

TECHNICAL MEMORANDUM

TO: Sandy Smith, PE, LHG, Washington State Department of Ecology
CC: Eric Huseby, City of Tacoma
FROM: Katie Gauglitz, LG, and Joshua Burbach, EIT
DATE: July 15, 2025
RE: Long-Term Groundwater Monitoring Status Report No. 12
2025 Annual Groundwater Monitoring
Former Sauro's Cleanerama Site
Tacoma, Washington
Project No. 0094048.100.108

INTRODUCTION

On behalf of the City of Tacoma (City), Landau Associates, Inc. (Landau) is providing results for long-term groundwater monitoring activities at the former Sauro's Cleanerama site (site). Figure 1 shows the site location.

The City is implementing a Cleanup Action Plan (CAP; Ecology 2014), which is part of Agreed Order (AO) No. DE 11080 between the City and the Washington State Department of Ecology (Ecology). Under the CAP, the City is implementing the monitored natural attenuation (MNA) remedy selected in the feasibility study, which has a total 30-year timeframe. As identified in the AO (Ecology 2015), 2013 is the first year of MNA; year 30 will be 2043. Following completion of the AO and CAP, the City conducted 2 years of semiannual groundwater monitoring, beginning in January 2016 and continuing through July 2017. After completion of semiannual monitoring, winter was identified as the appropriate sampling timeframe because higher volatile organic compound (VOC) concentrations generally occur during the winter (Landau 2017). The City received approval from Ecology (Coleman 2018), and commenced the annual sampling in January 2018.

This technical memorandum summarizes the twelfth groundwater monitoring event under the CAP, conducted on January 13, 2025. Monitoring includes collection of groundwater samples and analysis for VOCs and MNA geochemical parameters, in accordance with the CAP.

GROUNDWATER MONITORING PROGRAM SUMMARY

The existing site groundwater monitoring well network includes 17 wells. Of the 17 wells, nine were selected for long-term monitoring under the CAP. Figure 2 shows the locations of the nine wells selected for long-term monitoring. Table 1 presents a sampling matrix for the long-term monitoring wells.

During the January 2025 sampling event, groundwater samples were collected in accordance with the *Sampling and Analysis Plan* (Landau 2013). Samples for VOC and MNA analysis were collected using a peristaltic pump at MW-2. The other eight wells were sampled using passive diffusion bags for VOCs and dedicated Waterra foot valves for MNA parameters. VOC samples at RNS-MW6 are collected at two discrete depths because of the relatively long screen (20 feet) and because prior sampling has demonstrated stratification within the well; all other wells were sampled at a single depth. All samples were submitted for analysis under proper chain-of-custody protocols to Eurofins TestAmerica Laboratories, Inc. (laboratory) located in Fife, Washington.

All groundwater samples were analyzed by the laboratory for VOC constituents of concern tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cDCE), and vinyl chloride (VC); and MNA parameters (chloride, nitrate, nitrite, total organic carbon [TOC], sulfate, sulfide, and dissolved gases [acetylene, methane, ethane, and ethene]). Samples were analyzed using the following methods: VOCs by US Environmental Protection Agency (EPA) Method 8260D, nitrate/nitrite and chloride/sulfate by EPA Method 300.0, TOC by EPA Method SM 5310B, sulfide by SM 4500-S2 D, and dissolved gases by EPA Method RSK-175. Field parameters were also collected, including dissolved oxygen (DO) and oxygen-reduction potential (ORP) using a field meter (YSI Quatro Pro Plus or similar) and ferrous iron using a HACH® field test kit (Model IR-18C). A duplicate sample was collected at LAI-MW3 (Dup1) for quality control purposes. Data will be electronically submitted to Ecology's Environmental Information Management system in spring 2025.

The analytical data were reviewed and validated (S2AVM; Ecology 2009) by an independent team at Landau for data quality indicator parameters (precision, accuracy, representativeness, comparability, completeness, and sensitivity) in accordance with the project CAP (Ecology 2014) and with guidance from applicable sections of EPA National Functional Guidelines (EPA 2020a, 2020b). Data were flagged with data validation qualifiers if the quality indicator parameters were not met. Overall, results were determined to be acceptable for use with the qualifications added to the data as indicated in the data tables. Data were qualified as estimated (J/UJ) low matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and/or high field duplicate relative percent differences (RPDs). Completeness is a measure of the amount of valid data collected compared to the amount planned; measurements qualified as estimated or non-detect are still considered valid; however, rejected data points are invalid. The completeness for this dataset was 100 percent complete.

Table 2 presents the analytical methods, practical quantitation limits (i.e., reporting limits), preservatives, and holding times. Groundwater elevations and contours are presented on Figure 2 and in Table 3. Figure 3 and Table 4 present VOC analytical results. Table 5 presents MNA analytical results. VOC time series plots are provided in Attachment 1. A copy of the laboratory data packages for the most recent sampling event (January 2025), cumulative results, and copies of the January 2025 sample collection forms are provided in Attachments 2, 3, and 4, respectively.

Groundwater Elevation Results

Groundwater conditions at the site are influenced by local geology and precipitation. During January 2025, groundwater elevations at monitoring wells nearest to the former Sauro's property were about

34 feet higher than those at downgradient monitoring well LAI-MW4, furthest from the Sauro's property and nearest the Thea Foss Waterway. The groundwater flows east, towards the Thea Foss Waterway.

In October 2021, construction of a new surface water pipeline, and dewatering activities, began near Dock Street in the vicinity of LAI-MW4 as part of the Jefferson and Hood Street Surface Water Interceptor pipeline construction project. Review of the groundwater analytical data collected at LAI-MW4 indicates that the aquifer in this location was likely affected by the construction project. Construction in the Dock Street area continued through summer of 2022. The pipeline was installed at a depth of 21 to 27 feet along Dock Street and is approximately 22 feet deep near LAI-MW4. Dewatering took place in the vicinity of Dock Street from December 2021 through May 2022. The location of the pipeline is shown on Figure 2.

Elevated concentrations of chloride and sulfate and decreased concentrations of methane were observed at LAI-MW4 beginning in 2022. It appears that these changes coincide with the construction schedule described above. Chloride and sulfate are associated with seawater intrusion, and observed increases of these constituents is likely the result of construction dewatering. Since 2023, the concentrations of chloride and sulfate have trended back toward concentrations observed before 2022. In 2025, the observed concentration of methane at LAI-MW4 recovered to approximately 50 percent of its previous concentration. These data indicate that the effects of seawater intrusion have persisted following the conclusion of the construction dewatering activities; however, concentrations have been trending back toward pre-construction levels. In general, the effects of seawater intrusion can take several years to fully dissipate.

Pre-construction analytical data collected from LAI-MW4, which shows consistently low concentrations of chloride and sulfate, don't suggest that there is tidal influence on groundwater conditions at the monitoring well. The recent increases in chloride and sulfate data appear to be related to the pipeline construction and dewatering activities.

Volatile Organic Compound Results

The VOC plume at the site is somewhat bifurcated, with the main portion of the plume extending east-northeast of the site and a smaller, lower-concentration portion of the plume extending south-southeast of the site. The east-northeast segment of the plume is characterized by monitoring wells LAI-MW5, RNS-MW6, MW-13, LAI-MW1, LAI-MW2, LAI-MW3, and LAI-MW4. The south-southeast segment of the plume is characterized by monitoring wells RNS-MW2 and MW-2.

VOC analytical results from the January 2025 sampling event are consistent with historical results. At four wells (LAI-MW1, LAI-MW5, MW-2, and LAI-MW-4), all VOC concentrations are below their respective cleanup levels. LAI-MW5 is located adjacent to the northeast corner of the property, LAI-MW1 bounds the northern edge of the east-northeast segment of the plume, MW-2 is located toward the downgradient end of the south-southeast segment of the plume, and LAI-MW4 is located downgradient from the property near the western bank of the Thea Foss Waterway. At the five remaining wells, one or more VOCs exceeded cleanup levels. The cleanup level for both PCE and TCE

is 5 micrograms per liter ($\mu\text{g/L}$), the cleanup level for cDCE is 70 $\mu\text{g/L}$, and the cleanup level for VC is 0.2 $\mu\text{g/L}$. cDCE did not exceed the performance standard in any well in 2025.

- LAI-MW2, MW-13, and RNS-MW6 (42.5 and 52.5 feet), which are located in the core of the east-northeast plume segment, continue to report the highest concentrations of VOCs.
 - The January 2025 results indicate concentrations above cleanup levels for PCE and TCE at all four sampling points. VC exceeded the cleanup level only at MW-13 and LAI-MW2.
 - Concentrations of PCE at these wells ranged from 190 $\mu\text{g/L}$ to 240 $\mu\text{g/L}$, and concentrations of TCE ranged from 74 $\mu\text{g/L}$ to 92 $\mu\text{g/L}$.
 - VC concentrations at MW-13 and LAI-MW2 were 0.35 $\mu\text{g/L}$ and 0.34 $\mu\text{g/L}$, respectively.
- Analytical results from LAI-MW3, also located in the east-northeast plume segment but downgradient of the core of the plume, indicate that concentrations of PCE and TCE exceed applicable cleanup levels; however, concentrations are somewhat lower (at an approximate 65 $\mu\text{g/L}$ and 28 $\mu\text{g/L}$, respectively¹) than at the four monitoring points discussed above. PCE and TCE concentrations at LAI-MW3 are similar to previously measured concentrations in 2023 and 2024. VC was not detected at concentrations exceeding the laboratory reporting limit at this location; however, the reporting limits were elevated in 2023 and 2024.
- Analytical results from RNS-MW2, located in the south-southeast plume segment, indicate that the concentration of PCE (15 $\mu\text{g/L}$) continues to exceed the applicable cleanup level. However, the concentration of PCE at adjacent well MW-2 (0.71 $\mu\text{g/L}$) is well below the cleanup level. RNS-MW2 is screened slightly deeper (38.5 feet below ground surface [ft bgs]), than MW-2 (15 ft bgs).

Discussion of Volatile Organic Compound Data Trends

An interim soil removal action was completed at the site in 2010 and the site was subsequently filled and paved. In the downgradient wells nearest the source area (RNS-MW6 and MW-13), a period of increasing VOC concentrations occurred following the removal action, likely due to significant soil disturbance associated with the removal action. A turning point occurred in 2013, and formerly increasing VOC concentration trends at RNS-MW6 and MW-13 began to decline. In wells farther downgradient (RNS-MW2, LAI-MW2, and LAI-MW3), the shift in concentration trends from increasing to decreasing occurred later, in 2016. The following sections provide detailed observations regarding VOC concentration trends. VOC concentration time series plots are provided in Attachment 1.

East-Northeast Plume Segment

- LAI-MW1 and LAI-MW5 historically showed sporadic detections of VOCs; however, VOCs have not been detected in either well since 2018 and 2019, respectively. LAI-MW5 is located adjacent to the former source area, and LAI-MW1 is located downgradient of the source area in the north-northeast direction and bounds the northern edge of the plume.
- LAI-MW4 bounds the plume to the east. VOC concentration at this well do not exhibit an apparent trend and constituents are detected intermittently. cDCE has never exceeded the cleanup level. TCE and PCE have not been detected in this well at concentrations greater than the cleanup level. VC has

¹ Concentrations are the result of laboratory estimation and have been assigned a “J” flag.

been sporadically detected above the cleanup level, with the last exceedance recorded in 2022. Only TCE and cDCE were detected in January 2025 (0.37 µg/L and 2.1 µg/L, respectively).

- RNS-MW6, located immediately downgradient of the source area, is sampled at two depths within the 20-ft screen. The trends observed at each depth are similar to each other.
 - VOC concentration trends at the 42.5-ft depth vary by constituent. PCE, TCE, and cDCE have all shown decreasing trends since 2013. VC was last detected in 2021 at a concentration of 0.38 µg/L. However, reporting limits for VC were elevated in 2022 through 2025 [2022 (10 µg/L), 2023 (4 µg/L), or 2024/2025 (2 µg/L)].
 - The data trends at the 52.5-ft sampling depth are similar to the trends at the 42.5-ft depth. VC reporting limits were also similarly elevated in 2022 through 2024. VC was last detected at a concentration of 0.37 µg/L in 2021.
- Data trends in the mid-plume region are generally declining.
 - Concentrations at MW-13 show an overall decreasing trend since 2013. Reporting limits for VC were elevated at this well in 2022 through 2024, similar to RNS-MW6. However, the well exhibits an overall declining VC trend, excluding the years with elevated reporting limits. MW-13 is located down-gradient of the source area and RNS-MW6.
 - At LAI-MW2, peak concentrations of PCE, TCE, and cDCE occurred in 2016, somewhat later than at other upgradient wells. After 2016, concentrations of all four VOCs show declining trends. VC was not detected above the elevated laboratory reporting limit in 2022 (2 µg/L) or 2023/2024 (10 µg/L). VC was detected in 2025 at the lowest concentration reported to date (0.44 µg/L).
 - LAI-MW3 exhibits overall decreasing trends for PCE, TCE, and cDCE from 2016 to present. VC has not been detected at this well since 2016, and VC was not detected above the reporting limit of 0.2 µg/L in 2025. However, reporting limits for VC were elevated to 2 µg/L in 2023 and 2024.

South-Southeast Plume Segment

- At RNS-MW2, only PCE exceeded the applicable cleanup level in 2025. PCE concentrations showed an increasing trend until 2016; however, concentrations have been declining since then. TCE shows an overall declining trend, and concentrations have consistently been below the cleanup level. VC has never been detected above the reporting limit at this well.
- At MW-2, no constituents exceeded cleanup levels in 2025. Concentrations show decreasing trends for all four VOCs through 2013, after which the data has been somewhat variable, with only VC occasionally exceeding the cleanup level. The fluctuations observed at this location may be attributed to the presence of the footing drain on the east side of the building located at 1411 Pacific Avenue, which appears to influence groundwater flow southeast of the property.

Monitored Natural Attenuation Results

Natural attenuation of chlorinated ethenes occurs through several mechanisms, with the primary mechanism being biologically mediated reductive dechlorination. For reductive dechlorination to occur, the aquifer must be reducing, and a food source (electron donor) for the bacteria must be available. Measures of aquifer redox conditions include DO, ORP, nitrate, ferrous iron, sulfate, and methane. TOC concentration is a measure of available electron donor. In general, low concentrations of DO, nitrate, and sulfate, and detections or elevated concentrations of ferrous iron and methane are indicators of

reduced aquifer conditions. However, the redox state of the aquifer can be variable and complex, and assessment requires evaluation of multiple indicators. 2025 MNA results are presented in Table 5, and a cumulative MNA table is presented in Attachment 3.

MNA data appear to suggest the most favorable conditions for reductive dechlorination are at LAI-MW5 (near the source area), MW-2 (southeast of the source area), and LAI-MW4 (the most downgradient well) where ferrous iron concentrations are highest. Elevated TOC concentrations also occur at these wells, indicating the presence of electron donor. Methane concentrations are elevated at LAI-MW5 but are currently low at MW-2 and LAI-MW4; methane concentrations were previously higher at all three wells. Indicators of reducing aquifer conditions and electron donor availability at LAI-MW5, MW-2, and LAI-MW4 during the January 2025 sampling event are summarized below.

- Ferrous iron was detected in the three wells at concentrations of 5.0 milligrams per liter (mg/L) at LAI-MW5 and LAI-MW4, and at 5.4 mg/L at MW2.
- Nitrate and nitrite were non-detect at LAI-MW5 and LAI-MW4. At MW-2, nitrate was detected at 2.4 mg/L and nitrite was non-detect.
- The sulfate concentration at LAI-MW5 is relatively low (4.5 mg/L), but sulfate concentrations remain elevated LAI-MW4 and MW2 (33 mg/L and 31 mg/L, respectively). LAI-MW4 had significantly increased concentrations of sulfate in 2022 and 2023 that may be indicative of saltwater intrusion, but concentrations decreased through 2025.
- Methane was detected at a concentration of 6.80 mg/L at LAI-MW5, which is considered elevated and indicative of methanogenesis. Methane concentrations at MW2 and LAI-MW4 were relatively low (0.53 mg/L and 0.49 mg/L, respectively).
- TOC concentrations were somewhat elevated at each of the three wells, with concentrations of 5.2 mg/L at LAI-MW5, 3.3 mg/L at MW-2, and 3.0 mg/L at LAI-MW4.

At the remaining six wells, results indicate minimal capacity for reductive dechlorination. Ferrous iron was not present (except for a low-level detection of 1.0 mg/L at RNS-MW2), and TOC was not detected above the laboratory reporting limit. Although nitrate/nitrite are low or not detected at the remaining wells, sulfate remains somewhat elevated, and sulfide, the reduced form of sulfur, is not detected.

PLANNED GROUNDWATER MONITORING ACTIVITIES

Groundwater monitoring results will continue to be submitted to Ecology 60 days after completion of sampling activities. The next scheduled sampling event will occur in January 2026.

USE OF THIS TECHNICAL MEMORANDUM

This technical memorandum has been prepared for the exclusive use of the City of Tacoma and Washington State Department of Ecology for specific application to the former Sauro's Cleanerama Groundwater Monitoring project. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau, shall be at the user's sole

risk. Landau warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. Landau makes no other warranty, either express or implied.

Please contact us if you have any questions concerning groundwater monitoring activities at the site or the results presented in this status report. This document has been prepared under the supervision and direction of the following key staff.

LANDAU ASSOCIATES, INC.



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JDB/KMG/JWW/tac

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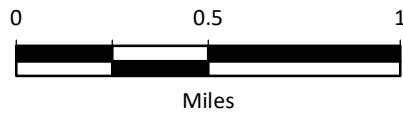
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Landau. 2021. Technical Memorandum: Long-Term Groundwater Monitoring Status Report No. 8, January 2021 Annual Groundwater Monitoring, Former Sauro's Cleanerama Site; Tacoma, Washington. Landau Associates, Inc. April 19.

ATTACHMENTS

- Figure 1: Vicinity Map
- Figure 2: Groundwater Elevations (January 2025)
- Figure 3: VOC Concentrations in Groundwater (January 2025)
- Table 1: Sample Matrix
- Table 2: Laboratory Analytical and Field Parameter Details
- Table 3: Groundwater Elevations
- Table 4: Groundwater Analytical Results for Constituents of Concern
- Table 5: Monitored Natural Attenuation Parameters
- Attachment 1: Constituents of Concern Concentration Time Series Plots
- Attachment 2: January 2025 Laboratory Data Package
- Attachment 3: Cumulative Results Table
- Attachment 4: Sample Collection Forms



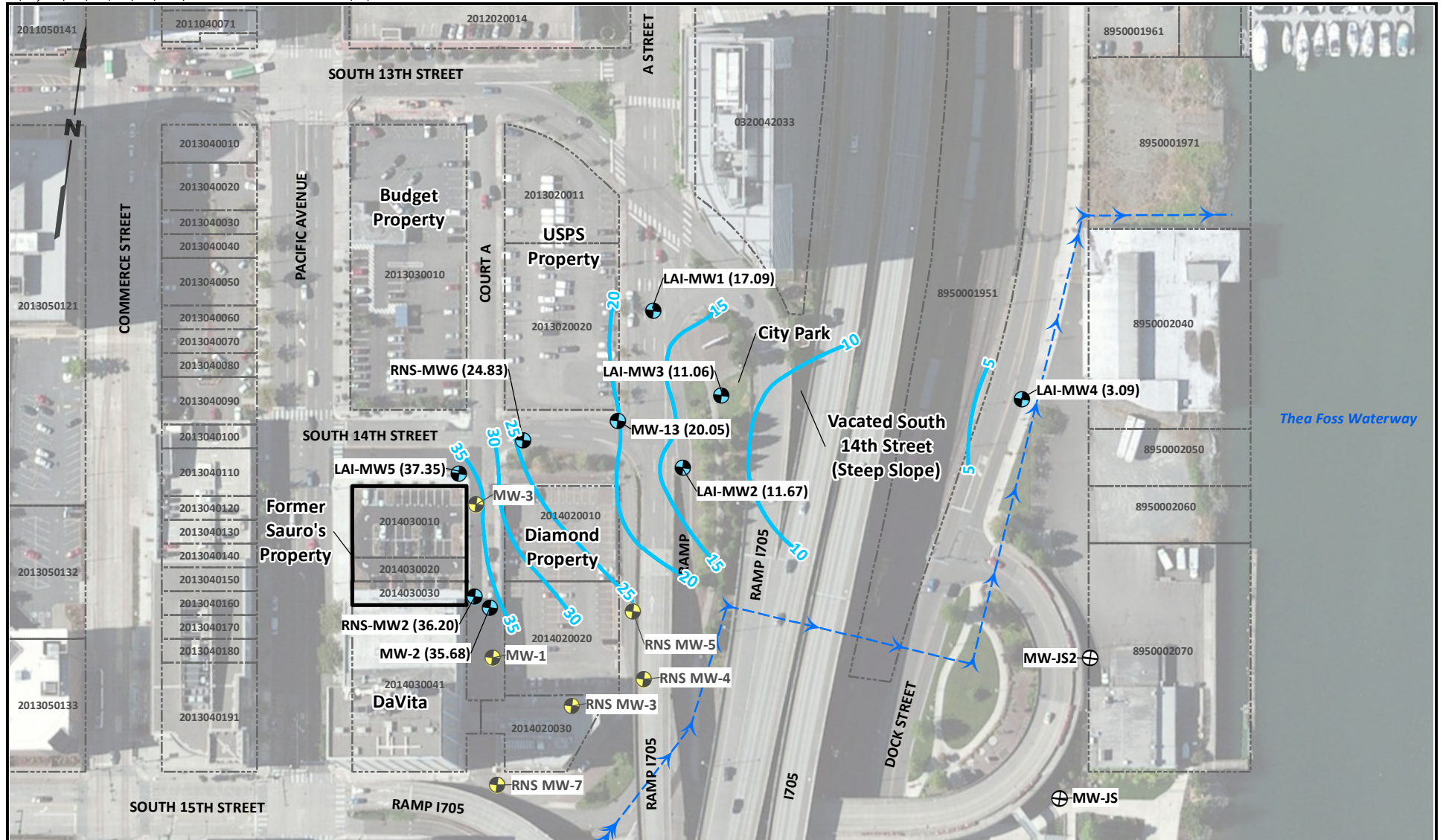
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Sauro's Cleanerama
Tacoma, Washington

Vicinity Map

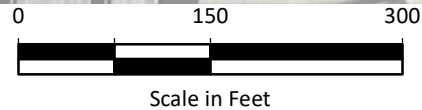
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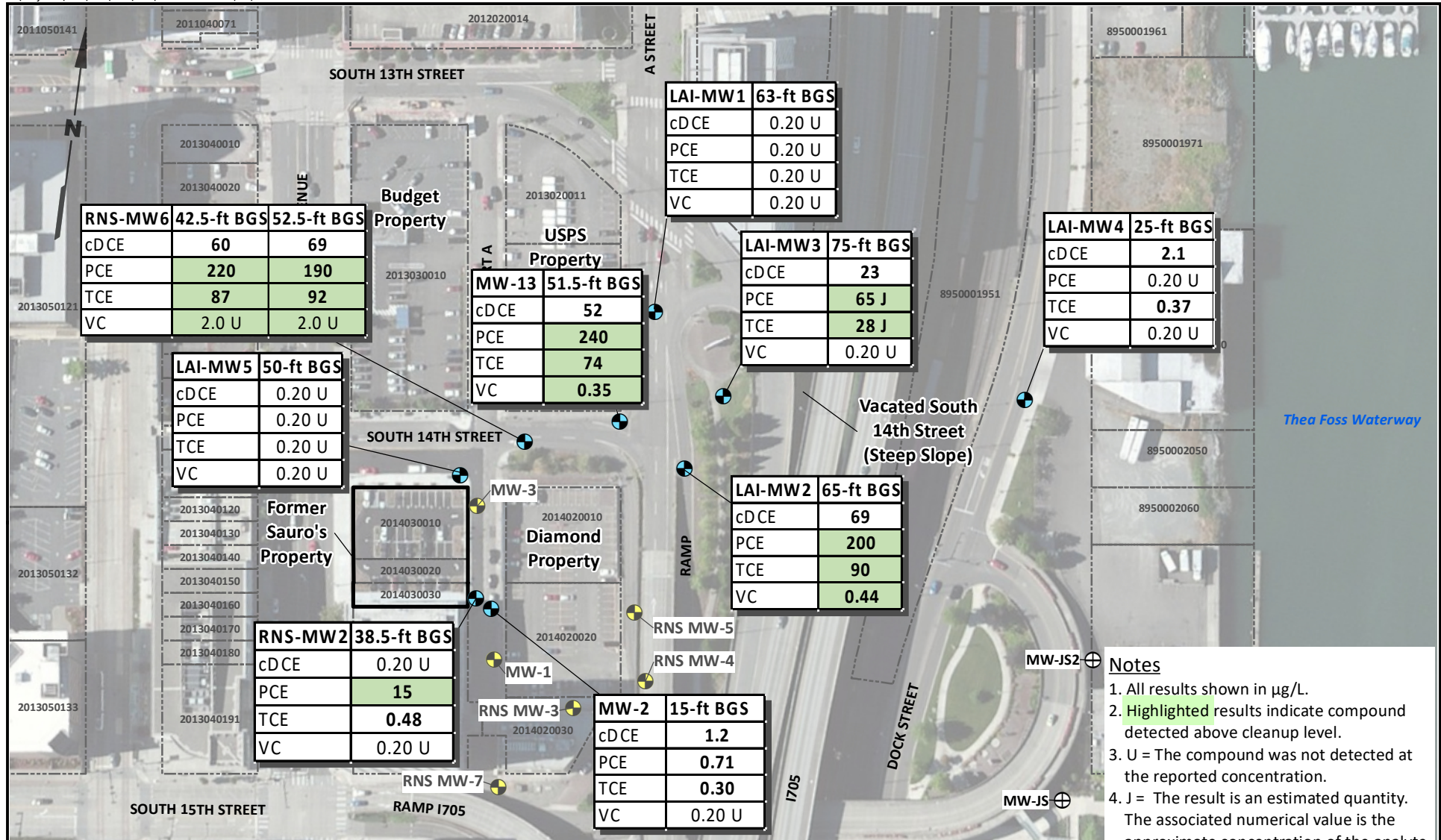
Legend

- Long-Term Groundwater Monitoring Well (and Groundwater Elevation)
- Pre-RI Monitoring Well
- Non-Project Wells
- Groundwater Elevation Contour
- Surface Water Pipeline
- Subject Property
- Tax Parcels with Parcel ID



Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Notes

1. All results shown in µg/L.
2. Highlighted results indicate compound detected above cleanup level.
3. U = The compound was not detected at the reported concentration.
4. J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Long-Term Groundwater Monitoring Well (and Sampling Depth)
- Pre-RI Monitoring Well
- ⊕ Non-Project Wells
- ▭ Subject Property
- ▭ Tax Parcels with Parcel ID

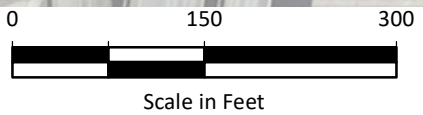


Table 1
Sample Matrix
Former Sauro's Cleanerama Site – Tacoma, Washington

Location	VOC Sampling Depth (ft)	VOC Sampling Method	MNA Parameters Sampling Depth (ft)	MNA Parameters Sampling Method
LAI-MW1	63	PDB	63	WAT
LAI-MW2	65	PDB	65	WAT
LAI-MW3	75	PDB	75	WAT
LAI-MW4	25	PDB	25	WAT
LAI-MW5	50	PDB	50	WAT
MW-2	15	PP	15	PP
MW-13	51.5	PDB	51.5	WAT
RNS-MW2	38.5	PDB	38.5	WAT
RNS-MW6 ^a	42.5 and 52.5	PDB	47.5	WAT

Note:

^a For RNS-MW6, where there are two VOC sampling depths, the MNA sampling depth is the mid-point between the two VOC sampling depths.

Abbreviations/Acronyms:

ft = foot/feet

HDPE = high-density polyethylene

MNA = monitored natural attenuation

PDB = passive diffusion bag

PP = peristaltic pump with dedicated tubing

VOC = volatile organic compound

WAT = (dedicated) Waterra foot valve (with dedicated 5/8-inch HDPE tubing)

Table 2
Laboratory Analytical and Field Parameter Details
Former Sauro's Cleanerama Site – Tacoma, Washington

Groundwater Analytical Parameters	EPA Analytical Method	Practical Quantitation Limit	Preservation	Maximum Holding Time (Days)
Volatile Organic Compounds				
Tetrachloroethene	8260D	0.2 µg/L	Add HCl to pH<2; Store cool at 6°C	14
Trichloroethene	8260D	0.2 µg/L	Add HCl to pH<2; Store cool at 6°C	14
cis-1,2-Dichloroethene	8260D	0.2 µg/L	Add HCl to pH<2; Store cool at 6°C	14
Vinyl Chloride	8260D	0.2 µg/L	Add HCl to pH<2; Store cool at 6°C	14
Monitored Natural Attenuation				
Chloride	300.0	1.5 mg/L	Store cool at 6°C	28
Nitrate (NO ₃) (Total) as N	300.0	0.2 mg/L ^a	Store cool at 6°C	48 hours
Nitrite (NO ₂) (Total) as N	300.0	0.4 mg/L ^a	Store cool at 6°C	48 hours
Total Organic Carbon	SM 5310C	1.00 mg/L	Add 2mL 9N H2SO4 pH<2; Store at 6°C	28
Sulfate (SO ₄) (Total)	300.0	1.5 mg/L	Store cool at 6°C	28
Sulfide (SO ₂) (Total)	SM 4500-S2 D	0.050 mg/L	Store cool at 6°C	7
AMEE	RSK-175	0.0050 mg/L	Store cool at 6°C	14

Groundwater Field Parameters	Data Collection Method	Instrument	Units
Monitored Natural Attenuation			
Conductivity	Field meter	YSI ^b	µS/cm
Dissolved Oxygen	Field meter	YSI ^b	mg/L
Oxidation Reduction Potential	Field meter	YSI ^b	units +/- mV
pH	Field meter	YSI ^b	unitless
Temperature	Field meter	YSI ^b	(°C)
Ferrous Iron (Fe ²⁺)	Field meter	Hach [®] Kit	mg/L
Turbidity	Field meter	Turbidity Meter	NTU
Water Level	Field meter	Water Level Indicator	0.01 ft

Notes:

^a Reporting limits for nitrate and nitrite were raised prior to the July 2016 sampling event because of laboratory capabilities.

^b YSI shall be recalibrated daily.

Abbreviations/Acronyms:

AMEE = acetylene, methane, ethane, and ethene

°C = degrees Celsius

EPA = US Environmental Protection Agency

ft = foot

µg/L = micrograms per liter

mg/L = milligrams per liter

mL = milliliters

mV = millivolts

µS/cm = microSiemens per centimeter

NTU = nephelometric turbidity units

Table 3
Groundwater Elevations
Former Sauro's Cleanerama Site — Tacoma, Washington

Location	Measurement Date	Measurement Time	Depth to Water (ft)	Top of Casing Elevation (ft) ^(a)	Calculated Groundwater Elevation (ft)
LAI-MW1	1/13/2025	10:38	45.29	62.38	17.09
LAI-MW2	1/13/2025	9:15	44.90	56.57	11.67
LAI-MW3	1/13/2025	11:41	50.62	61.68	11.06
LAI-MW4	1/13/2025	7:57	11.15	14.24	3.09
LAI-MW5	1/13/2025	13:04	23.65	61.00	37.35
MW13	1/13/2025	15:40	39.16	59.21	20.05
MW2	1/13/2025	13:12	15.38	51.06	35.68
RNS-MW2	1/13/2025	14:28	16.21	52.41	36.20
RNS-MW6	1/13/2025	16:38	35.59	60.42	24.83

Notes:

^(a) Vertical datum is National Geodetic Vertical Datum of 1929.

Acronyms/Abbreviations:

ft = feet

Table 4
Groundwater Analytical Results for Constituents of Concern
Former Sauro's Cleanerama Site – Tacoma, Washington

Analyte	Groundwater MTCA Method A CUL or Federal/State MCL (µg/L)	Sampling Location, Sampling Date, Laboratory Sample ID, Sample Type										
		LAI-MW1	LAI-MW2	LAI-MW3	LAI-MW3	LAI-MW4	LAI-MW5	MW2	MW13	RNS-MW2	RNS-MW6-42.5	RNS-MW6-52.5
		1/13/2025 580-147289-2 N	1/13/2025 580-147289-3 N	1/13/2025 580-147289-4 N	1/13/2025 580-147289-5 FD	1/13/2025 580-147289-6 N	1/13/2025 580-147289-7 N	1/13/2025 580-147289-8 N	1/13/2025 580-147289-9 N	1/13/2025 580-147289-10 N	1/13/2025 580-147289-11 N	1/13/2025 580-147289-12 N
Volatile Organic Compounds (µg/L; SW-846 8260D)												
cis-1,2-Dichloroethene	70 ^a	0.20 U	69	23	27	2.1	0.20 U	1.2	52	0.20 U	60	69
Tetrachloroethene	5	0.20 U	200	65 J	97 J	0.20 U	0.20 U	0.71	240	15	220	190
Trichloroethene	5	0.20 U	90	28 J	37 J	0.37	0.20 U	0.30	74	0.48	87	92
Vinyl Chloride	0.2	0.20 U	0.44	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.35	0.20 U	2.0 U	2.0 U

Notes:

U = The compound was not detected at the reported concentration.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Bold = detected analyte

Green highlighting = compound detected at concentrations above cleanup criteria.

^a Cis-1,2-Dichloroethene does not have a MTCA Method A CUL for groundwater; therefore, the federal/state primary MCL value of 70 µg/L is used as the CUL.

Abbreviations and Acronyms:

µg/L = micrograms per liter

CUL = cleanup level

FD = field duplicate

ID = identification

MCL = maximum contaminant levels

MTCA = Model Toxics Control Act

N = primary sample

Table 5
Monitored Natural Attenuation Parameters
Former Sauro's Cleanorama Site – Tacoma, Washington

Analyte	Sampling Location, Sampling Date, Laboratory Sample ID, Sample Type									
	LAI-MW1 1/13/2025 580-147289-2 N	LAI-MW2 1/13/2025 580-147289-3 N	LAI-MW3 1/13/2025 580-147289-4 N	LAI-MW3 1/13/2025 580-147289-5 FD	LAI-MW4 1/13/2025 580-147289-6 N	LAI-MW5 1/13/2025 580-147289-7 N	MW2 1/13/2025 580-147289-8 N	MW13 1/13/2025 580-147289-9 N	RNS-MW2 1/13/2025 580-147289-10 N	RNS-MW6-52.5 1/13/2025 580-147289-12 N
	Natural Attenuation Parameters (mg/L; EPA 300.0/SM 4500-S2-D/SM 5310B)									
Chloride	80	23	39	39	430	120	14	64	27	47
Nitrogen, Nitrate (as N)	1.3	0.20 U	0.59	0.60	0.20 U	0.20 U	2.4	0.54	2.6	0.60
Nitrogen, Nitrite	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Sulfate	14	17	19	19	33	4.5	31	20	21	24
Sulfide, Total	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Total Organic Carbon (TOC)	1.0 U	1.0 U	1.0 U	1.0 U	3.0	5.2	3.3	1.0 U	1.0 U	1.0 U
Dissolved Gases (mg/L; RSK-175)										
Acetylene	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
Ethane	0.0015 U	0.0020 J	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
Ethene	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
Methane	0.0015 U	0.0099	0.0015 U	0.0015 U	0.49	6.8	0.53	0.012	0.0018 J	0.0076
Field Parameters										
Temperature (°C)	14.7	13.8	12.5	12.6	12.2	13.8	11.8	14.8	14.5	13.1
Dissolved Oxygen (mg/L)	1.19	0.69	5.77	5.50	0.56	1.23	1.87	0.46	7.13	1.03
Oxidation Reduction Potential (mV)	24.5	4.4	29.9	32.3	-141.1	-50.6	251.0	17.8	33.6	29.6
pH (SU)	6.63	7.00	7.08	7.06	7.07	6.45	6.54	6.87	6.96	6.71
Ferrous Iron (mg/L)	<0.5	<0.5	<0.5	<0.5	5.0	5.0	5.4	<0.5	1.0	<0.5

Notes:

Bold text indicates detected analyte.

U = The compound was not detected at the reported concentration.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Abbreviations and Acronyms:

°C = degrees Celsius

EPA = US Environmental Protection Agency

FD = field duplicate

ID = identification

mg/L = milligrams per liter

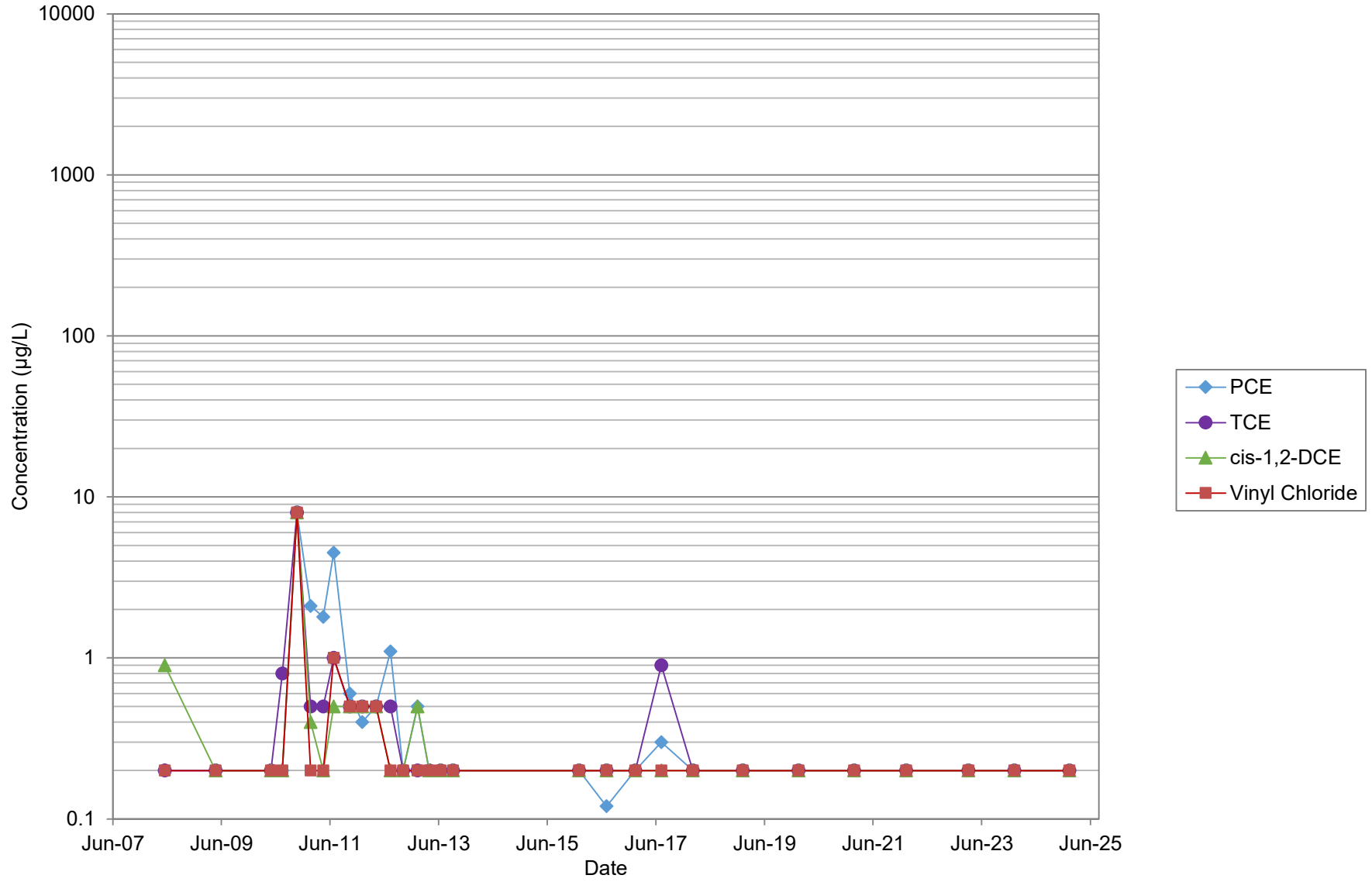
mV = millivolt

N = primary sample

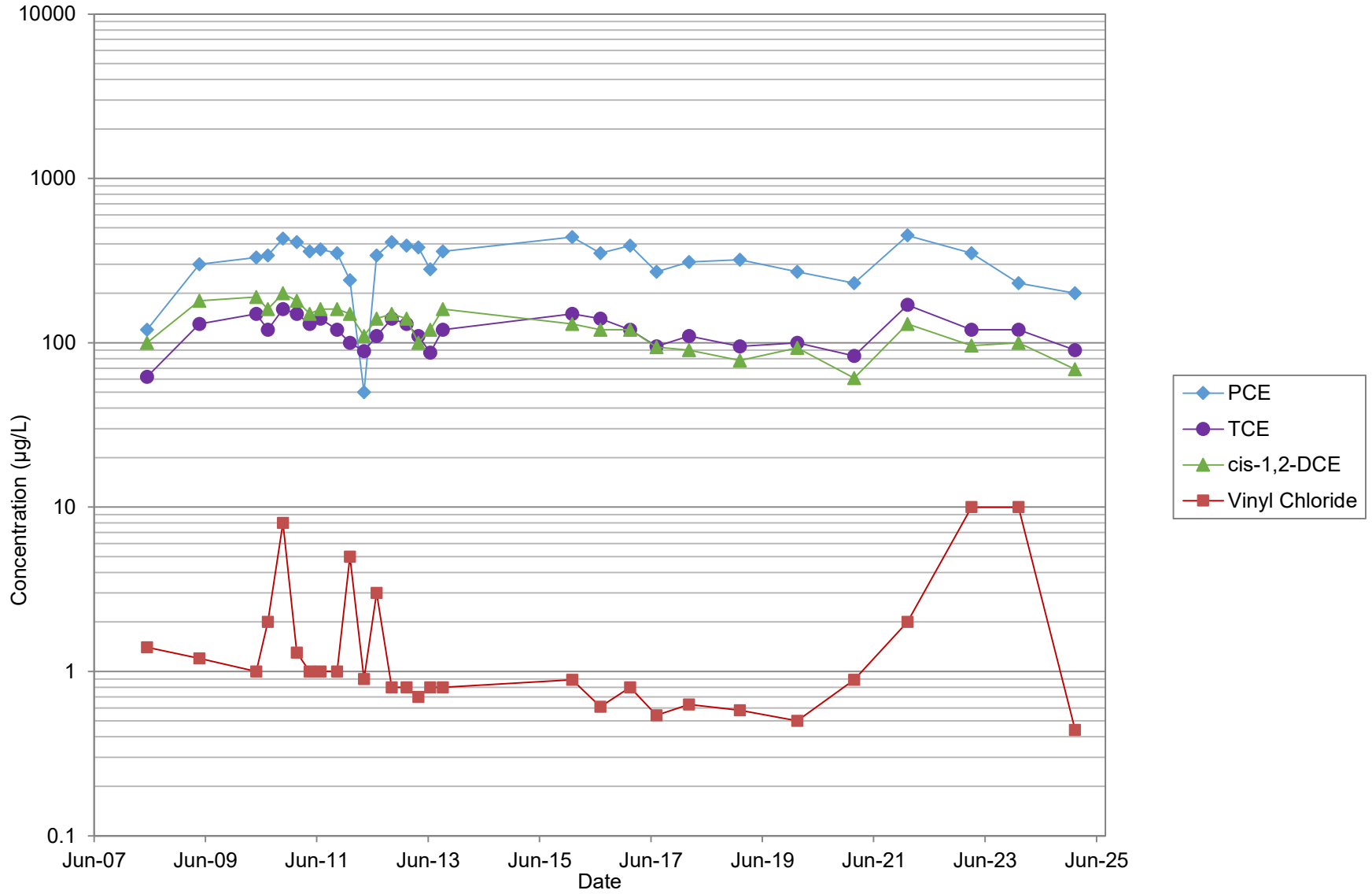
SU = standard unit

Constituents of Concern Concentration Time Series Plots

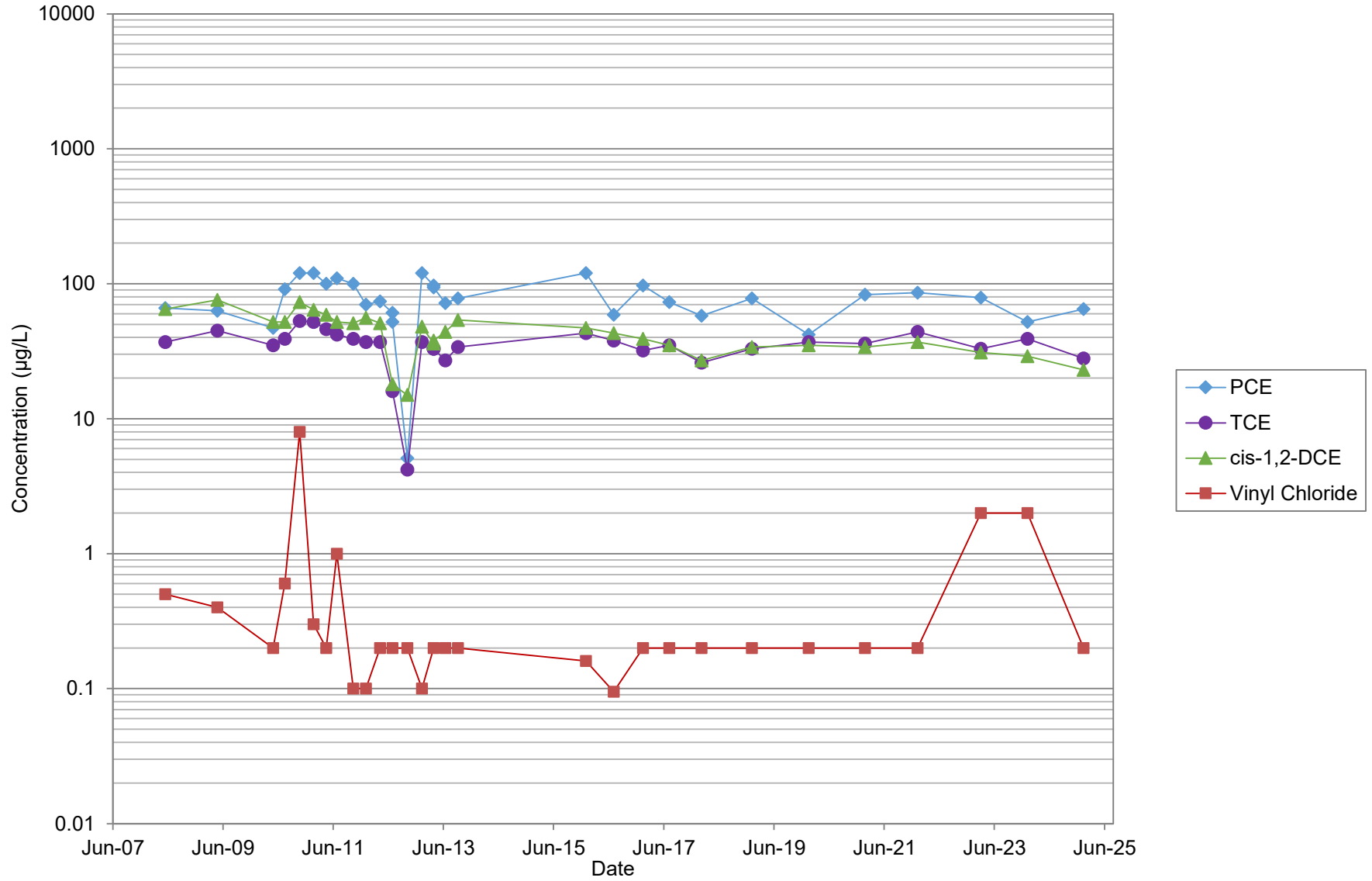
LAI-MW1



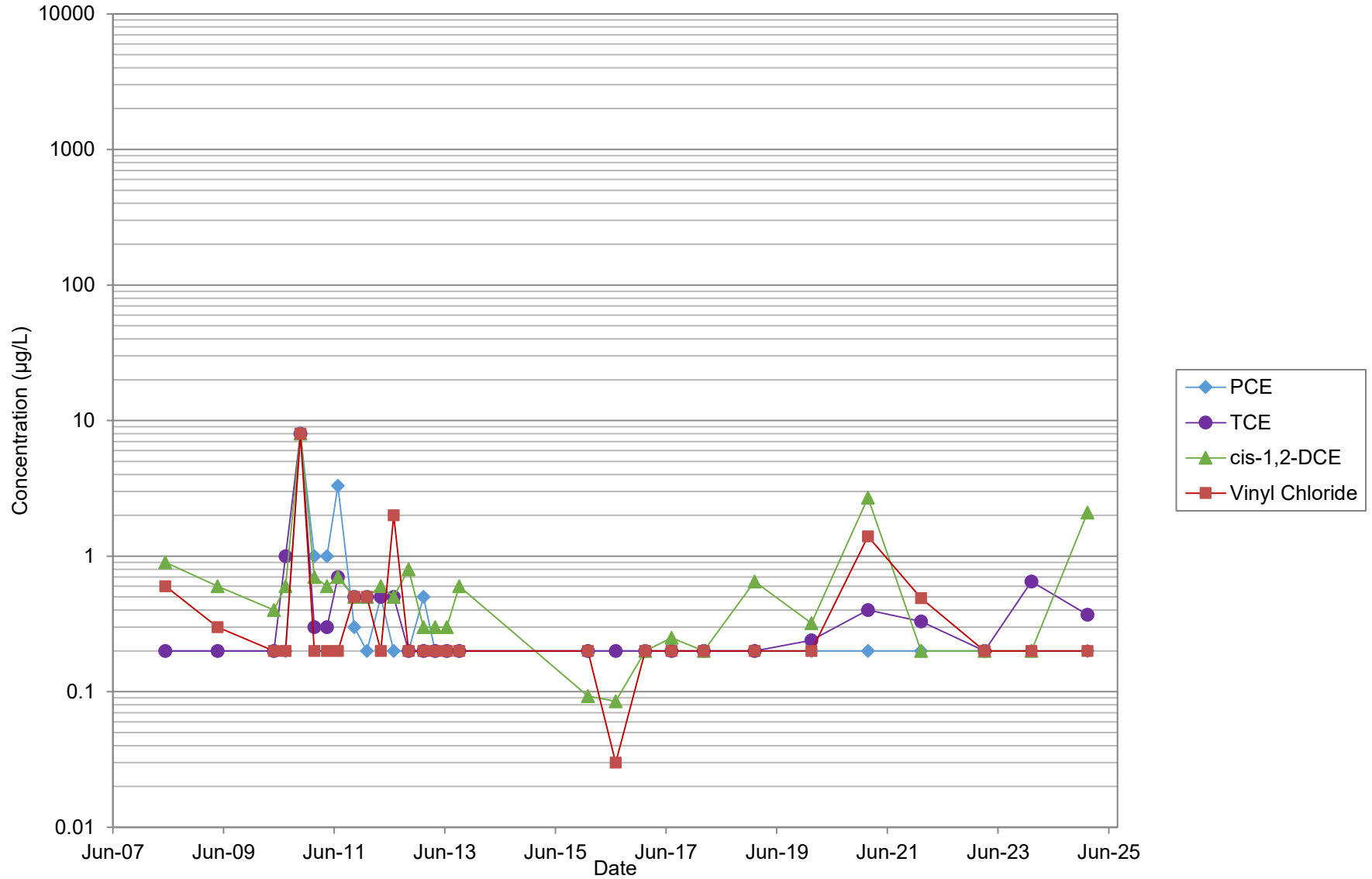
LAI-MW2



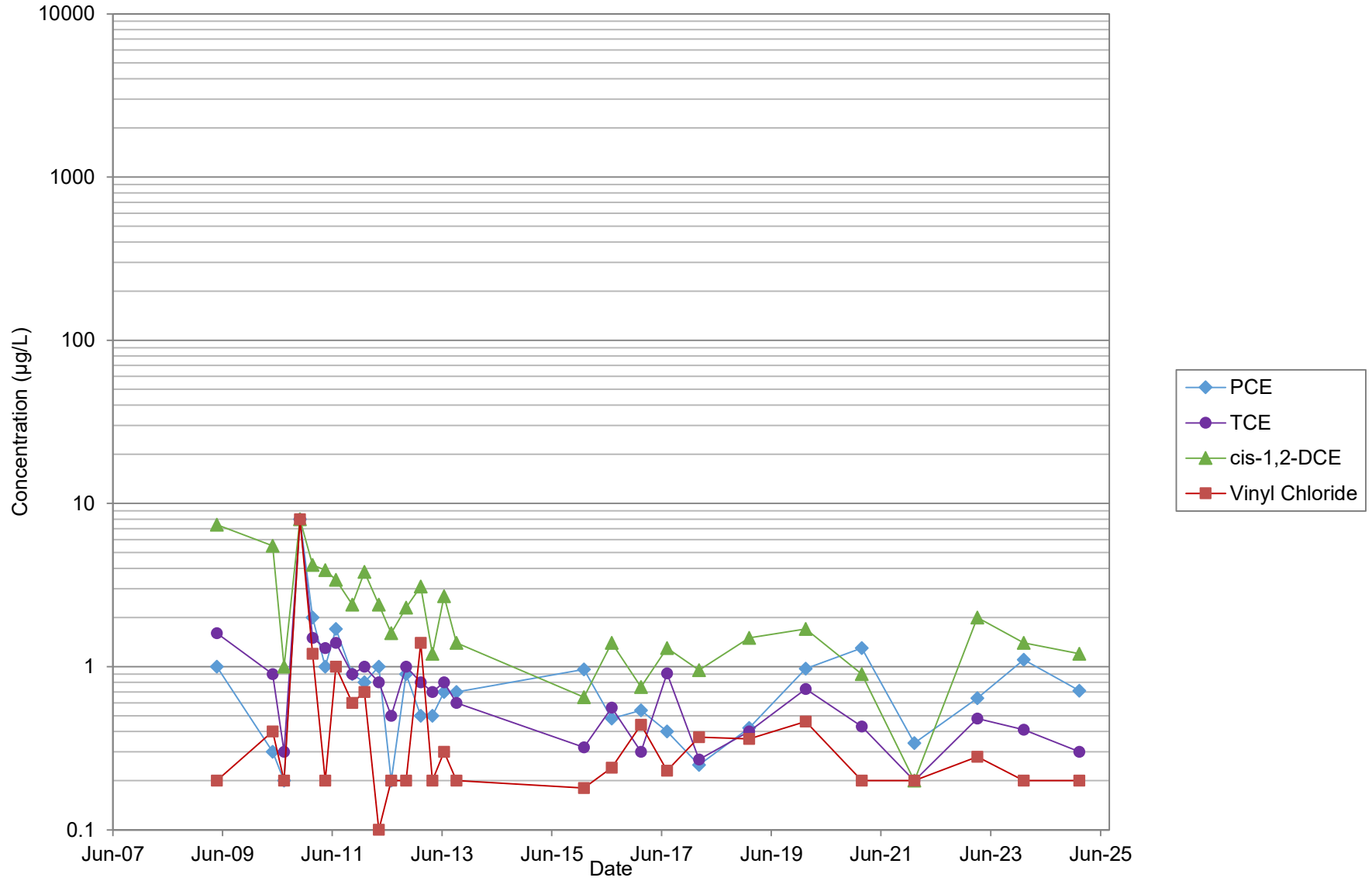
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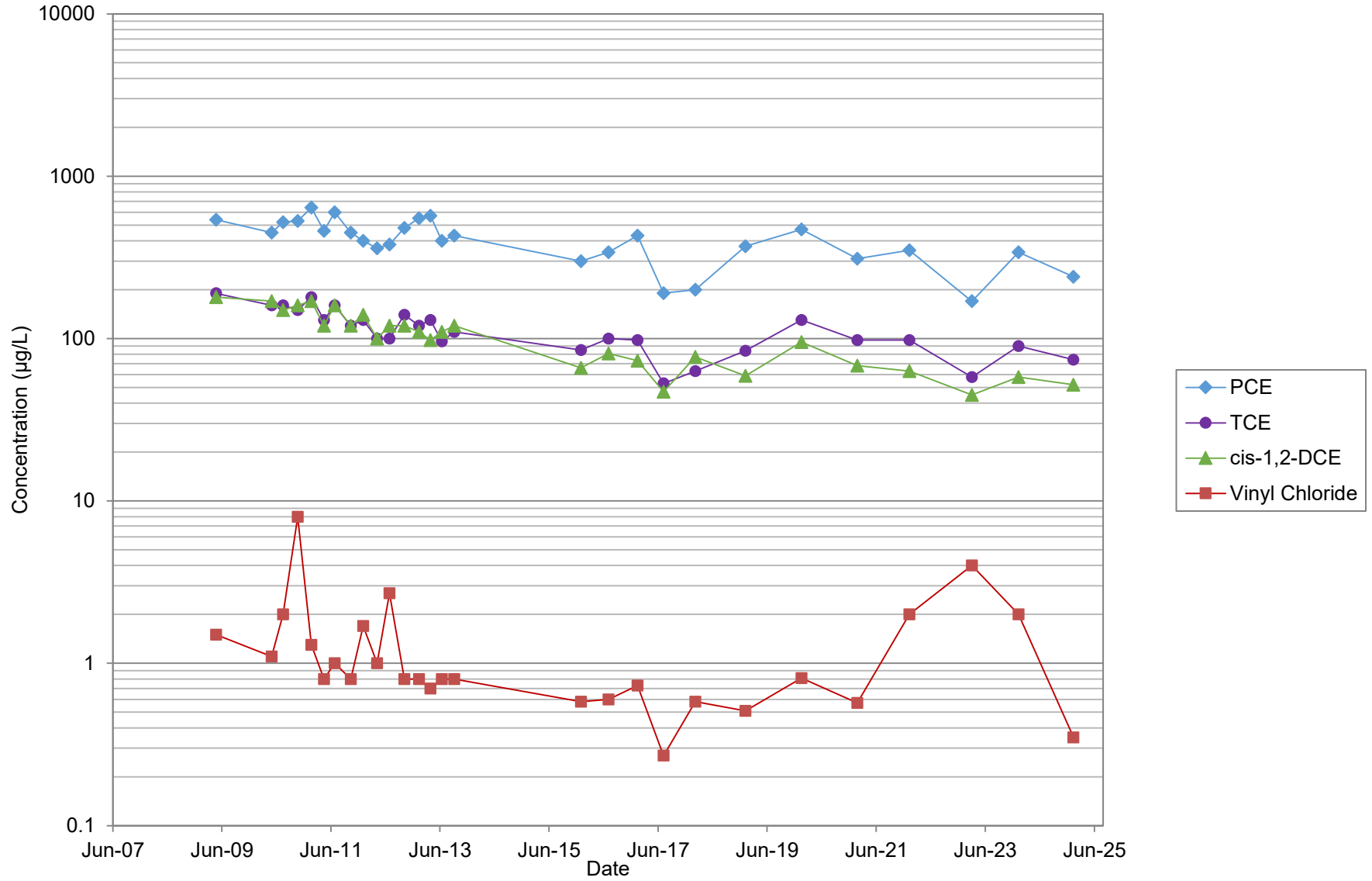
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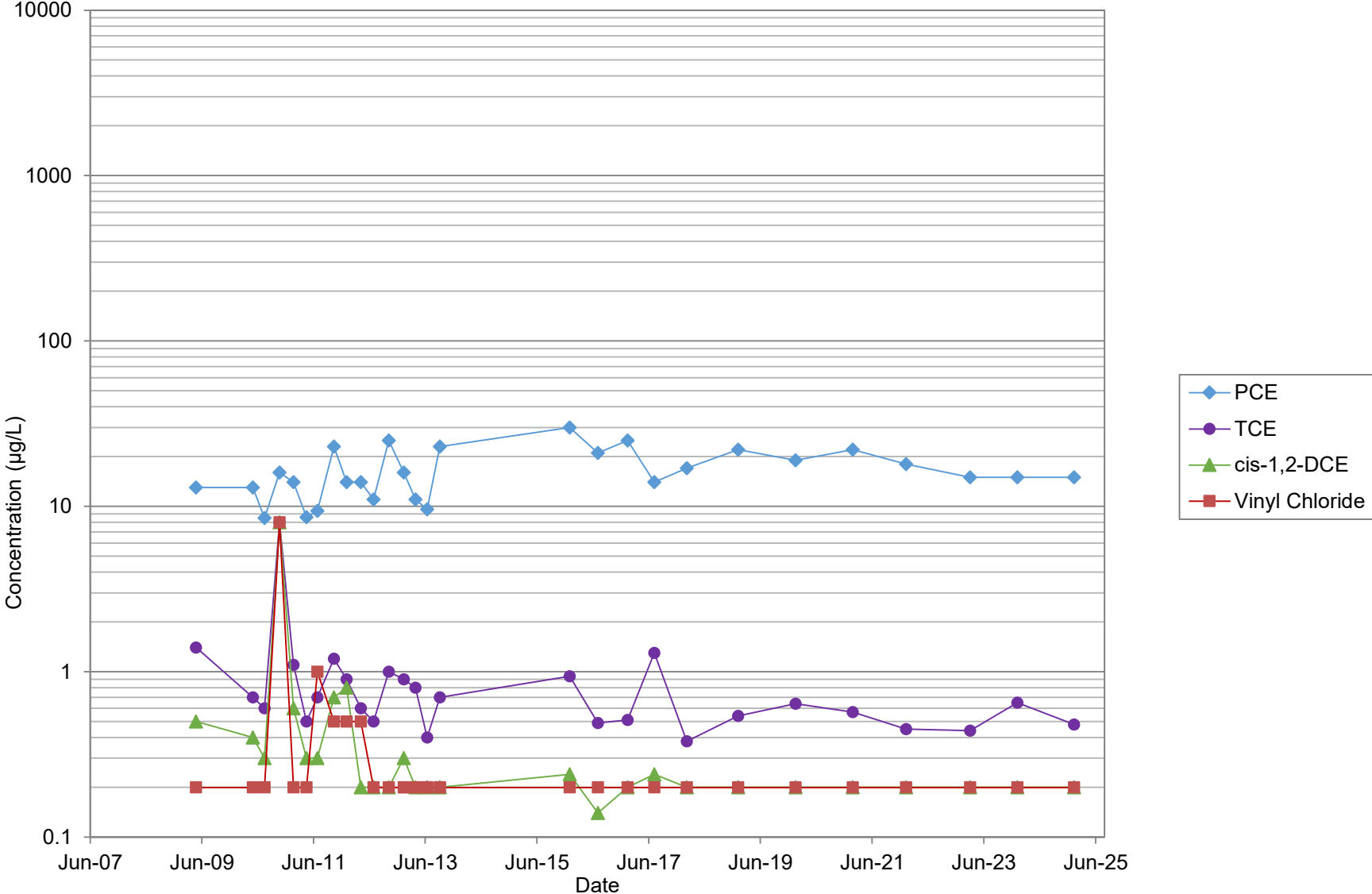
MW-2



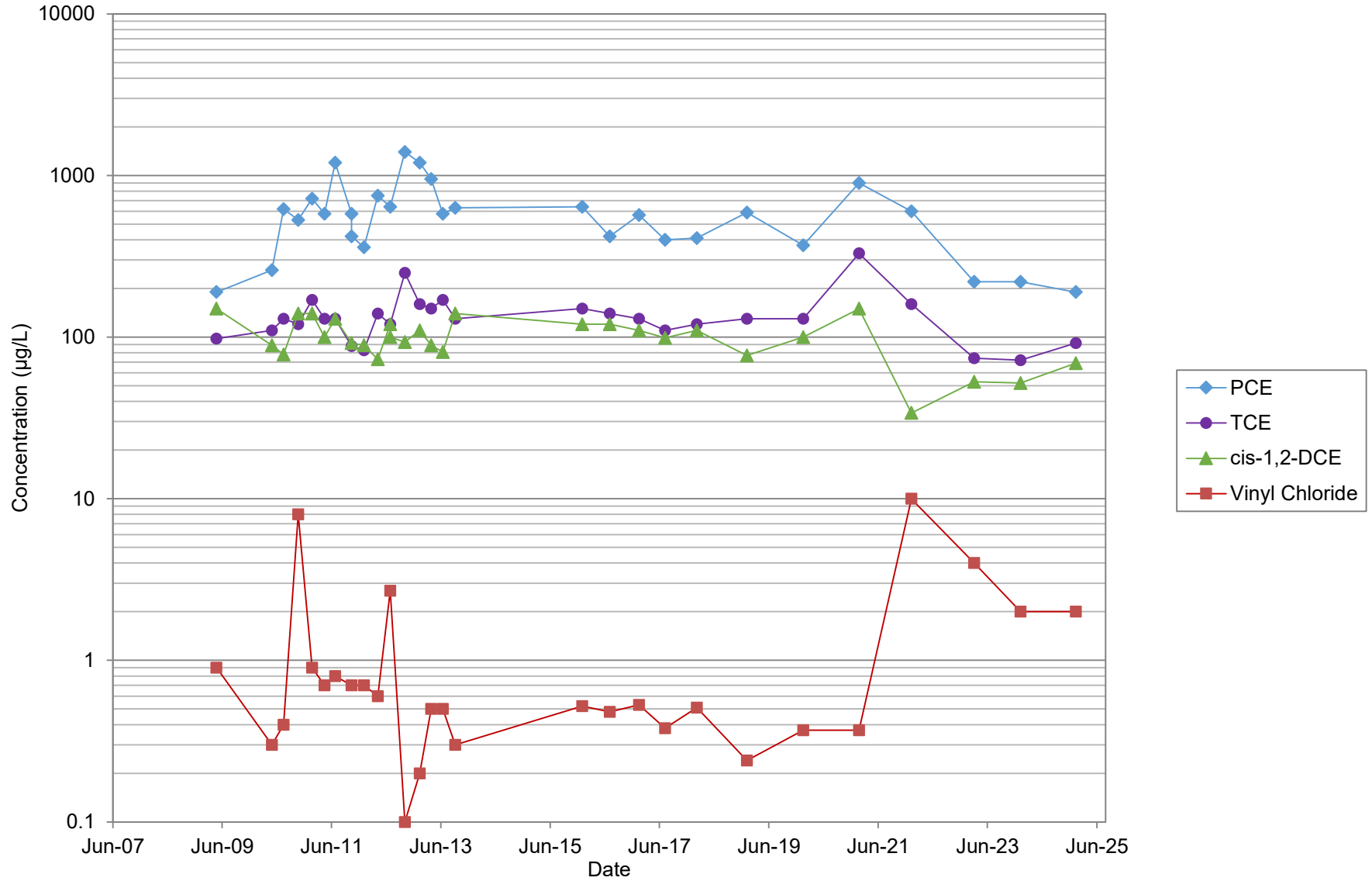
MW-13



RNS-MW2



RNS-MW6-52.5



January 2025 Laboratory Data Package

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Katie Gauglitz
Landau Associates, Inc.
2107 South C Street
Tacoma, Washington 98402

Generated 1/31/2025 2:26:03 PM Revision 1

JOB DESCRIPTION

Sauro's Cleanorama 0094048.100

JOB NUMBER

580-147289-1

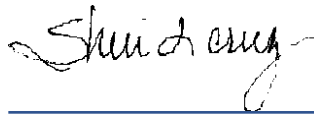
Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Authorized for release by
Sheri Cruz, Project Manager I
Sheri.Cruz@et.eurofinsus.com
(253)922-2310

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Revision 1



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Case Narrative

Client: Landau Associates, Inc.
Project: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Job ID: 580-147289-1

Eurofins Seattle

Job Narrative 580-147289-1

Revised report 1/31/2025 to fix narration about RL vs MDL reporting.
All the methods are reported to the RL except for method RSK-175 which is reported to MDL.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 1/14/2025 8:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C.

Receipt Exceptions

Lids from the following workshare samples were received broken: Sample-10-C and Sample-12-C Trip Blank-20250113 (580-147289-1), LAI-MW1-20250113 (580-147289-2), LAI-MW2-20250113 (580-147289-3), LAI-MW3-20250113 (580-147289-4), Dup1-20250113 (580-147289-5), LAI-MW4-20250113 (580-147289-6), LAI-MW5-20250113 (580-147289-7), MW2-20250113 (580-147289-8), MW13-20250113 (580-147289-9), RNS-MW2-20250113 (580-147289-10), RNS-MW6-42.5-20250113 (580-147289-11) and RNS-MW6-52.5-20250113 (580-147289-12). Lids replaced with no volume lost or compromised.

One or more containers for the following workshare samples were received broken or leaking: Sample-3-D and Sample-4-E were received at the Denver lab broken Trip Blank-20250113 (580-147289-1), LAI-MW1-20250113 (580-147289-2), LAI-MW2-20250113 (580-147289-3), LAI-MW3-20250113 (580-147289-4), Dup1-20250113 (580-147289-5), LAI-MW4-20250113 (580-147289-6), LAI-MW5-20250113 (580-147289-7), MW2-20250113 (580-147289-8), MW13-20250113 (580-147289-9), RNS-MW2-20250113 (580-147289-10), RNS-MW6-42.5-20250113 (580-147289-11) and RNS-MW6-52.5-20250113 (580-147289-12).

GC/MS VOA

Method 8260D_LL: The following samples were diluted to bring the concentration of target analytes within the calibration range: LAI-MW2-20250113 (580-147289-3), MW13-20250113 (580-147289-9), RNS-MW6-42.5-20250113 (580-147289-11) and RNS-MW6-52.5-20250113 (580-147289-12). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method RSK_175: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-681684. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

General Chemistry

Method 300.0_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 580-482755 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method SM4500_S2_D: The matrix spike and matrix spike duplicate (MS&MSD) recoveries for analytical batch 280-681787 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Seattle

Case Narrative

Client: Landau Associates, Inc.
Project: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Job ID: 580-147289-1 (Continued)

Eurofins Seattle

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Definitions/Glossary

Client: Landau Associates, Inc.
Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

Sample Summary

Client: Landau Associates, Inc.
Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-147289-1	Trip Blank-20250113	Water	01/13/25 00:00	01/14/25 08:40
580-147289-2	LAI-MW1-20250113	Water	01/13/25 11:17	01/14/25 08:40
580-147289-3	LAI-MW2-20250113	Water	01/13/25 10:07	01/14/25 08:40
580-147289-4	LAI-MW3-20250113	Water	01/13/25 12:27	01/14/25 08:40
580-147289-5	Dup1-20250113	Water	01/13/25 12:28	01/14/25 08:40
580-147289-6	LAI-MW4-20250113	Water	01/13/25 08:41	01/14/25 08:40
580-147289-7	LAI-MW5-20250113	Water	01/13/25 13:54	01/14/25 08:40
580-147289-8	MW2-20250113	Water	01/13/25 13:33	01/14/25 08:40
580-147289-9	MW13-20250113	Water	01/13/25 16:24	01/14/25 08:40
580-147289-10	RNS-MW2-20250113	Water	01/13/25 15:13	01/14/25 08:40
580-147289-11	RNS-MW6-42.5-20250113	Water	01/13/25 16:45	01/14/25 08:40
580-147289-12	RNS-MW6-52.5-20250113	Water	01/13/25 17:10	01/14/25 08:40





580-147289 Chain of Custody

f-Custody

- North Seattle (206) 631-8660
- Tacoma (253) 926-2493
- Olympia (360) 791-3178

- Spokane (509) 327-9737
- Portland (503) 542-1080

Date 1/13/2025
 Page 1 of 4

Turnaround Time:
 Standard
 Accelerated

Project Name Duoro 3 Project No. 0094048.100.108

Project Location/Event Tacoma, WA / 2025-Annual

Sampler's Name CSC/JDB

Project Contact Katie Goughitz

Send Results To data@landwin.com, kgoughitz@landwin.com

Sample I.D.	Date	Time	Matrix	No. of Containers	Observations/Comments
<u>Trip Blank - 20250113</u>	<u>1/13/2025</u>	<u>1117</u>	<u>A9</u>	<u>2</u>	
<u>LAI-MW1-20250113</u>		<u>1007</u>		<u>9</u>	
<u>LAI-MW2-20250113</u>		<u>1227</u>		<u>9</u>	
<u>LAI-MW3-20250113</u>		<u>1228</u>		<u>9</u>	
<u>Dup1-20250113</u>		<u>0841</u>		<u>9</u>	
<u>LAI-MW4-20250113</u>		<u>1333</u>		<u>9</u>	
<u>LAI-MW5-20250113</u>		<u>1629</u>		<u>9</u>	
<u>MW13-20250113</u>		<u>1513</u>		<u>9</u>	
<u>RNS-MW2-20250113</u>		<u>1645</u>		<u>3</u>	
<u>RNS-MW6-42.5-20250113</u>		<u>1710</u>		<u>9</u>	
<u>RNS-MW6-52.5-20250113</u>		<u>1515</u>		<u>4</u>	
<u>RNS-MW2-20250113</u>					

Special Handling Requirements: _____

Ship Method: Deliver

Stored on ice: Yes / No

Observations/Comments: _____

Allow water samples to settle, collect aliquot from clear portion

NWTPH-Dx - Acid wash cleanup

- Silica gel cleanup

Dissolved metal samples were field filtered _____

Other _____

Therm. ID: 11 Cor: 4.3 Unc: 5.3

Cooler Desc: LB FedEx: _____ UPS: _____

Seal: Yes No _____ Lab Count: _____

Due Ice: Yes No _____ Other: CD

Relinquished by: [Signature]
 Signature _____
 Printed Name Casper Crowder
 Company LAI
 Date 1/14/25 Time 0840

Received by: [Signature]
 Signature _____
 Printed Name Jacob Pike
 Company CD
 Date 1-14-25 Time 840

Relinquished by: _____
 Signature _____
 Printed Name _____
 Company _____
 Date _____ Time _____

Received by: _____
 Signature _____
 Printed Name _____
 Company _____
 Date _____ Time _____



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: N/A	Lab PIV: Cruz, Sheri L	Carrier Tracking No(s): N/A	COC No: 580-140939.1						
Client Contact: Shipping/Receiving		Phone: N/A	E-Mail: Sheri.Cruz@et.eurofins.com	State of Origin: Washington	Page: Page 1 of 2						
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Washington, State Program - Washington		Job #: 580-147289-1	Preservation Codes:						
Address: 4955 Yarrow Street,		Due Date Requested: 1/27/2025		Analysis Requested:							
City: Anvada		TAT Requested (days): N/A		Total Number of Containers: 5							
State, Zip: CO, 80002		PO #: N/A		Other: N/A							
Phone: 303-736-0100(Tel) 303-431-7171(Fax)		WO #: N/A		Special Instructions/Note:							
Email: N/A		Project #: 58018771									
Project Name: Sauro's Cleanorama 0094048.100		SSOW#: N/A									
Site: N/A											
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefl, BT=Tissue, As=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_S2_P/Sulfide	RSK_175I (MOD) Local Method	SM5310B (MOD) Local Method	Other
LA1-MW1-20250113 (580-147289-2)		1/13/25	11:17 Pacific	G	Water	X	X	X	X	X	N/A
LA1-MW2-20250113 (580-147289-3)		1/13/25	10:07 Pacific	G	Water	X	X	X	X	X	
LA1-MW3-20250113 (580-147289-4)		1/13/25	12:27 Pacific	G	Water	X	X	X	X	X	
Dup1-20250113 (580-147289-5)		1/13/25	12:28 Pacific	G	Water	X	X	X	X	X	
LA1-MW4-20250113 (580-147289-6)		1/13/25	08:41 Pacific	G	Water	X	X	X	X	X	
LA1-MW5-20250113 (580-147289-7)		1/13/25	13:54 Pacific	G	Water	X	X	X	X	X	
MW2-20250113 (580-147289-8)		1/13/25	13:33 Pacific	G	Water	X	X	X	X	X	
MW13-20250113 (580-147289-9)		1/13/25	16:24 Pacific	G	Water	X	X	X	X	X	
RNS-MW2-20250113 (580-147289-10)		1/13/25	15:13 Pacific	G	Water	X	X	X	X	X	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northwest, LLC.

Possible Hazard Identification

Unconfirmed Return To Client Disposal By Lab Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: *Lauren* Date/Time: 1/15/25 16:00 Company: _____

Relinquished by: *Lauren* Date/Time: 1/15/25 16:00 Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks: *2.7 FABU (F20)*

Custody Seals Intact: Yes No Custody Seal No.:



Login Sample Receipt Checklist

Client: Landau Associates, Inc.

Job Number: 580-147289-1

Login Number: 147289

List Number: 1

Creator: Moore, Brook 1

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Landau Associates, Inc.

Job Number: 580-147289-1

Login Number: 147289

List Number: 2

Creator: Naylis, Patrick J

List Source: Eurofins Denver

List Creation: 01/16/25 12:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: Trip Blank-20250113

Date Collected: 01/13/25 00:00

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/14/25 16:58	1
cis-1,2-Dichloroethene	ND		0.20	0.20	ug/L			01/14/25 16:58	1
Trichloroethene	ND		0.20	0.20	ug/L			01/14/25 16:58	1
Tetrachloroethene	ND		0.20	0.20	ug/L			01/14/25 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		01/14/25 16:58	1
Dibromofluoromethane (Surr)	103		80 - 120		01/14/25 16:58	1
4-Bromofluorobenzene (Surr)	100		80 - 120		01/14/25 16:58	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		01/14/25 16:58	1

Client Sample ID: LAI-MW1-20250113

Date Collected: 01/13/25 11:17

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/14/25 18:31	1
cis-1,2-Dichloroethene	ND		0.20	0.20	ug/L			01/14/25 18:31	1
Trichloroethene	ND		0.20	0.20	ug/L			01/14/25 18:31	1
Tetrachloroethene	ND		0.20	0.20	ug/L			01/14/25 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		01/14/25 18:31	1
Dibromofluoromethane (Surr)	103		80 - 120		01/14/25 18:31	1
4-Bromofluorobenzene (Surr)	100		80 - 120		01/14/25 18:31	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		01/14/25 18:31	1

Client Sample ID: LAI-MW2-20250113

Date Collected: 01/13/25 10:07

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.44		0.20	0.20	ug/L			01/14/25 18:54	1
cis-1,2-Dichloroethene	69		0.20	0.20	ug/L			01/14/25 18:54	1
Trichloroethene	90		0.20	0.20	ug/L			01/14/25 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		01/14/25 18:54	1
Dibromofluoromethane (Surr)	99		80 - 120		01/14/25 18:54	1
4-Bromofluorobenzene (Surr)	101		80 - 120		01/14/25 18:54	1
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		01/14/25 18:54	1

Client Sample ID: LAI-MW3-20250113

Date Collected: 01/13/25 12:27

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/14/25 19:17	1
cis-1,2-Dichloroethene	23		0.20	0.20	ug/L			01/14/25 19:17	1
Trichloroethene	28		0.20	0.20	ug/L			01/14/25 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		01/14/25 19:17	1
Dibromofluoromethane (Surr)	102		80 - 120		01/14/25 19:17	1

Eurofins Seattle

Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: LAI-MW3-20250113

Date Collected: 01/13/25 12:27

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		01/14/25 19:17	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		01/14/25 19:17	1

Client Sample ID: Dup1-20250113

Date Collected: 01/13/25 12:28

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/14/25 20:03	1
cis-1,2-Dichloroethene	27		0.20	0.20	ug/L			01/14/25 20:03	1
Trichloroethene	37		0.20	0.20	ug/L			01/14/25 20:03	1
Tetrachloroethene	97		0.20	0.20	ug/L			01/14/25 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		01/14/25 20:03	1
Dibromofluoromethane (Surr)	102		80 - 120		01/14/25 20:03	1
4-Bromofluorobenzene (Surr)	101		80 - 120		01/14/25 20:03	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		01/14/25 20:03	1

Client Sample ID: LAI-MW4-20250113

Date Collected: 01/13/25 08:41

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/14/25 19:40	1
cis-1,2-Dichloroethene	2.1		0.20	0.20	ug/L			01/14/25 19:40	1
Trichloroethene	0.37		0.20	0.20	ug/L			01/14/25 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		01/14/25 19:40	1
Dibromofluoromethane (Surr)	102		80 - 120		01/14/25 19:40	1
4-Bromofluorobenzene (Surr)	102		80 - 120		01/14/25 19:40	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		01/14/25 19:40	1

Client Sample ID: LAI-MW5-20250113

Date Collected: 01/13/25 13:54

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/14/25 20:26	1
cis-1,2-Dichloroethene	ND		0.20	0.20	ug/L			01/14/25 20:26	1
Trichloroethene	ND		0.20	0.20	ug/L			01/14/25 20:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		01/14/25 20:26	1
Dibromofluoromethane (Surr)	104		80 - 120		01/14/25 20:26	1
4-Bromofluorobenzene (Surr)	101		80 - 120		01/14/25 20:26	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		01/14/25 20:26	1

Client Sample ID: MW2-20250113

Date Collected: 01/13/25 13:33

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/16/25 04:07	1

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Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW2-20250113

Lab Sample ID: 580-147289-8

Date Collected: 01/13/25 13:33

Matrix: Water

Date Received: 01/14/25 08:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.2		0.20	0.20	ug/L			01/16/25 04:07	1
Trichloroethene	0.30		0.20	0.20	ug/L			01/16/25 04:07	1
Tetrachloroethene	0.71		0.20	0.20	ug/L			01/16/25 04:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					01/16/25 04:07	1
Dibromofluoromethane (Surr)	105		80 - 120					01/16/25 04:07	1
4-Bromofluorobenzene (Surr)	102		80 - 120					01/16/25 04:07	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120					01/16/25 04:07	1

Client Sample ID: MW13-20250113

Lab Sample ID: 580-147289-9

Date Collected: 01/13/25 16:24

Matrix: Water

Date Received: 01/14/25 08:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.35		0.20	0.20	ug/L			01/16/25 01:25	1
cis-1,2-Dichloroethene	52		0.20	0.20	ug/L			01/16/25 01:25	1
Trichloroethene	74		0.20	0.20	ug/L			01/16/25 01:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120					01/16/25 01:25	1
Dibromofluoromethane (Surr)	99		80 - 120					01/16/25 01:25	1
4-Bromofluorobenzene (Surr)	100		80 - 120					01/16/25 01:25	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120					01/16/25 01:25	1

Client Sample ID: RNS-MW2-20250113

Lab Sample ID: 580-147289-10

Date Collected: 01/13/25 15:13

Matrix: Water

Date Received: 01/14/25 08:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/16/25 01:48	1
cis-1,2-Dichloroethene	ND		0.20	0.20	ug/L			01/16/25 01:48	1
Trichloroethene	0.48		0.20	0.20	ug/L			01/16/25 01:48	1
Tetrachloroethene	15		0.20	0.20	ug/L			01/16/25 01:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					01/16/25 01:48	1
Dibromofluoromethane (Surr)	106		80 - 120					01/16/25 01:48	1
4-Bromofluorobenzene (Surr)	103		80 - 120					01/16/25 01:48	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120					01/16/25 01:48	1

Client Sample ID: RNS-MW6-42.5-20250113

Lab Sample ID: 580-147289-11

Date Collected: 01/13/25 16:45

Matrix: Water

Date Received: 01/14/25 08:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		2.0	2.0	ug/L			01/16/25 07:35	10
cis-1,2-Dichloroethene	60		2.0	2.0	ug/L			01/16/25 07:35	10
Trichloroethene	87		2.0	2.0	ug/L			01/16/25 07:35	10
Tetrachloroethene	220		2.0	2.0	ug/L			01/16/25 07:35	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					01/16/25 07:35	10
Dibromofluoromethane (Surr)	105		80 - 120					01/16/25 07:35	10

Eurofins Seattle

Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: RNS-MW6-42.5-20250113
Date Collected: 01/13/25 16:45
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-11
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		01/16/25 07:35	10
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		01/16/25 07:35	10

Client Sample ID: RNS-MW6-52.5-20250113
Date Collected: 01/13/25 17:10
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		2.0	2.0	ug/L			01/16/25 07:12	10
cis-1,2-Dichloroethene	69		2.0	2.0	ug/L			01/16/25 07:12	10
Trichloroethene	92		2.0	2.0	ug/L			01/16/25 07:12	10
Tetrachloroethene	190		2.0	2.0	ug/L			01/16/25 07:12	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		01/16/25 07:12	10
Dibromofluoromethane (Surr)	105		80 - 120		01/16/25 07:12	10
4-Bromofluorobenzene (Surr)	102		80 - 120		01/16/25 07:12	10
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		01/16/25 07:12	10

Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Client Sample ID: LAI-MW2-20250113

Date Collected: 01/13/25 10:07

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	200		2.0	2.0	ug/L			01/15/25 18:51	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	99		80 - 120					01/15/25 18:51	10
<i>Dibromofluoromethane (Surr)</i>	102		80 - 120					01/15/25 18:51	10
<i>4-Bromofluorobenzene (Surr)</i>	100		80 - 120					01/15/25 18:51	10
<i>1,2-Dichloroethane-d4 (Surr)</i>	101		80 - 120					01/15/25 18:51	10

Client Sample ID: MW13-20250113

Date Collected: 01/13/25 16:24

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	240		2.0	2.0	ug/L			01/16/25 19:04	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	98		80 - 120					01/16/25 19:04	10
<i>Dibromofluoromethane (Surr)</i>	105		80 - 120					01/16/25 19:04	10
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120					01/16/25 19:04	10
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		80 - 120					01/16/25 19:04	10

Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Client Sample ID: LAI-MW3-20250113

Date Collected: 01/13/25 12:27

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	65		0.20	0.20	ug/L			01/15/25 17:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	100		80 - 120					01/15/25 17:19	1
<i>Dibromofluoromethane (Surr)</i>	101		80 - 120					01/15/25 17:19	1
<i>4-Bromofluorobenzene (Surr)</i>	102		80 - 120					01/15/25 17:19	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	100		80 - 120					01/15/25 17:19	1

Client Sample ID: LAI-MW4-20250113

Date Collected: 01/13/25 08:41

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.20	0.20	ug/L			01/15/25 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	99		80 - 120					01/15/25 16:10	1
<i>Dibromofluoromethane (Surr)</i>	104		80 - 120					01/15/25 16:10	1
<i>4-Bromofluorobenzene (Surr)</i>	100		80 - 120					01/15/25 16:10	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	100		80 - 120					01/15/25 16:10	1

Client Sample ID: LAI-MW5-20250113

Date Collected: 01/13/25 13:54

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.20	0.20	ug/L			01/15/25 16:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	99		80 - 120					01/15/25 16:33	1
<i>Dibromofluoromethane (Surr)</i>	104		80 - 120					01/15/25 16:33	1
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120					01/15/25 16:33	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	100		80 - 120					01/15/25 16:33	1

Client Sample Results

Client: Landau Associates, Inc.
Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: LAI-MW1-20250113

Date Collected: 01/13/25 11:17

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.0050	0.0015	mg/L			01/16/25 23:02	1
Ethylene	ND		0.0050	0.0015	mg/L			01/16/25 23:02	1
Ethane	ND		0.0050	0.0015	mg/L			01/16/25 23:02	1
Acetylene	ND		0.0050	0.0015	mg/L			01/16/25 23:02	1

Client Sample ID: LAI-MW2-20250113

Date Collected: 01/13/25 10:07

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.0099		0.0050	0.0015	mg/L			01/16/25 22:21	1
Ethylene	ND		0.0050	0.0015	mg/L			01/16/25 22:21	1
Ethane	0.0020	J	0.0050	0.0015	mg/L			01/16/25 22:21	1
Acetylene	ND		0.0050	0.0015	mg/L			01/16/25 22:21	1

Client Sample ID: LAI-MW3-20250113

Date Collected: 01/13/25 12:27

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.0050	0.0015	mg/L			01/16/25 22:35	1
Ethylene	ND		0.0050	0.0015	mg/L			01/16/25 22:35	1
Ethane	ND		0.0050	0.0015	mg/L			01/16/25 22:35	1
Acetylene	ND		0.0050	0.0015	mg/L			01/16/25 22:35	1

Client Sample ID: Dup1-20250113

Date Collected: 01/13/25 12:28

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.0050	0.0015	mg/L			01/16/25 23:30	1
Ethylene	ND		0.0050	0.0015	mg/L			01/16/25 23:30	1
Ethane	ND		0.0050	0.0015	mg/L			01/16/25 23:30	1
Acetylene	ND		0.0050	0.0015	mg/L			01/16/25 23:30	1

Client Sample ID: LAI-MW4-20250113

Date Collected: 01/13/25 08:41

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.49		0.0050	0.0015	mg/L			01/16/25 23:44	1
Ethylene	ND		0.0050	0.0015	mg/L			01/16/25 23:44	1
Ethane	ND		0.0050	0.0015	mg/L			01/16/25 23:44	1
Acetylene	ND		0.0050	0.0015	mg/L			01/16/25 23:44	1

Client Sample ID: LAI-MW5-20250113

Date Collected: 01/13/25 13:54

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	6.8		0.0050	0.0015	mg/L			01/16/25 23:58	1
Ethylene	ND		0.0050	0.0015	mg/L			01/16/25 23:58	1
Ethane	ND		0.0050	0.0015	mg/L			01/16/25 23:58	1
Acetylene	ND		0.0050	0.0015	mg/L			01/16/25 23:58	1

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Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: RSK-175 - Dissolved Gases (GC)

Client Sample ID: MW2-20250113
Date Collected: 01/13/25 13:33
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.53		0.0050	0.0015	mg/L			01/17/25 00:12	1
Ethylene	ND		0.0050	0.0015	mg/L			01/17/25 00:12	1
Ethane	ND		0.0050	0.0015	mg/L			01/17/25 00:12	1
Acetylene	ND		0.0050	0.0015	mg/L			01/17/25 00:12	1

Client Sample ID: MW13-20250113
Date Collected: 01/13/25 16:24
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.012		0.0050	0.0015	mg/L			01/17/25 00:25	1
Ethylene	ND		0.0050	0.0015	mg/L			01/17/25 00:25	1
Ethane	ND		0.0050	0.0015	mg/L			01/17/25 00:25	1
Acetylene	ND		0.0050	0.0015	mg/L			01/17/25 00:25	1

Client Sample ID: RNS-MW2-20250113
Date Collected: 01/13/25 15:13
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.0018	J	0.0050	0.0015	mg/L			01/17/25 00:39	1
Ethylene	ND		0.0050	0.0015	mg/L			01/17/25 00:39	1
Ethane	ND		0.0050	0.0015	mg/L			01/17/25 00:39	1
Acetylene	ND		0.0050	0.0015	mg/L			01/17/25 00:39	1

Client Sample ID: RNS-MW6-52.5-20250113
Date Collected: 01/13/25 17:10
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.0076		0.0050	0.0015	mg/L			01/17/25 00:53	1
Ethylene	ND		0.0050	0.0015	mg/L			01/17/25 00:53	1
Ethane	ND		0.0050	0.0015	mg/L			01/17/25 00:53	1
Acetylene	ND		0.0050	0.0015	mg/L			01/17/25 00:53	1

Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

General Chemistry

Client Sample ID: LAI-MW1-20250113

Date Collected: 01/13/25 11:17

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	80		1.5	1.5	mg/L			01/14/25 23:10	1
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/14/25 23:10	1
Nitrate as N (EPA 300.0)	1.3		0.20	0.20	mg/L			01/14/25 23:10	1
Sulfate (EPA 300.0)	14		1.5	1.5	mg/L			01/14/25 23:10	1
Sulfide (SM 4500 S2 D)	ND	F1	0.050	0.050	mg/L			01/17/25 12:31	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	1.0	mg/L			01/21/25 14:34	1

Client Sample ID: LAI-MW2-20250113

Date Collected: 01/13/25 10:07

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	23		1.5	1.5	mg/L			01/14/25 23:46	1
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/14/25 23:46	1
Nitrate as N (EPA 300.0)	ND		0.20	0.20	mg/L			01/14/25 23:46	1
Sulfate (EPA 300.0)	17		1.5	1.5	mg/L			01/14/25 23:46	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:33	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	1.0	mg/L			01/21/25 15:25	1

Client Sample ID: LAI-MW3-20250113

Date Collected: 01/13/25 12:27

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	39		1.5	1.5	mg/L			01/15/25 00:09	1
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/15/25 00:09	1
Nitrate as N (EPA 300.0)	0.59		0.20	0.20	mg/L			01/15/25 00:09	1
Sulfate (EPA 300.0)	19		1.5	1.5	mg/L			01/15/25 00:09	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:33	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	1.0	mg/L			01/21/25 15:41	1

Client Sample ID: Dup1-20250113

Date Collected: 01/13/25 12:28

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	39		1.5	1.5	mg/L			01/15/25 00:57	1
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/15/25 00:57	1
Nitrate as N (EPA 300.0)	0.60		0.20	0.20	mg/L			01/15/25 00:57	1
Sulfate (EPA 300.0)	19		1.5	1.5	mg/L			01/15/25 00:57	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:34	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	1.0	mg/L			01/21/25 15:58	1

Client Sample ID: LAI-MW4-20250113

Date Collected: 01/13/25 08:41

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	430		30	30	mg/L			01/15/25 01:33	20
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/15/25 01:21	1
Nitrate as N (EPA 300.0)	ND		0.20	0.20	mg/L			01/15/25 01:21	1

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Client Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

General Chemistry (Continued)

Client Sample ID: LAI-MW4-20250113
Date Collected: 01/13/25 08:41
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate (EPA 300.0)	33		1.5	1.5	mg/L			01/15/25 01:21	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:34	1
Total Organic Carbon - Quad (SM 5310B)	3.0		1.0	1.0	mg/L			01/21/25 16:14	1

Client Sample ID: LAI-MW5-20250113
Date Collected: 01/13/25 13:54
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	120		15	15	mg/L			01/15/25 02:09	10
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/15/25 01:57	1
Nitrate as N (EPA 300.0)	ND		0.20	0.20	mg/L			01/15/25 01:57	1
Sulfate (EPA 300.0)	4.5		1.5	1.5	mg/L			01/15/25 01:57	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:35	1
Total Organic Carbon - Quad (SM 5310B)	5.2		1.0	1.0	mg/L			01/21/25 16:28	1

Client Sample ID: MW2-20250113
Date Collected: 01/13/25 13:33
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	14		1.5	1.5	mg/L			01/15/25 02:32	1
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/15/25 02:32	1
Nitrate as N (EPA 300.0)	2.4		0.20	0.20	mg/L			01/15/25 02:32	1
Sulfate (EPA 300.0)	31		1.5	1.5	mg/L			01/15/25 02:32	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:35	1
Total Organic Carbon - Quad (SM 5310B)	3.3		1.0	1.0	mg/L			01/21/25 16:46	1

Client Sample ID: MW13-20250113
Date Collected: 01/13/25 16:24
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	64		1.5	1.5	mg/L			01/15/25 03:20	1
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/15/25 03:20	1
Nitrate as N (EPA 300.0)	0.54		0.20	0.20	mg/L			01/15/25 03:20	1
Sulfate (EPA 300.0)	20		1.5	1.5	mg/L			01/15/25 03:20	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:36	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	1.0	mg/L			01/21/25 17:34	1

Client Sample ID: RNS-MW2-20250113
Date Collected: 01/13/25 15:13
Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	27		1.5	1.5	mg/L			01/15/25 03:44	1
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/15/25 03:44	1
Nitrate as N (EPA 300.0)	2.6		0.20	0.20	mg/L			01/15/25 03:44	1
Sulfate (EPA 300.0)	21		1.5	1.5	mg/L			01/15/25 03:44	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:36	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	1.0	mg/L			01/21/25 17:52	1

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Client Sample Results

Client: Landau Associates, Inc.
Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

General Chemistry

Client Sample ID: RNS-MW6-52.5-20250113

Date Collected: 01/13/25 17:10

Date Received: 01/14/25 08:40

Lab Sample ID: 580-147289-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	47		1.5	1.5	mg/L			01/15/25 04:08	1
Nitrite as N (EPA 300.0)	ND		0.40	0.40	mg/L			01/15/25 04:08	1
Nitrate as N (EPA 300.0)	0.60		0.20	0.20	mg/L			01/15/25 04:08	1
Sulfate (EPA 300.0)	24		1.5	1.5	mg/L			01/15/25 04:08	1
Sulfide (SM 4500 S2 D)	ND		0.050	0.050	mg/L			01/17/25 12:36	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	1.0	mg/L			01/21/25 18:08	1

QC Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-482548/10
Matrix: Water
Analysis Batch: 482548

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Vinyl chloride	ND		0.20	0.20	ug/L			01/14/25 16:12	1
cis-1,2-Dichloroethene	ND		0.20	0.20	ug/L			01/14/25 16:12	1
Trichloroethene	ND		0.20	0.20	ug/L			01/14/25 16:12	1
Tetrachloroethene	ND		0.20	0.20	ug/L			01/14/25 16:12	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	99		80 - 120		01/14/25 16:12	1
Dibromofluoromethane (Surr)	105		80 - 120		01/14/25 16:12	1
4-Bromofluorobenzene (Surr)	103		80 - 120		01/14/25 16:12	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		01/14/25 16:12	1

Lab Sample ID: LCS 580-482548/5
Matrix: Water
Analysis Batch: 482548

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	5.00	5.18		ug/L		104	72 - 120
Trichloroethene	5.00	4.99		ug/L		100	72 - 120
Tetrachloroethene	5.00	4.91		ug/L		98	75 - 124

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120

Lab Sample ID: LCSD 580-482548/6
Matrix: Water
Analysis Batch: 482548

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	5.00	5.21		ug/L		104	72 - 120	1	22
Trichloroethene	5.00	4.94		ug/L		99	72 - 120	1	22
Tetrachloroethene	5.00	4.88		ug/L		98	75 - 124	1	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120

QC Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

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

Lab Sample ID: MB 580-482622/7
Matrix: Water
Analysis Batch: 482622

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.20	0.20	ug/L			01/15/25 13:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					01/15/25 13:40	1
Dibromofluoromethane (Surr)	104		80 - 120					01/15/25 13:40	1
4-Bromofluorobenzene (Surr)	101		80 - 120					01/15/25 13:40	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120					01/15/25 13:40	1

Lab Sample ID: LCS 580-482622/4
Matrix: Water
Analysis Batch: 482622

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Tetrachloroethene	5.00	4.95		ug/L		99	75 - 124	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Toluene-d8 (Surr)	101		80 - 120					
Dibromofluoromethane (Surr)	104		80 - 120					
4-Bromofluorobenzene (Surr)	102		80 - 120					
1,2-Dichloroethane-d4 (Surr)	101		80 - 120					

Lab Sample ID: LCSD 580-482622/5
Matrix: Water
Analysis Batch: 482622

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Tetrachloroethene	5.00	5.05		ug/L		101	75 - 124	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Toluene-d8 (Surr)	100		80 - 120						
Dibromofluoromethane (Surr)	105		80 - 120						
4-Bromofluorobenzene (Surr)	102		80 - 120						
1,2-Dichloroethane-d4 (Surr)	101		80 - 120						

Lab Sample ID: MB 580-482662/7
Matrix: Water
Analysis Batch: 482662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.20	ug/L			01/16/25 00:38	1
cis-1,2-Dichloroethene	ND		0.20	0.20	ug/L			01/16/25 00:38	1
Trichloroethene	ND		0.20	0.20	ug/L			01/16/25 00:38	1
Tetrachloroethene	ND		0.20	0.20	ug/L			01/16/25 00:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					01/16/25 00:38	1
Dibromofluoromethane (Surr)	104		80 - 120					01/16/25 00:38	1

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QC Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

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

Lab Sample ID: MB 580-482662/7
Matrix: Water
Analysis Batch: 482662

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		01/16/25 00:38	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		01/16/25 00:38	1

Lab Sample ID: LCS 580-482662/4
Matrix: Water
Analysis Batch: 482662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	5.00	4.83		ug/L		97	41 - 150
cis-1,2-Dichloroethene	5.00	5.03		ug/L		101	72 - 120
Trichloroethene	5.00	4.67		ug/L		93	72 - 120
Tetrachloroethene	5.00	4.54		ug/L		91	75 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 120

Lab Sample ID: LCSD 580-482662/5
Matrix: Water
Analysis Batch: 482662

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl chloride	5.00	4.73		ug/L		95	41 - 150	2	32
cis-1,2-Dichloroethene	5.00	4.87		ug/L		97	72 - 120	3	22
Trichloroethene	5.00	4.84		ug/L		97	72 - 120	3	22
Tetrachloroethene	5.00	4.63		ug/L		93	75 - 124	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		80 - 120

Lab Sample ID: MB 580-482736/7
Matrix: Water
Analysis Batch: 482736

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.20	0.20	ug/L			01/16/25 12:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		01/16/25 12:31	1
Dibromofluoromethane (Surr)	105		80 - 120		01/16/25 12:31	1
4-Bromofluorobenzene (Surr)	102		80 - 120		01/16/25 12:31	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		01/16/25 12:31	1

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QC Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

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

Lab Sample ID: LCS 580-482736/4
Matrix: Water
Analysis Batch: 482736

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	5.00	4.60		ug/L		92	75 - 124
Surrogate		LCS %Recovery	LCS Qualifier	Limits			
Toluene-d8 (Surr)		99		80 - 120			
Dibromofluoromethane (Surr)		104		80 - 120			
4-Bromofluorobenzene (Surr)		101		80 - 120			
1,2-Dichloroethane-d4 (Surr)		103		80 - 120			

Lab Sample ID: LCSD 580-482736/5
Matrix: Water
Analysis Batch: 482736

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Tetrachloroethene	5.00	4.48		ug/L		90	75 - 124	3	20
Surrogate		LCSD %Recovery	LCSD Qualifier	Limits					
Toluene-d8 (Surr)		100		80 - 120					
Dibromofluoromethane (Surr)		103		80 - 120					
4-Bromofluorobenzene (Surr)		99		80 - 120					
1,2-Dichloroethane-d4 (Surr)		102		80 - 120					

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-681684/5
Matrix: Water
Analysis Batch: 681684

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.0050	0.0015	mg/L			01/16/25 16:51	1
Ethylene	ND		0.0050	0.0015	mg/L			01/16/25 16:51	1
Ethane	ND		0.0050	0.0015	mg/L			01/16/25 16:51	1
Acetylene	ND		0.0050	0.0015	mg/L			01/16/25 16:51	1

Lab Sample ID: LCS 280-681684/3
Matrix: Water
Analysis Batch: 681684

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	0.0657	0.0621		mg/L		94	80 - 120
Ethylene	0.115	0.104		mg/L		91	80 - 120
Ethane	0.123	0.114		mg/L		93	80 - 120
Acetylene	0.107	0.0998		mg/L		94	80 - 129

Lab Sample ID: LCSD 280-681684/4
Matrix: Water
Analysis Batch: 681684

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methane	0.0657	0.0612		mg/L		93	80 - 120	1	10

Eurofins Seattle

QC Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCSD 280-681684/4
Matrix: Water
Analysis Batch: 681684

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylene	0.115	0.103		mg/L		90	80 - 120	1	10
Ethane	0.123	0.112		mg/L		91	80 - 120	2	10
Acetylene	0.107	0.0991		mg/L		93	80 - 129	1	19

Lab Sample ID: 580-147289-2 DU
Matrix: Water
Analysis Batch: 681684

Client Sample ID: LAI-MW1-20250113
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Methane	ND		ND		mg/L		NC	20
Ethylene	ND		ND		mg/L		NC	20
Ethane	ND		ND		mg/L		NC	20
Acetylene	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-482754/3
Matrix: Water
Analysis Batch: 482754

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.40	0.40	mg/L			01/14/25 17:48	1
Nitrate as N	ND		0.20	0.20	mg/L			01/14/25 17:48	1

Lab Sample ID: LCS 580-482754/4
Matrix: Water
Analysis Batch: 482754

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	5.00	4.84		mg/L		97	90 - 110
Nitrate as N	5.00	4.95		mg/L		99	90 - 110

Lab Sample ID: LCSD 580-482754/5
Matrix: Water
Analysis Batch: 482754

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	5.00	4.85		mg/L		97	90 - 110	0	15
Nitrate as N	5.00	4.94		mg/L		99	90 - 110	0	15

Lab Sample ID: MB 580-482755/33
Matrix: Water
Analysis Batch: 482755

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	1.5	mg/L			01/14/25 17:48	1
Sulfate	ND		1.5	1.5	mg/L			01/14/25 17:48	1

Eurofins Seattle

QC Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-482755/34
Matrix: Water
Analysis Batch: 482755

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.0		mg/L		102	90 - 110
Sulfate	50.0	50.5		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-482755/35
Matrix: Water
Analysis Batch: 482755

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	51.0		mg/L		102	90 - 110	0	15
Sulfate	50.0	50.5		mg/L		101	90 - 110	0	15

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 280-681787/11
Matrix: Water
Analysis Batch: 681787

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		0.050	0.050	mg/L			01/17/25 12:13	1

Lab Sample ID: LCS 280-681787/9
Matrix: Water
Analysis Batch: 681787

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	0.501	0.436		mg/L		87	81 - 122

Lab Sample ID: LCSD 280-681787/10
Matrix: Water
Analysis Batch: 681787

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	0.501	0.440		mg/L		88	81 - 122	1	10

Lab Sample ID: 580-147289-2 MS
Matrix: Water
Analysis Batch: 681787

Client Sample ID: LAI-MW1-20250113
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	ND	F1	0.501	0.390	F1	mg/L		78	81 - 122

Lab Sample ID: 580-147289-2 MSD
Matrix: Water
Analysis Batch: 681787

Client Sample ID: LAI-MW1-20250113
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND	F1	0.501	0.390	F1	mg/L		78	81 - 122	0	10

QC Sample Results

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-682213/4
Matrix: Water
Analysis Batch: 682213

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	ND		1.0	1.0	mg/L			01/21/25 14:04	1

Lab Sample ID: LCS 280-682213/3
Matrix: Water
Analysis Batch: 682213

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Quad	25.0	24.1		mg/L		96	85 - 115

Lab Sample ID: 580-147289-2 MS
Matrix: Water
Analysis Batch: 682213

Client Sample ID: LAI-MW1-20250113
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Quad	ND		25.0	26.3		mg/L		105	85 - 115

Lab Sample ID: 580-147289-2 MSD
Matrix: Water
Analysis Batch: 682213

Client Sample ID: LAI-MW1-20250113
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Quad	ND		25.0	26.2		mg/L		105	85 - 115	0	15

Lab Chronicle

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Client Sample ID: Trip Blank-20250113

Lab Sample ID: 580-147289-1

Date Collected: 01/13/25 00:00

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482548	K1K	EET SEA	01/14/25 16:58

Client Sample ID: LAI-MW1-20250113

Lab Sample ID: 580-147289-2

Date Collected: 01/13/25 11:17

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482548	K1K	EET SEA	01/14/25 18:31
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/16/25 23:02
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/14/25 23:10
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/14/25 23:10
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:31
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 14:34

Client Sample ID: LAI-MW2-20250113

Lab Sample ID: 580-147289-3

Date Collected: 01/13/25 10:07

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482548	K1K	EET SEA	01/14/25 18:54
Total/NA	Analysis	8260D	DL	10	482622	JBT	EET SEA	01/15/25 18:51
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/16/25 22:21
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/14/25 23:46
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/14/25 23:46
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:33
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 15:25

Client Sample ID: LAI-MW3-20250113

Lab Sample ID: 580-147289-4

Date Collected: 01/13/25 12:27

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482548	K1K	EET SEA	01/14/25 19:17
Total/NA	Analysis	8260D	RA	1	482622	JBT	EET SEA	01/15/25 17:19
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/16/25 22:35
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/15/25 00:09
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/15/25 00:09
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:33
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 15:41

Lab Chronicle

Client: Landau Associates, Inc.
 Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Client Sample ID: Dup1-20250113

Lab Sample ID: 580-147289-5

Date Collected: 01/13/25 12:28

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482548	K1K	EET SEA	01/14/25 20:03
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/16/25 23:30
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/15/25 00:57
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/15/25 00:57
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:34
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 15:58

Client Sample ID: LAI-MW4-20250113

Lab Sample ID: 580-147289-6

Date Collected: 01/13/25 08:41

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482548	K1K	EET SEA	01/14/25 19:40
Total/NA	Analysis	8260D	RA	1	482622	JBT	EET SEA	01/15/25 16:10
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/16/25 23:44
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/15/25 01:21
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/15/25 01:21
Total/NA	Analysis	300.0		20	482755	MLT	EET SEA	01/15/25 01:33
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:34
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 16:14

Client Sample ID: LAI-MW5-20250113

Lab Sample ID: 580-147289-7

Date Collected: 01/13/25 13:54

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482548	K1K	EET SEA	01/14/25 20:26
Total/NA	Analysis	8260D	RA	1	482622	JBT	EET SEA	01/15/25 16:33
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/16/25 23:58
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/15/25 01:57
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/15/25 01:57
Total/NA	Analysis	300.0		10	482755	MLT	EET SEA	01/15/25 02:09
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:35
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 16:28

Client Sample ID: MW2-20250113

Lab Sample ID: 580-147289-8

Date Collected: 01/13/25 13:33

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482662	JBT	EET SEA	01/16/25 04:07
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/17/25 00:12
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/15/25 02:32

Eurofins Seattle

Lab Chronicle

Client: Landau Associates, Inc.
Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Client Sample ID: MW2-20250113

Lab Sample ID: 580-147289-8

Date Collected: 01/13/25 13:33

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/15/25 02:32
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:35
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 16:46

Client Sample ID: MW13-20250113

Lab Sample ID: 580-147289-9

Date Collected: 01/13/25 16:24

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482662	JBT	EET SEA	01/16/25 01:25
Total/NA	Analysis	8260D	DL	10	482736	JBT	EET SEA	01/16/25 19:04
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/17/25 00:25
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/15/25 03:20
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/15/25 03:20
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:36
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 17:34

Client Sample ID: RNS-MW2-20250113

Lab Sample ID: 580-147289-10

Date Collected: 01/13/25 15:13

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	482662	JBT	EET SEA	01/16/25 01:48
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/17/25 00:39
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/15/25 03:44
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/15/25 03:44
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:36
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 17:52

Client Sample ID: RNS-MW6-42.5-20250113

Lab Sample ID: 580-147289-11

Date Collected: 01/13/25 16:45

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		10	482662	JBT	EET SEA	01/16/25 07:35

Client Sample ID: RNS-MW6-52.5-20250113

Lab Sample ID: 580-147289-12

Date Collected: 01/13/25 17:10

Matrix: Water

Date Received: 01/14/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		10	482662	JBT	EET SEA	01/16/25 07:12
Total/NA	Analysis	RSK-175		1	681684	SJD	EET DEN	01/17/25 00:53
Total/NA	Analysis	300.0		1	482754	MLT	EET SEA	01/15/25 04:08

Eurofins Seattle

Lab Chronicle

Client: Landau Associates, Inc.
Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Client Sample ID: RNS-MW6-52.5-20250113

Lab Sample ID: 580-147289-12

Date Collected: 01/13/25 17:10

Matrix: Water

Date Received: 01/14/25 08:40

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Analysis	300.0		1	482755	MLT	EET SEA	01/15/25 04:08
Total/NA	Analysis	SM 4500 S2 D		1	681787	ABW	EET DEN	01/17/25 12:36
Total/NA	Analysis	SM 5310B		1	682213	GMW	EET DEN	01/21/25 18:08

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Accreditation/Certification Summary

Client: Landau Associates, Inc.
Project/Site: Sauro's Cleanorama 0094048.100

Job ID: 580-147289-1

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788-24	07-13-25

Laboratory: Eurofins Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

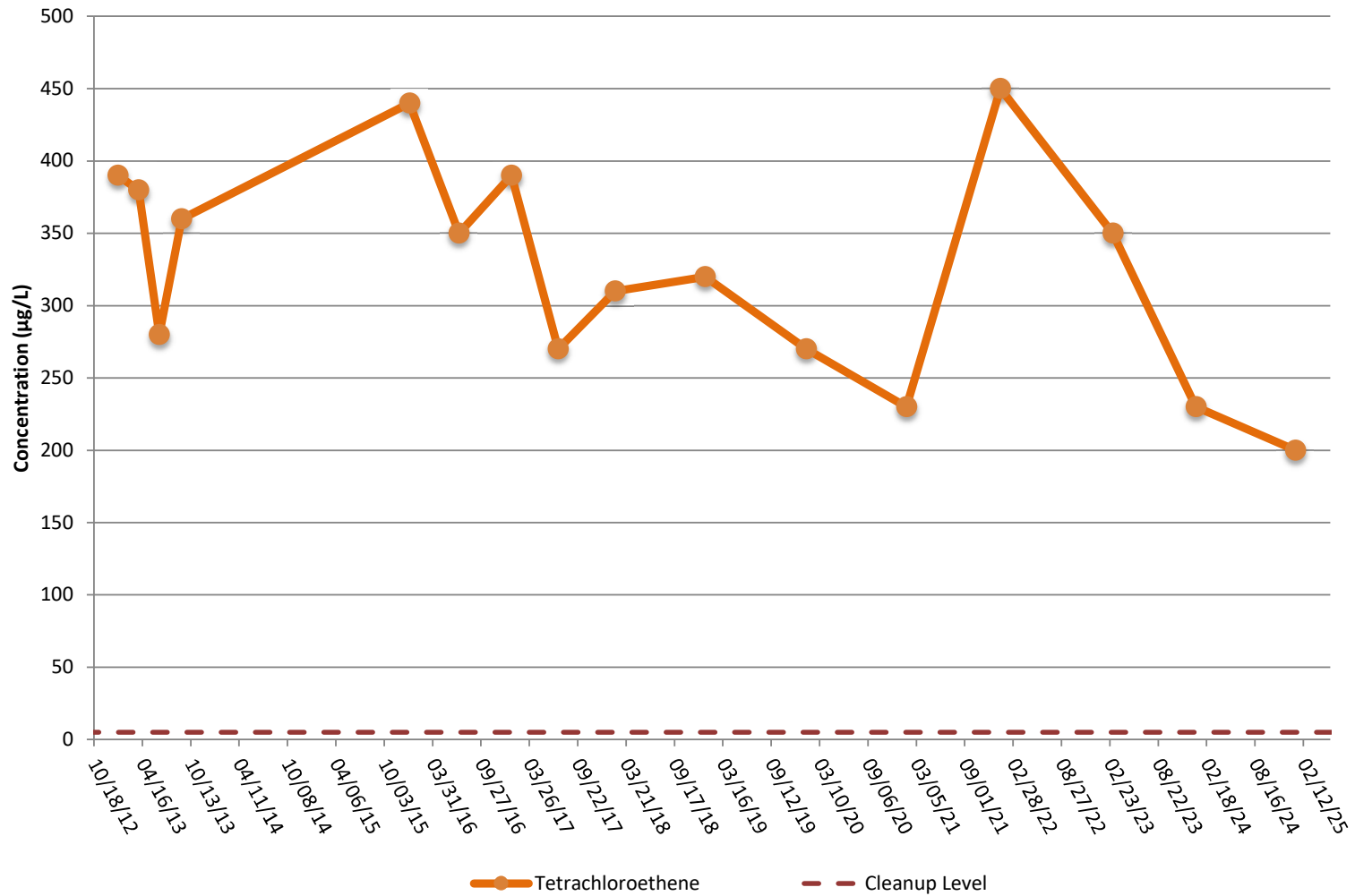
Authority	Program	Identification Number	Expiration Date
Washington	State	C583	08-03-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 5310B		Water	Total Organic Carbon - Quad



Cumulative Results Table

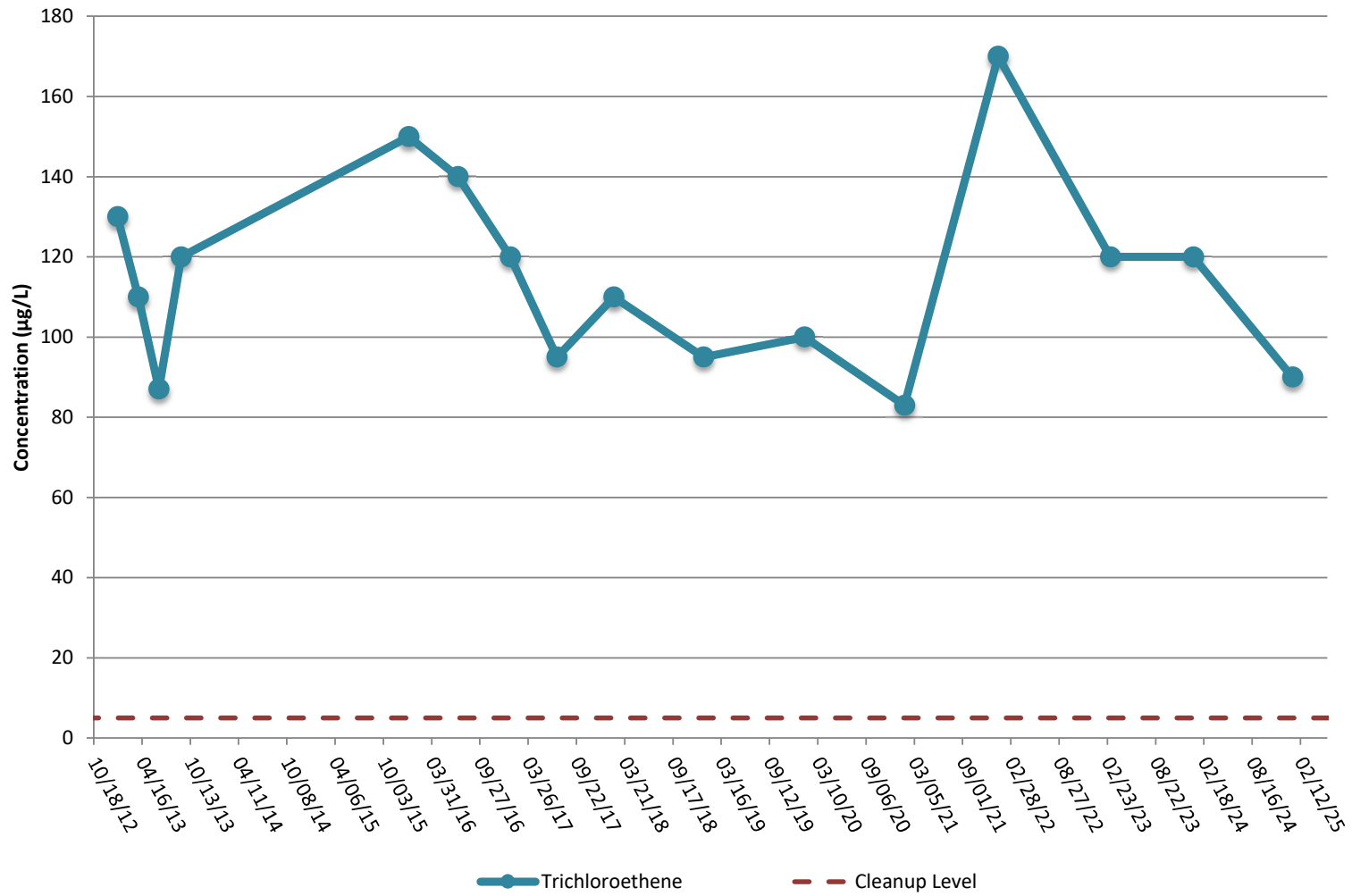


Sauro's Cleanorama
Tacoma, Washington

LAI-MW2
Tetrachloroethene

Figure
3-1

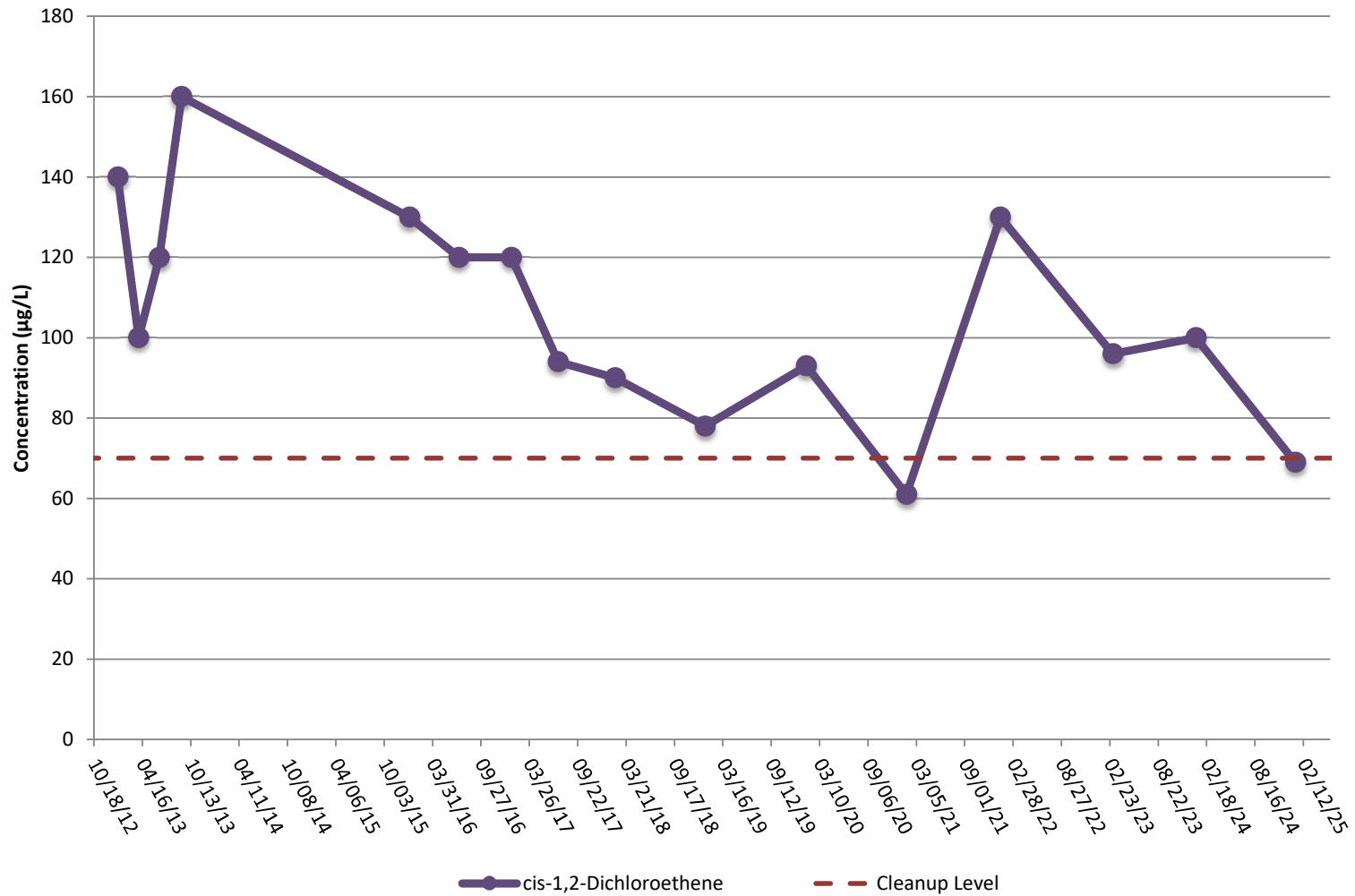




Sauro's Cleanerama
Tacoma, Washington

LAI-MW2
Trichloroethene

Figure
3-2



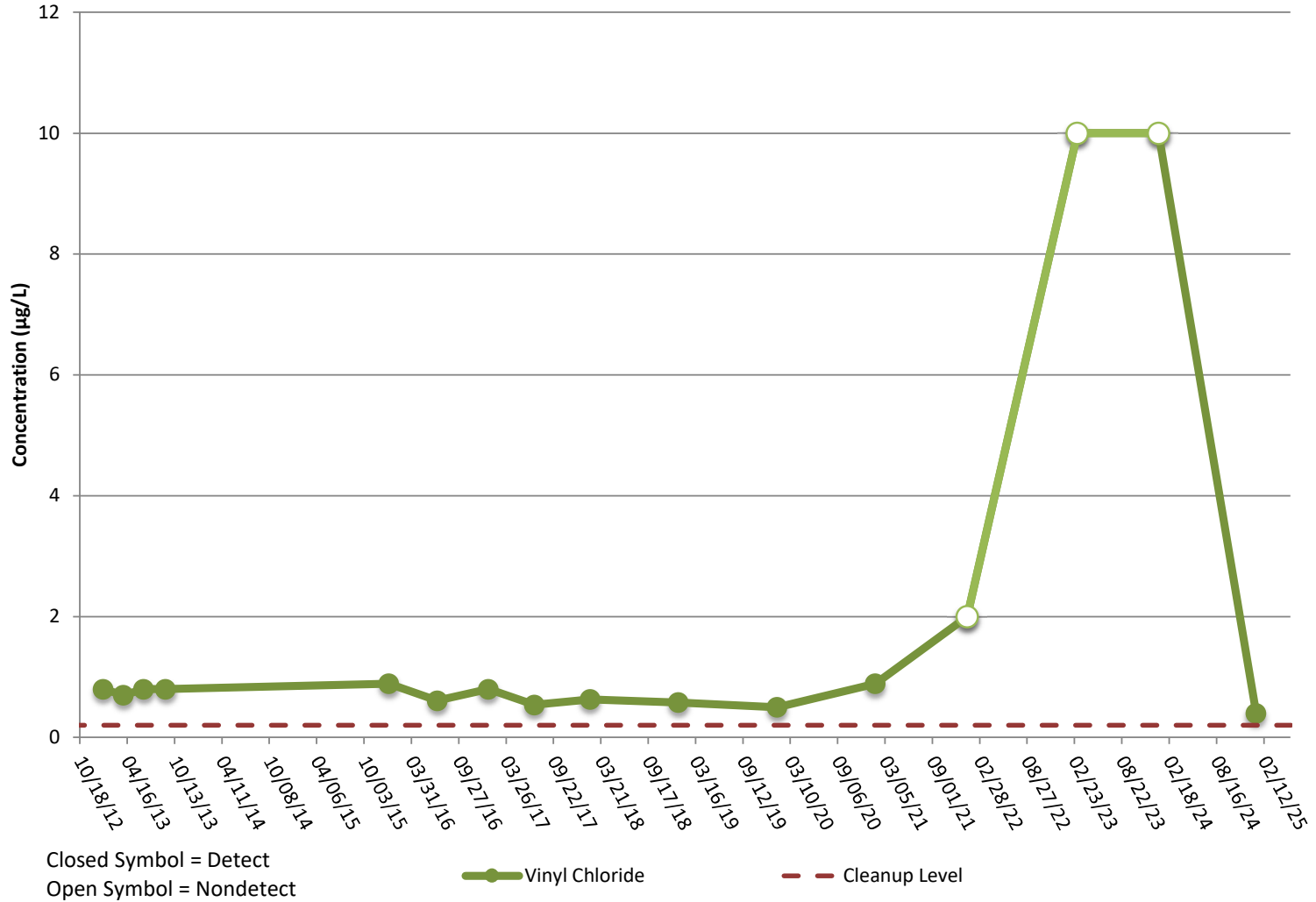
● cis-1,2-Dichloroethene - - - Cleanup Level



Sauro's Cleanorama
Tacoma, Washington

LAI-MW2
cis-1,2-Dichloroethene

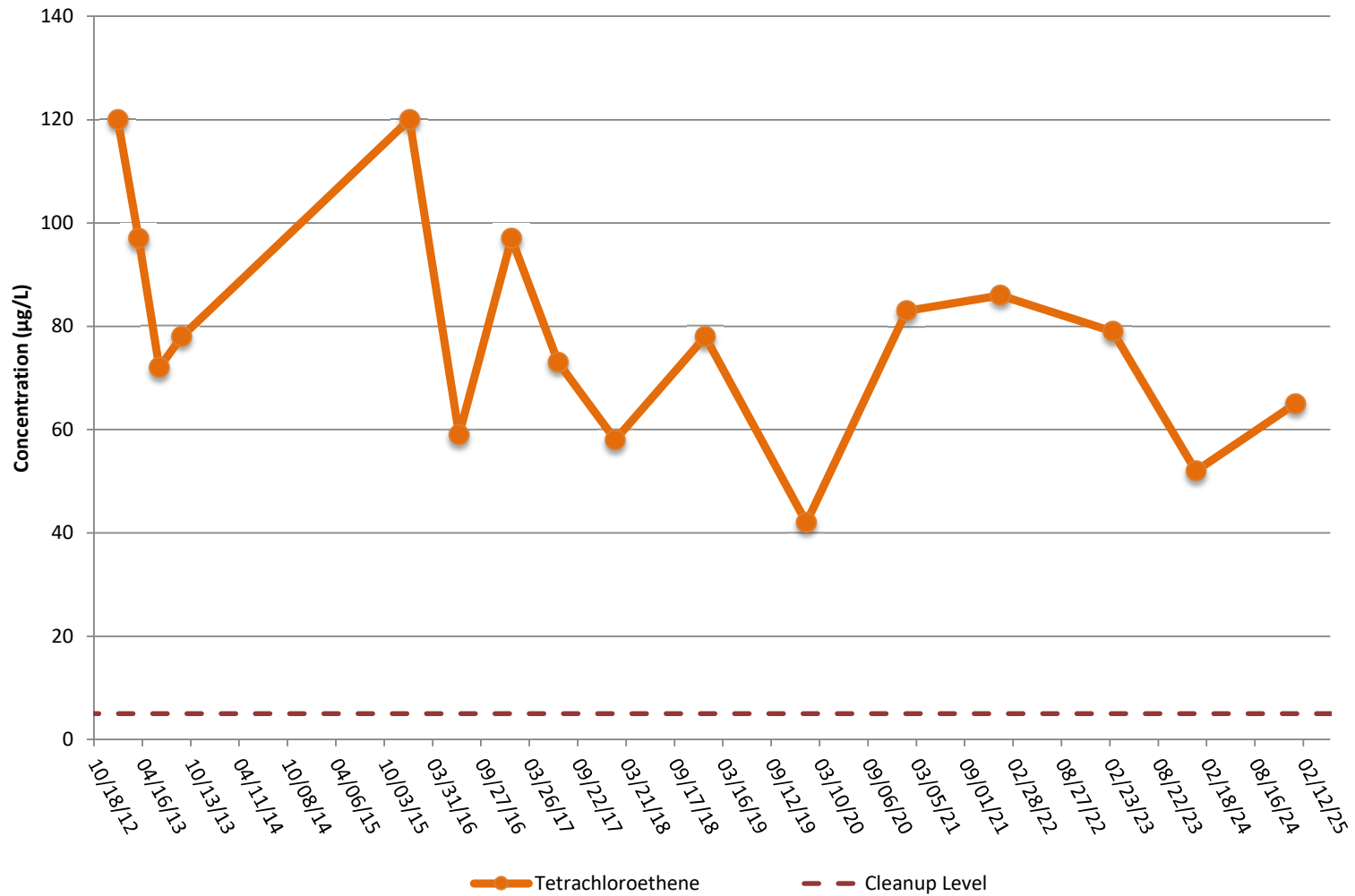
Figure
3-3



Sauro's Cleanerama
Tacoma, Washington

LAI-MW2
Vinyl Chloride

Figure
3-4

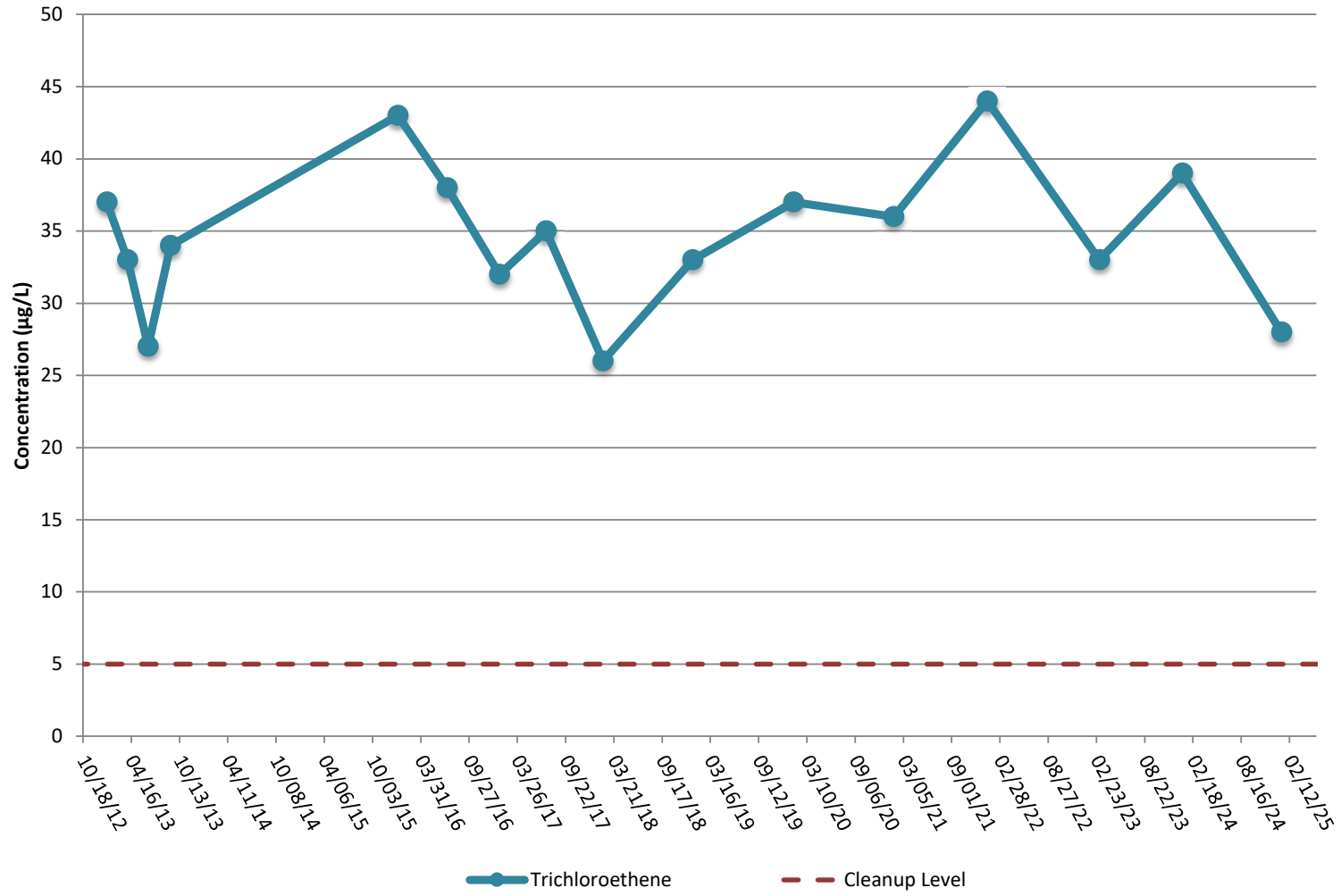


Sauro's Cleanerama
Tacoma, Washington

LAI-MW3
Tetrachloroethene

Figure
3-5



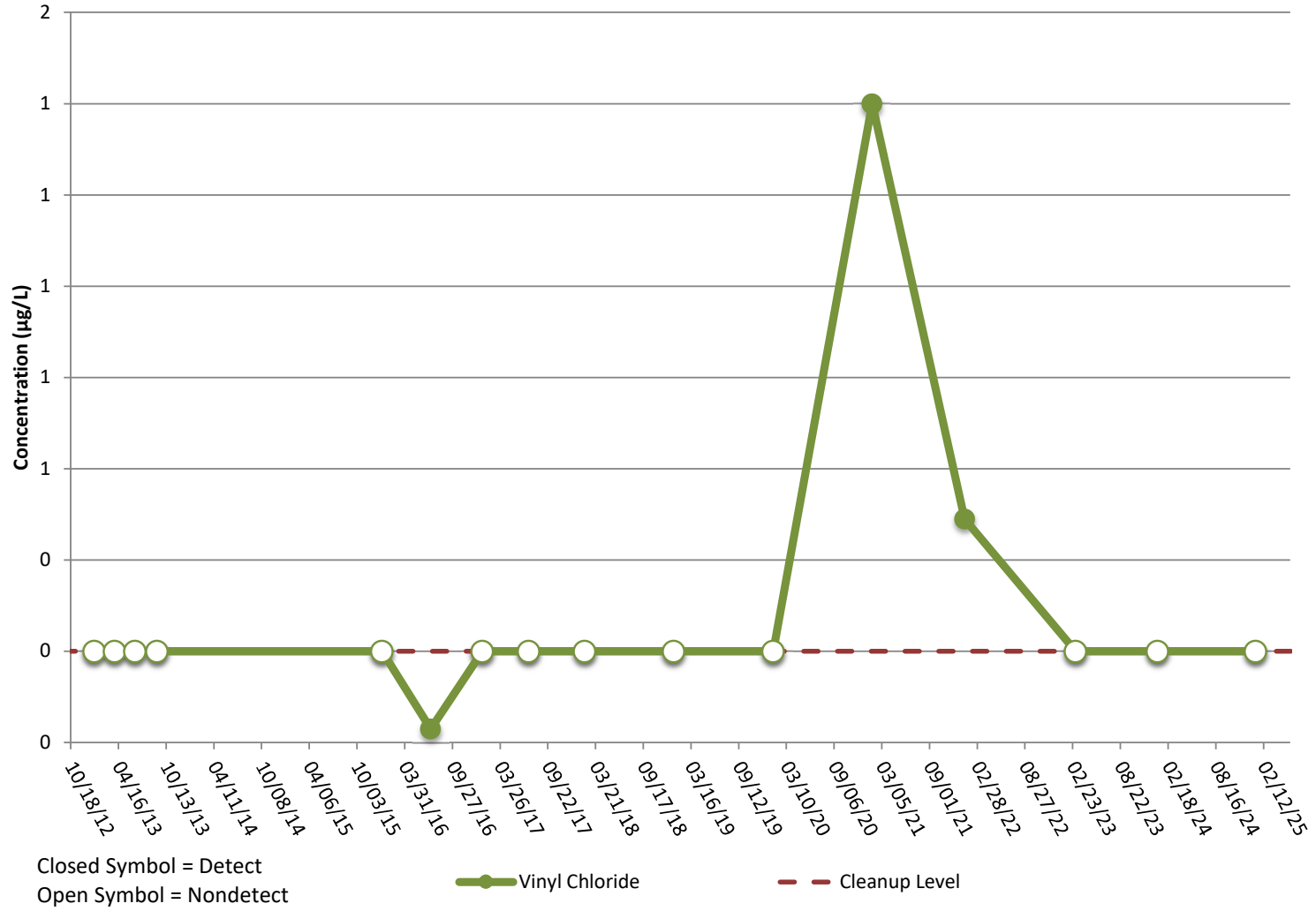


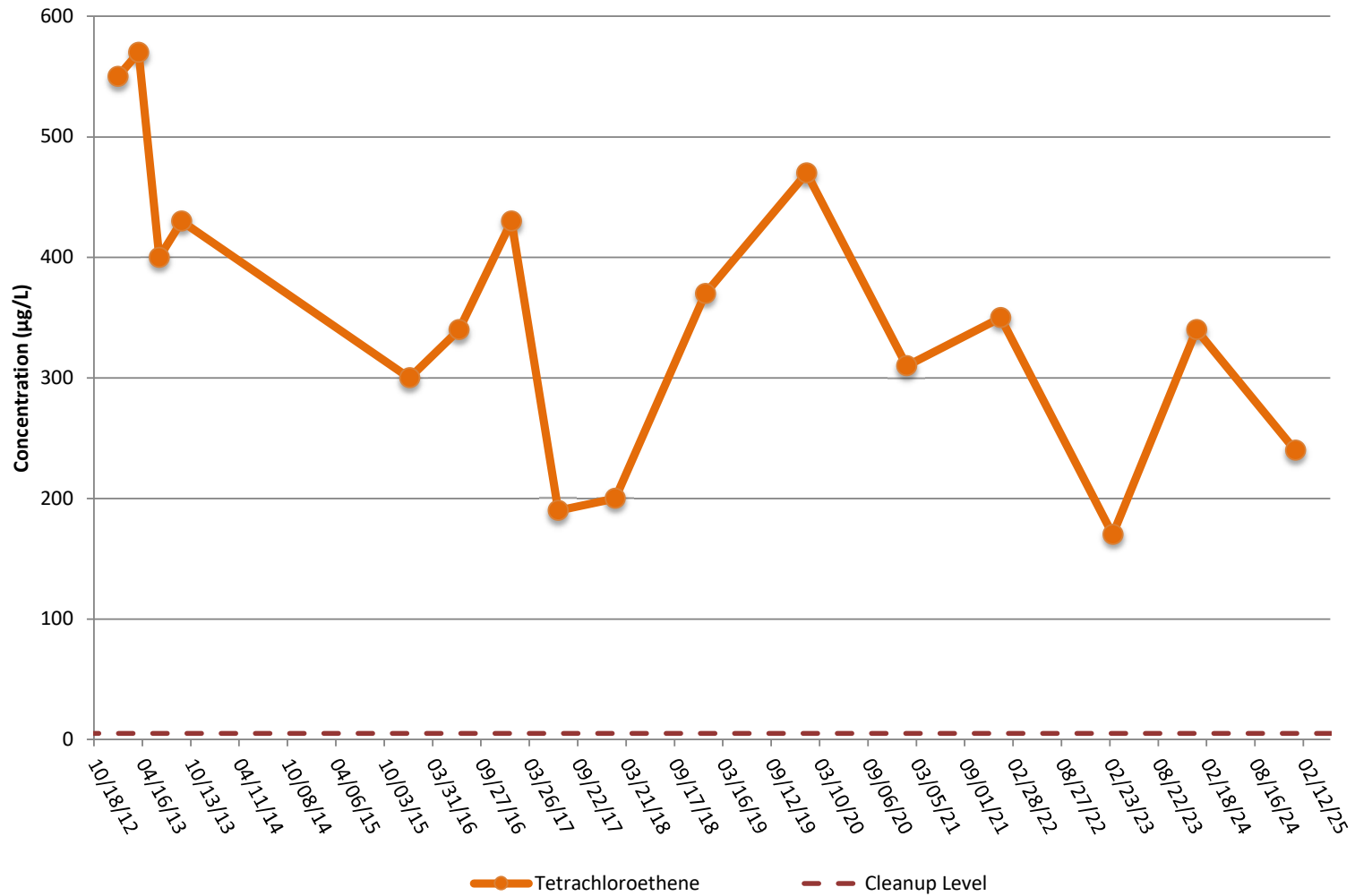
Sauro's Cleanorama
Tacoma, Washington

LAI-MW3
Trichloroethene

Figure
3-6





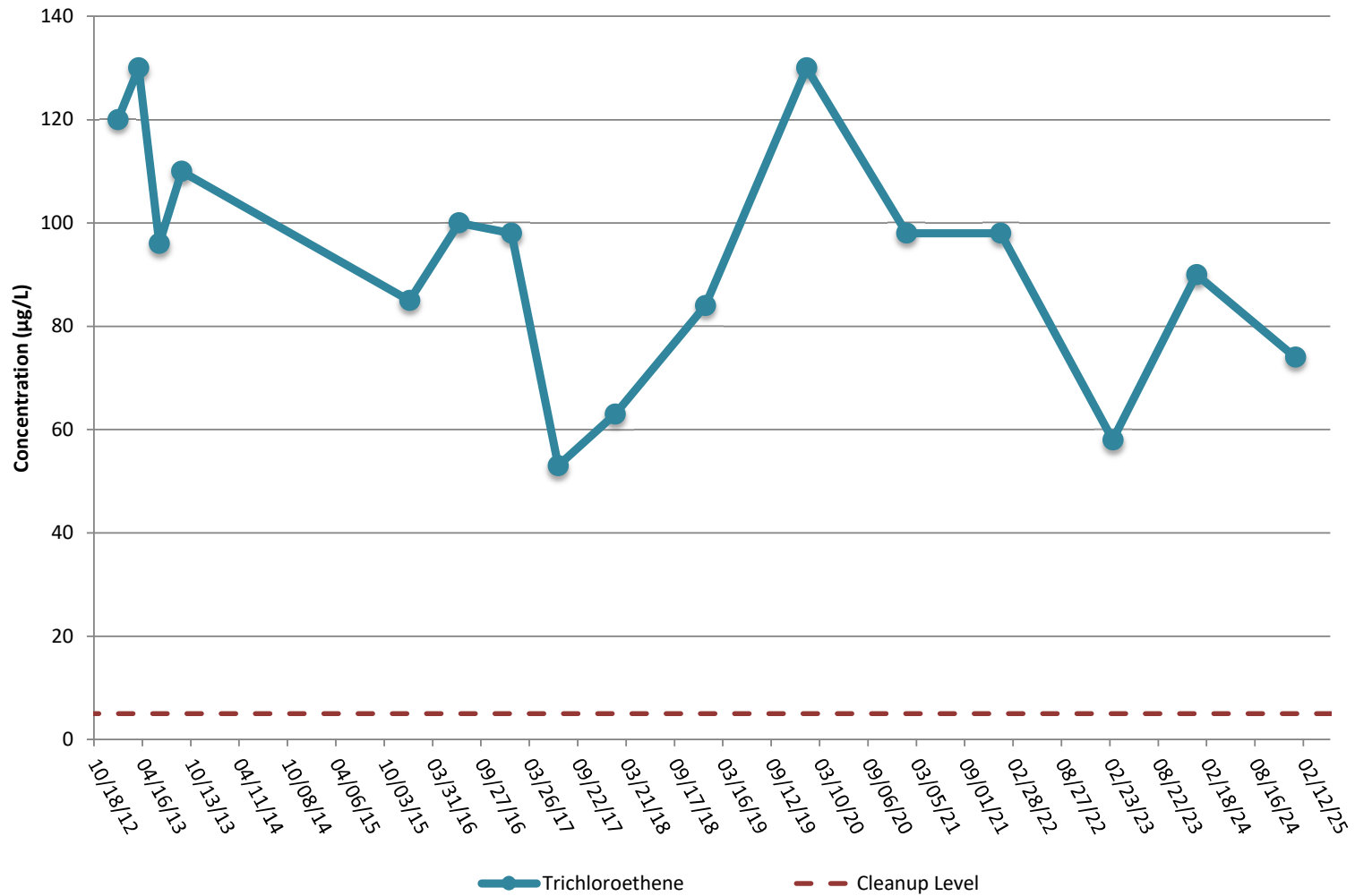


Sauro's Cleanerama
Tacoma, Washington

MW13
Tetrachloroethene

Figure
3-8





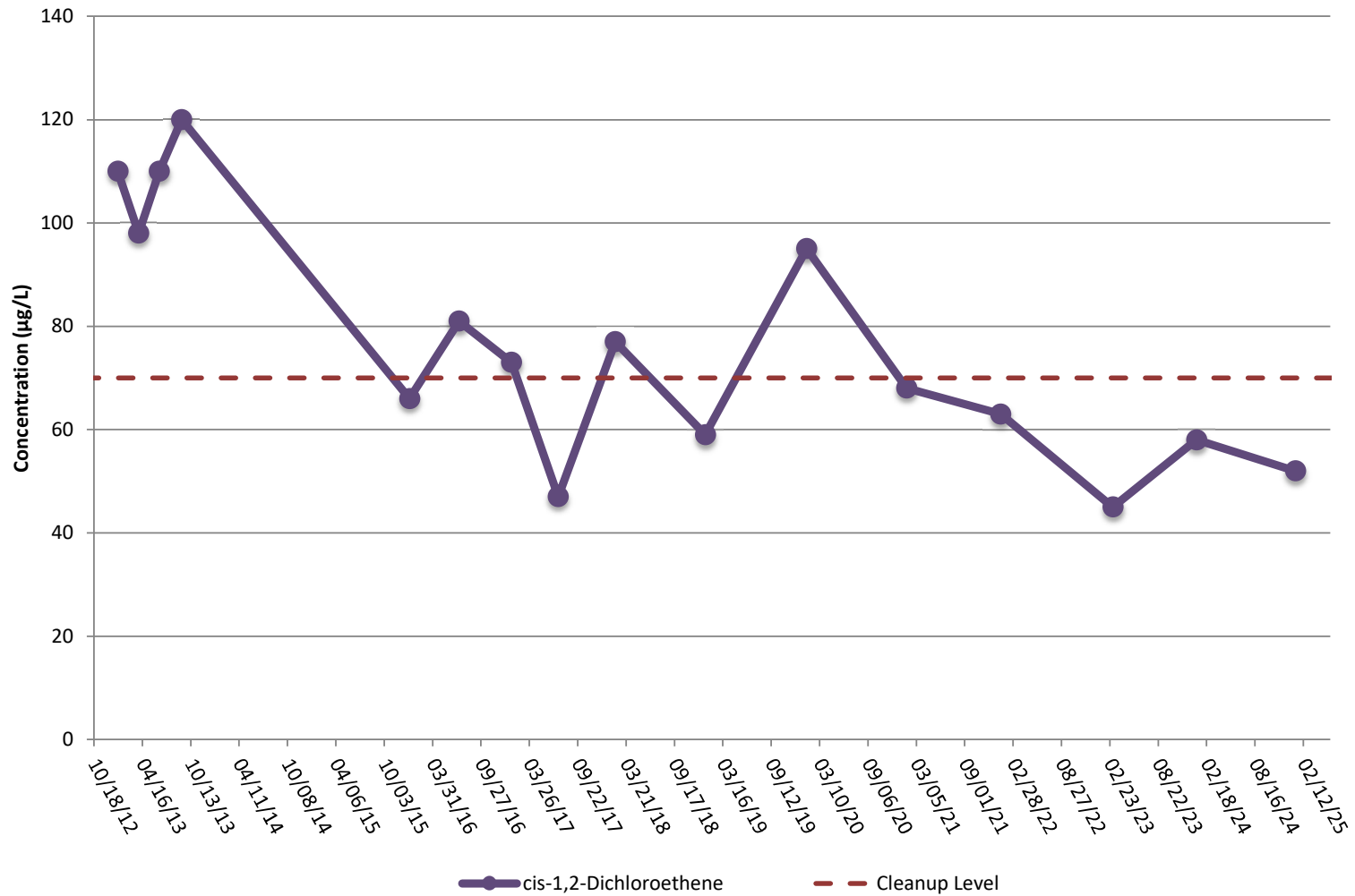
Trichloroethene Cleanup Level

Sauro's Cleanerama
Tacoma, Washington

MW13
Trichloroethene

Figure
3-9



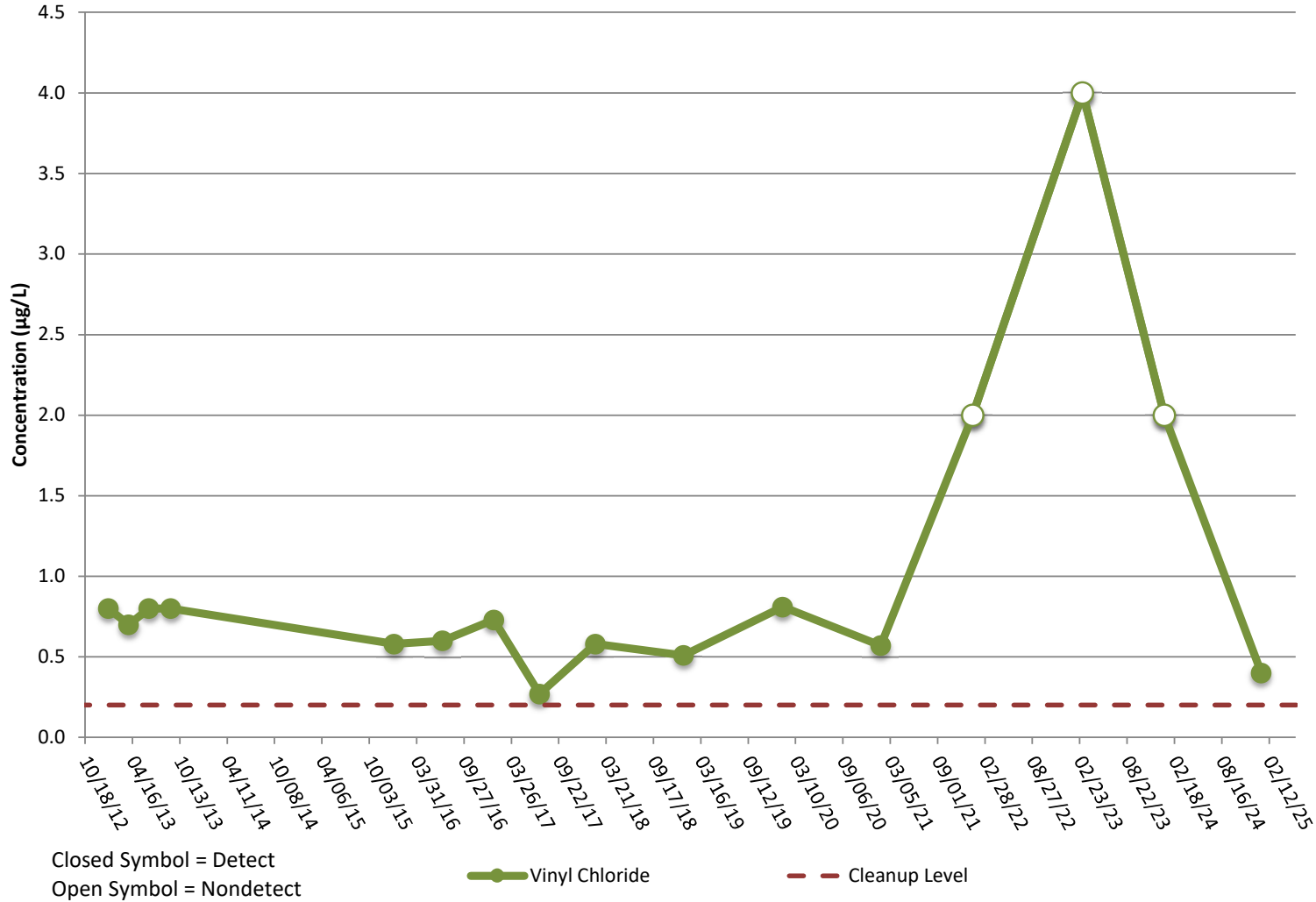


Sauro's Cleanerama
Tacoma, Washington

MW13
cis-1,2-Dichloroethene

Figure
3-10

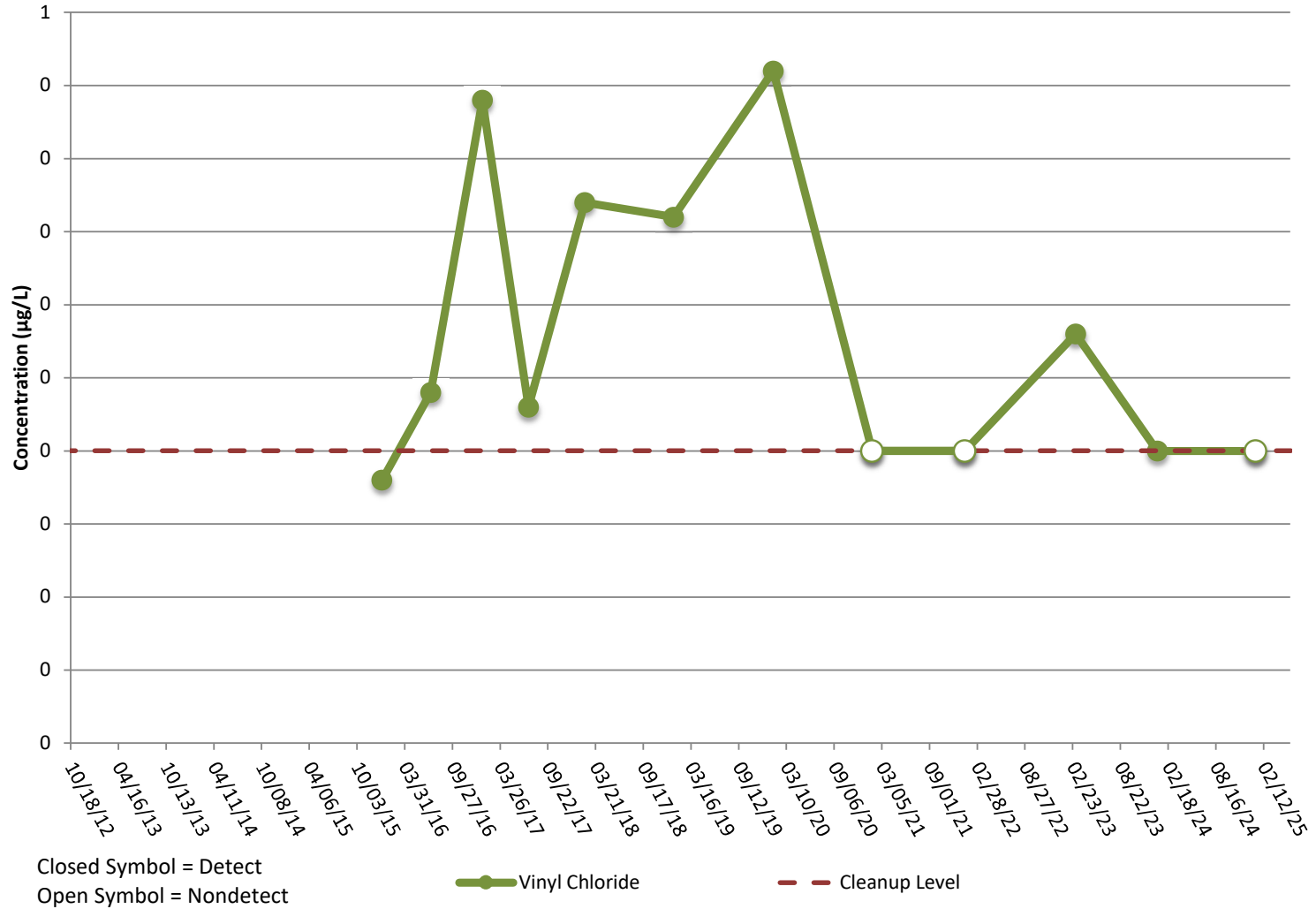




Sauro's Cleanerama
Tacoma, Washington

MW13
Vinyl Chloride

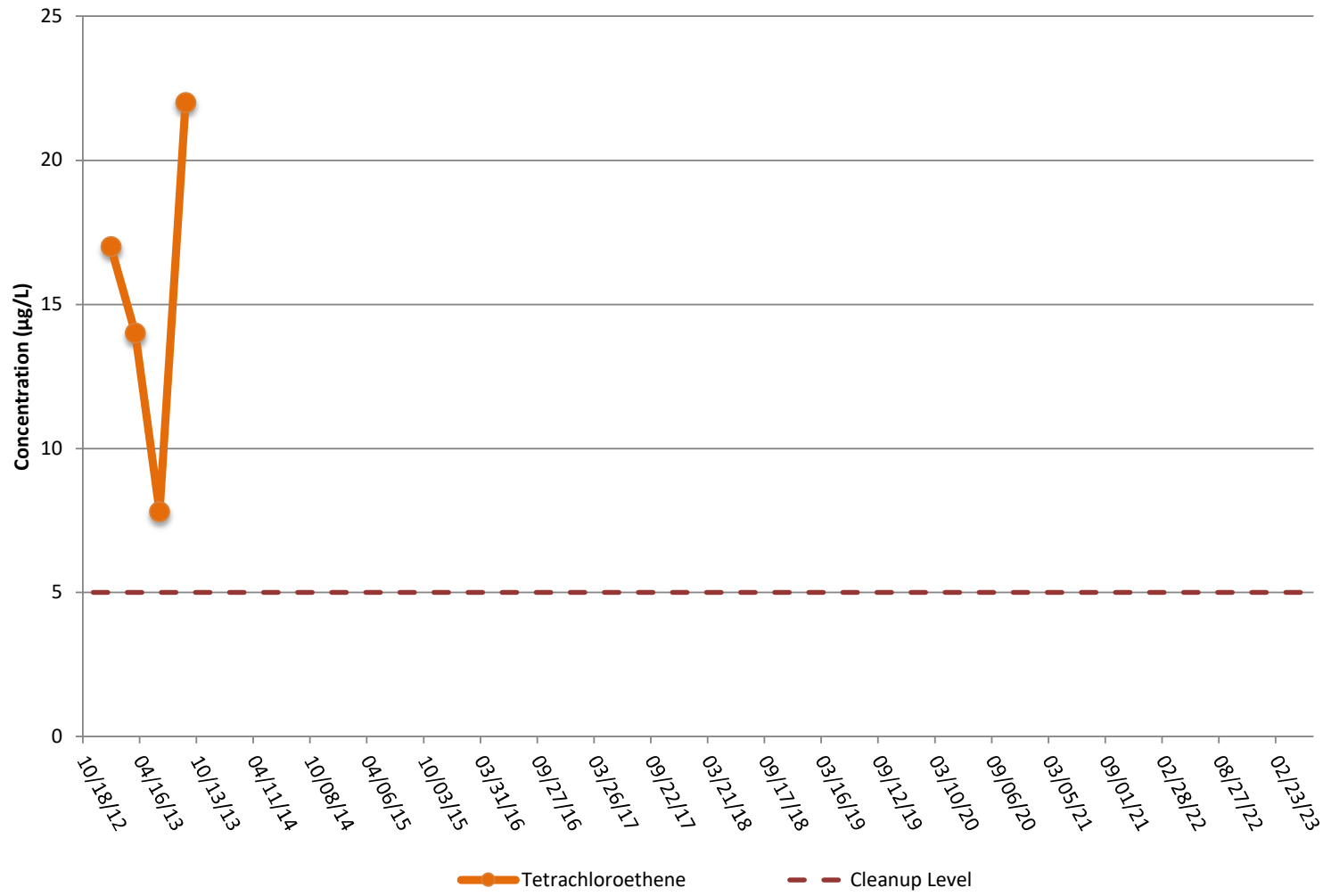
Figure
3-11



Sauro's Cleanerama
Tacoma, Washington

MW2
Vinyl Chloride

Figure
3-12

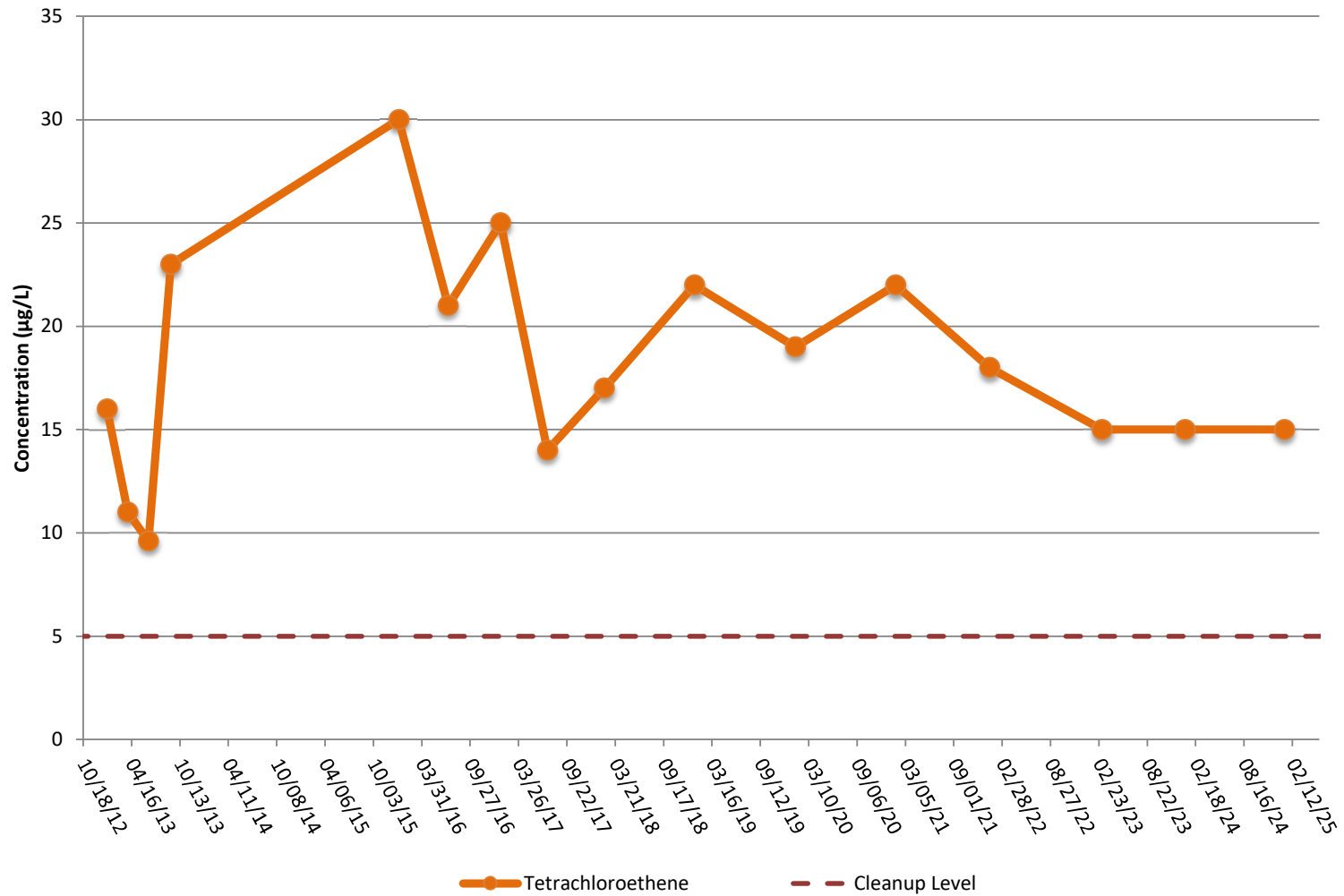


Sauro's Cleanerama
Tacoma, Washington

RNS-MW2-21.5
Tetrachloroethene

Figure
3-13



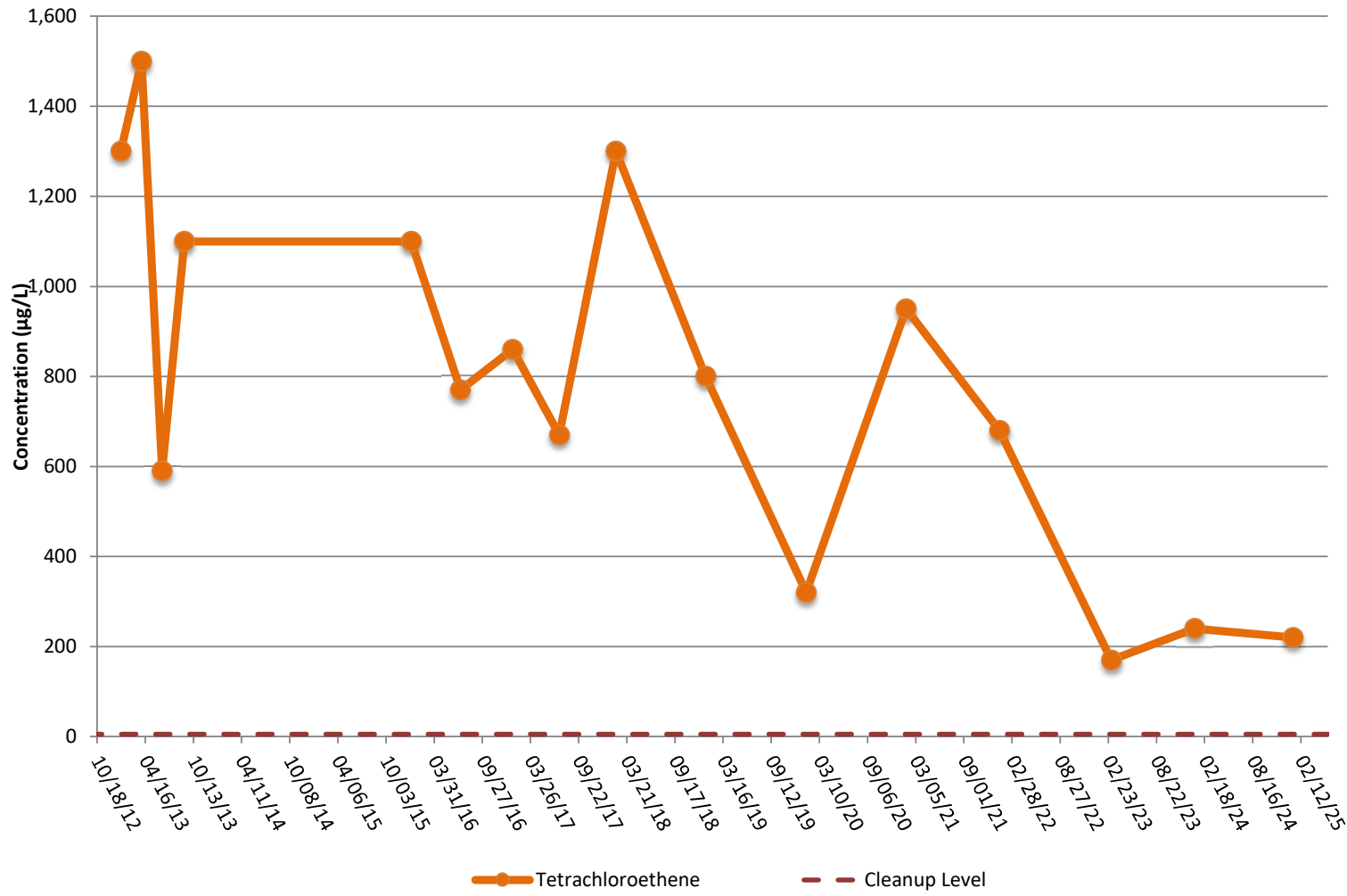


Sauro's Cleanerama
Tacoma, Washington

RNS-MW2-38.5
Tetrachloroethene

Figure
3-14



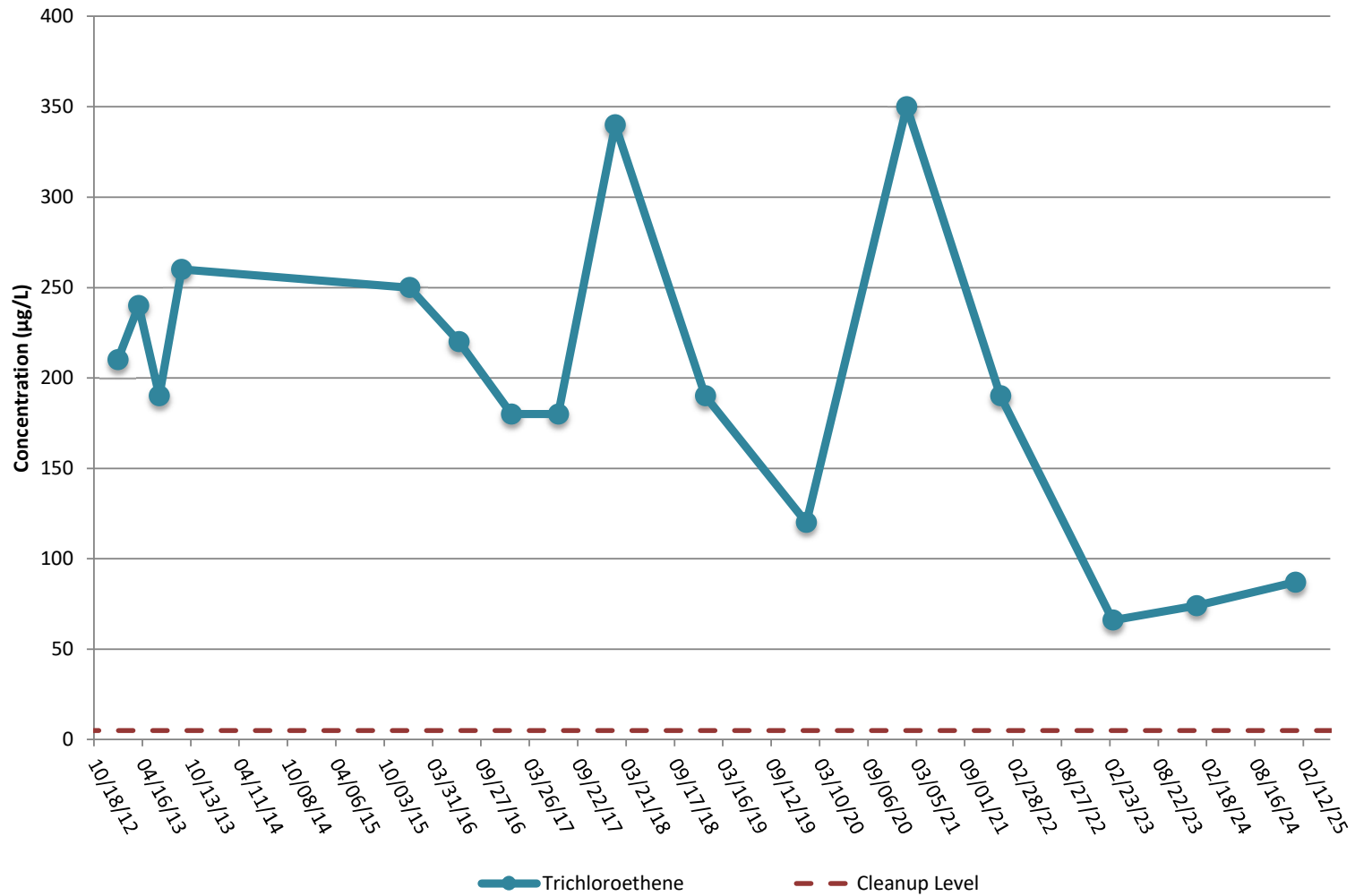


Sauro's Cleanerama
Tacoma, Washington

RNS-MW6-42.5
Tetrachloroethene

Figure
3-15



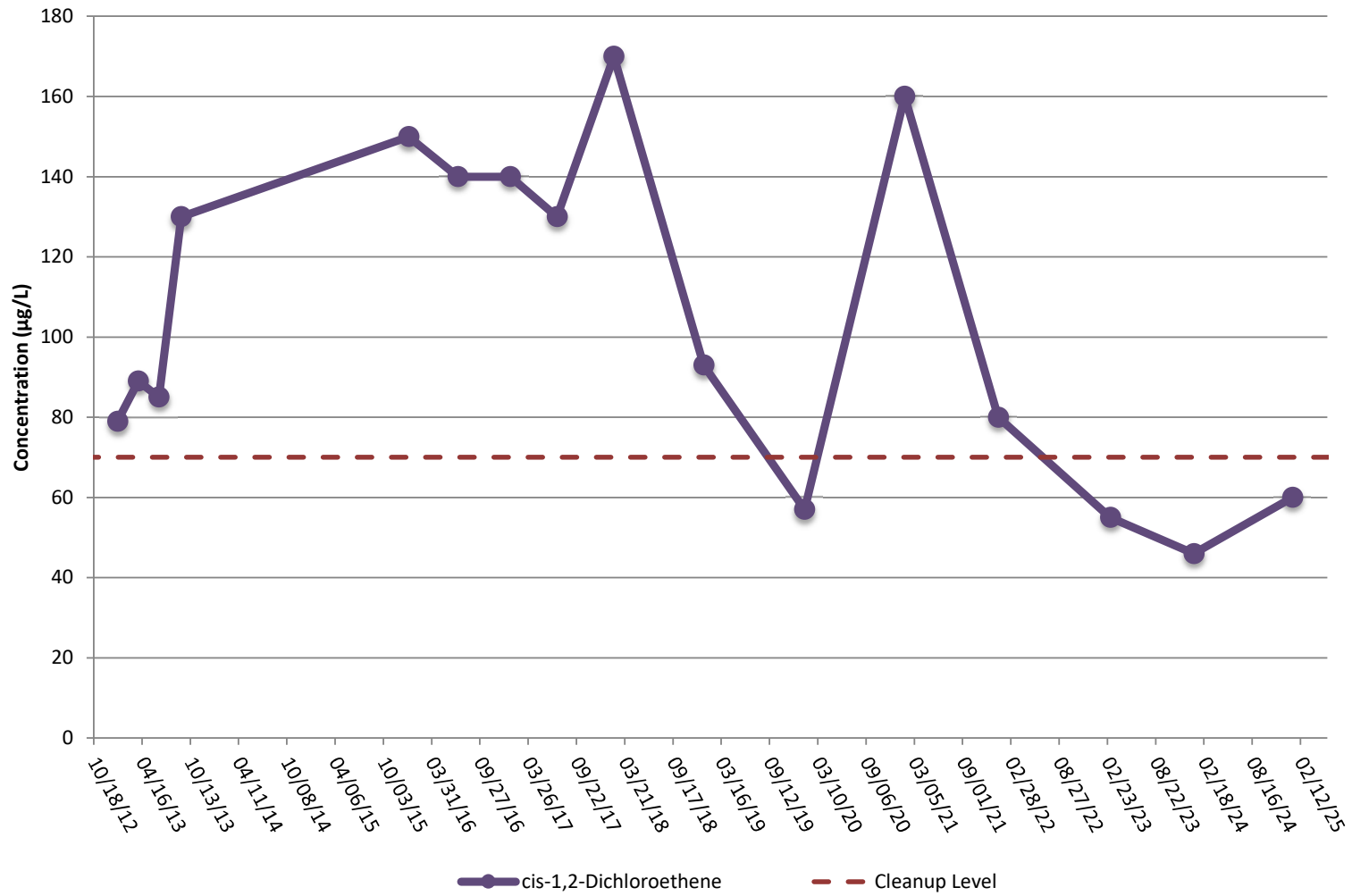


Sauro's Cleanerama
Tacoma, Washington

RNS-MW6-42.5
Trichloroethene

Figure
3-16





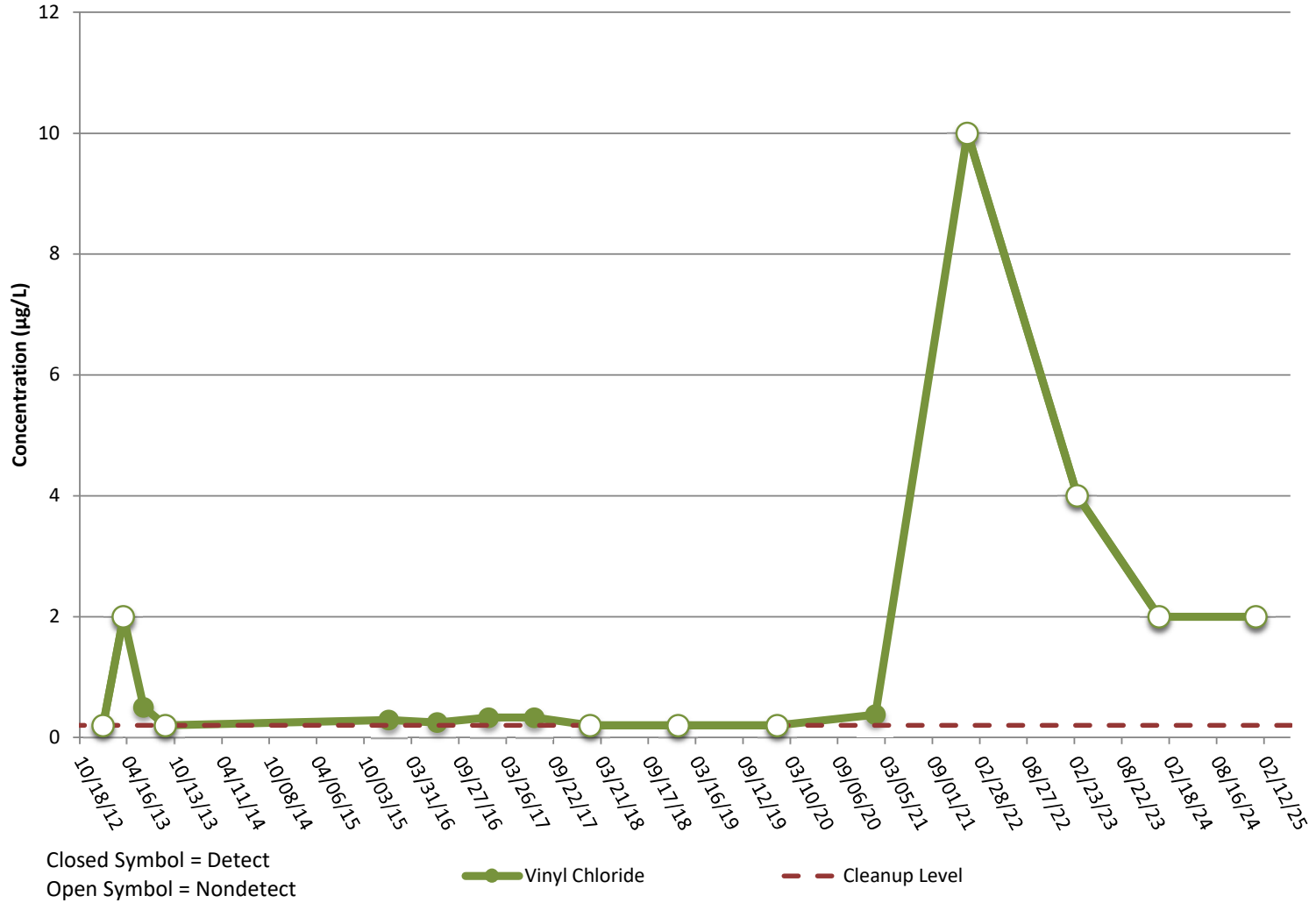
● cis-1,2-Dichloroethene - - - Cleanup Level



Sauro's Cleanerama
Tacoma, Washington

RNS-MW6-42.5
cis-1,2-Dichloroethene

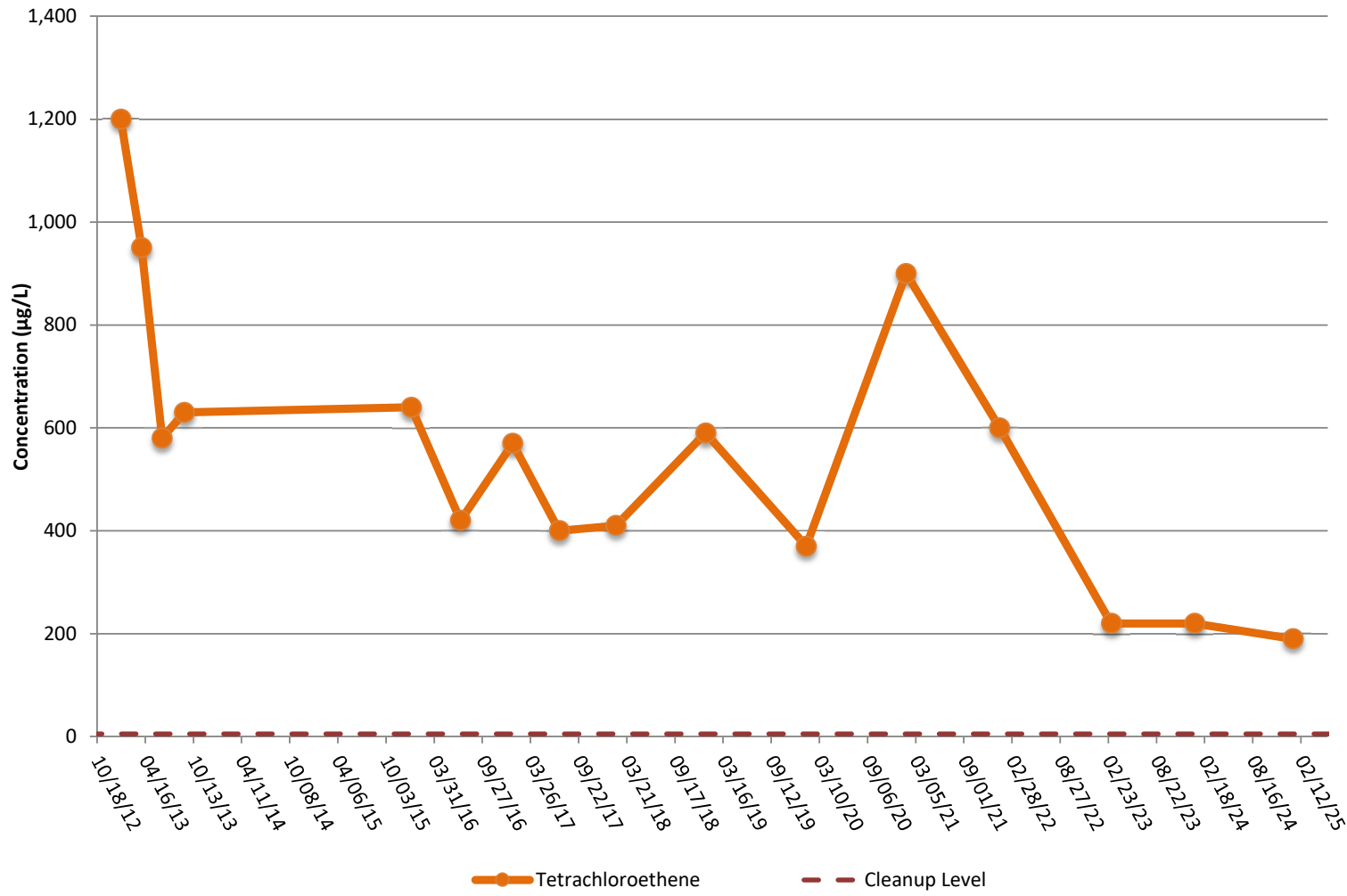
Figure
3-17



Sauro's Cleanerama
Tacoma, Washington

RNS-MW6-42.5
Vinyl Chloride

Figure
3-18

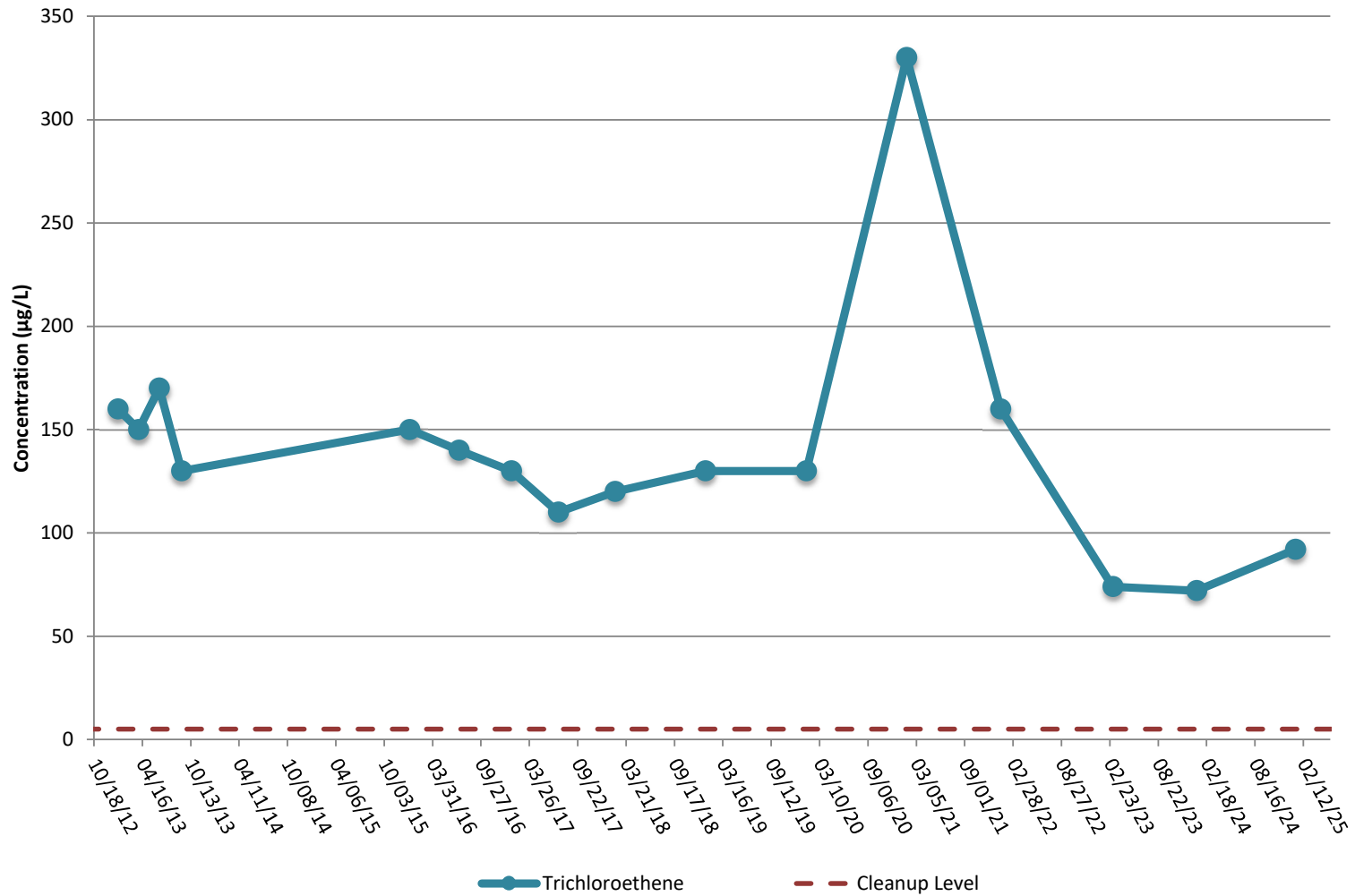


Sauro's Cleanerama
Tacoma, Washington

RNS-MW6-52.5
Tetrachloroethene

Figure
3-19



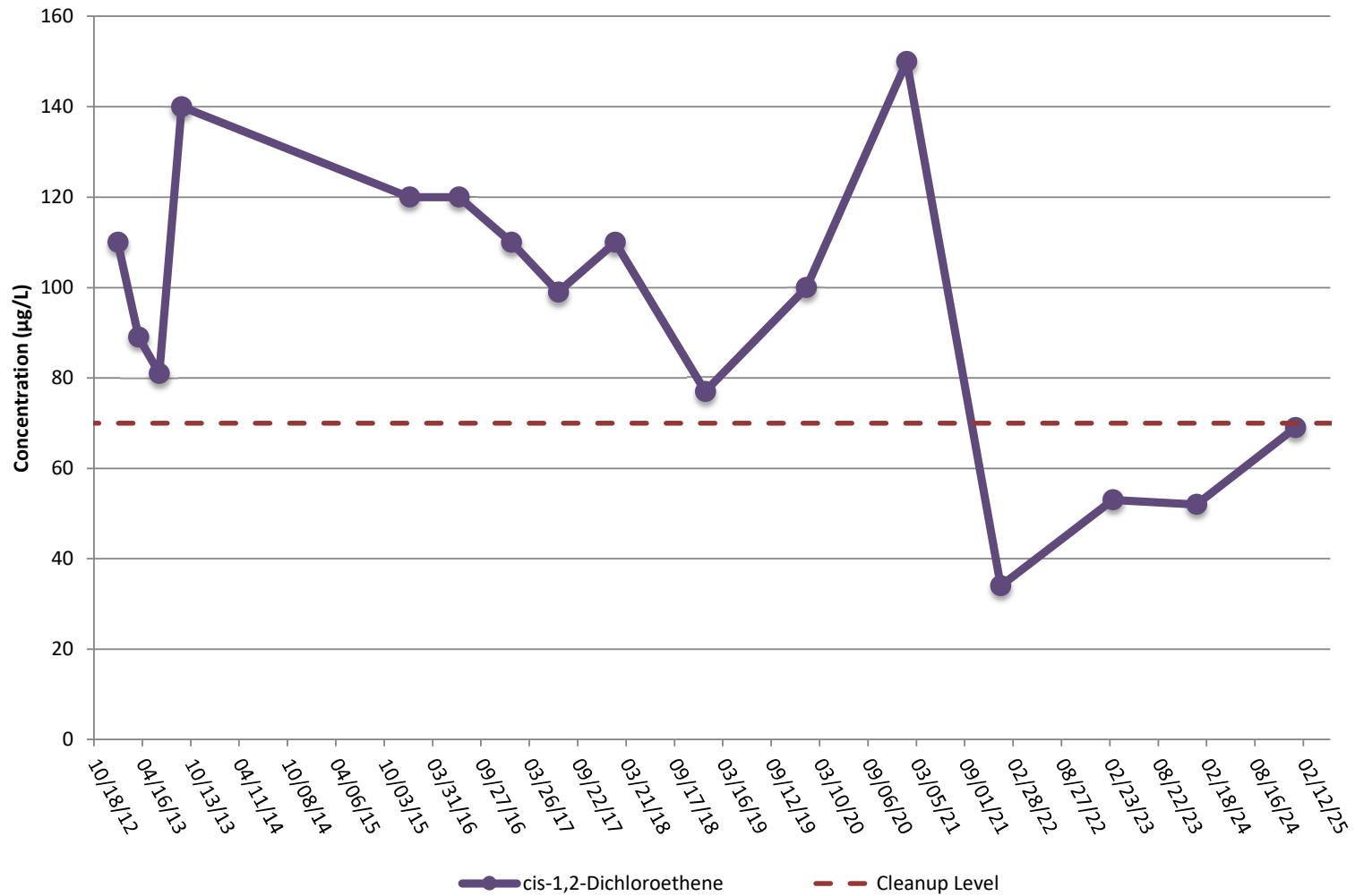


Sauro's Cleanerama
Tacoma, Washington

RNS-MW6-52.5
Trichloroethene

Figure
3-20





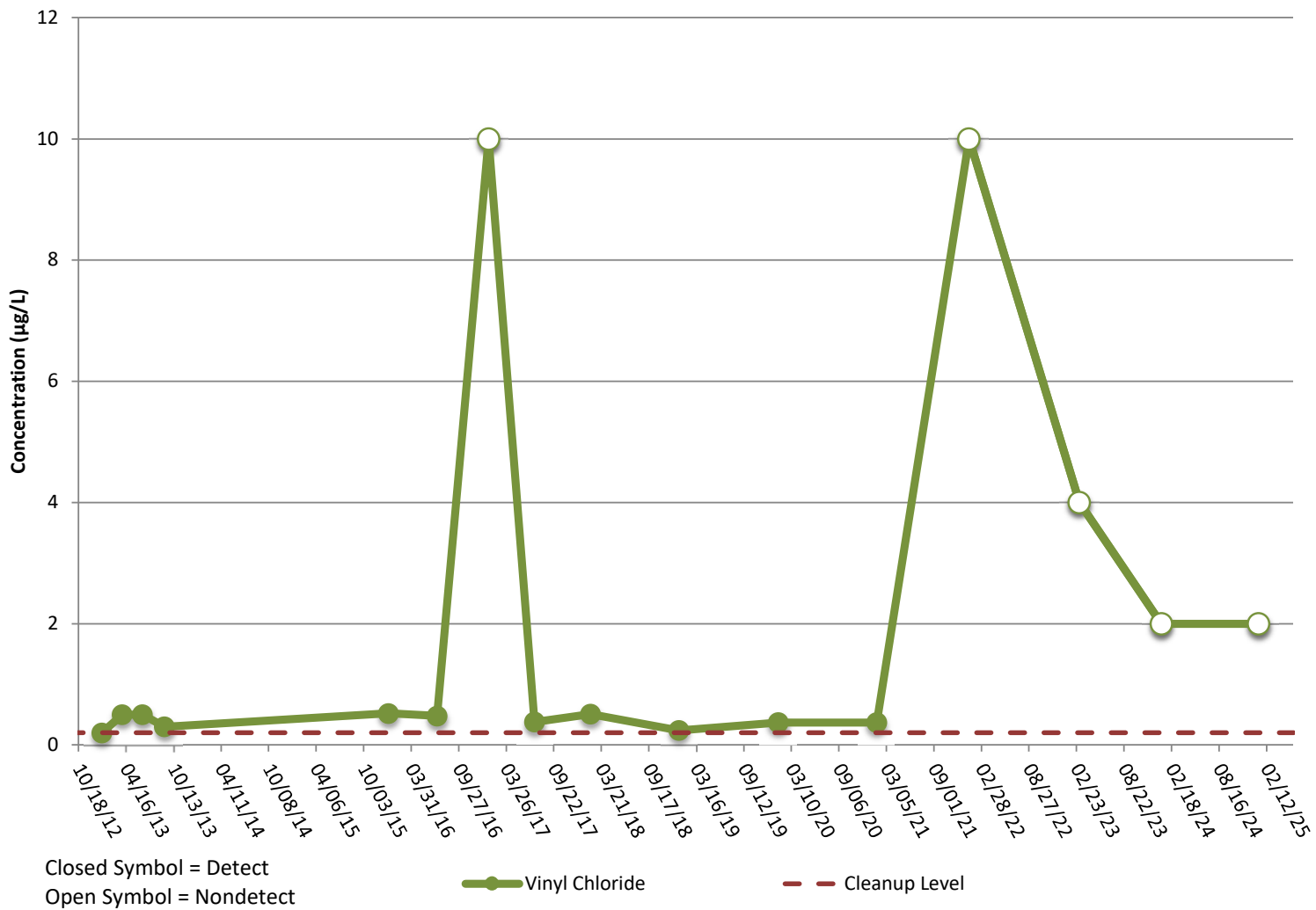
● cis-1,2-Dichloroethene - - - Cleanup Level

Sauro's Cleanerama
Tacoma, Washington

RNS-MW6-52.5
cis-1,2-Dichloroethene

Figure
3-21





**Table 3-1
Bioremediation Data Summary
Sauro's Cleanerama**

Well	Date	Sample Type	Volatile Organic Compounds							Aquifer Redox Conditions									Donor Indicators
			PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	Acetylene (µg/L)	Chloride (mg/L)	DO (a) (mg/L)	ORP (a) (mV)	Nitrate (mg/L)	Nitrite (mg/L)	Iron II (a) (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Methane (µg/L)	TOC (mg/L)
Cleanup Level:			5	5	70	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW1	1/15/2013	N	0.5 U	0.2 U	0.5 U	0.2 U	5.0 U	5.0 U	5.0 U	44.1	1.90	-14.1	1.15	0.0229	0.040	17.7	0.15 U	5.0 U	3.97
LAI-MW1	4/2/2013	N	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	5.0 U	5.0 U	44.3	2.20	1.40	1.03 J	0.0109 J	0.030	22.4	0.150 U	5.0 U	3.40
LAI-MW1	6/18/2013	N	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	5.0 U	5.0 U	43.1	0.800 J	-26.8 J	1.39	0.0139	0.090 J	24.9	0.150 U	5.0 U	9.26
LAI-MW1	9/9/2013	N	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	5.0 U	5.0 U	47.8	1.20	-31.8	1.40	0.025	0.03 U	25.8	0.150 U	5.0 U	11.2
LAI-MW1	1/5/2016	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	48	5.96	115.00	0.84 J	0.020 UJ	0.0	19	0.050 U	16	0.27 J
LAI-MW1	7/7/2016	N	0.12 J	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	64	2.37	-16.4	1.1	0.40 U	0.0	21	0.050 U	0.55 J	1.4 J
LAI-MW1	1/18/2017	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	72	2.17	31.2	1.3	0.40 U	0.0	19	0.050 U	5.0 U	2.6
LAI-MW1	7/11/2017	N	0.30	0.90 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	53	2.39	59.8	1.2	0.40 U	0.0	20	0.050 U	5.0 U	1.8
LAI-MW1	2/8/2018	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	47	3.13	-68.7	1.5	0.40 U	1.0	20	0.050 U	5.0 U	1.9
LAI-MW1	1/9/2019	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	52	1.65	165	1.8	0.40 U	0.5	22	0.050 U	5.0 U	1.3
LAI-MW1	1/20/2020	N	0.20 UJ	0.20 UJ	0.20 UJ	0.20 UJ	5.0 UJ	5.0 UJ	5.0 UJ	45 J	1.06	87.6	1.2 J	0.40 UJ	0.4	20 J	0.050 UJ	19 J	1.7 J
LAI-MW1	1/27/2021	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	65	1.82	-280.8	2.0	0.40 U	1.5	23	0.050 U	5.0 U	1.5 U
LAI-MW1	1/11/2022	N	0.20 U	0.20 U	0.20 U	0.20 U	--	--	--	89	0.293	1.98	1.5	0.40 U	1.4	19	0.050 U	8.0 J	1.3
LAI-MW1	3/6/2023	N	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.57 U	0.73 U	67	2.16	50.30	1.8	0.40 U	0.5	20	0.050 U	0.63 U	1.4
LAI-MW1	1/9/2024	N	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.57 U	0.73 U	56	4.28	88.50	1.4	0.40 U	0.0	17	0.050 U	0.63 U	1.3
LAI-MW1	1/13/2025	N	0.20 U	0.20 U	0.20 U	0.20 U	1.5 U	1.5 U	1.5 U	80	1.19	24.5	1.3	0.40 U	0.5 U	14	0.050 UJ	1.5 U	1.0 U
LAI-MW2	1/15/2013	N	390	130	140	0.8	5.0 U	5.0 U	5.0 U	8.99	3.06	-19.2	0.01 U	0.0161	0.050	11.3	0.285	37	2.38
LAI-MW2	4/2/2013	N	380	110	100	0.7	5.0 U	5.0 U	5.0 U	10.0	2.80	-28.9	0.01 UJ	0.0575 J	0.280	17.5	17.5	43	4.11
LAI-MW2	6/18/2013	N	280 J	87 J	120 J	0.8	5.0 U	5.0 U	5.0 U	10.8	1.50 J	32.7 J	0.018	0.0100 U	0.030 UJ	17.2	17.2	43	10.3
LAI-MW2	9/9/2013	N	360 J	120 J	160 J	0.8	5.0 U	5.0 U	5.0 U	13.0	2.90	-44.8	0.01 U	0.015	0.03 U	18.9	18.9	26	12.3
LAI-MW2	1/5/2016	N	440	150	130	0.89	5.0 U	3.8 J	5.0 U	15	6.89	81.60	0.024 J	0.020 UJ	0.5	22	22	17	2.9
LAI-MW2	7/7/2016	N	350	140	120	0.61	0.65 J	3.7 J	5.0 U	15	3.34	-28.5	0.20 U	0.40 U	0.4	20	20	27	1.3
LAI-MW2	1/18/2017	N	390	120	120	0.80 J	5.0 U	5.0 U	5.0 U	12	6.97	15.5	0.20 U	0.40 U	1.5	19	19	24	5.6
LAI-MW2	7/11/2017	N	270	95	94	0.54	5.0 U	5.0 U	5.0 U	13	2.24	57.1	0.20 U	0.40 U	0.4	19	19	12	1.8
LAI-MW2	2/8/2018	N	310	110	90	0.63	5.0 U	5.0 U	5.0 U	12	7.28	-60.3	0.20 U	0.40 U	1.5	18	18	11	1.7
LAI-MW2	1/9/2019	N	320	95	78	0.58	5.0 U	5.0 U	5.0 U	14 J	2.46	86.8	0.20 U	0.40 U	1.0	20 J	20 J	6.5	1.2
LAI-MW2	1/20/2020	N	270 J	100 J	93 J	0.50 J	5.0 UJ	5.0 UJ	5.0 UJ	14 J	1.47	91.4	0.20 UJ	0.40 UJ	0.4	17 J	17 J	9.8 J	1.1 J
LAI-MW2	1/27/2021	N	230	83	61	0.89	5.0 U	5.0 U	5.0 U	25	2.99	-265	0.54	0.40 U	0.5	24	24	6.3	1.5 U
LAI-MW2	1/11/2022	N	450	170	130	2.0 U	--	--	--	24	5.20	18.8	0.29	0.40 U	2.0	24	24	6.1 J	1.8
LAI-MW2	3/6/2023	N	350	120	96	10 U	0.40 U	3.8	0.73 U	26	2.35	-7.4	0.20 U	0.40 U	0.0	23	0.050 U	14	1.6
LAI-MW2	1/9/2024	N	230	120	100	10 U	0.40 U	3.3 J	0.73 U	21	2.31	66.8	0.20 U	0.40 U	1.0	17	0.050 U	12	1.2
LAI-MW2	1/13/2025	N	200	90	69	0.44	1.5 U	2.0 J	1.5 U	23	0.69	4.4	0.20 U	0.40 U	0.5 U	17	0.050 U	10	1.0 U

**Table 3-1
Bioremediation Data Summary
Sauro's Cleanerama**

Well	Date	Sample Type	Volatile Organic Compounds							Aquifer Redox Conditions									Donor Indicators
			PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	Acetylene (µg/L)	Chloride (mg/L)	DO (a) (mg/L)	ORP (a) (mV)	Nitrate (mg/L)	Nitrite (mg/L)	Iron II (a) (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Methane (µg/L)	TOC (mg/L)
Cleanup Level:			5	5	70	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW3	1/15/2013	N	120	37	48	0.1 J	5.0 U	5.0 U	5.0 U	5.36	5.36	-28.1	0.165	0.0357	0.030	8.3	0.076	5.0 U	4.36
LAI-MW3	4/2/2013	N	97	33	36	0.2 U	5.0 U	5.0 U	5.0 U	13.8	3.77	-7.10	0.416 J	0.0184 J	0.160	24.1	0.069 J	5.0 U	6.35
LAI-MW3	4/2/2013	FD	94	33	38	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW3	6/18/2013	N	72 J	27	44	0.2 U	5.0 U	5.0 U	5.0 U	17.1	1.30 J	-34.9 J	0.647	0.0129	0.080 J	23.3	0.150 U	5.0 U	11.8
LAI-MW3	9/9/2013	N	78 J	34	54	0.2 U	5.0 U	5.0 U	5.0 U	19.3	3.00	-29.0	0.655	0.020	0.03 U	21.9	0.150 U	5.0 U	16.0
LAI-MW3	1/5/2016	N	120	43	47	0.16 J	5.0 U	5.0 U	5.0 U	18	6.42	95.1	0.51 J	0.020 UJ	--	21	0.050 U	2.8 J	2.2
LAI-MW3	7/7/2016	N	59	38	43	0.095 J	5.0 U	5.0 U	5.0 U	23	1.36	-36.5	0.62	0.40 U	0.0	22	0.050 U	1.8 J	1.5
LAI-MW3	1/18/2017	N	97	32	39	0.20 U	5.0 U	5.0 U	5.0 U	17	1.31	31.6	0.54	0.40 U	0.0	20	0.050 U	5.0 U	1.8
LAI-MW3	7/11/2017	N	73	35 J	35	0.20 U	5.0 U	5.0 U	5.0 U	19	2.38	55.9	0.53	0.40 U	1.0	20	0.050 U	5.0 U	2.0
LAI-MW3	2/8/2018	N	58	26	27	0.20 U	5.0 U	5.0 U	5.0 U	20	2.73	-46.1	0.65	0.40 U	0.5	22	0.050 U	5.0 U	2.3
LAI-MW3	1/9/2019	N	78	33	34	0.20 U	5.0 U	5.0 U	5.0 U	22	3.18	130	0.70	0.40 U	0.5	23	0.050 U	5.0 U	1.3
LAI-MW3	1/20/2020	N	42 J	37 J	35 J	0.20 UJ	5.0 UJ	5.0 UJ	5.0 UJ	22 J	2.29	24.6	0.64 J	0.40 UJ	0.6	22 J	0.050 UJ	5.0 UJ	1.5 J
LAI-MW3	1/27/2021	N	83	36	34	0.20 U	5.0 U	5.0 U	5.0 U	26	4.59	-344.2	1.3	0.40 U	0.5	27	0.050 U	5.0 U	1.5
LAI-MW3	1/11/2022	N	86	44	37	0.20 U	--	--	--	23	3.76	38.8	0.82	0.40 U	0.0	24	0.050 U	R	1.7
LAI-MW3	3/6/2023	N	79	33	31	2.0 U	0.40 U	0.57 U	0.73 U	20	3.04	61.2	0.55	0.40 U	0.0	25	0.050 U	2.3	1.3
LAI-MW3	3/6/2023	FD	77	32	30	2.0 U	0.40 U	0.57 U	0.73 U	20 J	2.92	62.0	0.56 J	0.40 U	0.0	24 J	0.050 U	1.9	1.2
LAI-MW3	1/9/2024	N	52	39	29	2.0 U	0.40 U	0.57 U	0.73 U	29	6.47	107.2	0.50	0.40 U	0.0	19	0.050 U	1.2 J	1.2
LAI-MW3	1/9/2024	FD	56	39	28	2.0 U	0.40 U	0.57 U	0.73 U	29	6.25	107.2	0.50	0.40 U	0.0	19	0.050 U	1.6 J	1.2
LAI-MW3	1/13/2025	N	65 J	28 J	23	0.2 U	1.5 U	1.5 U	1.5 U	39	5.77	29.9	0.59	0.40 U	0.5 U	19	0.050 U	1.5 U	1.0 U
LAI-MW3	1/13/2025	FD	97 J	37 J	27	0.2 U	1.5 U	1.5 U	1.5 U	39	5.50	32.3	0.60	0.40 U	0.5 U	19	0.050 U	1.5 U	1.0 U
LAI-MW4	1/15/2013	N	0.5 U	0.2 U	0.3 J	0.2 U	5.0 U	5.0 U	5.0 U	33.1	2.52	-75.0	0.01 U	0.0480	4.70	4.0	0.029	2,800	10.7
LAI-MW4	4/2/2013	N	0.2 U	0.2 U	0.3	0.2 U	5.0 U	5.0 U	5.0 U	31.3	1.86	-87.3	0.01 UJ	0.0319 J	5.55	6.9	0.150 U	3,700	6.73
LAI-MW4	6/18/2013	N	0.2 U	0.2 U	0.3	0.2 U	5.0 U	5.0 U	5.0 U	32.2	1.84 J	-62.4 J	0.019	0.0090	6.40 J	11.3	0.150 U	3,400	17.8
LAI-MW4	9/9/2013	N	0.2 U	0.2 U	0.6	0.2 U	5.0 U	5.0 U	5.0 U	32.6	2.60	-82.6	0.010 U	0.0550 J	2.52	11.1	0.150 U	3,000	19.6
LAI-MW4	1/5/2016	N	0.20 UJ	0.20 U	0.093 J	0.20 U	5.0 U	0.77 J	5.0 U	34	3.65	-43.9	0.016 J	0.020 UJ	1.5	9.1	0.050 U	4,200	4.3
LAI-MW4	1/5/2016	FD	0.88	0.092 J	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	34	3.64	-43.5	0.017 J	0.020 UJ	1.5	9.4	0.050 U	4,500	4.2
LAI-MW4	7/7/2016	N	0.20 U	0.20 U	0.085 J	0.030 J	5.0 U	0.78 J	5.0 U	27	--	--	0.20 U	0.40 U	3.0	2.0	0.050 U	6,400	2.9
LAI-MW4	7/7/2016	FD	0.20 U	0.20 U	0.10 J	0.030 J	5.0 U	0.90 J	5.0 U	27	--	--	0.20 U	0.40 U	3.0	2.0	0.050 U	6,100	2.9
LAI-MW4	1/18/2017	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	24	2.35	-18.3	0.20 U	0.40 U	4.5	2.1	0.050 U	3,700 J	3.6
LAI-MW4	1/18/2017	FD	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	24	2.13	-19.5	0.20 U	0.40 U	4.5	2.6	0.050 U	4,600 J	3.5
LAI-MW4	7/11/2017	N	0.20 U	0.20 U	0.25	0.20 U	5.0 U	5.0 U	5.0 U	22	3.98	6.78	0.20 U	0.40 U	3.0	1.8	0.050 U	5,200	3.7
LAI-MW4	7/11/2017	FD	0.20 U	0.92 U	0.27	0.20 U	5.0 U	5.0 U	5.0 U	22	3.81	5.85	0.20 U	0.40 U	3.0	1.7	0.050 U	4,900	4.3
LAI-MW4	2/8/2018	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	32	3.82	-36.2	0.20 U	0.40 U	1.5	1.2 U	0.050 U	4,400	4.6
LAI-MW4	2/8/2018	FD	0.20 U	0.20 U	0.20 U	0.20 U	5.0 UJ	5.0 UJ	5.0 U	33	3.79	-34.9	0.20 U	0.40 U	1.5	1.2 U	0.050 U	4,600 J	4.3
LAI-MW4	1/9/2019	N	0.20 U	0.20 U	0.65	0.20 U	5.0 U	5.0 U	5.0 U	40	2.95	-40.0	0.20 U	0.40 U	4.5	4.3	0.050 U	2,100	2.6
LAI-MW4	1/9/2019	FD	0.20 U	0.20 U	0.58	0.20 U	5.0 U	5.0 U	5.0 U	40	2.88	-40.3	0.20 U	0.40 U	4.5	4.3	0.050 U	1,900	2.7
LAI-MW4	1/20/2020	N	0.20 UJ	0.24 J	0.32 J	0.20 UJ	5.0 UJ	5.0 UJ	5.0 UJ	53 J	5.70	-9.85	0.20 UJ	0.40 UJ	4.8	2.5 J	0.050 UJ	3,000 J	3.4 J
LAI-MW4	1/20/2020	FD	0.20 UJ	0.24 J	0.33 J	0.20 UJ	5.0 UJ	5.0 UJ	5.0 UJ	54 J	5.78	-7.33	0.20 UJ	0.40 UJ	4.8	2.4 J	0.050 UJ	3,200 J	3.5 J
LAI-MW4	1/27/2021	N	0.20 U	0.40	2.7	1.4	5.0 U	5.0 U	5.0 U	40	1.51	-251.6	0.68 J	0.40 U	5.0	9.8	0.050 U	1,000	3.2
LAI-MW4	1/27/2021	FD	0.20 U	0.40	2.5	1.3	5.0 U	5.0 U	5.0 U	40	1.47	-253.1	0.61 J	0.40 UJ	5.0	9.2	0.050 U	1,000	3.5
LAI-MW4	1/11/2022	N	0.20 U	0.33	0.20 U	0.49 J	--	--	--	5,200	0.46	-102.4	1.1	0.40 U	4.8	720	0.050 U	160 J	2.5
LAI-MW4	1/11/2022	FD	0.20 U	0.29	0.25	0.20 UJ	--	--	--	5,300	0.47	-100.5	0.96 J	R	4.8	710	0.050 U	190 J	2.5
LAI-MW4	3/6/2023	N	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.57 U	0.73 U	3,500	2.81	-10.2	20 U	40 U	2.5	530	0.061	330	3.0
LAI-MW4	1/9/2024	N	0.20 U	0.65	0.20 U	0.20 U	0.40 U	0.57 U	0.73 U	1,100	2.94	94.1	0.20 U	0.40 U	4.8	140	0.050 U	110	3.2
LAI-MW4	1/13/2025	N	0.20 U	0.37	2.1	0.20 U	1.5 U	1.5 U	1.5 U	430	0.56	-141.1	0.20 U	0.40 U	5.0	33	0.050 U	490	3.0

**Table 3-1
Bioremediation Data Summary
Sauro's Cleanerama**

Well	Date	Sample Type	Volatile Organic Compounds							Aquifer Redox Conditions									Donor Indicators
			PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	Acetylene (µg/L)	Chloride (mg/L)	DO (a) (mg/L)	ORP (a) (mV)	Nitrate (mg/L)	Nitrite (mg/L)	Iron II (a) (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Methane (µg/L)	TOC (mg/L)
Cleanup Level:			5	5	70	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW5-42	1/15/2013	N	0.5 U	0.2 U	0.5 U	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW5-42	1/15/2013	FD	0.5 U	0.2 U	0.5 U	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW5-42	4/2/2013	N	0.4	0.2 U	0.2 U	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW5-42	6/18/2013	N	0.2 U	0.2 U	0.2 U	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW5-42	9/9/2013	N	0.2 U	0.2 U	0.2 U	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW5-50	1/15/2013	N	0.5 U	0.2 U	0.5 U	0.2 U	5.0 U	5.0 U	5.0 U	58.4	2.32	-12.2	0.01 U	0.0490	6.32	5.4	0.15 U	5,200	10.0
LAI-MW5-50*	4/2/2013	N	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	5.0 U	5.0 U	57.5	2.00	-64.9	0.01 UJ	0.138 J	10.0	13.6	0.131 J	6,600	10.5
LAI-MW5-50*	6/18/2013	N	0.2 U	0.2 U	0.2 U	0.2 U	5.0 U	5.0 U	5.0 U	59.7	1.70 J	-28.2 J	0.010 U	0.0373	7.95 J	10.1	0.150 U	10,000	17.8
LAI-MW5-50*	9/9/2013	N	0.3 J	0.2 U	0.2 U	0.2 U	5.0 U	5.0 U	5.0 U	56.3	1.00	-69.8	0.010 U	0.092 J	2.52	5.3	0.150 U	11,000	24.4
LAI-MW5-50	9/9/2013	FD	0.6 J	0.2 U	0.2 U	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
LAI-MW5-50	1/5/2016	N	0.44	0.048 J	0.094 J	0.022 U	10.0 U	10.0 U	5.0 U	20	2.88	-39.9	0.020 UJ	0.020 UJ	3.0	2.6	0.050 U	18,000	11
LAI-MW5-50	7/7/2016	N	0.073 J	0.027 J	0.081 J	0.039 J	5.0 U	5.0 U	5.0 U	24	1.68	-62.1	0.11 J	0.40 U	3.6	4.1	0.50 U	9,000	7.5
LAI-MW5-50	1/18/2017	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	14	1.81	-26.0	0.20 U	0.40 U	2.0	1.2 U	0.10 U	12,000	9.6
LAI-MW5-50	7/11/2017	N	0.63	0.88 U	0.22	0.20 U	5.0 U	5.0 U	5.0 U	25	0.94	-16.5	0.20 U	0.40 U	2.0	1.4	0.050 U	8,300	9.6
LAI-MW5-50	2/8/2018	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	26	2.11	-148.6	0.20 U	0.40 U	2.0	1.2 U	0.050 U	9,500	9.3
LAI-MW5-50	1/9/2019	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	57	2.41	-23.1	0.20 U	0.40 U	7.0	4.3	0.050 U	5,400	6.2
LAI-MW5-50	1/20/2020	N	0.20 UJ	0.20 UJ	0.20 UJ	0.20 UJ	5.0 UJ	5.0 UJ	5.0 UJ	110 J	1.71	-69.7	0.20 UJ	0.40 UJ	3.6	2.0 J	0.24 J	14,000 J	6.3 J
LAI-MW5-50	1/27/2021	N	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	89	2.91	-268.6	0.60	0.40 U	3.5	3.3	0.050 U	10,000	7.3
LAI-MW5-50	1/12/2022	N	0.20 U	0.20 U	0.20 U	0.20 U	--	--	--	85	1.19	-38.7	0.20 U	0.40 U	6.2	4.9	0.050 U	9,300 J	6.2
LAI-MW5-50	3/7/2023	N	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.57 U	0.73 U	100	5.47	-41.1	0.20 U	0.40 U	1.5	12	0.050 U	6,400	6.1
LAI-MW5-50	1/9/2024	N	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.57 U	0.73 U	140	2.99	112.4	0.20 U	0.40 U	7.0	3.9	0.050 U	11,000	5.7
LAI-MW5-50	1/13/2025	N	0.20 U	0.20 U	0.20 U	0.20 U	1.5 U	1.5 U	1.5 U	120	1.23	-50.6	0.20 U	0.40 U	5.0	4.5	0.050 U	6,800	5.2
MW13	1/15/2013	N	550	120	110	0.8	5.0 U	5.0 U	5.0 U	8.28	3.20	-1.10	0.306	0.0168	0.280	24.1	0.15 U	6.0	4.51
MW13	4/2/2013	N	570	130	98	0.7	5.0 U	5.0 U	5.0 U	8.16	1.48	-0.800	0.869 J	0.0709 J	0.550	33.1	0.150 U	6.5	5.78 J
MW13	4/2/2013	FD	--	--	--	--	5.0 U	5.0 U	5.0 U	--	--	--	0.778 J	0.138 J	--	33.6	0.150 U	6.3	7.18 J
MW13	6/18/2013	N	400 J	96 J	110 J	0.8	5.0 U	5.0 U	5.0 U	9.91	3.30 J	77.0 J	1.12	0.0136	0.150 UJ	51.3	0.150 U	9.3	7.30
MW13	9/9/2013	N	430 J	110 J	120 J	0.8	5.0 U	5.0 U	5.0 U	10.2	1.28	48.5	1.01 J	0.018 J	0.240	34.6	0.150 U	6.6	8.79 J
MW13	9/9/2013	FD	--	--	--	--	5.0 U	5.0 U	5.0 U	10.2	--	--	0.989 J	0.011 J	--	32.0	0.150 U	6.4	11.8 J
MW13	1/5/2016	N	300	85	66	0.58	5.0 U	2.4 J	5.0 U	13	1.74	119.3	0.79 J	0.020 UJ	0.0	32	0.050 U	14	1.7
MW13	7/7/2016	N	340	100	81	0.60	5.0 U	1.2 J	5.0 U	16	6.38	-25.7	0.73	0.40 U	0.0	33	0.50 U	6.3	1.5
MW13	1/18/2017	N	430	98	73	0.73 J	5.0 U	5.0 U	5.0 U	14	2.21	37.7	0.65	0.40 U	0.0	30	0.25 U	10	1.7
MW13	7/11/2017	N	190	53	47	0.27	5.0 U	5.0 U	5.0 U	13	--	--	0.67	0.40 U	0.0	30	0.050 U	6.1	2.0
MW13	2/8/2018	N	200	63	77	0.58	5.0 U	5.0 U	5.0 U	13	2.91	-40.0	0.79	0.40 U	0.5	31	0.050 U	9.5	2.4
MW13	1/9/2019	N	370	84	59	0.51	5.0 U	5.0 U	5.0 U	16	3.30	168.6	0.76	0.40 U	1.0	31	0.050 U	5.0 U	1.3
MW13	1/21/2020	N	470	130	95	0.81	5.0 U	5.0 U	5.0 UJ	17	4.92	139.3	0.65	0.40 UJ	1.8	29	0.37	6.2	1.2
MW13	1/27/2021	N	310	98	68	0.57	5.0 U	5.0 U	5.0 U	24	2.33	-338.1	1.2	0.40 U	2.0	30	0.050 U	5.0 U	2.0
MW13	1/12/2022	N	350	98	63	2.0 U	--	--	--	27	2.39	107.5	0.63	0.40 U	0.0	23	0.050 U	6.0 J	1.6
MW13	3/6/2023	N	170	58	45	4.0 U	0.40 U	0.81	0.73 U	38	2.95	74.6	0.70	0.40 U	0.0	24	0.050 U	5.0	1.2
MW13	1/11/2024	N	340	90	58	2.0 U	0.40 U	0.57 U	0.73 U	43	3.42	148.6	0.55	0.40 U	0.0	21	0.050 U	2.8 J	1.0
MW13	1/13/2025	N	240	74	52	0.35	1.5 U	1.5 U	1.5 U	64	0.46	17.8	0.54	0.40 U	0.5 U	20	0.050 U	12	1.0 U

**Table 3-1
Bioremediation Data Summary
Sauro's Cleanerama**

Well	Date	Sample Type	Volatile Organic Compounds							Aquifer Redox Conditions									Donor Indicators
			PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	Acetylene (µg/L)	Chloride (mg/L)	DO (a) (mg/L)	ORP (a) (mV)	Nitrate (mg/L)	Nitrite (mg/L)	Iron II (a) (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Methane (µg/L)	TOC (mg/L)
Cleanup Level:			5	5	70	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
MW2	1/15/2013	N	0.5	0.8	3.1	1.4	5.0 U	5.0 U	5.0 U	61.5	3.10	-3.60	0.477	0.0209	2.25	37.9	0.15 U	5.0 U	4.36
MW2	4/2/2013	N	0.5 J	0.7 J	1.2 J	0.2 UJ	5.0 U	5.0 U	5.0 U	99.4	4.00	47.6	2.03 J	0.0167 J	0.03 U	27.7	0.053 J	4.3 J	8.37
MW2	6/18/2013	N	0.7	0.8	2.7	0.3	5.0 U	5.0 U	5.0 U	81.0	2.00 J	51.1 J	2.18	0.0163	0.130 J	31.5	0.150 U	83	13.9
MW2	9/9/2013	N	0.7	0.6	1.4	0.2	5.0 U	5.0 U	5.0 U	66.3	--	-113.0	1.63	0.019	--	50.3	0.150 U	260	6.74
MW2	1/5/2016	N	0.96	0.32	0.65	0.18 J	5.0 U	5.0 U	5.0 U	17	--	--	1.7 J	0.020 UJ	--	29	0.050 U	590	2.5
MW2	7/7/2016	N	0.48	0.56	1.4	0.24	5.0 U	1.3 J	5.0 U	15	--	--	1.9	0.40 U	0.0	20	0.050 U	1,100	3.3
MW2	1/18/2017	N	0.54	0.30	0.75	0.44	5.0 U	5.0 U	5.0 U	25	1.67	38.9	1.9	0.40 U	0.5	24	0.050 U	1,000	2.7
MW2	7/11/2017	N	0.40	0.91 U	1.3	0.23	5.0 U	5.0 U	5.0 U	55	1.50	58.4	2.0	0.40 U	--	14	0.050 U	470	3.3
MW2	2/8/2018	N	0.25	0.27	0.95	0.37	5.0 U	5.0 U	5.0 U	70	--	--	0.59	0.40 U	1.0	28	0.050 U	640	3.3
MW2	1/9/2019	N	0.42	0.40	1.5	0.36	5.0 U	5.0 U	5.0 U	60	--	--	1.3	0.40 U	--	42	0.050 U	570	2.6
MW2	1/20/2020	N	0.97 J	0.73 J	1.7 J	0.46 J	5.0 UJ	5.0 UJ	5.0 UJ	52 J	--	--	1.3 J	0.40 UJ	--	79 J	0.21 J	600 J	2.5 J
MW2	1/27/2021	N	1.3	0.43	0.90	0.20 U	5.0 U	5.0 U	5.0 U	80	0.875	-252.8	3.2	0.40 U	0.8	50	0.050 U	300	3.6
MW2	1/11/2022	N	0.34	0.20 U	0.20 U	0.20 U	--	--	--	50	1.59	-145.7	2.9	0.40 U	0.5	43	0.050 UJ	30 J	2.8
MW2	3/7/2023	N	0.64	0.48	2.0	0.28	0.40 U	0.57 U	0.73 U	47	1.55	-13.9	0.45	0.40 U	0.5	23	0.050 U	320	3.6
MW2	1/9/2024	N	1.10	0.41	1.4	0.20	0.40 U	0.57 U	0.73 U	25	1.17	93.5	1.30	0.40 U	6.0	29	0.050 UJ	2,000	2.6
MW2	1/13/2025	N	0.71	0.30	1.2	0.20 U	1.5 U	1.5 U	1.5 U	14	1.87	251.0	2.4	0.40 U	5.4	31	0.050 U	530	3.3
RNS-MW2-21.5	1/15/2013	N	17	0.9 J	0.4 J	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW2-21.5	4/2/2013	N	14	0.7	0.4	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW2-21.5	6/18/2013	N	7.8	0.4	0.2	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW2-21.5	9/9/2013	N	22	0.8	0.3	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW2-38.5*	1/15/2013	N	16	0.9	0.3 J	0.2 U	5.0 U	5.0 U	5.0 U	22.9	8.67	24.7	3.28	0.0628	0.060	41.2	0.15 U	5.0 U	2.00
RNS-MW2-38.5*	1/15/2013	FD	--	--	--	--	5.0 U	5.0 U	5.0 U	20.6	--	--	3.44	0.0376	--	37.4	0.15 U	5.0 U	2.56
RNS-MW2-38.5*	4/2/2013	N	11	0.8	0.2	0.2 U	5.0 U	5.0 U	5.0 U	25.8	8.60	134	2.17 J	0.234 J	0.150	37.0	37.0	5.0 U	3.65
RNS-MW2-38.5*	6/18/2013	N	9.6	0.4	0.2	0.2 U	5.0 U	5.0 U	5.0 U	31.8	5.97 J	-21.1 J	2.99	0.0080	0.550 J	77.3	77.3	5.0 U	11.6
RNS-MW2-38.5*	9/9/2013	N	23	0.7	0.2	0.2 U	5.0 U	5.0 U	5.0 U	18.5	6.04	66.5	3.02 J	0.020 J	0.800	33.4	33.4	5.0 U	6.68
RNS-MW2-38.5	1/5/2016	N	30	0.94	0.24	0.20 U	5.0 U	5.0 U	5.0 U	25	6.7	87.9	3.3 J	0.020 UJ	--	35	35	5.0 U	1.3
RNS-MW2-38.5	7/7/2016	N	21	0.49	0.14 J	0.20 U	5.0 U	5.0 U	5.0 U	20	7.51	-2.2	2.9	0.40 U	0.0	30	30	5.0 U	1.1
RNS-MW2-38.5	1/18/2017	N	25	0.51	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	42	6.37	35.8	2.9	0.40 U	0.0	27	27	5.0 U	1.2
RNS-MW2-38.5	7/11/2017	N	14	1.3 J	0.24	0.20 U	5.0 U	5.0 U	5.0 U	41	6.69	60.1	2.6	0.40 U	0.0	26	26	5.0 U	1.8
RNS-MW2-38.5	2/8/2018	N	17	0.38	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	67	4.73	-21.2	3	0.40 U	1.0	26	26	5.0 U	1.2
RNS-MW2-38.5	1/9/2019	N	22	0.54	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	100	5.64	146.0	2.9	0.40 U	1.5	25	25	5.0 U	1.1
RNS-MW2-38.5	1/20/2020	N	19 J	0.64 J	0.20 UJ	0.20 UJ	5.0 UJ	5.0 UJ	5.0 UJ	150 J	5.61	114.2	2.9 J	0.40 UJ	0.2	26 J	26 J	5.0 UJ	1.1 J
RNS-MW2-38.5	1/27/2021	N	22	0.57	0.20 U	0.20 U	5.0 U	5.0 U	5.0 U	100	6.02	-256.5	3.9	0.40 U	0.5	29	29	5.0 U	1.5 U
RNS-MW2-38.5	1/11/2022	N	18	0.45	0.20 U	0.20 U	--	--	--	67 J	6.24	59.0	0.20 U	0.40 U	0.5	23	23	R	1.8
RNS-MW2-38.5	3/6/2023	N	15	0.44	0.20 U	0.20 U	0.40 U	0.57 U	0.73 U	54	5.79	82.8	2.8	0.40 U	0.1	23	0.050 U	0.63 U	1.3
RNS-MW2-38.5	1/9/2024	N	15	0.65	0.20 U	0.20 U	0.40 U	0.57 U	0.73 U	31	6.99	78.2	2.6	0.40 U	0.5	19	0.050 U	0.63 U	1.1
RNS-MW2-38.5	1/13/2025	N	15	0.48	0.20 U	0.20 U	1.5 U	1.5 U	1.5 U	27	7.13	33.6	2.6	0.40 U	1.0 U	21	0.050 U	1.80 J	1.0 U

**Table 3-1
Bioremediation Data Summary
Sauro's Cleanerama**

Well	Date	Sample Type	Volatile Organic Compounds							Aquifer Redox Conditions									Donor Indicators
			PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	Acetylene (µg/L)	Chloride (mg/L)	DO (a) (mg/L)	ORP (a) (mV)	Nitrate (mg/L)	Nitrite (mg/L)	Iron II (a) (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Methane (µg/L)	TOC (mg/L)
Cleanup Level:			5	5	70	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/15/2013	N	1300	210	79	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	4/2/2013	N	1500 J	240	89	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	6/18/2013	N	590 J	190 J	85 J	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	9/9/2013	N	1100 J	260 J	130 J	0.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/5/2016	N	1100	250	150	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	7/7/2016	N	770	220	140	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/18/2017	N	860	180	140	0.33 J	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	7/11/2017	N	670	180	130	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	2/8/2018	N	1300	340	170	0.20 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/9/2019	N	800	190	93	0.20 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/20/2020	N	320 J	120 J	57 J	0.20 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/27/2021	N	950	350	160	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/12/2022	N	680	190	80	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	3/6/2023	N	170	66	55	4.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/11/2024	N	240	74	46	2.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-42.5	1/13/2025	N	220	87	60	2.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--
RNS-MW6-52.5*	1/15/2013	N	1200	160	110	0.2	5.0 U	5.0 U	5.0 U	17.0	2.75	-6.80	0.049	0.0333	0.03 U	25.4	0.15 U	36	4.63
RNS-MW6-52.5*	4/2/2013	N	950	150	89	0.5	5.0 U	4.1 J	5.0 U	18.3	3.12	16.8	0.206 J	0.0917 J	0.15 U	32.8	0.083 J	36	8.75
RNS-MW6-52.5*	6/18/2013	N	580 J	170 J	81 J	0.5	5.0 U	5.0 U	5.0 U	20.2	3.70 J	58.9 J	0.454	0.0097	0.030 UJ	40.9 J	0.150 U	7.6 J	10.5
RNS-MW6-52.5*	6/18/2013	FD	520 J	150 J	72 J	0.4	5.0 U	5.0 U	5.0 U	20.2	--	--	0.405	0.0089	--	55.2 J	0.150 U	16 J	12.3
RNS-MW6-52.5*	9/9/2013	N	630 J	130 J	140 J	0.3	5.0 U	9.2	5.0 U	21.0	3.72	55.8	0.317 J	0.022 J	0.180	33.5	0.150 U	68	11.6
RNS-MW6-52.5	1/5/2016	N	640	150	120	0.52	5.0 U	10	5.0 U	26	4.08	97.6	0.57 J	0.020 UJ	--	29	0.050 U	52	2.2
RNS-MW6-52.5	7/7/2016	N	420	140	120	0.48	5.0 U	13	5.0 U	30	0.95	-31.4	0.58	0.40 U	0.0	31	0.50 U	77	1.7
RNS-MW6-52.5	1/18/2017	N	570	130	110	10 U	5.0 U	8.7	5.0 U	25	2.77	41.9	0.61	0.40 U	0.0	27	0.25 U	36	1.9
RNS-MW6-52.5	7/11/2017	N	400	110	99	0.38	5.0 U	8.3	5.0 U	26	--	--	0.64	0.40 U	0.0	28	0.050 U	43	2.7
RNS-MW6-52.5	2/8/2018	N	410	120	110	0.51	5.0 U	10	5.0 U	26	4.04	-49.5	0.20 U	0.40 U	1.0	28	0.050 U	62	2.2
RNS-MW6-52.5	1/9/2019	N	590	130	77	0.24	5.0 U	5.1	5.0 U	28	1.74	173	0.78	0.40 U	1.0	29	0.050 U	18	1.7
RNS-MW6-52.5	1/20/2020	N	370 J	130 J	100 J	0.37 J	5.0 UJ	5.4 J	5.0 UJ	31 J	3.07	74.9	0.63 J	0.40 UJ	2.0	25 J	1.2 J	43 J	1.8 J
RNS-MW6-52.5	1/27/2021	N	900	330	150	0.37	5.0 U	5.1	5.0 U	41	1.58	-380.4	1.1	0.40 U	2.0	26 J	0.050 U	160	3.1
RNS-MW6-52.5	1/12/2022	N	600	160	34	10 U	--	--	--	39	0.453	115.1	0.67	0.40 U	0.0	23	0.050 U	32 J	2.0
RNS-MW6-52.5	3/6/2023	N	220	74	53	4.0 U	0.40 U	3.5	0.73 U	48	0.45	80.8	0.96	0.40 U	0.0	27	0.050 U	17	1.4
RNS-MW6-52.5	1/11/2024	N	220	72	52	2.0 U	0.40 U	0.57 U	0.73 U	45	0.66	165.2	0.77	0.40 U	0.0	26	0.050 U	1.9 J	1.3
RNS-MW6-52.5	1/13/2025	N	190	92	69	2.0 U	1.5 U	1.5 U	1.5 U	47	1.03	29.6	0.60	0.40 U	0.5 U	24	0.050 U	7.6	1.0 U

**Table 3-1
Bioremediation Data Summary
Sauro's Cleanerama**

Notes:

Bold text indicates detected analyte.

Green shading indicates detected analyte exceeds applicable cleanup level.

Blue shading indicates laboratory reporting limit exceeds applicable cleanup level.

R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ = The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

* Samples for dissolved gases (ethane, ethene, methane), sulfate, methane, and TOC were collected from the mid-point depth between the two established well depths.

(a) DO, ORP, and Iron II results reported for 2013 samples were measured at the laboratory; all other DO, ORP, and Iron II measurements were completed in the field.

-- = not analyzed

Abbreviations/Acronyms:

µg/L = micrograms per liter

cDCE = cis-1,2-dichloroethene

DO = dissolved oxygen

FD = field duplicate

mg/L = milligrams per liter

N = primary sample

ORP = oxidation reduction potential

PCE = tetrachloroethene

TCE = trichloroethene

TOC = total organic carbon

VC = vinyl chloride

Sample Collection Forms

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: 37 F, overcast
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: LAI-MW1
 Sample ID: LAI-MW1- 20250113
 Date: 01/13/25 Time: 11:17

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 45.29 Time: 10:38 Describe: _____
 Static DTW (ft): 45.29 Time: 10:39 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly #1
 Begin Purge (Date/Time): 1/13/2025 10:45 End Purge (Date/Time): 1/13/2025 11:16 Gallons Purged: <2
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
10:48	13.6	3.03	366.6	6.83	28.7	18.1	45.29	YES	C/C/NO/NS
10:51	13.3	2.49	386.5	6.72	31.8	17.3	45.29	YES	C/C/NO/NS
10:54	14.0	2.03	409.6	6.68	3.1	26.3	45.29	YES	C/C/NO/NS
10:57	14.8	1.70	428.8	6.67	30.4	39	45.29	YES	C/C/NO/NS
11:00	14.7	1.50	427.5	6.64	30.8	35.1	45.29	YES	C/C/NO/NS
11:03	14.7	1.29	424.9	6.61	30.2	34.5	45.29	YES	C/C/NO/NS
11:06	14.2	1.49	419.1	6.60	31.8	29.6	45.29	YES	C/C/NO/NS
11:09	14.7	1.13	427.1	6.67	29.4	25.4	45.29	YES	C/C/NO/NS
11:12	14.7	1.16	426.6	6.63	29.4	23.4	45.29	YES	C/C/NO/NS
11:15	14.7	1.19	426.7	6.63	24.5	24.4	45.29	YES	C/C/NO/NS

Sample Description (turbidity, color, odor, sheen): Clear, colorless, no odor, no sheen Fe 2⁺ (mg/L): <0.5

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual) Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: _____ MS/MSD

Comments: _____

Signature: CJC Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: 37F, overcast
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: LAI-MW2
 Sample ID: LAI-MW2- 20250113
 Date: 01/13/25 Time: 10:07

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 44.90 Time: 9:15 Describe: Well has considerable sediment in monument
 Static DTW (ft): 44.90 Time: 9:16 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly #1
 Begin Purge (Date/Time): 1/13/2025 9:33 End Purge (Date/Time): 1/13/2025 10:06 Gallons Purged: 6.0
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
9:36	13.9	2.76	386.7	7.02	-7.4	54.6	47.36	YES	C/C/NO/NS
9:39	13.8	2.21	380	7.01	-7.1	65.2	47.36	YES	C/C/NO/NS
9:42	13.9	1.87	371.8	6.97	-2.5	74.5	47.74	YES	C/C/NO/NS
9:45	13.9	1.65	365.1	6.99	0.9	69.5	47.90	YES	C/C/NO/NS
9:48	13.9	1.42	357.6	6.99	3.4	57.3	48.01	YES	C/C/NO/NS
9:51	13.9	1.17	351.6	6.99	4.7	49	48.05	YES	C/C/NO/NS
9:54	13.9	1.07	345.8	7.00	5.6	44.7	47.89	YES	C/C/NO/NS
9:57	13.9	0.92	341.7	7.00	6.4	39.7	48.01	YES	C/C/NO/NS
10:00	13.7	0.80	335.9	7.00	5.7	32.8	47.73	YES	C/C/NO/NS
10:03	13.8	0.69	333.4	7.00	4.4	29.2	47.45	YES	C/C/NO/NS

Sample Description (turbidity, color, odor, sheen): Clear, colorless, no odor, no sheen Fe 2⁺ (mg/L): <0.5

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual) Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: _____ MS/MSD

Comments: _____

Signature: CJC Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: 39 F, overcast
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: LAI-MW3
 Sample ID: LAI-MW3- 20250113
 Date: 01/13/25 Time: 12:27

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 50.62 Time: 11:41 Describe: _____
 Static DTW (ft): 50.62 Time: 11:42 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly #1
 Begin Purge (Date/Time): 1/13/2025 11:52 End Purge (Date/Time): 1/13/2025 12:26 Gallons Purged: <3
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
11:55	11.6	8.04	367.1	7.08	30.4	44.8	50.80	YES	C/C/NO/NS
11:58	11.8	6.65	372.8	6.97	33.9	86.9	50.80	YES	C/C/NO/NS
12:01	12.2	6.01	375	7.04	34.2	74.4	50.80	YES	C/C/NO/NS
12:04	12.3	5.63	376.5	7.08	34.6	68.9	50.80	YES	C/C/NO/NS
12:07	12.2	5.66	369.7	7.09	33.0	56.4	50.80	YES	C/C/NO/NS
12:10	12.3	5.55	376.3	7.10	33.8	41.8	50.80	YES	C/C/NO/NS
12:13	12.3	5.50	374.4	7.09	33.8	35.6	50.80	YES	C/C/NO/NS
12:16	12.4	5.42	376.5	7.05	32.9	30.3	50.80	YES	C/C/NO/NS
12:19	12.5	5.40	377.6	7.11	33.4	20	50.80	YES	C/C/NO/NS
12:22	12.6	5.38	378.6	7.05	34.5	22.5	50.80	YES	C/C/NO/NS
12:25	12.5	5.77	377.6	7.08	29.9	18.7	50.80	YES	C/C/NO/NS

Sample Description (turbidity, color, odor, sheen): Clear, colorless, no odor, no sheen, slightly effervescent Fe 2⁺ (mg/L): <0.5

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: Dup1-20250113

MS/MSD

Comments: _____

Signature: CJC

Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: 39 F, overcast
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: Dup1
 Sample ID: Dup1- 20250113
 Date: 01/13/25 Time: 12:28

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 50.62 Time: 11:41 Describe: _____
 Static DTW (ft): 50.62 Time: 11:42 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly #1
 Begin Purge (Date/Time): 1/13/2025 11:53 End Purge (Date/Time): 1/13/2025 12:27 Gallons Purged: <3
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
11:56	11.7	7.52	365.3	6.95	32.1	44.8	50.80	YES	C/C/NO/NS
11:59	11.9	6.40	369.7	7.04	34.1	86.9	50.80	YES	C/C/NO/NS
12:02	12.2	5.96	374.4	7.08	34.2	74.4	50.80	YES	C/C/NO/NS
12:05	12.2	5.74	375.6	7.00	35.3	68.9	50.80	YES	C/C/NO/NS
12:08	12.2	5.73	375	7.12	33.0	56.4	50.80	YES	C/C/NO/NS
12:11	12.3	5.50	376.2	7.04	34.4	41.8	50.80	YES	C/C/NO/NS
12:14	12.3	5.43	376.3	7.06	33.8	35.6	50.80	YES	C/C/NO/NS
12:17	12.4	5.43	377.6	7.05	32.8	30.3	50.80	YES	C/C/NO/NS
12:20	12.5	5.31	374.2	7.07	34.3	20	50.80	YES	C/C/NO/NS
12:23	12.6	5.37	378.6	7.04	34.6	22.5	50.80	YES	C/C/NO/NS
12:26	12.6	5.50	379.2	7.06	32.3	18.7	50.80	YES	C/C/NO/NS

Sample Description (turbidity, color, odor, sheen): Clear, colorless, no odor, no sheen, slightly effervescent Fe 2⁺ (mg/L): <0.5

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: LAI-MW3-20250113

MS/MSD

Comments: _____
 Signature: CJC

Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: 32 f, cloudy
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: LAI-MW4
 Sample ID: LAI-MW4- 20250113
 Date: 01/13/25 Time: 8:41

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 11.15 Time: 7:57 Describe: _____
 Static DTW (ft): 11.15 Time: 7:58 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly #1
 Begin Purge (Date/Time): 1/13/2025 8:06 End Purge (Date/Time): 1/13/2025 8:40 Gallons Purged: <2
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
8:09	12.4	2.30	1728	7.11	-68.2	21.8	11.15	YES	C/C/NO/NS
8:12	12.9	0.79	1755	7.04	-109.0	21.4	11.15	YES	C/C/NO/NS
8:15	13.2	0.68	1693	7.07	-127.2	12	11.15	YES	C/C/NO/NS
8:18	13.6	0.61	1658	7.07	-133.6	9.18	11.15	YES	C/C/NO/NS
8:21	13.6	0.53	1611	7.07	-136.7	5.83	11.15	YES	C/C/NO/NS
8:24	13.6	0.45	1575	7.05	-139.9	5.02	11.15	YES	C/C/NO/NS
8:27	12.8	0.50	1544	7.06	-137.7	3.84	11.19	YES	C/C/NO/NS
8:30	11.4	0.89	1486	7.08	-137.4	4.02	11.20	YES	C/C/NO/NS
8:33	11.3	0.70	1472	7.08	-138.8	3.81	11.20	YES	C/C/NO/NS
8:36	11.5	0.62	1472	7.05	-138.5	3.58	11.20	YES	C/C/NO/NS
8:39	12.2	0.56	1518	7.07	-141.1	NM	11.20	YES	C/C/NO/NS

Sample Description (turbidity, color, odor, sheen): clear, colorless, no odor, no sheen Fe 2⁺ (mg/L): 5.0

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Peristaltic/Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual) Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
8:51	12.9	2.92	1528	7.06	-109	7.22	11.21	C/C/NO/NS

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: _____

MS/MSD

Comments: _____

Signature: CJC

Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: 39 F, overcast
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: LAI-MW5
 Sample ID: LAI-MW5- 20250113
 Date: 01/13/25 Time: 13:54

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 23.65 Time: 13:04 Describe: _____
 Static DTW (ft): 23.65 Time: 13:05 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly #1
 Begin Purge (Date/Time): 1/13/2025 13:19 End Purge (Date/Time): 1/13/2025 13:53 Gallons Purged: <3
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
13:22	13.3	4.59	585	6.62	-32.7	70.8	23.80	YES	C/C/NO/NS
13:25	12.9	3.95	613	6.48	-32.6	107	23.80	YES	Cloudy/C/NO/NS
13:28	13.2	3.30	629	6.45	-35.6	202	23.80	YES	Cloudy/C/NO/NS
13:31	13.7	3.07	641	6.44	-38.3	322	23.80	YES	Cloudy/C/NO/NS
13:34	13.8	2.55	642	6.44	-40.7	562	23.80	YES	Cloudy/C/NO/NS
13:37	13.7	2.02	638	6.44	-43.9	458	23.80	YES	Cloudy/C/NO/NS
13:40	14.1	1.69	641	6.45	-46.8	411	23.80	YES	Cloudy/C/NO/NS
13:43	14.3	1.45	642	6.46	-48.9	331	23.80	YES	Cloudy/C/NO/NS
13:46	14.0	1.29	638	6.45	-49.4	295	23.80	YES	Cloudy/C/NO/NS
13:49	14.0	1.29	637	6.45	-50.0	253	23.00	YES	Cloudy/C/NO/NS
13:52	13.8	1.23	634	6.45	-50.6	238	23.00	YES	Cloudy/C/NO/NS

Sample Description (turbidity, color, odor, sheen): Cloudy, colorless, no odor, no sheen Fe 2⁺ (mg/L): 5.0

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: _____

MS/MSD

Comments: _____

Signature: CJC

Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: Cloudy, 30s to 40s
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: MW2
 Sample ID: MW2- 20250113
 Date: 01/13/25 Time: 13:33

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 15.38 Time: 13:12 Describe: 1" casing with pvc cap
 Static DTW (ft): 15.38 Time: 13:15 Flow-Thru Cell Vol.: 240 mL WQM No.: TAC 2
 Begin Purge (Date/Time): 1/13/2025 13:18 End Purge (Date/Time): 1/13/2025 13:32 Gallons Purged: <1
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
13:21	11.7	2.23	440.1	6.77	259.6	5.78	NM	Yes	c,c,no,ns
13:24	11.6	2.02	436	6.57	257.5	4.13	NM	Yes	c,c,no,ns
13:27	11.5	1.92	427.7	6.54	255.7	4.41	NM	Yes	c,c,no,ns
13:30	11.8	1.87	427.3	6.54	251.0	3	NM	Yes	c,c,no,ns
13:33									
13:36									
13:39									
13:42									
13:45									
13:48									

Sample Description (turbidity, color, odor, sheen): Colorless, clear, no odor, no sheen **Fe 2+ (mg/L):** 5.4

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Peristaltic
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual) Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)	Bottle Information	
	Number	Type
Volatiles: 8260 8260 SIM 8021 524 624	3	40 mL VOA
Semivolatiles: 8270 8270 SIM 8011 625		
Petroleum Hydrocarbons: NWTPH-HCID NWTPH-Gx NWTPH-Dx NWTPH-Dx SGC		
Total/Dissolved Metals: 6010 6020 200.7 200.8 7471 <input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics: 8082 1668 608 8330		
Dioxin-Furans: 1613 8290		
PFAS: 1633 537.1 533 SOP		
Conventionals: 300.0 SM2450C SM2450D SM5310C RSK175	3 1	40 ML VOA unpres poly
Other: SM4500 SM5310B	1 1	pres poly amber

Duplicate or Parent Sample ID: _____ MS/MSD

Comments: Dry after VOCs, AMEE, and TOC. Wait for recharge (approx 30 minutes) for remaining

Signature: JDB

Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: 41 F, overcast
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: MW13
 Sample ID: MW13- 20250113
 Date: 01/13/25 Time: 16:24

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 39.16 Time: 15:40 Describe: _____
 Static DTW (ft): 39.16 Time: 15:41 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly #1
 Begin Purge (Date/Time): 1/13/2025 15:49 End Purge (Date/Time): 1/13/2025 16:24 Gallons Purged: <6
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
15:52	13.4	5.07	375.1	6.99	27.0	238	39.71	YES	SLIGHTLY CLOUDY/C/NO/NS
15:55	14.0	2.78	278	6.88	29.7	200	39.71	YES	SLIGHTLY CLOUDY/C/NO/NS
15:58	14.2	2.20	406.7	6.85	29.3	277	39.71	YES	SLIGHTLY CLOUDY/C/NO/NS
16:01	14.5	1.65	409.7	6.87	27.5	304	40.05	YES	SLIGHTLY CLOUDY/C/NO/NS
16:04	14.5	1.30	408.9	6.86	26.2	343	40.09	YES	SLIGHTLY CLOUDY/C/NO/NS
16:07	14.7	1.03	409	6.86	24.6	376	40.30	YES	SLIGHTLY CLOUDY/C/NO/NS
16:10	14.7	0.84	409.4	6.88	22.8	384	40.48	YES	SLIGHTLY CLOUDY/C/NO/NS
16:13	14.7	0.71	408.1	6.89	21.5	389	40.48	YES	SLIGHTLY CLOUDY/C/NO/NS
16:16	14.6	0.58	407	6.87	20.5	333	40.48	YES	SLIGHTLY CLOUDY/C/NO/NS
16:19	14.6	0.53	407.5	6.89	19.3	408.5	50.51	YES	SLIGHTLY CLOUDY/C/NO/NS
16:22	14.8	0.46	409.4	6.87	17.8	363	50.51	YES	SLIGHTLY CLOUDY/C/NO/NS

Sample Description (turbidity, color, odor, sheen): Slightly cloudy, colorless, no odor, no sheen Fe 2⁺ (mg/L): <0.5

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: _____

MS/MSD

Comments: _____

Signature: CJC

Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: 41 F, overcast
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: RNS-MW2
 Sample ID: RNS-MW2- 20250113
 Date: 01/13/25 Time: 15:13

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 16.21 Time: 14:28 Describe: _____
 Static DTW (ft): 16.21 Time: 14:29 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly #1
 Begin Purge (Date/Time): 1/13/2025 14:38 End Purge (Date/Time): 1/13/2025 15:12 Gallons Purged: <5
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
14:41	12.3	7.82	279.3	7.03	-24.5	436	16.29	YES	CLOUDY/C/NO/NS
14:44	13.0	7.69	278.4	7.02	-6.1	493	16.29	YES	CLOUDY/C/NO/NS
14:47	12.9	7.81	277.4	7.09	6.6	595	16.29	YES	CLOUDY/C/NO/NS
14:50	13.8	7.40	284.1	6.97	14.1	780	16.29	YES	CLOUDY/C/NO/NS
14:53	14.2	7.28	286.7	7.00	17.9	609	16.38	YES	CLOUDY/C/NO/NS
14:56	14.5	7.09	287.6	7.01	22.7	509	16.38	YES	CLOUDY/C/NO/NS
14:59	14.7	7.07	288.4	6.92	25.2	424	16.51	YES	CLOUDY/C/NO/NS
15:02	14.6	7.10	285.3	7.01	28.3	382	16.51	YES	CLOUDY/C/NO/NS
15:05	14.6	7.05	284.4	7.02	29.9	332	16.51	YES	CLOUDY/C/NO/NS
15:08	14.6	7.04	285.2	6.92	31.4	308	16.51	YES	CLOUDY/C/NO/NS
15:11	14.5	7.13	284	6.96	33.6	277	16.51	YES	CLOUDY/C/NO/NS

Sample Description (turbidity, color, odor, sheen): Cloudy, clear, no odor, no sheen **Fe 2⁺ (mg/L):** 1.0

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual) Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: _____ MS/MSD
 Comments: _____
 Signature: CJC Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: cloudy, twilight, 30s to 40s
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: RNS-MW6-42.5
 Sample ID: RNS-MW6-42.5- 20250113
 Date: 01/13/25 Time: 16:45

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 35.59 Time: 16:38 Describe: _____
 Static DTW (ft): 35.59 Time: 16:39 Flow-Thru Cell Vol.: N/A WQM No.: N/A
 Begin Purge (Date/Time): 1/13/2025 End Purge (Date/Time): 1/13/2025 Gallons Purged: N/A
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
NO MNA, ONLY PDB									

Sample Description (turbidity, color, odor, sheen): Colorless, clear, no odor, no sheen Fe 2⁺ (mg/L): N/A

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual) Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175			
Other:	SM4500	SM5310B						

Duplicate or Parent Sample ID: _____

MS/MSD

Comments: _____

Signature: JDB

Date: 01/13/25

Project Name: Sauro's Cleanerama
 Event: 2025 Annual Monitoring
 Weather: cloudy, twilight, 30s to 40s
 Landau Rep.: CJC/JDB

Project Number: 0094048.100.108
 Well ID: RNS-MW6-52.5
 Sample ID: RNS-MW6-52.5- 20250113
 Date: 01/13/25 Time: 17:10

WELL INFORMATION

Screened Interval: Top (ft): _____ Bottom (ft): _____ Well Secure? No Yes Damaged? No Yes
 DTW After Cap Opened (ft): 35.59 Time: 16:38 Describe: left side of road heading south
 Static DTW (ft): 35.59 Time: 16:39 Flow-Thru Cell Vol.: 240 mL WQM No.: Oly 1
 Begin Purge (Date/Time): 1/13/2025 16:50 End Purge (Date/Time): 1/13/2025 17:09 Gallons Purged: <1
 Water Disposal: 55-gal drum Storage tank Ground Other: City of Tacoma Treatment System

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol. (Yes/No)	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft		
16:53	14.8	1.61	398.9	6.81	30.0	500	36.50	yes	whiteish,cloudy,no,ns
16:56	14.8	1.20	397	6.72	29.4	610	36.53	yes	whiteish,cloudy,no,ns
16:59	14.9	0.95	401.5	6.72	30.2	645	36.48	yes	whiteish,cloudy,no,ns
17:02	13.6	1.04	389.3	6.74	30.6	543	35.95	yes	whiteish,cloudy,no,ns
17:05	12.9	1.11	384.7	6.75	30.2	540	35.96	yes	whiteish,cloudy,no,ns
17:08	13.1	1.03	388.2	6.71	29.6	547	35.90	yes	whiteish,cloudy,no,ns
17:11									
17:14									
17:17									
17:20									

Sample Description (turbidity, color, odor, sheen): Whiteish, cloudy, no odor no sheen Fe 2+ (mg/L): <0.5

PUMP AND MATERIAL INFORMATION

Collection Method: Bailer Pump Type: Waterra/PDB
 Material: Stainless Steel PVC Teflon Polyethylene Other Dedicated
 Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated
 Other (describe sequence): _____

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual) Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	8260 SIM	8021	524	624		3	40 mL VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	<input type="checkbox"/> Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175		3 1	40 ML VOA unpres poly
Other:	SM4500	SM5310B					1 1	pres poly amber

Duplicate or Parent Sample ID: _____

MS/MSD

Comments: _____

Signature: JDB

Date: 01/13/25