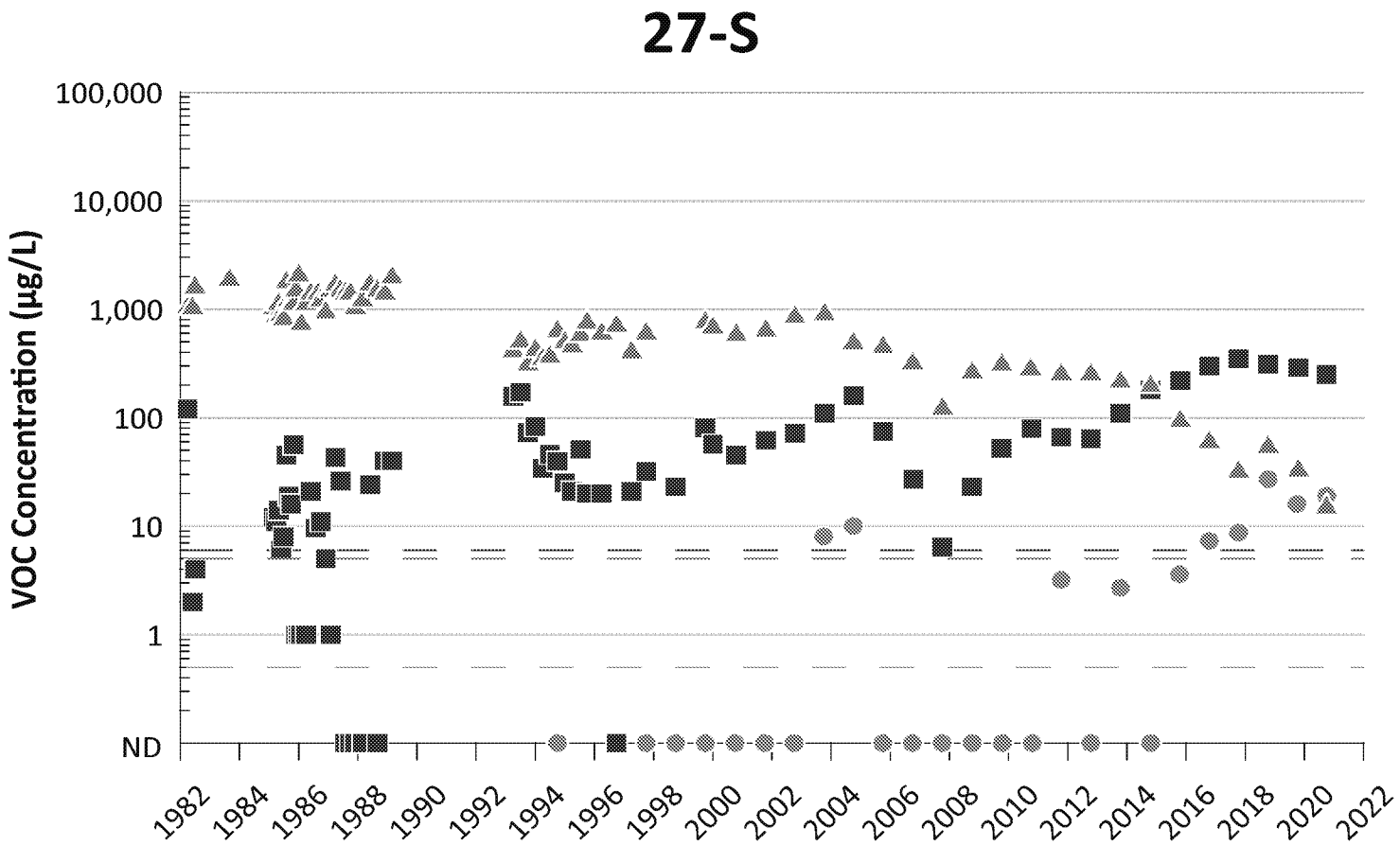
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 23-S

January 2021

FIGURE F-4

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F4_23-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

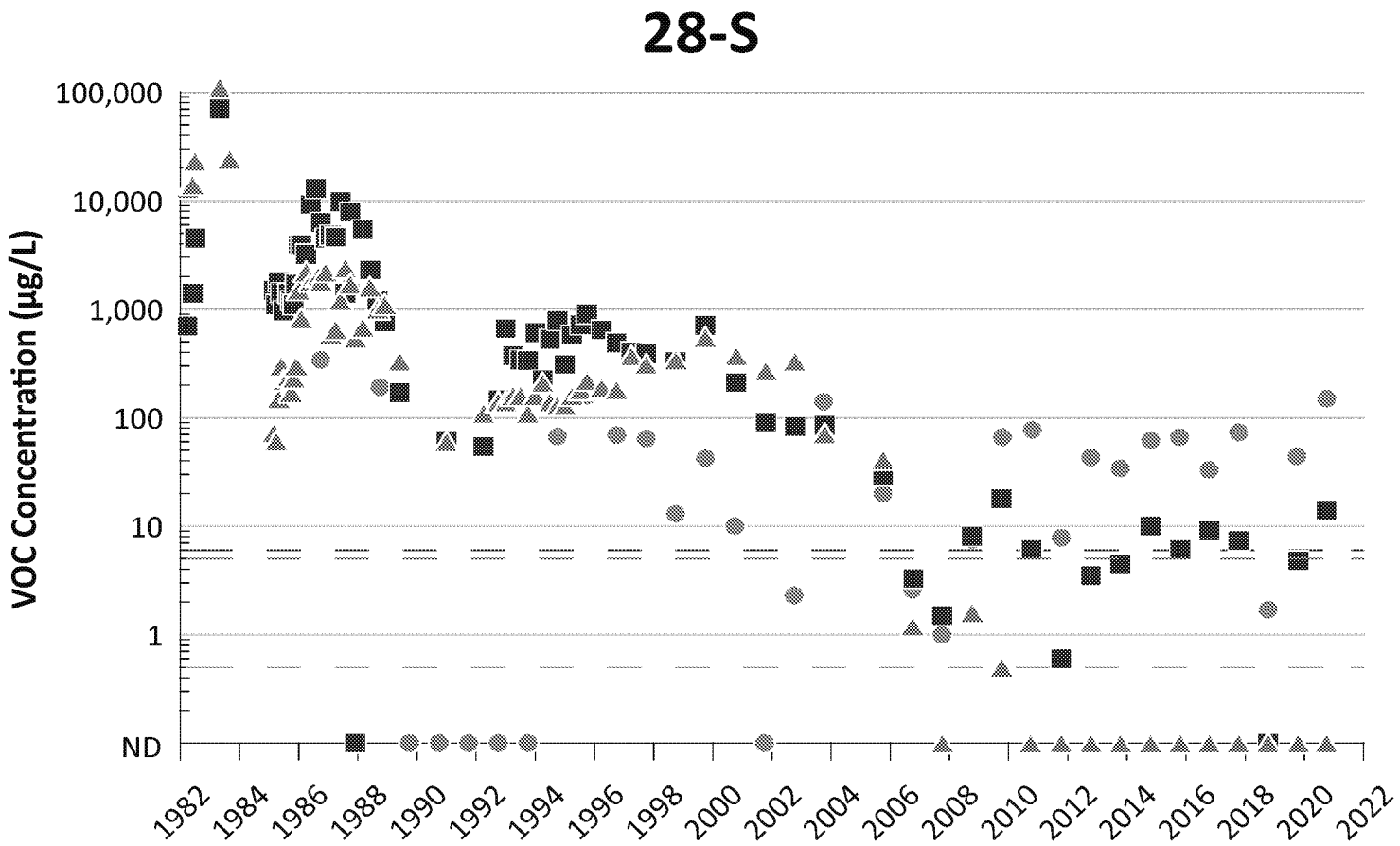
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 27-S

January 2021

FIGURE F-5

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F5_27-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

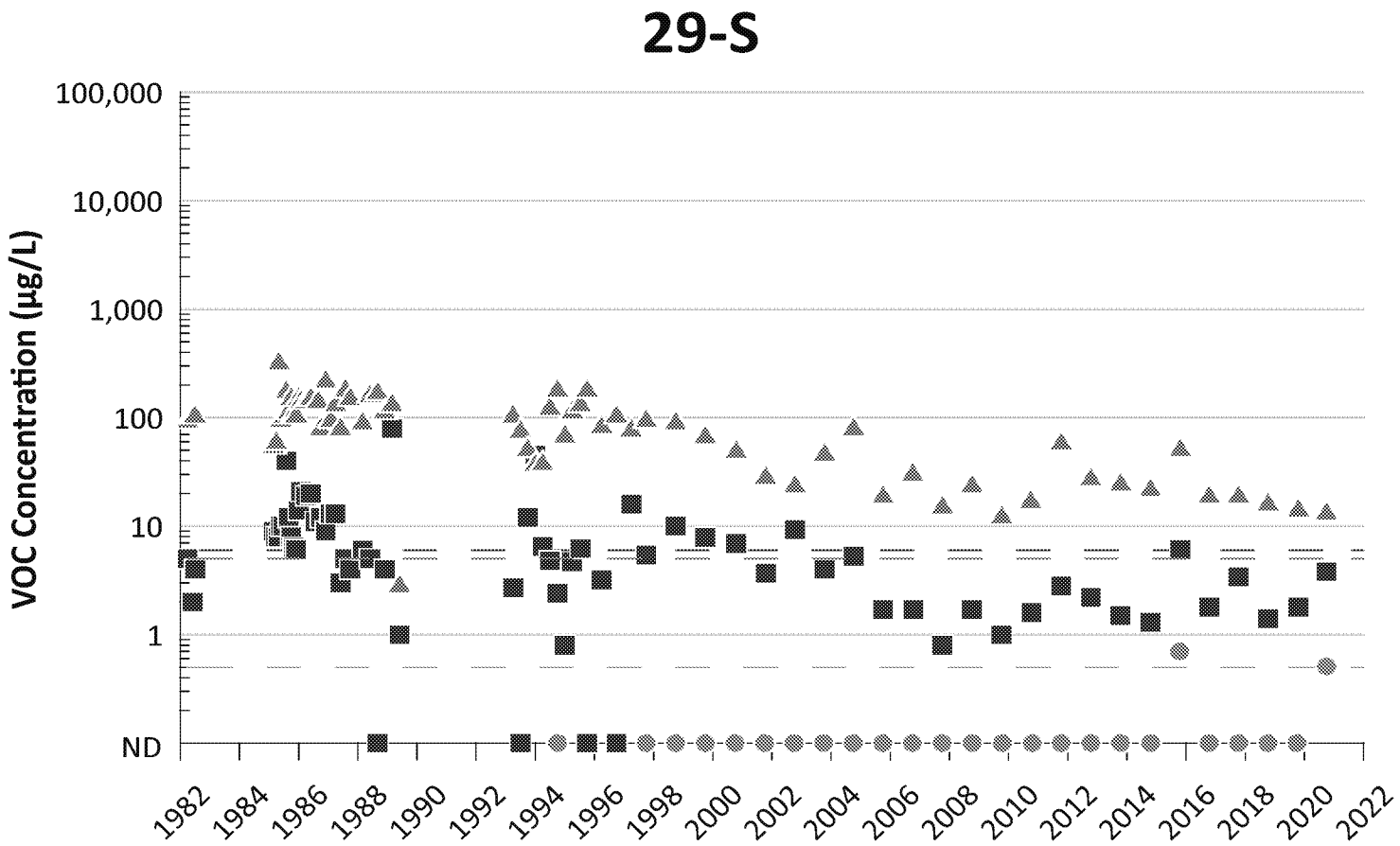
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 28-S

January 2021

FIGURE F-6

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F6_28-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

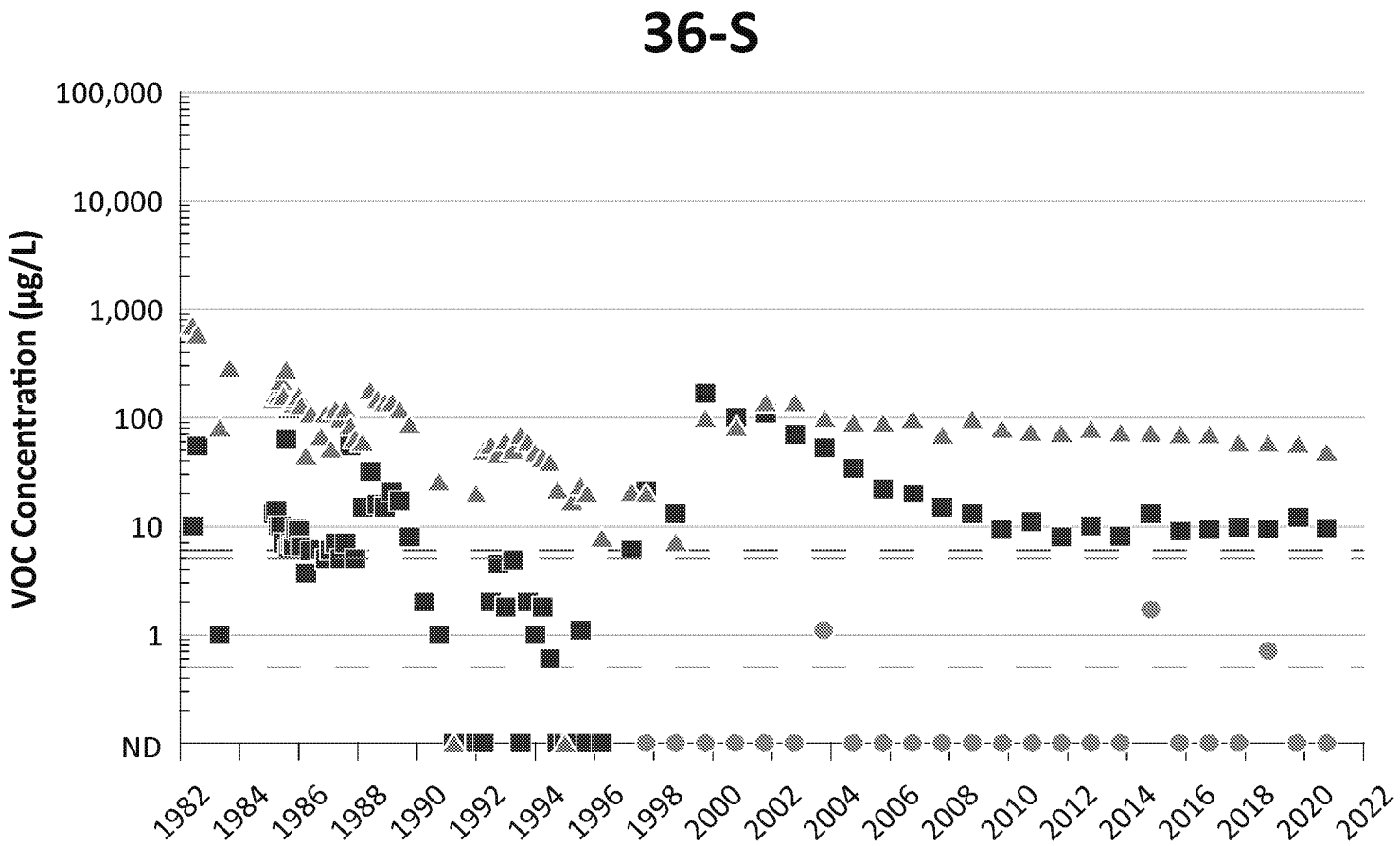
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 29-S

January 2021

FIGURE F-7

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F7_29-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

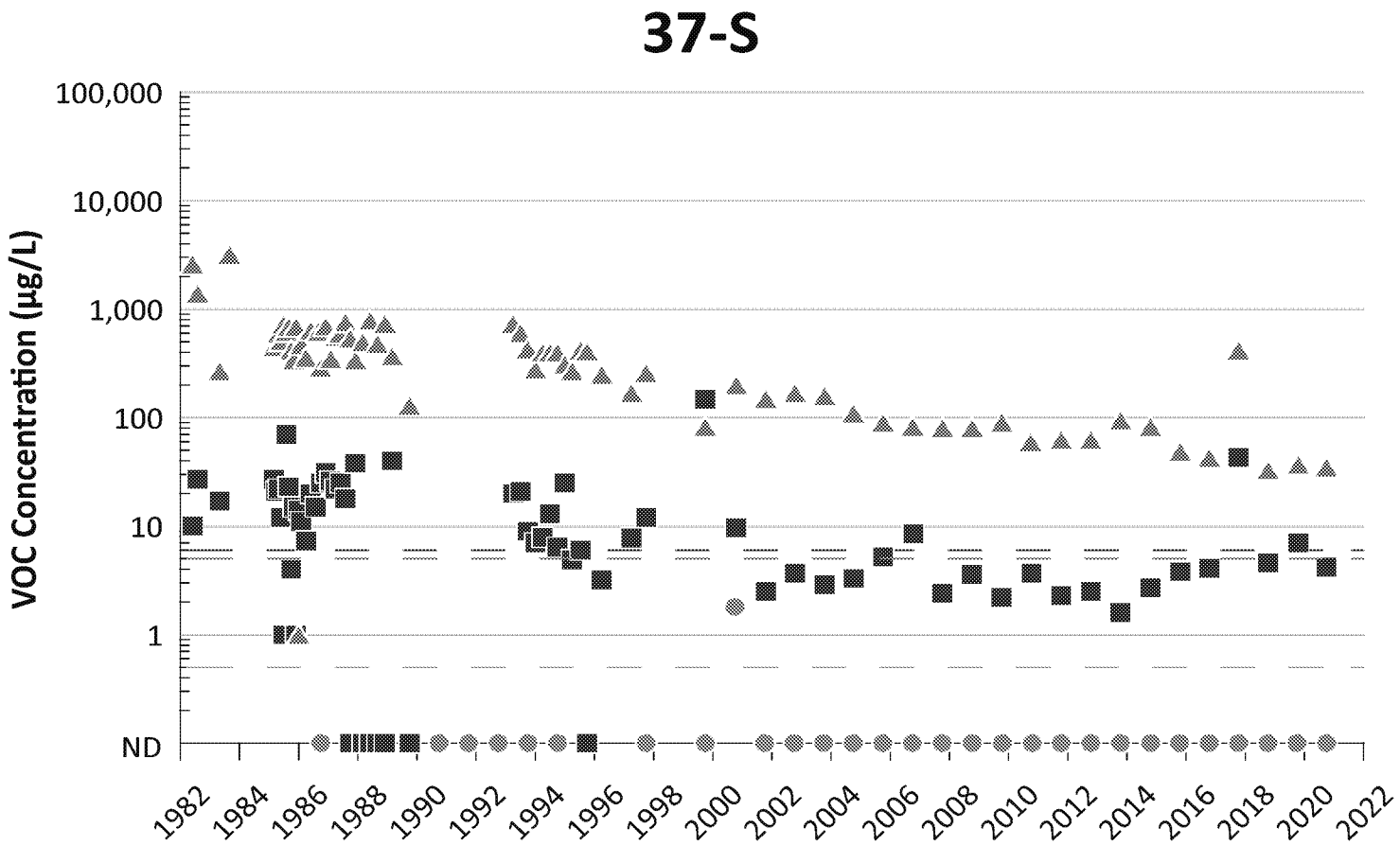
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 36-S

January 2021

FIGURE F-8

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F9_36-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

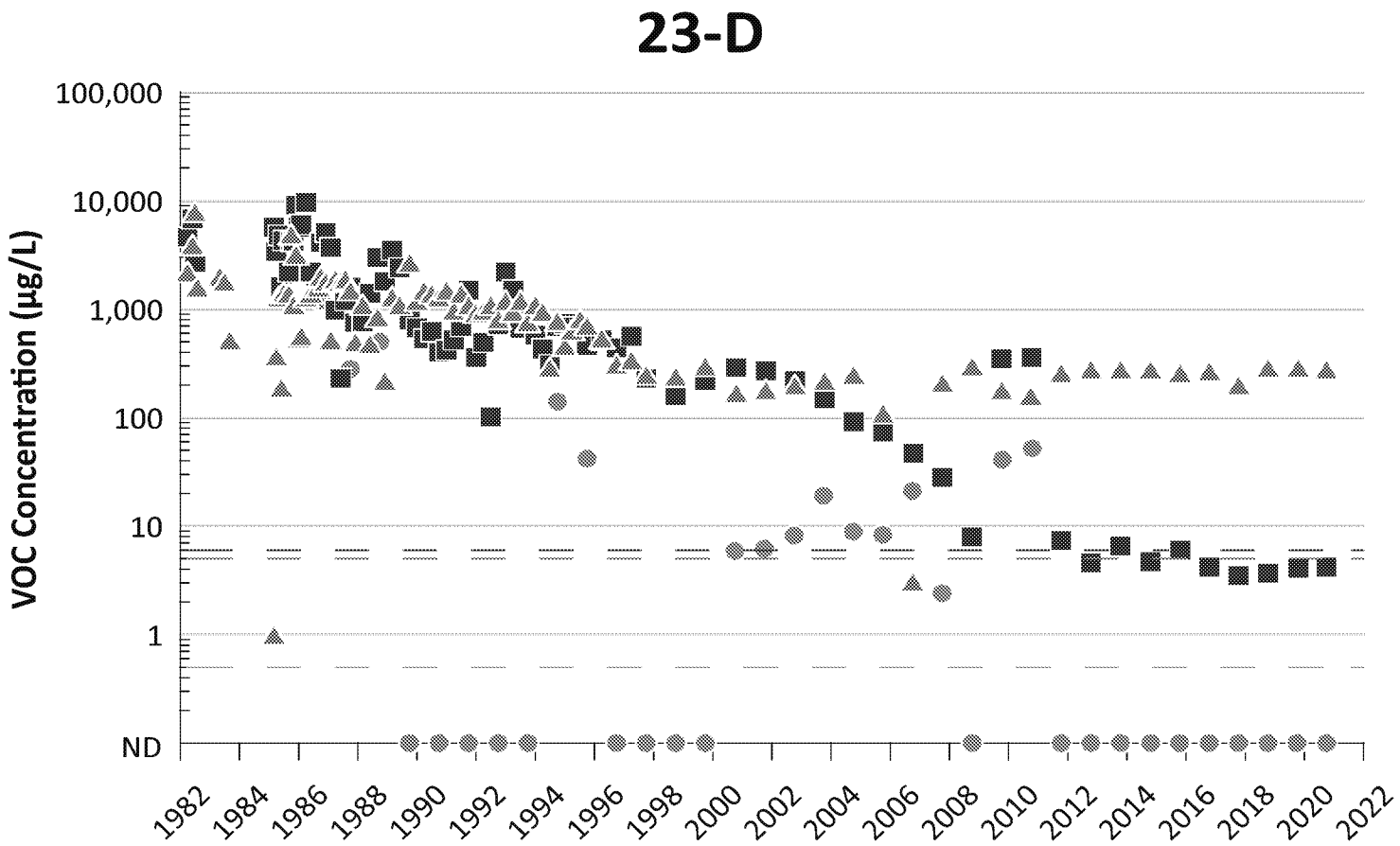
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 37-S

January 2021

FIGURE F-9

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F9_37-S.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

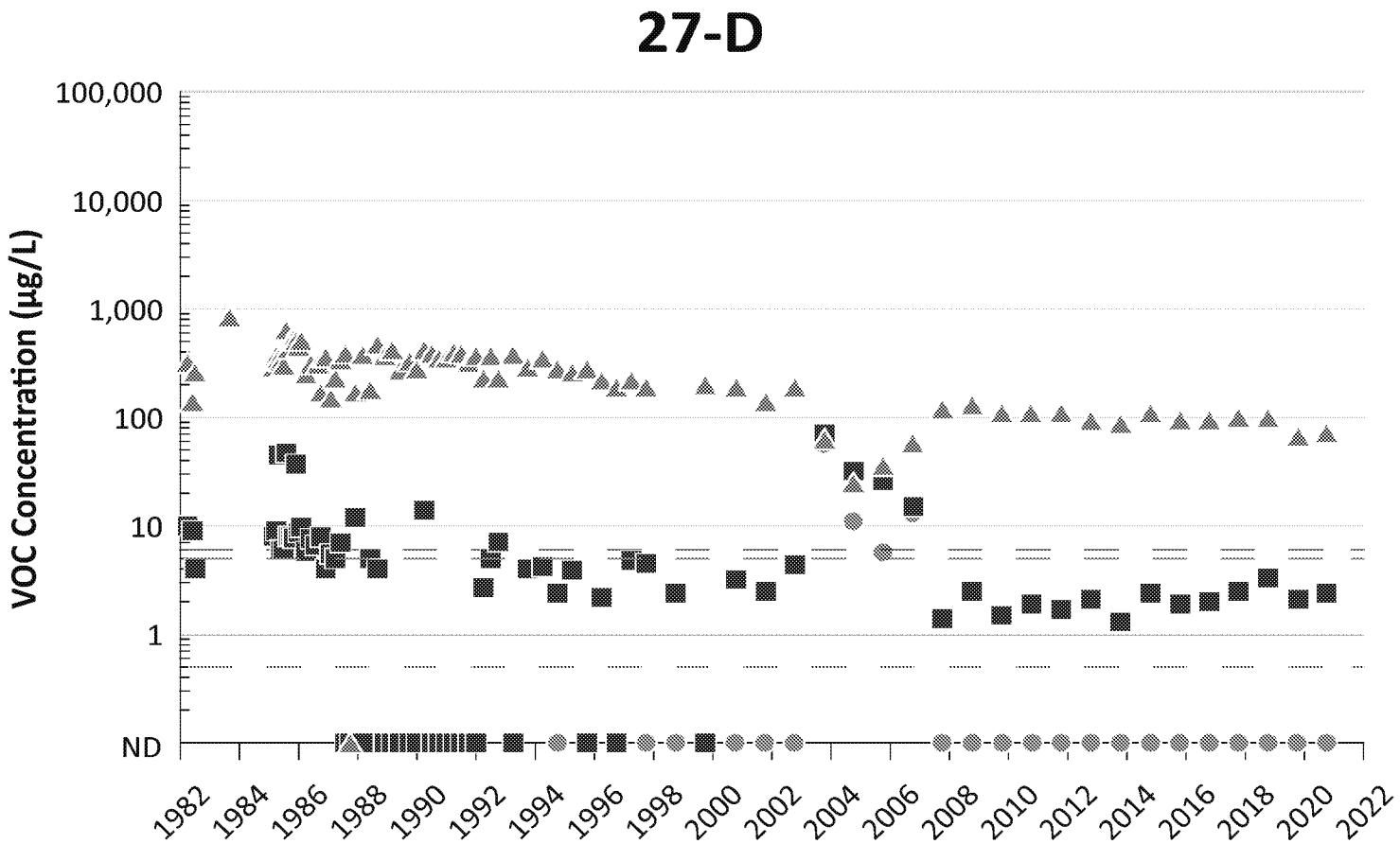
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 23-D

January 2021

FIGURE F-10

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F10_23-D.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

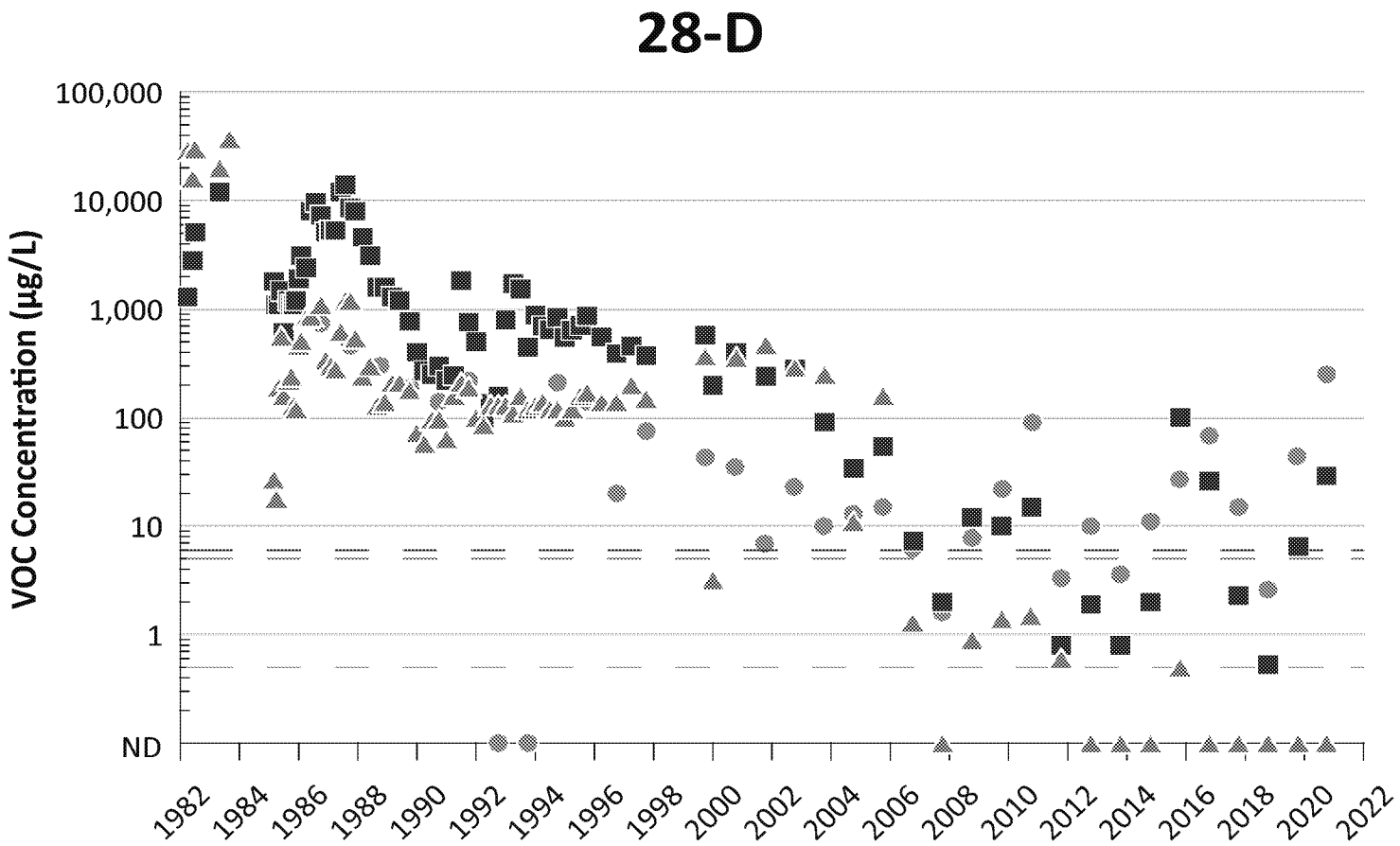
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 27-D

January 2021

FIGURE F-11

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F11_27-D.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

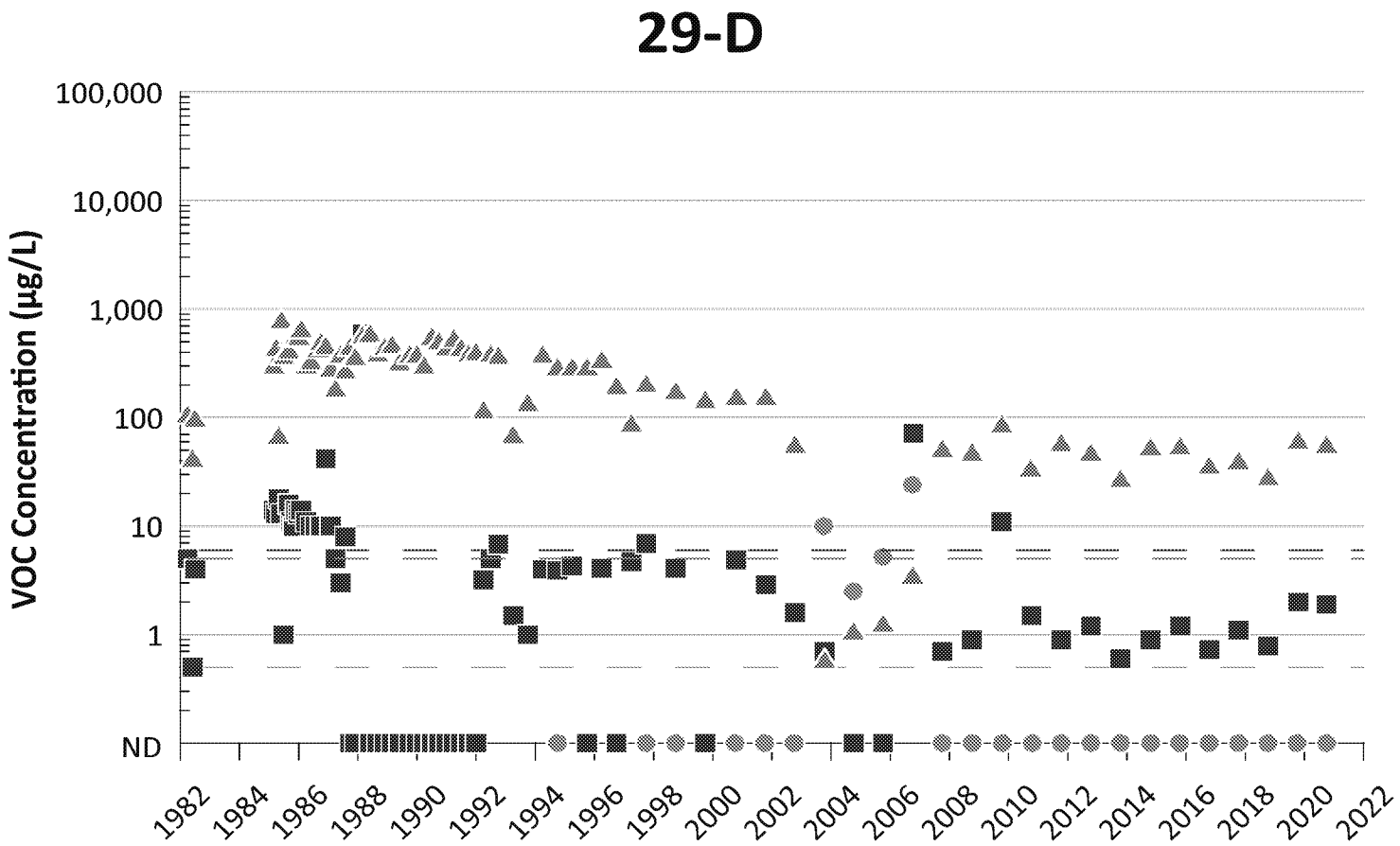
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 28-D

January 2021

FIGURE F-12

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F12_28-D.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

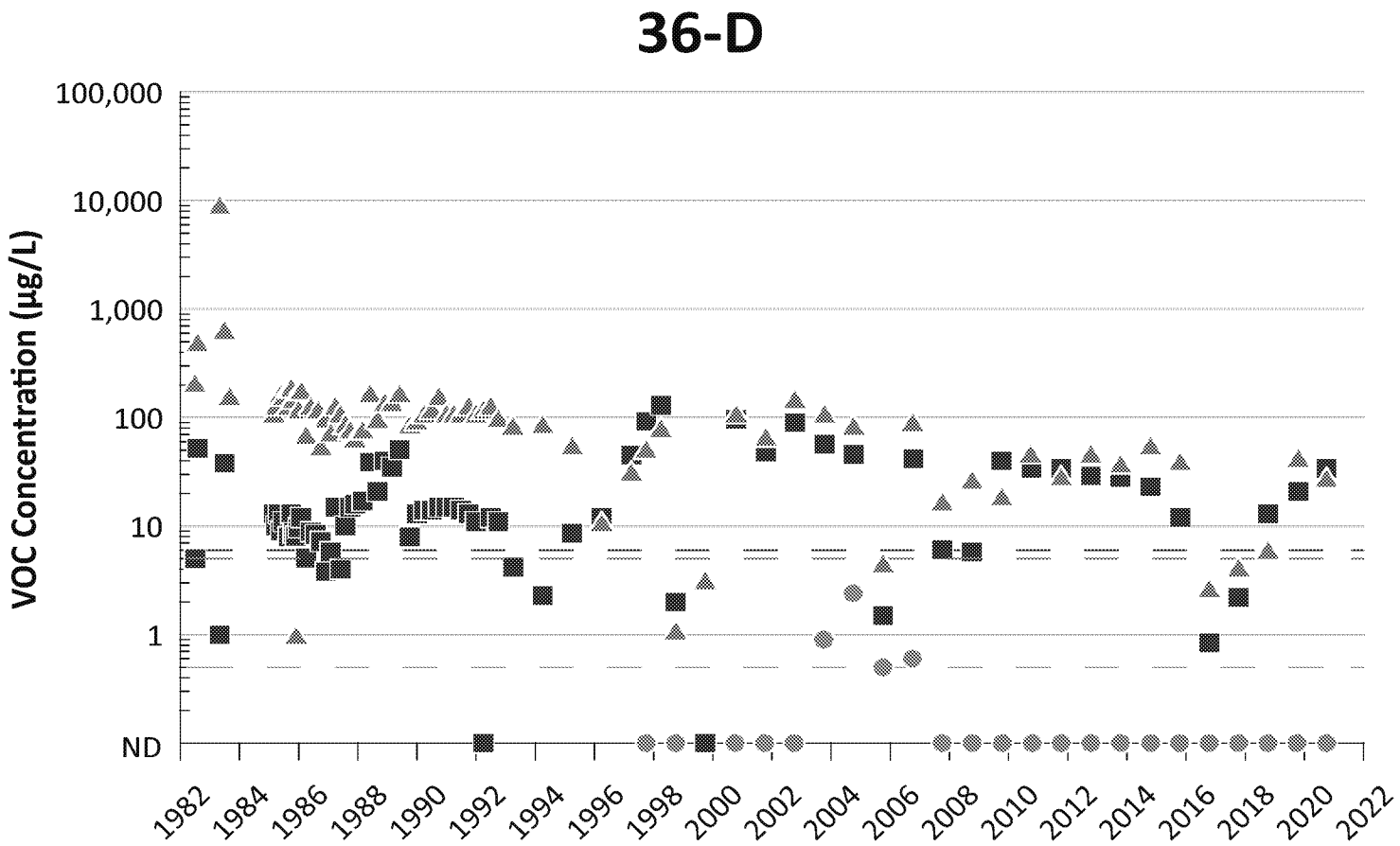
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 29-D

January 2021

FIGURE F-13

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F13_29-D.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

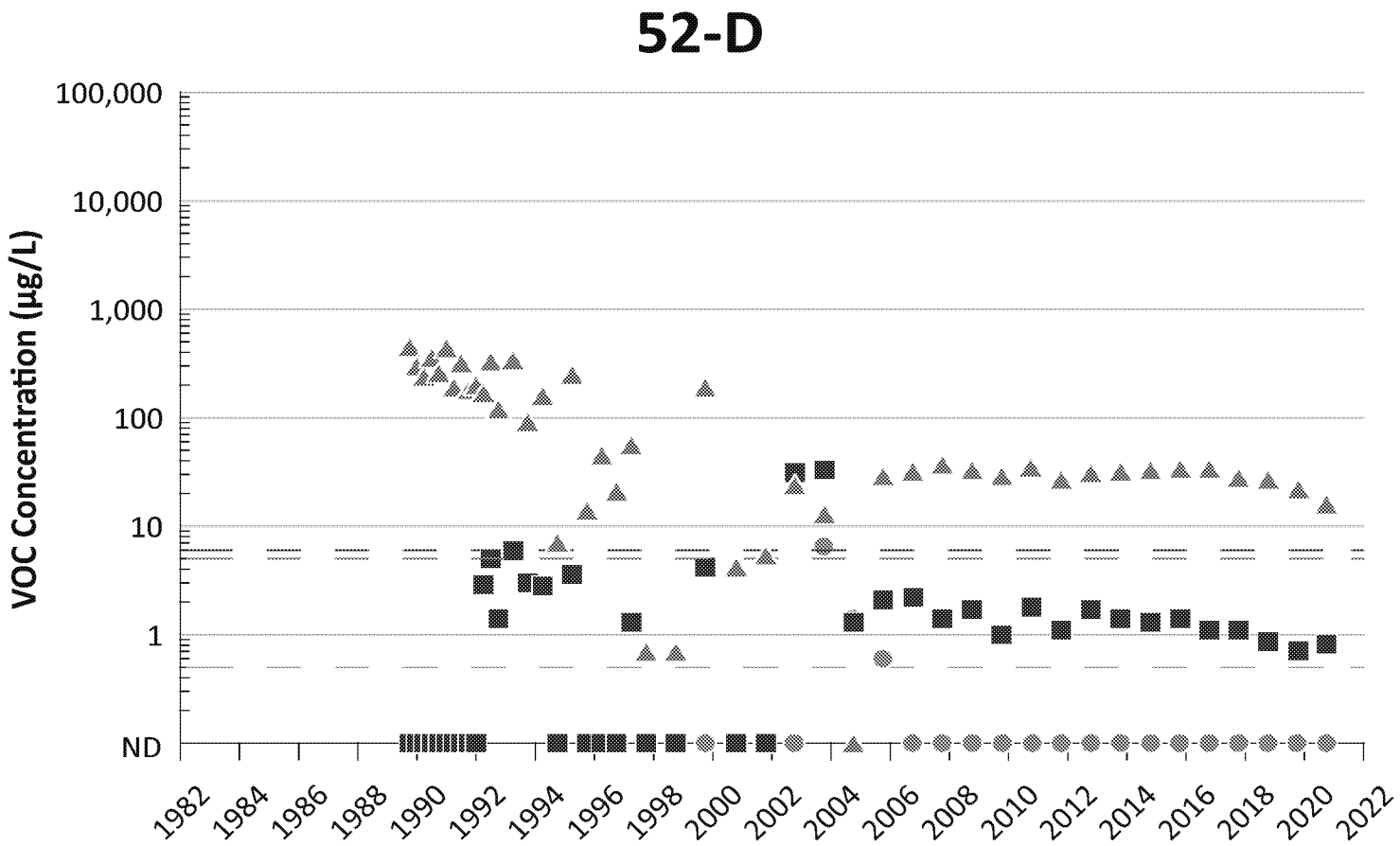
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 36-D

January 2021

FIGURE F-14

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F14_36-D.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

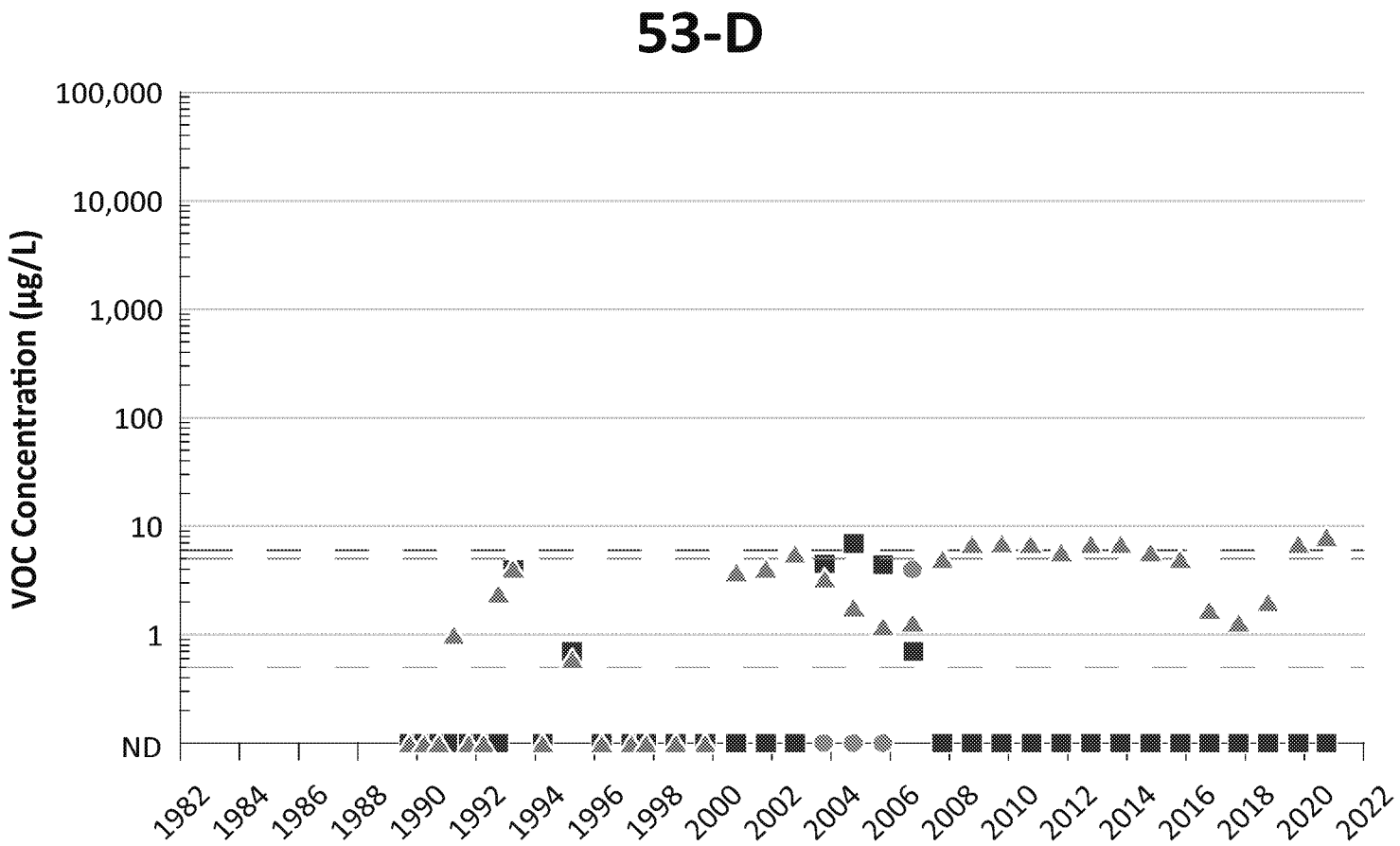
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 52-D

January 2021

FIGURE F-15

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F15_52-D.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

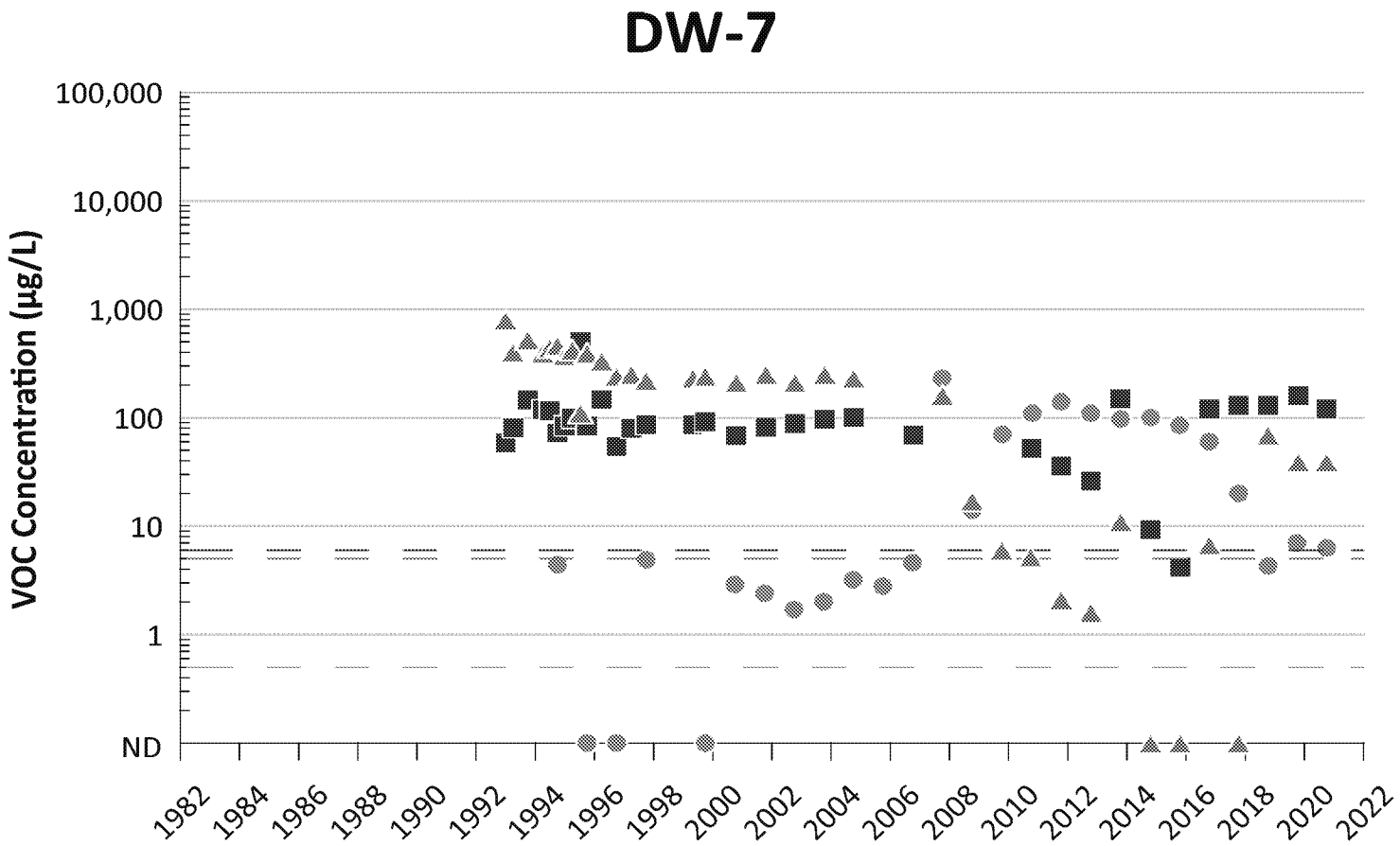
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 53-D

January 2021

FIGURE F-16

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F16_53-D.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

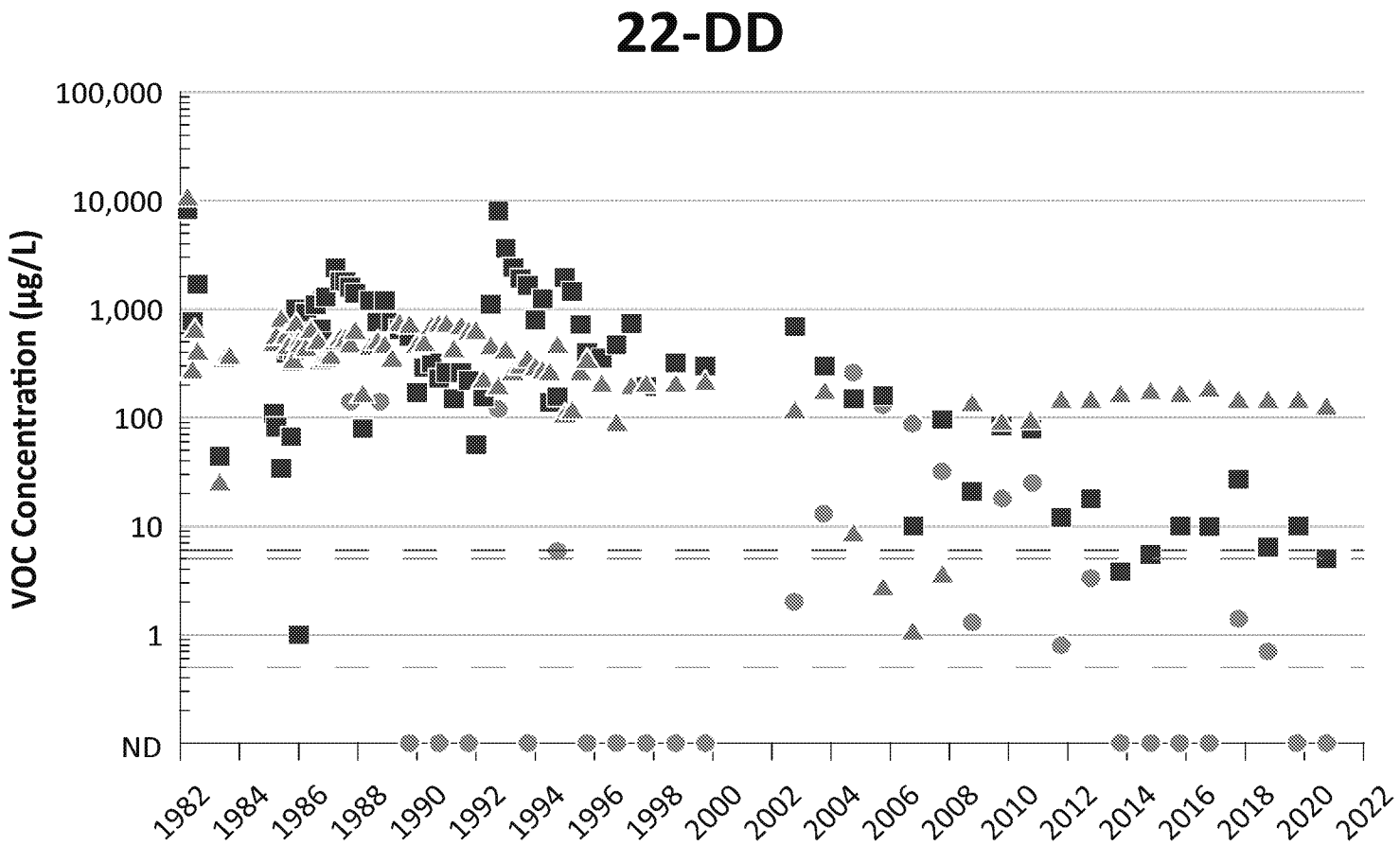
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL DW-7

January 2021

FIGURE F-17

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F17_DW-7.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

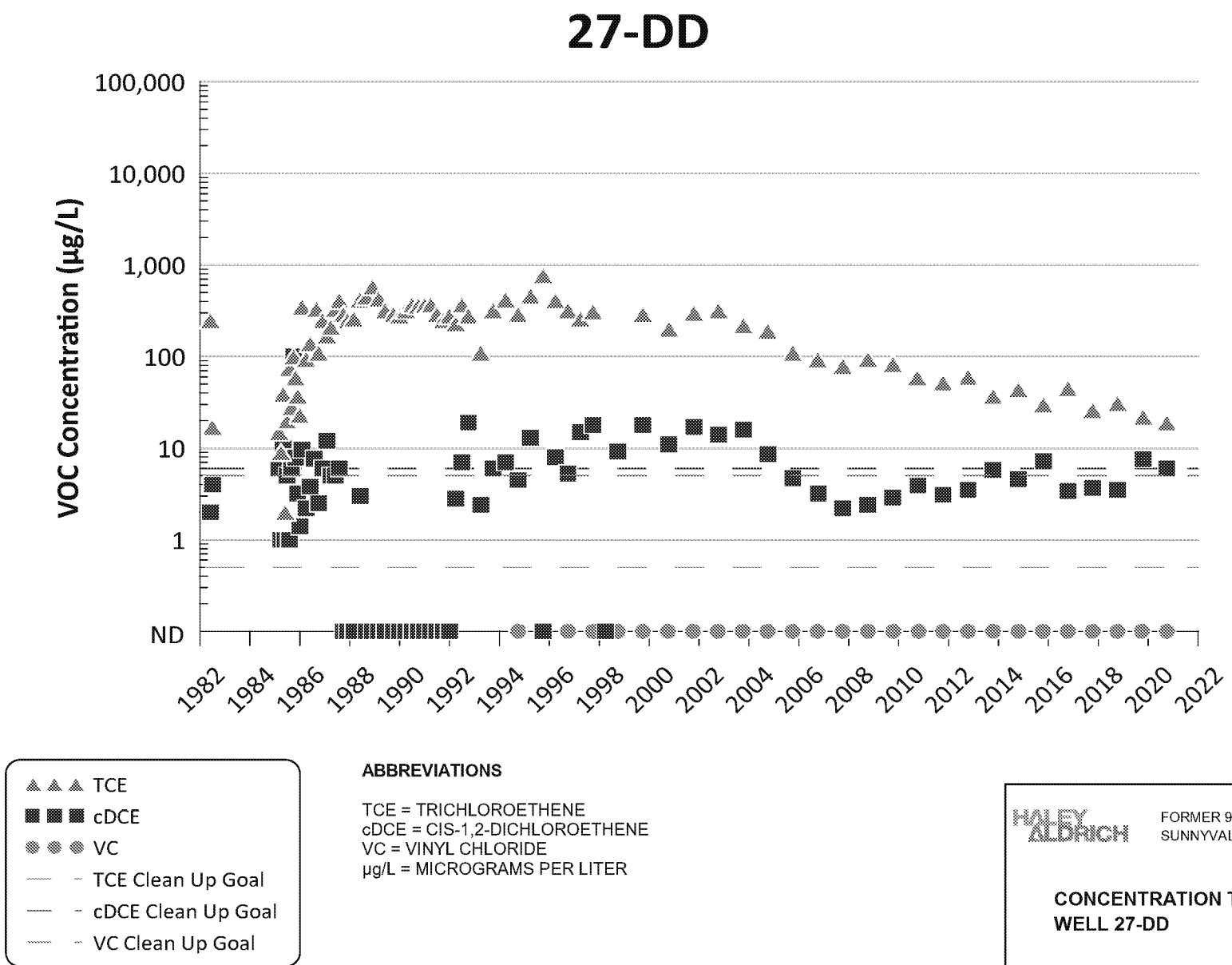
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 22-DD

January 2021

FIGURE F-18

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F18_22-DD.xlsx]Figure F-3



ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

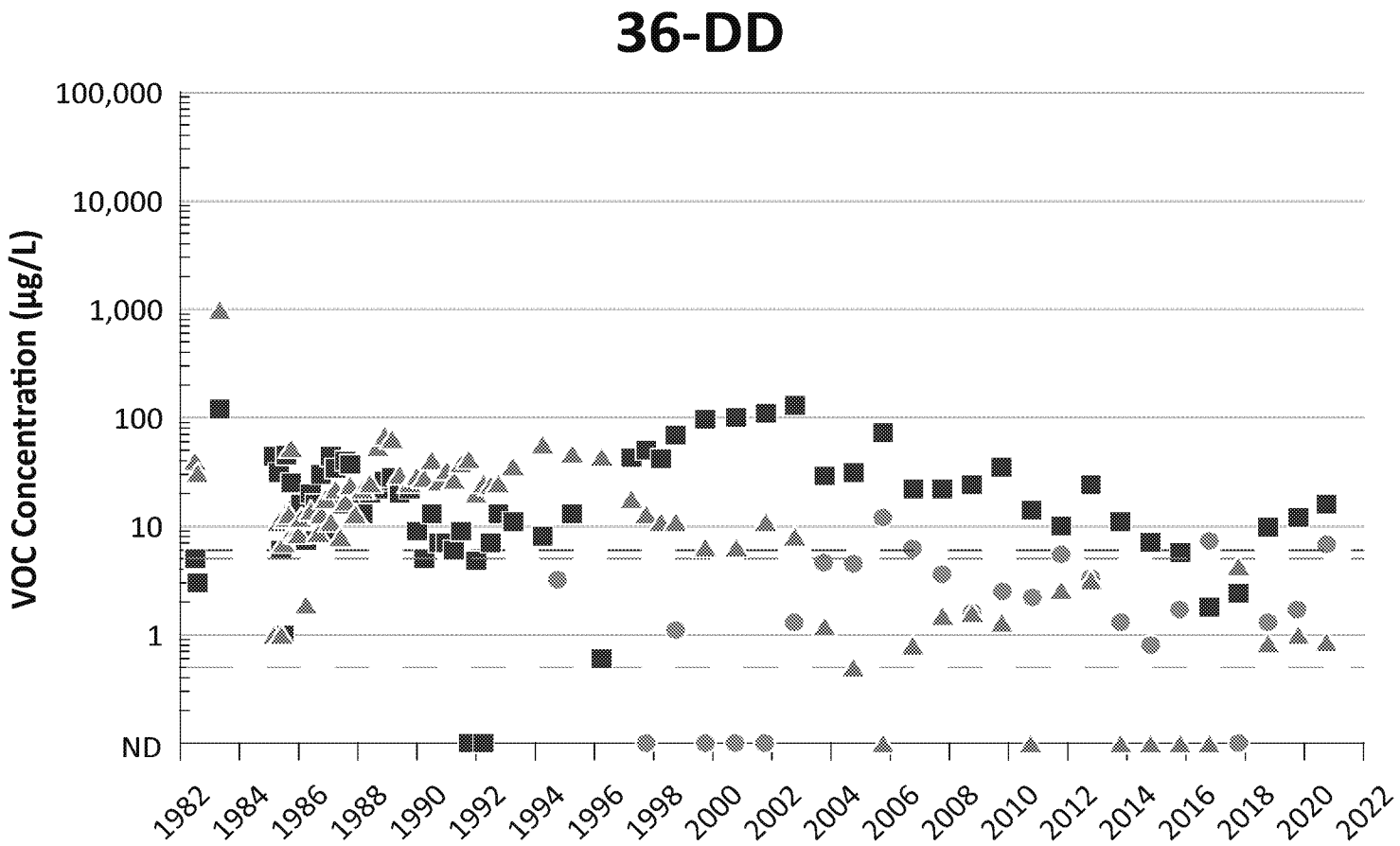
FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 27-DD

January 2021

FIGURE F-19

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thomspon Place\DELIVERABLES\Annual GWMR\2020\4_Appendices\9_App F_concentration trends\Excel Files\[F19_27-DD.xlsx]Figure F-3



TCE
cDCE
VC
TCE Clean Up Goal
cDCE Clean Up Goal
VC Clean Up Goal

ABBREVIATIONS

TCE = TRICHLOROETHENE
cDCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
µg/L = MICROGRAMS PER LITER

HALEY ALDRICH

FORMER 901/902 THOMPSON PLACE
SUNNYVALE, CALIFORNIA

CONCENTRATION TRENDS FOR WELL 36-DD

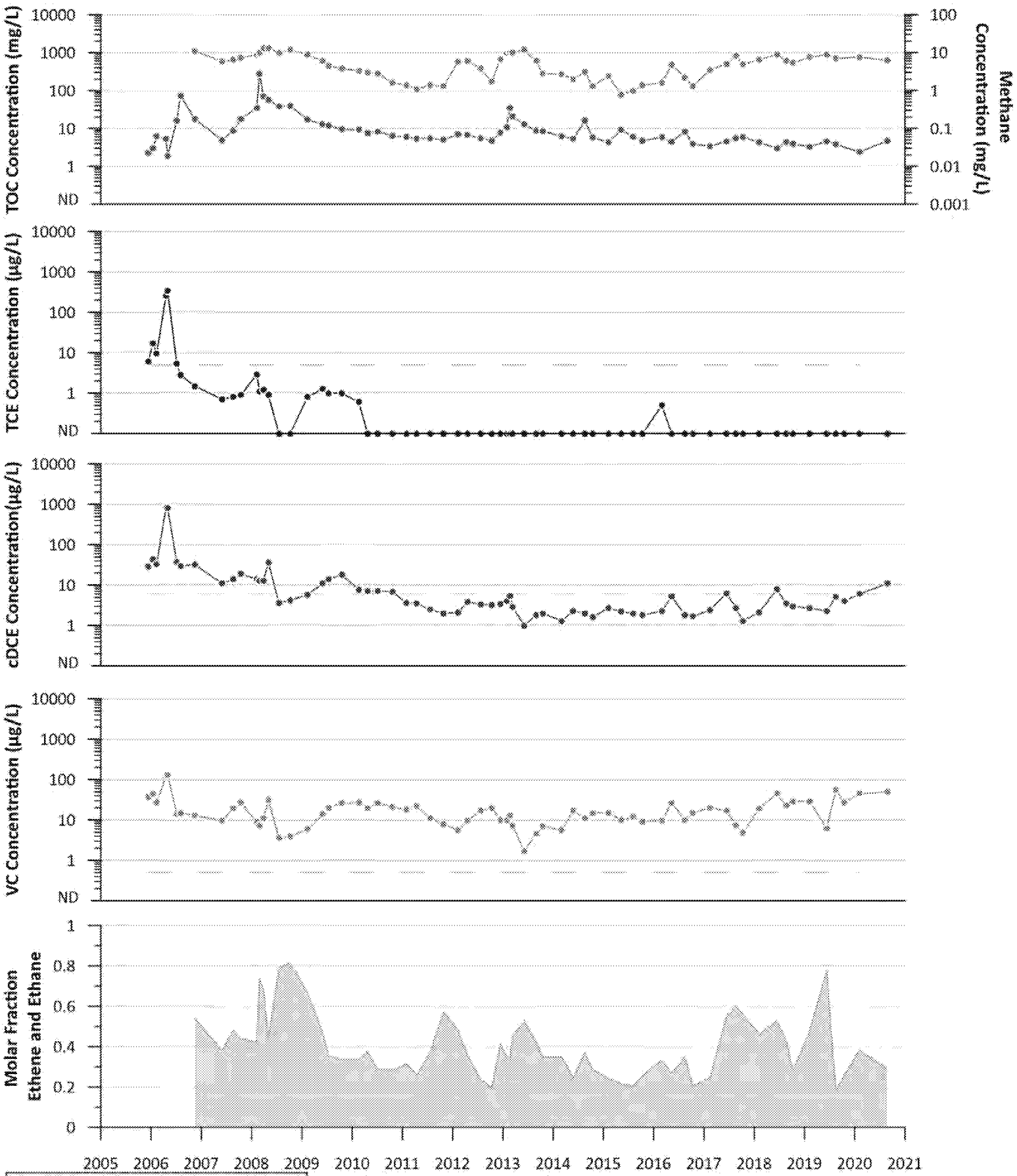
January 2021

FIGURE F-20

\\haleyaldrich.com\share\oak_common\Advanced Micro Devices\1_Former 901-902 Thompson Place\DELIVERABLES\Annual GWMR\202004_Appendices\9_App F_concentration trends\Excel Files\[F20_36-DD.xlsx]Figure F-3

APPENDIX G

Concentration Trend Plots for ISB Performance Monitoring Wells



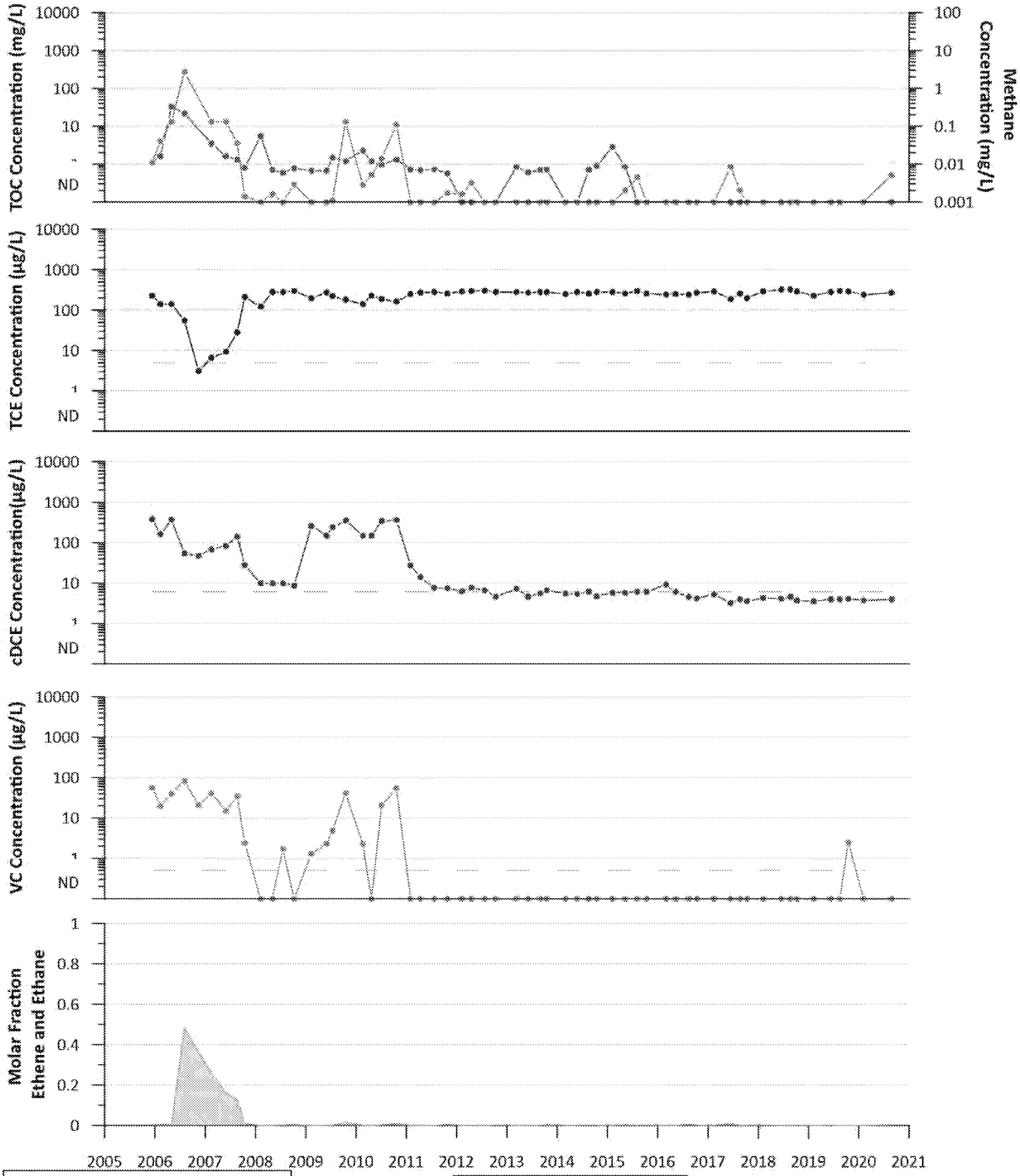
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL 16-5

FIGURE G-1
JANUARY 2021

HALEY ALDRICH



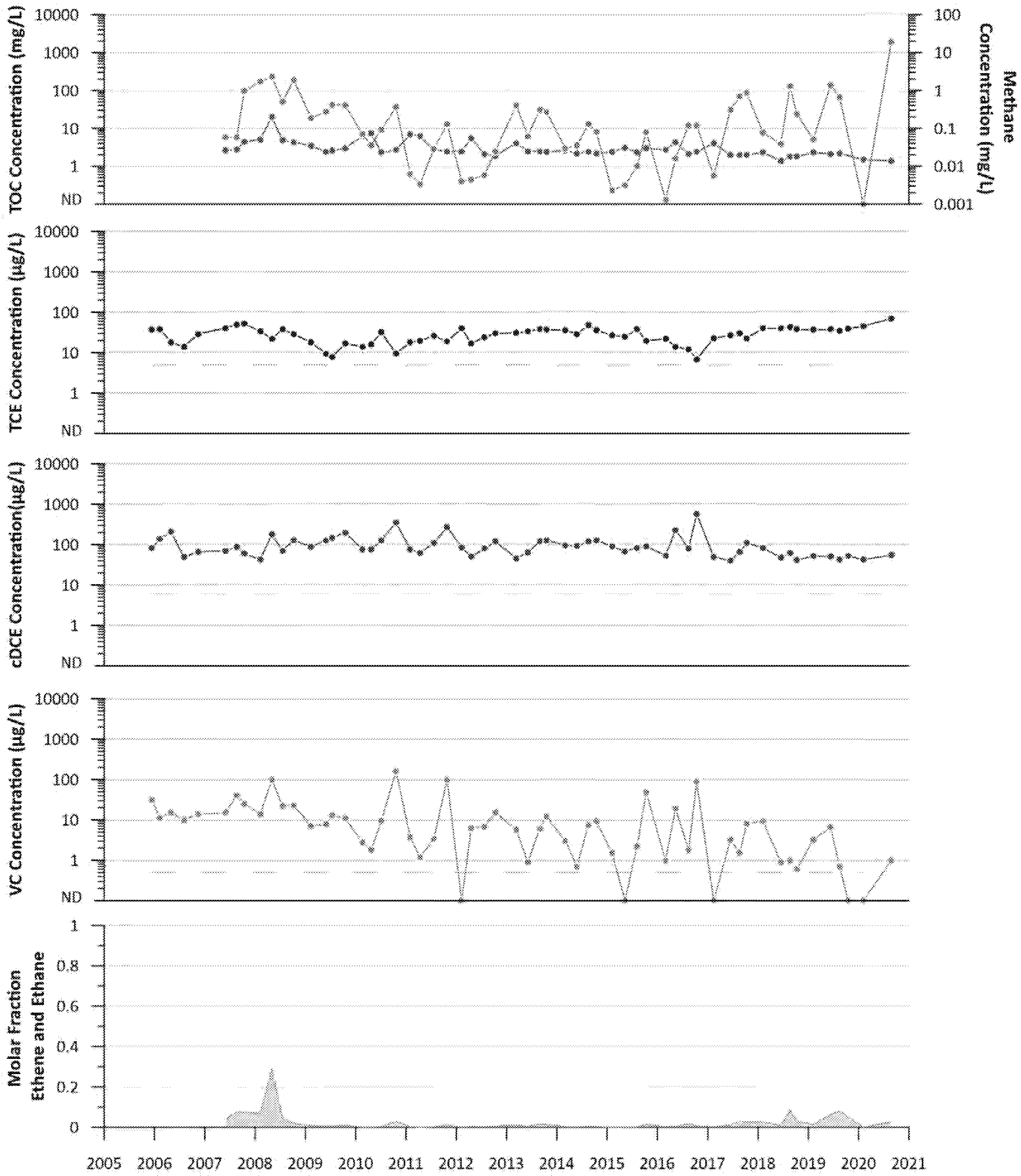
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL 23-D

FIGURE G-2
JANUARY 2021

MALEY ALDRICH



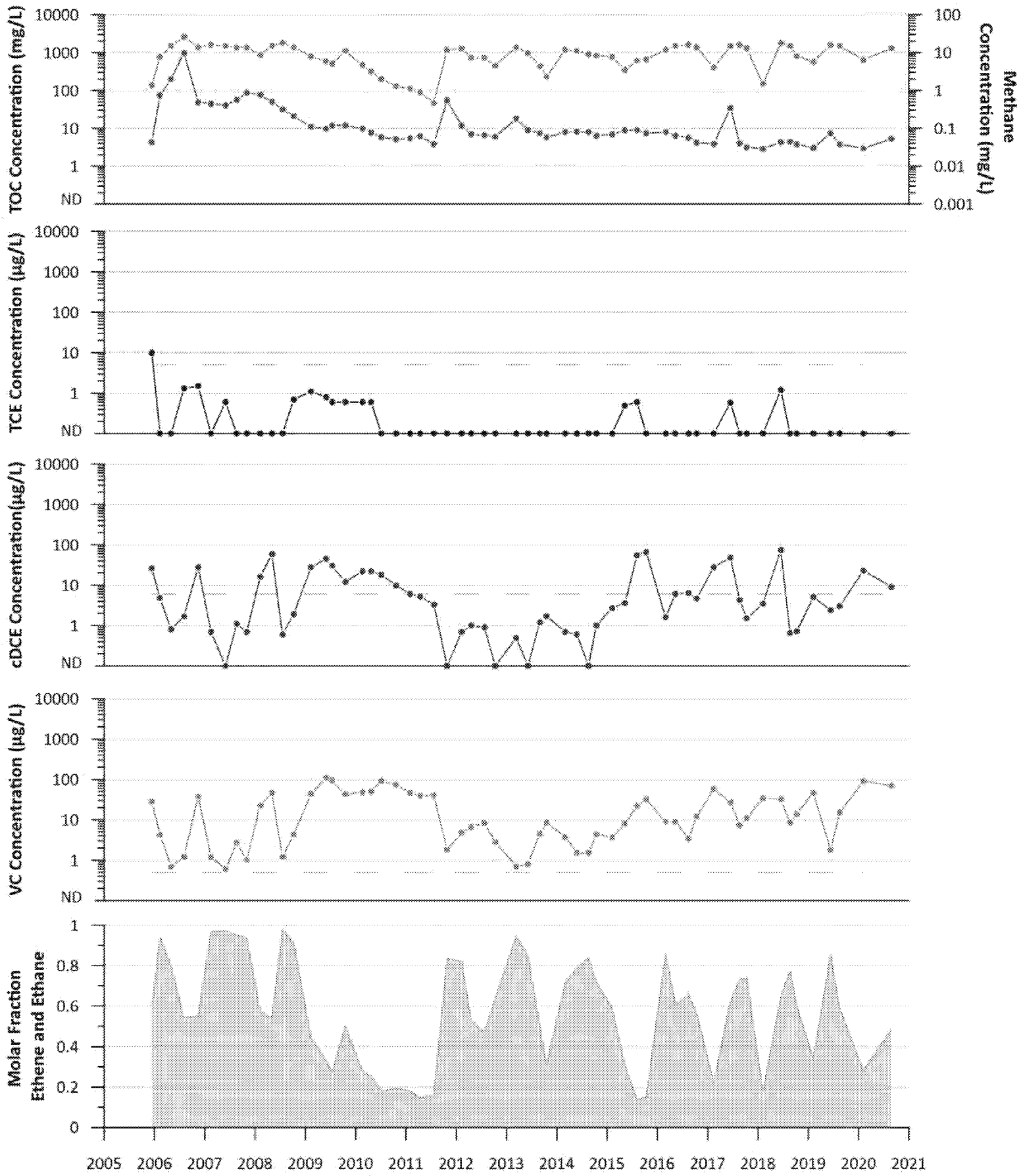
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL 23-S

FIGURE G-3
JANUARY 2021

HALEY ALDRICH



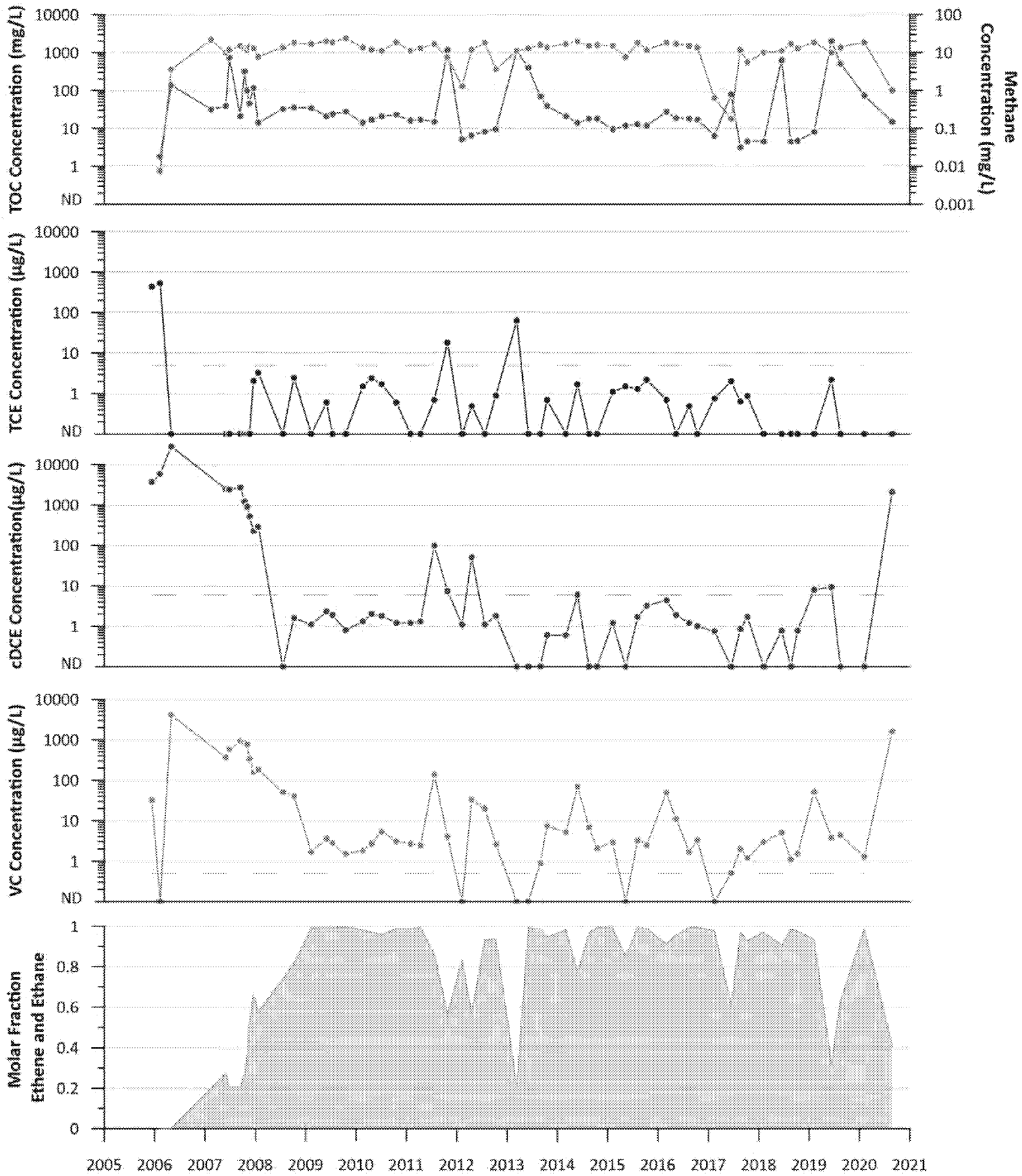
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL 28-MW

FIGURE G-4
JANUARY 2021

HALEY ALDRICH



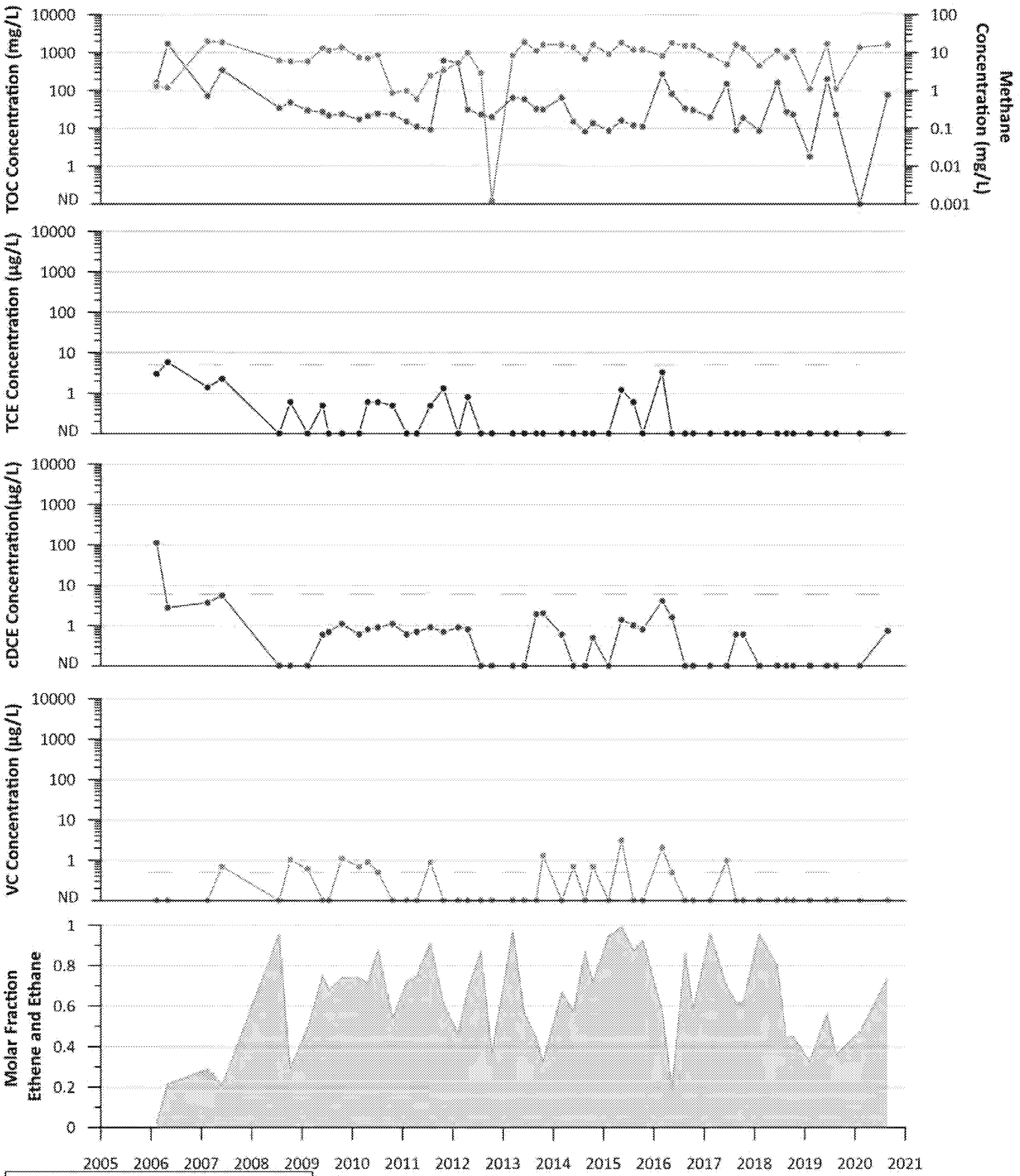
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL DW-1

FIGURE G-5
JANUARY 2021

HALEY ALDRICH

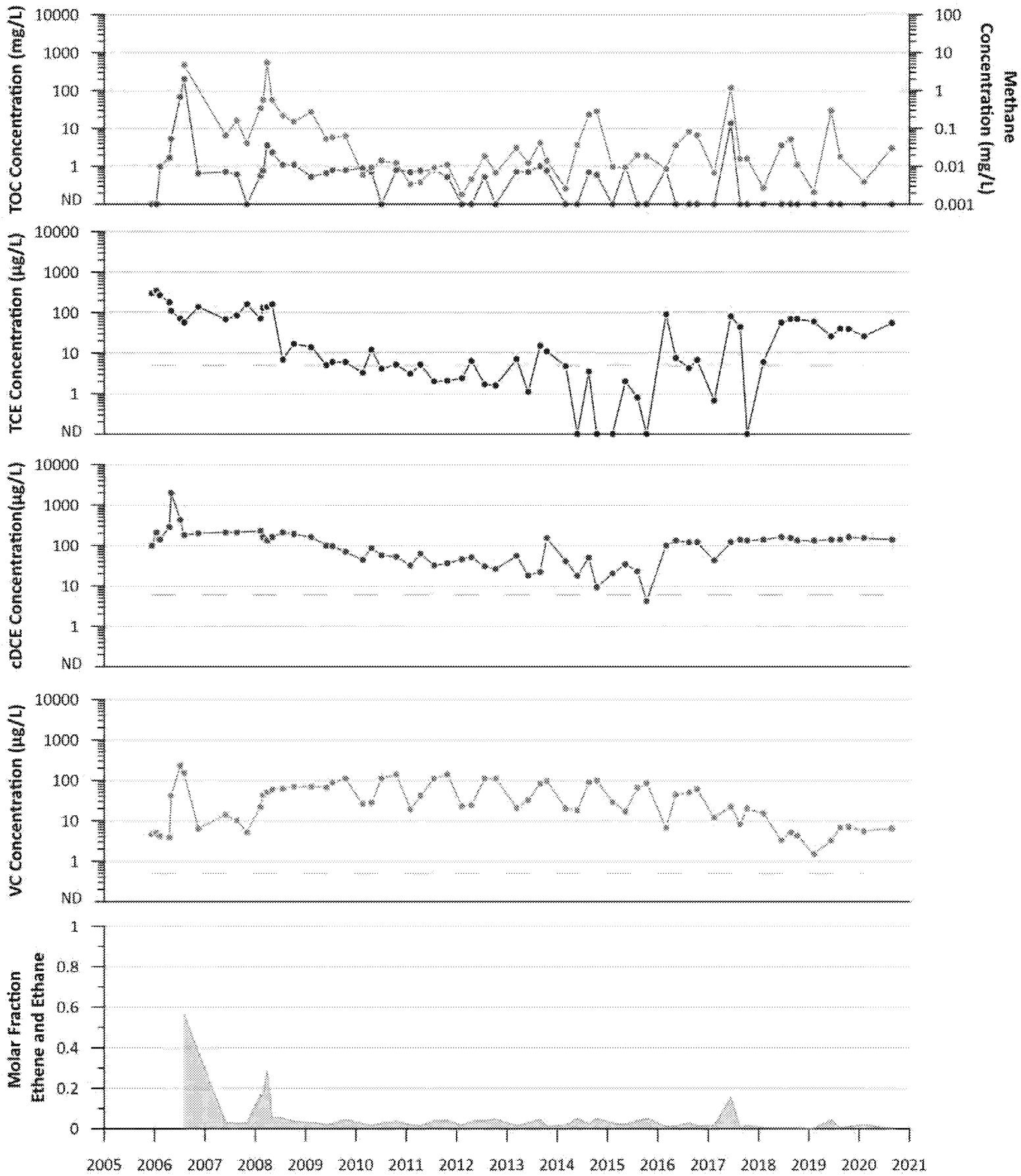


Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL DW-2

FIGURE G-6
JANUARY 2021

HALEY ALDRICH



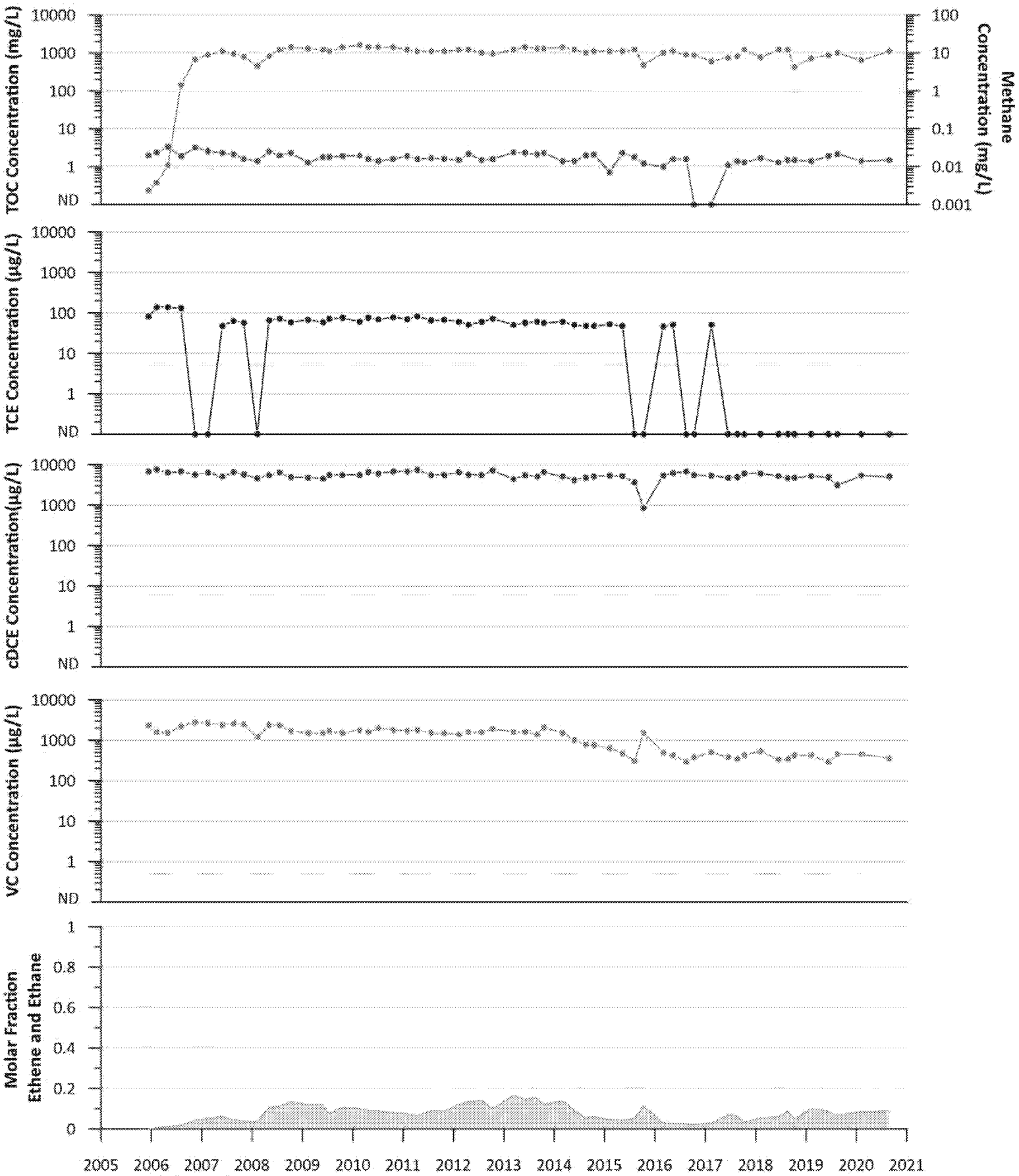
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL DW-7

FIGURE G-7
JANUARY 2021

HALEY ALDRICH

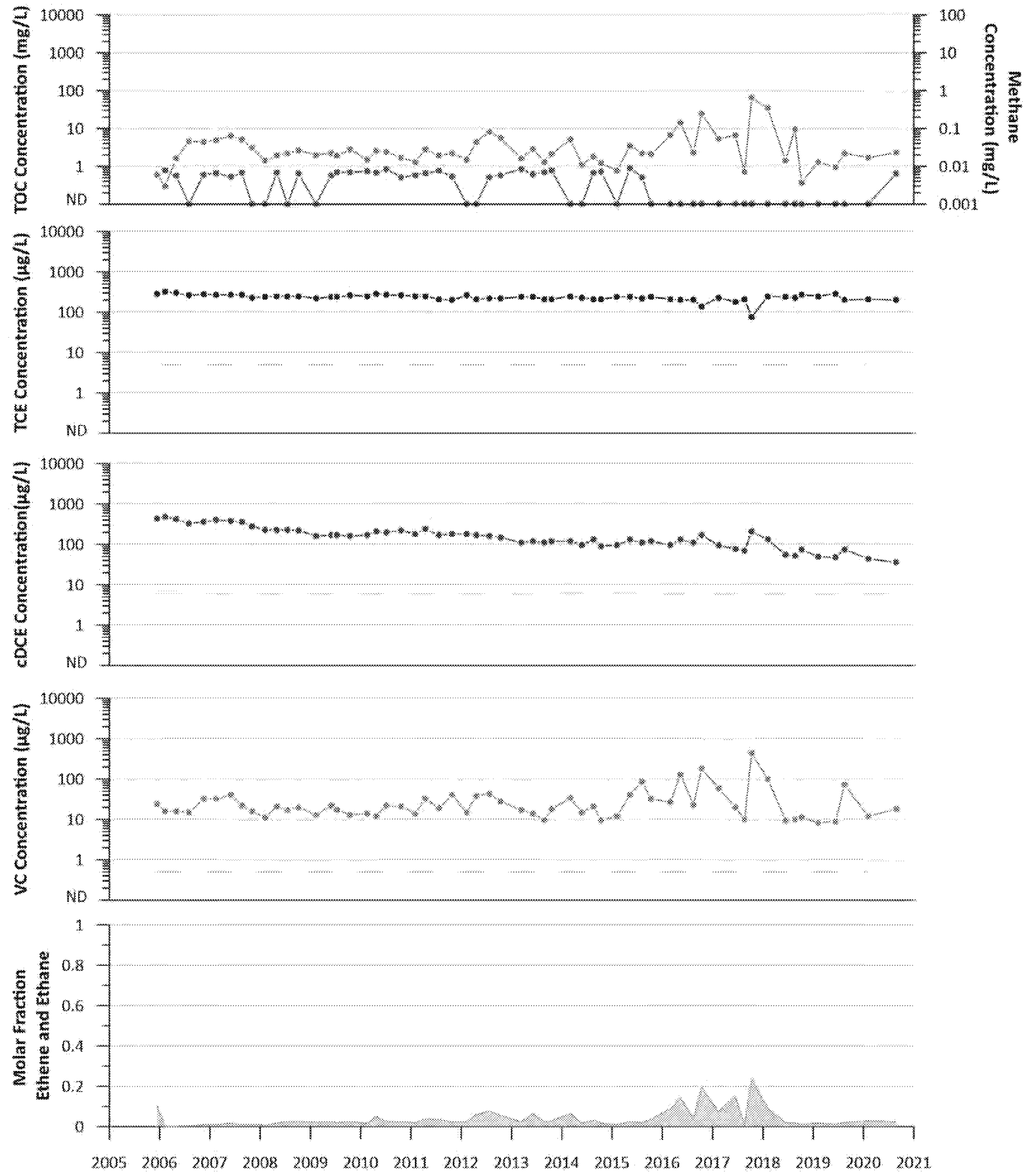


TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL PMW-2-1
FIGURE G-8
JANUARY 2021

HALEY ALDRICH



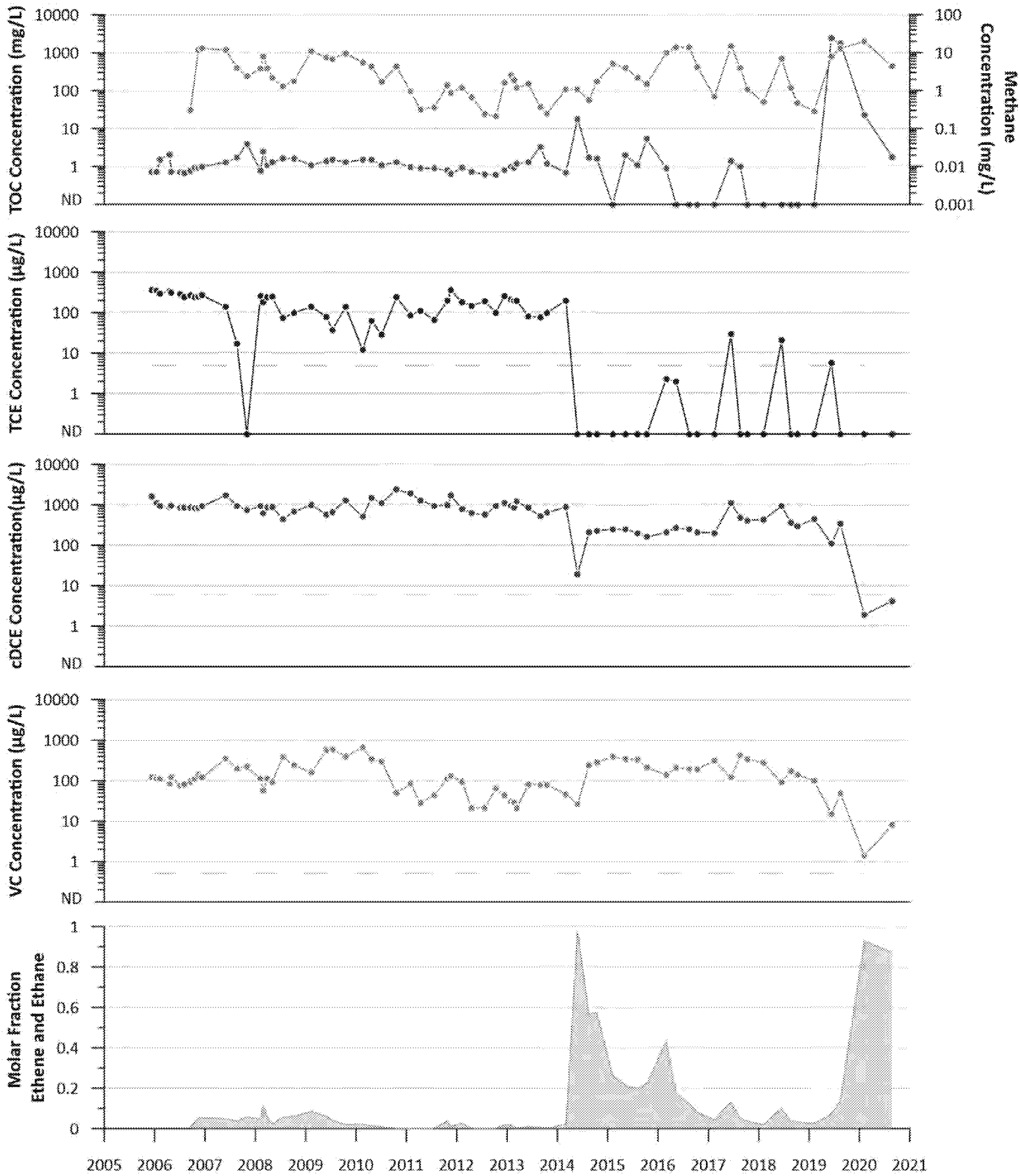
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL PMW-2-3

FIGURE G-9
JANUARY 2021

HALEY ALDRICH



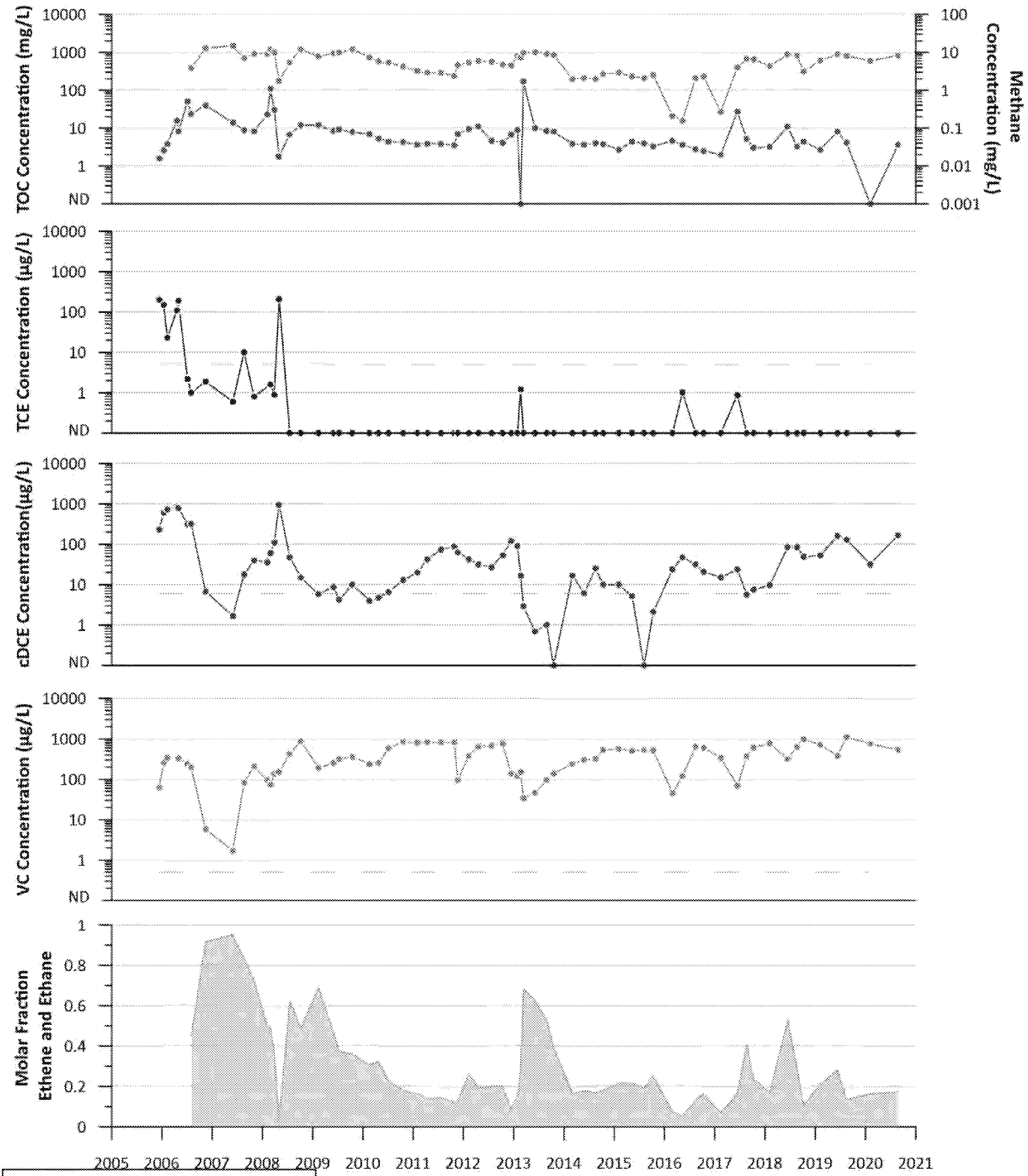
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL X1B

FIGURE G-10
JANUARY 2021

HALEY ALDRICH



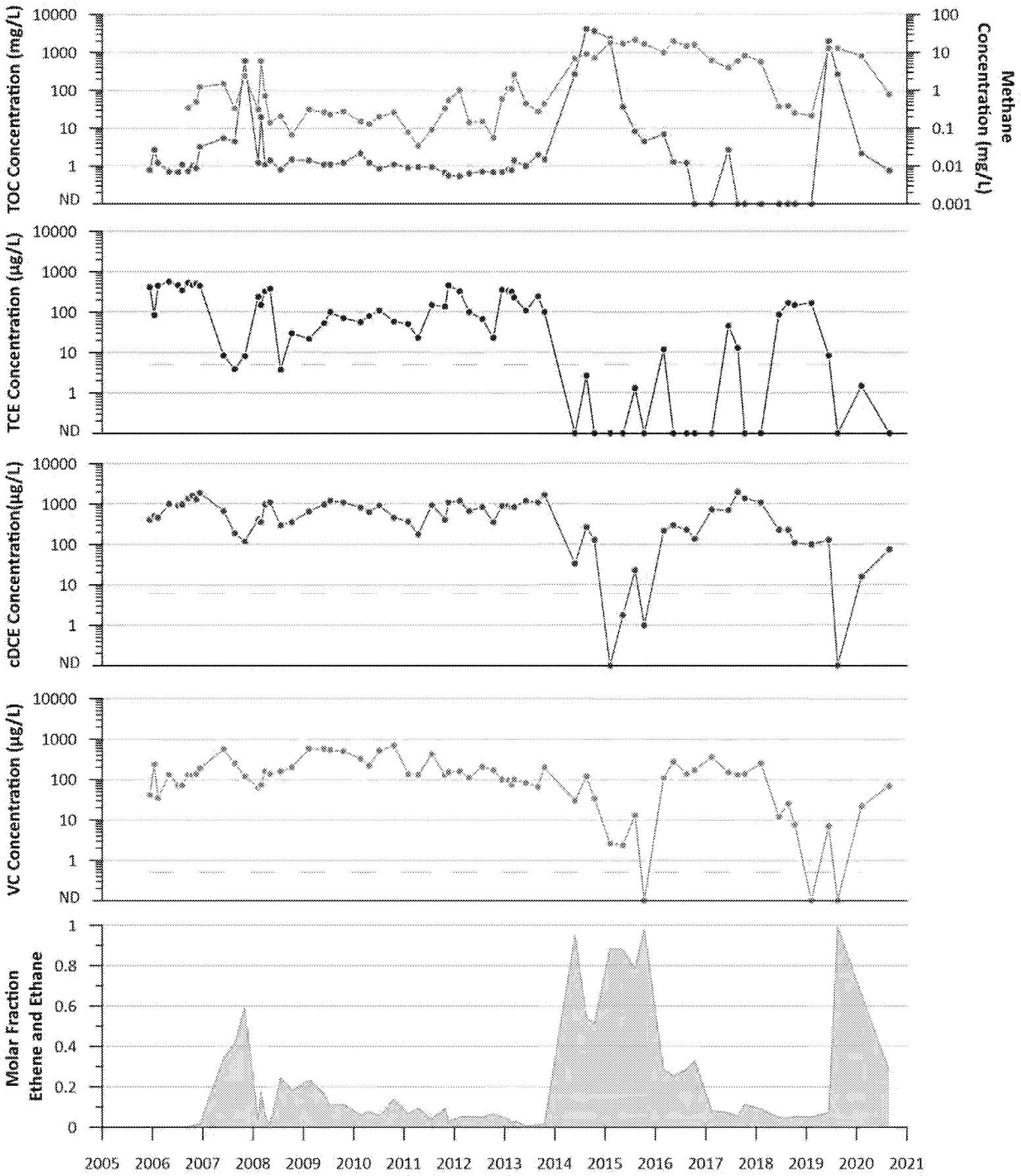
TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL X2A

FIGURE G-11
JANUARY 2021

HALEY ALDRICH



TOC
Methane
TCE
cDCE
VC
Cleanup Goal
Molar Fraction Ethene and Ethane

Notes
TOC = Total Organic Carbon
TCE = Trichloroethene
cDCE = Cis-1,2-Dichloroethene
VC = Vinyl Chloride
mg/L = milligrams per liter
µg/L = micrograms per liter

CONCENTRATION TREND PLOT FOR WELL X2B1

FIGURE G-12
JANUARY 2021

HALEY ALDRICH