FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

ANNUAL REPORT 2022
REMEDIAL ACTION PERFORMANCE AND GROUNDWATER COMPLIANCE MONITORING

CENEX HARVEST STATES COOPERATIVES SITE
300 DIVISION STREET EAST
QUINCY, WASHINGTON

Submitted by:
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027

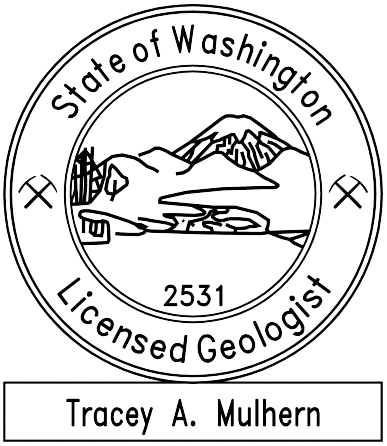
Farallon PN: 301-001

For:
CHS Inc.
763 Willoughby Lane
Stevensville, Montana 59870

December 1, 2022

Prepared by:

Tracey A. Mulhern, L.G.
Associate Geologist



Reviewed by:

Jeff Kaspar, L.G., L.H.G.
Principal Geologist

TABLE OF CONTENTS

FIGURES

TABLES

CHARTS

APPENDICES

ACRONYMS AND ABBREVIATIONS

1,2-DCP	1,2-dichloropropane
1,2,3-TCP	1,2,3-trichloropropane
2021 PR review draft	*Second Periodic Review, CENEX Supply & Marketing Inc. Rinsate, 300 Division St. East, Quincy, Grant County, Facility Site ID No. 33599645, Cleanup Site ID No. 370* dated October 2021, prepared by Toxics Cleanup Program, Eastern Region, Washington State Department of Ecology
2022 PR public review draft	*Second Periodic Review, CENEX Supply & Marketing Inc. Rinsate, 300 Division St. East, Quincy, Grant County, Facility Site ID No. 33599645, Cleanup Site ID No. 370* dated October 2022, prepared by Toxics Cleanup Program, Eastern Region, Washington State Department of Ecology
Annual Report	*Annual Report 2022, Remedial Action Performance and Groundwater Compliance Monitoring, Cenex Harvest States Cooperatives Site, 300 Division Street East, Quincy, Washington* dated December X, 2022 prepared by Farallon Consulting, L.L.C. (this document)
bgs	below ground surface
CHS	CHS Inc.
CHS Property	Grant County Parcel No. 040525043, near 300 Division Street East, in Quincy, Washington
COCs	constituents of concern
Consent Decree	Consent Decree No. DE-00TCPER-1815 dated February 22, 2001 entered into by the Washington State Department of Ecology and Cenex Harvest States Cooperatives
Ecology	Washington State Department of Ecology
EDB	1,2-dibromoethane
EPA	U.S. Environmental Protection Agency
Farallon	Farallon Consulting, L.L.C.
Final CAP	*Final Cleanup Action Plan, Cenex/Quincy Site, Quincy, WA* dated February 22, 2001
IHSs	indicator hazardous substances
kg	kilogram
µg/l	micrograms per liter

$\mu g/m^3$	micrograms per cubic meter
msl	mean sea level
MS/SVE	microsparge/soil vapor extraction
MSW	microsparge well
O&M	operation and maintenance
PQL	practical quantitation limit
PR	Periodic Review
QA/QC	quality assurance/quality control
RAP	*Draft Remedial Action Work Plan, Cenex Harvest States Cooperatives Site, 300 Division Street, Quincy, Washington* dated July 2, 2001 prepared by Farallon Consulting, L.L.C.
RPD	relative percent difference
scfh	standard cubic feet per hour
Site	Grant County Parcel No. 040525043, near 300 Division Street East, in Quincy, Washington and adjacent and down-gradient properties where hazardous substances released from the CHS Property have come to be located
SVE	soil vapor extraction
VEW	vapor extraction well
VI	vapor intrusion
VOCs	volatile organic compounds

EXECUTIVE SUMMARY

This Annual Report 2022 presents a summary of performance air monitoring, groundwater compliance monitoring, and operation and maintenance activities performed over the past year at the Cenex Harvest States Cooperatives Site (herein referred to as the Site). The Site is defined as Grant County Parcel No. 040525043, near 300 Division Street East, in Quincy, Washington (herein referred to as the CHS Property) and adjacent and down-gradient properties where hazardous substances released from the CHS Property have come to be located. The Site has been the subject of investigation and remediation activities related to the release of volatile organic compounds to soil and groundwater, most notably 1,2-dichloropropane (1,2-DCP) in response to the requirements of Exhibit C of Consent Decree No. DE-00TCPER-1815 dated February 22, 2001 entered into by the Washington State Department of Ecology (Ecology) and Cenex Harvest States Cooperatives, predecessor to CHS Inc. (CHS).

CHS completed installation of a microsparge/soil vapor extraction (MS/SVE) system at the Site in 2001, and has performed quarterly air monitoring and groundwater compliance monitoring since system start-up in December 2001. The MS/SVE system was shut down between June 2022 and November 2022 as part of a planned pulsed operational scenario and due to an operational malfunction with the system vacuum blower. A replacement blower was tested and installed at the Site in September and October 2022. The replacement blower has additional vacuum capacity that will support ongoing efforts to optimize capture of volatile organic compounds by the MS/SVE system.

An extensive groundwater monitoring network is in place at the Site consisting of shallow and deep monitoring wells designed to monitor groundwater from near the top and bottom of the uppermost aquifer at the Site. The December 2021 through September 2022 groundwater compliance monitoring results presented herein were consistent with those from previous events. Concentrations of indicator hazardous substances (IHSs) have shown a steady decline in groundwater samples collected at the Site since the installation of the MS/SVE system at the Site in 2001. The IHSs for groundwater at the Site, a subset of the constituents of concern, are chloroform; 1,2-dibromoethane; 1,2-dichloroethane; 1,2-DCP; 1,1,2-trichloroethane; 1,2,3-trichloropropane; and vinyl chloride.

The IHS that has been detected in groundwater samples collected at the Site with the highest frequency and at higher concentrations than other IHSs is 1,2-DCP. 1,2-DCP was detected at concentrations exceeding the Site cleanup level of 1 microgram per liter in groundwater samples collected from the CHS Property to approximately 2,000 to 2,500 feet down-gradient of the CHS Property over the past year of monitoring. The southwest-trending groundwater plume is relatively narrow in width compared to its length, approximately 300 feet at the widest point. 1,2-DCP was not detected at concentrations exceeding the Site cleanup level in groundwater samples collected from the farthest-down-gradient monitoring wells at the Site during the past year in March, June, and September 2022.

A significant reduction in the concentrations of 1,2-DCP detected in groundwater samples collected from Site monitoring wells has been observed since installation and start-up of the MS/SVE system at the Site. The reduction in the contaminant mass of 1,2-DCP in groundwater at the Site for the period from December 2001 to September 2022 was estimated to be 14.98 kilograms, a decrease of approximately 96 percent, with most of the 1,2-DCP mass reduction occurring in the first 3 to 4 years of MS/SVE system operation.

Ecology completed a draft Second Periodic Review (PR) for public comment in October 2022 (2022 PR public review draft). The 2022 PR public review draft concluded that although cleanup of the Site has not been achieved, human health and the environment continue to be protected. Current conditions at the Site also do not represent a vapor intrusion risk at Quincy Middle School. If the current cleanup approaches are maintained with continued optimization of the MS/SVE system, cleanup levels can potentially be met in most areas of the Site within the next 10 years. Work to complete action items recommended by Ecology in the 2022 PR public review draft will be initiated once the PR is finalized.

The next quarterly monitoring event is scheduled for December 2022.

1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Annual Report 2022 (Annual Report) for CHS Inc. (CHS) (formerly Cenex Harvest States Cooperatives) to present the results from performance air monitoring, groundwater compliance monitoring, and operation and maintenance (O&M) activities performed over the past year at the Cenex Harvest States Cooperatives Site (herein referred to as the Site) (Figure 1). The Site is defined as Grant County Parcel No. 040525043, near 300 Division Street East, in Quincy, Washington (herein referred to as the CHS Property) and adjacent and down-gradient properties where hazardous substances released from the CHS Property have come to be located. A facility plan of the CHS Property and a Site plan are provided on Figures 2 and 3, respectively.

This Annual Report has been prepared in accordance with the requirements of Consent Decree No. DE-00TCPER-1815 dated February 22, 2001 entered into by the Washington State Department of Ecology (Ecology) (2001b) and Cenex Harvest States Cooperatives (Consent Decree). This report presents the results from quarterly performance air and groundwater compliance monitoring, and O&M activities conducted August through October 2022; and a summary of quarterly performance air and groundwater compliance monitoring and O&M activities conducted from December 2021 through October 2022. Work was completed in accordance with the *Draft Remedial Action Work Plan, Cenex Harvest States Cooperatives Site, 300 Division Street, Quincy, Washington* dated July 2, 2001, prepared by Farallon (2001) (RAP), approved by Ecology (2001c) on October 8, 2001 along with the Technical Memorandum regarding Proposed Operational Modifications for the Microsparge/Soil Vapor Extraction System (Farallon 2021a), approved by Ecology (2021a) on August 10, 2021.

1.1 BACKGROUND

The Site has been the subject of investigation and remediation activities since the early 1990s related to the historical release of volatile organic compounds (VOCs) to soil and groundwater related to former operation of a fumigant tank storage area and rinsate collection system (Figure 2). The rinsate collection system consisted of a concrete rinse pad and a rinsate collection pond used to collect rinsate water from the cleaning of agricultural application equipment. Historical remedial actions at the Site included removal of soil from the CHS Property from the former rinsate pond, fumigant tank, and rinse pad areas and installation of an air sparge and soil vapor extraction (SVE) system.

CHS completed installation and start-up of the current microsparge/SVE (MS/SVE) soil and groundwater treatment system at the Site in November 2001. Performance air and groundwater compliance monitoring generally has been conducted quarterly since system start-up. Details of system start-up and operation were presented in the *Cleanup Action Report, Cenex Harvest States*

*Cooperative [*sic*] Site*, *300 Division Street, Quincy, Washington* dated April 5, 2002, prepared by Farallon (2002). The MS/SVE system conducts three primary operations:

- Extraction of soil gas from vadose zone soil using SVE wells VEW-1 through VEW-9 (VEW wells);
- Air sparging for stripping of VOCs from groundwater at two depths in MS/SVE microsparge wells (MSW) MSW-1 through MSW-12; and
- Extraction of soil gas from vadose zone soil and stripped VOC vapors from the SVE component of the 12 MSW wells.

Between April 20, 2015 and February 10, 2016, the MS/SVE system was shut down as part of an evaluation of potential modifications to operation of the MS/SVE system (Farallon 2015b). Following Ecology approval of the proposed operational modifications, the MS/SVE system was restarted on February 10, 2016. The MS/SVE system was again shut down as part of an evaluation of system operation under a pulsed operational scenario to optimize recovery of VOC vapors between August 17 and October 28, 2021 (Farallon 2021a) (Ecology 2021a) and June 13 and November 10, 2022. Details of the 2021 to 2022 MS/SVE system operational modifications are provided in Section 2.4, Operation and Maintenance Activities, and Section 5.0, Operation and Maintenance Annual Summary.

1.2 ORGANIZATION

This Annual Report is organized into the following sections:

- **Section 2**, **Performance Air and Groundwater Compliance Monitoring**, describes the performance air monitoring, the groundwater compliance monitoring program, analytical data quality assurance/quality control (QA/QC) review, O&M activities, and results from the September through November 2022 Site activities.
- **Section 3**, **Performance Air Monitoring Annual Summary**, presents the performance air monitoring results for the past year.
- **Section 4**, **Groundwater Compliance Monitoring Annual Summary**, presents a summary of the groundwater elevation and analytical results for the past year, calculation of the 1,2-dichloropropane (1,2-DCP) mass in groundwater for the September 2022 monitoring event, and an evaluation of the effects of MS/SVE system operation on groundwater concentrations.
- **Section 5**, **Operation and Maintenance Annual Summary**, provides a summary of O&M activities conducted for the MS/SVE system and monitoring wells at the Site over the past year.
- **Section 6, Draft Periodic Review,** provides a summary of the draft Periodic Review (PR) completed by Ecology for the Site in October 2022.

- **Section 7**, **Conclusions**, provides Farallon's conclusions pertaining to the ongoing remediation and monitoring activities at the Site.
- **Section 8**, **References**, presents a list of the documents cited in this report.
- **Section 9**, **Limitations**, presents Farallon's standard limitations for this Annual Report.

2.0 PERFORMANCE AIR AND GROUNDWATER COMPLIANCE MONITORING

This section provides a description of the September through November 2022 performance air and groundwater compliance monitoring, the analytical data QA/QC review; a summary of O&M activities; and a summary and discussion of the results from the activities conducted at the Site. Results from the performance air and groundwater compliance monitoring conducted in December 2021 through June 2022 were provided in the monitoring reports previously submitted to Ecology (Farallon 2022a, 2022b, and 2022c).

2.1 PERFORMANCE AIR MONITORING

The performance air monitoring event was not performed in September 2022 due to planned shut-down of the MS/SVE system. Additional details regarding the MS/SVE system operation are provided in Section 2.4, Operation and Maintenance Activities. Tables 1 through 3 present performance air monitoring data collected previously at the Site. Table 4 presents a summary of the 1,2-DCP recovered by the MS/SVE system.

Performance air samples were collected on November 10, 2022 from each of the three piping runs of the VEW wells with the MS and SVE components of the 12 MSW wells turned off and only the SVE portion of the VEW wells operating. The samples were collected after restarting the system and allowing only the SVE component of the VEW wells to operate for approximately 15 minutes prior to beginning collection of the first of the three samples. Prior to the restart for sampling the VEW wells, the SVE system had been off since June 13, 2022 as part of the MS/SVE system pulsed operational modifications. Once the MS/SVE system was restarted on November 10, 2022 and airflow adjustments were made to the system, air samples also were collected from sampling ports installed in the MS/SVE system influent and effluent piping. The locations of the air sampling ports are as follows:

- MSW influent monitoring: upstream of the air bleed-in valve, and upstream of all carbon filters to monitor the air drawn from the MSW wells;
- VEW influent monitoring: upstream of the air bleed-in valve, and upstream of all carbon filters to monitor the air drawn from the VEW wells; and
- Effluent monitoring: downstream of all carbon filters.

Influent air samples collected from each of the three VEW well piping runs and from the MSW and VEW influent air sample ports during the November 2022 monitoring event were collected directly from the sampling ports using 6-liter Summa canisters. The samples collected from the VEW well piping runs were collected in accordance with the Technical Memorandum regarding Proposed Operational Modifications for the Microsparge/Soil Vapor Extraction System (Farallon 2021a). The influent air sampling was conducted in accordance with the sampling procedure provided in Attachment A of the Technical Memorandum regarding Scope of Work for

Supplemental Operation and Monitoring Activities for the Microsparge/Soil Vapor Extraction System dated February 26, 2015 (Farallon 2015a).

Dedicated fittings and disposable Teflon tubing were used for collection of the MSW and VEW influent air samples. The initial pressures of the Summa canisters were recorded, and the sampling train was checked for leaks. Upon confirmation that there was no measurable leakage in the sampling train, the sample tubing was purged of five internal volumes of air using a GilAir Plus air pump. After the sampling train had been purged, the Summa canister valve was opened, and the canister was allowed to fill until the final pressure reached approximately -5.0 inches of mercury. Air sample parameters from the last four sampling events, including sample volume, collection duration, and initial and final pressures, are summarized on Table 1. The air samples were transported under standard chain-of-custody protocols to Eurofins Air Toxics, LLC of Folsom, California.

The effluent air sample was collected directly from the sampling port into a 1-liter Tedlar sample bag using disposable silicone tubing (Table 1). The samples were labeled and transported under chain-of-custody protocols in accordance with the RAP to OnSite Environmental Inc. of Redmond, Washington. An effluent breakthrough air sample was not collected because the carbon drums had just been replaced so no breakthrough is expected based on previous effluent sampling results (Table 2). An effluent breakthrough air sample will be collected in December 2022.

2.1.1 Analytical Methods

VEW air samples collected from the three piping runs and MSW and VEW influent air samples collected in November 2022 using 6-liter Summa canisters were analyzed for the groundwater indicator hazardous substances (IHSs) by Modified U.S. Environmental Protection Agency (EPA) Method TO-15 GC/MS. The IHSs for groundwater are a subset of the constituents of concern (COCs) for the Site defined by Ecology (2001a) in the *Final Cleanup Action Plan, Cenex/Quincy Site, Quincy, WA* dated February 22, 2001 (Final CAP), Exhibit B of the Consent Decree. The IHSs for groundwater for the Site are chloroform, 1,2-dibromoethane (EDB), 1,2-dichloroethane, 1,2-DCP, 1,1,2-trichloroethane, 1,2,3-trichloropropane (1,2,3-TCP), and vinyl chloride. The effluent air sample collected using a 1-liter Tedlar bag was analyzed for the groundwater IHSs by EPA Method 8260D.

2.1.2 Performance Air Monitoring Results

The results of the November 2022 performance air monitoring will be provided in the December 2022 Remedial Action Performance and Groundwater Compliance Monitoring letter report for the Site.

2.2 GROUNDWATER COMPLIANCE MONITORING PROGRAM

The September 2022 groundwater compliance monitoring event conducted at the Site is described below.

2.2.1 Field Methods

Between September 13 and 15, 2022, groundwater compliance samples were collected from monitoring wells MW-1 through MW-3, MW-5 through MW-9, MW-11 through MW-13, MW-15 through MW-17, MW-20, MW-24 through MW-26, and MW-28 through MW-46. Monitoring well MW-21 was included in the groundwater compliance monitoring program for groundwater elevation measurement only. Monitoring well locations are presented on Figure 3.

2.2.1.1 Depth to Groundwater

Prior to sampling, the depth to groundwater in each monitoring well was measured using an electronic water-level indicator. The monitoring wells were opened, and the water levels were allowed to equilibrate before measurement. The groundwater level was measured to the surveyed reference point on the top of the well casing to derive the groundwater elevation at each monitoring well. The distance from the surveyed reference point to the water surface in the West Canal (Figure 3) also was measured using an electronic water-level indicator. The surface water in the drainage ditch adjacent to the West Canal was not measured due to overgrown vegetation to the extent that Farallon field scientists were not able take a depth to water measurement. The distance to the water surface in the West Canal was measured from the surveyed measuring point on the top of the bridge along F Street Southeast (Figure 3). Depth to groundwater and surface water measurements were completed in approximately 2 hours on September 13, 2022.

2.2.1.2 Groundwater Sample Collection

Groundwater samples were collected September 13 through 15, 2022. Before the monitoring wells were purged, the dedicated polyethylene tubing intake was placed at the approximate center of the screened interval in each monitoring well. Groundwater was then purged from each well using a peristaltic pump at flow rates between 100 and 200 milliliters per minute. During the purging of groundwater, field measurements were taken for pH, temperature, specific conductivity, dissolved oxygen, and oxidation-reduction potential using YSI Model ProDSS water-quality analyzers equipped with flow-through cells. Groundwater samples were collected after the pH, temperature, and specific conductivity parameters stabilized. Stabilization for pH is determined as a change of plus or minus 0.1 pH unit between readings for three consecutive measurements, and for temperature and specific conductivity as a relative percent difference (RPD) of less than 3 percent between readings for three consecutive measurements. After stabilization was achieved, groundwater samples were immediately collected from each well by discharging groundwater directly from the dedicated polyethylene tubing outlet into laboratory-prepared sample containers. The samples were labeled, placed on ice, and transported under chain-of-custody protocols in accordance with the RAP to OnSite Environmental Inc. Duplicate QA/QC samples were collected from monitoring wells MW-16, MW-25, and MW-31.

2.2.1.3 Analytical Method

The groundwater samples were analyzed for the groundwater IHSs for the Site using EPA Method 8260D.

2.2.1.4 Purge Water Handling

The purge water from the March 2021 through September 2022 sampling events is being stored in drums in a fenced area on the CHS Property pending development of a waste profile and disposal.

2.2.2 Groundwater Compliance Monitoring Results

Table 5 presents a summary of the groundwater and surface water elevation data for the Site. Table 6 presents a summary of analytical results for IHSs in groundwater for the September 2022 monitoring event and those from the previous three quarters. Data collected prior to December 2021 were provided in Remedial Action Performance and Groundwater Compliance Monitoring Reports prepared for the Site previously submitted to Ecology. Site-specific cleanup levels established in the Final CAP (Ecology 2001a), Exhibit B of the Consent Decree, are included in Table 6. Groundwater quality parameters measured in the field are summarized in Table 7. The laboratory analytical report for the September 2022 groundwater monitoring event is provided in Appendix A.

2.2.2.1 Groundwater Elevation

The groundwater elevation at the Site on September 13, 2022 ranged from 1,276.29 feet above mean sea level (msl) in monitoring well MW-46 to 1,282.33 feet above msl in monitoring well MW-1. Table 5 presents a summary of the groundwater elevation data. Figure 4 depicts the groundwater elevation contours for monitoring wells in the shallow monitoring well network measured on September 13, 2022. Each monitoring well at the Site is designated as shallow or deep. Shallow monitoring wells at the Site are completed to a total depth of approximately 20 to 25 feet below ground surface (bgs); deep monitoring wells are completed to a total depth of approximately 40 to 45 feet bgs. The depth of the screened interval and the total depth of each monitoring well are shown in Table 5.

The average hydraulic gradient at the Site on September 13, 2022 was measured at approximately 0.003 foot per foot across the Site. The groundwater elevations measured during the September 2022 monitoring event ranged from approximately 0.04 to 1.34 foot higher than those measured during the June 2022 monitoring event. Groundwater elevations generally increase in the spring and summer due to irrigation.

On September 13, 2022, the surface water elevation in the West Canal was 1,286.62 feet above msl, 0.07 feet lower than that measured in June 2022. The surface water elevation in the West Canal drainage ditch was not measured during the September 2022 event due to heavy vegetation. The groundwater elevation measured in monitoring well MW-41,

installed near the West Canal surveyed measuring point, was 7.87 feet lower than the surface water elevation measured in the West Canal.

2.2.2.2 Analytical Results

1,2-DCP was detected at concentrations at or exceeding the Site cleanup level of 1 microgram per liter (µg/l) in groundwater samples collected from 12 of the 37 monitoring wells sampled during the September 2022 monitoring event (Table 6). During the September 2022 monitoring event, 1,2-DCP was detected at concentrations ranging from 0.21 µg/l in the sample collected from monitoring well MW-12 to 21 µg/l in the sample collected from monitoring well MW-16. The concentrations of 1,2-DCP detected in groundwater samples collected from monitoring wells in the shallow and deep monitoring well networks during the September 2022 monitoring event are presented on Figures 5 and 6, respectively. A cross section depicting the 1,2-DCP distribution in groundwater in the uppermost 35 feet of the upper aquifer beneath the Site is presented on Figure 7. The cross section was constructed along the approximate center line of the 1,2-DCP contaminant plume. Monitoring wells were projected to line A-A' on Figure 3, and are shown on the cross section for spatial reference.

Vinyl chloride, chloroform, 1,2-dichloroethane, 1,1,2-trichloroethane, and EDB were not detected at concentrations exceeding Site cleanup levels in any of the groundwater samples collected from Site monitoring wells during the September 2022 monitoring event. Chloroform was detected at a concentration exceeding the laboratory practical quantitation limit (PQL) but not the Site cleanup level in the groundwater sample collected from monitoring well MW-32 at a concentration of 0.30 µg/l. 1,2,3-TCP was detected at concentrations at or exceeding the Site cleanup level in groundwater samples collected from 7 of the 37 monitoring wells sampled during the September 2022 monitoring event, at concentrations ranging from 1.0 µg/l in the groundwater sample collected from monitoring well MW-6 to 19 µg/l in the groundwater sample collected from monitoring well MW-16 (Table 6).

2.2.2.3 Groundwater Quality Parameters

The final groundwater quality parameters recorded during purging of groundwater at each monitoring well prior to sample collection are provided in Table 7 and summarized below:

- pH values ranged from 6.15 to 8.14;
- Groundwater temperatures ranged from 14. 4 to 18.9 degrees Celsius;
- Specific conductivity ranged from 480 to 5,060 microSiemens per centimeter;
- Dissolved oxygen concentrations ranged from 0.24 to 6.25 milligrams per liter; and
- Oxidation-reduction potential values ranged from 144.7 to 240.8 millivolts. One of the two multiparameter meters used during this sampling event had anomalously

high readings for oxidation-reduction potential, and the results have been flagged in the table.

2.3 ANALYTICAL DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

This section presents the analytical data QA/QC review for the groundwater samples collected in September 2022. Analytical results were reviewed in accordance with the procedures outlined in the Quality Assurance Project Plan, presented as Appendix B of the RAP.

2.3.1 Method Deviations

The RAP specifies use of EPA Method 8260B for analysis for VOCs in groundwater and air. EPA Method 8260D was used for analysis for VOCs in water September 2022 sampling event because it is the most-current version of EPA Method 8260 analysis, and includes additional laboratory QA/QC measures. The method modifications used are provided in the laboratory analytical report in Appendix A.

2.3.2 Sample Extraction and Holding Times

Groundwater samples collected in September 2021 were extracted and analyzed within method-specified holding times.

2.3.3 Method Reporting Limits

The laboratory PQLs for the groundwater analyses were less than or equal to Site cleanup levels.

2.3.4 Field Duplicate Samples

Three groundwater field duplicate samples were collected during the September 2022 sampling event:

- Sample QA/QC-1-091422-P-GW, a duplicate of MW-31-091422-P-GW;
- Sample QA/QC-2-091422-P-GW, a duplicate of MW-25-091422-P-GW; and
- Sample QA/QC-3-091522-P-GW, a duplicate of MW-16-091522-P-GW.

Relative percent difference (RPD) is a measure of precision or reproducibility of measurements. RPDs were calculated for detected IHSs in groundwater samples and field duplicates for the EPA Method 8260D analyses as follows:

$$RPD = \frac{(C_1 - C_2)}{(C_1 + C_2)/2} \times 100$$

Where:

RPD = relative percent difference

C_1 = the larger of the two duplicate results (i.e., the highest detected concentration)

C_2 = the smaller of the two duplicate results (i.e., the lowest detected concentration)

If sample results were less than five times the laboratory PQL, the absolute difference between the two results would be calculated instead of an RPD. In the case where an analyte was not detected, the RPD or absolute difference for that compound was not calculated. The RPDs for the QA/QC duplicate sample collected from monitoring well MW-16 were 15.4 percent for 1,2-DCP and 17.1 percent for 1,2,3-TCP. The RPDs for the QA/QC duplicate sample collected from monitoring well MW-25 were 15.4 percent for 1,2-DCP and 14.6 percent for 1,2,3-TCP. The RPDs for the QA/QC duplicate sample collected from monitoring well MW-38 were 0.0 percent for 1,2-DCP and 15.4 percent for 1,2,3-TCP.

Because there are no criteria for evaluating RPDs for organic sample analyses, the results were compared to the EPA *National Functional Guidelines for Inorganic Superfund Methods Data Review* dated November 2020,[1] Part B: Method-Specific Data Review, ICP-MS Data Review, Section VII: Duplicate Sample Analysis, ICP-MS Table 7, *Duplicate Sample Actions*. For groundwater, the criteria for evaluating the precision or reproducibility of duplicate samples are an RPD of less than 20 percent, or an absolute difference of less than one times the laboratory PQL for results less than five times the laboratory PQL. The field duplicate samples collected during the September 2022 sampling event were within the criteria for inorganic laboratory analyses.

2.3.5 Trip Blank

Trip blanks were provided by the analytical laboratory to accompany the groundwater samples. The trip blanks were analyzed for the groundwater IHSs using EPA Method 8260D. IHSs were not detected at a concentration exceeding laboratory reporting limits in the trip blank samples for the EPA Method 8260D groundwater analyses.

2.3.6 Method Blank Samples

Three groundwater method blank samples were analyzed using EPA Method 8260D. None of the analytes were detected at concentrations exceeding the laboratory PQLs in the groundwater blank samples.

2.3.7 Spike Blank/Spike Blank Duplicate Samples

Three groundwater spike blank/spike blank duplicate samples were analyzed as part of the EPA Method 8260D analysis. RPDs for the three spike blank/spike blank duplicate samples ranged from 0 to 8 percent, within the acceptable laboratory RPD control limits.

2.3.8 Surrogate Recoveries

Surrogate recoveries were analyzed as part of the EPA Method 8260D groundwater. The surrogate recoveries were within laboratory control limits.

[1] EPA 542-R-20-006.

2.3.9 Percent Completeness

No sample results were determined to be invalid. Therefore, the percent completeness for the analytical results for the September 2022 sampling event was 100 percent.

2.4 OPERATION AND MAINTENANCE ACTIVITIES

The MS/SVE system was shut down on June 13, 2022 due to mechanical failure of the system blower. The planned MS/SVE system shut-down period was scheduled to begin following the June 2022 monitoring event. The operational modifications consist of operating the MS/SVE system under a pulsed operational mode, off in the summer and on in the fall, winter, and spring. Due to the system mechanical problems, the shut-down period was instead initiated during the second week of June 2022, just prior to the June 2022 monitoring event. Farallon evaluated the system on June 20, 2022 and determined that the MS/SVE system blower motor was malfunctioning. An electrician from Tobin Electric of Quincy, Washington performed a check on the MS/SVE system on June 30, 2022 and determined that the blower motor was damaged and would need to be replaced. Performance air sampling was not conducted during the June 2022 monitoring event due to the MS/SVE system shut-down.

On September 22, 2022, Farallon tested two used blowers at the Site to determine whether either would be a suitable replacement for the MS/SVE system and could operate within system specifications. Of the two blowers tested, the ROTRON Regenerative DR858 blower was determined to have the ability to reach the target performance for flow capacity and will allow for increased flow to support ongoing optimization efforts. Routine O&M activities were then conducted on the MS/SVE system compressor. Summa canisters were ordered from Eurofins Air Toxics, LLC of Folsom, California following the blower testing with a delivery date of October 21, 2022, the earliest date available.

On October 27, 2022, Farallon returned to the Site to remove the old blower, complete the connection of the new blower to the carbon filtration system, start up the remediation system, and collect performance air samples. The modified operation of the MS/SVE system during the operating period of each pulse cycle includes:

- Operating VEW wells VEW-1 through VEW-9;
- Operating the MS and SVE components of MSW wells MSW-5 through MSW-12 only;
- Controlling airflow to the upper portion of MSW wells MSW-5 through MSW-12 at 5 standard cubic feet per hour (scfh); and to the deep portion of MSW wells MSW-5 through MSW-12 at 60 scfh; and
- Controlling overall system pressure at approximately 18.5 pounds per square inch, and vacuum at approximately 25.0 inches of water.

After startup of the MS/SVE system and adjustments to the airflow to the VEW wells, MS and SVE components of the MSW wells, and system pressure and vacuum, the system shut down several times while adjustments were being made. The backpressure from the system effluent carbon filtration drums was tested and found to be too high and the likely cause of the system shut-down.

Four new carbon filtration drums were delivered to the Site on November 8, 2022 and connected to the MS/SVE system on November 10, 2022. The MS/SVE system was restarted on November 10, 2022 and the air flows and system pressure and vacuum adjusted. After replacement of the carbon filtration drums, the system backpressure was at a normal level and the system operated continuously.

The MS/SVE system was restarted and allowed to equilibrate for approximately 15 minutes before collection of the air samples from the three VEW well piping runs. Once the air samples were collected from the three piping runs, airflow to the lower portion of MSW wells MSW-5 through MSW-12 was reestablished and set at 60 scfh, airflow to the upper portions of MSW wells MSW-5 through MSW-12 was set at 5 scfh, and the SVE portion of these wells was opened. Overall system pressure was set at 18.5 pounds per square inch, and vacuum at 25.0 inches of water. The MS/SVE system was allowed to equilibrate for approximately 15 minutes before collection of air samples from the MSW and VEW influent, effluent, and breakthrough sampling ports. The MS/SVE system will remain on until the June 2023 sampling event when it will be shut down as part of the planned pulsed operational modifications (Farallon 2021a).

Aboveground piping was inspected for leaks, misalignment, loose fittings, corrosion, deformation, and overall condition. The temperature of air sparge piping was checked tactilely at the connections between the galvanized steel pipe and the polyvinyl chloride piping. Fittings on the carbon filtration system and the biofilter were inspected for leaks, misalignment, and loose fittings. All fittings appeared to be tight and in alignment.

All Site monitoring wells were inspected during the September 2022 sampling event for overall integrity, including monitoring wells not part of the routine quarterly compliance groundwater monitoring and sampling program. Missing bolts, washers, and gaskets were replaced as necessary.

2.5 SUMMARY AND CONCLUSIONS

Groundwater elevations measured at the Site in September 2022 were higher than those measured in June 2022, and groundwater elevations in monitoring wells adjacent to the West Canal were lower than the surface water elevation in the canal.

IHSs were detected at concentrations exceeding Site cleanup levels in groundwater at the Site. 1,2-DCP concentrations detected in groundwater samples typically were higher than those of other IHSs. 1,2-DCP was detected at concentrations at or exceeding the Site cleanup level of 1 µg/l in groundwater samples collected from 12 of the 37 Site monitoring wells sampled during the

September 2022 monitoring event. 1,2,3-TCP was detected at concentrations exceeding the Site cleanup level in groundwater samples collected from 7 of the 37 monitoring wells sampled during the September 2022 monitoring event (Table 6).

A southeast-trending plume of dissolved-phase 1,2-DCP is present at concentrations exceeding the Site cleanup level in groundwater at the Site. Figures 5 and 6 depict the isoconcentration contours and groundwater analytical results for 1,2-DCP in the shallow and deep monitoring well networks, respectively, for the September 2021 monitoring event.

The highest concentration of 1,2-DCP detected in groundwater samples collected from the shallow monitoring well network at the Site during the September 2022 monitoring event was 6.2 µg/l, detected in the groundwater sample collected from monitoring well MW-38, located approximately 1,875 feet downgradient of the source area on the CHS Property (Figure 5).

The highest concentrations of 1,2-DCP detected in the deep monitoring well network during the September 2022 groundwater monitoring event were detected in the groundwater samples collected from monitoring well MW-16, located on the CHS Property and from monitoring wells MW-25 and MW-31, located 600 and 1,000 feet down-gradient of the CHS Property, respectively. 1,2-DCP concentrations detected in deeper groundwater at the Site decreased down-gradient of these monitoring wells. 1,2-DCP, was not detected at a concentration exceeding the laboratory PQL of 0.20 µg/l in the groundwater sample collected during the September 2022 monitoring event from deep monitoring wells MW-39 and MW-44, which are the two the farthest down-gradient monitoring wells in the deep monitoring well network (Figures 6 and 7).

3.0 PERFORMANCE AIR MONITORING ANNUAL SUMMARY

This section presents a summary of the results from performance air monitoring conducted over the past year. Performance air samples were collected in December 2021 and March and November 2022 from monitoring ports installed in the MS/SVE system effluent and influent piping. Laboratory analytical results from the November 2022 sampling event will be provided in the December 2022 Remedial Action Performance and Groundwater Compliance Monitoring letter report. The monitoring ports for the influent and effluent monitoring conducted at the Site are located as follows:

- MSW influent monitoring: upstream of the air bleed-in valve, and upstream of all carbon filters to monitor the air drawn from the MSW wells;
- VEW influent monitoring: upstream of the air bleed-in valve, and upstream of all carbon filters to monitor the air drawn from the VEW wells.
- Effluent monitoring: downstream of all carbon filters; and
- Breakthrough effluent monitoring: downstream of the first carbon filter.

In addition to the MSW and VEW influent, effluent, and breakthrough air samples, air samples were collected from the three VEW well piping runs in November 2022 as part of the MS/SVE system operational modification evaluation.

1,2-DCP was detected at concentrations exceeding laboratory PQLs in the air samples collected from the MSW and VEW monitoring ports in December 2021 and March 2022 (Table 3). 1,2-DCP was detected at concentrations ranging from 2.3 micrograms per cubic meter ($\mu g/m^3$) in the air sample collected from the VEW monitoring port in March 2021 to 16 $\mu g/m^3$ in the air sample collected from the VEW monitoring port in December 2021. 1,2-DCP concentrations decreased following restart of the MS/SVE system following an initial increase after the planned shut-down period between August 17 and October 28, 2021. The increase immediately following the system restart was expected because the air samples were collected following the planned shutdown period. Concentrations of 1,2-DCP in air samples tend to decrease upon continuous operation of the MS/SVE system as previously observed following prior shutdown and restart cycles of the MS/SVE system. No other IHSs were detected at a concentration exceeding the laboratory PQLs in the air samples collected from the MSW and VEW monitoring ports in December 2021 or March 2022.

IHSs were not detected at a concentration exceeding the laboratory PQL of 1.0 µg/l in the effluent or breakthrough effluent air samples collected during the December 2021 or March 2022 sampling events (Table 2) (Farallon 2022a, 2022b, 2022c).

Chart 1 depicts 1,2-DCP concentrations detected in the air samples collected from the MSW and VEW monitoring ports from March 2015 through March 2022, and shows the significant periods

of MS/SVE system shut-down periods (shaded in blue) that occurred due to planned evaluation shut-down periods or unforeseen mechanical malfunctions. The shut-down periods were:

- Between April 20, 2015 and February 10, 2016;
- Between February 1 and April 2, 2018;
- Between January 31 and July 18, 2019;
- Between May 19 and September 23, 2020;
- Between August 17 and October 28, 2021; and
- Between June 13 and November 10, 2022.

Following restart of the MS/SVE system after the shut-down periods noted above, 1,2-DCP concentrations detected in air samples collected from the MSW and VEW monitoring ports increased from those detected prior to the shut-down periods. 1,2-DCP concentrations in vadose zone soil gas appear to reach static levels as shown by 1,2-DCP concentrations decreasing to near the laboratory PQLs in air samples collected from the MSW and VEW monitoring ports when the MS/SVE system operates continuously (Table 3; Chart 1). Following extended periods of MS/SVE shut-down greater than 2 months, 1,2-DCP concentrations in soil gas generally return to near equilibrium levels as shown by increases in the 1,2-DCP concentrations detected in air samples collected from the MSW and VEW monitoring ports just after the MS/SVE system is restarted.

A comparison of the MS/SVE system operation and 1,2-DCP concentrations detected in groundwater samples for monitoring wells near the MS/SVE system indicates that operation of the MS/SVE system has some effect on concentrations of IHSs in groundwater in several of the monitoring wells near the MS/SVE system (Farallon 2021a). 1,2-DCP concentrations in groundwater samples collected from shallow monitoring well MW-24 increased following significant shut-down periods (6 months or greater) of the MS/SVE system, but only after the MS/SVE system was restarted (Chart 2). Shorter-duration shut-down periods of the MS/SVE system did not appear to have a significant impact on 1,2-DCP or 1,2,3-TCP concentrations in groundwater samples collected from monitoring well MW-24. 1,2-DCP has not been detected at a concentration exceeding the laboratory PQL or Site cleanup level since March 2015 in groundwater samples collected from deep monitoring well MW-9, which is paired with shallow monitoring well MW-24, indicating that MS/SVE system operation does not affect deeper groundwater in this area of the Site (Table 6).

1,2-DCP concentrations in groundwater samples collected from deep monitoring well MW-16 increased during the MS/SVE system shut-down period from 2015 to 2016, August to October 2021, and during the most recent shut-down period between June and November 2022. 1,2-DCP concentrations in groundwater samples collected from deep monitoring well MW-16 have also decreased during MS/SVE shut-down periods and were observed during the 2019 and 2020 shut-down periods (Chart 3). 1,2-DCP concentrations have also increased in groundwater samples collected from monitoring well MW-16 at times when the MS/SVE system was operating.

The estimated cumulative mass of 1,2-DCP recovered by the MS/SVE system from February 2016 through June 2022 was 0.275 pound (Table 4). A summary of the estimated mass of 1,2-DCP recovered by the MSW-series and the VEW-series SVE wells is provided on Chart 4, which also depicts extended periods of MS/SVE system planned and unplanned shut-down periods (shaded in blue). Following each of the MS/SVE system shut-down periods between 2015 and 2021, the rate of 1,2-DCP recovery by the system increased for several quarters compared to the rate of recovery prior to the shut-downs.

Increases in 1,2-DCP concentrations detected in air samples collected from the MSW and VEW monitoring ports and the resulting increase in the calculated mass of 1,2-DCP recovered by the MS/SVE system following periods of shut-down likely is the result of the diffusion of volatile COCs in soil. The SVE system likely preferentially removes a higher mass of COCs from the more-transmissive higher-permeability soil. The diffusion of volatile COCs from lower- to higher-permeability subsurface soil following periods of SVE system shut-down can result in an increase in COC concentrations in recovered soil gas after the system is restarted.

To optimize recovery of IHSs by the MS/SVE system and further reduce IHS concentrations in groundwater in the vicinity of the MS/SVE system, the following modifications to the operation of the MS/SVE system were proposed (Farallon 2021a) and approved by Ecology (2021a):

- Operate the MS/SVE system on an alternating schedule with the system off for approximately 3 months beginning the summer of 2021 and on for approximately 9 months beginning the fall of 2021. MS/SVE system shut-downs between 2 and 4 months duration appear to result an increase in the 1,2-DCP concentration recovered by the MS/SVE system (Charts 1 and 5) without causing significant increases in 1,2-DCP concentrations in groundwater samples collected from monitoring well MW-24 (Chart 2).
- Resume operation of the MS and SVE components of MSW wells MSW-11 and MSW-12 and continue operation of MSW wells MSW-5 through MSW-10 with airflows set at approximately 60 scfh in the lower portions of the MSW wells, and at 10 to 15 scfh in the upper portions of the MSW wells. MSW wells MSW-11 and MSW-12 are in the vicinity of monitoring well MW-24 where 1,2-DCP concentrations have increased in groundwater samples collected following restart of the MS/SVE system after extended shut-down periods.
- Collect air samples from each of the three piping runs of the VEW wells prior to shutting the MS/SVE system off in the summer of 2021 and upon restart of the MS/SVE system in the fall of 2021. If the air samples collected from the individual piping runs indicate one or more of the piping runs does not contain concentrations of IHSs exceeding the laboratory PQL, the piping run(s) will be turned off to focus SVE airflow in areas where IHSs are present in the vadose zone to maximize recovery.

Results from the air samples collected from each of the three VEW well piping runs in October 2021 indicated that all three of the piping runs contained IHSs exceeding the laboratory PQL. Therefore, all three of the piping runs remained on during MS/SVE operation.

This is the second year that the MS/SVE system has operated under the modified operational scenario detailed above. The modified operations scenario appears to be having a beneficial effect on recovery of IHSs by the MS/SVE system as the recovery rate (Table 3) has shown increases following the system shut-down period upon restart.

4.0 GROUNDWATER COMPLIANCE MONITORING ANNUAL SUMMARY

This section presents a summary of the groundwater compliance monitoring results for the past year, including groundwater elevation and analytical results for the quarterly groundwater monitoring events. A discussion of the calculation of the mass of 1,2-DCP in groundwater for the September 2022 monitoring event and the effects of MS/SVE system operation on groundwater concentrations in monitoring wells adjacent to the system also is included. 1,2-DCP is the IHS that has been detected at the highest concentrations and with the highest frequency in groundwater samples collected at the Site. The discussion of results and trends focuses on 1,2-DCP as an indicator of overall groundwater quality.

4.1 GROUNDWATER ELEVATION

Groundwater elevation measurements from the past year of monitoring are provided in Table 5. Groundwater elevation contour maps for the shallow monitoring well network were constructed using data collected during the past four quarterly groundwater monitoring events to depict the direction and gradient of groundwater flow at the Site. The groundwater elevation contour map for the September 2022 monitoring event is provided on Figure 4. Groundwater elevation contour maps for the December 2021, and March and June 2022 monitoring events are provided in Appendix B as Figures B1 through B3.

The groundwater flow direction at the Site is southeast. Groundwater elevations generally fluctuate seasonally due to irrigation activities conducted in the area, resulting in an increase in groundwater elevation during the spring and summer irrigation season, and a decrease in groundwater elevation during the fall and winter Historically, the highest groundwater elevations in the shallow monitoring well network typically were measured during the third quarter monitoring event each year, and the lowest during the first quarter monitoring event. Groundwater measurements over the past several years have shown shifts in seasonal elevation trends in areas of the Site, as discussed below.

Over the past year, groundwater elevations in the shallow monitoring well network were the highest during the September 2022 monitoring event and lowest during the March 2022 monitoring event with the exception of monitoring wells near the West Canal, which had the lowest groundwater elevations during the December 2021 monitoring event.

Surface water elevations measured in the West Canal over the past year also were the highest during the September 2022 monitoring event and the lowest during the December 2021 monitoring event. The surface water elevation in the West Canal influences the groundwater elevation, gradient, and flow direction in monitoring wells adjacent to the canal. When the surface water elevation in the West Canal is high (June), higher groundwater elevations usually are observed in adjacent monitoring wells; when the surface water elevation in the West Canal is low (December), lower groundwater elevations are observed. A steeper groundwater gradient generally is observed

in monitoring wells adjacent to the West Canal when the surface water elevation in the West Canal is low (Table 5; Chart 5).

Surface water elevations measured in the West Canal drainage ditch over the past year were relatively similar in December 2021, and March and June 2022. Surface water elevations measured in the West Canal drainage ditch generally have been lower than groundwater elevations measured in monitoring wells adjacent to the West Canal drainage ditch during the June and September monitoring events at the Site, indicating that shallow groundwater likely discharges to the West Canal drainage ditch for approximately one-half of the year (Chart 5). However, the surface water elevation measured in the West Canal drainage ditch was only lower than the groundwater elevations measured in monitoring well MW-41 in June 2022 (Chart 5). The West Canal drainage ditch may be acting as a discharge point for shallow groundwater at the down-gradient end of the Site.

4.2 ANALYTICAL RESULTS

This section presents a summary of the groundwater compliance monitoring analytical results for the past year of monitoring at the Site.

4.2.1 Isoconcentration Contour Figures

Groundwater analytical results from the past year of monitoring at the Site are summarized in Table 6. Figures 5 and 6 depict isoconcentration contours and groundwater analytical results for 1,2-DCP in the shallow and deep monitoring wells, respectively, for the September 2022 monitoring event.

A southeast-trending plume of dissolved-phase 1,2-DCP is present at concentrations exceeding the Site cleanup level in groundwater at the Site. The isoconcentration contours and groundwater analytical results for 1,2-DCP in the shallow and the deep monitoring well networks for the December 2021, and March and June 2022 monitoring events are presented in Appendix C as Figures C1 through C6. For construction of the figures, monitoring wells not sampled as part of the quarterly monitoring program were assumed to contain no detectable concentrations of 1,2-DCP, based on recent (2020) and historical groundwater monitoring results for the Site.

The highest concentrations of 1,2-DCP in the shallow monitoring well network over the past year were detected in groundwater samples collected from monitoring well MW-24 on the CHS Property in the approximate source-area of COCs at the Site and from monitoring well MW-38, located approximately 1,875 feet down-gradient of the CHS Property (Figure 5; Appendix C Figures C1, C3, and C5). The highest concentrations of IHSs in the shallow monitoring well network were historically detected in groundwater samples collected from monitoring wells in and immediately down-gradient of the former rinsate pond, the fumigant tank, and the rinse pad area on the CHS Property, including monitoring well MW-24.

1,2-DCP was not detected at concentrations exceeding the Site cleanup level in groundwater samples collected from the farthest-down-gradient shallow monitoring wells during the March,

June, and September 2022 monitoring events. This is attributable to seasonal variations and an observed trend of decreasing 1,2-DCP concentrations in monitoring wells throughout the Site.

1,2-DCP concentrations detected in groundwater samples collected from monitoring well MW-41, located adjacent to the West Canal, appear to be disconnected from the 1,2-DCP plume at the Site, indicating a separate source. Monitoring well MW-41 is approximately 650 feet south-southwest of monitoring well MW-40, and approximately 375 feet southeast of monitoring well MW-42, neither of which have contained 1,2-DCP or other COCs at concentrations exceeding the laboratory PQL since the wells were installed in 2010 (Table 6; Figure 5). The 1,2-DCP plume associated with the Site is relatively narrow in width compared to its length, approximately 300 feet at the widest point, and it is not likely that 1,2-DCP in groundwater would have migrated 500 feet cross-gradient to monitoring well MW-41.

The highest concentrations of 1,2-DCP detected in groundwater samples collected from the deep monitoring well network over the past year were detected in groundwater samples collected from monitoring wells MW-16, MW-25, and MW-31 (Figure 6; Appendix C Figures C2, C4, and C6). Monitoring well MW-16 is located on the CHS Property and monitoring wells MW-25 and MW-31 are approximately 600 and 1,000 feet down-gradient of the CHS Property, respectively. 1,2-DCP has not been detected at a concentration exceeding the Site cleanup level in groundwater samples collected from monitoring well MW-44, the farthest down-gradient well in the deep monitoring well network at the Site, over the past year of monitoring.

4.2.2 Cross Sections

Cross sections depicting 1,2-DCP distribution in groundwater in the uppermost 35 feet of the upper aquifer beneath the Site for the December 2021, and March, June, and September 2022 monitoring events are presented in Appendix D as Figures D1 through D3, and on Figure 7. The cross sections were constructed along the approximate center line of the 1,2-DCP groundwater plume, with monitoring wells outside of the centerline projected to line A-A' on Figure 3 and shown on the cross sections for spatial reference. The cross sections constructed over the past year generally show the highest concentrations of 1,2-DCP (exceeding 10 µg/l) in deep groundwater down-gradient of the CHS Property in the central portion of the Site, with an isolated area of 1,2-DCP exceeding 10 µg/l in groundwater from monitoring well MW-16 or MW-24 on the CHS Property.

4.3 1,2-DICHLOROPROPANE MASS IN GROUNDWATER

The 1,2-DCP mass in groundwater at the Site has been calculated annually since start-up of the MS/SVE system in 2001, using the Thiessen Polygon method (Dingman 1993; Fetter 1994). The polygon areas are presented in Appendix E as Figures E1 and E2. To estimate the mass of 1,2-DCP dissolved in groundwater at the Site, the area encompassing the monitoring well network at the Site was divided into two zones representing the deep and the shallow groundwater monitoring networks. The deep and shallow areas were then divided into polygons centered around each monitoring well so that all points in each polygon are closer to the monitoring well in the center of the polygon than to any other monitoring well at the Site (Appendix E Figures E1 and E2). 1,2-DCP concentrations in each discrete polygon area were assumed to be uniform. The thickness

of the shallow aquifer in September 2022 was calculated for each polygon area using the measured depth to groundwater for each monitoring well and an assumed depth to the middle of the aquifer of 30 feet bgs. Calculations from 2010 and earlier used an average depth to groundwater to calculate the thickness of the shallow aquifer. The thickness of the deep aquifer was assumed to be uniform, extending from 30 to 45 feet bgs, the depth of the approximate top of basalt bedrock. Using an estimated effective porosity of 35 percent, the average value for silt and silt/sand sediments (Fetter 1994), the area and the aquifer thickness around each monitoring well were multiplied to determine the volume of groundwater at each monitoring well polygon. The concentration of 1,2-DCP detected in groundwater samples collected from each monitoring well in September 2022 was multiplied by the volume of groundwater in the corresponding polygon to derive the contaminant mass of 1,2-DCP in each discrete area. The calculated masses associated with each well polygon were then summed to determine the total mass of 1,2-DCP for both the shallow and the deep aquifer zones in September 2022 (Table 8). The mass of 1,2-DCP has been calculated on an annual basis since 2002 using the results from each year's September monitoring event, and compared to the baseline mass calculated in December 2001.

The calculated 1,2-DCP mass in groundwater at the Site for the combined shallow and deep aquifer zones in December 2001 using the monitoring wells in the network at that time (monitoring wells MW-1 through MW-33) was 15.59 kilograms (kg) (Table 8). As additional monitoring wells have been installed at the Site, the mass calculations have been modified to include the area encompassed by the new monitoring wells. The calculated mass of 1,2-DCP in September 2022 was 0.61 kg, a reduction of 14.98 kg from December 2001, and a reduction of 0.12 kg from the mass of 0.73 kg calculated in September 2021 (Table 8).

Chart E1 in Appendix E shows a summary of the calculated contaminant mass of dissolved 1,2-DCP in groundwater for the shallow aquifer zone, the deep aquifer zone, and the combined shallow and deep aquifer zones for the December 2001 and September 2002 through September 2022 monitoring events. The calculated mass of dissolved 1,2-DCP in groundwater has decreased significantly since September 2002. Most of the mass reduction occurred in the first 3 to 4 years of remediation system operation. The total mass of 1,2-DCP in groundwater at the Site estimated for September 2022 was the lowest since start-up of the MS/SVE system in 2001.

The calculated mass of dissolved 1,2-DCP in groundwater at the Site in the shallow portion of the upper aquifer decreased significantly after September 2002, followed by a slight increase from September 2005 through September 2008, and a steady decrease after September 2008. The calculated mass of 1,2-DCP in groundwater at the Site in the deep portion of the upper aquifer decreased from September 2002 through September 2007, followed by a slight increase in September 2008 and September 2010, and a subsequent decrease from September 2011 through September 2022.

A significant reduction in the overall mass of dissolved 1,2-DCP in groundwater at the Site has occurred since start-up of the MS/SVE system in 2001. The steady and relatively linear decline in the estimated total mass of dissolved 1,2-DCP in groundwater at the Site over the past 18 years

suggests that the overall mass has not yet reached an asymptotic limit, and is expected to continue to attenuate in response to both the ongoing treatment and natural attenuation processes.

4.4 MICROSPARGE/SOIL VAPOR EXTRACTION SYSTEM OPERATION AND GROUNDWATER ANALYTICAL RESULTS

A correlation between the MS/SVE system operation and the concentration of 1,2-DCP detected in groundwater samples from monitoring well MW-24 (shallow well) (Chart 2), and to a lesser extent monitoring well MW-16 (deep well) (Chart 3), has been observed for the past several years following significant periods of system shut-down. Other monitoring wells in the immediate vicinity of the Site, including monitoring wells MW-3, MW-5, and MW-7 through MW-9, do not appear to be affected by the MS/SVE system operational status. The 1,2-DCP concentrations measured in monitoring wells MW-16 and MW-24 between March 2015 and September 2022 were plotted along with significant MS/SVE system shut-down periods to show the relationship between system operation and 1,2-DCP groundwater concentrations (Charts 2 and 3). The MS/SVE system operated under a modified operational scenario between February 10, 2016 and August 17, 2021 with VEW wells VEW-1 through VEW-9 on, and only southern perimeter MSW MS/SVE wells MSW-5 through MSW-10 operating (Figure 2). Airflow to MSW MS/SVE wells MSW-11 and MSW-12, located in the central portion of the Site adjacent to monitoring wells MW-9 and MW-24, was resumed on October 28, 2021 along with the other VEW and MSW wells that were previously operating since February 2016 (MS/SVE wells MSW-1 through MSW-4 remain off).

Increases in 1,2-DCP concentrations in groundwater samples collected from shallow monitoring well MW-24 have been observed following extended shut-down periods of the MS/SVE system, but generally only after the MS/SVE system has been restarted. Following the planned MS/SVE system shut-down in 2015 to 2016, when the MS/SVE system was off for approximately 11 months, and in 2019 when the MS/SVE system was off for approximately 6 months, concentrations of 1,2-DCP in groundwater samples collected from monitoring well MW-24 increased following restart of the system under the 2016 modified operational scenario (Chart 2). Shorter-duration shut-down periods of the MS/SVE system do not appear to have a significant impact on 1,2-DCP or 1,2,3-TCP concentrations in groundwater in the vicinity of monitoring well MW-24; however, increases in 1,2-DCP and 1,2,3-TCP concentrations were observed in monitoring well MW-24 in December 2021, following the restart of the system in October 2021. 1,2-DCP has not been detected at a concentration exceeding the laboratory PQL or Site cleanup level since March 2015 in groundwater samples collected from deep monitoring well MW-9, indicating that MS/SVE system operation does not affect deeper groundwater in this area of the Site under either the previous full or previous modified operational scenarios.

Concentrations of 1,2-DCP in groundwater samples collected from deep monitoring well MW-16 increased during the MS/SVE system shut-down period in 2015 to 2016, with decreases observed during the shut-down periods in 2019 and 2020 (Chart 3). Increases in 1,2-DCP concentrations have also been observed in groundwater samples collected from monitoring well MW-16 when the MS/SVE system was operating (March 2017, December 2018, and March 2021) (Chart 3). 1,2-

DCP and 1,2,3-TCP concentrations increased in monitoring well MW-16 during the latest shut-down period between June and November 2022.

5.0 OPERATION AND MAINTENANCE ANNUAL SUMMARY

This section provides a summary of the O&M activities conducted for the MS/SVE system and monitoring wells at the Site over the past year.

5.1 MICROSPARGING/SOIL VAPOR EXTRACTION SYSTEM

The MS/SVE system was shut down as part of an evaluation to optimize potential recovery of VOC vapors between June 13 and November 10, 2022 (Farallon 2021a). Upon restart on November 10, 2022, the modified operational scenario consisted of the following:

- Operating VEW wells VEW-1 through VEW-9;
- Operating the MS and SVE components of MSW wells MSW-5 through MSW-12 only;
- Controlling airflow to the upper portion of MSW wells MSW-5 through MSW-12 at 5 scfh, and to the deep portion of MSW wells MSW-5 through MSW-12 at 60 scfh; and
- Operating the MS/SVE system under a pulsed operational mode, off in the summer and on in the fall, winter, and spring.

O&M activities and corrective actions conducted on the MS/SVE system from December 2021 through June 2022 were detailed in quarterly reports previously submitted to Ecology (Farallon 2022a, 2022b, 2022c). A summary of O&M activities and corrective actions over the past year is provided below.

Routine O&M activities on the MS/SVE system were conducted in December, 2021. The MS/SVE system was not operating upon Farallon's arrival on December 10, 2021 for the monitoring event and was restarted on December 13, 2021 following compressor maintenance. The four compressor vanes were replaced. Final airflow in the lower portion of MS/SVE-series wells MSW-5 through MSW-10 was set at 60 scfh, with airflow to the upper portions of MS/SVE-series wells MSW-5 through MSW-10 set at 5 scfh. Overall system pressure was set at 18.5 pounds per square inch, and vacuum at 25.0 inches of water.

In March 2022, Final airflow in the lower portion of MSW wells MSW-5 through MSW-12 was set at 60 scfh, with airflow to the upper portions of MSW wells MSW-5 through MSW-12 set at 5 scfh. Overall system pressure was set at 18.5 pounds per square inch, and vacuum at 25.0 inches of water.

The MS/SVE system was not operating upon Farallon's arrival for the June 2022 sampling event. The MS/SVE system had shut down during the second week of June 2022 due to mechanical failure of the system blower. The blower was evaluated by Farallon and electricians from Tobin Electric; it was determined that the blower motor was damaged and would need to be replaced.

MS/SVE system operations for September 2022 are provided in Section 2.4, Operations and Maintenance Activities.

During the December 2021 and March 2022 monitoring events, aboveground piping was inspected for leaks, misalignment, loose fittings, corrosion, deformation, and overall condition; the temperature of air sparge piping was checked tactilely at the connections between the galvanized steel pipe and the polyvinyl chloride piping; and fittings on the carbon filtration system and the biofilter were inspected for leaks, misalignment, and loose fittings. All fittings appeared to be tight and in alignment.

5.2 MONITORING WELLS

Monitoring wells were inspected for overall integrity; gasket seals were cleaned and inspected; and missing bolts, washers, and gasket seals were replaced as needed during each of the monitoring events conducted over the past year. Site monitoring wells, including monitoring wells not part of the routine quarterly compliance groundwater monitoring and sampling program, were inspected for overall integrity during the September 2022 monitoring event.

6.0 DRAFT PERIODIC REVIEW

In October 2021, Ecology provided a draft Second PR (Ecology 2021b) to CHS to review and provide comments on (2021 PR review draft), prior to issuing a draft that would be shared with the public. CHS provided comments on the 2021 PR review draft in a letter to Ecology on November 12, 2021 (Farallon 2021b). CHS requested that Ecology update the 2021 PR draft to include current Site data collected more recently than 2018; include the results of CHS's 2020 vapor intrusion (VI) assessment (Farallon 2020); and include the results of CHS's MS/SVE system assessment (Farallon 2021a). In addition, CHS requested that Ecology consider modification to the groundwater monitoring scope and frequency given that there has been over 20 years of quarterly groundwater monitoring data collected at the Site and clarify the discussion regarding cleanup levels and amendment to the Final CAP Cleanup Action Plan.

Ecology completed the 2022 PR public review draft (Ecology 2022) for the Site in October 2022. The public comment period for the 2022 PR public review draft is from October 31 through November 29, 2022. A new Ecology Site Project Manager also was assigned to the Site in the 2022 PR public review draft.

The 2022 PR public review draft concluded that although cleanup of the Site has not been achieved, human health and the environment continue to be protected. Ecology reviewed the 2020 VI assessment prepared to evaluate the VI risk at Quincy Middle School (Farallon 2020) in the 2022 PR public review draft. Ecology separately conducted VI assessment to evaluate the VI risk at Quincy Middle School and determined that the current conditions do not represent a VI risk to the school.

The 2022 PR public review draft noted that groundwater monitoring data indicate that the concentrations and mass of COCs in groundwater continue to slowly decline and have declined measurably since the 2009 PR (Ecology 2009). Ecology concluded that if the current cleanup approaches are maintained with continued system optimization, cleanup levels can potentially be met in most areas of the Site within the next 10 years.

Recommendations in the 2022 PR public review draft for the Site are as follows:

- Continue groundwater monitoring at an agreed-upon frequency and sampling locations.
- Continue to optimize the MS/SVE system operations at the CHS Property as proposed and approved by Ecology in August 2021.
- Continue to optimize the vadose zone SVE operations at the CHS property; where possible, collect soil gas samples from individual SVE wells to assess any potential elevated IHS area. Modify existing SVE operations according to the approved plan to address SVE wells that show the highest IHS vapor concentrations.
- Sample the domestic water supply well southeast of the West Canal at least once every 5 years for Site IHSs.

- Record environmental covenants for all parcels within the Site.
- Prepare a comprehensive remediation performance evaluation as part of an annual report submitted a year prior to the next PR.
- Amend the [Final]CAP to include the cleanup level adjustments based on the new groundwater PQL of 0.2 µg/l for EDB, 1,2-DCP, and 1,2,3-TCP.

CHS submitted a comment to Ecology during the public comment period regarding the recommendation to amend the Final CAP to include cleanup level adjustments for EDB, 1,2-DCP, and 1,2,3-TCP. The recommendation to lower the cleanup level for EDB, 1,2,-DCP, and 1,2,3-TCP to 0.2 µg/l is inconsistent with information provided in the 2022 PR public review draft discussing the Site cleanup level, which indicates that a "decision to potentially lower the current cleanup levels based on laboratory PQLs must consider the ability of existing remedial systems and contaminant reductions process to effectively achieve and sustain the lower IHS concentrations." Further, the MTCA Method B cleanup level for 1,2-DCP is 1.2 µg/l and the recommendation to lower the established cleanup level to a new groundwater PQL of 0.2 µg/l is not consistent with MTCA.

CHS has already been working to identify parcels within the Site that do not currently have environmental covenants and will complete other tasks after the PR has been finalized.

7.0 CONCLUSIONS

1,2-DCP and 1,2,3-TCP were detected at concentrations exceeding Site cleanup levels in groundwater samples collected from Site monitoring wells during the past year of groundwater monitoring. Consistent with previous results, 1,2-DCP typically was detected in the groundwater samples at concentrations higher than other IHSs, and was detected in more areas of the Site. 1,2-DCP was detected at concentrations exceeding the Site cleanup level of 1 µg/l in 18 of the 37 monitoring wells sampled at the Site over the past year. 1,2,3-TCP was detected at concentrations exceeding the Site cleanup level of 1 µg/l in groundwater samples collected from 9 of the 37 monitoring wells sampled at the Site over the past year.

A southeast-trending plume of 1,2-DCP is present at concentrations exceeding the Site cleanup level in groundwater at the Site. During the past four quarters of monitoring, the highest concentration of 1,2-DCP detected in groundwater samples collected from the shallow monitoring well network was from monitoring well MW-24, located on the CHS Property and from monitoring well MW-38, located approximately 1,875 feet down-gradient from the CHS Property. Over the past year of monitoring, the highest concentrations of 1,2-DCP detected in groundwater samples collected from the deep monitoring well network were from monitoring well MW-16 located on the CHS Property, and from monitoring wells MW-25 and MW-31, approximately 600 and 1,000 feet down-gradient of the CHS Property, respectively.

1,2-DCP has not been detected at a concentration exceeding the Site cleanup level in the groundwater samples collected from the farthest-down-gradient deep monitoring well MW-44 over the past year of monitoring. Additionally, 1,2-DCP was not detected at a concentration exceeding the Site cleanup level in the groundwater samples collected from farthest-down-gradient shallow monitoring wells during the March, June, and September 2022 monitoring events.

The estimated mass of 1,2-DCP in groundwater at the Site has decreased by approximately 96 percent since start-up of the MS/SVE system in December 2001, indicating that the MS/SVE system has had a beneficial effect in reducing the mass of 1,2-DCP at the Site, with most of the 1,2-DCP mass reduction occurring in the first 3 to 4 years of MS/SVE system operation. The total estimated mass of 1,2-DCP in groundwater at the Site has shown a steady linear decline over the past 18 years. The total estimated mass of 1,2-DCP in groundwater at the Site for the September 2022 monitoring event was 0.61 kg, the lowest estimated mass since start-up of the MS/SVE system in 2001.

Based on the continued observed reduction in 1,2-DCP mass at the Site along with over 20 years of quarterly groundwater monitoring data, a reduction in the groundwater monitoring program frequency and sampling locations is warranted at the Site. CHS will propose a reduced sampling frequency and well locations once Ecology has finalized the Second PR.

1,2-DCP was detected in SVE effluent air samples collected from the MSW and VEW monitoring ports over the past year of MS/SVE system operation. The estimated mass of 1,2-DCP recovered by the MS/SVE system since February 2016 is 0.275 pound. The source of 1,2-DCP detected in

SVE influent air samples appears to be residual soil gas in the vadose zone soil and stripped VOCs from groundwater.

Following restart of the MS/SVE system after shut-down periods, 1,2-DCP concentrations detected in air samples collected at the MSW and VEW monitoring ports generally increased compared to those detected prior to the shut-down period when the MS/SVE system had been operating continuously. To optimize the recovery of IHSs from groundwater and soil gas in the source area, pulsed operation of the MS/SVE system has been implemented. Continued operation of the MS/SVE system under the modified pulsed operational scenario is recommended to optimize recovery of IHSs from groundwater and soil gas. The effects of this change in operation will be evaluated to determine whether the mass recovery increases with time.

The 2022 PR public review draft (Ecology 2022) public comment period is October 31 through November 29, 2022. The 2022 PR public review draft concluded that although cleanup of the Site has not been achieved, human health and the environment continue to be protected and the current conditions do not represent a VI risk Quincy Middle School. Work to complete the recommended action items from the 2022 PR public review draft will be initiated once the PR is finalized.

The next quarterly groundwater compliance monitoring and performance air sampling event at the Site is scheduled for December 2022. The results from the November 2022 MS/SVE influent and effluent air sampling will be included in the December 2022 Remedial Action Performance and Groundwater Compliance Monitoring letter report for the Site.

8.0 REFERENCES

Dingman, S. Lawrence. 1993. "Precipitation." *Physical Hydrogeology.* Prentice-Hall, Inc. Upper Saddle River, New Jersey. pp. 111-113.

Farallon Consulting, L.L.C. (Farallon). 2001. *Draft Remedial Action Work Plan, Cenex Harvest States Cooperatives Site, 300 Division Street, Quincy, Washington*. Prepared for Cenex Harvest States Cooperatives. July 2.

———. 2002. *Cleanup Action Report, Cenex Harvest States Cooperative [*sic*] Site*, *300 Division Street, Quincy, Washington*. Prepared for Cenex Harvest States Cooperatives. April 5.

———. 2015a. Technical Memorandum Regarding Scope of Work for Supplemental Operation and Monitoring Activities for the Microsparge/Soil Vapor Extraction System, Cenex Harvest States Cooperative Site, Quincy Washington. From Paul Grabau. To Chuck Gruenenfelder, Washington State Department of Ecology. February 26.

———. 2015b. Technical Memorandum Regarding Proposed Operational Modifications for the Microsparge/Soil Vapor Extraction System, Cenex Harvest States Cooperative Site, Quincy, Washington. From Paul Grabau. To Chuck Gruenenfelder, Washington State Department of Ecology. October 28.

_____. 2020. Technical Memorandum Regarding Tier I Vapor Intrusion Assessment, Cenex Harvest States Cooperatives Site, Quincy, Washington. From Tracey Mulhern and Paul Grabau. To Chuck Gruenenfelder, Washington State Department of Ecology. November 10.

———. 2021a. Technical Memorandum Regarding Proposed Operational Modifications for the Microsparge/Soil Vapor Extraction System, Cenex, Cenex Harvest States Cooperatives Site, Quincy, Washington. From Paul Grabau and Tracey Mulhern. To Chuck Gruenenfelder, Washington State Department of Ecology. July 22.

_____. 2021b. Letter Regarding Comments on Draft Second Periodic Review Report, Cenex Supply & Marketing Inc. Rinsate Site, Quincy Cleanup Action, 300 Division Street East, Quincy, Washington. From Paul Grabau and Tracey Mulhern. To Chuck Gruenenfelder, Washington State Department of Ecology. November 15.

———. 2022a. Letter Regarding December 2021 Remedial Action Performance and Groundwater Compliance Monitoring, Cenex Harvest States Cooperatives Site, Quincy, Washington. From Tracey A. Mulhern and Paul C. Grabau. To Chuck Gruenenfelder, Washington State Department of Ecology. March 2.

———. 2022b. Letter Regarding March 2022 Remedial Action Performance and Groundwater Compliance Monitoring, Cenex Harvest States Cooperatives Site, Quincy, Washington.

From Tracey A. Mulhern and Paul C. Grabau. To Chuck Gruenenfelder, Washington State Department of Ecology. June 2.

———. 2022c. Letter Regarding June 2022 Remedial Action Performance and Groundwater Compliance Monitoring, Cenex Harvest States Cooperatives Site, Quincy, Washington. From Tracey A. Mulhern and Paul C. Grabau. To Chuck Gruenenfelder, Washington State Department of Ecology. August 30.

Fetter, C.W. 1994. *Applied Hydrogeology.* Third Edition. Prentice-Hall, Inc. Upper Saddle River, New Jersey. pp. 41-44 and 86.

Intertox, Inc. 2006. *Observations Related to Potential Soil Vapor Migration at Quincy High School* prepared for Roger Fox, Quincy School District Superintendent. May 31.

U.S. Environmental Protection Agency (EPA). 1998. *Technical Protocol for Evaluation of Natural Attenuation of Chlorinated Solvents in Ground Water.* EPA/600/R-98/128. September.

_____. 2017. *EPA Spreadsheet for Modeling Subsurface Vapor Intrusion,* last updated September 27, 2017. <https://www.epa.gov/vaporintrusion/epa-spreadsheet-modeling-subsurface-vapor-intrusion> (March 24, 2020.)

Washington State Department of Ecology (Ecology). 2001a. *Final Cleanup Action Plan, Cenex/Quincy Site, Quincy, WA.* Exhibit B of the *Final Consent Decree and Cleanup Action Plan, Cenex/Quincy Site, Quincy, WA* dated February 22, 2001 issued by the Washington State Department of Ecology. February 22.

———. 2001b. *Final Consent Decree and Cleanup Action Plan, Cenex/Quincy Site, Quincy, WA.* February 22.

———. 2001c. Letter Regarding Responsiveness Summary and Removal Action Plan Approval. From Guy Gregory. To Jerry Eide, Cenex Harvest States Cooperatives. October 8.

_____. 2009. *Cenex/Quincy Site, Final Periodic Review, Quincy, Washington.* Eastern Regional Office, Toxics Cleanup Program. June.

———. 2021a. Email Regarding Approval of the Cenex Quincy – Proposed Operational Modifications for the MS/SVE System. From Chuck Gruenenfelder. To Tracey Mulhern, Farallon Consulting, L.L.C. August 10.

_____. 2021b. *Second Periodic Review, CENEX Supply & Marketing Inc. Rinsate, 300 Division St. East, Quincy, Grant County, Facility Site ID No. 33599645, Cleanup Site ID No. 370.* Toxics Cleanup Program, Eastern Region. October.

_____. 2022. *Second Periodic Review, CENEX Supply & Marketing Inc. Rinsate, 300 Division St. East, Quincy, Grant County, Facility Site ID No. 33599645, Cleanup Site ID No. 370.* Toxics Cleanup Program, Eastern Region. October.

9.0 LIMITATIONS

9.1 GENERAL LIMITATIONS

The conclusions contained in this report/assessment are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location. The conclusions contained herein are subject to the following inherent limitations:

- **Accuracy of Information**. Farallon obtained, reviewed, and evaluated certain information used in this report/assessment from sources that were believed to be reliable. Farallon's conclusions, opinions, and recommendations are based in part on such information. Farallon's services did not include verification of its accuracy or authenticity. Should the information upon which Farallon relied prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.
- **Reconnaissance and/or Characterization**. Farallon performed a reconnaissance and/or characterization of the Site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions. Contamination may exist in other areas of the Site that were not investigated or were inaccessible. Site activities beyond Farallon's control could change at any time after the completion of this report/assessment.

For the foregoing reasons, Farallon cannot and does not warrant or guarantee that the Site is free of hazardous or potentially hazardous substances or conditions, or that latent or undiscovered conditions will not become evident in the future. Farallon's observations, findings, and opinions can be considered valid only as of the date of the report.

This report/assessment has been prepared in accordance with the contract for services between Farallon and CHS, and currently accepted industry standards. No other warranties, representations, or certifications are made.

9.2 LIMITATION ON RELIANCE BY THIRD PARTIES

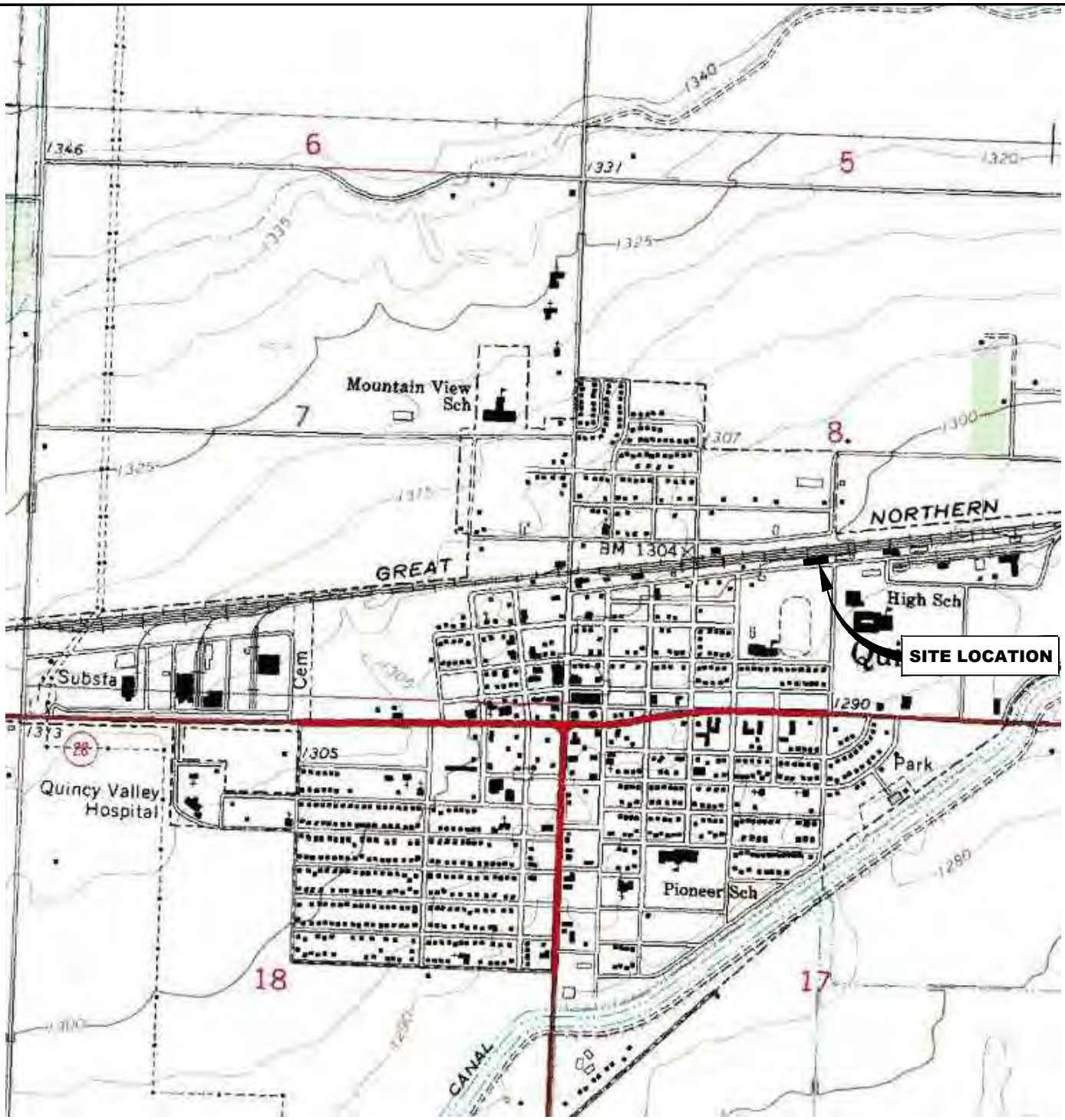
Reliance by third parties is prohibited. This report/assessment has been prepared for the exclusive use of CHS to address the unique needs of CHS at the Site at a specific point in time.

This is not a general grant of reliance. No one other than CHS may rely on this report unless Farallon agrees in advance to such reliance in writing. Any unauthorized use, interpretation, or reliance on this report/assessment is at the sole risk of that party and Farallon will have no liability for such unauthorized use, interpretation, or reliance.

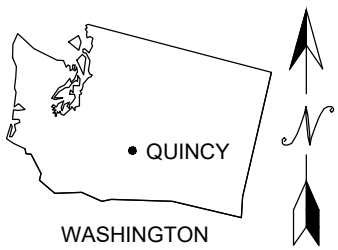
FIGURES

ANNUAL REPORT 2022
Cenex Harvest States Cooperatives Site
300 Division Street East
Quincy, Washington

Farallon PN: 301-001



REFERENCE: 7.5 MINUTE USGS QUADRANGLE QUINCY, WASHINGTON. DATED 1966



FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

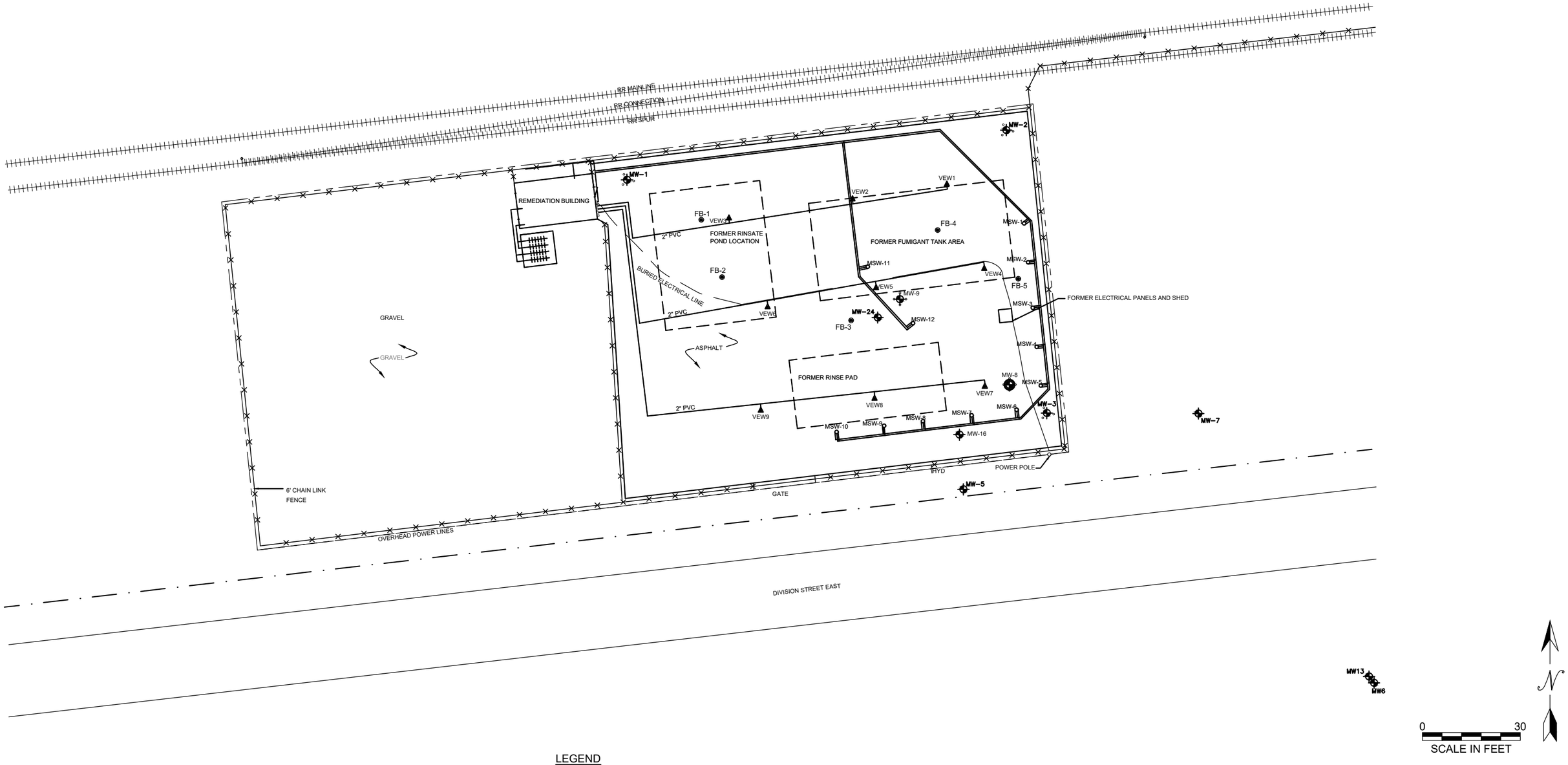
Drawn By: NM Checked By: TM

FIGURE 1

SITE LOCATION MAP
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

R:\Projects\301-001\CAD\Figures\2022-09 Quarterly Report\301-001 Fig-1.dwg 11/4/2022 11:36 AM (Nick Miller)



LEGEND

- APPROXIMATE CHS PROPERTY BOUNDARY
- FORMER SITE FEATURES
- FENCING
- SOIL VAPOR / AIR SPARGE SYSTEM PIPING
- MICROSPARGE SYSTEM PIPING

ALL LOCATIONS ARE APPROXIMATE

- FB-3 — BORING LOCATION FARALLON CONSULTING. L.L.C. (2011)
- MONITORING WELL
- VEW8 — SOIL VAPOR EXTRACTION WELL
- MSW-3 — MICROSPARGE WELL
- HYD = WATER HYDRANT
- PVC = POLYVINYL CHLORIDE

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

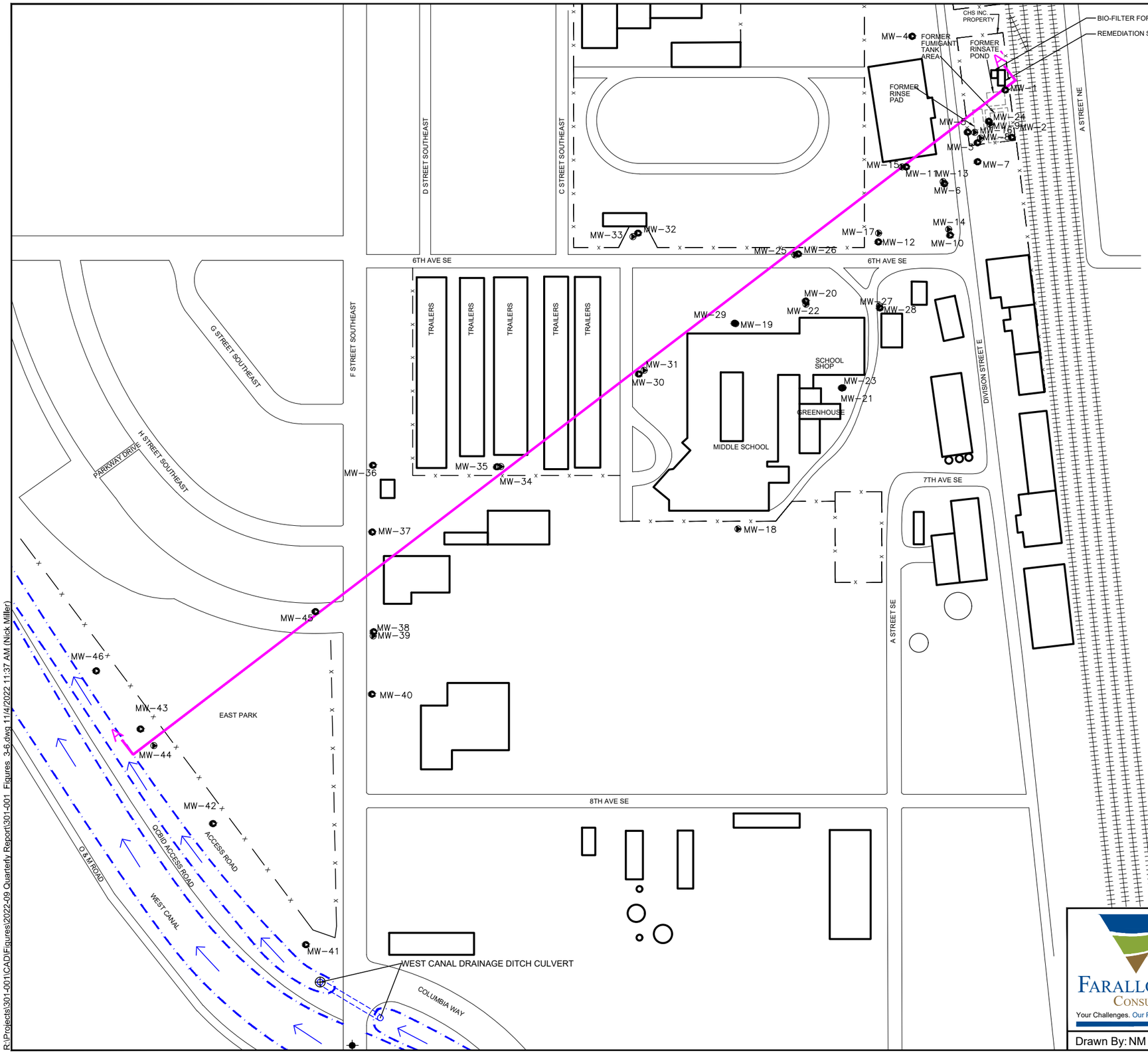
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE 2

CHS PROPERTY FACILITY PLAN
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



LEGEND

A — A' LINE OF CROSS SECTION

BUILDING STRUCTURE

MW-32 MONITORING WELL, SHALLOW

MW-18 MONITORING WELL, DEEP

BRIDGE SURVEYED MEASURING POINT

CULVERT SURVEYED MEASURING POINT

FENCE

PREVIOUS STRUCTURE

RAILROAD TRACKS

WEST CANAL/DRAINAGE FLOW DIRECTION

NOTE: ALL LOCATIONS ARE APPROXIMATE

N

0 250

APPROXIMATE SCALE IN FEET

R:\Projects\301-001\CAD\Figures\2022-09 Quarterly Report\301-001 Figures 3-6.dwg 11/4/2022 11:37 AM (Nick Miller)

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

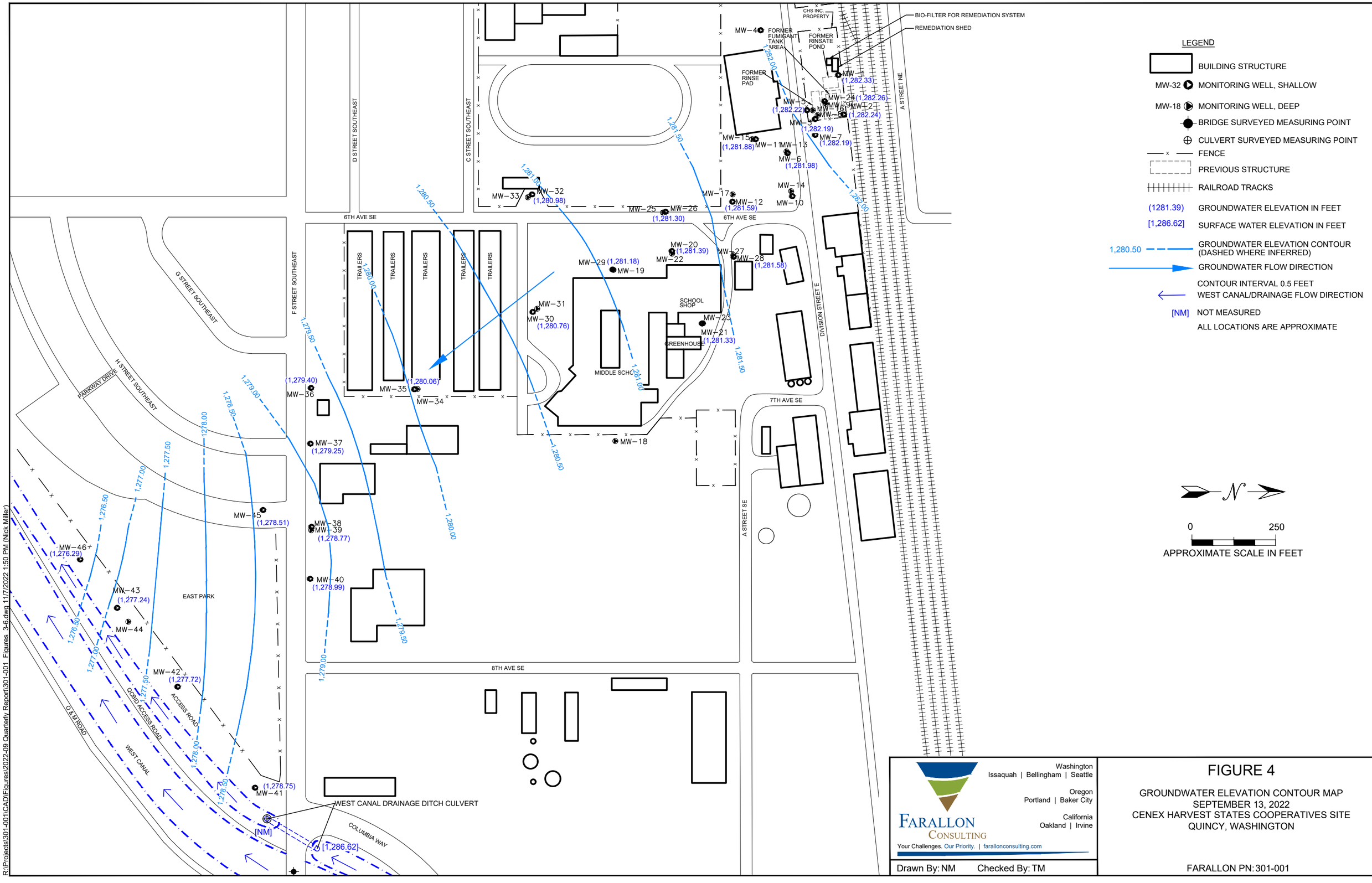
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE 3

SITE PLAN
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



R:\Projects\301-001\CAD\Figures\2022-09 Quarterly Report\301-001 Figures 3-6.dwg 11/7/2022 1:50 PM (Nick Miller)

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

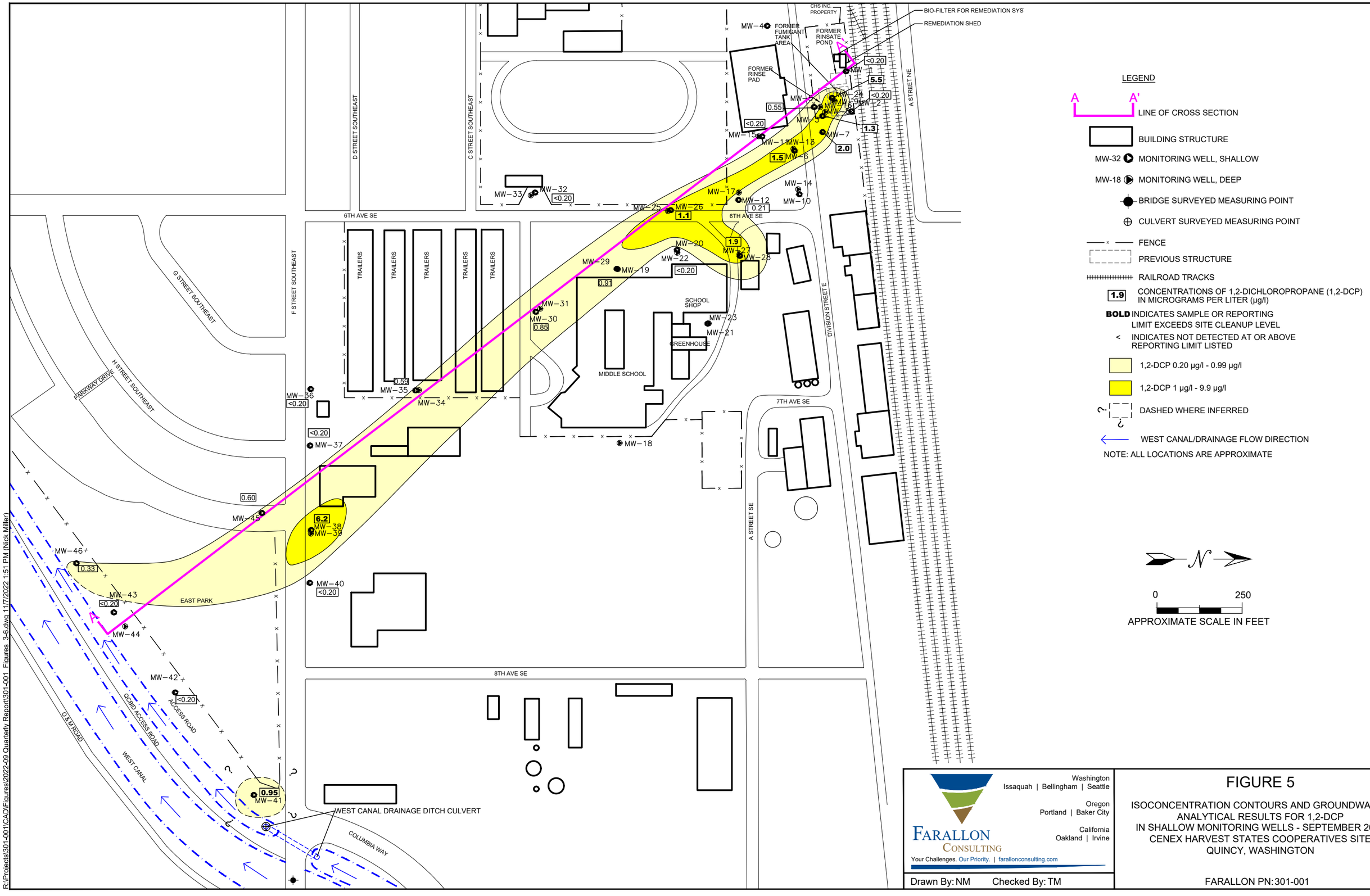
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE 4

GROUNDWATER ELEVATION CONTOUR MAP
SEPTEMBER 13, 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



LEGEND

A — A' LINE OF CROSS SECTION

BUILDING STRUCTURE

MW-32 MONITORING WELL, SHALLOW

MW-18 MONITORING WELL, DEEP

BRIDGE SURVEYED MEASURING POINT

CULVERT SURVEYED MEASURING POINT

FENCE

PREVIOUS STRUCTURE

RAILROAD TRACKS

1.9 CONCENTRATIONS OF 1,2-DICHLOROPROPANE (1,2-DCP) IN MICROGRAMS PER LITER (µg/l)

BOLD INDICATES SAMPLE OR REPORTING LIMIT EXCEEDS SITE CLEANUP LEVEL

< INDICATES NOT DETECTED AT OR ABOVE REPORTING LIMIT LISTED

1,2-DCP 0.20 µg/l - 0.99 µg/l

1,2-DCP 1 µg/l - 9.9 µg/l

? DASHED WHERE INFERRED

WEST CANAL/DRAINAGE FLOW DIRECTION

NOTE: ALL LOCATIONS ARE APPROXIMATE

N

0 250

APPROXIMATE SCALE IN FEET

R:\Projects\301-001\CAD\Figures\2022-09 Quarterly Report\301-001 Figures 3-6.dwg 11/7/2022 1:51 PM (Nick Miller)

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

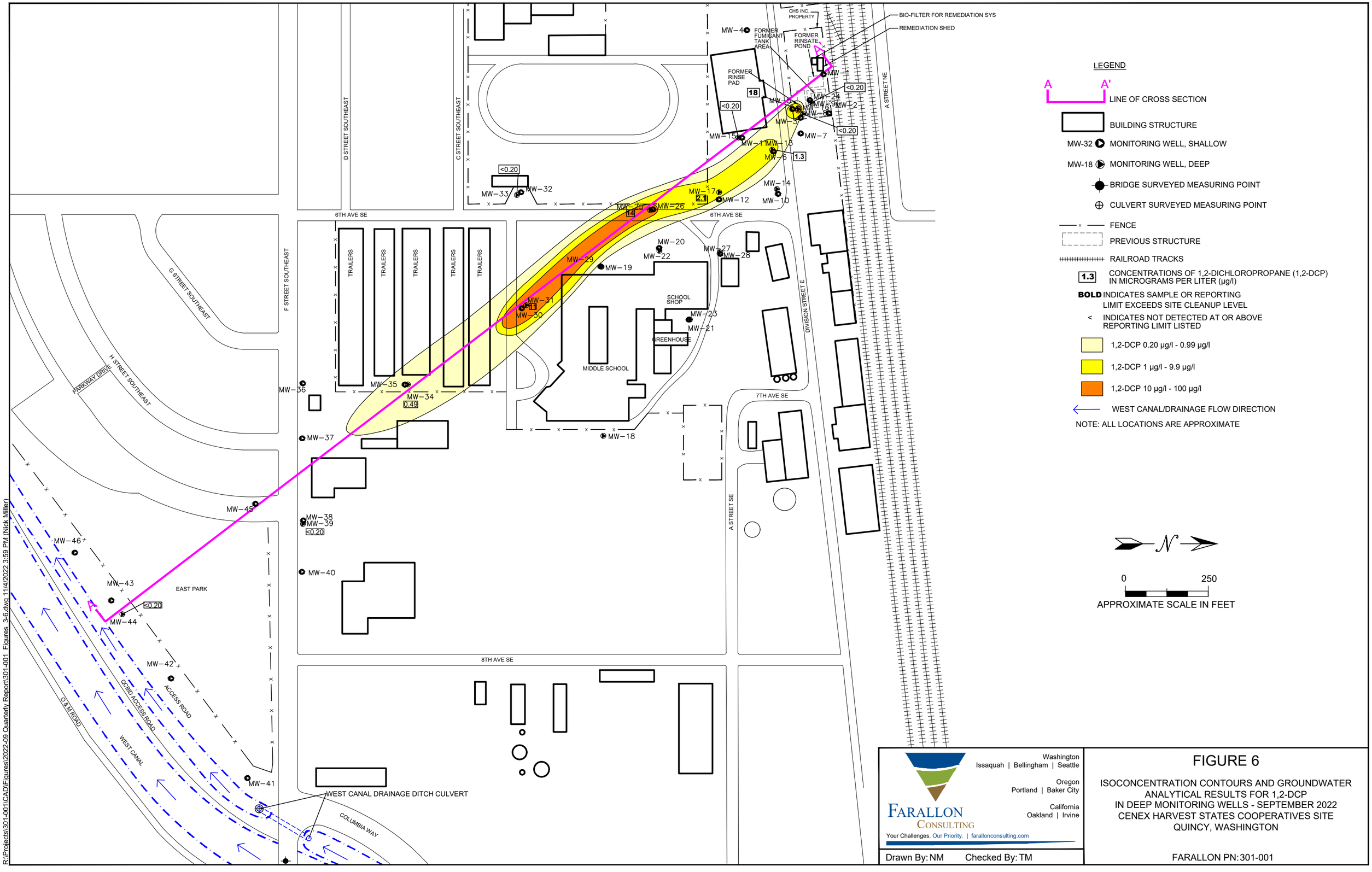
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE 5

ISOCONCENTRATION CONTOURS AND GROUNDWATER ANALYTICAL RESULTS FOR 1,2-DCP IN SHALLOW MONITORING WELLS - SEPTEMBER 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



LEGEND

- A — A' LINE OF CROSS SECTION
- BUILDING STRUCTURE
- MW-32 MONITORING WELL, SHALLOW
- MW-18 MONITORING WELL, DEEP
- BRIDGE SURVEYED MEASURING POINT
- CULVERT SURVEYED MEASURING POINT
- FENCE
- PREVIOUS STRUCTURE
- RAILROAD TRACKS
- 1.3 CONCENTRATIONS OF 1,2-DICHLOROPROPANE (1,2-DCP) IN MICROGRAMS PER LITER (µg/l)
- **BOLD** INDICATES SAMPLE OR REPORTING LIMIT EXCEEDS SITE CLEANUP LEVEL
- < INDICATES NOT DETECTED AT OR ABOVE REPORTING LIMIT LISTED
- 1,2-DCP 0.20 µg/l - 0.99 µg/l
- 1,2-DCP 1 µg/l - 9.9 µg/l
- 1,2-DCP 10 µg/l - 100 µg/l
- WEST CANAL/DRAINAGE FLOW DIRECTION

NOTE: ALL LOCATIONS ARE APPROXIMATE

N

0 250

APPROXIMATE SCALE IN FEET

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

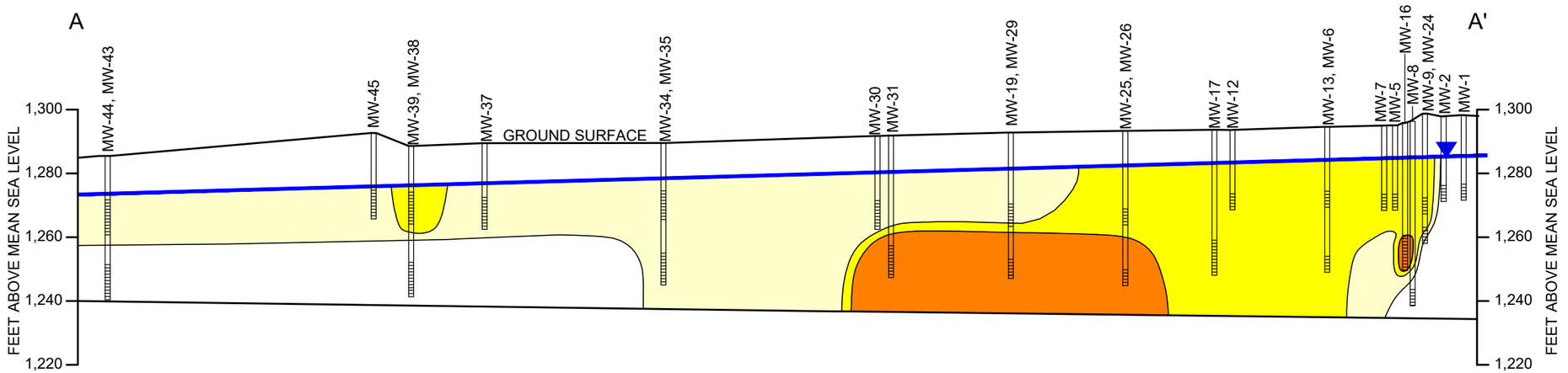
Drawn By: NM Checked By: TM

FIGURE 6

ISOCONCENTRATION CONTOURS AND GROUNDWATER ANALYTICAL RESULTS FOR 1,2-DCP
IN DEEP MONITORING WELLS - SEPTEMBER 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

R:\Projects\301-001\CAD\Figures\2022-09 Quarterly Report\301-001_Figures_3-6.dwg 11/4/2022 3:59 PM (Nick Miller)



CROSS SECTION SEPTEMBER 2022

MW-1
MONITORING WELL
BLANK CASING
WELL SCREENED INTERVAL

LEGEND

ISOCONCENTRATION CONTOUR
POTENTIOMETRIC SURFACE
1,2-DCP = 1,2-DICHLOROPROPANE
µg/l = MICROGRAMS PER LITER

1,2-DCP 0.20 µg/l - 0.99 µg/l
1,2-DCP 1.0 µg/l - 9.9 µg/l
1,2-DCP 10 µg/l - 100 µg/l

40'
0'
0'
240'

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com
Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Baker City
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE 7

CROSS SECTION OF 1,2-DCP
GROUNDWATER PLUME
SEPTEMBER 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

R:\Projects\301-001\CADFigures\2022-09 Quarterly Report\301-001_X-Sec.dwg 2022/10/20 4:29 PM (Nikki Miller)

TABLES

ANNUAL REPORT 2022
Cenex Harvest States Cooperatives Site
300 Division Street East
Quincy, Washington

Farallon PN: 301-001

Table 1
Air Sampling Parameters
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Sample Volume (liters)	Sampling Device	Sample Start Time	Sample End Time	Sample Duration (minutes)	Initial Pressure (inches of mercury)[1]	Final Pressure (inches of mercury)[2]
MSW Wells									
Influent From MSW Wells, Upstream of Air Bleed-In Valve	MSW-121420-P-A	12/14/2020	1	Summa Canister	15:52	15:58	0:06	-28.0	-5.0
	MSW-033121-P-A	3/31/2021	1	Summa Canister	8:48	8:55	0:07	-29.0	-5.0
	MSW-062321-P-A	6/23/2021	1	Summa Canister	12:13	12:19	0:06	-27.0	-5.0
	MSW-102821-P-A	10/28/2021	6	Summa Canister	16:40	17:09	0:29	-26.0	-7.4
	MSW-121421-P-A	12/14/2021	6	Summa Canister	8:34	8:41	0:07	-27.0	-22.0
	MSW-032922-P-A	3/29/2022	6	Summa Canister	8:45	9:33	0:48	-27.0	-6.0
	MSW-111022	11/10/2022	6	Summa Canister	16:18	16:54	0:36	-27.0	-5.0
VEW Wells									
Influent From VEW Wells	VEW-121420-P-A	12/14/2020	1028	Summa Canister	15:56	16:02	0:06	-29.0	-5.0
	VEW-033121-P-A	3/31/2021	1	Summa Canister	8:55	9:01	0:06	-27.0	-5.0
	VEW-062321-P-A	6/23/2021	1	Summa Canister	12:26	12:33	0:07	-29.0	-5.0
	VEW-102821-P-A	10/28/2021	6	Summa Canister	16:38	17:12	0:34	-28.7	-8.4
	VEW-121421-P-A	12/14/2021	6	Summa Canister	9:11	9:23	0:12	-25.5	-20.5
	VEW-032922-P-A	3/29/2022	6	Summa Canister	9:46	11:55	2:09	-28.0	-7.0
	VEW-111022	11/10/2022	6	Summa Canister	16:19	17:02	0:43	-27.2	-5.0

Table 1
Air Sampling Parameters
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Sample Volume (liters)	Sampling Device	Sample Start Time	Sample End Time	Sample Duration (minutes)	Initial Pressure (inches of mercury)[1]	Final Pressure (inches of mercury)[2]
VEW Wells - Individual Piping Runs									
Influent From VEW Wells VEW-1 through VEW-3 (MSW Wells Off)	VEW-1-081721-P-A	8/17/2021	1	Summa Canister	11:36	11:43	0:07	-30.0	-5.0
	VEW-123-102821-P-A	10/28/2021	6	Summa Canister	14:20	15:08	0:48	-27.5	-9.1
	VEW-1-111022	11/10/2022	6	Summa Canister	15:02	15:48	0:46	-24.5	-5.0
Influent From VEW Wells VEW-4 through VEW-6 (MSW Wells Off)	VEW-2-081721-P-A	8/17/2021	1	Summa Canister	11:48	11:54	0:06	-28.5	-5.0
	VEW-456-102821-P-A	10/28/2021	6	Summa Canister	15:50	16:24	0:34	-28.5	-8.1
	VEW-2-111022	11/10/2022	6	Summa Canister	15:03	15:40	0:37	-26.7	-5.0
Influent From VEW Wells VEW-7 through VEW-9 (MSW Wells Off)	VEW-3-081721-P-A	8/17/2021	1	Summa Canister	11:58	12:03	0:05	-25.0	-5.0
	VEW-789-102821-P-A	10/28/2021	6	Summa Canister	15:50	16:24	0:34	-28.6	-9.0
	VEW-3-111022	11/10/2022	6	Summa Canister	15:04	15:37	0:33	-25.0	-5.0

Table 1
Air Sampling Parameters
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Sample Volume (liters)	Sampling Device	Sample Start Time	Sample End Time	Sample Duration (minutes)	Initial Pressure (inches of mercury)[1]	Final Pressure (inches of mercury)[2]
Effluent Monitoring									
Downstream of All Carbon Filters	AAE-121520-P-A	12/15/2020	1	Tedlar Bag	9:50	N/A	N/A	N/A	N/A
	AAE-033121-P-A	3/31/2021	1	Tedlar Bag	9:00	N/A	N/A	N/A	N/A
	AAE-062321-P-A	6/23/2021	1	Tedlar Bag	12:52	N/A	N/A	N/A	N/A
	AAE-102121-P-A	10/28/2021	1	Tedlar Bag	16:52	N/A	N/A	N/A	N/A
	AAE-102121-P-A	3/29/2022	1	Tedlar Bag	8:17	N/A	N/A	N/A	N/A
	Carbon-EFFLUENT-111022	11/10/2022	1	Tedlar Bag	16:20	N/A	N/A	N/A	N/A
Breakthrough Monitoring									
Downstream from First Carbon Filter	ECF1E-121520-P-A	12/15/2020	1	Tedlar Bag	9:45	N/A	N/A	N/A	N/A
	ECF1E-033121-P-A	3/31/2021	1	Tedlar Bag	9:05	N/A	N/A	N/A	N/A
	ECF1E-062321-P-A	6/23/2021	1	Tedlar Bag	12:50	N/A	N/A	N/A	N/A
	ECF1E-102821-P-A	10/28/2021	1	Tedlar Bag	16:50	N/A	N/A	N/A	N/A
	ECF1E-102821-P-A	3/29/2022	1	Tedlar Bag	8:16	N/A	N/A	N/A	N/A

NOTES:

[1]Pressure in Summa canister prior to sample collection.

[2]Final pressure in Summa canister at termination of sample collection.

MSW = microsparge well

N/A = not applicable

VEW = vapor extraction well

Table 2
Summary of Laboratory Analytical Results for IHSs in Effluent Air
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Air Sample Location	Sample Date	Analytical Results (micrograms per liter)[1]						
		Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
Effluent Monitoring: Downstream of All Carbon Filters	6/23/2021	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	10/28/2021	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	12/14/2021	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	3/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Breakthrough Monitoring: Downstream from First Carbon Filter	6/23/2021	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	10/28/2021	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	12/14/2021	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	3/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

NOTES:

< denotes analyte not detected at or exceeding the reporting limit listed.

IHSs = indicator hazardous substances

[1]Analyzed using U.S. Environmental Protection Agency Method 8260D.

Table 3
Summary of Laboratory Analytical Results for IHSs in SVE Influent Air
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter)[1]						
			Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
MSW Wells									
Influent Upstream of Air Bleed-In Valve	MSW-032015-P-A	3/20/2015	<0.47	<0.90	<0.74	**16**	<1.0	<1.4	<5.5
Influent Upstream of Air Bleed-In Valve (MSW Wells Off)	MSW-072215-P-A	7/22/2015	<0.45	<0.85	<0.71	**17**	<0.95	<1.3	<5.3
Influent Upstream of Air Bleed-In Valve	MSW-031416-P-A	3/14/2016	<0.45	<0.85	<0.71	**39**	<0.95	<1.3	**9.0**
Influent Upstream of Air Bleed-In Valve	MSW-060916-P-A	6/9/2016	<0.49	<0.94	<0.78	<0.89	<1.0	<1.5	<5.8
Influent Upstream of Air Bleed-In Valve	MSW-072716-P-A	7/27/2016	<0.47	<0.90	<0.74	**14**	<1.0	<1.4	<5.5
Influent Upstream of Air Bleed-In Valve	MSW-091516-P-A	9/15/2016	<0.46	<0.87	<0.72	**9.6**	<0.98	<1.4	<5.4
Influent Upstream of Air Bleed-In Valve	MSW-120816-P-A	12/8/2016	<0.40	<0.76	<0.63	**5.4**	<0.84	<1.2	<4.7
Influent Upstream of Air Bleed-In Valve	MSW-032317-P-A	3/23/2017	<0.41	<0.78	<0.64	**4.5**	<0.87	<1.2	<4.8
Influent Upstream of Air Bleed-In Valve	MSW-062717-P-A	6/27/2017	<0.45	<0.85	<0.71	<0.81	<0.95	<1.3	<5.3
Influent Upstream of Air Bleed-In Valve	MSW-092017-P-A	9/20/2017	<0.42	<0.80	<0.66	**8.5**	<0.89	<1.3	<4.9
Influent Upstream of Air Bleed-In Valve	MSW-122117-P-A	12/21/2017	<0.40	<0.77	<0.64	**5.2**	<0.86	<1.2	<4.7
Influent Upstream of Air Bleed-In Valve	MSW-040418-P-A	4/4/2018	< 0.44	< 0.83	< 0.69	**17**	< 0.93	< 1.3	< 5.2
Influent Upstream of Air Bleed-In Valve	MSW-062018-P-A	6/20/2018	<0.43	<0.82	<0.68	**9.6**	<0.92	<1.3	<5.1
Influent Upstream of Air Bleed-In Valve	MSW-092018-P-A	9/20/2018	<0.42	<0.80	<0.66	**8.2**	<0.89	<1.3	<4.9
Influent Upstream of Air Bleed-In Valve	MSW-121818-P-A	12/18/2018	<0.47	<0.90	<0.75	**2.2**	<1.0	<1.4	<5.6

Table 3
Summary of Laboratory Analytical Results for IHSs in SVE Influent Air
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter)[1]						
			Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
Influent Upstream of Air Bleed-In Valve	MSW-071819-P-A	7/18/2019	**0.46**	<0.77	<0.64	**22**	<0.86	<1.2	<4.8
Influent Upstream of Air Bleed-In Valve	MSW-091919-P-A	9/19/2019	<0.40	<0.77	<0.64	**12**	<0.86	<1.2	ND[2]
Influent Upstream of Air Bleed-In Valve	MSW-121219-P-A	12/12/2019	<0.79	**0.21**	**0.13**	**4.5**	<0.34	<0.24	<19[2]
Influent Upstream of Air Bleed-In Valve	MSW-092320-P-A	9/23/2020	<0.89	**0.58**	<0.14	**35**	<0.19	<0.27	<21[2]
Influent Upstream of Air Bleed-In Valve	MSW-121420-P-A	12/14/2020	< 0.89	< 0.17	< 0.14	**2.9**	< 0.19	< 0.27	< 21[5]
Influent Upstream of Air Bleed-In Valve	MSW-033121-P-A	3/31/2021	< 0.84	< 0.16	< 0.13	**8.5**	< 0.18	< 0.25	< 20[5]
Influent Upstream of Air Bleed-In Valve	MSW-062321-P-A	6/23/2021	< 1.7	< 0.32	< 0.26	**20**	< 0.35	< 0.50	< 39[5]
Influent Upstream of Air Bleed-In Valve	MSW-102821-P-A	10/28/2021	< 0.42	< 0.80	< 0.67	**39**	< 0.90	< 1.3	< 5.0
Influent Upstream of Air Bleed-In Valve	MSW-121421-P-A	12/14/2021	< 1.2	< 2.3	< 1.9	**7.8**	< 2.6	< 3.6	< 14
Influent Upstream of Air Bleed-In Valve	MSW-032922-P-A	3/29/2022	< 0.39	< 0.75	< 0.62	**7.5**	< 0.83	< 1.2	< 4.6
VEW Wells									
Influent From VEW Wells	VEW-032015-P-A	3/20/2015	<0.46	<0.88	<0.73	**23**	<0.98	<1.4	<5.4
Influent From VEW Wells (MSW Wells Off)	VEW-072215-P-A	7/22/2015	**2.2**	**1.4**	<0.79	**92**	<1.1	<1.5	**6.7**
Influent From VEW Wells	VEW-031416-P-A	3/14/2016	<0.44	<0.85	<0.70	**56**	<0.95	<1.3	<5.2
Influent From VEW Wells	VEW-060916-P-A	6/9/2016	<0.48	<0.91	**1**	<0.86	<1.0	<1.4	<5.6
Influent From VEW Wells	VEW-072716-P-A	7/27/2016	<0.48	<0.93	<0.77	<0.88	<1.0	<1.5	<5.7
Influent From VEW Wells	VEW-091516-P-A	9/15/2016	<0.43	<0.83	<0.69	**34**	<0.93	<1.3	<5.1
Influent From VEW Wells	VEW-120816-P-A	12/8/2016	<0.41	<0.79	<0.66	**13**	<0.88	<1.2	<4.9

Table 3
Summary of Laboratory Analytical Results for IHSs in SVE Influent Air
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter)[1]						
			Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
Influent From VEW Wells	VEW-032317-P-A	3/23/2017	<0.35	<0.66	<0.55	**5.5**	<0.74	<1.0	<4.1
Influent From VEW Wells	VEW-062717-P-A	6/27/2017	<0.43	<0.82	<0.68	<0.78	<0.92	<1.3	<5.1
Influent From VEW Wells	VEW-092017-P-A	9/20/2017	<0.39	<0.75	<0.62	<0.71	<0.83	<1.2	<4.6
Influent From VEW Wells	VEW-122117-P-A	12/21/2017	<0.41	<0.78	<0.65	**6.7**	<0.87	<1.2	<4.8
Influent From VEW Wells	VEW-040418-P-A	4/4/2018	<0.46	<0.87	<0.72	**31**	<0.98	<1.4	<5.4
Influent From VEW Wells	VEW-062018-P-A	6/20/2018	<0.45	<0.86	<0.72	**38**	<0.96	<1.4	<5.3
Influent From VEW Wells	VEW-092018-P-A	9/20/2018	<0.42	<0.80	<0.66	**29**	<0.89	<1.3	<4.9
Influent From VEW Wells	VEW-121818-P-A	12/18/2018	<0.44	<0.85	<0.70	**2.1**	<0.95	<1.3	<5.2
Influent From VEW Wells	VEW-071819-P-A	7/18/2019	**1.2**	<0.74	<0.62	**43**	<0.83	<1.2	<4.6
Influent From VEW Wells	VEW-091919-P-A	9/19/2019	<0.40	<0.76	<0.63	**49**	<0.84	<1.2	**1.1**[2,3,4]
Influent From VEW Wells	VEW-121219-P-A	12/12/2019	<0.79	<0.15	**0.15**	**4.5**	<0.34	<0.24	<19[2]
Influent From VEW Wells	VEW-092320-P-A	9/23/2020	<0.87	**0.90**	<0.14	**63**	**0.19**	<0.26	<20[2]
Influent From VEW Wells	VEW-121420-P-A	12/14/2020	< 0.92	< 0.18	< 0.15	< 0.83	< 0.2	< 0.28	< 21[5]
Influent From VEW Wells	VEW-033121-P-A	3/31/2021	< 0.92	< 0.18	< 0.15	**5.2**	< 0.2	< 0.28	< 22[5]
Influent From VEW Wells	VEW-062321-P-A	6/23/2021	< 1.6	**0.36**	< 0.25	**32**	< 0.33	< 0.47	< 37[5]
Influent From VEW Wells	VEW-102821-P-A	10/28/2021	**1.1**	**1.2**	< 0.61	**100**	**0.99**	< 1.2	**6.9**
Influent From VEW Wells	VEW-121421-P-A	12/14/2021	< 1.2	< 2.2	< 1.8	**16**	< 2.5	< 3.5	< 14
Influent From VEW Wells	VEW-032922-P-A	3/29/2022	< 0.39	< 0.75	< 0.62	**2.3**	< 0.84	< 1.2	< 4.6

Table 3
Summary of Laboratory Analytical Results for IHSs in SVE Influent Air
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Analytical Results (micrograms per cubic meter)[1]						
			Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
VEW Wells – Individual Piping Runs									
Influent From VEW Wells VEW-1 through VEW-3 (MSW Wells Off)	VEW-123-121815-P-A	12/18/2015	**5.2**	**3.8**	<0.74	**250**	<0.99	<1.4	**8.0**
	VEW-1-081721-P-A	8/17/2021	<2.2	<0.42	<0.35	**58**	**0.56**	<0.66	<52[5]
	VEW-123-102821-P-A	10/28/2021	**2.3**	**1.4**	<0.71	**160**	**1.6**	<0.81	<5.3
Influent From VEW Wells VEW-4 through VEW-6 (MSW Wells Off)	VEW-456-121815-P-A	12/18/2015	**6.9**	**5.4**	<0.83	**250**	<1.1	<1.6	**7.2**
	VEW-2-081721-P-A	8/17/2021	<1.6	<0.3	<0.25	**32**	<0.33	<0.47	<36[5]
	VEW-456-102821-P-A	10/28/2021	<0.37	**1.1**	<0.58	**99**	**0.99**	<1.1	**8.5**
Influent From VEW Wells VEW-7 through VEW-9 (MSW Wells Off)	VEW-789-121815-P-A	12/15/2015	**0.88**	**1.2**	<0.74	**100**	<1.0	<1.4	**6.9**
	VEW-3-081721-P-A	8/17/2021	<1.4	<0.27	<0.22	**14**	<0.3	<0.42	<33[5]
	VEW-789-102821-P-A	10/28/2021	<0.39	**0.82**	<0.62	**72**	<0.83	<1.2	<4.6

NOTES:
Results in **bold** denote concentrations detected exceeding the laboratory reporting limit.
< denotes analyte not detected at or exceeding the laboratory reporting limit listed.
[1]Analyzed by U.S. Environmental Protection Agency Method TO-15 GC/MS.
[2]Tentatively identified compound.
[3]The identification is based on presumption.
[4]Estimated.
[5]The reported concentration was generated from a library search.

IHSs = indicator hazardous substances
MS/SVE = microsparge/soil vapor extraction
MSW = microsparge well
ND = not detected
SVE = soil vapor extraction
VEW = vapor extraction well

Table 4
Summary of MS/SVE System 1,2-DCP Recovered February 2016 to June 2022
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Airflow Rate (scfm)	1,2-Dichloropropane Analytical Results (micrograms per cubic meter)[1]	Recovery Rate (milligrams per minute)[2]	Amount Recovered Between Events (pounds)	Cumulative Amount Recovered (pounds)
MSW Wells							
Influent Upstream of Air Bleed-In Valve	—[3]	2/10/2016	81.47	—[3]	0.090	—[3]	—[3]
	MSW-031416-P-A	3/14/2016	70.55	**39**	0.078	0.0088	0.0088
	MSW-060916-P-A	6/9/2016	119.92	<0.89	0.0015	0.0110	0.0198
	MSW-072716-P-A	7/27/2016	106.75	**14**	0.042	0.0033	0.0231
	MSW-091516-P-A	9/15/2016	129.28	**9.6**	0.035	0.0061	0.029
	MSW-120816-P-A	12/8/2016	109.51	**5.4**	0.017	0.0069	0.036
	MSW-032317-P-A	3/23/2017	128.81	**4.5**	0.016	0.0055	0.042
	MSW-062717-P-A	6/27/2017	128.81	<0.81	0.0015	0.0027	0.044
	MSW-092017-P-A	9/20/2017	128.81	**8.5**	0.031	0.0044	0.049
	MSW-122117-P-A	12/21/2017	112.79	**5.2**	0.017	0.0069	0.056
	—[4]	2/1/2018	112.79	—[4]	0.017	0.0022	0.058
	—[5]	4/2/2018	—[5]	—[5]	—[5]	—[5]	0.058
	MSW-040418-P-A	4/4/2018	101.43	**17**	0.049	0.0002	0.058
	MSW-062018-P-A	6/20/2018	84.79	**9.6**	0.023	0.0088	0.067
	MSW-092018-P-A	9/20/2018	94.07	**8.2**	0.022	0.0065	0.074
	MSW-121818-P-A	12/18/2018	90.47	**2.2**	0.006	0.0039	0.077
	—[6]	1/31/2019	90.47	—[6]	0.006	0.0008	0.078
	MSW-071819-P-A	7/18/2019	91.08	**22**	0.057	—[7]	0.078
	MSW-091919-P-A	9/19/2019	119.92	**12**	0.041	0.0097	0.088
	MSW-121219-P-A	12/12/2019	119.92	**4.5**	0.015	0.0075	0.095
	—[8]	5/19/2020	—[8]	—[8]	0.015	0.0077	0.103
	MSW-092320-P-A	9/23/2020	138.36	**35**	0.137	—[9]	0.103
	MSW-121420-P-A	12/14/2020	166.3	**2.9**	0.014	0.0196	0.123
	MSW-033121-P-A	3/31/2021	96.97	**8.5**	0.023	0.0062	0.129
	MSW-062321-P-A[10]	6/23/2021	141.11	**20**	—[10]	—[10]	0.129
	—[11]	8/17/2021	141.11	—[11]	0.080	0.0090	0.138
	MSW-121421-P-A	12/14/2021	132.53	**7.8**	0.029	0.0207	0.159
	MSW-032922-P-A	3/29/2022	132.53	**7.5**	0.028	0.0095	0.168
	—[12]	6/13/2022	132.53	—[12]	0.028	0.0068	0.175

Table 4
Summary of MS/SVE System 1,2-DCP Recovered February 2016 to June 2022
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Location	Sample Identification	Sample Date	Airflow Rate (scfm)	1,2-Dichloropropane Analytical Results (micrograms per cubic meter)[1]	Recovery Rate (milligrams per minute)[2]	Amount Recovered Between Events (pounds)	Cumulative Amount Recovered (pounds)
VEW Wells							
Influent From VEW Wells	—[3]	2/10/2016	32.43	—[3]	0.051	—[3]	—[3]
	VEW-031416-P-A	3/14/2016	21.40	**56**	0.0339	0.0045	0.0045
	VEW-060916-P-A	6/9/2016	25.70	<0.86	0.00031	0.0047	0.0092
	VEW-072716-P-A	7/27/2016	19.45	<0.88	0.00024	0.000042	0.0092
	VEW-091516-P-A	9/15/2016	36.35	**34**	0.035	0.0028	0.0120
	VEW-120816-P-A	12/8/2016	38.46	**13**	0.014	0.0066	0.019
	VEW-032317-P-A	3/23/2017	26.80	**5.5**	0.0042	0.0031	0.022
	VEW-062717-P-A	6/27/2017	25.10	<0.78	0.00028	0.0007	0.022
	VEW-092017-P-A	9/20/2017	25.10	<0.71	0.00025	0.0001	0.022
	VEW-122117-P-A	12/21/2017	43.19	**6.7**	0.00819	0.0012	0.024
	—[4]	2/1/2018	43.19	—[4]	0.00819	0.0011	0.025
	—[5]	4/2/2018	—[5]	—[5]	—[5]	—[5]	0.025
	VEW-040418-P-A	4/4/2018	34.58	**31**	0.03036	0.0001	0.025
	VEW-062018-P-A	6/20/2018	31.17	**38**	0.03354	0.0077	0.033
	VEW-092018-P-A	9/20/2018	45.10	**29**	0.03704	0.0104	0.043
	VEW-121818-P-A	12/18/2018	45.17	**2.1**	0.00269	0.0056	0.049
	—[6]	1/31/2019	45.17	—[6]	0.00269	0.0004	0.049
	VEW-071819-P-A	7/18/2019	35.78	**43**	0.04357	—[7]	0.049
	VEW-091919-P-A	9/19/2019	36.98	**49**	0.05131	0.0095	0.058
	VEW-121219-P-A	12/12/2019	36.98	**4.5**	0.00471	0.0075	0.066
	—[8]	5/19/2020	—[8]	—[8]	0.00471	0.0024	0.068
	VEW-092320-P-A	9/23/2020	41.92	**63**	0.07478	—[9]	0.068
	VEW-121420-P-A	12/14/2020	53.60	<0.83	0.00063	0.0098	0.078
	VEW-033121-P-A	3/31/2021	37.92	**5.2**	0.00558	0.0010	0.079
	VEW-062321-P-A[10]	6/23/2021	39.28	**32**	—[10]	—[10]	0.079
	—[11]	8/17/2021	39.28	—[11]	0.03559	0.0062	0.085
	VEW-121421-P-A	12/14/2021	41.94	**16**	0.01900	0.0103	0.096
	VEW-032922-P-A	3/29/2022	41.94	**2.3**	0.00273	0.0036	0.099
	—[12]	6/13/2022	41.94	—[12]	0.00273	0.0007	0.100
						TOTAL	**0.275**

NOTES:

Results in **bold** denote concentrations exceeding laboratory reporting limit.

— denotes not applicable.

< denotes analyte not detected at or exceeding the reporting limit listed.

1,2-DCP = 1,2-dichloropropane

MS/SVE = microsparge/soil vapor extraction

scfm = standard cubic feet per minute

VEW = vapor extraction well

[1]Analyzed by U.S. Environmental Protection Agency Method TO-15 GC/MS.

[2]Where analyte was not detected, half the detection limit was used for calculation.

[3]Analytical results from the March 14, 2016 sampling event were used for calculation.

[4]Analytical results from the December 21, 2017 sampling event were used for calculation; the MS/SVE system was shut down on February 1, 2018.

[5]MS/SVE system was restarted on April 2, 2018.

[6]Analytical results from the December 18, 2018 sampling event were used for calculation; the MS/SVE system was shut down on January 31, 2019.

[7]MS/SVE system was restarted on July 18, 2019.

[8]Analytical results from the December 12, 2019 sampling event were used for calculation; the MS/SVE system was shut down on May 19, 2020.

[9]MS/SVE system was restarted on September 21, 2020.

[10]MS/SVE system not operating upon arrival for sampling event on June 21, 2021, recovery rate and amount of 1,2-DCP recovered not calculated.

[11]Analytical results from the June 23, 2021 sampling event were used for calculation; the MS/SVE system operated from June 23 to August 17, 2021.

[12]Analytical results and airflow rate from the March 29, 2022 sampling event were used for calculation; the MS/SVE system operated from March 29 to June 13, 2022.

Table 5
Groundwater and Surface Water Elevation Data
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well or Measuring Point Identification (total depth in feet)[1]	Screened Interval (feet)[2]	Sample Date	Elevation Top of Well Casing or Measuring Point (feet)[3]	Depth to Water (feet)[1]	Groundwater or Surface Water Elevation (feet)[3]
MW-1 (26.31)	20-25	12/13/2021	1,303.29	21.03	1,282.26
		3/28/2022		22.27	1,281.02
		6/20/2022		22.14	1,281.15
		9/13/2022		20.96	1,282.33
MW-2 (26.00)	20-25	12/13/2021	1,303.46	21.40	1,282.06
		3/28/2022		22.59	1,280.87
		6/20/2022		22.45	1,281.01
		9/13/2022		21.22	1,282.24
MW-3 (27.14)	20-25	12/13/2021	1,302.76	20.79	1,281.97
		3/28/2022		21.98	1,280.78
		6/20/2022		21.78	1,280.98
		9/13/2022		20.57	1,282.19
MW-5 (24.38)	20-25	12/13/2021	1,299.53	17.54	1,281.99
		3/28/2022		18.75	1,280.78
		6/20/2022		18.53	1,281.00
		9/13/2022		17.31	1,282.22
MW-6 (24.36)	20-25	12/13/2021	1,299.75	18.18	1,281.57
		3/28/2022		19.48	1,280.27
		6/20/2022		19.03	1,280.72
		9/13/2022		17.77	1,281.98
MW-7 (23.92)	20-25	12/13/2021	1,299.76	17.85	1,281.91
		3/28/2022		19.12	1,280.64
		6/20/2022		18.91	1,280.85
		9/13/2022		17.57	1,282.19
MW-8 (60.31)	55-60	12/13/2021	1,303.82	21.86	1,281.96
		3/28/2022		23.17	1,280.65
		6/20/2022		22.85	1,280.97
		9/13/2022		21.62	1,282.20
MW-9 (42.70)	35-40	12/13/2021	1,302.83	20.73	1,282.10
		3/28/2022		21.93	1,280.90
		6/20/2022		21.76	1,281.07
		9/13/2022		20.55	1,282.28
MW-11 (25.29)	20-25	12/13/2021	1,300.97	19.59	1,281.38
		3/28/2022		20.91	1,280.06
		6/20/2022		20.28	1,280.69
		9/13/2022		19.09	1,281.88
MW-12 (24.71)	20-25	12/13/2021	1,297.41	16.50	1,280.91
		3/28/2022		17.82	1,279.59
		6/20/2022		17.16	1,280.25
		9/13/2022		15.82	1,281.59
MW-13 (44.85)	40-45	12/13/2021	1,299.34	17.78	1,281.56
		3/28/2022		19.10	1,280.24
		6/20/2022		18.62	1,280.72
		9/13/2022		17.39	1,281.95

Table 5
Groundwater and Surface Water Elevation Data
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well or Measuring Point Identification (total depth in feet)[1]	Screened Interval (feet)[2]	Sample Date	Elevation Top of Well Casing or Measuring Point (feet)[3]	Depth to Water (feet)[1]	Groundwater or Surface Water Elevation (feet)[3]
MW-15 (43.20)	35-45	12/13/2021	1,300.71	19.51	1,281.20
		3/28/2022		20.83	1,279.88
		6/20/2022		20.22	1,280.49
		9/13/2022		18.99	1,281.72
MW-16 (45.20)	35-45	12/13/2021	1,300.08	18.07	1,282.01
		3/28/2022		19.31	1,280.77
		6/20/2022		19.07	1,281.01
		9/13/2022		17.85	1,282.23
MW-17 (45.18)	35-45	12/13/2021	1,297.55	16.58	1,280.97
		3/28/2022		17.92	1,279.63
		6/20/2022		17.19	1,280.36
		9/13/2022		15.93	1,281.62
MW-20 (26.80)	17-27	12/13/2021	1,296.97	16.59	1,280.38
		3/28/2022		17.87	1,279.10
		6/20/2022		16.92	1,280.05
		9/14/2022		15.58	1,281.39
MW-21 (25.15)	22-27	12/13/2021	1,296.28	15.82	1,280.46
		3/28/2022		17.10	1,279.18
		6/20/2022		16.23	1,280.05
		9/13/2022		14.95	1,281.33
MW-24 (23.84)	19-24[4]	12/13/2021	1,300.59	18.50	1,282.09
		3/28/2022		19.61	1,280.98
		6/20/2022		19.52	1,281.07
		9/13/2022		18.33	1,282.26
MW-25 (47.40)	43-48	12/13/2021	1,297.31	16.98	1,280.33
		3/28/2022		18.29	1,279.02
		6/20/2022		17.31	1,280.00
		9/13/2022		16.09	1,281.22
MW-26 (26.75)	23-28	12/13/2021	1,297.19	16.80	1,280.39
		3/28/2022		18.10	1,279.09
		6/20/2022		17.13	1,280.06
		9/13/2022		15.89	1,281.30
MW-28 (27.17)	18-28	12/13/2021	1,296.32	15.45	1,280.87
		3/28/2022		16.76	1,279.56
		6/20/2022		16.02	1,280.30
		9/13/2022		14.74	1,281.58
MW-29 (26.87)	23-28	12/13/2021	1,295.98	15.91	1,280.07
		3/28/2022		17.15	1,278.83
		6/20/2022		16.05	1,279.93
		9/13/2022		14.80	1,281.18
MW-30 (27.66)	18-28	12/13/2021	1,293.71	14.23	1,279.48
		3/28/2022		15.40	1,278.31
		6/20/2022		14.19	1,279.52
		9/13/2022		12.95	1,280.76

Table 5
Groundwater and Surface Water Elevation Data
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well or Measuring Point Identification (total depth in feet)[1]	Screened Interval (feet)[2]	Sample Date	Elevation Top of Well Casing or Measuring Point (feet)[3]	Depth to Water (feet)[1]	Groundwater or Surface Water Elevation (feet)[3]
MW-31 (43.26)	33-43	12/13/2021	1,293.72	14.27	1,279.45
		3/28/2022		15.39	1,278.33
		6/20/2022		14.17	1,279.55
		9/13/2022		12.93	1,280.79
MW-32 (26.28)	17-27	12/13/2021	1,296.46	16.61	1,279.85
		3/28/2022		17.88	1,278.58
		6/20/2022		16.69	1,279.77
		9/13/2022		15.48	1,280.98
MW-33 (41.80)	32.5-42.5	12/13/2021	1,296.50	16.59	1,279.91
		3/28/2022		17.87	1,278.63
		6/20/2022		16.68	1,279.82
		9/13/2022		15.46	1,281.04
MW-34 (43.20)	34-44	12/13/2021	1,292.18	13.75	1,278.43
		3/28/2022		14.68	1,277.50
		6/20/2022		13.25	1,278.93
		9/13/2022		12.11	1,280.07
MW-35 (24.72)	15-25	12/13/2021	1,292.33	13.98	1,278.35
		3/28/2022		14.88	1,277.45
		6/20/2022		13.43	1,278.90
		9/13/2022		12.27	1,280.06
MW-36 (24.67)	15-25	12/13/2021	1,291.31	13.95	1,277.36
		3/28/2022		14.74	1,276.57
		6/20/2022		12.92	1,278.39
		9/13/2022		11.91	1,279.40
MW-37 (24.54)	15-25	12/13/2021	1,290.70	13.71	1,276.99
		3/28/2022		14.40	1,276.30
		6/20/2022		12.42	1,278.28
		9/13/2022		11.45	1,279.25
MW-38 (24.51)	15-25	12/13/2021	1,290.30	14.18	1,276.12
		3/28/2022		14.62	1,275.68
		6/20/2022		12.39	1,277.91
		9/13/2022		11.53	1,278.77
MW-39 (47.42)	37-47	12/13/2021	1,290.34	13.96	1,276.38
		3/28/2022		14.37	1,275.97
		6/20/2022		12.13	1,278.21
		9/13/2022		11.32	1,279.02
MW-40 (25.18)	15-25	12/13/2021	1,289.95	13.83	1,276.12
		3/28/2022		14.14	1,275.81
		6/20/2022		11.77	1,278.18
		9/13/2022		10.96	1,278.99
MW-41 (25.27)	15-25	12/13/2021	1,286.25	12.38	1,273.87
		3/28/2022		11.33	1,274.92
		6/20/2022		8.02	1,278.23
		9/13/2022		7.50	1,278.75

Table 5
Groundwater and Surface Water Elevation Data
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well or Measuring Point Identification (total depth in feet)[1]	Screened Interval (feet)[2]	Sample Date	Elevation Top of Well Casing or Measuring Point (feet)[3]	Depth to Water (feet)[1]	Groundwater or Surface Water Elevation (feet)[3]
MW-42 (25.17)	15-25	12/13/2021	1,285.38	11.85	1,273.53
		3/28/2022		10.96	1,274.42
		6/20/2022		7.70	1,277.68
		9/13/2022		7.66	1,277.72
MW-43 (24.99)	15-25	12/13/2021	1,286.11	12.75	1,273.36
		3/28/2022		12.25	1,273.86
		6/20/2022		9.05	1,277.06
		9/13/2022		8.87	1,277.24
MW-44 (44.93)	35-45	12/13/2021	1,285.39	12.35	1,273.04
		3/28/2022		11.75	1,273.64
		6/20/2022		8.53	1,276.86
		9/13/2022		8.38	1,277.01
MW-45 (24.94)	35-45	12/13/2021	1,293.21	17.53	1,275.68
		3/28/2022		17.91	1,275.30
		6/20/2022		15.48	1,277.73
		9/13/2022		14.70	1,278.51
MW-46 (25.09)	35-45	12/13/2021	1,285.99	13.59	1,272.40
		3/28/2022		13.23	1,272.76
		6/20/2022		9.87	1,276.12
		9/13/2022		9.70	1,276.29
West Canal	NA	12/13/2021	1,295.86	21.25	1,274.61
		3/28/2022		9.75	1,286.11
		6/20/2022		9.31	1,286.55
		9/14/2022		9.24	1,286.62
West Canal Drainage Ditch	NA	12/13/2021	1,277.80	0.00	1,277.80
		3/28/2022		0.38	1,277.42
		6/20/2022		0.00	1,277.80
		9/13/2022		NM	NM

NOTES:

[1]In feet below top of well casing.

[2]In feet below ground surface according to boring logs for each monitoring well.

[3]Elevation in feet above mean sea level, adjusted to common datum.

[4]Screened interval estimated based on total depth of well. Farallon has not located a well installation log for monitoring well MW-24. The water well report filed with the Washington State Department of Ecology by the driller in 1998 listed a screened interval of 23 to 28 feet below ground surface, which appears to be an error, based on the measured total depth.

NA = not applicable
NM = not measured

Table 6
Summary of Laboratory Analytical Results for IHSs in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Analytical Results (micrograms per liter)[1]						
		Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
MW-1	12/15/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/22/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/15/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-2	12/15/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/22/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/15/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-3	12/15/2021	< 0.20	< 0.20	< 0.20	0.26	< 0.20	< 0.20	0.42
	3/30/2022	< 0.20	< 0.20	< 0.20	0.89	< 0.20	< 0.20	0.43
	6/22/2022	< 0.20	< 0.20	< 0.20	0.93	< 0.20	< 0.20	0.84
	9/15/2022	< 0.20	< 0.20	< 0.20	**1.3**	< 0.20	< 0.20	0.77
MW-5	12/15/2021	< 0.20	< 0.20	< 0.20	0.53	< 0.20	< 0.20	0.60
	3/30/2022	< 0.20	< 0.20	< 0.20	0.60	< 0.20	< 0.20	0.60
	6/22/2022	< 0.20	< 0.20	< 0.20	0.25	< 0.20	< 0.20	0.42
	9/15/2022	< 0.20	< 0.20	< 0.20	0.55	< 0.20	< 0.20	0.71
MW-6	12/15/2021	< 0.20	< 0.20	< 0.20	**1.3**	< 0.20	< 0.20	0.55
	3/30/2022	< 0.20	< 0.20	< 0.20	**1.6**	< 0.20	< 0.20	0.88
	6/22/2022	< 0.20	< 0.20	< 0.20	**1.3**	< 0.20	< 0.20	**1.1**
	9/14/2022	< 0.20	< 0.20	< 0.20	**1.5**	< 0.20	< 0.20	**1.0**
MW-7	12/15/2021	< 0.20	< 0.20	< 0.20	**1.9**	< 0.20	< 0.20	0.41
	3/30/2022	< 0.20	< 0.20	< 0.20	**2.0**	< 0.20	< 0.20	0.53
	6/22/2022	< 0.20	< 0.20	< 0.20	**1.5**	< 0.20	< 0.20	0.56
	9/15/2022	< 0.20	< 0.20	< 0.20	**2.0**	< 0.20	< 0.20	0.61
MW-8	12/15/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/22/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.32
	9/15/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-9	12/15/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/22/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/15/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-11	12/15/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/22/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Groundwater Cleanup Levels for the Cenex/Quincy Site[2]		**1**[3]	**7.2**[4]	**1**[3]	**1**[3]	**1**[3]	**1**[3]	**1**[3]

Table 6
Summary of Laboratory Analytical Results for IHSs in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Analytical Results (micrograms per liter)[1]						
		Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
MW-12	12/15/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/22/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	0.21	< 0.20	< 0.20	< 0.20
MW-13	12/15/2021	< 0.20	< 0.20	< 0.20	0.64	< 0.20	< 0.20	0.41
	3/30/2022	< 0.20	< 0.20	< 0.20	0.42	< 0.20	< 0.20	0.25
	6/22/2022	< 0.20	< 0.20	< 0.20	0.85	< 0.20	< 0.20	0.92
	9/14/2022	< 0.20	< 0.20	< 0.20	**1.3**	< 0.20	< 0.20	**1.3**
MW-15	12/15/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/22/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-16	12/15/2021	< 0.20	< 0.20	< 0.20	**2.9**	< 0.20	< 0.20	**1.3**
	3/30/2022	< 0.20	< 0.20	< 0.20	**10**	< 0.20	< 0.20	**6.5**
	6/22/2022	< 0.20	< 0.20	< 0.20	**3.9**	< 0.20	< 0.20	**5.3**
	9/15/2022	< 0.20	< 0.20	< 0.20	**21**	< 0.20	< 0.20	**19**
	9/15/2022[5]	< 0.20	< 0.20	< 0.20	**18**	< 0.20	< 0.20	**16**
MW-17	12/15/2021	< 0.20	< 0.20	< 0.20	**2.5**	< 0.20	< 0.20	**1.4**
	3/30/2022	< 0.20	< 0.20	< 0.20	**1.1**	< 0.20	< 0.20	0.59
	6/22/2022	< 0.20	< 0.20	< 0.20	**1.1**	< 0.20	< 0.20	0.93
	9/14/2022	< 0.20	< 0.20	< 0.20	**2.1**	< 0.20	< 0.20	**1.6**
MW-20	12/15/2021	< 0.20	< 0.20	< 0.20	**3.8**	< 0.20	0.38	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	0.98	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	**1.7**	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-24	12/15/2021	< 0.20	< 0.20	< 0.20	**40**	< 0.20	< 0.20	**66**
	3/30/2022	< 0.20	< 0.20	< 0.20	**8.0**	< 0.20	< 0.20	**20**
	6/22/2022	< 0.20	< 0.20	< 0.20	**5.1**	< 0.20	< 0.20	**19**
	9/15/2022	< 0.20	< 0.20	< 0.20	**5.5**	< 0.20	< 0.20	**13**
MW-25	12/15/2021	< 0.20	< 0.20	< 0.20	**17**	< 0.20	< 0.20	**2.0**
	3/29/2022	< 0.20	< 0.20	< 0.20	**13**	< 0.20	< 0.20	**2.0**
	3/29/2022[5]	< 0.20	< 0.20	< 0.20	**11**	< 0.20	< 0.20	**1.5**
	6/21/2022	< 0.20	< 0.20	< 0.20	**15**	< 0.20	< 0.20	**2.7**
	6/21/2022[5]	< 0.20	< 0.20	< 0.20	**18**	< 0.20	< 0.20	**2.4**
	9/14/2022	< 0.20	< 0.20	< 0.20	**14**	< 0.20	< 0.20	**2.2**
	9/14/2022[5]	< 0.20	< 0.20	< 0.20	**12**	< 0.20	< 0.20	**1.9**
MW-26	12/15/2021	< 0.20	< 0.20	< 0.20	**3.8**	< 0.20	< 0.20	0.76
	3/30/2022	< 0.20	< 0.20	< 0.20	**3.9**	< 0.20	< 0.20	0.65
	6/21/2022	< 0.20	< 0.20	< 0.20	**2.1**	< 0.20	< 0.20	0.87
	9/14/2022	< 0.20	< 0.20	< 0.20	**1.1**	< 0.20	< 0.20	0.57
Groundwater Cleanup Levels for the Cenex/Quincy Site[2]		**1[3]**	**7.2[4]**	**1[3]**	**1[3]**	**1[3]**	**1[3]**	**1[3]**

Table 6
Summary of Laboratory Analytical Results for IHSs in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Analytical Results (micrograms per liter)[1]						
		Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
MW-28	12/15/2021	< 0.20	< 0.20	< 0.20	**1.5**	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	**1.7**	< 0.20	< 0.20	< 0.20
	6/22/2022	< 0.20	< 0.20	< 0.20	0.36	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	**1.9**	< 0.20	< 0.20	< 0.20
MW-29	12/15/2021	< 0.20	< 0.20	< 0.20	**1.1**	< 0.20	< 0.20	< 0.20
	3/30/2022	< 0.20	< 0.20	< 0.20	**1.1**	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	**1.2**	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	0.91	< 0.20	< 0.20	< 0.20
MW-30	12/14/2021	< 0.20	< 0.20	< 0.20	0.53	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	**1.2**	< 0.20	< 0.20	0.54
	6/21/2022	< 0.20	< 0.20	< 0.20	0.37	< 0.20	< 0.20	0.28
	9/14/2022	< 0.20	< 0.20	< 0.20	0.85	< 0.20	< 0.20	0.41
MW-31	12/14/2021	< 0.20	< 0.20	< 0.20	**13**	< 0.20	< 0.20	**1.1**
	3/29/2022	< 0.20	< 0.20	< 0.20	**13**	< 0.20	< 0.20	**1.2**
	3/29/2022[5]	< 0.20	< 0.20	< 0.20	**11**	< 0.20	< 0.20	0.91
	6/21/2022	< 0.20	< 0.20	< 0.20	**10**	< 0.20	< 0.20	**1.7**
	6/21/2022[5]	< 0.20	< 0.20	< 0.20	**11**	< 0.20	< 0.20	**1.2**
	9/14/2022	< 0.20	< 0.20	< 0.20	**11**	< 0.20	< 0.20	**1.2**
	9/14/2022[5]	< 0.20	< 0.20	< 0.20	**11**	< 0.20	< 0.20	**1.4**
MW-32	12/14/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	0.30	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-33	12/14/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-34	12/14/2021	< 0.20	< 0.20	< 0.20	0.41	< 0.20	< 0.20	0.37
	3/29/2022	< 0.20	< 0.20	< 0.20	0.46	< 0.20	< 0.20	0.40
	6/21/2022	< 0.20	< 0.20	< 0.20	0.32	< 0.20	< 0.20	0.61
	9/14/2022	< 0.20	< 0.20	< 0.20	0.49	< 0.20	< 0.20	0.39
MW-35	12/14/2021	< 0.20	< 0.20	< 0.20	0.58	< 0.20	< 0.20	0.33
	3/29/2022	< 0.20	< 0.20	< 0.20	0.69	< 0.20	< 0.20	0.29
	6/21/2022	< 0.20	< 0.20	< 0.20	0.62	< 0.20	< 0.20	0.61
	9/14/2022	< 0.20	< 0.20	< 0.20	0.59	< 0.20	< 0.20	0.38
MW-36	12/14/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.22
	9/14/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Groundwater Cleanup Levels for the Cenex/Quincy Site[2]		**1[3]**	**7.2[4]**	**1[3]**	**1[3]**	**1[3]**	**1[3]**	**1[3]**

Table 6
Summary of Laboratory Analytical Results for IHSs in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Analytical Results (micrograms per liter)[1]						
		Vinyl Chloride	Chloroform	1,2-Dichloroethane	1,2-Dichloropropane	1,1,2-Trichloroethane	1,2-Dibromoethane	1,2,3-Trichloropropane
MW-37	12/14/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/13/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-38	12/14/2021	< 0.20	< 0.20	< 0.20	**6.4**	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	**6.9**	< 0.20	< 0.20	< 0.20
	3/29/2022[5]	< 0.20	< 0.20	< 0.20	**5.8**	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	**4.5**	< 0.20	< 0.20	< 0.20
	6/21/2022[5]	< 0.20	< 0.20	< 0.20	**4.9**	< 0.20	< 0.20	< 0.20
	9/13/2022	< 0.20	< 0.20	< 0.20	**6.2**	< 0.20	< 0.20	< 0.20
MW-39	12/14/2021	< 0.20	< 0.20	< 0.20	**1.4**	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	0.30	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/13/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-40	12/14/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	0.25	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/13/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-41	12/14/2021	< 0.20	< 0.20	< 0.20	0.91	< 0.20	< 0.20	0.75
	3/29/2022	< 0.20	< 0.20	0.32	**7.0**	< 0.20	< 0.20	**5.2**
	6/21/2022	< 0.20	< 0.20	< 0.20	**3.2**	< 0.20	< 0.20	**1.1**
	9/14/2022	< 0.20	< 0.20	< 0.20	0.95	< 0.20	< 0.20	0.38
MW-42	12/14/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	0.42	< 0.20	< 0.20	**1.8**
	9/14/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.65
MW-43	12/14/2021	< 0.20	< 0.20	< 0.20	**3.1**	< 0.20	< 0.20	< 0.20
	12/14/2021[5]	< 0.20	< 0.20	< 0.20	**3.2**	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	0.93	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
MW-44	12/14/2021	< 0.20	< 0.20	< 0.20	0.22	< 0.20	< 0.20	< 0.20
	12/14/2021[5]	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	0.20	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Groundwater Cleanup Levels for the Cenex/Quincy Site[2]		**1**[3]	**7.2**[4]	**1**[3]	**1**[3]	**1**[3]	**1**[3]	**1**[3]

Table 6
Summary of Laboratory Analytical Results for IHSs in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Analytical Results (micrograms per liter)[1]						
		Vinyl Chloride	**Chloroform**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**1,1,2-Trichloroethane**	**1,2-Dibromoethane**	**1,2,3-Trichloropropane**
MW-45	12/14/2021	< 0.20	< 0.20	< 0.20	0.29	< 0.20	< 0.20	0.31
	3/29/2022	< 0.20	< 0.20	< 0.20	0.31	< 0.20	< 0.20	0.29
	6/21/2022	< 0.20	< 0.20	< 0.20	0.37	< 0.20	< 0.20	0.32
	9/13/2022	< 0.20	< 0.20	< 0.20	0.60	< 0.20	< 0.20	0.21
MW-46	12/14/2021	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	12/14/2021[5]	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3/29/2022	< 0.20	< 0.20	< 0.20	0.22	< 0.20	< 0.20	< 0.20
	6/21/2022	< 0.20	< 0.20	< 0.20	0.59	< 0.20	< 0.20	< 0.20
	9/14/2022	< 0.20	< 0.20	< 0.20	0.33	< 0.20	< 0.20	< 0.20
Groundwater Cleanup Levels for the Cenex/Quincy Site[2]		**1**[3]	**7.2**[4]	**1**[3]	**1**[3]	**1**[3]	**1**[3]	**1**[3]

NOTES:

Results in **bold** denote concentrations at or exceeding applicable cleanup levels.

< denotes analyte not detected at or exceeding the reporting limit listed.

[1]Analyzed by U.S. Environmental Protection Agency Method 8260D.

[2]Groundwater cleanup levels established in the *Final Consent Decree and Cleanup Action Plan, Cenex Quincy Site, Quincy, WA* dated February 22, 2001 prepared by the Washington State Department of Ecology.

[3]Cleanup level based on analytical method practical quantitation limit.

[4]Washington State Model Toxics Control Act Cleanup Regulation Cleanup Levels and Risk Calculations, Standard Method B Values for Groundwater, https://fortress.wa.gov/ecy/clarc/

[5]QA/QC duplicate sample.

IHSs = indicator hazardous substances

QA/QC = quality assurance/quality control

Table 7
Summary of pH, Temperature, Specific Conductivity, DO, and ORP in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Field Measurements[1]				
		pH	Temperature (^{o}C)	Specific Conductivity (µS/cm)	DO (mg/l)	ORP (mV)
MW-1	12/15/2021	7.60	13.8	2,209	5.22	189.7
	3/30/2022	7.57	15.4	1,818	4.61	160.7
	6/22/2022	7.15	17.0	2,282	5.54	—[2]
	9/15/2022	7.83	16.3	1,576	5.37	197.0
MW-2	12/15/2021	7.71	13.7	2,116	7.21	188.7
	3/30/2022	7.95	15.7	1,691	7.61	177.7
	6/22/2022	7.30	17.2	2,210	6.43	—[2]
	9/15/2022	7.98	16.2	1,742	5.44	188.5
MW-3	12/15/2021	7.48	15.0	3,757	8.53	215.4
	3/30/2022	7.29	16.0	3,030	6.11	171.3
	6/22/2022	6.90	17.7	4,374	5.00	—[2]
	9/15/2022	7.17	16.8	4,310	1.57	—[2]
MW-5	12/15/2021	6.96	14.4	3,828	0.63	174.8
	3/30/2022	6.93	15.5	3,016	0.82	161.8
	6/22/2022	6.64	19.2	3,160	2.09	—[2]
	9/15/2022	7.04	16.4	3,651	0.31	—[2]
MW-6	12/15/2021	7.42	14.6	3,017	2.97	109.1
	3/30/2022	7.41	15.6	3,107	1.52	170.5
	6/22/2022	7.37	17.2	3,269	1.75	128.0
	9/14/2022	7.39	17.4	4,056	1.84	—[2]
MW-7	12/15/2021	7.21	14.0	4,151	0.64	163.9
	3/30/2022	7.16	15.8	3,415	0.91	162.3
	6/22/2022	6.75	21.2	4,461	1.82	—[2]
	9/15/2022	7.22	16.3	4,253	0.37	—[2]
MW-8	12/15/2021	7.48	13.5	1,752	0.81	161.8
	3/30/2022	7.66	15.8	1,380	5.33	154.8
	6/22/2022	7.21	18.4	1,851	5.31	—[2]
	9/15/2022	7.59	18.9	1,468	0.61	144.7
MW-9	12/15/2021	8.11	14.2	2,543	0.56	133.9
	3/30/2022	8.13	15.5	2,113	0.78	120.1
	6/22/2022	7.48	17.7	2,364	2.89	—[2]
	9/15/2022	8.14	17.2	2,000	0.48	192.1
MW-11	12/15/2021	7.59	13.6	1,610	1.59	12.7
	3/30/2022	7.45	14.6	1,800	1.31	148.5
	6/22/2022	7.54	16.3	1,785	0.99	127.7
	9/14/2022	7.84	15.5	1,731	0.49	185.0
MW-12	12/15/2021	7.56	13.5	2,031	5.76	176.3
	3/30/2022	7.47	14.4	2,326	4.26	253.2
	6/22/2022	7.48	15.9	2,544	4.74	162.5
	9/14/2022	7.67	16.7	2,472	3.87	184.6

Table 7
Summary of pH, Temperature, Specific Conductivity, DO, and ORP in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Field Measurements[1]				
		pH	Temperature (^{o}C)	Specific Conductivity (µS/cm)	DO (mg/l)	ORP (mV)
MW-13	12/15/2021	7.61	14.0	1,869	1.31	-35.4
	3/30/2022	7.53	15.0	1,888	0.82	128.3
	6/22/2022	7.52	17.6	2,281	0.78	163.9
	9/14/2022	7.47	17.6	3,151	0.28	—[2]
MW-15	12/15/2021	7.75	13.0	1,307	3.56	123.3
	3/30/2022	7.61	14.4	1,438	1.19	140.4
	6/22/2022	7.72	17.1	1,472	1.78	165.2
	9/14/2022	7.81	16.2	1,555	3.06	183.3
MW-16	12/15/2021	7.69	13.5	2,191	1.35	-33.5
	3/30/2022	6.89	15.9	3,535	0.67	168.0
	6/22/2022	6.49	20.2	3,904	1.90	—[2]
	9/15/2022	6.15	17.5	5,060	0.33	—[2]
MW-17	12/15/2021	7.48	12.6	2,246	1.59	-2.3
	3/30/2022	7.47	14.3	1,997	0.71	147.3
	6/22/2022	7.42	16.7	2,215	0.81	125.2
	9/14/2022	7.56	17.3	2,353	0.43	167.4
MW-20	12/15/2021	7.54	13.1	2,820	0.70	147.7
	3/30/2022	7.60	14.1	1,768	0.73	217.3
	6/21/2022	7.50	16.9	2,138	1.30	169.7
	9/14/2022	7.77	16.5	1,568	4.94	204.2
MW-24	12/15/2021	7.13	15.6	12,221	0.58	177.2
	3/30/2022	7.71	16.2	2,828	0.79	168.2
	6/22/2022	7.33	17.9	4,213	1.89	—[2]
	9/15/2022	7.94	17.4	3,572	0.49	192.6
MW-25	12/15/2021	7.58	12.5	2,439	3.43	-55.1
	3/29/2022	7.39	14.5	2,672	0.66	184.4
	6/21/2022	7.46	17.4	3,442	2.23	—[2]
	9/14/2022	7.53	16.0	3,453	0.30	—[2]
MW-26	12/15/2021	7.54	12.6	2,229	1.58	-45.2
	3/30/2022	7.47	13.1	2,430	0.93	159.0
	6/21/2022	7.40	17.1	3,307	2.14	—[2]
	9/14/2022	7.44	15.7	3,488	0.32	—[2]
MW-28	12/15/2021	7.90	13.5	2,752	1.57	137.6
	3/30/2022	7.97	14.6	2,310	1.11	140.5
	6/22/2022	7.59	17.1	1,777	1.60	175.0
	9/14/2022	8.04	17.0	2,386	1.59	194.2
MW-29	12/15/2021	7.52	12.6	1,760	1.21	153.3
	3/30/2022	7.49	13.9	1,380	0.92	150.5
	6/21/2022	7.40	16.2	1,697	0.78	171.9
	9/14/2022	7.63	16.0	1,392	0.69	225.3

Table 7
Summary of pH, Temperature, Specific Conductivity, DO, and ORP in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Field Measurements[1]				
		pH	Temperature (^{o}C)	Specific Conductivity (µS/cm)	DO (mg/l)	ORP (mV)
MW-30	12/14/2021	7.52	14.8	2,067	0.95	164.6
	3/29/2022	7.51	16.7	1,963	1.56	175.0
	6/21/2022	7.66	19.1	1,534	6.41	—[2]
	9/14/2022	7.51	17.9	2,318	0.67	—[2]
MW-31	12/14/2021	7.56	14.3	3,006	0.54	162.0
	3/29/2022	7.60	16.5	2,335	0.59	160.0
	6/21/2022	7.55	18.9	3,025	2.11	—[2]
	9/14/2022	7.62	17.9	2,875	0.27	—[2]
MW-32	12/14/2021	7.59	11.8	1,259	5.14	147.5
	3/29/2022	7.42	14.6	1,390	3.26	191.4
	6/21/2022	7.51	15.1	1,450	3.18	138.1
	9/14/2022	7.49	14.4	1,629	4.57	—[2]
MW-33	12/14/2021	7.56	11.6	1,282	4.76	129.9
	3/29/2022	7.40	14.1	1,412	2.78	200.3
	6/21/2022	7.49	15.1	1,484	2.82	136.3
	9/14/2022	7.49	15.0	1,718	2.35	—[2]
MW-34	12/14/2021	7.61	13.1	1,769	2.78	169.5
	3/29/2022	7.62	15.8	1,360	2.63	153.4
	6/21/2022	7.57	18.1	1,750	3.56	—[2]
	9/14/2022	7.60	16.4	1,881	1.78	—[2]
MW-35	12/14/2021	7.50	13.9	2,340	1.13	164.0
	3/29/2022	7.43	15.9	1,972	0.68	185.4
	6/21/2022	7.48	17.3	2,502	2.25	—[2]
	9/14/2022	7.51	16.2	2,293	0.35	—[2]
MW-36	12/14/2021	7.73	13.4	1,092	6.76	149.5
	3/29/2022	7.55	16.7	1,232	5.87	183.1
	6/21/2022	7.54	18.0	1,750	6.58	—[2]
	9/14/2022	7.59	16.2	1,651	6.25	—[2]
MW-37	12/14/2021	7.62	14.1	1,488	5.25	168.4
	3/29/2022	7.57	16.7	1,220	5.14	169.2
	6/21/2022	7.57	17.3	1,647	5.09	—[2]
	9/13/2022	7.64	17.8	1,425	4.30	222.1
MW-38	12/14/2021	7.62	14.2	1,483	3.07	-65.2
	3/29/2022	7.44	16.7	1,619	0.64	155.9
	6/21/2022	7.45	17.4	1,700	0.73	77.1
	9/13/2022	7.49	18.1	2,030	0.24	—[2]
MW-39	12/14/2021	7.70	12.2	1,314	4.70	28.4
	3/29/2022	7.56	17.1	1,287	3.59	174.0
	6/21/2022	7.58	18.3	1,293	4.76	180.0
	9/13/2022	7.61	18.7	1,511	5.22	—[2]

Table 7
Summary of pH, Temperature, Specific Conductivity, DO, and ORP in Groundwater
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Monitoring Well Identification	Sample Date	Field Measurements[1]				
		pH	Temperature (°C)	Specific Conductivity (µS/cm)	DO (mg/l)	ORP (mV)
MW-40	12/14/2021	7.56	14.3	1,259	7.45	70.7
	3/29/2022	7.45	16.7	1,305	5.65	177.1
	6/21/2022	7.50	16.9	1,177	5.58	221.5
	9/13/2022	7.57	18.1	981	5.42	240.8
MW-41	12/14/2021	7.28	13.6	1,711	4.17	165.2
	3/29/2022	7.27	15.6	1,442	0.73	161.2
	6/21/2022	7.48	15.5	822	0.81	175.4
	9/14/2022	8.02	15.9	480	0.41	168.2
MW-42	12/14/2021	7.55	12.8	1,651	7.28	172.4
	3/29/2022	7.54	14.5	1,049	5.40	183.9
	6/21/2022	7.53	14.4	1,324	3.18	166.8
	9/14/2022	7.77	15.9	1,336	3.68	177.5
MW-43	12/14/2021	7.43	12.1	1,863	0.69	153.2
	3/29/2022	7.39	14.3	1,435	1.00	154.3
	6/21/2022	7.45	15.0	521	7.16	—[2]
	9/14/2022	7.74	15.1	1,083	4.07	214.7
MW-44	12/14/2021	7.66	11.3	1,646	3.55	164.6
	3/29/2022	7.58	14.5	1,263	3.44	166.7
	6/21/2022	7.61	15.5	1,483	4.93	—[2]
	9/14/2022	7.90	16.0	1,191	4.06	213.8
MW-45	12/14/2021	7.56	14.4	2,419	4.24	174.9
	3/29/2022	7.51	16.7	1,890	3.96	151.6
	6/21/2022	7.51	17.2	2,220	3.01	—[2]
	9/13/2022	7.46	17.6	2,272	2.55	—[2]
MW-46	12/14/2021	7.55	11.3	1,809	4.10	229.1
	3/29/2022	7.45	14.3	1,454	4.09	201.5
	6/21/2022	7.50	15.2	1,486	1.38	191.8
	9/14/2022	7.69	15.3	1,534	0.69	216.0

NOTES:

[1]pH, temperature, conductivity, DO, and ORP measured in the field using a water-quality analyzer with a flow-through cell once stabilization had been achieved immediately prior to sample collection.

[2]ORP probe malfunction.

°C = degrees Celsius
DO = dissolved oxygen
mg/l = milligrams per liter
µS/cm = microSiemens per centimeter
mV = millivolts
ORP = oxidation-reduction potential

Table 8
Summary of 1,2-DCP Mass Calculations
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001

Sample Date	Mass of Dissolved 1,2-DCP (kilograms)		
	Total Shallow Monitoring Wells	Total Deep Monitoring Wells	Total All Monitoring Wells
12/2001	7.05	8.54	15.59
9/2002	8.22	10.10	18.32
9/2003	4.23	7.24	11.47
9/2004	2.06	4.33	6.39
9/2005	2.66	2.36	5.02
9/2006	2.74	2.00	4.74
9/2007	3.20	1.46	4.66
9/2008	3.70	1.24	4.95
9/2009	2.90	1.23	4.13
9/2010	2.25	1.90	4.15
9/2011	1.80	1.53	3.33
9/2012	1.82	1.50	3.32
9/2013	1.51	1.42	2.93
9/2014	1.35	1.24	2.59
9/2015	1.07	1.15	2.22
9/2016	1.05	1.00	2.05
9/2017	0.74	0.88	1.62
9/2018	0.61	0.82	1.43
9/2019	0.52	0.85	1.37
9/2020	0.30	0.62	0.92
9/2021	0.24	0.49	0.73
9/2022	0.24	0.37	0.61

NOTE:

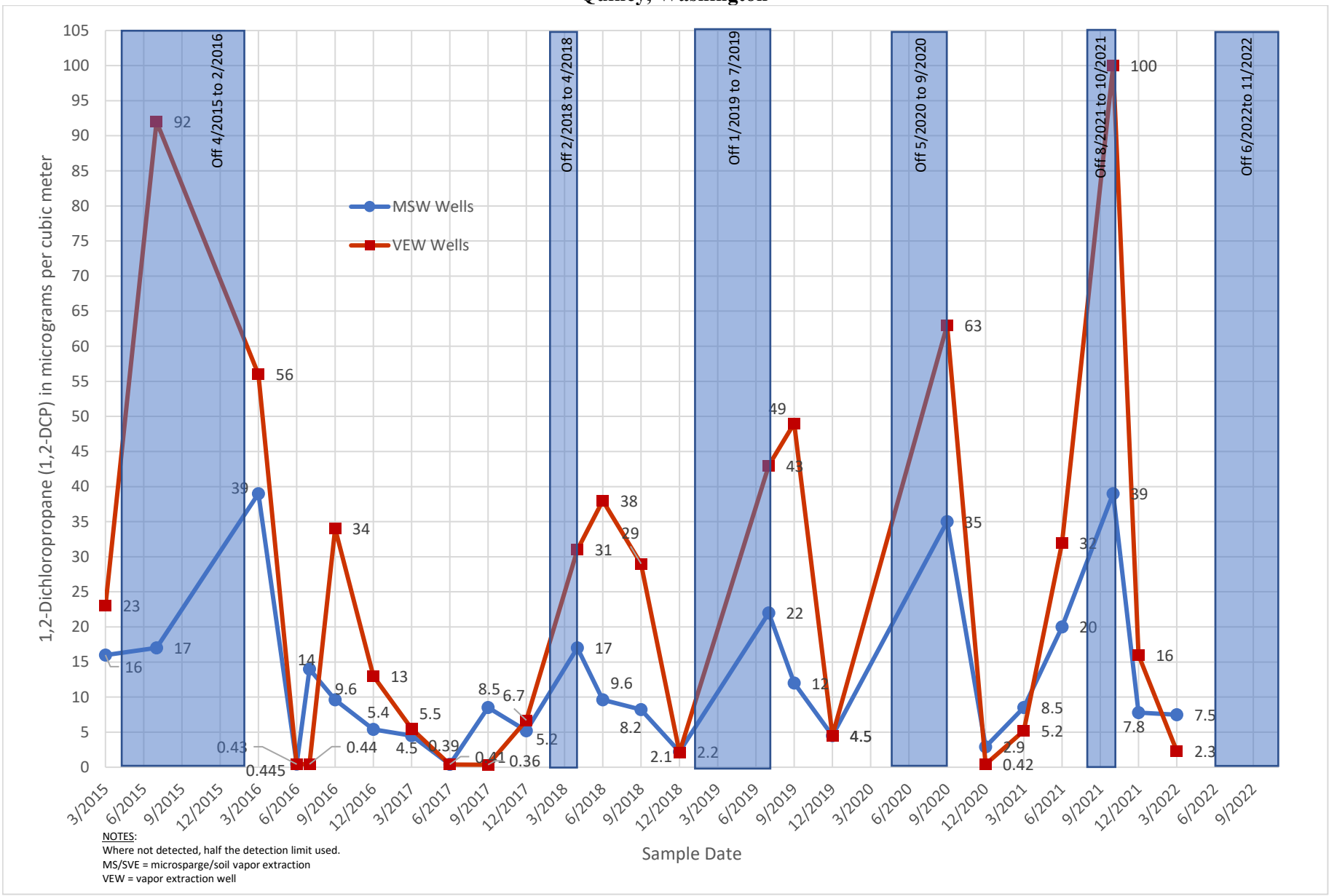
1,2-DCP = 1,2-dichloropropane

CHARTS

ANNUAL REPORT 2022
Cenex Harvest States Cooperatives Site
300 Division Street East
Quincy, Washington

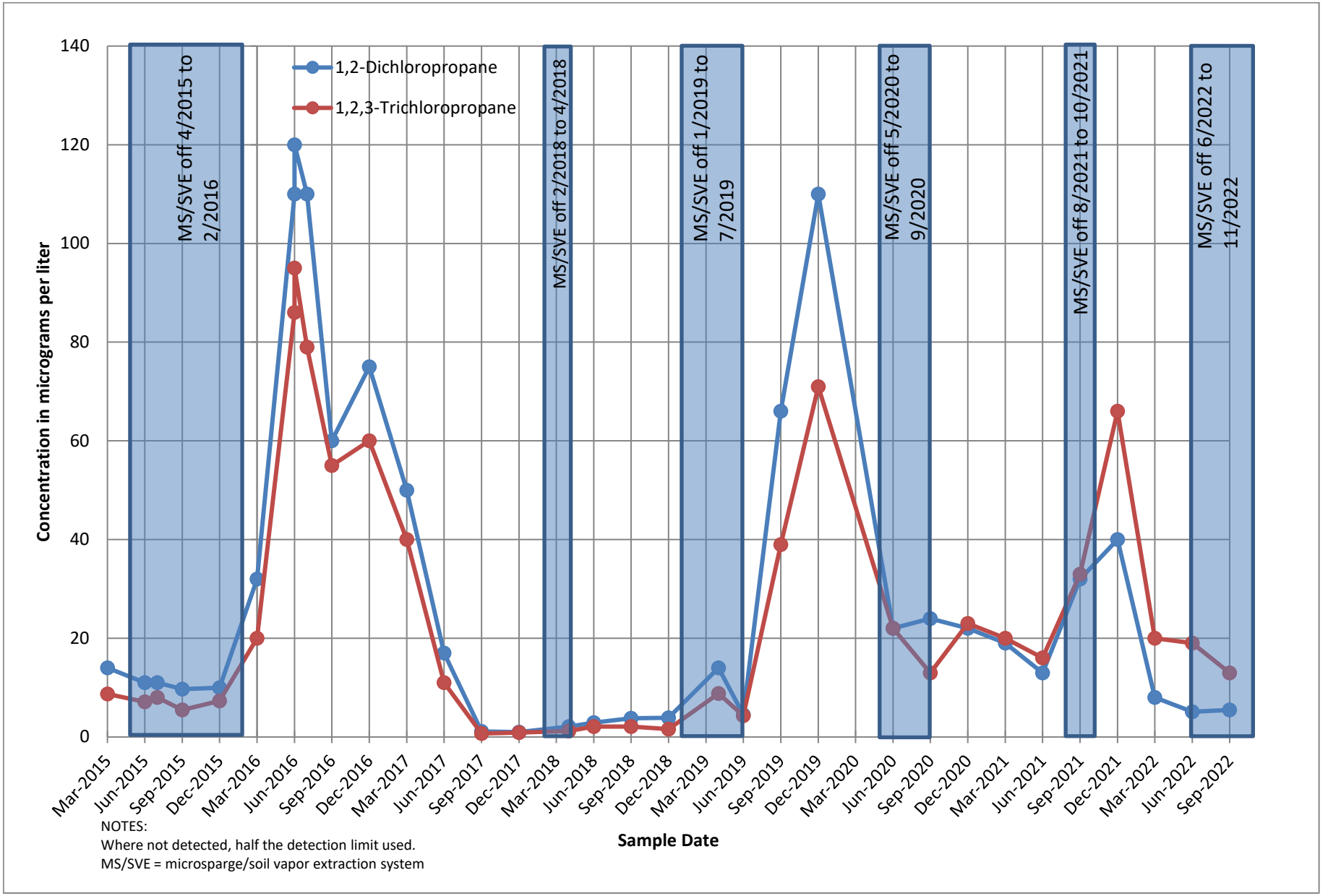
Farallon PN: 301-001

Chart 1
Summary of Laboratory Analytical Results for 1,2-DCP in SVE Influent Air
March 2015 to March 2022
Cenex Harvest State Cooperatives Site
Quincy, Washington



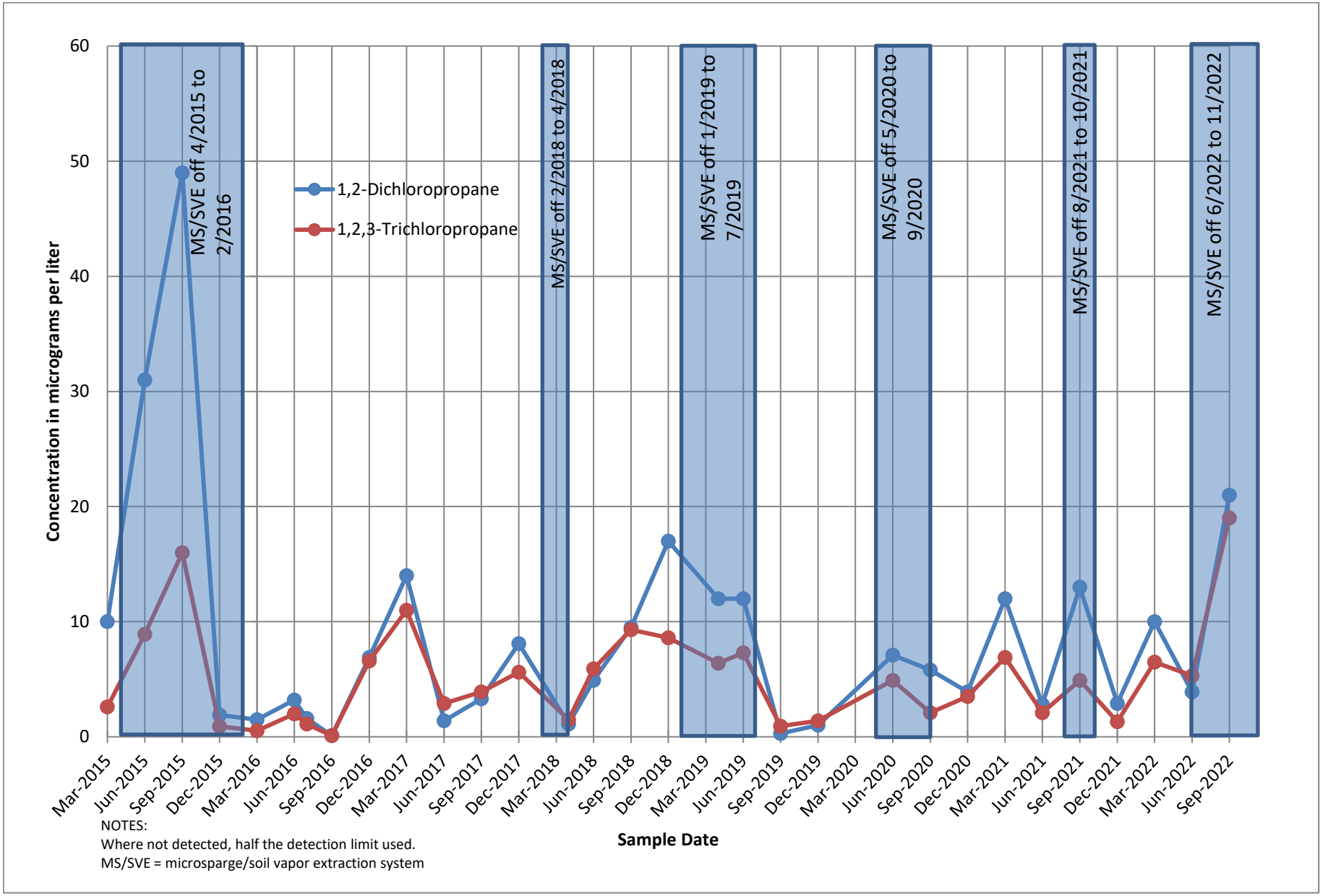
P:\301 Cenex\301001 Quincy\Reports\Annual Report 2022\Charts\Charts 1 & 4

Chart 2
Monitoring Well MW-24 (shallow) Groundwater Analytical Results 2015 to 2022
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001



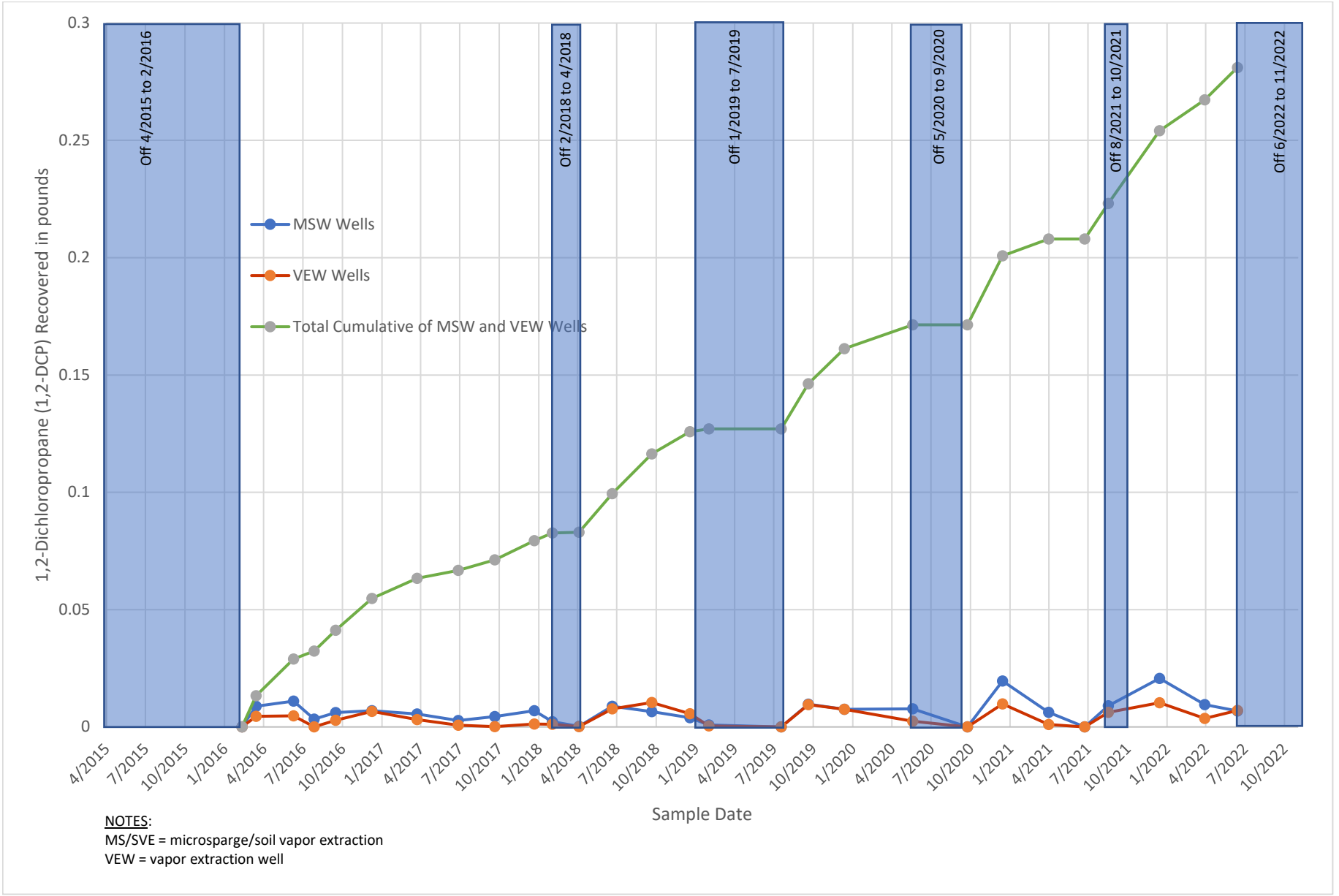
NOTES:
Where not detected, half the detection limit used.
MS/SVE = microsparge/soil vapor extraction system

Chart 3
Monitoring Well MW-16 (deep) Groundwater Analytical Results 2015 to 2022
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001



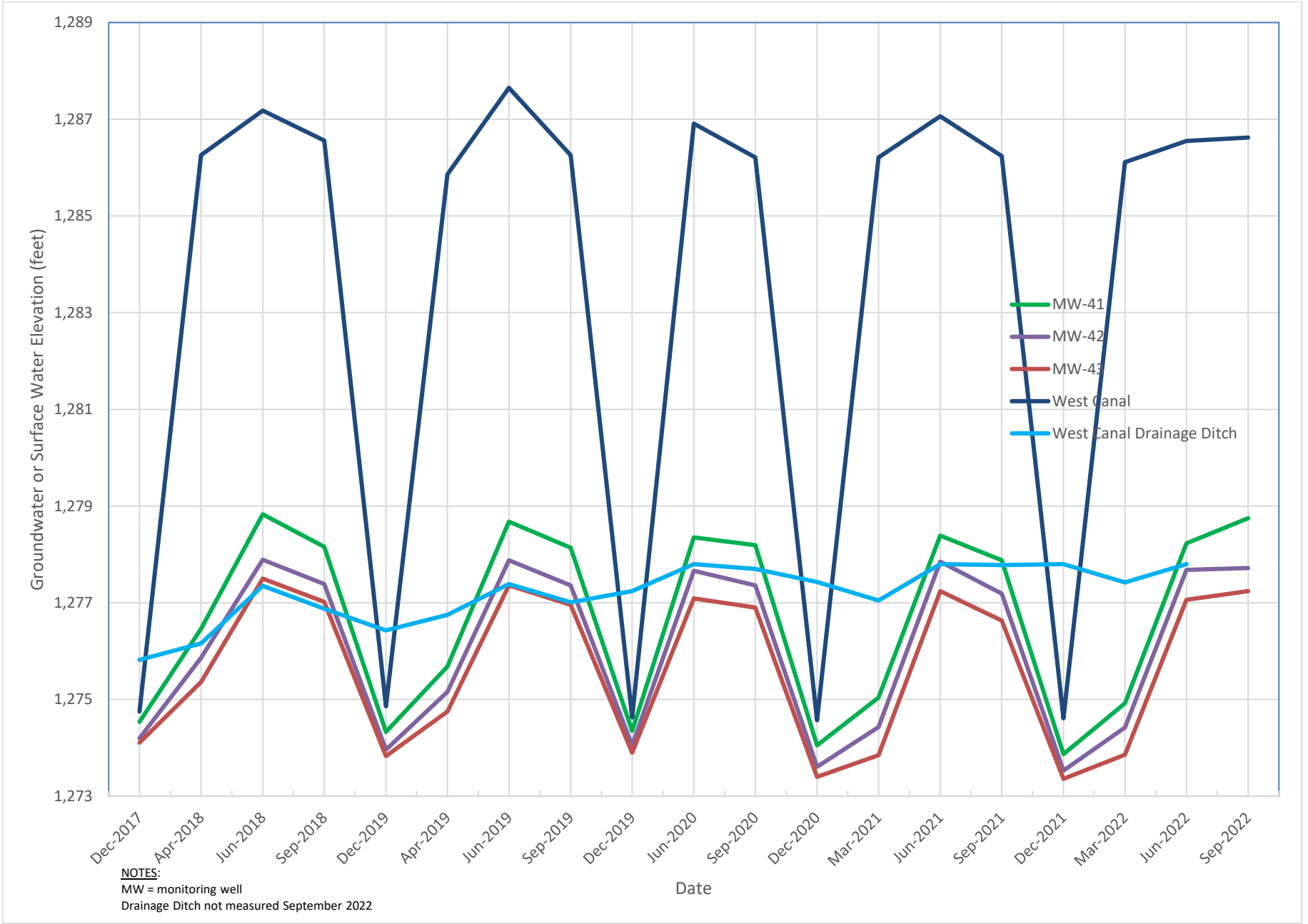
NOTES:
Where not detected, half the detection limit used.
MS/SVE = microsparge/soil vapor extraction system

Chart 4
Summary of 1,2-DCP Recovered by MS/SVE System
February 2016 to June 2022
Cenex Harvest States Cooperatives Site
Farallon PN: 301-001



NOTES:
MS/SVE = microsparge/soil vapor extraction
VEW = vapor extraction well

Chart 5
Groundwater and Surface Water Elevations – December 2017 to September 2022
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001



NOTES:
MW = monitoring well
Drainage Ditch not measured September 2022

APPENDIX A
LABORATORY ANALYTICAL REPORTS

ANNUAL REPORT 2022
Cenex Harvest States Cooperatives Site
300 Division Street East
Quincy, Washington

Farallon PN: 301-001

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 22, 2022

Tracey Mulhern
Farallon Consulting
1201 Cornwall Avenue, Suite 105
Bellingham, WA 98225

Re: Analytical Data for Project 301-001
Laboratory Reference No. 2209-141

Dear Tracey:

Enclosed are the analytical results and associated quality control data for samples submitted on September 15, 2022.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

Case Narrative

Samples were collected on September 13, 14, 15, 2022 and received by the laboratory on September 15, 2022. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-45-091322-P-GW**					
Laboratory ID:	09-141-01					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	0.60	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	0.21	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*94*	*75-127*				
Toluene-d8	*97*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				
Client ID:	**MW-40-091322-P-GW**					
Laboratory ID:	09-141-02					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*94*	*75-127*				
Toluene-d8	*96*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-39-091322-P-GW**					
Laboratory ID:	09-141-03					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*91*	*75-127*				
Toluene-d8	*96*	*80-127*				
4-Bromofluorobenzene	*96*	*78-125*				
Client ID:	**MW-38-091322-P-GW**					
Laboratory ID:	09-141-04					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	6.2	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*92*	*75-127*				
Toluene-d8	*93*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-37-091322-P-GW**					
Laboratory ID:	09-141-05					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*92*	*75-127*				
Toluene-d8	*94*	*80-127*				
4-Bromofluorobenzene	*100*	*78-125*				
Client ID:	**MW-36-091422-P-GW**					
Laboratory ID:	09-141-06					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*90*	*75-127*				
Toluene-d8	*93*	*80-127*				
4-Bromofluorobenzene	*96*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-46-091422-P-GW**					
Laboratory ID:	09-141-07					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	0.33	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*90*	*75-127*				
Toluene-d8	*93*	*80-127*				
4-Bromofluorobenzene	*98*	*78-125*				
Client ID:	**MW-43-091422-P-GW**					
Laboratory ID:	09-141-08					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*89*	*75-127*				
Toluene-d8	*92*	*80-127*				
4-Bromofluorobenzene	*96*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-35-091422-P-GW**					
Laboratory ID:	09-141-09					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	0.59	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	0.38	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*88*	*75-127*				
Toluene-d8	*93*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				
Client ID:	**MW-34-091422-P-GW**					
Laboratory ID:	09-141-10					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	0.49	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	0.39	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*88*	*75-127*				
Toluene-d8	*90*	*80-127*				
4-Bromofluorobenzene	*95*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-44-091422-P-GW**					
Laboratory ID:	09-141-11					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*89*	*75-127*				
Toluene-d8	*91*	*80-127*				
4-Bromofluorobenzene	*98*	*78-125*				
Client ID:	**MW-42-091422-P-GW**					
Laboratory ID:	09-141-12					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	0.65	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*88*	*75-127*				
Toluene-d8	*90*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-33-091422-P-GW**					
Laboratory ID:	09-141-13					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*88*	*75-127*				
Toluene-d8	*91*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				
Client ID:	**MW-32-091422-P-GW**					
Laboratory ID:	09-141-14					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	0.30	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*88*	*75-127*				
Toluene-d8	*90*	*80-127*				
4-Bromofluorobenzene	*98*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-41-091422-P-GW**					
Laboratory ID:	09-141-15					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	0.95	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	0.38	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*90*	*75-127*				
Toluene-d8	*91*	*80-127*				
4-Bromofluorobenzene	*98*	*78-125*				
Client ID:	**MW-30-091422-P-GW**					
Laboratory ID:	09-141-16					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	0.85	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	0.41	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*87*	*75-127*				
Toluene-d8	*90*	*80-127*				
4-Bromofluorobenzene	*98*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-31-091422-P-GW**					
Laboratory ID:	09-141-17					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	11	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	1.2	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*87*	*75-127*				
Toluene-d8	*90*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				
Client ID:	**MW-29-091422-P-GW**					
Laboratory ID:	09-141-18					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	0.91	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*86*	*75-127*				
Toluene-d8	*90*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-20-091422-P-GW**					
Laboratory ID:	09-141-19					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*106*	*78-125*				
Client ID:	**MW-25-091422-P-GW**					
Laboratory ID:	09-141-20					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	14	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	2.2	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*75-127*				
Toluene-d8	*96*	*80-127*				
4-Bromofluorobenzene	*98*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-28-091422-P-GW**					
Laboratory ID:	09-141-21					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	1.9	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*75-127*				
Toluene-d8	*104*	*80-127*				
4-Bromofluorobenzene	*106*	*78-125*				
Client ID:	**MW-26-091422-P-GW**					
Laboratory ID:	09-141-22					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	1.1	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	0.57	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*75-127*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*106*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12-091422-P-GW**					
Laboratory ID:	09-141-23					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	0.21	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*103*	*78-125*				
Client ID:	**MW-17-091422-P-GW**					
Laboratory ID:	09-141-24					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	2.1	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	1.6	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*105*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-091422-P-GW**					
Laboratory ID:	09-141-25					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	1.3	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	1.3	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*75-127*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*105*	*78-125*				
Client ID:	**MW-6-091422-P-GW**					
Laboratory ID:	09-141-26					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	1.5	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	1.0	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*103*	*80-127*				
4-Bromofluorobenzene	*106*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-091422-P-GW**					
Laboratory ID:	09-141-27					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*75-127*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*104*	*78-125*				
Client ID:	**MW-15-091422-P-GW**					
Laboratory ID:	09-141-28					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*75-127*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*104*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7-091522-P-GW**					
Laboratory ID:	09-141-29					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	2.0	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	0.61	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*103*	*80-127*				
4-Bromofluorobenzene	*105*	*78-125*				
Client ID:	**MW-1-091522-P-GW**					
Laboratory ID:	09-141-30					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*75-127*				
Toluene-d8	*103*	*80-127*				
4-Bromofluorobenzene	*107*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5-091522-P-GW**					
Laboratory ID:	09-141-31					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	0.55	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	0.71	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*103*	*78-125*				
Client ID:	**MW-2-091522-P-GW**					
Laboratory ID:	09-141-32					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*75-127*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*104*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-16-091522-P-GW**					
Laboratory ID:	09-141-33					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	21	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	19	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*75-127*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*103*	*78-125*				
Client ID:	**MW-9-091522-P-GW**					
Laboratory ID:	09-141-34					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*75-127*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*105*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-3-091522-P-GW**					
Laboratory ID:	09-141-35					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	1.3	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	0.77	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*105*	*78-125*				
Client ID:	**MW-24-091522-P-GW**					
Laboratory ID:	09-141-36					
Vinyl Chloride	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Chloroform	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloropropane	5.5	0.20	EPA 8260D	9-20-22	9-20-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2,3-Trichloropropane	13	0.20	EPA 8260D	9-20-22	9-20-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*75-127*				
Toluene-d8	*92*	*80-127*				
4-Bromofluorobenzene	*99*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**QA/QC-1-091422-P-GW**					
Laboratory ID:	09-141-37					
Vinyl Chloride	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Chloroform	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloropropane	11	0.20	EPA 8260D	9-20-22	9-20-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2,3-Trichloropropane	1.4	0.20	EPA 8260D	9-20-22	9-20-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*95*	*75-127*				
Toluene-d8	*92*	*80-127*				
4-Bromofluorobenzene	*99*	*78-125*				
Client ID:	**QA/QC-2-091422-P-GW**					
Laboratory ID:	09-141-38					
Vinyl Chloride	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Chloroform	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloropropane	12	0.20	EPA 8260D	9-20-22	9-20-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2,3-Trichloropropane	1.9	0.20	EPA 8260D	9-20-22	9-20-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*97*	*75-127*				
Toluene-d8	*91*	*80-127*				
4-Bromofluorobenzene	*99*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**QA/QC-3-091522-P-GW**					
Laboratory ID:	09-141-39					
Vinyl Chloride	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Chloroform	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloropropane	18	0.20	EPA 8260D	9-20-22	9-20-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2,3-Trichloropropane	16	0.20	EPA 8260D	9-20-22	9-20-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*95*	*75-127*				
Toluene-d8	*89*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				
Client ID:	**MW-8-091522-P-GW**					
Laboratory ID:	09-141-40					
Vinyl Chloride	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Chloroform	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*75-127*				
Toluene-d8	*92*	*80-127*				
4-Bromofluorobenzene	*99*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TB-091522**					
Laboratory ID:	09-141-41					
Vinyl Chloride	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Chloroform	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*95*	*75-127*				
Toluene-d8	*90*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0916W1					
Vinyl Chloride	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Chloroform	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-16-22	9-16-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*97*	*75-127*				
Toluene-d8	*97*	*80-127*				
4-Bromofluorobenzene	*96*	*78-125*				
Laboratory ID:	MB0919W1					
Vinyl Chloride	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Chloroform	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-19-22	9-19-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*75-127*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*106*	*78-125*				
Laboratory ID:	MB0920W1					
Vinyl Chloride	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Chloroform	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dichloropropane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2-Dibromoethane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	9-20-22	9-20-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*94*	*75-127*				
Toluene-d8	*90*	*80-127*				
4-Bromofluorobenzene	*100*	*78-125*				

Date of Report: September 22, 2022
Samples Submitted: September 15, 2022
Laboratory Reference: 2209-141
Project: 301-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0916W1									
	SB	SBD	SB	SBD	SB	SBD				
Vinyl Chloride	**10.5**	**10.3**	10.0	10.0	105	103	71-135	2	20	
Chloroform	**10.2**	**10.2**	10.0	10.0	102	102	80-123	0	16	
1,2-Dichloroethane	**10.6**	**10.6**	10.0	10.0	106	106	80-124	0	15	
1,2-Dichloropropane	**10.5**	**10.7**	10.0	10.0	105	107	80-123	2	15	
1,1,2-Trichloroethane	**10.5**	**10.6**	10.0	10.0	105	106	77-126	1	20	
1,2-Dibromoethane	**10.9**	**10.7**	10.0	10.0	109	107	80-127	2	15	
1,2,3-Trichloropropane	**9.36**	**9.69**	10.0	10.0	94	97	71-129	3	25	
Surrogate:										
Dibromofluoromethane					*103*	*98*	*75-127*			
Toluene-d8					*102*	*101*	*80-127*			
4-Bromofluorobenzene					*103*	*101*	*78-125*			
Laboratory ID:	SB0919W1									
	SB	SBD	SB	SBD	SB	SBD				
Vinyl Chloride	**11.2**	**11.3**	10.0	10.0	112	113	71-135	1	20	
Chloroform	**11.8**	**11.4**	10.0	10.0	118	114	80-123	3	16	
1,2-Dichloroethane	**11.6**	**11.5**	10.0	10.0	116	115	80-124	1	15	
1,2-Dichloropropane	**11.2**	**11.2**	10.0	10.0	112	112	80-123	0	15	
1,1,2-Trichloroethane	**10.4**	**10.4**	10.0	10.0	104	104	77-126	0	20	
1,2-Dibromoethane	**10.6**	**10.6**	10.0	10.0	106	106	80-127	0	15	
1,2,3-Trichloropropane	**10.8**	**11.1**	10.0	10.0	108	111	71-129	3	25	
Surrogate:										
Dibromofluoromethane					*102*	*107*	*75-127*			
Toluene-d8					*100*	*103*	*80-127*			
4-Bromofluorobenzene					*105*	*109*	*78-125*			
Laboratory ID:	SB0920W1									
	SB	SBD	SB	SBD	SB	SBD				
Vinyl Chloride	**8.64**	**9.32**	10.0	10.0	86	93	71-135	8	20	
Chloroform	**8.88**	**9.34**	10.0	10.0	89	93	80-123	5	16	
1,2-Dichloroethane	**9.06**	**9.45**	10.0	10.0	91	95	80-124	4	15	
1,2-Dichloropropane	**9.22**	**9.71**	10.0	10.0	92	97	80-123	5	15	
1,1,2-Trichloroethane	**10.3**	**10.9**	10.0	10.0	103	109	77-126	6	20	
1,2-Dibromoethane	**10.5**	**11.0**	10.0	10.0	105	110	80-127	5	15	
1,2,3-Trichloropropane	**10.6**	**11.0**	10.0	10.0	106	110	71-129	4	25	
Surrogate:										
Dibromofluoromethane					*88*	*90*	*75-127*			
Toluene-d8					*90*	*90*	*80-127*			
4-Bromofluorobenzene					*104*	*104*	*78-125*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon Consulting
Project Number: 301-001
Project Name: Cenex Quincy
Project Manager: Tracey Mulhern
Sampled by: C. van Stolk, M. Nelson

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-141

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up ☐)	Volatiles 8260 ☆	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664					% Moisture
1	MW-45-091322-P-GW	9-13-22	1605	GW	3					X																	
2	MW-40-091322-P-GW		1630							X																	
3	MW-39-091322-P-GW		1640							X																	
4	MW-38-091322-P-GW		1705							X																	
5	MW-37-091322-P-GW		1720							X																	
6	MW-36-091422-P-GW	9-14-22	0855							X																	
7	MW-46-091422-P-GW		0900							X																	
8	MW-43-091422-P-GW		0935							X																	
9	MW-35-091422-P-GW		0945							X																	
10	MW-34-091422-P-GW		1005							X																	

	Signature	Company	Date	Time
Relinquished	Mex-Hek Nek	Farallon	9-15-22	1523
Received	Nicole Blum	OSE	9/15/22	1523
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

☆ only chloroform, 1,2-dibromoethane, 1,2-dichloroethane, 1,2-dichloropropane, 1,1,2-trichloroethane, 1,2,3-trichloropropane, vinyl chloride.

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Company: Farallon Consulting
Project Number: 301-001
Project Name: Cenex Quincy
Project Manager: Tracey Mulhern
Sampled by: C. van Stolk, M. Nelson

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-141

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up☐)	Volatiles 8260 ★	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664					% Moisture
11	MW-44-091422-P-GW	9-14-22	1015	GW	3					X																	
12	MW-42-091422-P-GW		1100							X																	
13	MW-33-091422-P-GW		1100							X																	
14	MW-32-091422-P-GW		1125							X																	
15	MW-41-091422-P-GW		1140							X																	
16	MW-30-091422-P-GW		1225							X																	
17	MW-31-091422-P-GW		1250							X																	
18	MW-29-091422-P-GW		1311							X																	
19	MW-20-091422-P-GW		1400							X																	
20	MW-25-091422-P-GW		1420							X																	

	Signature	Company	Date	Time
Relinquished	Megan Henry Nelson	Farallon	9-15-22	1523
Received	Nichelle Slim	OSE	9/15/22	1523
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

★ Only chloroform, 1,2-dibromoethane, 1,2-dichloroethane, 1,2-dichloropropane, 1,1,2-trichloroethane, 1,2,3-trichloropropane, vinyl chloride

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon Consulting
Project Number: 301-001
Project Name: Cenex Quincy
Project Manager: Tracey Mulhern
Sampled by: C. van Stolk, M. Nelson

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-141

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up☐)	Volatiles 8260 ★	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664					% Moisture
21	MW-28-091422-P-GW	9-14-22	1444	GW	3					X																	
22	MW-26-091422-P-GW	"	1450	"	"					X																	
23	MW-12-091422-P-GW	"	1526	"	"					X																	
24	MW-17-091422-P-GW	"	1555	"	"					X																	
25	MW-13-091422-P-GW	"	1615	"	"					X																	
26	MW-6-091422-P-GW	"	1640	"	"					X																	
27	MW-11-091422-P-GW	"	1711	"	"					X																	
28	MW-15-091422-P-GW	"	1639	"	"					X																	
29	MW-7-091522-P-GW	9-15-22	0852	"	"					X																	
30	MW-1-091522-P-GW	"	0900	"	"					X																	

	Signature	Company	Date	Time
Relinquished	Maya Ha Nelson	Farallon	9-15-22	1523
Received	Danielle Stilwell	OSE	9/15/22	1523
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

★ only chloroform, 1,2-dibromoethane, 1,2-dichloroethane, 1,2-dichloropropane, 1,1,2-trichloroethane, 1,2,3-trichloropropane, vinyl ~~chloride~~ chloride.

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon Consulting
Project Number: 301-001
Project Name: Cenex Quincy
Project Manager: Tracey Mulhern
Sampled by: C. van Stolk, M. Nelson

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-141

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up☐)	Volatiles 8260 ✯	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664					% Moisture
31	MW-5-091522-P-GW	9-15-22	0927	GW	3					X																	
32	MW-2-091522-P-GW	"	0933	"	"					X																	
33	MW-16-091522-P-GW	"	1005	"	"					X																	
34	MW-9-091522-P-GW	"	1011	"	"					X																	
35	MW-3-091522-P-GW	"	1030	"	"					X																	
36	MW-24-091522-P-GW	"	1042	"	"					X																	
37	QA/QC-1-091422-P-GW	9-14-22	1250	"	"					X																	
38	QA/QC-2-091422-P-GW	"	1423	"	"					X																	
39	QA/QC-3-091522-P-GW	9-15-22	1008	"	"					X																	
40	MW-8-091522-P-GW	"	1119	"	"					X																	

	Signature	Company	Date	Time
Relinquished	Meg Heffner	Farallon	9-15-22	1523
Received	Nichelle Bjorn	OSE	9/15/22	1523
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
✯ only chloroform, 1,2-dibromoethane, 1,2-dichloroethane, 1,2-dichloropropane, 1,1,2-trichloroethane, 1,2,3-trichloropropane, vinyl chloride.

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon Consulting
Project Number: 301-001
Project Name: Cenex Quincy
Project Manager: Tracey Mulhern
Sampled by: C. van Stolk, M. Nelson

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-141

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664					% Moisture
41	TB-091522	N/A	N/A	water	3					X																	

	Signature	Company	Date	Time
Relinquished		Farallon	9/15/22	1523
Received		OSE	9/15/22	1523
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

☆ only chloroform, 1,2-dibromoethane, 1,2-dichloroethane, 1,2-dichloropropane, 1,1,2-trichloroethane, 1,2,3-trichloropropane, vinyl chloride

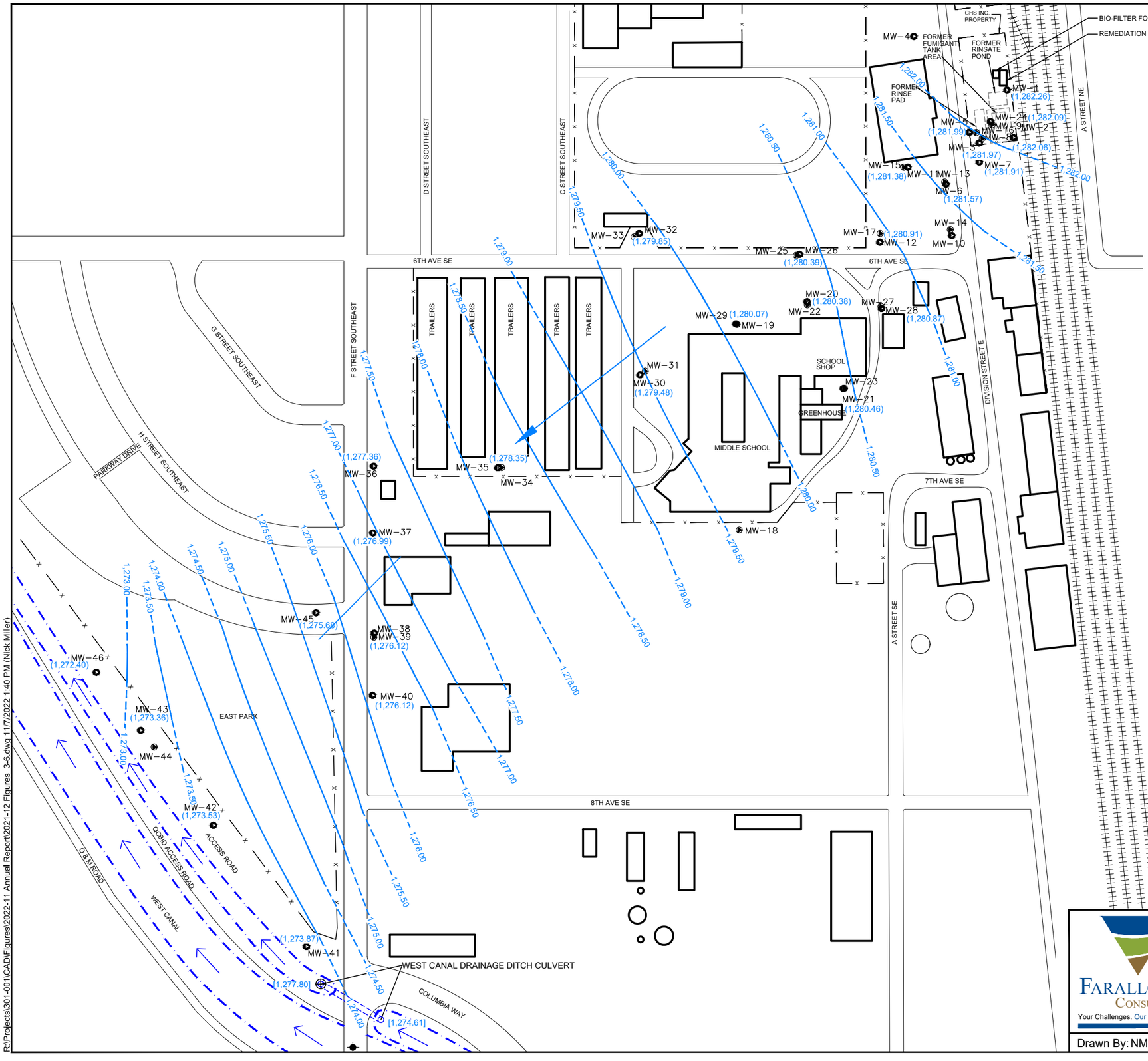
Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

APPENDIX B
GROUNDWATER ELEVATION CONTOUR FIGURES

ANNUAL REPORT 2022
Cenex Harvest States Cooperatives Site
300 Division Street East
Quincy, Washington

Farallon PN: 301-001



LEGEND

- BUILDING STRUCTURE
- MW-32 MONITORING WELL, SHALLOW
- MW-18 MONITORING WELL, DEEP
- BRIDGE SURVEYED MEASURING POINT
- CULVERT SURVEYED MEASURING POINT
- FENCE
- PREVIOUS STRUCTURE
- RAILROAD TRACKS
- (1280.39) GROUNDWATER ELEVATION IN FEET
- [1,274.61] SURFACE WATER ELEVATION IN FEET
- 1,280.50 GROUNDWATER ELEVATION CONTOUR, DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- CONTOUR INTERVAL 0.5 FEET
- WEST CANAL/DRAINAGE FLOW DIRECTION
- ALL LOCATIONS ARE APPROXIMATE

N

0 250

APPROXIMATE SCALE IN FEET

R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2021-12 Figures_3-6.dwg 11/7/2022 1:40 PM (Nick Miller)

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

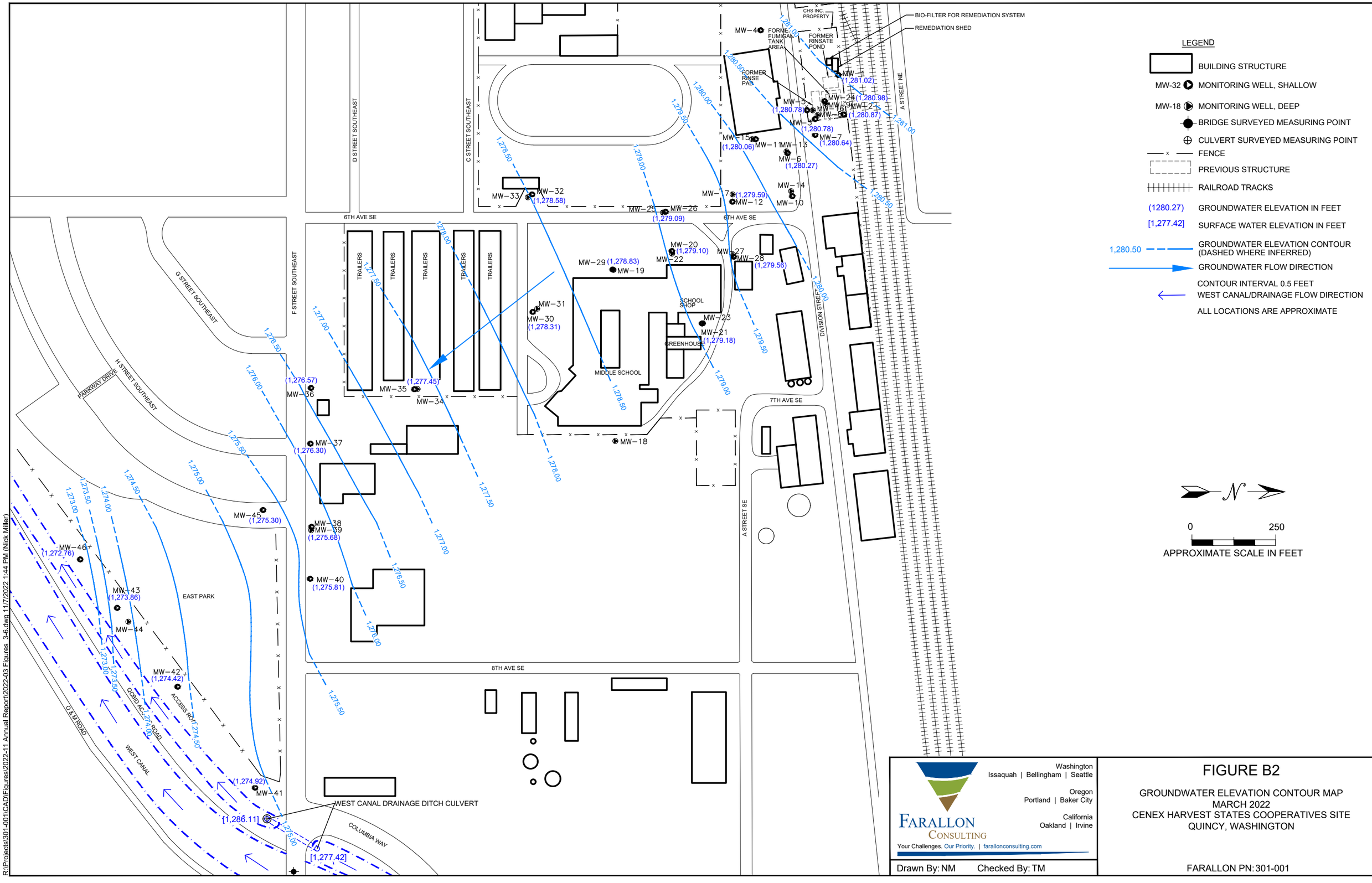
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE B1

GROUNDWATER ELEVATION CONTOUR MAP
DECEMBER 13, 2021
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2022-03 Figures 3-6.dwg 11/7/2022 1:44 PM (Nick Miller)

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

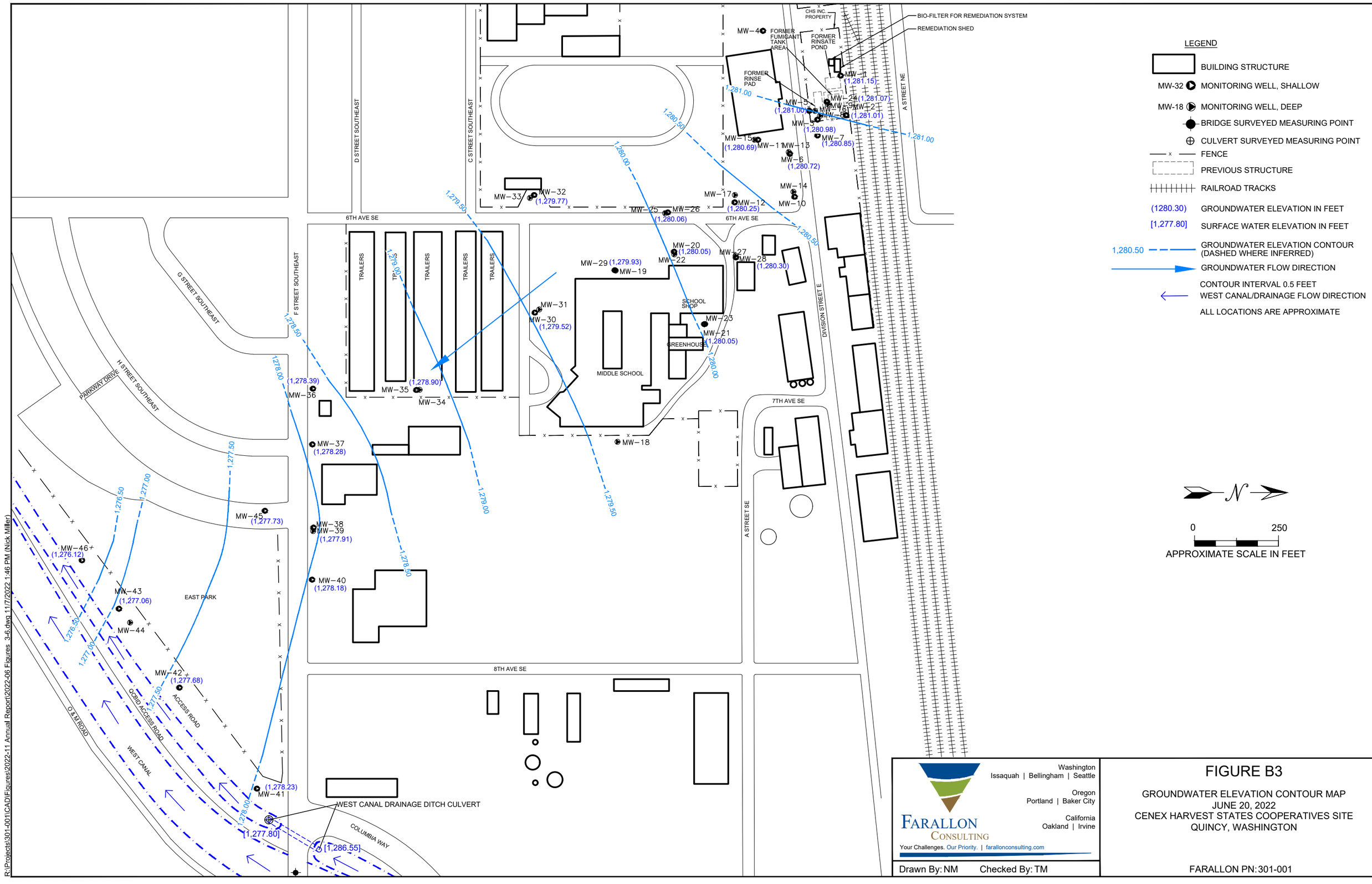
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE B2

GROUNDWATER ELEVATION CONTOUR MAP
MARCH 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2022-06 Figures 3-6.dwg 11/7/2022 1:46 PM (Nick Miller)

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Drawn By: NM Checked By: TM

FIGURE B3

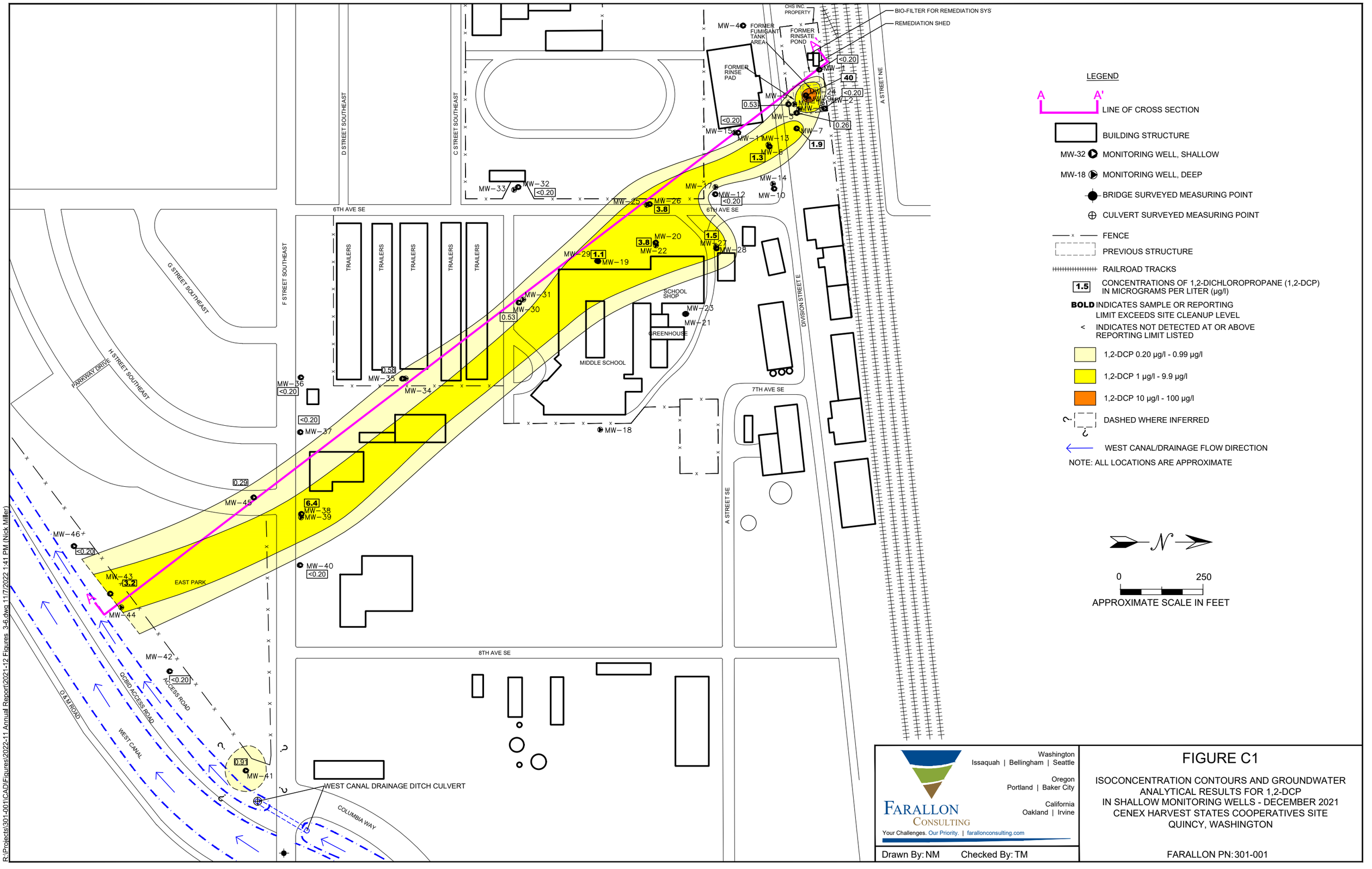
GROUNDWATER ELEVATION CONTOUR MAP
JUNE 20, 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

APPENDIX C
ISOCONCENTRATION CONTOUR AND GROUNDWATER ANALYTICAL RESULTS FIGURES

ANNUAL REPORT 2022
Cenex Harvest States Cooperatives Site
300 Division Street East
Quincy, Washington

Farallon PN: 301-001



R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2021-12 Figures 3-6.dwg 11/7/2022 1:41 PM (Nick Miller)

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

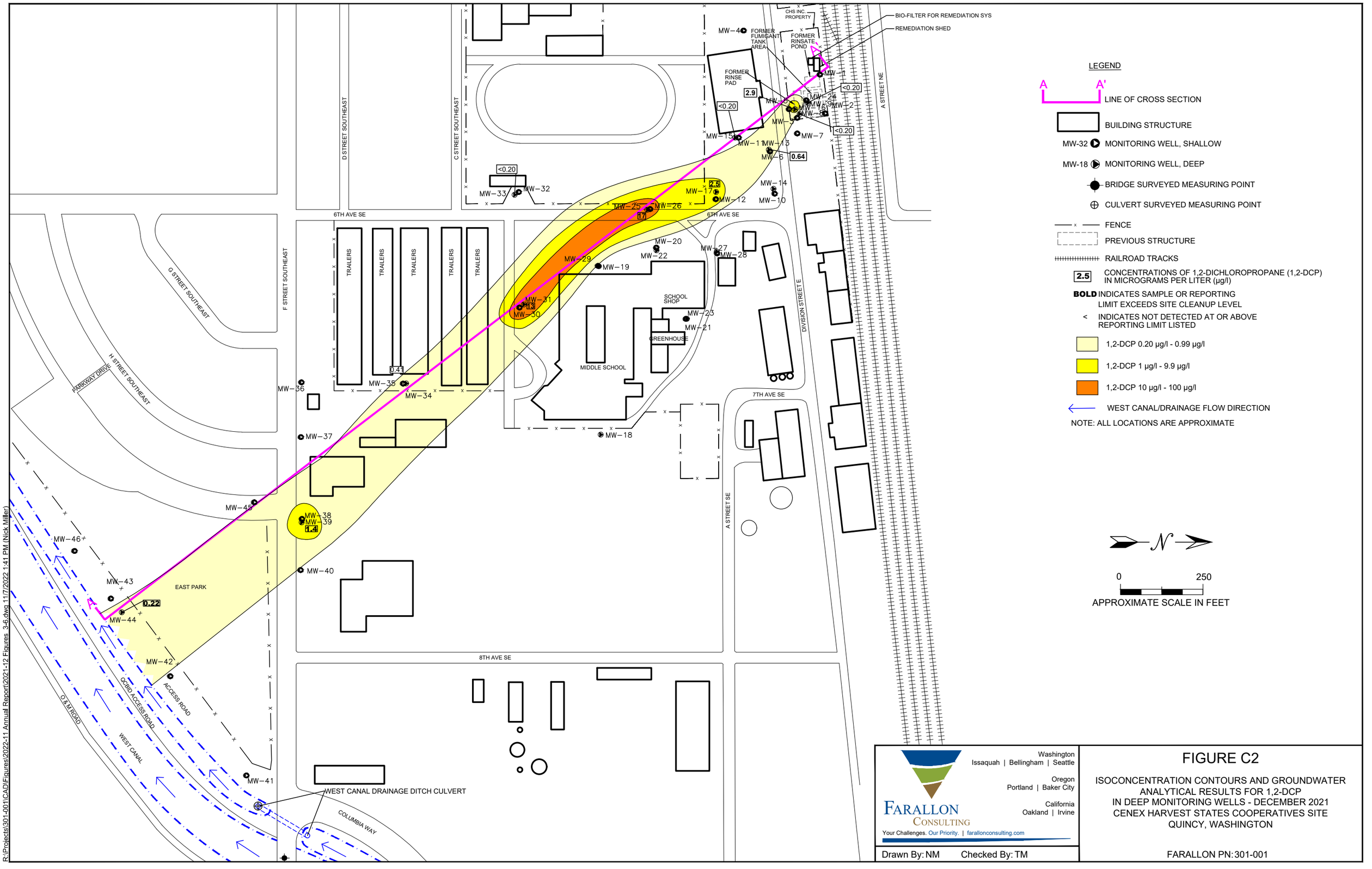
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE C1

ISOCONCENTRATION CONTOURS AND GROUNDWATER ANALYTICAL RESULTS FOR 1,2-DCP IN SHALLOW MONITORING WELLS - DECEMBER 2021
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



LEGEND

A — A' LINE OF CROSS SECTION

BUILDING STRUCTURE

MW-32 MONITORING WELL, SHALLOW

MW-18 MONITORING WELL, DEEP

BRIDGE SURVEYED MEASURING POINT

CULVERT SURVEYED MEASURING POINT

FENCE

PREVIOUS STRUCTURE

RAILROAD TRACKS

2.5 CONCENTRATIONS OF 1,2-DICHLOROPROPANE (1,2-DCP) IN MICROGRAMS PER LITER (µg/l)

BOLD INDICATES SAMPLE OR REPORTING LIMIT EXCEEDS SITE CLEANUP LEVEL

< INDICATES NOT DETECTED AT OR ABOVE REPORTING LIMIT LISTED

1,2-DCP 0.20 µg/l - 0.99 µg/l

1,2-DCP 1 µg/l - 9.9 µg/l

1,2-DCP 10 µg/l - 100 µg/l

WEST CANAL/DRAINAGE FLOW DIRECTION

NOTE: ALL LOCATIONS ARE APPROXIMATE

N

0 250

APPROXIMATE SCALE IN FEET

R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2021-12 Figures_3-6.dwg 11/7/2022 1:41 PM (Nick Miller)

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

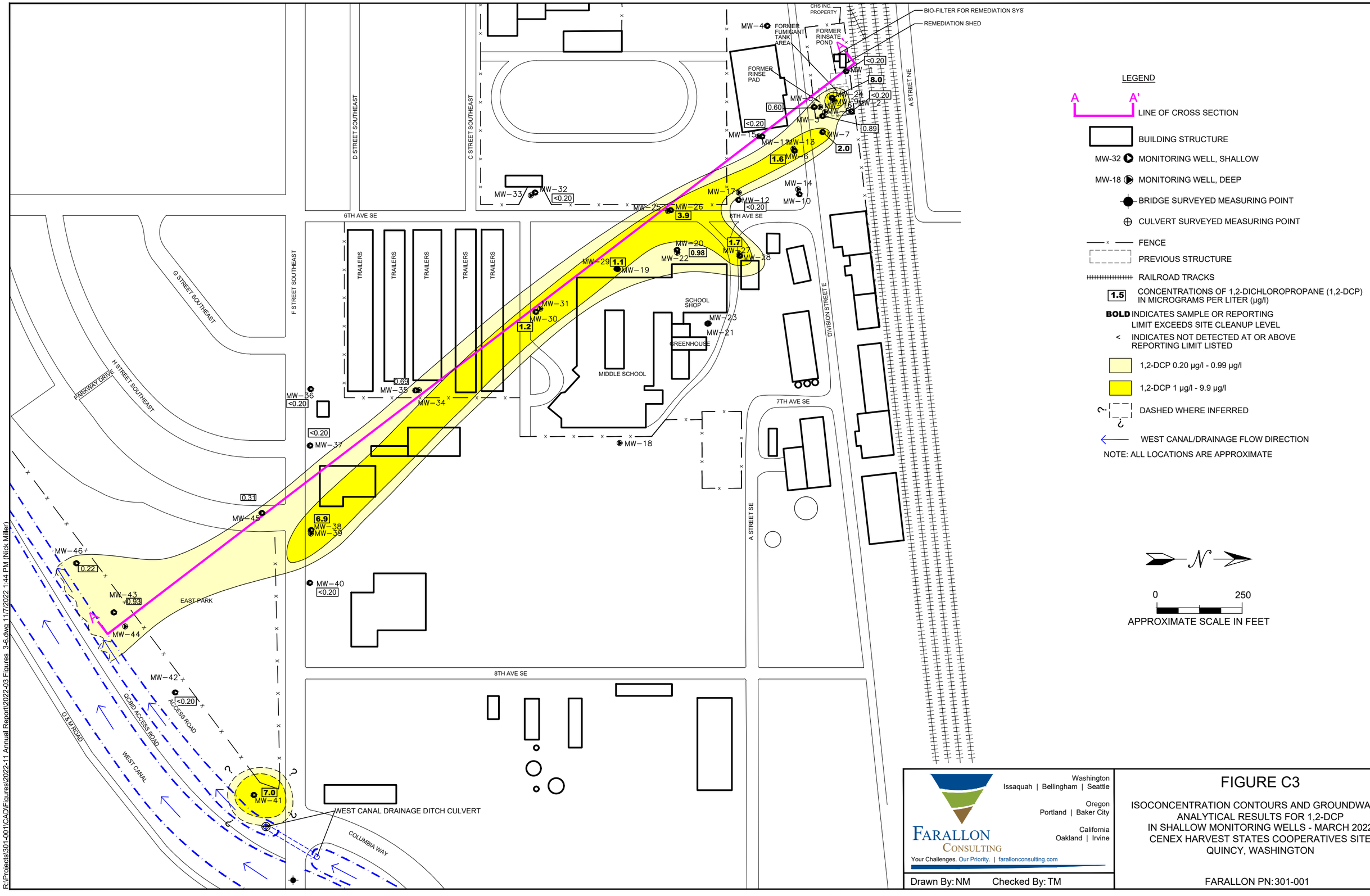
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE C2

ISOCONCENTRATION CONTOURS AND GROUNDWATER ANALYTICAL RESULTS FOR 1,2-DCP IN DEEP MONITORING WELLS - DECEMBER 2021
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2022-03 Figures 3-6.dwg 11/7/2022 1:44 PM (Nick Miller)

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

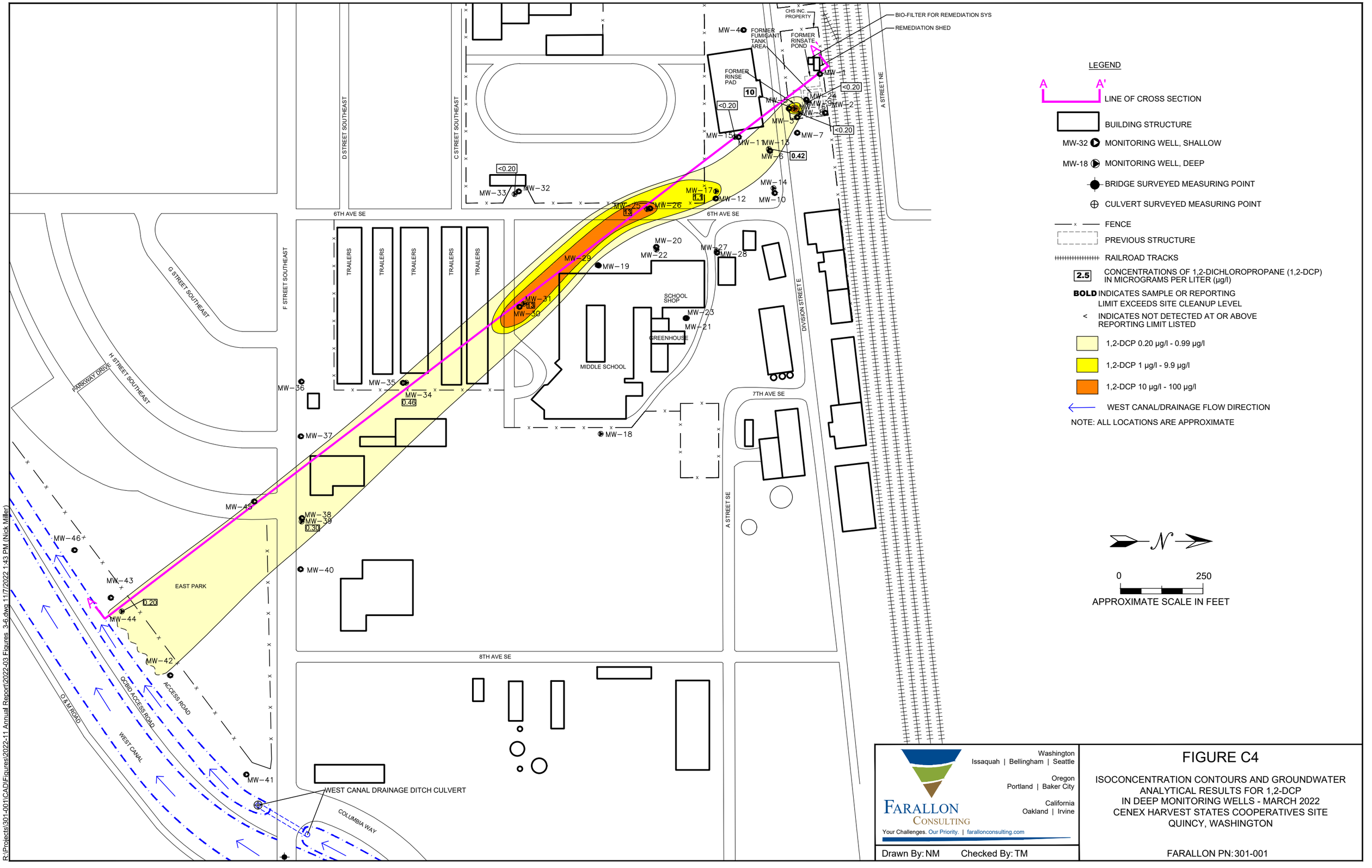
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE C3

ISOCONCENTRATION CONTOURS AND GROUNDWATER ANALYTICAL RESULTS FOR 1,2-DCP IN SHALLOW MONITORING WELLS - MARCH 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2022-03 Figures 3-6.dwg 11/7/2022 1:43 PM (Nick Miller)

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

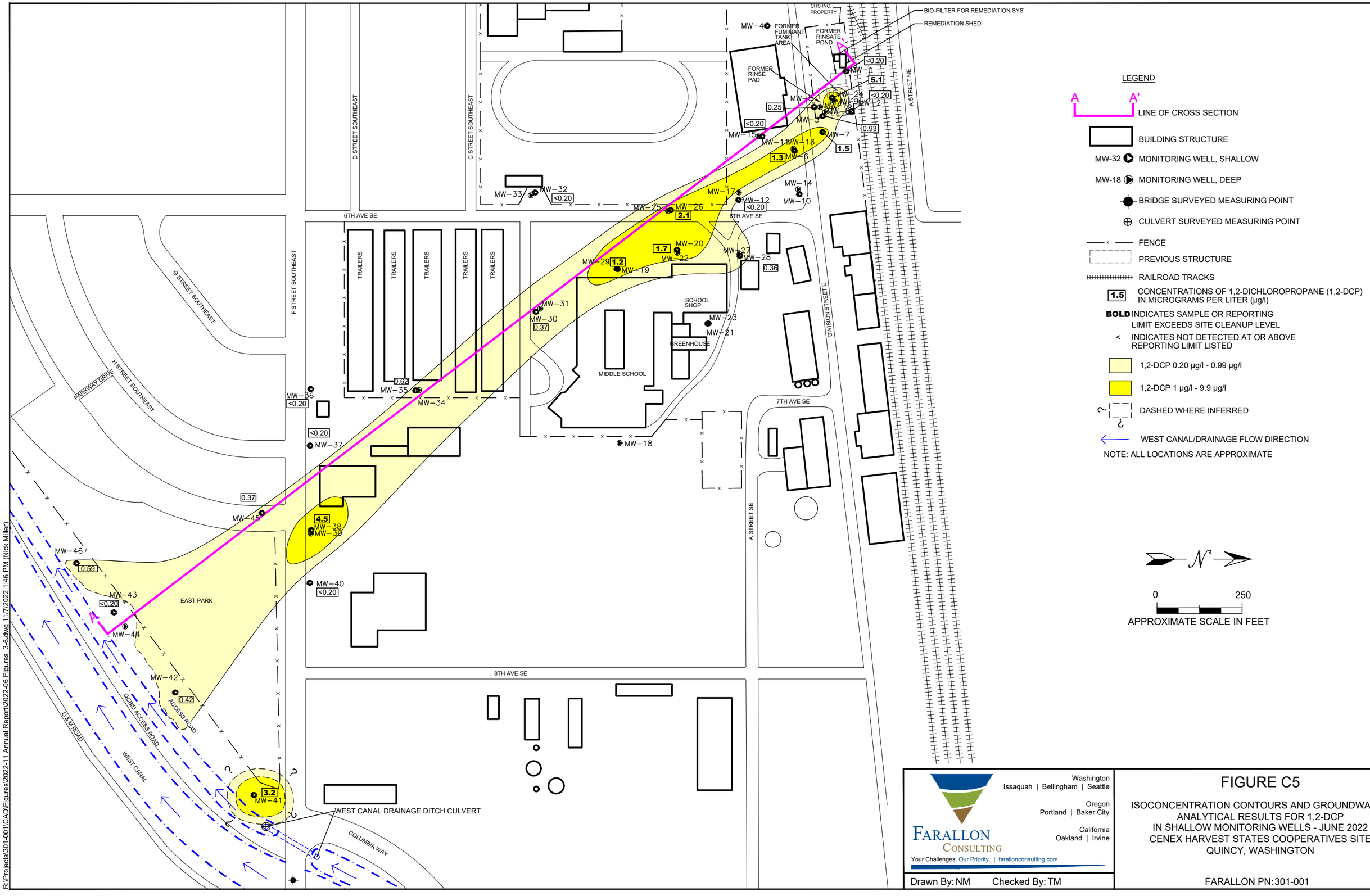
California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE C4

ISOCONCENTRATION CONTOURS AND GROUNDWATER ANALYTICAL RESULTS FOR 1,2-DCP IN DEEP MONITORING WELLS - MARCH 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001



LEGEND

- A — A' LINE OF CROSS SECTION
- BUILDING STRUCTURE
- MW-32 MONITORING WELL, SHALLOW
- MW-18 MONITORING WELL, DEEP
- BRIDGE SURVEYED MEASURING POINT
- CULVERT SURVEYED MEASURING POINT
- FENCE
- PREVIOUS STRUCTURE
- RAILROAD TRACKS
- **1.5** CONCENTRATIONS OF 1,2-DICHLOROPROPANE (1,2-DCP) IN MICROGRAMS PER LITER (µg/l)
- **BOLD** INDICATES SAMPLE OR REPORTING LIMIT EXCEEDS SITE CLEANUP LEVEL
- < INDICATES NOT DETECTED AT OR ABOVE REPORTING LIMIT LISTED
- 1,2-DCP 0.20 µg/l - 0.99 µg/l
- 1,2-DCP 1 µg/l - 9.9 µg/l
- DASHED WHERE INFERRED
- WEST CANAL/DRAINAGE FLOW DIRECTION

NOTE: ALL LOCATIONS ARE APPROXIMATE

N

0 250

APPROXIMATE SCALE IN FEET

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

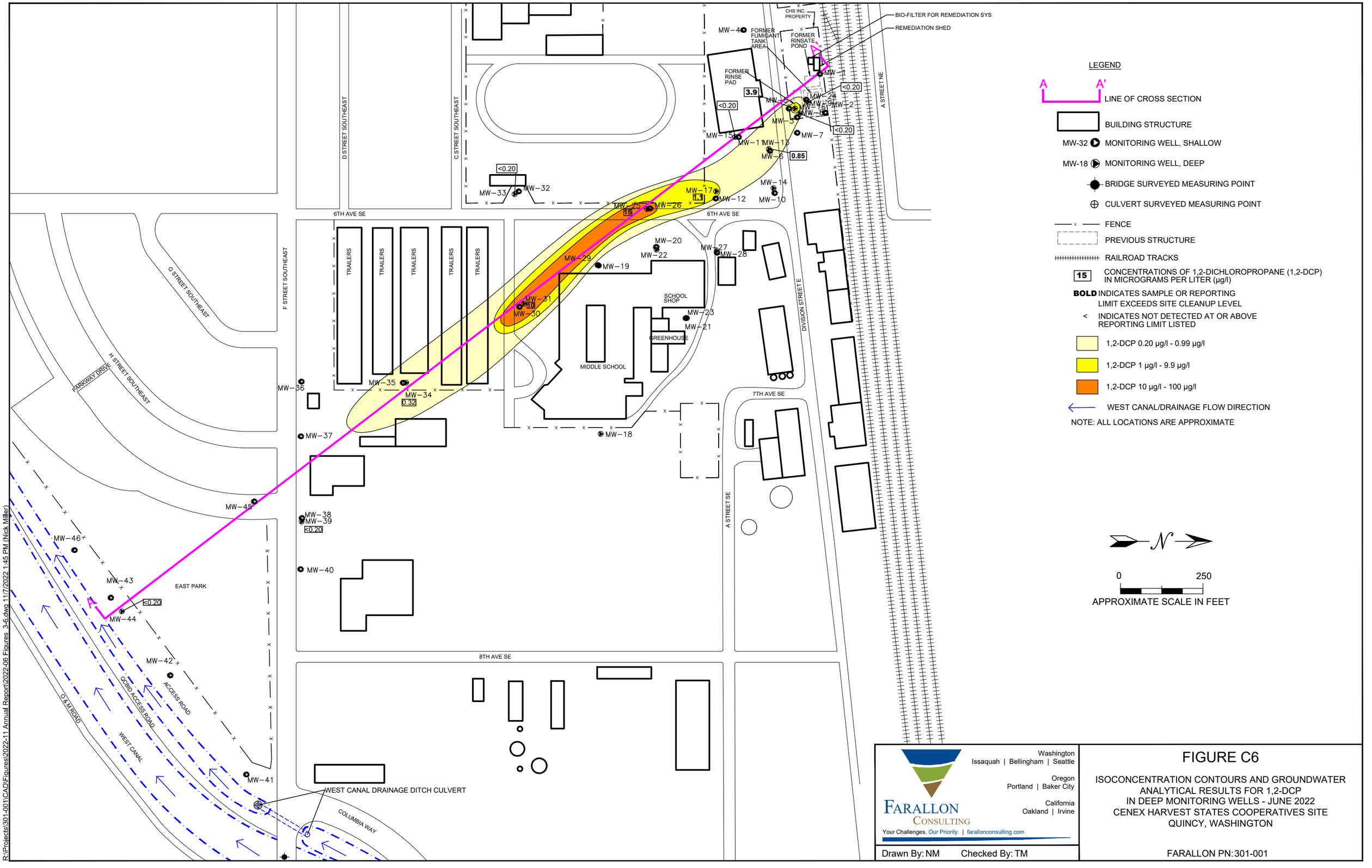
Drawn By: NM Checked By: TM

FIGURE C5

ISOCONCENTRATION CONTOURS AND GROUNDWATER ANALYTICAL RESULTS FOR 1,2-DCP IN SHALLOW MONITORING WELLS - JUNE 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2022-06 Figures 3-6.dwg 11/7/2022 1:46 PM (Nick Miller)



R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2022-06 Figures_3-6.dwg 11/7/2022 1:45 PM (Nick Miller)

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE C6

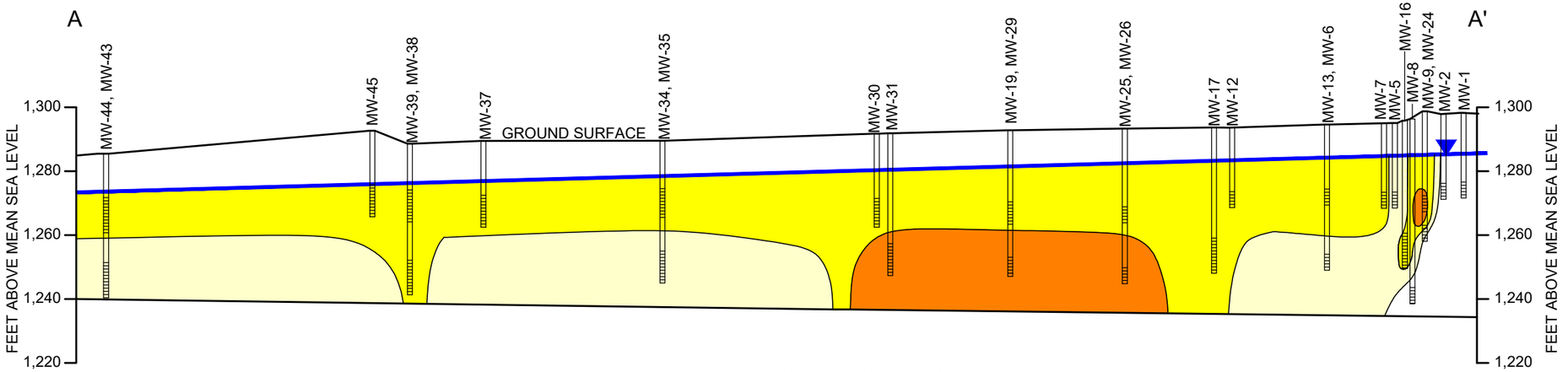
ISOCONCENTRATION CONTOURS AND GROUNDWATER ANALYTICAL RESULTS FOR 1,2-DCP IN DEEP MONITORING WELLS - JUNE 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

APPENDIX D
CROSS SECTION FIGURES

ANNUAL REPORT 2022
Cenex Harvest States Cooperatives Site
300 Division Street East
Quincy, Washington

Farallon PN: 301-001



CROSS SECTION DECEMBER 2021

LEGEND

MW-1 — MONITORING WELL

BLANK CASING

WELL SCREENED INTERVAL

ISOCONCENTRATION CONTOUR

POTENTIOMETRIC SURFACE

1,2-DCP = 1,2-DICHLOROPROPANE

µg/l = MICROGRAMS PER LITER

1,2-DCP 0.20 µg/l - 0.99 µg/l

1,2-DCP 1.0 µg/l - 9.9 µg/l

1,2-DCP 10 µg/l - 100 µg/l

40'

0'

0' 240'

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

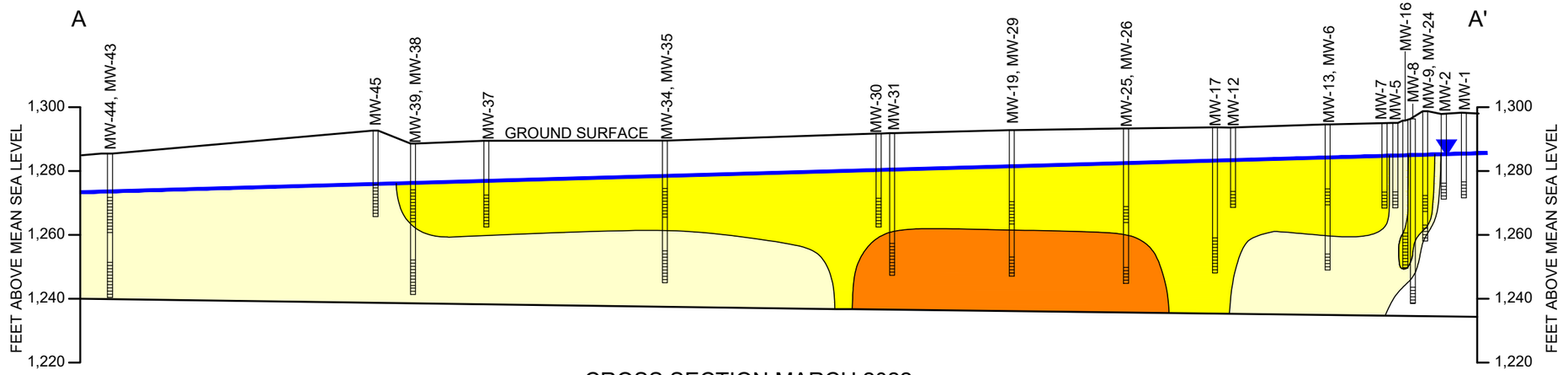
Drawn By: NM Checked By: TM

FIGURE D1

CROSS SECTION OF 1,2-DCP
GROUNDWATER PLUME
DECEMBER 2021
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2021-12 X-Sec.dwg 11/7/2022 1:42 PM (Nick Miller)



CROSS SECTION MARCH 2022

LEGEND

MW-1 — MONITORING WELL

BLANK CASING

WELL SCREENED INTERVAL

ISOCONCENTRATION CONTOUR

POTENTIOMETRIC SURFACE

1,2-DCP = 1,2-DICHLOROPROPANE

µg/l = MICROGRAMS PER LITER

1,2-DCP 0.20 µg/l - 0.99 µg/l

1,2-DCP 1.0 µg/l - 9.9 µg/l

1,2-DCP 10 µg/l - 100 µg/l

40'

0'

0' 240'

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

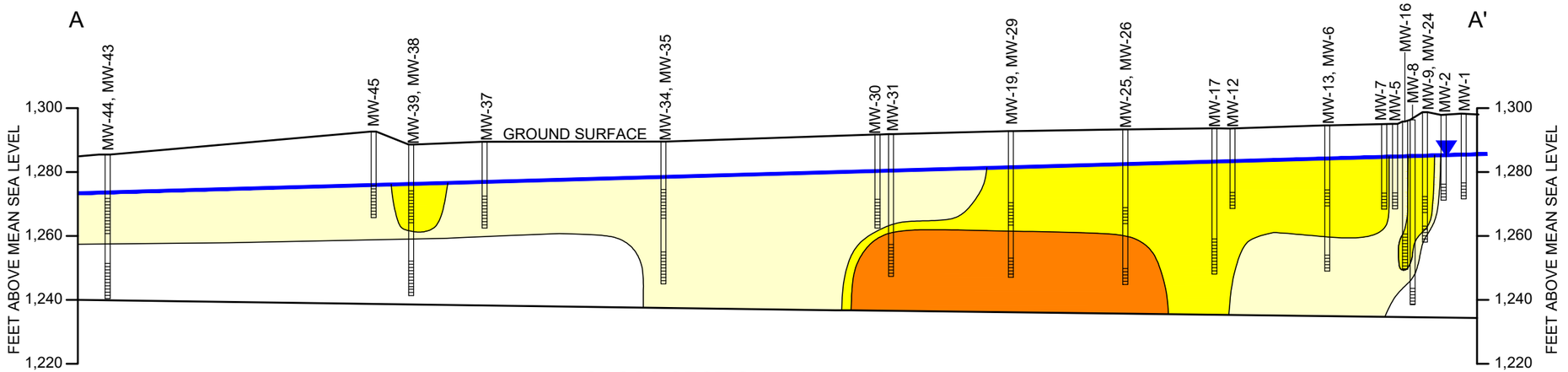
Drawn By: NM Checked By: TM

FIGURE D2

CROSS SECTION OF 1,2-DCP
GROUNDWATER PLUME
MARCH 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2022-03 X-Sec.dwg 2/02/2022 10:27:1 PM (Nick Miller)



CROSS SECTION JUNE 2022

LEGEND

MW-1 — MONITORING WELL

BLANK CASING

WELL SCREENED INTERVAL

ISOCONCENTRATION CONTOUR

POTENTIOMETRIC SURFACE

1,2-DCP = 1,2-DICHLOROPROPANE

µg/l = MICROGRAMS PER LITER

1,2-DCP 0.20 µg/l - 0.99 µg/l

1,2-DCP 1.0 µg/l - 9.9 µg/l

1,2-DCP 10 µg/l - 100 µg/l

40'

0'

0'

240'

FARALLON CONSULTING

Your Challenges. Our Priority. | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

Drawn By: NM Checked By: TM

FIGURE D3

CROSS SECTION OF 1,2-DCP
GROUNDWATER PLUME
JUNE 2022
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

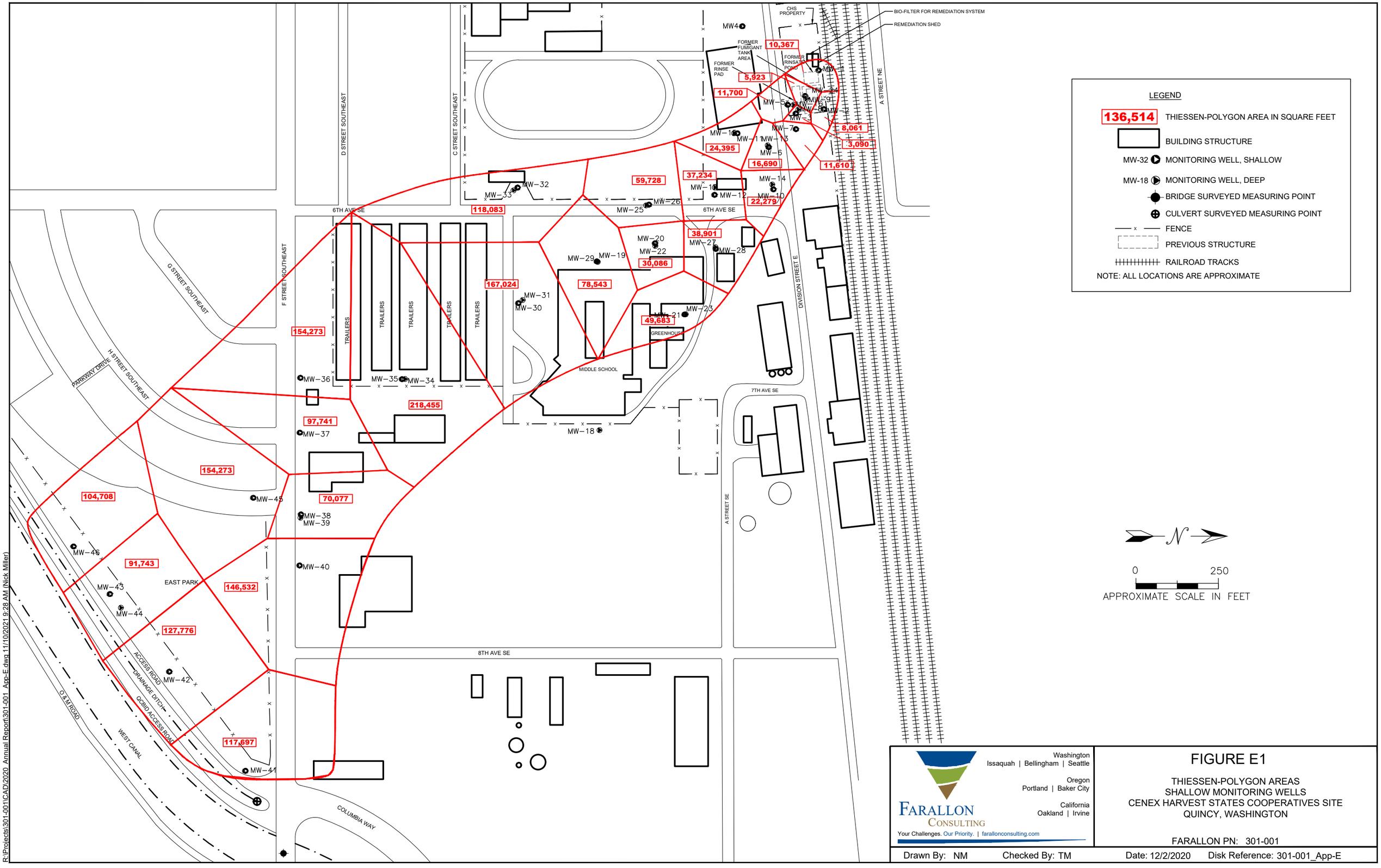
FARALLON PN: 301-001

R:\Projects\301-001\CAD\Figures\2022-11 Annual Report\2022-06 X-Sec.dwg 11/7/2022 1:47 PM (Nick Miller)

APPENDIX E
1,2-DCP MASS CALCULATION FIGURES AND CHART

ANNUAL REPORT 2022
Cenex Harvest States Cooperatives Site
300 Division Street East
Quincy, Washington

Farallon PN: 301-001



Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

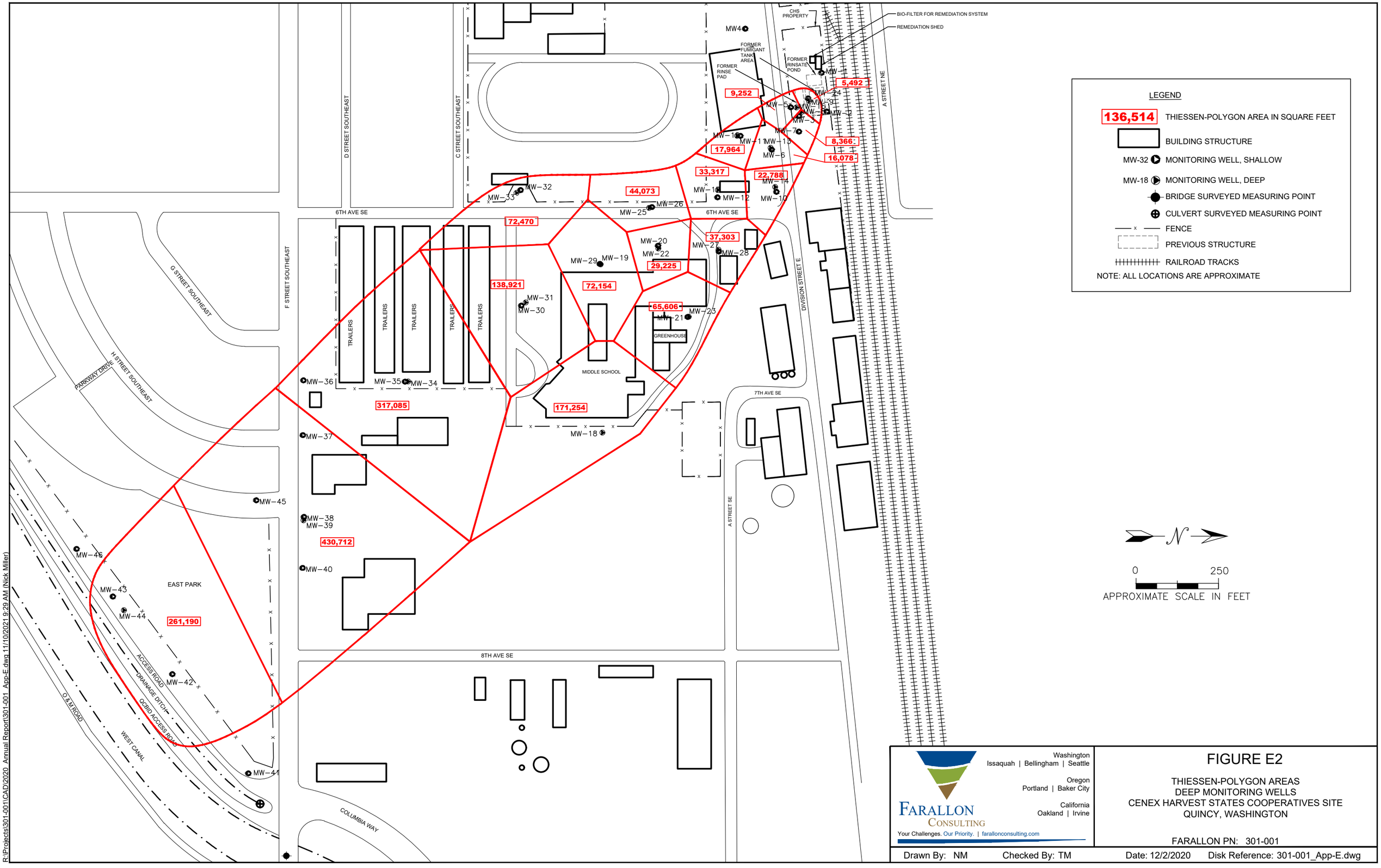
FIGURE E1

THIESSEN-POLYGON AREAS
SHALLOW MONITORING WELLS
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

Drawn By: NM Checked By: TM Date: 12/2/2020 Disk Reference: 301-001_App-E

R:\Projects\301-001\CAD\2020 Annual Report\301-001 App-E.dwg 11/10/2021 9:28 AM (Nick Miller)



R:\Projects\301-001\CAD\2020 Annual Report\301-001 App-E.dwg 11/10/2021 9:29 AM (Nick Miller)

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FARALLON CONSULTING
Your Challenges. Our Priority. | farallonconsulting.com

FIGURE E2

THIESSEN-POLYGON AREAS
DEEP MONITORING WELLS
CENEX HARVEST STATES COOPERATIVES SITE
QUINCY, WASHINGTON

FARALLON PN: 301-001

Drawn By: NM Checked By: TM Date: 12/2/2020 Disk Reference: 301-001_App-E.dwg

Chart E1
Summary of 1,2-DCP Mass Calculations
Cenex Harvest States Cooperatives Site
Quincy, Washington
Farallon PN: 301-001