

April 30, 2024

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U.S. Environmental Protection Agency – Region 9
775 Hawthorne Street, LND-4-2
San Francisco, California 94105

Subject: First Quarter 2024 Groundwater Monitoring Results, Former Thermal Treatment Unit, Nammo Defense Systems Inc., Mesa, Arizona

Dear Ms. Clark:

Pinyon Environmental, Inc. (Pinyon), has prepared the following First Quarter 2024 (Q1 2024) Groundwater Monitoring Report (Report) on behalf of Nammo Defense Systems Inc. (NDS). This report documents field activities and results for groundwater sampling conducted at the NDS Former Thermal Treatment Unit (TTU) located in Mesa, Arizona (the Site; Figure 1). The monitoring activities were planned and executed following the scope of work and requirements outlined in the *Groundwater Water Sampling and Analysis Plan, Former Thermal Treatment Unit, Nammo Defense Systems Inc., Mesa Arizona*, dated September 30, 2022 (TTU SAP); and the *Quality Assurance Project Plan, Nammo Defense Systems Inc. Facility, Mesa, Arizona*, dated April 28, 2022 (NDS Facility QAPP). The finalized TTU SAP was submitted to the U.S. Environmental Protection Agency (EPA) on September 30, 2022. Any changes or deviations from these documents are provided in subsequent sections of this report.

Based on the *Data Management Plan, Nammo Defense Systems Inc., Mesa Arizona*, dated November 2022 (revised May 2023) groundwater data will be provided as electronic data deliverables (EDDs) with spatial data provided as shape files. The EDDs and shape files will be provided as a separate deliverable.

I. SCOPE OF ACTIVITIES

Groundwater monitoring and pumping/extraction wells were sampled between February 12 and 14, 2024. Well construction details are summarized in Table I. A Site Vicinity Map and well locations are shown on Figures 1 and 2, respectively.

I.I Deviations from Work Plan

The Q1 2024 groundwater monitoring was conducted in accordance with the TTU SAP and NDS Facility QAPP, with the following exceptions:

- Depth to groundwater was not obtained from well PF-2 as the water level meter hit an obstruction within the well at a depth of 168 feet while the well is 400 feet deep.
- TTU-3 was resampled due to an exceedance of 1,4-dioxane during the routine sampling event. 1,4-dioxane was not detected at a concentration above the laboratory reporting limit in the second sample. The laboratory analytical order will be updated to prevent suspected carryover.
- TTU-15 and TTU-16 had sample results that appeared to have been switched, they were subsequently resampled, and the confirmation analytical results were in line with historical results confirming the lab had switched the samples during analysis. The data presented in the figures and tables represent the results

from resampling. 1,4-dioxane was not included in the analytical suite during resampling; however, based on the results of the other analysis the February sample results were switched and those results have been rejected and are not considered valid for use on Figure 4.

I.2 Groundwater Elevation Measurements

Groundwater depth was measured utilizing an electronic water level indicator. Measurements were collected to the nearest 0.01 foot on the north side, top of casing at each well. Monitoring well TTU-18 is historically dry, and therefore no sample was collected during the Q1 event. Depth to water will be re-checked during the second quarter (Q2) 2024 groundwater monitoring event. A summary of groundwater elevation data for the Q1 2024 sampling event is provided in Table 2.

I.3 Groundwater Sampling

For extraction/pumping wells, the wells were activated and allowed to purge for at least 15 minutes prior to sample collection. Water was taken from the spigot closest to the wellhead. From each sampled well, field parameter measurements were collected utilizing a YSI Professional Plus water quality meter. Parameters collected include water temperature, pH, oxidation reduction potential (ORP), conductivity, and dissolved oxygen (DO). Turbidity was measured utilizing a 2020 LaMotte Turbidimeter. For the production wells TTU-1, TTU-2, TTU-20, and PF-2, field readings were collected every 5 minutes during the minimum 15-minute purging/stabilization period. For non-pumping wells, one round of field parameter measurements were collected at the time of sample collection. Field parameter stabilization forms for the Q1 2024 sampling event are provided in Attachment 1.

Monitoring wells and other non-pumping wells were sampled utilizing HydraSleeve samplers that were deployed by Pinyon following Q4 2024 sample collection at each well. The samplers were suspended inside the wells at the depths summarized in Table 3.

Groundwater samples were collected into laboratory provided and preserved sample containers based on analytical method requirements as described in the TTU SAP. Each groundwater sample was labeled, secured from breakage, and stored on-ice inside an insulated cooler. The samples were transported under chain-of-custody protocol to Pace Analytical and Eurofins-Phoenix for analysis. Pace Analytical and Eurofins Phoenix are Arizona Department of Health Services (ADHS) certified laboratories (#AZ0728 and #AZ0728, respectively).

The groundwater samples were analyzed for volatile organic compounds (VOCs) via USEPA Method 8260B, 1,4-dioxane via USEPA Method 8260B-SIM, and perchlorate via USEPA Method 314.0 Mod by Pace Analytical. The sample collected from PF-2 was analyzed by Eurofins Phoenix for perchlorate via USEPA Method 314.0.

I.4 Sampling Equipment Decontamination

Disposable sampling equipment such as protective gloves and paper towels were containerized and disposed of as non-hazardous commercial or household waste. Reusable equipment such as the YSI meter and the water level indicator were decontaminated prior to use and between each well using an Alconox and distilled water solution followed by a double rinse with distilled water. Reusable equipment was allowed to air dry prior to its next use.

2. GROUNDWATER MONITORING RESULTS

Laboratory reports and chain-of-custody forms are presented in Attachment 2.

2.1 Estimated Groundwater Flow Direction

The horizontal groundwater gradient was measured across the Site at approximately 0.12 feet per foot (ft/ft) to the west for the plane defined between wells TTU-5, TTU-9A, and TTU-10. This gradient is the same as the 0.12 ft/ft reported during the Q4 2023 groundwater sampling event. Groundwater flow appears to be affected by the significant land surface elevation increase at TTU-15, TTU-16, and TTU-17 creating an area of northern groundwater flow (Figure 2).

2.2 Groundwater Laboratory Results

Perchlorate was detected at concentrations above the Arizona Department of Environmental Quality (ADEQ) Health Based Guidance Level (HBGL) of 14 micrograms per liter ($\mu\text{g}/\text{L}$) in 15 of the 25 wells sampled. 1,4-dioxane was detected at concentrations above the interim screening level of 3.5 $\mu\text{g}/\text{L}$ in 14 of the 25 wells sampled. 1,1-dichloroethene (DCE) was detected at concentrations above the Arizona Aquifer Water Quality Standard (AWQS) of 7 $\mu\text{g}/\text{L}$ in 10 of the 25 wells sampled. Trichloroethene (TCE) was detected at concentrations above the AWQS of 5 $\mu\text{g}/\text{L}$ in 13 of the 25 wells sampled. Analytical results for Q1 2024 are summarized in Table 3 for perchlorate and in Table 4 for detected VOCs. Historical 1,4-Dioxane and TCE concentrations are summarized in Table 5. Concentration contours and VOC exceedances are depicted on Figures 3 through 7.

The Q1 2024 monitoring activities were generally consistent with Q4 2023, but also include the addition of newly established trigger levels (TLs) and follow up sampling procedures as outlined in the *Contingency Plan for Groundwater Contamination Limit Exceedances at Primate Facility Well No. 2* (Geosyntec, 2023). Per the Contingency Plan, notification and resampling must be made if the following TLs are exceeded:

- PF-2: if perchlorate exceeds 3.2 $\mu\text{g}/\text{L}$;
- TTU-6: if 1,4-dioxane exceeds 3.5 $\mu\text{g}/\text{L}$ and/or other VOCs reach 50% of the AWQS; and
- TTU-1, TTU-2, TTU-3, TTU-4, TTU-6, TTU-7, TTU-8, TTU-9a, TTU-10, TTU-14, PF-1, and PF-2: if an order-of-magnitude increase in the concentration¹ of a COPC that was previously measured at a concentration exceeding the project screening level (e.g., AWQS).

During the February sampling event, 1,4-dioxane was detected at 5.72 $\mu\text{g}/\text{L}$ at TTU-3. Historically since 2018, 1,4-dioxane was not observed at TTU-3 above method detection limits (0.26 $\mu\text{g}/\text{L}$ - 0.597 $\mu\text{g}/\text{L}$), with the exception of the previous event where concentrations were observed at 9.22 $\mu\text{g}/\text{L}$. Due to the sample concentrations being an order of magnitude higher than the average of the three previous sampling events, TTU-3 was subsequently resampled in March 2024. 1,4-dioxane was not detected in the March resampling, thus additional monthly sampling was not necessary.

During a review of analytical data, the concentrations of COCs at TTU-15 and TTU-16 appeared to be inverted. These wells were resampled to confirm the results in April 2024, and based on the resampling concentrations, it was confirmed the February samples were in fact reported incorrectly. The April resampling results were used for COC plume geometry and concentration versus time plots.

2.3 Groundwater Concentration and Elevation versus Time Plots

Concentration and groundwater elevation versus time plots for TCE, 1,1- DCE, perchlorate, and 1,4-dioxane are presented in Attachment 3. Based on a review of the plots, no groundwater elevations or chemical concentrations were outside of their respective historical ranges. A full analysis of the concentration trends will be provided in the 2024 Annual Groundwater Monitoring Report prepared following the Q4 2024 sampling event.

April 30, 2024

Page 4

Prior to the Q3 2023 sampling event, TTU-20 was converted to an extraction well and initially the concentrations of COCs decreased following injection of a carbon donor but have rebounded following the cessation of the pilot test. No other significant changes in concentrations at any other wells were noted during Q1 2024 event relative to historical concentrations.

2.4 Discussion

On February 12, 2024, 1,4-dioxane was detected at TTU-3 at a concentration of 5.72 µg/L, which exceeded the established trigger level. TTU-3 was subsequently resampled for 1,4-dioxane on March 18, 2024, and no detectable concentrations of 1,4-dioxane were observed. Based on the confirmation sample and the trend of the last three sampling events at TTU-3, the non-detection was consistent with historical results and was utilized to determine 1,4-dioxane plume geometry.

2.5 Data Validation

A Tier 1A data validation of the laboratory results according to EPA guidance and the laboratory results are qualified as usable for meeting project objectives. A data validation summary is provided in Attachment 4.

3. CLOSING

Overall, the Q1 2024 groundwater monitoring data indicates primarily stable conditions associated with the Site.

Please contact the undersigned at 720-536-4178 or musson@pinyon-env.com if you have any questions.

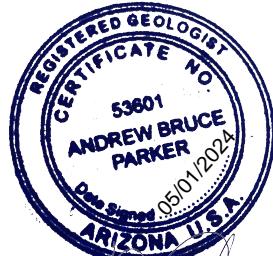
Sincerely,

Pinyon Environmental, Inc.

Isabella Foster
Isabella Foster
Environmental Scientist

Reviewed By:

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Tables

- Table 1 – Former Thermal Treatment Unit Groundwater Monitoring Network
- Table 2 – Groundwater Elevations - First Quarter 2024
- Table 3 – Summary of Perchlorate Concentrations - First Quarter 2024
- Table 4 – Summary of Detected VOC Concentrations - First Quarter 2024
- Table 5 – Historical 1,4-Dioxane and TCE Concentrations

Figures

- Figure 1 – Site Vicinity Map
- Figure 2 – Quarterly Groundwater Contour Map - First Quarter 2024
- Figure 3 – Perchlorate Detections in Groundwater - First Quarter 2024
- Figure 4 – 1,4-Dioxane Detections in Groundwater - First Quarter 2024
- Figure 5 – 1,1-Dichloroethene Detections in Groundwater - First Quarter 2024
- Figure 6 – Trichloroethene Detections in Groundwater - First Quarter 2024
- Figure 7 – Other VOC Exceedances in Groundwater - First Quarter 2024

Attachments

- Attachment 1 – Field Notes
- Attachment 2 – Laboratory Analytical Reports
- Attachment 3 – Concentration and Groundwater Elevation versus Time Plots
- Attachment 4 – Data Validation Documentation

Tables

TABLE I:
FORMER THERMAL TREATMENT UNIT
GROUNDWATER MONITORING NETWORK
NAMMO DEFENSE SYSTEMS INC.
MESA, ARIZONA

Well ID (Location)	Install Date	Latitude	Longitude	Survey Date	Survey Coordinate Datum	Measuring Point Elevation Top of Casing (ft asml)	Ground Surface Elevation (ft asml)	Well Stickup Height (ft)	ADWR Number	Well Type/Use	Well Name/Owner	Well Owner Information	Well Const	Well Diameter (in)	Screen Interval (ft bgs)	Casing Depth (ft bgs)	Boring Depth (ft bgs)
Plume Monitoring Wells																	
TTU-3	10/18/2013	33 29 57.98	-111 43 00.91	NP	NAVD 88	1308.03	1305.50	2.50	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85279	PVC	4	78.1-138.1	143.6	180
TTU-4	10/25/2013	33 30 01.65	-111 42 59.09	NP	NAVD 88	1305.12	1302.50	2.50	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85280	PVC	4	39.5-99.5	104.9	180
TTU-5	9/20/2014	33 29 52.48	-111 42 58.40	NP	NAVD 88	1314.93	1312.30	3.00	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85281	PVC	4	59.5-164.5	169.5	174
TTU-6	10/7/2014	33 29 57.57	-111 43 04.79	NP	NAVD 88	1300.84	1299.40	2.37	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	110-175	180	185
TTU-7	10/8/2014	33 29 57.85	-111 43 05.18	NP	NAVD 88	1301.84	1299.30	2.52	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	Steel	8.5	282-410	282	410
TTU-8	4/18/2016	33 30 01.91	-111 43 05.31	NP	NAVD 88	1310.23	1307.60	2.98	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	Open Borehole	8		None	
TTU-9A	6/16/2016	33 30 04.61	-111 42 51.19	NP	NAVD 88	1318.04	1316.00	2.5	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	135-185	190	204
TTU-10	4/18/2016	33 29 54.60	-111 43 07.90	NP	NAVD 88	1302.42	1299.80	3.17	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	115-180	185	204
TTU-12	7/19/2018	33 29 56.03	-111 42 58.38	NP	NP	1312.21	NP	1.33	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	Steel	5.5	30-180	30	180
TTU-13	7/20/2018	33 29 58.99	-111 42 56.85	NP	NP	1310.79	NP	1.46	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85283	Open Borehole	5		None	
TTU-14	7/19/2018	33 29 57.20	-111 42 57.46	NP	NP	1319.30	1316.80	1.38	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85284	Steel	5.5	45-100	45	100
TTU-15	1/25/2018	33 29 56.78	-111 42 47.03	NP	NP	1350.85	NP	1.88	55-228014	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85285	Open Borehole	5		None	
TTU-16	1/28/2020	33 29 56.18	-111 42 49.59	NP	NP	1338.55	NP	1.19	55-231730	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85286	Steel	8	20-95.6	20	95.6
TTU-17	1/28/2020	33 29 58.61	-111 42 45.69	NP	NP	1347.49	NP	0.60	55-231735	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85287	Open Borehole	8		None	
TTU-18	1/25/2020	33 29 47.20	-111 42 58.10	NP	NP	1320.25	NP	NP	55-231737	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	Steel	8	21-140	21	140
													Open Borehole	8		None	

TABLE I:
FORMER THERMAL TREATMENT UNIT
GROUNDWATER MONITORING NETWORK
NAMMO DEFENSE SYSTEMS INC.
MESA, ARIZONA

Well ID (Location)	Install Date	Latitude	Longitude	Survey Date	Survey Coordinate Datum	Measuring Point Elevation Top of Casing (ft amsl)	Ground Surface Elevation (ft amsl)	Well Stickup Height (ft)	ADWR Number	Well Type/Use	Well Name/Owner	Well Owner Information	Well Const	Well Diameter (in)	Screen Interval (ft bgs)	Casing Depth (ft bgs)	Boring Depth (ft bgs)
Extraction and Injection Wells																	
TTU-1	6/6/2012	33 29 59.14	-111 42 56.27	NP	NAVD 88	1312.73	1309.70	3.03	55-914440	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85277	PVC	4	30-70	75	200
TTU-2	10/17/2013	33 29 55.85	-111 42 57.85	NP	NAVD 88	1314.44	1311.80	2.64	N/A	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85278	PVC	4	49.4-179.6	185	187.5
TTU-11	9/11/2015	33 29 55.28	-111 42 51.47	NP	NAVD 88	1339.20	1336.60	2.60	55-918534	Extraction/Injection ¹	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	24.1-89.1	94	136
TTU-20	9/24/2020	33 29 55.17	-111 42 51.58	NP	NP	1336.90	NP	0.85	55-232968	Extraction ⁴	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	PVC	4	25-95	95	100
TTU-19	9/24/2020	33 29 55.25	-111 42 51.50	NP	NP	1336.67	NP	NP	55-232969	Monitoring/Injection ²	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	PVC	4	25-90	95	96
TTU-EX-1	1/25/2020	33 29 58.42	-111 42 52.55	NP	NP	1321.69	NP	1.60	55-231733	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	Steel	8	20-110.7	20	110.7
TTU-EX-2	1/23/2020	33 29 57.61	-111 42 53.79	NP	NP	1316.40	NP	1.10	55-231734	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85289	Steel	8		20	
TTU-EX-3	1/24/2020	33 29 56.29	-111 42 54.12	NP	NP	1316.85	NP	0.58	55-231731	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85290	Steel	8	20-101.45	20	111
TTU-EX-4	1/24/2020	33 29 55.46	-111 42 54.39	NP	NP	1319.96	NP	1.42	55-231732	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85291	Steel	8		20	
TTU-EX-5	1/24/2020	33 29 54.68	-111 42 54.62	NP	NP	1319.50	NP	0.96	55-231736	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85292	Steel	8	20-110.8	20	110.8
Production Wells																	
PF-1	NP	33 29 56.60	-111 43 09.75	NP	NP	1295.99	NP	NP	N/A	Production	University of Washington	4202 N Higley Rd Mesa, AZ 85215	Unknown	Unknown	Unknown	Unknown	Unknown
PF-2	3/27/2013	33 29 56.65	-111 43 09.96	NP	NP	1296.35	NP	NP	N/A	Production	University of Washington	4202 N Higley Rd Mesa, AZ 85215	Steel	6 5/8	300-400	400	400

Notes:

ft amsl = feet above mean sea level (NAVD88)

ADWR = Arizona Department of Water Resources

Const = construction

in = inches

(1) - TTU-11 was converted from an extraction well to an injection well in October 2020 for a In-Situ Bioremediation Pilot Test.

(2) - TTU-19 was converted from a monitoring well to an injection well in February 2021 for an In-Situ Bioremediation Pilot Test.

(3) - Monitoring well stick-up was measured using a tape measure to the top of the protective casing and not to the top of the well casing as no survey equipment was utilized.

(4) - TTU-20 was converted from a monitoring well to an extraction well in INSERTHERE 2023 for

TTU-EX-1 through TTU-EX-5 are not currently operating as extraction wells. TTU-11 and TTU-19 are not currently operating as injection wells.

N/A = Not applicable

PVC = polyvinyl chloride

ft bgs = feet below ground surface

TTU = Thermal Treatment Unit

EX = Extraction

PF = Primate Facility

NP = Not Provided

Drill Log TOC Different from Original

Drill Log TOC listed

TABLE 2:
GROUNDWATER ELEVATIONS - FIRST QUARTER 2024
 FORMER THERMAL TREATMENT UNIT
 NAMMO DEFENSE SYSTEMS INC.

Location	Northing (intl ft)	Easting (intl ft)	Top of Casing Elevation (ft amsl)	Date Measured	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
TTU-1	909420.734	761281.203	1312.73	2/13/2024	45.63	1,267.10
TTU-2	909087.852	761148.265	1314.44	2/13/2024	64.01	1,250.43
TTU-3	909303.363	760888.204	1308.03	2/12/2024	88.82	1,219.21
TTU-3	909303.363	760888.204	1308.03	3/18/2024	89.07	1,218.96
TTU-4	909673.680	761041.975	1305.12	2/13/2024	52.93	1,252.19
TTU-5	908747.636	761102.227	1314.93	2/13/2024	82.77	1,232.16
TTU-6	909260.820	760560.096	1300.84	2/12/2024	129.01	1,171.83
TTU-7	909287.611	760527.269	1301.84	2/12/2024	135.50	1,166.34
TTU-8	909699.266	760514.908	1310.23	2/14/2024	144.25	1,165.98
TTU-9A	909974.490	761710.151	1318.04	2/13/2024	66.96	1,251.08
TTU-10	908960.114	760297.013	1302.42	2/14/2024	166.62	1,135.80
TTU-11	909029.758	761706.470	1339.20	2/13/2024	36.84	1,302.36
TTU-12	909105.990	761103.280	1312.21	2/12/2024	74.17	1,238.04
TTU-13	909405.920	761232.180	1310.79	2/12/2024	43.70	1,267.09
TTU-14	909224.260	761181.230	1316.80	2/12/2024	60.39	1,256.41
TTU-15	909185.100	762065.910	1350.85	2/13/2024	33.82	1,317.03
TTU-16	909124.980	761848.851	1338.55	2/13/2024	26.24	1,312.31
TTU-17	909370.903	762179.168	1347.49	2/12/2024	41.19	1,306.30
TTU-18	908215.829	761130.011	1320.25		DRY	
TTU-19	909030.750	761687.700	1336.81	2/13/2024	34.87	1,301.94
TTU-20	909022.530	761681.990	1336.90	2/13/2024	38.06	1,298.84
TTU-EX-1	909350.574	761597.823	1321.69	2/13/2024	30.80	1,290.89
TTU-EX-2	909268.187	761493.214	1316.40	2/13/2024	39.87	1,276.53
TTU-EX-3	909134.941	761465.507	1316.85	2/12/2024	41.78	1,275.07
TTU-EX-4	909051.298	761442.876	1319.96	2/12/2024	44.74	1,275.22
TTU-EX-5	908971.770	761423.325	1319.50	2/13/2024	41.22	1,278.28
PF-1	909161.578	760140.434	1295.99	2/14/2024	156.10	1,139.89
PF-2	909166.890	760122.250	1296.35	2/14/2024	NM*	--

Notes:

intl ft - international foot

ft amsl - feet above mean sea level

ft btoc - feet below top of casing

"--" - Not enough information to determine groundwater elevation

NM - not measured

* - DTW not obtained due to obstruction in well

TABLE 3:
SUMMARY OF PERCHLORATE CONCENTRATIONS - FIRST QUARTER 2024
 FORMER THERMAL TREATMENT UNIT
 NAMMO DEFENSE SYSTEMS INC.

Location	Sample Depth (ft btoc)	Sample Date	Sample Type	Analyte	Perchlorate	
				EPA Method	314	314.0
				Units	µg/l	
				HBGL	14	
PF-2	400	2/14/2024	Primary	--	<1.0 E8	
TTU-1	50	2/13/2024	Primary	11,700	--	
TTU-2	114	2/13/2024	Primary	150,000	--	
TTU-3	108	2/12/2024	Primary	54.0	--	
TTU-4	57	2/13/2024	Primary	<4.00	--	
DUP-01			Duplicate	<4.00 M2	--	
TTU-5	110	2/13/2024	Primary	37.7	--	
TTU-6	143	2/12/2024	Primary	18.1	--	
TTU-7	345	2/12/2024	Primary	<4.00	--	
TTU-8	164	2/14/2024	Primary	<4.00	--	
TTU-9A	61	2/13/2024	Primary	6.06	--	
TTU-10	172	2/14/2024	Primary	<4.00	--	
DUP-03			Duplicate	<4.00	--	
TTU-11	73	2/13/2024	Primary	<4.00	--	
TTU-12	82	2/12/2024	Primary	139,000	--	
TTU-13	51	2/12/2024	Primary	24,000	--	
TTU-14	64	2/12/2024	Primary	147,000	--	
TTU-15	75	4/9/2024	Primary	11,100	--	
TTU-16	80	4/9/2024	Primary	817,000	--	
TTU-17	80	2/12/2024	Primary	<4.00	--	
TTU-19	73	2/13/2024	Primary	<4.00	--	
TTU-20	73	2/13/2024	Primary	85,900	--	
TTU-EX-1	69	2/13/2024	Primary	90,000	--	
TTU-EX-2	74	2/13/2024	Primary	93,200	--	
TTU-EX-3	76	2/12/2024	Primary	468,000	--	
TTU-EX-4	77	2/12/2024	Primary	85,600	--	
TTU-EX-5	80	2/13/2024	Primary	<4.00	--	
DUP-02			Duplicate	<4.00	--	

Notes:

ft btoc - feet below top of casing

µg/l - micrograms per liter

EPA - United States Environmental Protection Agency

HBGL - Health-Based Guidance Level

<Grey - Concentration is below laboratory reporting limits

* - The concentration limit for PF-2 is 6.4 µg/l and the trigger level is 3.2 µg/l

- - Not reported

BOLD - Concentration exceeds its respective HBGL

E8 - Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

M2 - Matrix spike recovery was low; the associated blank spike recovery was acceptable.

TABLE 4:
SUMMARY OF DETECTED VOC CONCENTRATIONS - FIRST QUARTER 2024
 FORMER THERMAL TREATMENT UNIT
 NAMMO DEFENSE SYSTEMS INC.

	Chemical Name	1,4-Dioxane	Acetone	1,1-dichloroethane	1,1-dichloroethene	1,2-dichloroethane	Benzene	Carbon Disulfide	Chloroform	cis-1,2-dichloroethene	Dichlormethane (methylene chloride)	Isopropylbenzene	Tetrachloroethene	Toluene	trans-1,2-dichloroethene	1,1,2-trichloroethane	Trichloroethene	Vinyl chloride	2-butaneone (MEK)	4-methyl-2-pentanone (MIBK)	Xylene Total	
	EPA Method	8260B SIM	8260B																			
	Unit	µg/l																				
Location	Sample Depth (ft btoc)	Screening Level	3.5 ⁽¹⁾	1800 ⁽²⁾	2.8 ⁽²⁾	7	5	5	81 ⁽²⁾	80 ⁽³⁾	70	5	45 ⁽²⁾	5	1000	100	5	5	2	560 ⁽²⁾	630 ⁽²⁾	10000
	Sample Date																					
PF-2	400	2/14/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.172 BI;E4	<0.111	<0.126	<0.430	<0.105	<0.3	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478 MI	<0.174
TTU-1	50	2/13/2024	18.2	<11.3	<0.100	1.21	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	5.44	<0.234	<1.19	<0.478	<0.174
TTU-2	114	2/13/2024	207	<113	<1.00	31.6	<0.819	1.14 E4	<0.962	1.65 E4	<1.26	<4.30	<1.05	<3.00	<2.78	<1.49	<1.58	529	<2.34	<11.9	<4.78	<1.74
TTU-3	108	2/12/2024	5.72	<11.3	<0.100	<0.188	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
TTU-3 *		3/18/2024	<0.597	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
TTU-4	57	2/13/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
DUP-01			<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
TTU-5	110	2/13/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
TTU-6	143	2/12/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
TTU-7	345	2/12/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	0.113 E4	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	0.540 E4	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	0.185 E4
TTU-8	164	2/14/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.186 BI;E4;R7	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
TTU-9A	61	2/13/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
TTU-10	172	2/14/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.17 BI;E4;R7	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
DUP-03			<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
TTU-11	73	2/13/2024	<0.597	2320	<1.00	5.47 E4	<0.819	<0.941	<0.962	<1.11	28.8	4.98 E4	3.71 E4	<3.00	<2.78	<1.49	<1.58	76.6	<2.34	1260	183	<1.74
TTU-12	82	2/12/2024	<0.597	<113	<1.00	52.6	<0.819	1.02 E4	<0.962	1.55 E4	<1.26	<4.30	<1.05	<3.00	<2.78	<1.49	<1.58	511	<2.34	<11.9	<4.78	<1.74
TTU-13	51	2/12/2024	31.4	<113	<0.100	4.80	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	13.6	<0.234	<1.19	<0.478	<0.174
TTU-14	64	2/12/2024	286	<113	<1.00	81.7	<0.819	1.84 E4	<0.962	2.01 E4	2.28 E4	<4.30	<1.05	<3.00	<2.78	<1.49	2.31 E4	829	<2.34	<11.9	<4.78	<1.74
TTU-15	75	4/9/2024	NS	<226	<2	<3.76	<1.64	<1.88	3.98 BI;E4	<2.22	<2.52	<8.60	<2.10	<6.00	<5.56	<2.98	<3.16	<3.8	<4.68	<23.8	<9.56	<3.48
TTU-16	80	4/9/2024	NS	<28200	<250	2440 E4	<205	260 E4	494 BI;E4	<278	<315	52100	<263	<750	<695	<373	<395	68500	<585	<2980	<1200	<435
TTU-17	80	2/12/2024	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	<0.0962	<0.111	0.507 E4	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	0.661 E4	<0.234	<1.19	<0.478	<0.174
TTU-19	73	2/13/2024	192	<56.5	<0.500	17.2	<0.409	3.46 E4	0.496 E4	<0.555	155	5.44 E4	1.83 E4	<1.50	<1.39	5.90	<0.790	195	3.99 E4	<5.95	3.61 E4	<0.870
TTU-20	73	2/13/2024	378	<113	3.36 E4	154	<0.819	4.48 E4	<0.962	3.86 E4	18.9	8.89 E4	<1.05	<3.00	<2.78	<1.49	3.28 E4	1860	<2.34	<11.9	<4.78	<1.74
TTU-EX-1	69	2/13/2024	326	<113	<1.00	88.9	<0.819	<0.941	<0.962	1.33 E4	<1.26	<4.30	<1.05	<3.00	<2.78	<1.49	<1.58</td					

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
		Screening Level	3.5 ⁽¹⁾	5
		Sample Date		
Contingency Level/ Trigger Level at PF-1, PF-2, TTU-6, and TTU-7		3.5/1.75	5/2.5	
PF-1	Primary	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Field Duplicate	9/16/2019	<0.597 U	<0.398 U
	Primary	12/23/2019	<0.597 U	<0.398 U
	Primary	3/13/2020	<0.597 U	<0.398 U
	Primary	12/4/2020	<0.597 U	<0.190 U
	Field Duplicate	12/4/2020	<0.597 U	<0.190 U
PF-2	Primary	3/29/2021	<0.597 U	<0.190 U
	Primary	5/6/2021	<0.597 U	<0.190 U
	Primary	8/6/2021	<0.597 U	<0.190 U
	Primary	11/18/2021	<0.597 U	<0.190 U
	Primary	3/31/2022	<0.597	<0.190 R7
	Field Duplicate	3/31/2022	<0.597	<0.190 R7
	Primary	6/21/2022	<0.597	<0.190 J3
	Field Duplicate	6/21/2022	<0.597	<0.190
	Primary	9/9/2022	<0.597 R7	<0.190
	Primary	11/30/2022	<0.597	<0.190
	Primary	2/27/2023	<0.597	<0.190
	Primary	6/12/2023	<0.597	<0.190
	Field Duplicate	6/12/2023	<0.597	<0.190 L1
	Primary	9/5/2023	<0.597	<0.190
	Primary	11/21/2023	<0.597	<0.190 L1
	Primary	2/14/2024	<0.597	<0.190
TTU-1	Primary	11/18/2014	NA	6.1
	Primary	12/23/2014	NA	8.8
	Primary	2/5/2015	26	10
	Primary	5/18/2015	20	6.1
	Primary	9/9/2015	17	5.2
	Primary	11/23/2015	14	5.1
	Primary	2/25/2016	11	4.6
	Primary	6/1/2016	12.7	3.03
	Primary	8/18/2016	11	3.7
	Primary	11/22/2016	27	5.5
	Primary	2/22/2017	18.4	5.5
	Primary	5/23/2017	14.1	7.2
	Primary	8/29/2017	11	1.4
	Primary	11/27/2017	17.7	7.1
	Field Duplicate	11/27/2017	18.1	7.2
	Primary	3/27/2018	17.1	4.6
	Primary	9/12/2018	31.8	11.2
	Field Duplicate	9/12/2018	29.1	12.4
	Primary	12/4/2018	7.3	4.4
	Primary	9/16/2019	13.9	5.72
	Field Duplicate	9/16/2019	10.8	4.85
	Primary	12/20/2019	5.06	5.19
	Primary	3/12/2020	4.63 J	3.91
	Primary	6/18/2020	17.1	7.6
	Primary	7/20/2020	3.71	6.09
	Primary	12/2/2020	29.9	1.33
	Primary	3/30/2021	18.9 J	6.40
	Primary	5/6/2021	22.0	17.1 J
	Primary	7/29/2021	37.7	14.3
	Primary	12/23/2021	11.1	8.82
	Primary	3/26/2022	18.4	3.72
	Field Duplicate	3/26/2022	19.9	4.46
	Primary	6/16/2022	17.5 Q	4.42
	Field Duplicate	6/16/2022	35.5	4.12
	Primary	10/11/2022	15.1	5.13
	Field Duplicate	10/11/2022	14.5	5.85
	Primary	11/28/2022	11.8 B	4.86
	Primary	2/23/2023	14.9	5.02 M1
	Primary	6/15/2023	9.66	4.18
	Primary	9/14/2023	6.07	1.38
	Primary	11/17/2023	9.45	3.51
	Primary	2/13/2024	18.2	5.44

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Screening Level	3.5 ⁽¹⁾	5		
Sample Date				
TTU-2	Primary	11/18/2014	NA	370
	Primary	12/23/2014	NA	280
	Primary	2/5/2015	170	280
	Primary	5/18/2015	160	190
	Primary	9/9/2015	170	200
	Primary	11/23/2015	140	150
	Primary	2/25/2016	110	150
	Primary	6/1/2016	88.2	50.3
	Primary	8/18/2016	150	360
	Primary	11/22/2016	260	780
	Primary	2/22/2017	244	727
	Primary	5/23/2017	222	880
	Primary	8/29/2017	241	93.2
	Field Duplicate	8/29/2017	227	89.7
	Primary	11/27/2017	235	353
	Primary	3/27/2018	219	236
	Field Duplicate	3/27/2018	152	274
	Primary	6/28/2018	246	498
	Primary	9/10/2018	246	433
	Primary	12/4/2018	232	288
	Primary	3/25/2019	313	364
	Primary	9/16/2019	295	475
	Primary	12/20/2019	211	711
	Field Duplicate	12/20/2019	215	742
	Primary	3/12/2020	227 J	511
	Primary	6/18/2020	292	824
	Primary	7/20/2020	156	959
	Primary	12/2/2020	329	785
	Primary	3/30/2021	196 J	656
	Field Duplicate	3/30/2021	244 J	720
	Primary	5/6/2021	316	683
	Primary	7/29/2021	373	654
	Primary	12/22/2021	280	627
	Field Duplicate	12/22/2021	281	653
	Primary	3/26/2022	251	823
	Primary	6/16/2022	246 Q	443
	Primary	10/10/2022	170	596 M3
	Primary	11/28/2022	230 V	643 V
	Primary	2/23/2023	362	648
	Primary	6/15/2023	239	406
	Field Duplicate	6/15/2023	269	429
	Primary	9/14/2023	200	501
	Field Duplicate	9/14/2023	234	566
	Primary	11/17/2023	221	561
	Primary	2/13/2024	207	529
TTU-3	Primary	5/23/2017	NA	2.5
	Primary	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Primary	6/7/2019	<0.597 U	<0.398 U
	Primary	9/16/2019	<0.597 U	<0.398 U
	Primary	12/23/2019	<0.597 U	<0.398 U
	Primary	3/13/2020	<0.597 U	<0.398 U
	Primary	6/18/2020	<0.597 U	<0.190 U
	Primary	7/21/2020	<0.597 U	<0.190 U
	Primary	12/4/2020	<0.597 U	<0.190 U
	Primary	3/29/2021	<0.597 U	<0.190 U
	Primary	5/6/2021	<0.597 U	<0.190 U
	Field Duplicate	5/6/2021	<0.597 U	<0.190 U
	Primary	7/30/2021	<0.597 U	<0.190 U
	Primary	11/18/2021	<0.597 U	<0.190 U
	Primary	3/22/2022	<0.597	0.454 E4
	Primary	6/14/2022	<0.597 J3	<0.190 J3
	Primary	9/9/2022	<0.597	<0.190
	Primary	11/30/2022	<0.597 J3	<0.190
	Field Duplicate	11/30/2022	<0.597	<0.190
	Primary	2/25/2023	<0.597	0.266 E4
	Field Duplicate	2/25/2023	<0.597	<0.190
	Primary	6/12/2023	<0.597	<0.190
	Primary	9/5/2023	<0.597	<0.190
	Primary	11/17/2023	9.22	<0.190
	Primary	12/13/2023	<0.597	NS
	Primary	2/12/2024	5.72	<0.190

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Screening Level	3.5 ⁽¹⁾	5		
Sample Date				
TTU-4	Primary	5/23/2017	NA	0.31
	Primary	3/27/2018	<0.36 U	<0.18 U
	Field Duplicate	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Field Duplicate	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Field Duplicate	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Field Duplicate	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Primary	6/7/2019	<0.597 U	<0.398 U
	Primary	9/16/2019	<0.597 U	<0.398 U
	Primary	12/23/2019	<0.597 U	<0.398 U
	Primary	3/13/2020	<0.597 U	<0.398 U
	Primary	6/18/2020	<0.597 U	<0.190 U
	Primary	7/21/2020	<0.597 U	<0.190 U
	Field Duplicate	7/21/2020	<0.597 U	<0.190 U
	Primary	12/4/2020	<0.597 U	<0.190 U
	Primary	3/29/2021	<0.597 U	<0.190 U
	Primary	5/6/2021	<0.597 U	<0.190 U
	Field Duplicate	5/6/2021	<0.597 U	<0.190 U
	Primary	7/30/2021	<0.597 U	<0.190 U
	Field Duplicate	7/30/2021	<0.597 U	<0.190 U
	Primary	11/18/2021	<0.597 U	<0.190 U
	Primary	3/22/2022	<0.597	<0.190
	Field Duplicate	3/22/2022	2.59 E4	<0.190
	Primary	6/14/2022	11.1	<0.190
	Primary	7/21/2022	<0.597	<0.190
	Field Duplicate	7/21/2022	<0.597	<0.190
	Primary	9/9/2022	<0.597	<0.190
TTU-5	Primary	11/30/2022	1.84 J	<0.190
	Primary	2/25/2023	<0.597	<0.190
	Primary	6/12/2023	<0.597	<0.190
	Primary	9/5/2023	<0.597	<0.190
	Primary	11/17/2023	<0.597	<0.190
	Primary	2/13/2024	<0.597	<0.190
	Field Duplicate	2/13/2024	<0.597	<0.190
	Primary	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Primary	6/7/2019	<0.597 U	<0.398 U
	Primary	9/16/2019	<0.597 U	<0.398 U
	Primary	12/20/2019	3.54	<0.398 U
	Primary	3/12/2020	<0.597 U	<0.398 U
	Primary	6/17/2020	<0.597 U	<0.190 U
	Primary	7/20/2020	<0.597 U	<0.190 U
	Primary	12/2/2020	<0.597 U	0.877 J
	Primary	3/30/2021	<0.597 U	<0.190 U
	Primary	5/6/2021	<0.597 U	<0.190 U
	Primary	7/29/2021	<0.597 U	<0.190 U
	Primary	11/17/2021	<0.597 U	<0.190 U
	Primary	3/21/2022	<0.597	0.64 E4
	Primary	6/13/2022	130	<0.190
	Primary	7/21/2022	<0.597	<0.190
	Primary	9/8/2022	<0.597	<0.190
	Primary	11/29/2022	21.5	<0.190
	Primary	2/25/2023	<0.597	<0.190
	Primary	6/13/2023	<0.597	<0.190
	Primary	9/6/2023	<0.597	<0.190
	Primary	11/17/2023	<0.597	<0.190
	Field Duplicate	11/17/2023	<0.597	<0.190
	Primary	2/13/2024	<0.597	<0.190

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
TTU-6	Primary	8/29/2017	NA	0.38
	Primary	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Primary	6/7/2019	<0.597 U	<0.398 U
	Field Duplicate	6/7/2019	<0.597 U	<0.398 U
	Primary	9/16/2019	<0.597 U	<0.398 U
	Primary	12/23/2019	<0.597 U	<0.398 U
	Primary	3/13/2020	<0.597 U	<0.398 U
	Primary	6/18/2020	<0.597 U	<0.190 U
	Primary	7/21/2020	<0.597 U	<0.190 U
	Primary	12/4/2020	<0.597 U	<0.190 U
	Primary	3/29/2021	<0.597 U	<0.190 U
	Primary	5/6/2021	<0.597 U	<0.190 U
	Primary	7/30/2021	<0.597 U	<0.190 U
	Primary	11/18/2021	<0.597 U	<0.190 U
	Primary	3/22/2022	<0.597	<0.190
	Primary	6/14/2022	<0.597 J3	<0.190
	Primary	9/9/2022	<0.597 R5	<0.190
	Primary	11/30/2022	<0.597	<0.190
	Primary	2/25/2023	<0.597	0.218 E4
	Primary	6/12/2023	<0.597	<0.190
	Primary	9/5/2023	<0.597	<0.190
	Primary	11/17/2023	<0.597	<0.190
	Primary	2/12/2024	<0.597	<0.190
TTU-7	Primary	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Field Duplicate	3/26/2019	<0.597 U	<0.398 U
	Primary	6/7/2019	<0.597 U	<0.398 U
	Primary	9/16/2019	<0.597 U	<0.398 U
	Primary	12/23/2019	<0.597 U	<0.398 U
	Primary	3/13/2020	<0.597 U	<0.398 U
	Primary	6/18/2020	<0.597 U	<0.190 U
	Primary	7/21/2020	<0.597 U	<0.190 U
	Primary	12/4/2020	<0.597 U	<0.190 U
	Primary	3/29/2021	<0.597 U	<0.190 U
	Primary	5/6/2021	<0.597 U	<0.190 U
	Primary	7/30/2021	<0.597 U	<0.190 U
	Primary	11/18/2021	<0.597 U	<0.190 U
	Primary	3/22/2022	<0.597	<0.190
	Primary	6/14/2022	<0.597 J3	<0.190 J3
	Primary	9/9/2022	<0.597	<0.190
	Primary	11/30/2022	<0.597	<0.190
	Primary	2/25/2023	<0.597	<0.190
	Primary	6/12/2023	<0.597	<0.190
	Field Duplicate	6/12/2023	<0.597	<0.190 L1
	Primary	9/5/2023	<0.597	<0.190
	Primary	11/17/2024	<0.597	<0.190
	Primary	2/12/2024	<0.597	<0.190

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
TTU-8	Primary	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Primary	6/7/2019	<0.597 U	<0.398 U
	Primary	9/16/2019	<0.597 U	<0.398 U
	Primary	12/23/2019	<0.597 U	<0.398 U
	Primary	3/16/2020	<0.597 U	<0.398 U
	Field Duplicate	3/16/2020	<0.597 U	<0.398 U
	Primary	6/18/2020	<0.597 U	<0.190 U
	Field Duplicate	6/18/2020	<0.597 U	<0.190 U
	Primary	7/21/2020	<0.597 U	<0.190 U
	Primary	12/4/2020	<0.597 U	<0.190 U
	Primary	3/29/2021	<0.597 U	<0.190 U
	Primary	5/6/2021	<0.597 U	<0.190 U
	Primary	7/30/2021	<0.597 U	<0.190 U
	Primary	11/18/2021	<0.597 U	<0.190 U
	Primary	3/22/2022	<0.597	<0.190
	Primary	6/14/2022	<0.597	<0.190
	Primary	9/9/2022	<0.597	<0.190
	Field Duplicate	9/9/2022	<0.597	<0.190
	Primary	11/30/2022	<0.597	<0.190
	Primary	2/25/2023	<0.597	<0.190
	Primary	6/12/2023	<0.597	<0.190
	Primary	9/5/2023	<0.597	<0.190
TTU-9A	Field Duplicate	9/6/2023	28.7	<0.190
	Primary	11/17/2023	<0.597	<0.190
	Field Duplicate	11/17/2023	<0.597	<0.190
	Primary	2/14/2024	<0.597	<0.190
	Primary	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Primary	6/7/2019	<0.597 U	<0.398 U
	Primary	9/16/2019	<0.597 U	<0.398 U
	Primary	12/20/2019	1.01 J	<0.398 U
	Primary	3/12/2020	11.9 J	<0.398 U
	Primary	6/17/2020	<0.597 U	<0.190 U
	Primary	7/20/2020	<0.597 U	<0.190 U
	Primary	12/2/2020	<0.597 U	6.46 J
	Primary	3/30/2021	<0.597 U	7.53
	Primary	5/6/2021	<0.597 U	4.76
	Primary	7/29/2021	<0.597 U	2.75
	Primary	11/17/2021	<0.597 U	0.911 J
	Field Duplicate	11/17/2021	<0.597 U	0.985 J
	Primary	3/22/2022	<0.597	0.944 E4
	Primary	6/13/2022	4.82	<0.190
	Primary	7/21/2022	<0.597	0.221 J
	Primary	9/8/2022	<0.597	<0.190
	Primary	11/29/2022	<0.597	<0.190
	Primary	2/23/2023	18.4	<0.190
	Primary	3/21/2023	<0.597	<0.190
	Primary	6/13/2023	<0.597	<0.190
	Field Duplicate	6/13/2023	<0.597	<0.190 L1
	Primary	9/6/2023	<0.597	<0.190
	Primary	11/17/2023	<0.597	<0.190
	Primary	2/13/2024	<0.597	<0.190

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
TTU-10	Sample Date			
	Primary	3/27/2018	<0.36 U	<0.18 U
	Primary	6/28/2018	<0.72 U	<0.15 U
	Primary	9/10/2018	<0.26 U	<0.15 U
	Primary	12/10/2018	<0.26 U	<0.15 U
	Primary	3/26/2019	<0.597 U	<0.398 U
	Primary	9/16/2019	<0.597 U	<0.398 U
	Primary	12/23/2019	<0.597 U	<0.398 U
	Primary	3/13/2020	<0.597 U	<0.398 U
	Primary	6/18/2020	<0.597 U	<0.190 U
	Primary	7/21/2020	<0.597 U	<0.190 U
	Primary	12/4/2020	<0.597 U	<0.190 U
	Primary	3/29/2021	<0.597 U	<0.190 U
	Primary	5/6/2021	<0.597 U	<0.190 U
	Primary	8/6/2021	<0.597 U	<0.190 U
	Primary	11/18/2021	<0.597 U	<0.190 U
	Primary	3/22/2022	1.58 E4	<0.190
	Primary	6/14/2022	<0.597 J3	<0.190
	Field Duplicate	6/14/2022	<0.597 J3	<0.190
	Primary	9/9/2022	<0.597	<0.190
	Primary	11/30/2022	<0.597	<0.190
	Primary	2/27/2023	<0.597	<0.190
	Primary	6/12/2023	<0.597	<0.190
	Primary	9/5/2023	<0.597	<0.190 R5
	Primary	11/21/2023	<0.597	<0.190 L1;R7
	Field Duplicate	11/21/2023	<0.597	<0.190 L1;R7
	Primary	2/14/2024	<0.597	<0.190
	Field Duplicate	2/14/2024	<0.597	<0.190
TTU-11	Primary	9/23/2015	380	3100
	Field Duplicate	9/23/2015	400	3100
	Primary	11/23/2015	270	2900
	Primary	2/25/2016	250	2400
	Primary	6/1/2016	282	1600
	Primary	8/18/2016	240	1800
	Primary	11/22/2016	310	2500
	Field Duplicate	11/22/2016	340	2400
	Primary	2/22/2017	222	2010
	Field Duplicate	2/22/2017	224	2080
	Primary	5/23/2017	201	1560
	Field Duplicate	5/23/2017	192	1710
	Primary	8/29/2017	1450	807
	Primary	3/27/2018	671	461
	Primary	9/12/2018	1060	4650
	Primary	12/4/2018	1820	14500
	Field Duplicate	12/4/2018	1840	14800
	Primary	12/10/2018	1820	14500
	Field Duplicate	12/10/2018	1840	14800
	Primary	9/16/2019	1510	11200
	Primary	12/20/2019	855 J-	11500
	Field Duplicate	12/20/2019	907 J-	9400
	Primary	3/12/2020	863	6780
	Primary	6/18/2020	1570	15000
	Primary	7/20/2020	977	17600
	Primary	10/26/2020	358 J	4430
	Primary	10/26/2020	562 J	4870
	Primary	9/23/2021	6.95 J	69.8
	Primary	6/20/2022	<0.597	56.3
	Primary	9/3/2022	<0.597 R7	58.2
	Primary	11/30/2022	<0.597 J3	71.5
	Primary	2/25/2023	11600	67.8
	Primary	6/13/2023	<5.97	45.5
	Primary	9/5/2023	<0.597	78.6
	Primary	11/18/2023	<0.597	67.9
	Primary	2/13/2024	<0.597	76.6

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Screening Level	3.5 ⁽¹⁾	5		
Sample Date				
TTU-12	Primary	8/29/2017	85.7	335
	Primary	11/27/2017	84.1	301
	Primary	3/27/2018	85.5	484
	Primary	6/28/2018	108	339
	Primary	9/10/2018	91	460
	Primary	12/10/2018	107	454
	Primary	3/25/2019	136	176
	Primary	6/7/2019	120	507
	Primary	9/16/2019	160	543
	Primary	12/20/2019	106	567
	Primary	3/12/2020	94.8 J	407
	Primary	6/17/2020	184	471
	Primary	7/20/2020	82.2	547
	Primary	12/2/2020	159	531
	Primary	3/30/2021	115 J	480
	Primary	5/6/2021	142	540
	Primary	7/29/2021	176	466
	Primary	11/18/2021	133	624
	Field Duplicate	11/18/2021	141	617
	Primary	3/22/2022	149	538
	Primary	6/13/2022	170	487
	Primary	9/9/2022	119	529
	Primary	11/29/2022	117	463
	Primary	2/23/2023	209	452
	Primary	9/7/2023	131	519 M3
	Primary	11/18/2023	153	427
	Primary	12/2/2024	<0.597	511
	Primary	2/12/2024	<0.597	511
TTU-13	Primary	8/29/2017	4	2.6
	Primary	11/27/2017	14.1	5.7
	Primary	3/27/2018	18.3	7.3
	Primary	6/28/2018	33.9	12.6
	Primary	9/10/2018	47.3	24.2
	Primary	12/10/2018	45.2	20.1
	Primary	3/25/2019	55.8	21.7
	Primary	6/7/2019	39.9	22.6
	Primary	9/16/2019	58	18.3
	Primary	12/20/2019	40.2	17
	Primary	3/16/2020	32.2 J	15.4
	Field Duplicate	3/16/2020	33.5 J	14.9
	Primary	6/17/2020	48.5	14.6
	Field Duplicate	6/17/2020	54.1	16.6
	Primary	7/20/2020	29.6	13.3
	Field Duplicate	7/20/2020	27.7	13.8
	Primary	12/3/2020	25.3	11.2 J
	Primary	3/30/2021	37.7 J	17.1
	Primary	5/6/2021	37.9	12.9
	Primary	7/29/2021	58.6	11.1
	Primary	11/18/2021	3.26	1.44 J
	Primary	3/22/2022	9.96	5.76
	Primary	6/13/2022	28.9	5.52
	Primary	9/8/2022	13.7	7.06
	Primary	11/29/2022	33.5	12.7
	Primary	2/23/2023	40.1	12.8
	Primary	6/13/2023	32.5	9.34
	Primary	9/6/2023	37.4	9.79
	Primary	11/17/2023	20.9	9.37
	Primary	2/12/2024	31.4	13.6

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
TTU-14	Primary	8/29/2017	367	657
	Primary	11/27/2017	356	828
	Primary	3/27/2018	363	1030
	Primary	6/28/2018	381	875
	Primary	9/10/2018	338	689
	Primary	12/17/2018	331	694
	Primary	3/27/2019	356	780
	Primary	9/16/2019	422	921
	Primary	12/20/2019	280	1060
	Primary	3/12/2020	278 J	880
	Primary	6/17/2020	504	891
	Primary	7/20/2020	241	1210
	Primary	12/2/2020	388	917
	Primary	3/30/2021	280 J	990
	Primary	5/6/2021	370	831
	Primary	7/29/2021	493	966
	Primary	11/18/2021	279	917
	Primary	3/22/2022	339	908
	Field Duplicate	3/22/2022	321	879
	Primary	6/14/2022	297 J3	1040
	Primary	9/9/2022	297	1020
	Primary	11/29/2022	288	882
	Primary	2/25/2023	339	807
	Primary	6/13/2023	269	764
	Primary	9/7/2023	246	921
	Primary	11/18/2023	356	712
	Primary	2/12/2024	286	829
TTU-15	Primary	3/27/2019	3.54	<0.398 U
	Primary	9/16/2019	3.95	<0.398 U
	Primary	12/20/2019	6.09	<0.398 U
	Primary	3/12/2020	3.02	<0.398 U
	Primary	6/17/2020	5.32	<0.190 U
	Primary	7/20/2020	2.81 J	<0.190 U
	Primary	12/2/2020	<0.597 U	3.1
	Primary	3/29/2021	5.33 J	12.9
	Primary	5/5/2021	3.83	11.7
	Primary	7/29/2021	6.26	13
	Primary	11/17/2021	5.9	10.3
	Primary	3/21/2022	6.93	7.89
	Primary	6/13/2022	9.83	6.23
	Primary	9/8/2022	8.21	6.08
	Primary	11/29/2022	27.5	5.13
	Primary	2/25/2023	15.7	4.9
	Primary	6/12/2023	13.5	3.76
	Primary	9/6/2023	4.69	3.05
	Primary	11/18/2023	12.2	3.24
	Field Duplicate	11/18/2023	6.38	3.21
	Primary	4/9/2024	NS	<3.80
TTU-16	Primary	3/13/2020	2470 J	51500
	Primary	6/17/2020	4310	68400
	Field Duplicate	6/17/2020	5610	70200
	Primary	7/20/2020	2220 J-	92200
	Primary	12/2/2020	1730	80000
	Field Duplicate	12/2/2020	1990	96000
	Primary	3/29/2021	2880	76800
	Field Duplicate	3/29/2021	2550	71800
	Primary	5/5/2021	4920	77400 J
	Field Duplicate	5/5/2021	5270	38500 J
	Primary	7/29/2021	5140	86000
	Field Duplicate	7/29/2021	5710	87300
	Primary	11/17/2021	3930	93200
	Primary	3/21/2022	5430	103000
	Primary	6/13/2022	3600 J3	96500
	Primary	9/8/2022	3820 R7	9520
	Primary	11/29/2022	3180	80000
	Primary	2/25/2023	32800	69100
	Field Duplicate	2/25/2023	39600	83600
	Primary	6/13/2023	2300	78000 L1
	Primary	9/7/2023	2880	59400
	Primary	11/18/2023	3470	30800
	Primary	4/9/2024	NS	68500

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Screening Level	3.5 ⁽¹⁾	5		
Sample Date				
TTU-17	Primary	3/13/2020	<0.0474 U	0.463 J
	Primary	6/17/2020	<0.597 U	0.321 J
	Primary	7/20/2020	<0.597 U	0.367 J
	Primary	12/2/2020	<0.597 U	1.56
	Primary	3/29/2021	<0.597 U	5
	Primary	5/5/2021	<0.597 U	4.13
	Primary	7/29/2021	<0.597 U	3.99
	Primary	11/17/2021	<0.597 U	3.08
	Primary	3/21/2022	4.75	3.51
	Primary	6/13/2022	10.1	2.1
	Primary	9/8/2022	242	2.1
	Primary	11/29/2022	264	1.41
	Field Duplicate	11/29/2022	2.11 B;J	1.57
	Primary	2/25/2023	<0.597	1.28
	Primary	6/12/2023	<0.597	1.15 L1
	Primary	9/6/2023	<0.597	1.20
	Primary	11/18/2023	<0.597	0.716 E4
	Primary	2/12/2024	<0.597	0.661 E4
TTU-19	Primary	10/26/2020	915 J	9990
	Primary	10/26/2020	781 J	12900
	Primary	11/18/2023	<0.597	478
	Primary	6/20/2022	<0.597	189
	Field Duplicate	6/20/2022	<0.597	373
	Primary	9/3/2022	152 H1	293 M3
	Primary	11/30/2022	<0.597	360
	Primary	2/25/2023	318	348
	Primary	6/13/2023	247	310 L1
	Primary	9/7/2023	209	158
	Primary	11/18/2023	279	187
	Primary	2/13/2024	192	195
TTU-20	Primary	10/26/2020	567 J	4480
	Primary	10/26/2020	824 J	6360
	Primary	6/14/2021	1450 J	11200 J
	Primary	9/23/2021	841 J	14300
	Primary	11/18/2021	2140	13400
	Primary	6/16/2022	1540 Q	10800
	Primary	9/3/2022	1140 Q	13200 L1
	Field Duplicate	9/3/2022	1250 Q	10700
	Primary	11/30/2022	1490	12400
	Primary	2/25/2023	19600	12800
	Primary	9/14/2023	499	2.43 E4
	Primary	2/13/2024	378	1860

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
TTU-EX-1	Sample Date			
	Primary	3/13/2020	24.5	265
	Primary	6/17/2020	284	168
	Primary	7/20/2020	207	163
	Primary	12/2/2020	466	240
	Primary	3/29/2021	340 J	262
	Primary	5/5/2021	258	286
	Primary	7/29/2021	702	372
	Primary	11/17/2021	112	79
	Primary	3/21/2022	244	181
	Primary	6/13/2022	324 J3	174
	Primary	9/8/2022	68.2	75.1
	Primary	11/29/2022	105	59.1
	Primary	2/23/2023	251	127
	Primary	6/13/2023	220	161 L1
	Primary	9/6/2023	163	195
TTU-EX-2	Field Duplicate	9/6/2023	202	194
	Primary	11/18/2023	351	182
	Primary	2/13/2024	326	241
	Primary	3/13/2020	198 J	327
	Primary	6/17/2020	405	549
	Primary	7/20/2020	212	561
	Primary	12/2/2020	424	506
	Primary	3/30/2021	334 J	634
	Primary	5/5/2021	218	536
	Primary	7/29/2021	523	630
	Primary	11/17/2021	158	238
	Primary	3/21/2022	213	234
	Primary	6/13/2022	189 J3	315
	Primary	9/8/2022	74.9	68.1
	Primary	11/29/2022	143	197
	Primary	2/23/2023	162	166
	Field Duplicate	2/23/2023	197	143
TTU-EX-3	Primary	6/13/2023	220	161 L1
	Primary	9/6/2023	191	433
	Primary	11/18/2023	266	329
	Primary	2/13/2024	256	415
	Primary	3/13/2020	175 J	5960
	Primary	6/17/2020	785	6050
	Primary	7/20/2020	610	7390
	Primary	12/2/2020	805 J-	5970 J
	Primary	3/30/2021	697	5560
	Primary	5/5/2021	536	5540
	Primary	7/29/2021	1010	7260
	Primary	11/17/2021	909	8120
	Field Duplicate	11/17/2021	969	8010
	Primary	3/21/2022	885	6560
	Primary	6/13/2022	863 J3	6020
	Primary	9/8/2022	741	7220
	Primary	11/29/2022	735	6620
	Primary	2/23/2023	916	6520
	Primary	6/13/2023	761	7690 L1
	Field Duplicate	6/12/2023	721	7580 L1
	Primary	9/6/2023	598	8100
	Primary	11/18/2023	1490	6890
	Primary	2/12/2024	523	5930

TABLE 5:
HISTORICAL 1,4-DIOXANE AND TCE CONCENTRATIONS
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.

Location	Sample Type	Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
Location	Sample Date			
TTU-EX-4	Primary	3/13/2020	16.1	811
	Primary	6/17/2020	23.7	1040
	Primary	7/20/2020	18.1	934
	Primary	12/2/2020	20.7	501
	Primary	3/30/2021	16.3	486
	Primary	5/5/2021	12.8	420
	Primary	7/29/2021	29	461
	Primary	11/17/2021	16.1	755
	Primary	3/21/2022	23.9	909
	Primary	6/13/2022	27.4	579
	Field Duplicate	6/13/2022	26.1	635
	Primary	9/8/2022	41.4	698
	Primary	11/29/2022	51.5	612
	Primary	2/23/2023	16.7	836
	Primary	6/13/2023	13.5	970 L1
	Primary	9/7/2023	19.8	698
	Field Duplicate	9/7/2023	12.1	742
	Primary	11/18/2023	9.81	673
	Primary	2/12/2024	15.9	588
TTU-EX-5	Primary	3/13/2020	<0.592 U	0.929 J
	Field Duplicate	3/13/2020	<0.595 U	0.775 J
	Primary	6/17/2020	<0.597 U	0.456 J
	Primary	7/20/2020	<0.597 U	0.562 J
	Field Duplicate	7/20/2020	<0.597 U	0.637 J
	Primary	12/2/2020	<0.597 U	4.18 J
	Field Duplicate	12/2/2020	<0.597 U	3.89 J
	Primary	3/30/2021	<0.597 U	6.53
	Primary	5/5/2021	<0.597 U	5.52
	Primary	7/29/2021	<0.597 U	5.51
	Primary	11/17/2021	<0.597 U	6.91
	Primary	3/21/2022	<0.597	5.74
	Field Duplicate	3/21/2022	<0.597	5.98
	Primary	6/13/2022	<0.597	5.58
	Primary	9/8/2022	2.16 E4	4.96
	Field Duplicate	9/8/2022	<0.597	5.06
	Primary	11/29/2022	3.4 B	4.51
	Primary	2/23/2023	<0.597	4.45
	Primary	6/12/2023	<0.597	4.01 L1
	Primary	9/7/2023	<0.597	3.45
	Primary	11/17/2023	<0.597	3.65
	Primary	2/13/2024	9.87	3.57
	Field Duplicate	2/13/2024	<0.597	3.08

Notes:

µg/l - micrograms per liter

EPA - Environmental Protection Agency

NA - Not Analyzed

NS - No sample collected

SIM - Selected Ion Monitoring

< - Concentration is below laboratory reporting limits

Concentration detected above the method detection limit

(1) - Interim Screening Level

V = The sample concentration is too high to evaluate accurate spike recoveries

J = The analyte was positively identified; the associated numerical value is the approximate

J3 = The associated batch QC was outside the established quality control range for precision

R7 = LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria

Q = Sample was prepared and/or analyzed past holding time as defined in the method. Concentration

E4 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.

U = Not detected at the Reporting Limit (or MDL where applicable).

B = The same analyte is found in the associated blank.

M1 = Matrix spike recovery was high; the associated blank spike recovery was acceptable.

L1 = The associated blank spikerecovery was above laboratory acceptance limits.

Figures



Notes:

- NG: Northrop Grumman
 - DFR: Desert Firing Range
 - NDS: Nammo Defense Systems Inc.
 - SRP: Salt River Project
 - SRPMIC: Salt River Pima-Maricopa Indian Community
 - SDI: Special Devices Inc.
 - WBO: Water Bore-Out
 - TTU: Thermal Treatment Unit
- Drawing not to scale



SITE VICINITY MAP

Nammo Defense Systems Inc. Plant #3
Formal Thermal Treatment Unit (TTU)
Mesa, Arizona

Site Location: Section 3, 15 and 27 Township 1N, Range 6E, Gila-Salt River Meridian

Drawn By: SJA

Figure: 1

Pinyon Project Number: 7/22-1522-01.REM001.2

Reviewed By: AP

Date: 2/2/2024



N

Legend

- Extraction Well
- Extraction Well Currently Used for Monitoring
- Extraction/Injection Well
- Monitoring Well

- Private Production Well
- ~~~~~ Groundwater Elevation Contour (ft amsl) (Contour Interval: 10ft)
- ← Estimated Regional Groundwater Flow Direction

TTU_i**d** = Monitoring Well Location
(I,I4524) = Groundwater Elevation (ft. amsl)

0 130 260
Feet



QUARTERLY GROUNDWATER CONTOUR MAP- FIRST QUARTER 2024
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Site Location: Sections 23, Townships 12 North, Range 6 East, Gila-Salt River Meridian

Drawn By: CJB Figure: 2

Pinyon Project Number: 7/22-1522-01.REM002.1b

Reviewed By: AP Date: 4/29/2024



Legend

- Extraction Well
- Private Production Well
- Extraction Well Currently Used for Monitoring
- Estimated extent of Perchlorate concentrations above the AWQS of 14 ug/l
- Extraction/Injection Well
- Dashed where Inferred
- Monitoring Well

(Result/Duplicate Result)

Site Location: Sections 23, Townships 12 North, Range 6 East, Gila-Salt River Meridian

Pinyon Project Number: 7/22-1522-01.REM002.1b

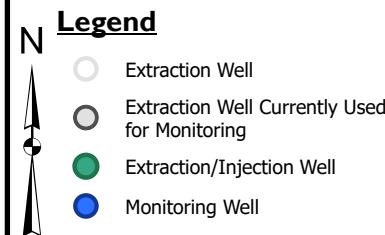
0 100 200
Feet

Pinyon
Environmental, Inc.

**PERCHLORATE DETECTIONS
IN GROUNDWATER - FIRST QUARTER 2024**
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Drawn By: CJB Figure: 3

Reviewed By: AP Date: 4/29/2024



((Result/Duplicate Result))

0 100 200
Feet

Pinyon
Environmental, Inc.

**I,4-DIOXANE DETECTIONS
IN GROUNDWATER - FIRST QUARTER 2024**
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Site Location: Sections 23, Townships 12 North, Range 6 East, Gila-Salt River Meridian

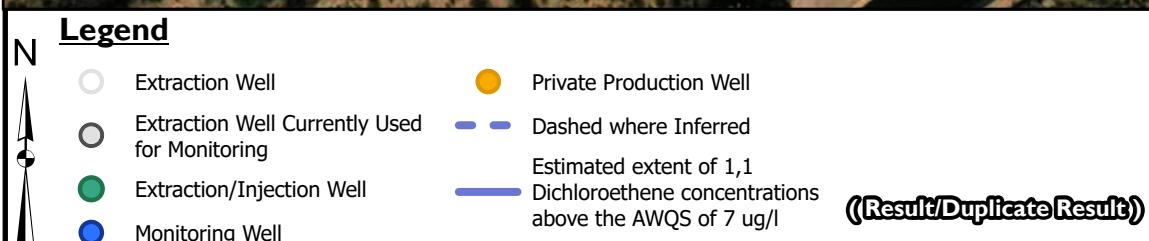
Drawn By: CJB Figure: 4

Pinyon Project Number: 7/22-1522-01.REM002.1b

Reviewed By: AP Date: 4/28/2024



Notes:
 µg/l - micrograms per liter
 AWQS - Arizona Aquifer Water Quality Standard
 BOLD - Concentration exceeds its respective AWQS or screening level
 * - Not used for contouring
 E4 - Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above method detection limit (MDL)
 < - Less Than
 TTU-15 and TTU-16 results appear to have been switched. The results shown are based on resampling



Site Location: Sections 23, Townships 12 North, Range 6 East, Gila-Salt River Meridian

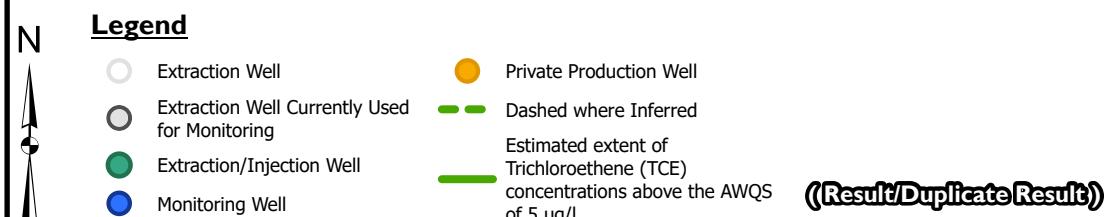
Pinyon Project Number: 7/22-1522-01.REM002.1b

0 100 200
Feet



I, I DICHLORETHENE DETECTIONS
IN GROUNDWATER - FIRST QUARTER 2024
Nmmo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Drawn By: CJB Figure: 5
Reviewed By: AP Date: 4/29/2024



Site Location: Sections 23, Townships 12 North, Range 6 East, Gila-Salt River Meridian

Pinyon Project Number: 7/22-1522-01.REM002.1b

0 150 300
Feet

Pinyon
Environmental Inc.
**TRICHLOROETHENE DETECTIONS
IN GROUNDWATER - FIRST QUARTER 2024**
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Drawn By: CJB Figure: 6
Reviewed By: AP Date: 4/29/2024

PLOT DATE: 4/30/2024

DWG: 07.dwg

Notes:

All locations are approximate.

Concentrations are in micrograms per liter ($\mu\text{g/L}$). Only detected results are shown.

NS - Not Sampled

NE - No Exceedances

E4 - Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above the MDL.

AWQS - Arizona Water Quality Standards

MEK - 2-butanone

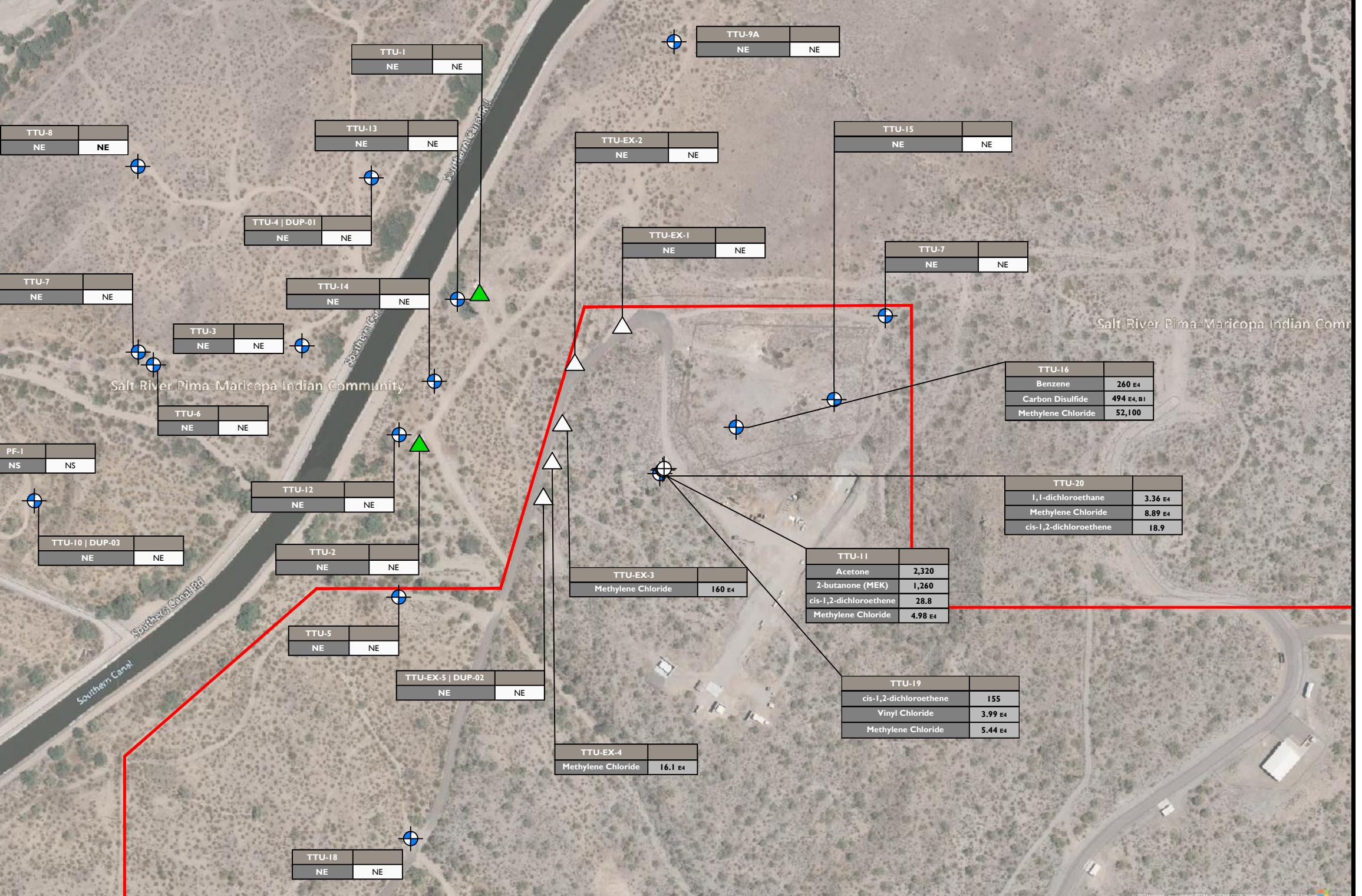
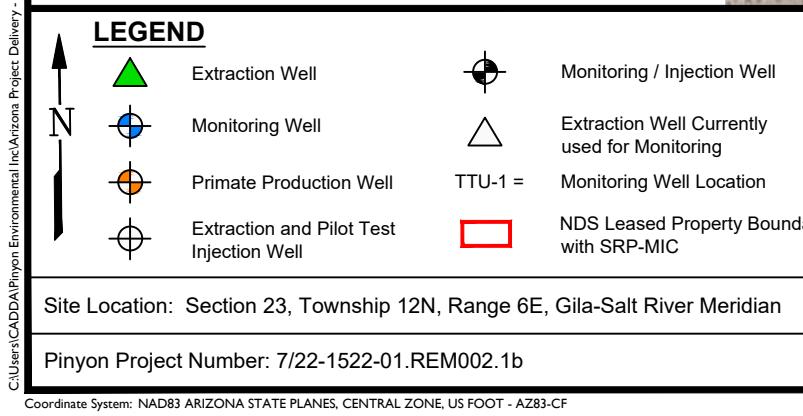
DCE - dichlorethane

AWQS or other Screening Levels ($\mu\text{g/L}$):

MEK - 560 cis-1,2-DCE - 70 Acetone - 1,800 Vinyl Chloride - 2

Toluene - 1,000 1,1-dichloroethane - 2.8 1,2-dichloroethane - 5

1,1,2-trichloroethane - 5



Pinyon Environmental Inc.

VOC EXCEEDANCES IN GROUNDWATER - FIRST QUARTER 2024

Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Drawn By: SJA Figure: 7

Reviewed By: DW Date: 4/30/2024

Attachments

Attachment I – Field Notes

Location	Measurement Date	Depth to Groundwater (ft btoc)	Measurement Date	Depth to Groundwater (ft btoc)
TTU-1	11/17/2023	43.07	2-13-24	45.63
TTU-2	11/17/2023	64.03	2-13-24	64.01
TTU-3	11/17/2023	92.07	2-12-24	88.82
TTU-4	11/17/2023	52.35	2-13-24	52.93
TTU-5	11/17/2023	81.76	2-13-24	82.77
TTU-6	11/17/2023	123.85	2-12-24	129.01
TTU-7	11/17/2023	131.85	2-12-24	135.5
TTU-8	11/17/2023	143.08	2-14-24	144.25
TTU-9A	11/17/2023	27.35	2-13-24	66.96
TTU-10	11/17/2023	165.18	2-14-24	166.62
TTU-11	11/18/2023	34.33	2-13-24	36.84
TTU-12	11/18/2023	75.62	2-12-24	74.17
TTU-13	11/17/2023	43.27	2-12-24	43.7
TTU-14	11/18/2023	61.81	2-12-24	60.39
TTU-15	11/18/2023	32.70	2-13-24	33.82
TTU-16	11/18/2023	24.67	2-13-24	26.24
TTU-17	11/18/2023	39.98	2-12-24	41.19
TTU-18	11/18/2023	Dry	—	—
TTU-19	11/18/2023	32.56	2-13-24	34.87
TTU-20	11/17/2023	33.65	2-13-24	38.06
TTU-EX-1	11/18/2023	29.27	2-13-24	30.8
TTU-EX-2	11/18/2023	38.04	2-13-24	39.87
TTU-EX-3	11/18/2023	40.18	2-12-24	41.78
TTU-EX-4	11/18/2023	43.78	2-12-24	44.74
TTU-EX-5	11/17/2023	40.71	2-12-24	41.22
PF-1	11/21/2023	No sound	—	—
PF-2	11/21/2023	NM (probe won't fit)	2-14-24	NA

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	PF-2					
Date Completed	N/A					
Casing Material	Steel					
Casing Diameter (in)	6 5/8					
Screen (ft btoc)	300-400					
Well Total Depth (ft btoc)	400					
Survey Information	Northing: 909166.890 / Easting: 760122.250					
Deployment						
Date / Time	NA					
Type of Sampler	Production Well; spigot					
Size of Sampler	NA					
DTW (ft btoc)	NA					
Deployment Depth (ft btoc)	400					
Personnel	NA					
Notes	Purge 15 minutes. Take parameters (starting and 15 min. after)					
Retrieval and/or Sampling						
Date / Time	2/14/24 @ 1500					
DTW (ft btoc)	*Collect before turning well on* WLM stopping at 168, no hit					
Sampler Integrity	NA					
Personnel	MER, JGF, CJW					
Notes						
$\pm 1^\circ\text{C}$ ± 0.1 Field Parameters $\pm 3\%$ $\pm 10\%$ $\pm 10\%$						
Date / Time	Water Temp (°C)	pH (SU)	± 10 ORP (mV)	Sp Cond ($\mu\text{S}/\text{cm}$)	DO (mg/L)	Turbidity
2/14/24 1414	23.9	7.22	-223.2	1294	2.64	7.1
1419	23.9	7.20	-224.7	1290	2.69	3.0
1424	24.7	7.18	-104.6	water spilled		3.1
1429	25.1	7.17	-228.6	1277	3.05	2.3
Sample ID	PF-2-400-20240214					
QAQC Samples	DUP-01 MS/MSD #3					
Containers	(2) 250 mL HDPE (no pres. & filtered) & (10) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate (Method 314.0 at Eurofins) / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes Well on at 1410°, turned off at 1502.						
Make sure to indicate "drinking water" on COC for Eurofins						
1434	25.2	7.27	-115.9	1291	3.89	2.2
1439	24.3	6.95	-231.9	1287	3.30	1.52.2
1440	24.1	7.15	-225.1	1288	3.43	1.2
1451	24.0	7.13	-226.1	1290	3.22	1.0

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTV					
Project Number	722152201-002					
Well ID / ADWR #	TTV-1 155-914440					
Date Completed	10/16/2012					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	30-70					
Well Total Depth (ft btoc)	75					
Survey Information	Northing 909420.734 / Easting 761281.203					
Deployment						
Date / Time	11-17-23 @ 1342 (W NA)					
Type of Sampler	Pump, Production well					
Size of Sampler	NA					
DTW (ft btoc)	43.07 * Before turning on well on 11-17-23					
Deployment Depth (ft btoc)	50					
Personnel	16F					
Notes	System is odorous					
Retrieval and/or Sampling						
Date / Time	2-13-24 @ 1027					
DTW (ft btoc)	45.63					
Sampler Integrity	Spigot					
Personnel	16F, CJW					
Notes	-					
PH	Water Temp	Field Parameters				
Date / Time	Water Temp °C	pH (SU)	ORP (mV)	Sp Cond (μ S/cm)	DO (mg/L)	Turbidity
2-13-24 @ 1003	7.68	18.9	-130.7	1018	5.80	2.5
1008	7.84	21.8	-102.0	1028	5.41	1.6
1013	7.83	22.3	-74.5	1026	5.19	1.4
1018	7.79	22.4	-78.9	1020	5.19	1.6
Sample ID	TTV-1-50-20240213					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (6) 40mL Amber Vials					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes No					
Notes	Well off upon arrival, well on @ 0857, well on upon departure.					

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTV					
Project Number	722152201.001					
Well ID / ADWR #	TTV-2 / NA					
Date Completed	10/17/2013					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	49.4 - 179.6					
Well Total Depth (ft btoc)	185					
Survey Information	Northing 909087.852 / Easting 761148.265					
Deployment						
Date / Time	2-13-24 @ 1101 NA					
Type of Sampler	Spigot Production well, Spigot					
Size of Sampler	NA					
DTW (ft btoc)	71.54 on 00 104.03 on 11-17-23					
Deployment Depth (ft btoc)	114.5					
Personnel	JGF, CJW					
Notes	-					
Retrieval and/or Sampling						
Date / Time	2-13-24 @ 1101					
DTW (ft btoc)	-					
Sampler Integrity	Spigot					
Personnel	JGF, CJW					
Notes	-					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
1037	21.7	7.28	-209.9	3419	5.37	3.0
1042	22.6	7.26	-206.6	3472	5.13	1.3
1047	22.9	7.20	-109.1	3471	5.11	1.5
1052	22.7	7.26	-209.2	3466	5.14	1.4
Sample ID	TTV-2-114-20240212					
QAQC Samples	-					
Containers	(1) 125 mL HDPE, (6) 40mL Amber vials					
Preservatives	HCl					
Analysis	Perchlorate, VOC's, 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes	ORP did not stabilize within 15 minutes, well on upon departure.					

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-3 / NA					
Date Completed	10/18/2013					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	78.1-138.1					
Well Total Depth (ft btoc)	143.6					
Survey Information	Northing: 909303.363 / Easting: 760888.204					
Deployment						
Date / Time	11/17/2023 at 11:25					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	92.07					
Deployment Depth (ft btoc)	108					
Personnel	IGF, CJW					
Notes	Water a little cloudy					
Retrieval and/or Sampling						
Date / Time	2-12-24 @ 1518					
DTW (ft btoc)	88.82					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2-12-24 @ 1523	21.9	7.08	-163.3	1327	4.17 4.71	14
Sample ID	TTU-3-108- 20240212					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (6) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes	*Be careful of tether when first opening well; is not secured and can fall in easily					

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTV					
Project Number	722152201.002					
Well ID / ADWR #	TTV-4 NA					
Date Completed	10 - 25 - 2013					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	39.5 - 99.5					
Well Total Depth (ft btoc)	104.9					
Survey Information	Northing 909673.680 / Easting 761041.975 Deployment					
Date / Time	11-17-2023 @ 0954					
Type of Sampler	Hydra Sheeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	52.35					
Deployment Depth (ft btoc)	52.05					
Personnel	16F, CJW					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	TTV-4 2-13-24 @ 1528					
DTW (ft btoc)	-					
Sampler Integrity	Good					
Personnel	16F, CJW					
Notes	Water clear parameters					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2-13-24 @ 1542	22.7	7.57	-249.7	2198	2.49	2.8
Sample ID	TTV-4-57-20240213					
QAQC Samples	Dip - 01					
Containers	(2) 125 mL HDPE, (6) 40mL Amber VOAS					
Preservatives	HPL					
Analysis	VOC's, 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-5 / NA					
Date Completed	9/20/2014					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	59.5-164.5					
Well Total Depth (ft btoc)	169.5					
Survey Information	Northing: 908747.636 / Easting: 761102.227					
Deployment						
Date / Time	11/17/2023 at 13:00					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	81.76					
Deployment Depth (ft btoc)	110					
Personnel	IGF & CJW					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	2/13/24 @ 1450					
DTW (ft btoc)	82.77					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/13/24 @ 1455	25.3	7.9 7.49	-254.2	688	3.00	4.7
Sample ID	TTU-5-110-20240213					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (4) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-6 / NA					
Date Completed	10/7/2014					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	110-175					
Well Total Depth (ft btoc)	180					
Survey Information	Northing: 909260.820 / Easting: 760560.096					
Deployment						
Date / Time	11/17/2023 at 11:05					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	123.85					
Deployment Depth (ft btoc)	143					
Personnel	IGF & CJW					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	2-12-23 @ 1458					
DTW (ft btoc)	129.01					
Sampler Integrity	IGF, WWG					
Personnel	LJOD					
Notes	Slightly cloudy					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2-12-24 @ 1504	22.0	7.11	-165.9	2897	1.16	27
Sample ID	TTU-6-143-20240212					
QAQC Samples	~					
Containers	(1) 125 mL HDPE (no pres.) & (6) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-7 / NA					
Date Completed	10/8/2014					
Casing Material	Steel					
Casing Diameter (in)	8.5					
Screen (ft btoc)	280-410					
Well Total Depth (ft btoc)	410					
Survey Information	Northing: 909287.611 / Easting: 760527.269					
Deployment						
Date / Time	11/17/2023 at 10:48					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	131.35					
Deployment Depth (ft btoc)	345					
Personnel	IGF & CJW					
Notes	Black sediment in bottom half of sleeve					
Retrieval and/or Sampling						
Date / Time	2/12/24 @ 1435					
DTW (ft btoc)	135.50					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/12/24 @ 1445	22.0	6.97	-175.3	3838	1.55	15
Sample ID	TTU-7-345-20240212					
QAQC Samples	~					
Containers	(j) 125 mL HDPE (no pres.) & (4) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-15-55-228014 - TTU-8 / NA					
Date Completed	1/25/2018 - 4-18-2016					
Casing Material	Steel	PVC				
Casing Diameter (in)	N/A	4				
Screen (ft btoc)	Open	135-185				
Well Total Depth (ft btoc)	100	190				
Survey Information	Northing: 909185.100 / Easting: 762065.910 Northing: 9091699.2660 / Easting: 760514.908					
Deployment						
Date / Time	1/18/2023 at 12:25 - 11-17-23 @ 1018					
Type of Sampler	HydraSleeve - HydraSleeve					
Size of Sampler	HS-2-IL	HS-2-IL				
DTW (ft btoc)	32.70	143.08				
Deployment Depth (ft btoc)	75	164				
Personnel	IGF & CJW					
Notes	Slightly cloudy water clear					
Retrieval and/or Sampling						
Date / Time	2/14/24 @ 1520					
DTW (ft btoc)	144.25 @ 2-12-29					
Sampler Integrity	GOOD					
Personnel	MER, IGF, CJW					
Notes	water clear					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/14/24 @ 1529	25.8	6.91	-254.9	3107	1.67	5.6
Sample ID: TTU-15-75 - TTU-8 - 167-20240214						
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (6) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-EX-3 / 55-231731 - TTU-9A / NA					
Date Completed	1/24/2020 - 10-16-2016					
Casing Material	PVC					
Casing Diameter (in)	8 - 4					
Screen (ft btoc)	OPEN - 24 - 99					
Well Total Depth (ft btoc)	HTT 104					
Survey Information	Northing: 909134.941 / Easting: 761465.507 - Northing 909974.490					
Deployment Easting 761710.151						
Date / Time	11/18/2023 at 10:56 11-17-2023 @ 1224					
Type of Sampler	HydraSleeve Hydra Sleeve					
Size of Sampler	HS-2-1L HS-2-1L					
DTW (ft btoc)	38.75 27.35					
Deployment Depth (ft btoc)	76 26.61					
Personnel	IGF & HMC 16F, CJW					
Notes	Rocky sediment on & in bag Water clear					
Retrieval and/or Sampling						
Date / Time	2-13-24 @ 0932					
DTW (ft btoc)	66.96					
Sampler Integrity	Good					
Personnel	IGF + CJW					
Notes	Water clear					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2-13-24 @ 0942	18.7	7.45	-173.9	1605	4.90	3.4
IGF						
Sample ID	TTU-EX-3-76 - TTU-9A - (01-202402123)					
QAQC Samples	MS/MSD #2					
Containers	(2) 125 mL HDPE (no pres.) & (1) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-10 / NA					
Date Completed	4/18/2016					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	115-180					
Well Total Depth (ft btoc)	185					
Survey Information	Northing: 908960.114 / Easting: 760297.013					
Deployment						
Date / Time	11/21/2023 at 12:40					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	165.18					
Deployment Depth (ft btoc)	172					
Personnel	IGF & CJW					
Notes	Water clear, small bit of sediment at bottom					
Retrieval and/or Sampling						
Date / Time	2/14/24 @ 1349					
DTW (ft btoc)	166.62					
Sampler Integrity	GOOD					
Personnel	MFR, IGF, CJW					
Notes	water clear					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/14/24 ② 1356	23.5	7.37	-205.9	1431	4.47	21
Sample ID	TTU-10-172-20240214					
QAQC Samples	DUP-03					
Containers	(2) 125 mL HDPE (no pres.) & (1) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-13-NA TTU-11 / 55-918534					
Date Completed	7/20/2018 9-11-2015					
Casing Material	Steel	PVC				
Casing Diameter (in)	5	4				
Screen (ft btoc)	Open to 80	24-89				
Well Total Depth (ft btoc)	80	94				
Survey Information	Northing: 909405.920 / Easting: 761232.180 Northing 909029.758					
Deployment						
Date / Time	11/17/23 at 14:35 11-18-23 @ 1415					
Type of Sampler	HydraSleeve Hydra Sleeve					
Size of Sampler	HS-2-IL HS-2-IL					
DTW (ft btoc)	43.27	34.33				
Deployment Depth (ft btoc)	51	73				
Personnel	IGF & CJW 16F, CJW					
Notes	Tree/plant roots on outside of sleeve Odorous effervescent, decrease in gel-like substance					
Retrieval and/or Sampling						
Date / Time	2/13/24 @ 1225					
DTW (ft btoc)	36.84					
Sampler Integrity	Good					
Personnel	16F CJW					
Notes	Gel like, slightly effervescent, floating precipitate					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/13/24 @ 1233	26.4	5.80	-276.9	1533	0.56	140
		11-				
Sample ID	TTU-13-51- 73-2024@213					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (1) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-12 / NA					
Date Completed	7/31/2018					
Casing Material	Steel					
Casing Diameter (in)	5					
Screen (ft btoc)	Open to 180					
Well Total Depth (ft btoc)	180					
Survey Information	Northing: 909105.990 / Easting: 761103.280					
Deployment						
Date / Time	11/18/23 at 10:15					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	75.62					
Deployment Depth (ft btoc)	82					
Personnel	IGF & CJW					
Notes	HS only 1/2 full					
Retrieval and/or Sampling						
Date / Time	2/12/24 @ 1000					
DTW (ft btoc)	74.17					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	3/4 full, 1/2" Sediment @ bottom of HS. Sediment on outside of HS.					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/12/24 @ 1010	19.3	6.87	-207.7	*Over 3000 last time 3/23/22	4.0	7.9
Sample ID	TTU-12-82-20240212					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (1) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-13 / NA					
Date Completed	7/20/2018					
Casing Material	Steel					
Casing Diameter (in)	5					
Screen (ft btoc)	Open to 80					
Well Total Depth (ft btoc)	80					
Survey Information	Northing: 909405.920 / Easting: 761232.180					
Deployment						
Date / Time	11/17/23 at 14:35					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	43.27					
Deployment Depth (ft btoc)	51					
Personnel	IGF & CJW					
Notes	Tree/plant roots on outside of sleeve					
Retrieval and/or Sampling						
Date / Time	2-12-24 @ 0905					
DTW (ft btoc)	43.70					
Sampler Integrity	(Good)					
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/12/24 @ 0915	16.1	6.82	-89.0	1302	3.73	6.8
Sample ID	TTU-13-51-20240212					
QAQC Samples	MS/MSD #1					
Containers	(2) 125 mL HDPE (no pres.) & (1) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-14 / NA					
Date Completed	7/19/2018					
Casing Material	Steel					
Casing Diameter (in)	5					
Screen (ft btoc)	Open to 100					
Well Total Depth (ft btoc)	100					
Survey Information	Northing: 909224.260 / Easting: 761181.230					
Deployment						
Date / Time	11/18/23 at 09:54					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	61.81					
Deployment Depth (ft btoc)	64					
Personnel	IGF & CJW					
Notes	Small amount of rocky sediment					
Retrieval and/or Sampling						
Date / Time	2-12-24 @ 0935					
DTW (ft btoc)	60.39					
Sampler Integrity	(good)					
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2-12-24 @ 0942	18.3	6.86	-73.6	2900	3.22	17
Sample ID	TTU-14-64- 20240212					
QAQC Samples	DUP - CW (6)					
Containers	(2) 125 mL HDPE (no pres.) & (10) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes	**Be careful, tether not hooked into anything					

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-15 / 55-228014					
Date Completed	1/25/2018					
Casing Material	Steel					
Casing Diameter (in)	N/A					
Screen (ft btoc)	Open					
Well Total Depth (ft btoc)	100					
Survey Information	Northing: 909185.100 / Easting: 762065.910					
Deployment						
Date / Time	11/18/2023 at 12:25					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	32.70					
Deployment Depth (ft btoc)	75					
Personnel	IGF & CJW					
Notes	Slightly cloudy					
Retrieval and/or Sampling						
Date / Time	2024-13-2 @ 1302					
DTW (ft btoc)	33.82					
Sampler Integrity	good					
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2-13-24 @ 1308	23.4	7.23	-88.4	2452	0.83	N
Sample ID	TTU-15-75-20240213					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (6) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-16 / 55-231730					
Date Completed	1/23/2020					
Casing Material	Steel					
Casing Diameter (in)	8					
Screen (ft btoc)	OPEN					
Well Total Depth (ft btoc)	96.6					
Survey Information	Northing: 909124.980 / Easting: 761848.851					
Deployment						
Date / Time	11/18/2023 at 13:04					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	24.67					
Deployment Depth (ft btoc)	80					
Personnel	IGF & CJW					
Notes	Water had red tint; slightly effervescent					
Retrieval and/or Sampling						
Date / Time	2/13/24 @ 1325					
DTW (ft btoc)	26.24					
Sampler Integrity	Good					
Personnel	IGF CJW					
Notes	7-3" Sediment @ bottom of HS. Slightly less red tint.					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/13/24 @ 1331	23.7	6.54	-287.9	*Was over 8,000 last time 9,530	0.73	50
Sample ID	TTU-16-80-20240213					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (1) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes	*Known high concentrations*					

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-17 / 55-23173					
Date Completed	1/22/2020					
Casing Material	Steel					
Casing Diameter (in)	8					
Screen (ft btoc)	OPEN					
Well Total Depth (ft btoc)	102					
Survey Information	Northing: 909370.903 / Easting: 762179.168					
Deployment						
Date / Time	11/18/2023 at 11:58					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	38.80					
Deployment Depth (ft btoc)	80					
Personnel	IGF & HMC					
Notes	~2" sediment in bottom of HS, bottom 1/3 cloudy, sulfur smell					
Retrieval and/or Sampling						
Date / Time	2-12-24 @ 1035					
DTW (ft btoc)	41.19					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	"sulfur-like smell"					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2-12-24 @ 1040	20.5	7.06	-72.9	1083	1.14	50
Sample ID	TTU-17-80-20240212					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (b) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-19 / 55-232969					
Date Completed	9/24/2020					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	25-90					
Well Total Depth (ft btoc)	95					
Survey Information	Northing: 909030.750 / Easting: 761687.700					
Deployment						
Date / Time	11/18/2023 at 13:44					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	32.56					
Deployment Depth (ft btoc)	73					
Personnel	IGF & CJW					
Notes	Much black sed. at bottom of HS; odorous; slightly effervescent					
Retrieval and/or Sampling						
Date / Time	2/13/24 @ 1200					
DTW (ft btoc)	34.87					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/13/24 @ 1200	24.60	6.61	-162.5	2403	0.46	270
Sample ID	TTU-19-73-20240213					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (4) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes				No	
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-20 / 55-232968					
Date Completed	9/24/2020					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	25-90					
Well Total Depth (ft btoc)	95					
Survey Information	Northing: 909022.530 / Easting: 761681.990					
Deployment						
Date / Time	—					
Type of Sampler	Dedicated pump					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	33.65 on 11/17/23					
Deployment Depth (ft btoc)	73					
Personnel	IGF & CJW					
Notes						
Retrieval and/or Sampling						
Date / Time	2/13/24 @ 1140					
DTW (ft btoc)	38.06					
Sampler Integrity	Spigot					
Personnel	IGF, CJW					
Notes	Water clear					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
1122	22.9	7.08	-233.9	3047	1.17	2.6
1127	24.3	7.03	-251.9	2291	1.32	1.9
1132	24.1	6.98	-183.6	2228	2.15	2.6
Sample ID	TTU-20-73- 20240213					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (4) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			<input checked="" type="radio"/> No		
Notes						
Known high concentrations						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-EX-1 / 55-231733					
Date Completed	1/29/2020					
Casing Material						
Casing Diameter (in)	8					
Screen (ft btoc)	OPEN					
Well Total Depth (ft btoc)	109					
Survey Information	Northing: 909350.574 / Easting: 761597.823					
Deployment						
Date / Time	11/18/2023 at 11:32					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	29.27					
Deployment Depth (ft btoc)	69					
Personnel	IGF & CJW					
Notes	Bottom 1/2 of HS cloudy, ~1" silt/sediment at bottom					
Retrieval and/or Sampling						
Date / Time	2/13/24 @ 1343					
DTW (ft btoc)	30.80					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes						
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/13/24 e 1349	23.9	7.17	-191.8	2862	2.44	14
Sample ID	TTU-EX-1-69-20740213					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (1) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-EX-2 / 55-231734					
Date Completed	1/28/2020					
Casing Material						
Casing Diameter (in)	8					
Screen (ft btoc)	OPEN					
Well Total Depth (ft btoc)	110					
Survey Information	Northing: 909268.187 / Easting: 761493.214					
Deployment						
Date / Time	11/18/2023 at 11:12					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	38.04					
Deployment Depth (ft btoc)	74					
Personnel	IGF & CJW					
Notes	Bottom 1/2 of sleeve cloudy					
Retrieval and/or Sampling						
Date / Time	2-13-24 @ 1359					
DTW (ft btoc)	39.89					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	" ..slightly cloudy "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2-13-24 @ 1405	23.8	7.20	-202.6	2116	8.90	33
Sample ID	TTU-EX-2-74-20240213					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (4) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-EX-3 / 55-231731					
Date Completed	1/24/2020					
Casing Material						
Casing Diameter (in)	8					
Screen (ft btoc)	OPEN					
Well Total Depth (ft btoc)	111					
Survey Information	Northing: 909134.941 / Easting: 761465.507					
Deployment						
Date / Time	11/18/2023 at 10:56					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	38.75					
Deployment Depth (ft btoc)	76					
Personnel	IGF & HMC					
Notes	Rocky sediment on & in bag					
Retrieval and/or Sampling						
Date / Time	2/12/24 @ 1100					
DTW (ft btoc)	41.78					
Sampler Integrity	(Good)					
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/12/24 @ 1107	20.5	6.65	-229.0	5661	1.35	12
Sample ID	TTU-EX-3-76-10240212					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & ((0) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

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Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-EX-4 / 55-231732					
Date Completed	1/25/2020					
Casing Material						
Casing Diameter (in)	8					
Screen (ft btoc)	OPEN					
Well Total Depth (ft btoc)	112					
Survey Information	Northing: 909051.298 / Easting: 761442.876					
Deployment						
Date / Time	11/18/2023 at 10:38					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	42.98					
Deployment Depth (ft btoc)	77					
Personnel	IGF & CJW					
Notes	Partially cloudy bottom 1/2					
Retrieval and/or Sampling						
Date / Time	2/12/24 @ 1113					
DTW (ft btoc)	44.74					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	11					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/12/24 ② 1118	20.4	6.98	-175.0	2157	1.11	55
Sample ID	TTU-EX-4-77-20240212					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (6) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-EX-5 / 55-231736					
Date Completed	1/24/2020					
Casing Material						
Casing Diameter (in)	8					
Screen (ft btoc)	OPEN					
Well Total Depth (ft btoc)	112.4					
Survey Information	Northing: 908971.770 / Easting: 761423.325					
Deployment						
Date / Time	11/17/2023 at 15:07					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	40.71					
Deployment Depth (ft btoc)	80					
Personnel	IGF & CJW					
Notes	Cloudy towards bottom of HS					
Retrieval and/or Sampling						
Date / Time	2024-2-13 @ 1415					
DTW (ft btoc)	41.22					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	—					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
2/13/24 @ 1425	24.4	7.27	-282.9	1162	0.85	26
Sample ID	TTU-EX-5-80-20240213					
QAQC Samples	DUP-02 ✓					
Containers	(2) 125 mL HDPE (no pres.) & (1) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						

Attachment 2 – Laboratory Analytical Reports

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Parker
Pinyon Environmental Inc
1783 W University Drive
Suite 137
Tempe, Arizona 85281

Generated 3/29/2024 11:43:06 AM Revision 2

JOB DESCRIPTION

Nammo TTU

JOB NUMBER

550-214412-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

Eurofins Phoenix

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 Southwest, LLC Project Manager.

Authorization



Generated
3/29/2024 11:43:06 AM
Revision 2

Authorized for release by
Rachel Sester, Project Manager I
Rachel.Sester@et.eurofinsus.com
(602)659-7615

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Sample Summary	6
Detection Summary	7
Client Sample Results	8
QC Sample Results	9
QC Association Summary	10
Lab Chronicle	11
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	15

Definitions/Glossary

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	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

Case Narrative

Client: Pinyon Environmental Inc
Project: Nammo TTU

Job ID: 550-214412-1

Job ID: 550-214412-1

Eurofins Phoenix

Job Narrative 550-214412-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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.

Revision 2

This report was revised on 3/97/24 to update the certification matrix to potable water. This final report replaces the report that was generated on 2/27/24 at 2:59 PM.

Revision

This report was revised on 3/27/24 to change the name of the project to "Nammo TTU", per client request. This final report replaces the report that was generated on 2/26/24 at 11:35 AM.

Receipt

The sample was received on 2/15/2024 9:35 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.1°C.

HPLC/IC

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

Eurofins Phoenix

Sample Summary

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-214412-1	PF-2-400-20240214	Water	02/14/24 00:00	02/15/24 09:35

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Detection Summary

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

Client Sample ID: PF-2-400-20240214

Lab Sample ID: 550-214412-1

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Client Sample Results

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

Client Sample ID: PF-2-400-20240214
Date Collected: 02/14/24 00:00
Date Received: 02/15/24 09:35

Lab Sample ID: 550-214412-1
Matrix: Water

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	E8	1.0	0.31	ug/L			02/23/24 21:30	1

QC Sample Results

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 550-316351/1002

Matrix: Water

Analysis Batch: 316351

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	E8	1.0	0.31	ug/L			02/23/24 12:20	1

Lab Sample ID: LCS 550-316351/4

Matrix: Water

Analysis Batch: 316351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	RPD
Perchlorate	25.0	23.4		ug/L		93	
						85 - 115	

Lab Sample ID: LCSD 550-316351/5

Matrix: Water

Analysis Batch: 316351

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD
Perchlorate	25.0	23.4		ug/L		94	
						85 - 115	

Lab Sample ID: MRL 550-316351/1003

Matrix: Water

Analysis Batch: 316351

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	RPD
Perchlorate	1.00	0.836	E4	ug/L		84	
						75 - 125	

Lab Sample ID: 550-214272-A-6 MS ^100

Matrix: Water

Analysis Batch: 316351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD
Perchlorate	1100		2500	3200		ug/L		85	
								80 - 120	

Lab Sample ID: 550-214272-A-6 MSD ^100

Matrix: Water

Analysis Batch: 316351

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Perchlorate	1100		2500	3190		ug/L		85	
								80 - 120	

Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

QC Association Summary

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

HPLC/IC

Analysis Batch: 316351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-214412-1	PF-2-400-20240214	Total/NA	Water	314.0	
MB 550-316351/1002	Method Blank	Total/NA	Water	314.0	
LCS 550-316351/4	Lab Control Sample	Total/NA	Water	314.0	
LCSD 550-316351/5	Lab Control Sample Dup	Total/NA	Water	314.0	
MRL 550-316351/1003	Lab Control Sample	Total/NA	Water	314.0	
550-214272-A-6 MS ^100	Matrix Spike	Total/NA	Water	314.0	
550-214272-A-6 MSD ^100	Matrix Spike Duplicate	Total/NA	Water	314.0	

Lab Chronicle

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

Client Sample ID: PF-2-400-20240214

Lab Sample ID: 550-214412-1

Matrix: Water

Date Collected: 02/14/24 00:00

Date Received: 02/15/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	314.0		1	316351	RDC	EET PHX	02/23/24 21:30

Laboratory References:

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-24

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Eurofins Phoenix

Method Summary

Client: Pinyon Environmental Inc
Project/Site: Nammo TTU

Job ID: 550-214412-1

Method	Method Description	Protocol	Laboratory
314.0	Perchlorate (IC)	EPA	EET PHX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

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1 2 3 4 5 6 7 8 9 10 11 12 13 14

Chain of Custody Record



214412
Environment Testing America

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite 189
Phoenix, AZ 85040-4807
phone 602.437.3340

Eurofins Environment Testing America
America

COC No:

1 of 1 COCs

TALS Project #:

Sampler: Sabrina Foster

For Lab Use Only:

Walk-in Client:

Lab Sampling:

Job / SDG No.:

Sample Specific Notes:

RCRA

Other: EPA

Regulatory Program: DW NPDES

Project Manager: Andrew Parker

Site Contact: ~

Date:

Login Sample Receipt Checklist

Client: Pinyon Environmental Inc

Job Number: 550-214412-1

Login Number: 214412

List Source: Eurofins Phoenix

List Number: 1

Creator: Maycock, Lisa

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?	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.



ANALYTICAL REPORT

March 22, 2024

Revised Report

Pinyon Environmental

Sample Delivery Group: L1705776
Samples Received: 02/14/2024
Project Number: 722152201.002
Description: Nammo TTU Groundwater Monitoring

Report To: Isabella Foster and Andrew Parker
3222 S. Vance Street Suite 200
Lakewood, CO 80227

Entire Report Reviewed By:

Daphne Richards
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Is

⁸Gl

⁹Al

¹⁰Sc

TABLE OF CONTENTS

Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	2 Tc
Ss: Sample Summary	3	3 Ss
Cn: Case Narrative	8	4 Cn
Sr: Sample Results	9	5 Sr
TTU-1-50-20240213 L1705776-01	9	6 Qc
TTU-2-114-20240213 L1705776-02	11	7 Is
TTU-3-108-20240212 L1705776-03	13	8 Gl
TTU-4-57-20240213 L1705776-04	15	9 Al
TTU-5-110-20240213 L1705776-05	17	10 Sc
TTU-6-143-20240212 L1705776-06	19	
TTU-7-345-20240212 L1705776-07	21	
TTU-9A-61-20240213 L1705776-08	23	
TTU-11-73-20240213 L1705776-09	25	
TTU-12-82-20240212 L1705776-10	27	
TTU-13-51-20240212 L1705776-11	29	
TTU-14-64-20240212 L1705776-12	31	
TTU-15-75-20240213 L1705776-13	33	
TTU-16-80-20240213 L1705776-14	35	
TTU-17-80-20240212 L1705776-15	37	
TTU-19-73-20240213 L1705776-16	39	
TTU-20-73-20240213 L1705776-17	41	
TTU-EX-5-80-20240213 L1705776-18	43	
TTU-EX-1-69-20240213 L1705776-19	45	
TTU-EX-2-74-20240213 L1705776-20	47	
TTU-EX-3-76-20240212 L1705776-21	49	
TTU-EX-4-77-20240212 L1705776-22	51	
DUP-01 L1705776-23	53	
DUP-02 L1705776-24	55	
TRIP BLANK L1705776-25	57	
Qc: Quality Control Summary	59	
Wet Chemistry by Method 314.0 Mod	59	
Volatile Organic Compounds (GC/MS) by Method 8260B	63	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	81	
Is: Internal Standard Summary	85	
Volatile Organic Compounds (GC/MS) by Method 8260B	85	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	88	
Gl: Glossary of Terms	91	
Al: Accreditations & Locations	92	
Sc: Sample Chain of Custody	93	

SAMPLE SUMMARY

			Collected by Isabella Foster	Collected date/time 02/13/24 10:27	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	500	02/24/24 23:29	02/24/24 23:29	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 11:32	02/17/24 11:32	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2227341	1	02/16/24 04:38	02/16/24 04:38	DWR	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/13/24 11:01	Received date/time 02/14/24 08:00	
TTU-2-114-20240213 L1705776-02 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	5000	02/21/24 01:26	02/21/24 01:26	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	10	02/17/24 15:18	02/17/24 15:18	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	10	02/20/24 01:23	02/20/24 01:23	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2227341	1	02/16/24 05:00	02/16/24 05:00	DWR	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/12/24 15:18	Received date/time 02/14/24 08:00	
TTU-3-108-20240212 L1705776-03 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 01:54	02/21/24 01:54	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 11:52	02/17/24 11:52	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2227341	1	02/16/24 05:22	02/16/24 05:22	DWR	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/13/24 15:28	Received date/time 02/14/24 08:00	
TTU-4-57-20240213 L1705776-04 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 02:22	02/21/24 02:22	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 12:13	02/17/24 12:13	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2227341	1	02/16/24 05:43	02/16/24 05:43	DWR	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/13/24 14:50	Received date/time 02/14/24 08:00	
TTU-5-110-20240213 L1705776-05 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 02:50	02/21/24 02:50	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 12:33	02/17/24 12:33	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2227341	1	02/16/24 06:05	02/16/24 06:05	DWR	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/12/24 14:58	Received date/time 02/14/24 08:00	
TTU-6-143-20240212 L1705776-06 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 04:14	02/21/24 04:14	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 12:54	02/17/24 12:54	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2227341	1	02/16/24 06:27	02/16/24 06:27	DWR	Mt. Juliet, TN



SAMPLE SUMMARY

			Collected by Isabella Foster	Collected date/time 02/12/24 14:35	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 04:41	02/21/24 04:41	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 13:15	02/17/24 13:15	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2227341	1	02/16/24 06:49	02/16/24 06:49	DWR	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/13/24 09:32	Received date/time 02/14/24 08:00	
TTU-9A-61-20240213 L1705776-08 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 05:09	02/21/24 05:09	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 13:35	02/17/24 13:35	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 16:25	02/20/24 16:25	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/13/24 12:25	Received date/time 02/14/24 08:00	
TTU-11-73-20240213 L1705776-09 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 06:05	02/21/24 06:05	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	10	02/20/24 01:47	02/20/24 01:47	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 16:47	02/20/24 16:47	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/12/24 10:00	Received date/time 02/14/24 08:00	
TTU-12-82-20240212 L1705776-10 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	5000	02/21/24 06:33	02/21/24 06:33	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	10	02/17/24 15:59	02/17/24 15:59	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	10	02/20/24 02:10	02/20/24 02:10	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 17:09	02/20/24 17:09	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/12/24 09:05	Received date/time 02/14/24 08:00	
TTU-13-51-20240212 L1705776-11 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1000	02/21/24 07:01	02/21/24 07:01	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 13:56	02/17/24 13:56	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 17:31	02/20/24 17:31	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/12/24 09:35	Received date/time 02/14/24 08:00	
TTU-14-64-20240212 L1705776-12 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	5000	02/25/24 21:43	02/25/24 21:43	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	10	02/17/24 16:20	02/17/24 16:20	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	10	02/20/24 02:33	02/20/24 02:33	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 17:53	02/20/24 17:53	JBE	Mt. Juliet, TN



SAMPLE SUMMARY

				Collected by Isabella Foster	Collected date/time 02/13/24 13:02	Received date/time 02/14/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	10000	02/25/24 00:24	02/25/24 00:24	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 14:16	02/17/24 14:16	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	2500	02/20/24 02:56	02/20/24 02:56	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230690	20	02/21/24 15:55	02/21/24 15:55	JBE	Mt. Juliet, TN
				Collected by Isabella Foster	Collected date/time 02/13/24 13:25	Received date/time 02/14/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	500	02/25/24 00:52	02/25/24 00:52	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	20	02/20/24 03:19	02/20/24 03:19	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230690	1	02/21/24 14:29	02/21/24 14:29	JBE	Mt. Juliet, TN
				Collected by Isabella Foster	Collected date/time 02/12/24 10:35	Received date/time 02/14/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/25/24 01:20	02/25/24 01:20	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 14:37	02/17/24 14:37	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	1	02/20/24 03:42	02/20/24 03:42	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230690	1	02/21/24 14:50	02/21/24 14:50	JBE	Mt. Juliet, TN
				Collected by Isabella Foster	Collected date/time 02/13/24 12:00	Received date/time 02/14/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 10:44	02/21/24 10:44	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	5	02/17/24 17:01	02/17/24 17:01	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	5	02/20/24 04:06	02/20/24 04:06	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	5	02/20/24 21:53	02/20/24 21:53	JBE	Mt. Juliet, TN
				Collected by Isabella Foster	Collected date/time 02/13/24 11:40	Received date/time 02/14/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1000	02/25/24 02:44	02/25/24 02:44	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	10	02/17/24 17:21	02/17/24 17:21	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	10	02/20/24 04:29	02/20/24 04:29	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 18:58	02/20/24 18:58	JBE	Mt. Juliet, TN
				Collected by Isabella Foster	Collected date/time 02/13/24 14:15	Received date/time 02/14/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1	02/21/24 11:40	02/21/24 11:40	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	1	02/17/24 14:57	02/17/24 14:57	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	1	02/20/24 04:52	02/20/24 04:52	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 19:20	02/20/24 19:20	JBE	Mt. Juliet, TN



SAMPLE SUMMARY

			Collected by Isabella Foster	Collected date/time 02/13/24 13:43	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1000	02/25/24 03:12	02/25/24 03:12	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	10	02/17/24 17:42	02/17/24 17:42	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	10	02/20/24 05:15	02/20/24 05:15	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	10	02/20/24 22:15	02/20/24 22:15	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/13/24 13:59	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228552	1000	02/25/24 03:40	02/25/24 03:40	JEA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228368	20	02/17/24 18:02	02/17/24 18:02	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2229520	20	02/20/24 05:38	02/20/24 05:38	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230690	1	02/21/24 15:12	02/21/24 15:12	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/12/24 11:00	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228553	5000	02/29/24 17:10	02/29/24 17:10	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228641	250	02/18/24 04:48	02/18/24 04:48	DYW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2231600	10	02/22/24 13:45	02/22/24 13:45	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/12/24 11:13	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228553	5000	02/29/24 17:38	02/29/24 17:38	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228641	25	02/18/24 05:11	02/18/24 05:11	DYW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 19:42	02/20/24 19:42	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/13/24 00:00	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228553	1	02/29/24 18:06	02/29/24 18:06	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228641	1	02/18/24 02:05	02/18/24 02:05	DYW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 20:04	02/20/24 20:04	JBE	Mt. Juliet, TN
			Collected by Isabella Foster	Collected date/time 02/13/24 00:00	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228553	1	02/29/24 18:34	02/29/24 18:34	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228641	1	02/18/24 02:28	02/18/24 02:28	DYW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 20:26	02/20/24 20:26	JBE	Mt. Juliet, TN



SAMPLE SUMMARY

TRIP BLANK L1705776-25 GW			Collected by Isabella Foster	Collected date/time 02/13/24 00:00	Received date/time 02/14/24 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2228641	1	02/17/24 23:23	02/17/24 23:23	DYW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2230157	1	02/20/24 16:03	02/20/24 16:03	JBE	Mt. Juliet, TN

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Daphne Richards
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

Report Revision History

Level II Report - Version 1: 03/06/24 14:18

Project Narrative

Sample id correction

Sample Delivery Group (SDG) Narrative

Insufficient sample volume to perform MS/MSD analyses per method QC requirements.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1705776-02	TTU-2-114-20240213	8260B
L1705776-09	TTU-11-73-20240213	8260B
L1705776-10	TTU-12-82-20240212	8260B
L1705776-12	TTU-14-64-20240212	8260B
L1705776-13	TTU-15-75-20240213	8260B, 8260B-SIM
L1705776-14	TTU-16-80-20240213	8260B, 8260B-SIM
L1705776-15	TTU-17-80-20240212	8260B, 8260B-SIM
L1705776-16	TTU-19-73-20240213	8260B
L1705776-17	TTU-20-73-20240213	8260B
L1705776-18	TTU-EX-5-80-20240213	8260B
L1705776-19	TTU-EX-1-69-20240213	8260B
L1705776-20	TTU-EX-2-74-20240213	8260B, 8260B-SIM

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	11700		150	2000	500	02/24/2024 23:29	WG2228552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 11:32	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 11:32	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 11:32	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 11:32	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 11:32	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 11:32	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 11:32	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 11:32	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 11:32	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 11:32	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 11:32	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 11:32	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 11:32	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 11:32	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 11:32	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 11:32	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 11:32	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 11:32	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 11:32	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 11:32	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 11:32	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 11:32	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 11:32	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 11:32	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 11:32	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 11:32	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 11:32	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 11:32	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 11:32	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 11:32	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 11:32	WG2228368
1,1-Dichloroethene	1.21		0.188	1.00	1	02/17/2024 11:32	WG2228368
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 11:32	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 11:32	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 11:32	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 11:32	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 11:32	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 11:32	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 11:32	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 11:32	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 11:32	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 11:32	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 11:32	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 11:32	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 11:32	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 11:32	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 11:32	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 11:32	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 11:32	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 11:32	WG2228368

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methylene Chloride	U		0.430	5.00	1	02/17/2024 11:32	WG2228368	¹ Cp
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 11:32	WG2228368	² Tc
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 11:32	WG2228368	³ Ss
Naphthalene	U		1.00	5.00	1	02/17/2024 11:32	WG2228368	
Propene	U		0.936	2.50	1	02/17/2024 11:32	WG2228368	⁴ Cn
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 11:32	WG2228368	
Styrene	U		0.118	1.00	1	02/17/2024 11:32	WG2228368	
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 11:32	WG2228368	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 11:32	WG2228368	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 11:32	WG2228368	
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 11:32	WG2228368	
Toluene	U		0.278	1.00	1	02/17/2024 11:32	WG2228368	
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 11:32	WG2228368	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 11:32	WG2228368	
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 11:32	WG2228368	
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 11:32	WG2228368	
Trichloroethene	5.44		0.190	1.00	1	02/17/2024 11:32	WG2228368	
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 11:32	WG2228368	
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 11:32	WG2228368	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 11:32	WG2228368	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 11:32	WG2228368	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 11:32	WG2228368	
Vinyl chloride	U		0.234	1.00	1	02/17/2024 11:32	WG2228368	
Xylenes, Total	U		0.174	3.00	1	02/17/2024 11:32	WG2228368	
(S) Toluene-d8	102			80.0-120		02/17/2024 11:32	WG2228368	
(S) 4-Bromofluorobenzene	92.4			77.0-126		02/17/2024 11:32	WG2228368	
(S) 1,2-Dichloroethane-d4	104			70.0-130		02/17/2024 11:32	WG2228368	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	18.2		0.597	3.00	1	02/16/2024 04:38	WG2227341
(S) Toluene-d8	96.1			77.0-127		02/16/2024 04:38	WG2227341

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	150000		1500	20000	5000	02/13/2024 11:01	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		113	500	10	02/17/2024 15:18	WG2228368
Acrolein	U		25.4	500	10	02/17/2024 15:18	WG2228368
Acrylonitrile	U		6.71	100	10	02/17/2024 15:18	WG2228368
Benzene	1.14	E4	0.941	10.0	10	02/17/2024 15:18	WG2228368
Bromobenzene	U		1.18	10.0	10	02/17/2024 15:18	WG2228368
Bromodichloromethane	U		1.36	10.0	10	02/17/2024 15:18	WG2228368
Bromoform	U		1.29	10.0	10	02/17/2024 15:18	WG2228368
Bromomethane	U		6.05	50.0	10	02/17/2024 15:18	WG2228368
1,3-Butadiene	U		2.99	20.0	10	02/17/2024 15:18	WG2228368
n-Butylbenzene	U		1.57	10.0	10	02/17/2024 15:18	WG2228368
sec-Butylbenzene	U		1.25	10.0	10	02/17/2024 15:18	WG2228368
tert-Butylbenzene	U		1.27	10.0	10	02/17/2024 15:18	WG2228368
Carbon tetrachloride	U		1.28	10.0	10	02/17/2024 15:18	WG2228368
Carbon disulfide	U		0.962	10.0	10	02/17/2024 15:18	WG2228368
Chlorobenzene	U		1.16	10.0	10	02/17/2024 15:18	WG2228368
Chlorodibromomethane	U		1.40	10.0	10	02/17/2024 15:18	WG2228368
Chloroethane	U		1.92	50.0	10	02/17/2024 15:18	WG2228368
Chloroform	1.65	E4	1.11	50.0	10	02/17/2024 15:18	WG2228368
Chloromethane	U		9.60	25.0	10	02/17/2024 15:18	WG2228368
Cyclohexane	U		1.88	10.0	10	02/17/2024 15:18	WG2228368
2-Chlorotoluene	U		1.06	10.0	10	02/17/2024 15:18	WG2228368
4-Chlorotoluene	U		1.14	10.0	10	02/17/2024 15:18	WG2228368
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	02/17/2024 15:18	WG2228368
1,2-Dibromoethane	U		1.26	10.0	10	02/17/2024 15:18	WG2228368
Dibromomethane	U		1.22	10.0	10	02/17/2024 15:18	WG2228368
1,2-Dichlorobenzene	U		1.07	10.0	10	02/17/2024 15:18	WG2228368
1,3-Dichlorobenzene	U		1.10	10.0	10	02/17/2024 15:18	WG2228368
1,4-Dichlorobenzene	U		1.20	10.0	10	02/17/2024 15:18	WG2228368
Dichlorodifluoromethane	U		3.74	50.0	10	02/17/2024 15:18	WG2228368
1,1-Dichloroethane	U		1.00	10.0	10	02/17/2024 15:18	WG2228368
1,2-Dichloroethane	U		0.819	10.0	10	02/17/2024 15:18	WG2228368
1,1-Dichloroethene	31.6		1.88	10.0	10	02/17/2024 15:18	WG2228368
cis-1,2-Dichloroethene	U		1.26	10.0	10	02/17/2024 15:18	WG2228368
trans-1,2-Dichloroethene	U		1.49	10.0	10	02/17/2024 15:18	WG2228368
1,2-Dichloropropane	U		1.49	10.0	10	02/17/2024 15:18	WG2228368
1,1-Dichloropropene	U		1.42	10.0	10	02/17/2024 15:18	WG2228368
1,3-Dichloropropane	U		1.10	10.0	10	02/17/2024 15:18	WG2228368
cis-1,3-Dichloropropene	U		1.11	10.0	10	02/17/2024 15:18	WG2228368
trans-1,3-Dichloropropene	U		1.18	10.0	10	02/17/2024 15:18	WG2228368
2,2-Dichloropropane	U		1.61	10.0	10	02/17/2024 15:18	WG2228368
Dicyclopentadiene	U		2.53	10.0	10	02/17/2024 15:18	WG2228368
Di-isopropyl ether	U		1.05	10.0	10	02/17/2024 15:18	WG2228368
Ethylbenzene	U		1.37	10.0	10	02/17/2024 15:18	WG2228368
4-Ethyltoluene	U		2.08	10.0	10	02/17/2024 15:18	WG2228368
Hexachloro-1,3-butadiene	U		3.37	10.0	10	02/17/2024 15:18	WG2228368
n-Hexane	U		7.49	100	10	02/17/2024 15:18	WG2228368
Isopropylbenzene	U		1.05	10.0	10	02/17/2024 15:18	WG2228368
p-Isopropyltoluene	U		1.20	10.0	10	02/17/2024 15:18	WG2228368
2-Butanone (MEK)	U		11.9	100	10	02/17/2024 15:18	WG2228368
Methyl Cyclohexane	8.46	E4	6.60	10.0	10	02/17/2024 15:18	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		4.30	50.0	10	02/20/2024 01:23	WG2229520
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	02/17/2024 15:18	WG2228368
Methyl tert-butyl ether	U		1.01	10.0	10	02/17/2024 15:18	WG2228368
Naphthalene	U		10.0	50.0	10	02/17/2024 15:18	WG2228368
Propene	U		9.36	25.0	10	02/17/2024 15:18	WG2228368
n-Propylbenzene	U		0.993	10.0	10	02/17/2024 15:18	WG2228368
Styrene	U		1.18	10.0	10	02/17/2024 15:18	WG2228368
1,1,1-Tetrachloroethane	U		1.47	10.0	10	02/17/2024 15:18	WG2228368
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	02/17/2024 15:18	WG2228368
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	02/17/2024 15:18	WG2228368
Tetrachloroethene	U		3.00	10.0	10	02/17/2024 15:18	WG2228368
Toluene	U		2.78	10.0	10	02/17/2024 15:18	WG2228368
1,2,3-Trichlorobenzene	U		2.30	10.0	10	02/17/2024 15:18	WG2228368
1,2,4-Trichlorobenzene	U		4.81	10.0	10	02/17/2024 15:18	WG2228368
1,1,1-Trichloroethane	U		1.49	10.0	10	02/17/2024 15:18	WG2228368
1,1,2-Trichloroethane	U		1.58	10.0	10	02/17/2024 15:18	WG2228368
Trichloroethene	529		1.90	10.0	10	02/20/2024 01:23	WG2229520
Trichlorofluoromethane	U		1.60	50.0	10	02/17/2024 15:18	WG2228368
1,2,3-Trichloropropane	U		2.37	25.0	10	02/17/2024 15:18	WG2228368
1,2,4-Trimethylbenzene	U		3.22	10.0	10	02/17/2024 15:18	WG2228368
1,2,3-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 15:18	WG2228368
1,3,5-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 15:18	WG2228368
Vinyl chloride	U		2.34	10.0	10	02/17/2024 15:18	WG2228368
Xylenes, Total	U		1.74	30.0	10	02/17/2024 15:18	WG2228368
(S) Toluene-d8	102			80.0-120		02/17/2024 15:18	WG2228368
(S) Toluene-d8	94.0			80.0-120		02/20/2024 01:23	WG2229520
(S) 4-Bromofluorobenzene	89.1			77.0-126		02/17/2024 15:18	WG2228368
(S) 4-Bromofluorobenzene	87.9			77.0-126		02/20/2024 01:23	WG2229520
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		02/17/2024 15:18	WG2228368
(S) 1,2-Dichloroethane-d4	92.7			70.0-130		02/20/2024 01:23	WG2229520

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	207		0.597	3.00	1	02/16/2024 05:00	WG2227341
(S) Toluene-d8	96.8			77.0-127		02/16/2024 05:00	WG2227341

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	54.0		0.300	4.00	1	02/12/2024 01:54	WG2228552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 11:52	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 11:52	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 11:52	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 11:52	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 11:52	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 11:52	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 11:52	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 11:52	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 11:52	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 11:52	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 11:52	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 11:52	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 11:52	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 11:52	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 11:52	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 11:52	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 11:52	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 11:52	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 11:52	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 11:52	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 11:52	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 11:52	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 11:52	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 11:52	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 11:52	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 11:52	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 11:52	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 11:52	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 11:52	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 11:52	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 11:52	WG2228368
1,1-Dichloroethene	U		0.188	1.00	1	02/17/2024 11:52	WG2228368
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 11:52	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 11:52	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 11:52	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 11:52	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 11:52	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 11:52	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 11:52	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 11:52	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 11:52	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 11:52	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 11:52	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 11:52	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 11:52	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 11:52	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 11:52	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 11:52	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 11:52	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 11:52	WG2228368

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/17/2024 11:52	WG2228368
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 11:52	WG2228368
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 11:52	WG2228368
Naphthalene	U		1.00	5.00	1	02/17/2024 11:52	WG2228368
Propene	U		0.936	2.50	1	02/17/2024 11:52	WG2228368
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 11:52	WG2228368
Styrene	U		0.118	1.00	1	02/17/2024 11:52	WG2228368
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 11:52	WG2228368
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 11:52	WG2228368
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 11:52	WG2228368
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 11:52	WG2228368
Toluene	U		0.278	1.00	1	02/17/2024 11:52	WG2228368
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 11:52	WG2228368
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 11:52	WG2228368
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 11:52	WG2228368
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 11:52	WG2228368
Trichloroethene	U		0.190	1.00	1	02/17/2024 11:52	WG2228368
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 11:52	WG2228368
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 11:52	WG2228368
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 11:52	WG2228368
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 11:52	WG2228368
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 11:52	WG2228368
Vinyl chloride	U		0.234	1.00	1	02/17/2024 11:52	WG2228368
Xylenes, Total	U		0.174	3.00	1	02/17/2024 11:52	WG2228368
(S) Toluene-d8	101			80.0-120		02/17/2024 11:52	WG2228368
(S) 4-Bromofluorobenzene	88.4			77.0-126		02/17/2024 11:52	WG2228368
(S) 1,2-Dichloroethane-d4	101			70.0-130		02/17/2024 11:52	WG2228368

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	5.72		0.597	3.00	1	02/16/2024 05:22	WG2227341
(S) Toluene-d8	93.2			77.0-127		02/16/2024 05:22	WG2227341

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	02/17/2024 02:22	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 12:13	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 12:13	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 12:13	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 12:13	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 12:13	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 12:13	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 12:13	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 12:13	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 12:13	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 12:13	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 12:13	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 12:13	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 12:13	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 12:13	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 12:13	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 12:13	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 12:13	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 12:13	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 12:13	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 12:13	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 12:13	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 12:13	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 12:13	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 12:13	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 12:13	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 12:13	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 12:13	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 12:13	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 12:13	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 12:13	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 12:13	WG2228368
1,1-Dichloroethene	U		0.188	1.00	1	02/17/2024 12:13	WG2228368
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 12:13	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 12:13	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 12:13	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 12:13	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 12:13	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 12:13	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 12:13	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 12:13	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 12:13	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 12:13	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 12:13	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 12:13	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 12:13	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 12:13	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 12:13	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 12:13	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 12:13	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 12:13	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/17/2024 12:13	WG2228368
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 12:13	WG2228368
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 12:13	WG2228368
Naphthalene	U		1.00	5.00	1	02/17/2024 12:13	WG2228368
Propene	U		0.936	2.50	1	02/17/2024 12:13	WG2228368
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 12:13	WG2228368
Styrene	U		0.118	1.00	1	02/17/2024 12:13	WG2228368
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 12:13	WG2228368
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 12:13	WG2228368
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 12:13	WG2228368
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 12:13	WG2228368
Toluene	U		0.278	1.00	1	02/17/2024 12:13	WG2228368
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 12:13	WG2228368
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 12:13	WG2228368
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 12:13	WG2228368
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 12:13	WG2228368
Trichloroethene	U		0.190	1.00	1	02/17/2024 12:13	WG2228368
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 12:13	WG2228368
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 12:13	WG2228368
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 12:13	WG2228368
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 12:13	WG2228368
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 12:13	WG2228368
Vinyl chloride	U		0.234	1.00	1	02/17/2024 12:13	WG2228368
Xylenes, Total	U		0.174	3.00	1	02/17/2024 12:13	WG2228368
(S) Toluene-d8	102			80.0-120		02/17/2024 12:13	WG2228368
(S) 4-Bromofluorobenzene	90.4			77.0-126		02/17/2024 12:13	WG2228368
(S) 1,2-Dichloroethane-d4	105			70.0-130		02/17/2024 12:13	WG2228368

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/16/2024 05:43	WG2227341
(S) Toluene-d8	93.3			77.0-127		02/16/2024 05:43	WG2227341

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

SAMPLE RESULTS - 05

L1705776

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	37.7		0.300	4.00	1	02/13/2024 14:50	WG2228552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 12:33	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 12:33	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 12:33	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 12:33	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 12:33	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 12:33	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 12:33	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 12:33	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 12:33	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 12:33	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 12:33	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 12:33	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 12:33	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 12:33	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 12:33	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 12:33	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 12:33	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 12:33	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 12:33	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 12:33	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 12:33	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 12:33	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 12:33	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 12:33	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 12:33	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 12:33	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 12:33	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 12:33	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 12:33	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 12:33	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 12:33	WG2228368
1,1-Dichloroethene	U		0.188	1.00	1	02/17/2024 12:33	WG2228368
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 12:33	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 12:33	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 12:33	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 12:33	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 12:33	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 12:33	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 12:33	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 12:33	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 12:33	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 12:33	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 12:33	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 12:33	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 12:33	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 12:33	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 12:33	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 12:33	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 12:33	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 12:33	WG2228368

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/17/2024 12:33	WG2228368
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 12:33	WG2228368
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 12:33	WG2228368
Naphthalene	U		1.00	5.00	1	02/17/2024 12:33	WG2228368
Propene	U		0.936	2.50	1	02/17/2024 12:33	WG2228368
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 12:33	WG2228368
Styrene	U		0.118	1.00	1	02/17/2024 12:33	WG2228368
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 12:33	WG2228368
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 12:33	WG2228368
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 12:33	WG2228368
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 12:33	WG2228368
Toluene	U		0.278	1.00	1	02/17/2024 12:33	WG2228368
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 12:33	WG2228368
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 12:33	WG2228368
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 12:33	WG2228368
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 12:33	WG2228368
Trichloroethene	U		0.190	1.00	1	02/17/2024 12:33	WG2228368
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 12:33	WG2228368
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 12:33	WG2228368
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 12:33	WG2228368
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 12:33	WG2228368
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 12:33	WG2228368
Vinyl chloride	U		0.234	1.00	1	02/17/2024 12:33	WG2228368
Xylenes, Total	U		0.174	3.00	1	02/17/2024 12:33	WG2228368
(S) Toluene-d8	100			80.0-120		02/17/2024 12:33	WG2228368
(S) 4-Bromofluorobenzene	88.6			77.0-126		02/17/2024 12:33	WG2228368
(S) 1,2-Dichloroethane-d4	107			70.0-130		02/17/2024 12:33	WG2228368

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/16/2024 06:05	WG2227341
(S) Toluene-d8	93.1			77.0-127		02/16/2024 06:05	WG2227341

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	18.1		0.300	4.00	1	02/12/2024 04:14	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 12:54	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 12:54	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 12:54	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 12:54	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 12:54	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 12:54	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 12:54	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 12:54	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 12:54	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 12:54	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 12:54	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 12:54	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 12:54	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 12:54	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 12:54	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 12:54	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 12:54	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 12:54	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 12:54	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 12:54	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 12:54	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 12:54	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 12:54	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 12:54	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 12:54	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 12:54	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 12:54	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 12:54	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 12:54	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 12:54	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 12:54	WG2228368
1,1-Dichloroethene	U		0.188	1.00	1	02/17/2024 12:54	WG2228368
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 12:54	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 12:54	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 12:54	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 12:54	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 12:54	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 12:54	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 12:54	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 12:54	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 12:54	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 12:54	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 12:54	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 12:54	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 12:54	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 12:54	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 12:54	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 12:54	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 12:54	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 12:54	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methylene Chloride	U		0.430	5.00	1	02/17/2024 12:54	WG2228368	¹ Cp
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 12:54	WG2228368	² Tc
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 12:54	WG2228368	³ Ss
Naphthalene	U		1.00	5.00	1	02/17/2024 12:54	WG2228368	
Propene	U		0.936	2.50	1	02/17/2024 12:54	WG2228368	⁴ Cn
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 12:54	WG2228368	
Styrene	U		0.118	1.00	1	02/17/2024 12:54	WG2228368	
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 12:54	WG2228368	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 12:54	WG2228368	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 12:54	WG2228368	
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 12:54	WG2228368	
Toluene	U		0.278	1.00	1	02/17/2024 12:54	WG2228368	
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 12:54	WG2228368	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 12:54	WG2228368	
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 12:54	WG2228368	
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 12:54	WG2228368	
Trichloroethene	U		0.190	1.00	1	02/17/2024 12:54	WG2228368	
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 12:54	WG2228368	
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 12:54	WG2228368	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 12:54	WG2228368	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 12:54	WG2228368	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 12:54	WG2228368	
Vinyl chloride	U		0.234	1.00	1	02/17/2024 12:54	WG2228368	
Xylenes, Total	U		0.174	3.00	1	02/17/2024 12:54	WG2228368	
(S) Toluene-d8	103			80.0-120		02/17/2024 12:54	WG2228368	
(S) 4-Bromofluorobenzene	91.6			77.0-126		02/17/2024 12:54	WG2228368	
(S) 1,2-Dichloroethane-d4	102			70.0-130		02/17/2024 12:54	WG2228368	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/16/2024 06:27	WG2227341
(S) Toluene-d8	93.7			77.0-127		02/16/2024 06:27	WG2227341

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	02/12/2024 04:41	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 13:15	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 13:15	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 13:15	WG2228368
Benzene	0.113	E4	0.0941	1.00	1	02/17/2024 13:15	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 13:15	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 13:15	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 13:15	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 13:15	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 13:15	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 13:15	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 13:15	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 13:15	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 13:15	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 13:15	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 13:15	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 13:15	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 13:15	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 13:15	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 13:15	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 13:15	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 13:15	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 13:15	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 13:15	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 13:15	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 13:15	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 13:15	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 13:15	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 13:15	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 13:15	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 13:15	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 13:15	WG2228368
1,1-Dichloroethene	U		0.188	1.00	1	02/17/2024 13:15	WG2228368
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 13:15	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 13:15	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 13:15	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 13:15	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 13:15	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 13:15	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 13:15	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 13:15	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 13:15	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 13:15	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 13:15	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 13:15	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 13:15	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 13:15	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 13:15	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 13:15	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 13:15	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 13:15	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methylene Chloride	U		0.430	5.00	1	02/17/2024 13:15	WG2228368	¹ Cp
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 13:15	WG2228368	² Tc
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 13:15	WG2228368	³ Ss
Naphthalene	U		1.00	5.00	1	02/17/2024 13:15	WG2228368	
Propene	7.32		0.936	2.50	1	02/17/2024 13:15	WG2228368	
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 13:15	WG2228368	
Styrene	U		0.118	1.00	1	02/17/2024 13:15	WG2228368	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 13:15	WG2228368	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 13:15	WG2228368	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 13:15	WG2228368	
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 13:15	WG2228368	
Toluene	0.540	E4	0.278	1.00	1	02/17/2024 13:15	WG2228368	⁴ Cn
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 13:15	WG2228368	⁵ Sr
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 13:15	WG2228368	⁶ Qc
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 13:15	WG2228368	⁷ Is
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 13:15	WG2228368	⁸ Gl
Trichloroethene	U		0.190	1.00	1	02/17/2024 13:15	WG2228368	
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 13:15	WG2228368	
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 13:15	WG2228368	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 13:15	WG2228368	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 13:15	WG2228368	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 13:15	WG2228368	
Vinyl chloride	U		0.234	1.00	1	02/17/2024 13:15	WG2228368	
Xylenes, Total	0.185	E4	0.174	3.00	1	02/17/2024 13:15	WG2228368	
(S) Toluene-d8	102			80.0-120		02/17/2024 13:15	WG2228368	
(S) 4-Bromofluorobenzene	88.3			77.0-126		02/17/2024 13:15	WG2228368	
(S) 1,2-Dichloroethane-d4	101			70.0-130		02/17/2024 13:15	WG2228368	⁹ Al
								¹⁰ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/16/2024 06:49	WG2227341
(S) Toluene-d8	93.1			77.0-127		02/16/2024 06:49	WG2227341

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	6.06		0.300	4.00	1	02/13/2024 09:32	WG2228552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 13:35	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 13:35	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 13:35	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 13:35	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 13:35	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 13:35	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 13:35	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 13:35	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 13:35	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 13:35	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 13:35	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 13:35	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 13:35	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 13:35	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 13:35	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 13:35	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 13:35	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 13:35	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 13:35	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 13:35	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 13:35	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 13:35	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 13:35	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 13:35	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 13:35	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 13:35	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 13:35	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 13:35	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 13:35	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 13:35	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 13:35	WG2228368
1,1-Dichloroethene	U		0.188	1.00	1	02/17/2024 13:35	WG2228368
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 13:35	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 13:35	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 13:35	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 13:35	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 13:35	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 13:35	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 13:35	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 13:35	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 13:35	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 13:35	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 13:35	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 13:35	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 13:35	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 13:35	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 13:35	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 13:35	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 13:35	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 13:35	WG2228368

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/17/2024 13:35	WG2228368
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 13:35	WG2228368
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 13:35	WG2228368
Naphthalene	U		1.00	5.00	1	02/17/2024 13:35	WG2228368
Propene	U		0.936	2.50	1	02/17/2024 13:35	WG2228368
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 13:35	WG2228368
Styrene	U		0.118	1.00	1	02/17/2024 13:35	WG2228368
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 13:35	WG2228368
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 13:35	WG2228368
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 13:35	WG2228368
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 13:35	WG2228368
Toluene	U		0.278	1.00	1	02/17/2024 13:35	WG2228368
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 13:35	WG2228368
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 13:35	WG2228368
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 13:35	WG2228368
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 13:35	WG2228368
Trichloroethene	U		0.190	1.00	1	02/17/2024 13:35	WG2228368
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 13:35	WG2228368
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 13:35	WG2228368
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 13:35	WG2228368
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 13:35	WG2228368
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 13:35	WG2228368
Vinyl chloride	U		0.234	1.00	1	02/17/2024 13:35	WG2228368
Xylenes, Total	U		0.174	3.00	1	02/17/2024 13:35	WG2228368
(S) Toluene-d8	99.2			80.0-120		02/17/2024 13:35	WG2228368
(S) 4-Bromofluorobenzene	90.1			77.0-126		02/17/2024 13:35	WG2228368
(S) 1,2-Dichloroethane-d4	103			70.0-130		02/17/2024 13:35	WG2228368

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/20/2024 16:25	WG2230157
(S) Toluene-d8	94.6			77.0-127		02/20/2024 16:25	WG2230157

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	02/21/2024 06:05	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	2320		113	500	10	02/20/2024 01:47	WG2229520
Acrolein	U		25.4	500	10	02/20/2024 01:47	WG2229520
Acrylonitrile	U		6.71	100	10	02/20/2024 01:47	WG2229520
Benzene	U		0.941	10.0	10	02/20/2024 01:47	WG2229520
Bromobenzene	U		1.18	10.0	10	02/20/2024 01:47	WG2229520
Bromodichloromethane	U		1.36	10.0	10	02/20/2024 01:47	WG2229520
Bromoform	U	L2	1.29	10.0	10	02/20/2024 01:47	WG2229520
Bromomethane	U		6.05	50.0	10	02/20/2024 01:47	WG2229520
1,3-Butadiene	U		2.99	20.0	10	02/20/2024 01:47	WG2229520
n-Butylbenzene	U		1.57	10.0	10	02/20/2024 01:47	WG2229520
sec-Butylbenzene	U		1.25	10.0	10	02/20/2024 01:47	WG2229520
tert-Butylbenzene	U		1.27	10.0	10	02/20/2024 01:47	WG2229520
Carbon tetrachloride	U		1.28	10.0	10	02/20/2024 01:47	WG2229520
Carbon disulfide	U		0.962	10.0	10	02/20/2024 01:47	WG2229520
Chlorobenzene	U		1.16	10.0	10	02/20/2024 01:47	WG2229520
Chlorodibromomethane	U		1.40	10.0	10	02/20/2024 01:47	WG2229520
Chloroethane	U		1.92	50.0	10	02/20/2024 01:47	WG2229520
Chloroform	U		1.11	50.0	10	02/20/2024 01:47	WG2229520
Chloromethane	U		9.60	25.0	10	02/20/2024 01:47	WG2229520
Cyclohexane	U		1.88	10.0	10	02/20/2024 01:47	WG2229520
2-Chlorotoluene	U		1.06	10.0	10	02/20/2024 01:47	WG2229520
4-Chlorotoluene	U		1.14	10.0	10	02/20/2024 01:47	WG2229520
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	02/20/2024 01:47	WG2229520
1,2-Dibromoethane	U		1.26	10.0	10	02/20/2024 01:47	WG2229520
Dibromomethane	U		1.22	10.0	10	02/20/2024 01:47	WG2229520
1,2-Dichlorobenzene	U	L2	1.07	10.0	10	02/20/2024 01:47	WG2229520
1,3-Dichlorobenzene	U	L2	1.10	10.0	10	02/20/2024 01:47	WG2229520
1,4-Dichlorobenzene	U	L2	1.20	10.0	10	02/20/2024 01:47	WG2229520
Dichlorodifluoromethane	U		3.74	50.0	10	02/20/2024 01:47	WG2229520
1,1-Dichloroethane	U		1.00	10.0	10	02/20/2024 01:47	WG2229520
1,2-Dichloroethane	U		0.819	10.0	10	02/20/2024 01:47	WG2229520
1,1-Dichloroethylene	5.47	E4	1.88	10.0	10	02/20/2024 01:47	WG2229520
cis-1,2-Dichloroethene	28.8		1.26	10.0	10	02/20/2024 01:47	WG2229520
trans-1,2-Dichloroethene	U		1.49	10.0	10	02/20/2024 01:47	WG2229520
1,2-Dichloropropane	U		1.49	10.0	10	02/20/2024 01:47	WG2229520
1,1-Dichloropropene	U		1.42	10.0	10	02/20/2024 01:47	WG2229520
1,3-Dichloropropane	U		1.10	10.0	10	02/20/2024 01:47	WG2229520
cis-1,3-Dichloropropene	U		1.11	10.0	10	02/20/2024 01:47	WG2229520
trans-1,3-Dichloropropene	U		1.18	10.0	10	02/20/2024 01:47	WG2229520
2,2-Dichloropropane	U		1.61	10.0	10	02/20/2024 01:47	WG2229520
Dicyclopentadiene	U		2.53	10.0	10	02/20/2024 01:47	WG2229520
Di-isopropyl ether	U		1.05	10.0	10	02/20/2024 01:47	WG2229520
Ethylbenzene	U		1.37	10.0	10	02/20/2024 01:47	WG2229520
4-Ethyltoluene	U		2.08	10.0	10	02/20/2024 01:47	WG2229520
Hexachloro-1,3-butadiene	U		3.37	10.0	10	02/20/2024 01:47	WG2229520
n-Hexane	U		7.49	100	10	02/20/2024 01:47	WG2229520
Isopropylbenzene	3.71	E4	1.05	10.0	10	02/20/2024 01:47	WG2229520
p-Isopropyltoluene	U		1.20	10.0	10	02/20/2024 01:47	WG2229520
2-Butanone (MEK)	1260		11.9	100	10	02/20/2024 01:47	WG2229520
Methyl Cyclohexane	U		6.60	10.0	10	02/20/2024 01:47	WG2229520

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Methylene Chloride	4.98	E4	4.30	50.0	10	02/20/2024 01:47	WG2229520
4-Methyl-2-pentanone (MIBK)	183		4.78	100	10	02/20/2024 01:47	WG2229520
Methyl tert-butyl ether	U		1.01	10.0	10	02/20/2024 01:47	WG2229520
Naphthalene	U		10.0	50.0	10	02/20/2024 01:47	WG2229520
Propene	U		9.36	25.0	10	02/20/2024 01:47	WG2229520
n-Propylbenzene	U		0.993	10.0	10	02/20/2024 01:47	WG2229520
Styrene	U	L2	1.18	10.0	10	02/20/2024 01:47	WG2229520
1,1,1,2-Tetrachloroethane	U		1.47	10.0	10	02/20/2024 01:47	WG2229520
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	02/20/2024 01:47	WG2229520
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	02/20/2024 01:47	WG2229520
Tetrachloroethene	U		3.00	10.0	10	02/20/2024 01:47	WG2229520
Toluene	U		2.78	10.0	10	02/20/2024 01:47	WG2229520
1,2,3-Trichlorobenzene	U		2.30	10.0	10	02/20/2024 01:47	WG2229520
1,2,4-Trichlorobenzene	U		4.81	10.0	10	02/20/2024 01:47	WG2229520
1,1,1-Trichloroethane	U		1.49	10.0	10	02/20/2024 01:47	WG2229520
1,1,2-Trichloroethane	U		1.58	10.0	10	02/20/2024 01:47	WG2229520
Trichloroethene	76.6		1.90	10.0	10	02/20/2024 01:47	WG2229520
Trichlorofluoromethane	U		1.60	50.0	10	02/20/2024 01:47	WG2229520
1,2,3-Trichloropropane	U		2.37	25.0	10	02/20/2024 01:47	WG2229520
1,2,4-Trimethylbenzene	U		3.22	10.0	10	02/20/2024 01:47	WG2229520
1,2,3-Trimethylbenzene	U		1.04	10.0	10	02/20/2024 01:47	WG2229520
1,3,5-Trimethylbenzene	U		1.04	10.0	10	02/20/2024 01:47	WG2229520
Vinyl chloride	U		2.34	10.0	10	02/20/2024 01:47	WG2229520
Xylenes, Total	U		1.74	30.0	10	02/20/2024 01:47	WG2229520
(S) Toluene-d8	124	S10		80.0-120		02/20/2024 01:47	WG2229520
(S) 4-Bromofluorobenzene	114			77.0-126		02/20/2024 01:47	WG2229520
(S) 1,2-Dichloroethane-d4	88.6			70.0-130		02/20/2024 01:47	WG2229520

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
1,4-Dioxane	U		0.597	3.00	1	02/20/2024 16:47	WG2230157
(S) Toluene-d8	105			77.0-127		02/20/2024 16:47	WG2230157

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	139000		1500	20000	5000	02/12/2024 06:33	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		113	500	10	02/17/2024 15:59	WG2228368
Acrolein	U		25.4	500	10	02/17/2024 15:59	WG2228368
Acrylonitrile	U		6.71	100	10	02/17/2024 15:59	WG2228368
Benzene	1.02	E4	0.941	10.0	10	02/17/2024 15:59	WG2228368
Bromobenzene	U		1.18	10.0	10	02/17/2024 15:59	WG2228368
Bromodichloromethane	U		1.36	10.0	10	02/17/2024 15:59	WG2228368
Bromoform	U		1.29	10.0	10	02/17/2024 15:59	WG2228368
Bromomethane	U		6.05	50.0	10	02/17/2024 15:59	WG2228368
1,3-Butadiene	U		2.99	20.0	10	02/17/2024 15:59	WG2228368
n-Butylbenzene	U		1.57	10.0	10	02/17/2024 15:59	WG2228368
sec-Butylbenzene	U		1.25	10.0	10	02/17/2024 15:59	WG2228368
tert-Butylbenzene	U		1.27	10.0	10	02/17/2024 15:59	WG2228368
Carbon tetrachloride	U		1.28	10.0	10	02/17/2024 15:59	WG2228368
Carbon disulfide	U		0.962	10.0	10	02/17/2024 15:59	WG2228368
Chlorobenzene	U		1.16	10.0	10	02/17/2024 15:59	WG2228368
Chlorodibromomethane	U		1.40	10.0	10	02/17/2024 15:59	WG2228368
Chloroethane	U		1.92	50.0	10	02/17/2024 15:59	WG2228368
Chloroform	1.55	E4	1.11	50.0	10	02/17/2024 15:59	WG2228368
Chloromethane	U		9.60	25.0	10	02/17/2024 15:59	WG2228368
Cyclohexane	U		1.88	10.0	10	02/17/2024 15:59	WG2228368
2-Chlorotoluene	U		1.06	10.0	10	02/17/2024 15:59	WG2228368
4-Chlorotoluene	U		1.14	10.0	10	02/17/2024 15:59	WG2228368
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	02/17/2024 15:59	WG2228368
1,2-Dibromoethane	U		1.26	10.0	10	02/17/2024 15:59	WG2228368
Dibromomethane	U		1.22	10.0	10	02/17/2024 15:59	WG2228368
1,2-Dichlorobenzene	U		1.07	10.0	10	02/17/2024 15:59	WG2228368
1,3-Dichlorobenzene	U		1.10	10.0	10	02/17/2024 15:59	WG2228368
1,4-Dichlorobenzene	U		1.20	10.0	10	02/17/2024 15:59	WG2228368
Dichlorodifluoromethane	U		3.74	50.0	10	02/17/2024 15:59	WG2228368
1,1-Dichloroethane	U		1.00	10.0	10	02/17/2024 15:59	WG2228368
1,2-Dichloroethane	U		0.819	10.0	10	02/17/2024 15:59	WG2228368
1,1-Dichloroethene	52.6		1.88	10.0	10	02/17/2024 15:59	WG2228368
cis-1,2-Dichloroethene	U		1.26	10.0	10	02/17/2024 15:59	WG2228368
trans-1,2-Dichloroethene	U		1.49	10.0	10	02/17/2024 15:59	WG2228368
1,2-Dichloropropane	U		1.49	10.0	10	02/17/2024 15:59	WG2228368
1,1-Dichloropropene	U		1.42	10.0	10	02/17/2024 15:59	WG2228368
1,3-Dichloropropane	U		1.10	10.0	10	02/17/2024 15:59	WG2228368
cis-1,3-Dichloropropene	U		1.11	10.0	10	02/17/2024 15:59	WG2228368
trans-1,3-Dichloropropene	U		1.18	10.0	10	02/17/2024 15:59	WG2228368
2,2-Dichloropropane	U		1.61	10.0	10	02/17/2024 15:59	WG2228368
Dicyclopentadiene	U		2.53	10.0	10	02/17/2024 15:59	WG2228368
Di-isopropyl ether	U		1.05	10.0	10	02/17/2024 15:59	WG2228368
Ethylbenzene	U		1.37	10.0	10	02/17/2024 15:59	WG2228368
4-Ethyltoluene	U		2.08	10.0	10	02/17/2024 15:59	WG2228368
Hexachloro-1,3-butadiene	U		3.37	10.0	10	02/17/2024 15:59	WG2228368
n-Hexane	U		7.49	100	10	02/17/2024 15:59	WG2228368
Isopropylbenzene	U		1.05	10.0	10	02/17/2024 15:59	WG2228368
p-Isopropyltoluene	U		1.20	10.0	10	02/17/2024 15:59	WG2228368
2-Butanone (MEK)	U		11.9	100	10	02/17/2024 15:59	WG2228368
Methyl Cyclohexane	U		6.60	10.0	10	02/17/2024 15:59	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methylene Chloride	U		4.30	50.0	10	02/20/2024 02:10	WG2229520	¹ Cp
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	02/17/2024 15:59	WG2228368	² Tc
Methyl tert-butyl ether	U		1.01	10.0	10	02/17/2024 15:59	WG2228368	³ Ss
Naphthalene	U		10.0	50.0	10	02/17/2024 15:59	WG2228368	
Propene	U		9.36	25.0	10	02/17/2024 15:59	WG2228368	
n-Propylbenzene	U		0.993	10.0	10	02/17/2024 15:59	WG2228368	
Styrene	U		1.18	10.0	10	02/17/2024 15:59	WG2228368	
1,1,1-Tetrachloroethane	U		1.47	10.0	10	02/17/2024 15:59	WG2228368	
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	02/17/2024 15:59	WG2228368	
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	02/17/2024 15:59	WG2228368	
Tetrachloroethene	U		3.00	10.0	10	02/17/2024 15:59	WG2228368	
Toluene	U		2.78	10.0	10	02/17/2024 15:59	WG2228368	
1,2,3-Trichlorobenzene	U		2.30	10.0	10	02/17/2024 15:59	WG2228368	
1,2,4-Trichlorobenzene	U		4.81	10.0	10	02/17/2024 15:59	WG2228368	
1,1,1-Trichloroethane	U		1.49	10.0	10	02/17/2024 15:59	WG2228368	
1,1,2-Trichloroethane	U		1.58	10.0	10	02/17/2024 15:59	WG2228368	
Trichloroethene	511		1.90	10.0	10	02/17/2024 15:59	WG2228368	
Trichlorofluoromethane	U		1.60	50.0	10	02/17/2024 15:59	WG2228368	
1,2,3-Trichloropropane	U		2.37	25.0	10	02/17/2024 15:59	WG2228368	
1,2,4-Trimethylbenzene	U		3.22	10.0	10	02/17/2024 15:59	WG2228368	
1,2,3-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 15:59	WG2228368	
1,3,5-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 15:59	WG2228368	
Vinyl chloride	U		2.34	10.0	10	02/17/2024 15:59	WG2228368	
Xylenes, Total	U		1.74	30.0	10	02/17/2024 15:59	WG2228368	
(S) Toluene-d8	103			80.0-120		02/17/2024 15:59	WG2228368	
(S) Toluene-d8	98.9			80.0-120		02/20/2024 02:10	WG2229520	
(S) 4-Bromofluorobenzene	93.0			77.0-126		02/17/2024 15:59	WG2228368	
(S) 4-Bromofluorobenzene	94.3			77.0-126		02/20/2024 02:10	WG2229520	
(S) 1,2-Dichloroethane-d4	102			70.0-130		02/17/2024 15:59	WG2228368	
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		02/20/2024 02:10	WG2229520	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/20/2024 17:09	WG2230157
(S) Toluene-d8	99.4			77.0-127		02/20/2024 17:09	WG2230157

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	24000		300	4000	1000	02/12/2024 07:01	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
	ug/l		ug/l	ug/l			
Acetone	U		11.3	50.0	1	02/17/2024 13:56	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 13:56	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 13:56	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 13:56	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 13:56	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 13:56	WG2228368
Bromoform	0.241	E4	0.129	1.00	1	02/17/2024 13:56	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 13:56	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 13:56	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 13:56	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 13:56	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 13:56	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 13:56	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 13:56	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 13:56	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 13:56	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 13:56	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 13:56	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 13:56	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 13:56	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 13:56	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 13:56	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 13:56	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 13:56	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 13:56	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 13:56	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 13:56	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 13:56	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 13:56	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 13:56	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 13:56	WG2228368
1,1-Dichloroethene	4.80		0.188	1.00	1	02/17/2024 13:56	WG2228368
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 13:56	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 13:56	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 13:56	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 13:56	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 13:56	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 13:56	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 13:56	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 13:56	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 13:56	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 13:56	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 13:56	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 13:56	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 13:56	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 13:56	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 13:56	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 13:56	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 13:56	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 13:56	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/17/2024 13:56	WG2228368
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 13:56	WG2228368
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 13:56	WG2228368
Naphthalene	U		1.00	5.00	1	02/17/2024 13:56	WG2228368
Propene	U		0.936	2.50	1	02/17/2024 13:56	WG2228368
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 13:56	WG2228368
Styrene	U		0.118	1.00	1	02/17/2024 13:56	WG2228368
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 13:56	WG2228368
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 13:56	WG2228368
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 13:56	WG2228368
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 13:56	WG2228368
Toluene	U		0.278	1.00	1	02/17/2024 13:56	WG2228368
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 13:56	WG2228368
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 13:56	WG2228368
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 13:56	WG2228368
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 13:56	WG2228368
Trichloroethene	13.6		0.190	1.00	1	02/17/2024 13:56	WG2228368
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 13:56	WG2228368
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 13:56	WG2228368
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 13:56	WG2228368
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 13:56	WG2228368
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 13:56	WG2228368
Vinyl chloride	U		0.234	1.00	1	02/17/2024 13:56	WG2228368
Xylenes, Total	U		0.174	3.00	1	02/17/2024 13:56	WG2228368
(S) Toluene-d8	101			80.0-120		02/17/2024 13:56	WG2228368
(S) 4-Bromofluorobenzene	87.0			77.0-126		02/17/2024 13:56	WG2228368
(S) 1,2-Dichloroethane-d4	107			70.0-130		02/17/2024 13:56	WG2228368

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	31.4		0.597	3.00	1	02/20/2024 17:31	WG2230157
(S) Toluene-d8	98.9			77.0-127		02/20/2024 17:31	WG2230157

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	147000		1500	20000	5000	02/25/2024 21:43	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		113	500	10	02/17/2024 16:20	WG2228368
Acrolein	U		25.4	500	10	02/17/2024 16:20	WG2228368
Acrylonitrile	U		6.71	100	10	02/17/2024 16:20	WG2228368
Benzene	1.84	E4	0.941	10.0	10	02/17/2024 16:20	WG2228368
Bromobenzene	U		1.18	10.0	10	02/17/2024 16:20	WG2228368
Bromodichloromethane	U		1.36	10.0	10	02/17/2024 16:20	WG2228368
Bromoform	U		1.29	10.0	10	02/17/2024 16:20	WG2228368
Bromomethane	U		6.05	50.0	10	02/17/2024 16:20	WG2228368
1,3-Butadiene	U		2.99	20.0	10	02/17/2024 16:20	WG2228368
n-Butylbenzene	U		1.57	10.0	10	02/17/2024 16:20	WG2228368
sec-Butylbenzene	U		1.25	10.0	10	02/17/2024 16:20	WG2228368
tert-Butylbenzene	U		1.27	10.0	10	02/17/2024 16:20	WG2228368
Carbon tetrachloride	U		1.28	10.0	10	02/17/2024 16:20	WG2228368
Carbon disulfide	U		0.962	10.0	10	02/17/2024 16:20	WG2228368
Chlorobenzene	U		1.16	10.0	10	02/17/2024 16:20	WG2228368
Chlorodibromomethane	U		1.40	10.0	10	02/17/2024 16:20	WG2228368
Chloroethane	U		1.92	50.0	10	02/17/2024 16:20	WG2228368
Chloroform	2.01	E4	1.11	50.0	10	02/17/2024 16:20	WG2228368
Chloromethane	U		9.60	25.0	10	02/17/2024 16:20	WG2228368
Cyclohexane	U		1.88	10.0	10	02/17/2024 16:20	WG2228368
2-Chlorotoluene	U		1.06	10.0	10	02/17/2024 16:20	WG2228368
4-Chlorotoluene	U		1.14	10.0	10	02/17/2024 16:20	WG2228368
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	02/17/2024 16:20	WG2228368
1,2-Dibromoethane	U		1.26	10.0	10	02/17/2024 16:20	WG2228368
Dibromomethane	U		1.22	10.0	10	02/17/2024 16:20	WG2228368
1,2-Dichlorobenzene	U		1.07	10.0	10	02/17/2024 16:20	WG2228368
1,3-Dichlorobenzene	U		1.10	10.0	10	02/17/2024 16:20	WG2228368
1,4-Dichlorobenzene	U		1.20	10.0	10	02/17/2024 16:20	WG2228368
Dichlorodifluoromethane	U		3.74	50.0	10	02/17/2024 16:20	WG2228368
1,1-Dichloroethane	U		1.00	10.0	10	02/17/2024 16:20	WG2228368
1,2-Dichloroethane	U		0.819	10.0	10	02/17/2024 16:20	WG2228368
1,1-Dichloroethene	81.7		1.88	10.0	10	02/17/2024 16:20	WG2228368
cis-1,2-Dichloroethene	2.28	E4	1.26	10.0	10	02/17/2024 16:20	WG2228368
trans-1,2-Dichloroethene	U		1.49	10.0	10	02/17/2024 16:20	WG2228368
1,2-Dichloropropane	U		1.49	10.0	10	02/17/2024 16:20	WG2228368
1,1-Dichloropropene	U		1.42	10.0	10	02/17/2024 16:20	WG2228368
1,3-Dichloropropane	U		1.10	10.0	10	02/17/2024 16:20	WG2228368
cis-1,3-Dichloropropene	U		1.11	10.0	10	02/17/2024 16:20	WG2228368
trans-1,3-Dichloropropene	U		1.18	10.0	10	02/17/2024 16:20	WG2228368
2,2-Dichloropropane	U		1.61	10.0	10	02/17/2024 16:20	WG2228368
Dicyclopentadiene	U		2.53	10.0	10	02/17/2024 16:20	WG2228368
Di-isopropyl ether	U		1.05	10.0	10	02/17/2024 16:20	WG2228368
Ethylbenzene	U		1.37	10.0	10	02/17/2024 16:20	WG2228368
4-Ethyltoluene	U		2.08	10.0	10	02/17/2024 16:20	WG2228368
Hexachloro-1,3-butadiene	U		3.37	10.0	10	02/17/2024 16:20	WG2228368
n-Hexane	U		7.49	100	10	02/17/2024 16:20	WG2228368
Isopropylbenzene	U		1.05	10.0	10	02/17/2024 16:20	WG2228368
p-Isopropyltoluene	U		1.20	10.0	10	02/17/2024 16:20	WG2228368
2-Butanone (MEK)	U		11.9	100	10	02/17/2024 16:20	WG2228368
Methyl Cyclohexane	U		6.60	10.0	10	02/17/2024 16:20	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methylene Chloride	U		4.30	50.0	10	02/20/2024 02:33	WG2229520	¹ Cp
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	02/17/2024 16:20	WG2228368	² Tc
Methyl tert-butyl ether	U		1.01	10.0	10	02/17/2024 16:20	WG2228368	³ Ss
Naphthalene	U		10.0	50.0	10	02/17/2024 16:20	WG2228368	
Propene	U		9.36	25.0	10	02/17/2024 16:20	WG2228368	⁴ Cn
n-Propylbenzene	U		0.993	10.0	10	02/17/2024 16:20	WG2228368	
Styrene	U		1.18	10.0	10	02/17/2024 16:20	WG2228368	
1,1,1-Tetrachloroethane	U		1.47	10.0	10	02/17/2024 16:20	WG2228368	
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	02/17/2024 16:20	WG2228368	
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	02/17/2024 16:20	WG2228368	
Tetrachloroethene	U		3.00	10.0	10	02/17/2024 16:20	WG2228368	
Toluene	U		2.78	10.0	10	02/17/2024 16:20	WG2228368	
1,2,3-Trichlorobenzene	U		2.30	10.0	10	02/17/2024 16:20	WG2228368	
1,2,4-Trichlorobenzene	U		4.81	10.0	10	02/17/2024 16:20	WG2228368	
1,1,1-Trichloroethane	U		1.49	10.0	10	02/17/2024 16:20	WG2228368	
1,1,2-Trichloroethane	2.31	E4	1.58	10.0	10	02/17/2024 16:20	WG2228368	
Trichloroethene	829		1.90	10.0	10	02/17/2024 16:20	WG2228368	
Trichlorofluoromethane	U		1.60	50.0	10	02/17/2024 16:20	WG2228368	
1,2,3-Trichloropropane	U		2.37	25.0	10	02/17/2024 16:20	WG2228368	
1,2,4-Trimethylbenzene	U		3.22	10.0	10	02/17/2024 16:20	WG2228368	
1,2,3-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 16:20	WG2228368	
1,3,5-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 16:20	WG2228368	
Vinyl chloride	U		2.34	10.0	10	02/17/2024 16:20	WG2228368	
Xylenes, Total	U		1.74	30.0	10	02/17/2024 16:20	WG2228368	
(S) Toluene-d8	103			80.0-120		02/17/2024 16:20	WG2228368	
(S) Toluene-d8	106			80.0-120		02/20/2024 02:33	WG2229520	
(S) 4-Bromofluorobenzene	88.7			77.0-126		02/17/2024 16:20	WG2228368	
(S) 4-Bromofluorobenzene	106			77.0-126		02/20/2024 02:33	WG2229520	
(S) 1,2-Dichloroethane-d4	102			70.0-130		02/17/2024 16:20	WG2228368	
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		02/20/2024 02:33	WG2229520	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	286		0.597	3.00	1	02/20/2024 17:53	WG2230157
(S) Toluene-d8	98.8			77.0-127		02/20/2024 17:53	WG2230157

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	800000		3000	40000	10000	02/25/2024 00:24	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
	ug/l		ug/l	ug/l			
Acetone	U		11.3	50.0	1	02/17/2024 14:16	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 14:16	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 14:16	WG2228368
Benzene	U		235	2500	2500	02/20/2024 02:56	WG2229520
Bromobenzene	U		0.118	1.00	1	02/17/2024 14:16	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 14:16	WG2228368
Bromoform	2.35		0.129	1.00	1	02/17/2024 14:16	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 14:16	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 14:16	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 14:16	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 14:16	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 14:16	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 14:16	WG2228368
Carbon disulfide	0.264	E4	0.0962	1.00	1	02/17/2024 14:16	WG2228368
Chlorobenzene	2.09		0.116	1.00	1	02/17/2024 14:16	WG2228368
Chlorodibromomethane	0.573	E4	0.140	1.00	1	02/17/2024 14:16	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 14:16	WG2228368
Chloroform	79.2		0.111	5.00	1	02/17/2024 14:16	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 14:16	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 14:16	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 14:16	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 14:16	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 14:16	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 14:16	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 14:16	WG2228368
1,2-Dichlorobenzene	3.02		0.107	1.00	1	02/17/2024 14:16	WG2228368
1,3-Dichlorobenzene	0.287	E4	0.110	1.00	1	02/17/2024 14:16	WG2228368
1,4-Dichlorobenzene	0.719	E4	0.120	1.00	1	02/17/2024 14:16	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 14:16	WG2228368
1,1-Dichloroethane	53.2		0.100	1.00	1	02/17/2024 14:16	WG2228368
1,2-Dichloroethane	27.6		0.0819	1.00	1	02/17/2024 14:16	WG2228368
1,1-Dichloroethene	5240		470	2500	2500	02/20/2024 02:56	WG2229520
cis-1,2-Dichloroethene	13.4		0.126	1.00	1	02/17/2024 14:16	WG2228368
trans-1,2-Dichloroethene	9.46		0.149	1.00	1	02/17/2024 14:16	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 14:16	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 14:16	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 14:16	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 14:16	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 14:16	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 14:16	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 14:16	WG2228368
Di-isopropyl ether	0.432	E4	0.105	1.00	1	02/17/2024 14:16	WG2228368
Ethylbenzene	0.721	E4	0.137	1.00	1	02/17/2024 14:16	WG2228368
4-Ethyltoluene	0.253	E4	0.208	1.00	1	02/17/2024 14:16	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 14:16	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 14:16	WG2228368
Isopropylbenzene	0.531	E4	0.105	1.00	1	02/17/2024 14:16	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 14:16	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 14:16	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 14:16	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	83000		1080	12500	2500	02/20/2024 02:56	WG2229520
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 14:16	WG2228368
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 14:16	WG2228368
Naphthalene	1.17	E4	1.00	5.00	1	02/17/2024 14:16	WG2228368
Propene	3.71		0.936	2.50	1	02/17/2024 14:16	WG2228368
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 14:16	WG2228368
Styrene	U		0.118	1.00	1	02/17/2024 14:16	WG2228368
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 14:16	WG2228368
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 14:16	WG2228368
1,1,2-Trichlorotrifluoroethane	8.85		0.180	1.00	1	02/17/2024 14:16	WG2228368
Tetrachloroethene	57.4		0.300	1.00	1	02/17/2024 14:16	WG2228368
Toluene	17.1		0.278	1.00	1	02/17/2024 14:16	WG2228368
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 14:16	WG2228368
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 14:16	WG2228368
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 14:16	WG2228368
1,1,2-Trichloroethane	67.7		0.158	1.00	1	02/17/2024 14:16	WG2228368
Trichloroethene	77500		475	2500	2500	02/20/2024 02:56	WG2229520
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 14:16	WG2228368
1,2,3-Trichloropropane	0.276	E4	0.237	2.50	1	02/17/2024 14:16	WG2228368
1,2,4-Trimethylbenzene	0.675	E4	0.322	1.00	1	02/17/2024 14:16	WG2228368
1,2,3-Trimethylbenzene	1.57		0.104	1.00	1	02/17/2024 14:16	WG2228368
1,3,5-Trimethylbenzene	0.220	E4	0.104	1.00	1	02/17/2024 14:16	WG2228368
Vinyl chloride	0.941	E4	0.234	1.00	1	02/17/2024 14:16	WG2228368
Xylenes, Total	99.1		0.174	3.00	1	02/17/2024 14:16	WG2228368
(S) Toluene-d8	95.8			80.0-120		02/17/2024 14:16	WG2228368
(S) Toluene-d8	107			80.0-120		02/20/2024 02:56	WG2229520
(S) 4-Bromofluorobenzene	93.9			77.0-126		02/17/2024 14:16	WG2228368
(S) 4-Bromofluorobenzene	104			77.0-126		02/20/2024 02:56	WG2229520
(S) 1,2-Dichloroethane-d4	105			70.0-130		02/17/2024 14:16	WG2228368
(S) 1,2-Dichloroethane-d4	86.3			70.0-130		02/20/2024 02:56	WG2229520

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	4020		11.9	60.0	20	02/21/2024 15:55	WG2230690
(S) Toluene-d8	99.0			77.0-127		02/21/2024 15:55	WG2230690

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	11600		150	2000	500	02/25/2024 00:52	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		226	1000	20	02/20/2024 03:19	WG2229520
Acrolein	U		50.8	1000	20	02/20/2024 03:19	WG2229520
Acrylonitrile	U		13.4	200	20	02/20/2024 03:19	WG2229520
Benzene	U		1.88	20.0	20	02/20/2024 03:19	WG2229520
Bromobenzene	U		2.36	20.0	20	02/20/2024 03:19	WG2229520
Bromodichloromethane	U		2.72	20.0	20	02/20/2024 03:19	WG2229520
Bromoform	U	L2	2.58	20.0	20	02/20/2024 03:19	WG2229520
Bromomethane	U		12.1	100	20	02/20/2024 03:19	WG2229520
1,3-Butadiene	U		5.98	40.0	20	02/20/2024 03:19	WG2229520
n-Butylbenzene	U		3.14	20.0	20	02/20/2024 03:19	WG2229520
sec-Butylbenzene	U		2.50	20.0	20	02/20/2024 03:19	WG2229520
tert-Butylbenzene	U		2.54	20.0	20	02/20/2024 03:19	WG2229520
Carbon tetrachloride	U		2.56	20.0	20	02/20/2024 03:19	WG2229520
Carbon disulfide	U		1.92	20.0	20	02/20/2024 03:19	WG2229520
Chlorobenzene	U		2.32	20.0	20	02/20/2024 03:19	WG2229520
Chlorodibromomethane	U		2.80	20.0	20	02/20/2024 03:19	WG2229520
Chloroethane	U		3.84	100	20	02/20/2024 03:19	WG2229520
Chloroform	U		2.22	100	20	02/20/2024 03:19	WG2229520
Chloromethane	U		19.2	50.0	20	02/20/2024 03:19	WG2229520
Cyclohexane	U		3.76	20.0	20	02/20/2024 03:19	WG2229520
2-Chlorotoluene	U		2.12	20.0	20	02/20/2024 03:19	WG2229520
4-Chlorotoluene	U		2.28	20.0	20	02/20/2024 03:19	WG2229520
1,2-Dibromo-3-Chloropropane	U		5.52	100	20	02/20/2024 03:19	WG2229520
1,2-Dibromoethane	U		2.52	20.0	20	02/20/2024 03:19	WG2229520
Dibromomethane	U		2.44	20.0	20	02/20/2024 03:19	WG2229520
1,2-Dichlorobenzene	U	L2	2.14	20.0	20	02/20/2024 03:19	WG2229520
1,3-Dichlorobenzene	U	L2	2.20	20.0	20	02/20/2024 03:19	WG2229520
1,4-Dichlorobenzene	U	L2	2.40	20.0	20	02/20/2024 03:19	WG2229520
Dichlorodifluoromethane	U		7.48	100	20	02/20/2024 03:19	WG2229520
1,1-Dichloroethane	U		2.00	20.0	20	02/20/2024 03:19	WG2229520
1,2-Dichloroethane	U		1.64	20.0	20	02/20/2024 03:19	WG2229520
1,1-Dichloroethene	U		3.76	20.0	20	02/20/2024 03:19	WG2229520
cis-1,2-Dichloroethene	U		2.52	20.0	20	02/20/2024 03:19	WG2229520
trans-1,2-Dichloroethene	U		2.98	20.0	20	02/20/2024 03:19	WG2229520
1,2-Dichloropropane	U		2.98	20.0	20	02/20/2024 03:19	WG2229520
1,1-Dichloropropene	U		2.84	20.0	20	02/20/2024 03:19	WG2229520
1,3-Dichloropropane	U		2.20	20.0	20	02/20/2024 03:19	WG2229520
cis-1,3-Dichloropropene	U		2.22	20.0	20	02/20/2024 03:19	WG2229520
trans-1,3-Dichloropropene	U		2.36	20.0	20	02/20/2024 03:19	WG2229520
2,2-Dichloropropane	U		3.22	20.0	20	02/20/2024 03:19	WG2229520
Dicyclopentadiene	U		5.06	20.0	20	02/20/2024 03:19	WG2229520
Di-isopropyl ether	U		2.10	20.0	20	02/20/2024 03:19	WG2229520
Ethylbenzene	U		2.74	20.0	20	02/20/2024 03:19	WG2229520
4-Ethyltoluene	U		4.16	20.0	20	02/20/2024 03:19	WG2229520
Hexachloro-1,3-butadiene	U		6.74	20.0	20	02/20/2024 03:19	WG2229520
n-Hexane	U		15.0	200	20	02/20/2024 03:19	WG2229520
Isopropylbenzene	U		2.10	20.0	20	02/20/2024 03:19	WG2229520
p-Isopropyltoluene	U		2.40	20.0	20	02/20/2024 03:19	WG2229520
2-Butanone (MEK)	U		23.8	200	20	02/20/2024 03:19	WG2229520
Methyl Cyclohexane	U		13.2	20.0	20	02/20/2024 03:19	WG2229520

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		8.60	100	20	02/20/2024 03:19	WG2229520
4-Methyl-2-pentanone (MIBK)	U		9.56	200	20	02/20/2024 03:19	WG2229520
Methyl tert-butyl ether	U		2.02	20.0	20	02/20/2024 03:19	WG2229520
Naphthalene	U		20.0	100	20	02/20/2024 03:19	WG2229520
Propene	U		18.7	50.0	20	02/20/2024 03:19	WG2229520
n-Propylbenzene	U		1.99	20.0	20	02/20/2024 03:19	WG2229520
Styrene	U	<u>L2</u>	2.36	20.0	20	02/20/2024 03:19	WG2229520
1,1,1,2-Tetrachloroethane	U		2.94	20.0	20	02/20/2024 03:19	WG2229520
1,1,2,2-Tetrachloroethane	U		2.66	20.0	20	02/20/2024 03:19	WG2229520
1,1,2-Trichlorotrifluoroethane	U		3.60	20.0	20	02/20/2024 03:19	WG2229520
Tetrachloroethene	U		6.00	20.0	20	02/20/2024 03:19	WG2229520
Toluene	U		5.56	20.0	20	02/20/2024 03:19	WG2229520
1,2,3-Trichlorobenzene	U		4.60	20.0	20	02/20/2024 03:19	WG2229520
1,2,4-Trichlorobenzene	U		9.62	20.0	20	02/20/2024 03:19	WG2229520
1,1,1-Trichloroethane	U		2.98	20.0	20	02/20/2024 03:19	WG2229520
1,1,2-Trichloroethane	U		3.16	20.0	20	02/20/2024 03:19	WG2229520
Trichloroethene	U		3.80	20.0	20	02/20/2024 03:19	WG2229520
Trichlorofluoromethane	U		3.20	100	20	02/20/2024 03:19	WG2229520
1,2,3-Trichloropropane	U		4.74	50.0	20	02/20/2024 03:19	WG2229520
1,2,4-Trimethylbenzene	U		6.44	20.0	20	02/20/2024 03:19	WG2229520
1,2,3-Trimethylbenzene	U		2.08	20.0	20	02/20/2024 03:19	WG2229520
1,3,5-Trimethylbenzene	U		2.08	20.0	20	02/20/2024 03:19	WG2229520
Vinyl chloride	U		4.68	20.0	20	02/20/2024 03:19	WG2229520
Xylenes, Total	U		3.48	60.0	20	02/20/2024 03:19	WG2229520
(S) Toluene-d8	104			80.0-120		02/20/2024 03:19	WG2229520
(S) 4-Bromofluorobenzene	101			77.0-126		02/20/2024 03:19	WG2229520
(S) 1,2-Dichloroethane-d4	91.4			70.0-130		02/20/2024 03:19	WG2229520

Sample Narrative:

L1705776-14 WG2229520: Elevated RI due to sample matrix/historical data.

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	7.27		0.597	3.00	1	02/21/2024 14:29	WG2230690
(S) Toluene-d8	98.3			77.0-127		02/21/2024 14:29	WG2230690

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	02/25/2024 01:20	WG2228552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 14:37	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 14:37	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 14:37	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 14:37	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 14:37	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 14:37	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 14:37	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 14:37	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 14:37	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 14:37	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 14:37	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 14:37	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 14:37	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 14:37	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 14:37	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 14:37	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 14:37	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 14:37	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 14:37	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 14:37	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 14:37	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 14:37	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 14:37	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 14:37	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 14:37	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 14:37	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 14:37	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 14:37	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 14:37	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 14:37	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 14:37	WG2228368
1,1-Dichloroethene	U		0.188	1.00	1	02/20/2024 03:42	WG2229520
cis-1,2-Dichloroethene	0.507	E4	0.126	1.00	1	02/17/2024 14:37	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 14:37	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 14:37	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 14:37	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 14:37	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 14:37	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 14:37	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 14:37	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 14:37	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 14:37	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 14:37	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 14:37	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 14:37	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 14:37	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 14:37	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 14:37	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 14:37	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 14:37	WG2228368

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methylene Chloride	U		0.430	5.00	1	02/20/2024 03:42	WG2229520	¹ Cp
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 14:37	WG2228368	² Tc
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 14:37	WG2228368	³ Ss
Naphthalene	U		1.00	5.00	1	02/17/2024 14:37	WG2228368	
Propene	U		0.936	2.50	1	02/17/2024 14:37	WG2228368	
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 14:37	WG2228368	
Styrene	U		0.118	1.00	1	02/17/2024 14:37	WG2228368	
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 14:37	WG2228368	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 14:37	WG2228368	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 14:37	WG2228368	
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 14:37	WG2228368	
Toluene	U		0.278	1.00	1	02/17/2024 14:37	WG2228368	
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 14:37	WG2228368	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 14:37	WG2228368	
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 14:37	WG2228368	
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 14:37	WG2228368	
Trichloroethene	0.661	E4	0.190	1.00	1	02/20/2024 03:42	WG2229520	
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 14:37	WG2228368	
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 14:37	WG2228368	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 14:37	WG2228368	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 14:37	WG2228368	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 14:37	WG2228368	
Vinyl chloride	U		0.234	1.00	1	02/17/2024 14:37	WG2228368	
Xylenes, Total	U		0.174	3.00	1	02/17/2024 14:37	WG2228368	
(S) Toluene-d8	90.1			80.0-120		02/17/2024 14:37	WG2228368	
(S) Toluene-d8	109			80.0-120		02/20/2024 03:42	WG2229520	
(S) 4-Bromofluorobenzene	79.9			77.0-126		02/17/2024 14:37	WG2228368	
(S) 4-Bromofluorobenzene	102			77.0-126		02/20/2024 03:42	WG2229520	
(S) 1,2-Dichloroethane-d4	101			70.0-130		02/17/2024 14:37	WG2228368	
(S) 1,2-Dichloroethane-d4	84.6			70.0-130		02/20/2024 03:42	WG2229520	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/21/2024 14:50	WG2230690
(S) Toluene-d8	93.9			77.0-127		02/21/2024 14:50	WG2230690

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	02/13/2024 12:00	WG2228552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		56.5	250	5	02/13/2024 12:00	WG2228368
Acrolein	U		12.7	250	5	02/13/2024 12:00	WG2228368
Acrylonitrile	U		3.36	50.0	5	02/13/2024 12:00	WG2228368
Benzene	3.46	E4	0.471	5.00	5	02/13/2024 12:00	WG2228368
Bromobenzene	U		0.590	5.00	5	02/13/2024 12:00	WG2228368
Bromodichloromethane	U		0.680	5.00	5	02/13/2024 12:00	WG2228368
Bromoform	U		0.645	5.00	5	02/13/2024 12:00	WG2228368
Bromomethane	U		3.03	25.0	5	02/13/2024 12:00	WG2228368
1,3-Butadiene	U		1.49	10.0	5	02/13/2024 12:00	WG2228368
n-Butylbenzene	U		0.785	5.00	5	02/13/2024 12:00	WG2228368
sec-Butylbenzene	U		0.625	5.00	5	02/13/2024 12:00	WG2228368
tert-Butylbenzene	U		0.635	5.00	5	02/13/2024 12:00	WG2228368
Carbon tetrachloride	U		0.640	5.00	5	02/13/2024 12:00	WG2228368
Carbon disulfide	0.496	E4	0.481	5.00	5	02/13/2024 12:00	WG2228368
Chlorobenzene	U		0.580	5.00	5	02/13/2024 12:00	WG2228368
Chlorodibromomethane	U		0.700	5.00	5	02/13/2024 12:00	WG2228368
Chloroethane	U		0.960	25.0	5	02/13/2024 12:00	WG2228368
Chloroform	U		0.555	25.0	5	02/13/2024 12:00	WG2228368
Chloromethane	U		4.80	12.5	5	02/13/2024 12:00	WG2228368
Cyclohexane	U		0.940	5.00	5	02/13/2024 12:00	WG2228368
2-Chlorotoluene	U		0.530	5.00	5	02/13/2024 12:00	WG2228368
4-Chlorotoluene	U		0.570	5.00	5	02/13/2024 12:00	WG2228368
1,2-Dibromo-3-Chloropropane	U		1.38	25.0	5	02/13/2024 12:00	WG2228368
1,2-Dibromoethane	U		0.630	5.00	5	02/13/2024 12:00	WG2228368
Dibromomethane	U		0.610	5.00	5	02/13/2024 12:00	WG2228368
1,2-Dichlorobenzene	U		0.535	5.00	5	02/13/2024 12:00	WG2228368
1,3-Dichlorobenzene	U		0.550	5.00	5	02/13/2024 12:00	WG2228368
1,4-Dichlorobenzene	U		0.600	5.00	5	02/13/2024 12:00	WG2228368
Dichlorodifluoromethane	U		1.87	25.0	5	02/13/2024 12:00	WG2228368
1,1-Dichloroethane	U		0.500	5.00	5	02/13/2024 12:00	WG2228368
1,2-Dichloroethane	U		0.409	5.00	5	02/13/2024 12:00	WG2228368
1,1-Dichloroethene	17.2		0.940	5.00	5	02/13/2024 12:00	WG2228368
cis-1,2-Dichloroethene	155		0.630	5.00	5	02/13/2024 12:00	WG2228368
trans-1,2-Dichloroethene	5.90		0.745	5.00	5	02/13/2024 12:00	WG2228368
1,2-Dichloropropane	U		0.745	5.00	5	02/13/2024 12:00	WG2228368
1,1-Dichloropropene	U		0.710	5.00	5	02/13/2024 12:00	WG2228368
1,3-Dichloropropane	U		0.550	5.00	5	02/13/2024 12:00	WG2228368
cis-1,3-Dichloropropene	U		0.555	5.00	5	02/13/2024 12:00	WG2228368
trans-1,3-Dichloropropene	U		0.590	5.00	5	02/13/2024 12:00	WG2228368
2,2-Dichloropropane	U		0.805	5.00	5	02/13/2024 12:00	WG2228368
Dicyclopentadiene	U		1.27	5.00	5	02/13/2024 12:00	WG2228368
Di-isopropyl ether	U		0.525	5.00	5	02/13/2024 12:00	WG2228368
Ethylbenzene	U		0.685	5.00	5	02/13/2024 12:00	WG2228368
4-Ethyltoluene	U		1.04	5.00	5	02/13/2024 12:00	WG2228368
Hexachloro-1,3-butadiene	U		1.69	5.00	5	02/13/2024 12:00	WG2228368
n-Hexane	U		3.74	50.0	5	02/13/2024 12:00	WG2228368
Isopropylbenzene	1.83	E4	0.525	5.00	5	02/13/2024 12:00	WG2228368
p-Isopropyltoluene	U		0.600	5.00	5	02/13/2024 12:00	WG2228368
2-Butanone (MEK)	U		5.95	50.0	5	02/13/2024 12:00	WG2228368
Methyl Cyclohexane	U		3.30	5.00	5	02/13/2024 12:00	WG2228368

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methylene Chloride	5.44	E4	2.15	25.0	5	02/20/2024 04:06	WG2229520	¹ Cp
4-Methyl-2-pentanone (MIBK)	3.61	E4	2.39	50.0	5	02/17/2024 17:01	WG2228368	² Tc
Methyl tert-butyl ether	U		0.505	5.00	5	02/17/2024 17:01	WG2228368	³ Ss
Naphthalene	U		5.00	25.0	5	02/17/2024 17:01	WG2228368	⁴ Cn
Propene	U		4.68	12.5	5	02/17/2024 17:01	WG2228368	⁵ Sr
n-Propylbenzene	U		0.497	5.00	5	02/17/2024 17:01	WG2228368	⁶ Qc
Styrene	U		0.590	5.00	5	02/17/2024 17:01	WG2228368	⁷ Is
1,1,1-Tetrachloroethane	U		0.735	5.00	5	02/17/2024 17:01	WG2228368	⁸ Gl
1,1,2,2-Tetrachloroethane	U		0.665	5.00	5	02/17/2024 17:01	WG2228368	⁹ Al
1,1,2-Trichlorotrifluoroethane	U		0.900	5.00	5	02/17/2024 17:01	WG2228368	¹⁰ Sc
Tetrachloroethene	U		1.50	5.00	5	02/17/2024 17:01	WG2228368	
Toluene	U		1.39	5.00	5	02/17/2024 17:01	WG2228368	
1,2,3-Trichlorobenzene	U		1.15	5.00	5	02/17/2024 17:01	WG2228368	
1,2,4-Trichlorobenzene	U		2.41	5.00	5	02/17/2024 17:01	WG2228368	
1,1,1-Trichloroethane	U		0.745	5.00	5	02/17/2024 17:01	WG2228368	
1,1,2-Trichloroethane	U		0.790	5.00	5	02/17/2024 17:01	WG2228368	
Trichloroethene	195		0.950	5.00	5	02/17/2024 17:01	WG2228368	
Trichlorofluoromethane	U		0.800	25.0	5	02/17/2024 17:01	WG2228368	
1,2,3-Trichloropropane	U		1.19	12.5	5	02/17/2024 17:01	WG2228368	
1,2,4-Trimethylbenzene	U		1.61	5.00	5	02/17/2024 17:01	WG2228368	
1,2,3-Trimethylbenzene	U		0.520	5.00	5	02/17/2024 17:01	WG2228368	
1,3,5-Trimethylbenzene	U		0.520	5.00	5	02/17/2024 17:01	WG2228368	
Vinyl chloride	3.99	E4	1.17	5.00	5	02/17/2024 17:01	WG2228368	
Xylenes, Total	U		0.870	15.0	5	02/17/2024 17:01	WG2228368	
(S) Toluene-d8	100			80.0-120		02/17/2024 17:01	WG2228368	
(S) Toluene-d8	107			80.0-120		02/20/2024 04:06	WG2229520	
(S) 4-Bromofluorobenzene	100			77.0-126		02/17/2024 17:01	WG2228368	
(S) 4-Bromofluorobenzene	100			77.0-126		02/20/2024 04:06	WG2229520	
(S) 1,2-Dichloroethane-d4	101			70.0-130		02/17/2024 17:01	WG2228368	
(S) 1,2-Dichloroethane-d4	92.3			70.0-130		02/20/2024 04:06	WG2229520	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	192		2.99	15.0	5	02/20/2024 21:53	WG2230157
(S) Toluene-d8	104			77.0-127		02/20/2024 21:53	WG2230157

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	85900		300	4000	1000	02/25/2024 02:44	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		113	500	10	02/17/2024 17:21	WG2228368
Acrolein	U		25.4	500	10	02/17/2024 17:21	WG2228368
Acrylonitrile	U		6.71	100	10	02/17/2024 17:21	WG2228368
Benzene	4.48	E4	0.941	10.0	10	02/17/2024 17:21	WG2228368
Bromobenzene	U		1.18	10.0	10	02/17/2024 17:21	WG2228368
Bromodichloromethane	U		1.36	10.0	10	02/17/2024 17:21	WG2228368
Bromoform	U		1.29	10.0	10	02/17/2024 17:21	WG2228368
Bromomethane	U		6.05	50.0	10	02/17/2024 17:21	WG2228368
1,3-Butadiene	U		2.99	20.0	10	02/17/2024 17:21	WG2228368
n-Butylbenzene	U		1.57	10.0	10	02/17/2024 17:21	WG2228368
sec-Butylbenzene	U		1.25	10.0	10	02/17/2024 17:21	WG2228368
tert-Butylbenzene	U		1.27	10.0	10	02/17/2024 17:21	WG2228368
Carbon tetrachloride	U		1.28	10.0	10	02/17/2024 17:21	WG2228368
Carbon disulfide	U		0.962	10.0	10	02/17/2024 17:21	WG2228368
Chlorobenzene	U		1.16	10.0	10	02/17/2024 17:21	WG2228368
Chlorodibromomethane	U		1.40	10.0	10	02/17/2024 17:21	WG2228368
Chloroethane	U		1.92	50.0	10	02/17/2024 17:21	WG2228368
Chloroform	3.86	E4	1.11	50.0	10	02/17/2024 17:21	WG2228368
Chloromethane	U		9.60	25.0	10	02/17/2024 17:21	WG2228368
Cyclohexane	U		1.88	10.0	10	02/17/2024 17:21	WG2228368
2-Chlorotoluene	U		1.06	10.0	10	02/17/2024 17:21	WG2228368
4-Chlorotoluene	U		1.14	10.0	10	02/17/2024 17:21	WG2228368
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	02/17/2024 17:21	WG2228368
1,2-Dibromoethane	U		1.26	10.0	10	02/17/2024 17:21	WG2228368
Dibromomethane	U		1.22	10.0	10	02/17/2024 17:21	WG2228368
1,2-Dichlorobenzene	U		1.07	10.0	10	02/17/2024 17:21	WG2228368
1,3-Dichlorobenzene	U		1.10	10.0	10	02/17/2024 17:21	WG2228368
1,4-Dichlorobenzene	U		1.20	10.0	10	02/17/2024 17:21	WG2228368
Dichlorodifluoromethane	U		3.74	50.0	10	02/17/2024 17:21	WG2228368
1,1-Dichloroethane	3.36	E4	1.00	10.0	10	02/17/2024 17:21	WG2228368
1,2-Dichloroethane	U		0.819	10.0	10	02/17/2024 17:21	WG2228368
1,1-Dichloroethene	154		1.88	10.0	10	02/17/2024 17:21	WG2228368
cis-1,2-Dichloroethene	18.9		1.26	10.0	10	02/17/2024 17:21	WG2228368
trans-1,2-Dichloroethene	U		1.49	10.0	10	02/17/2024 17:21	WG2228368
1,2-Dichloropropane	U		1.49	10.0	10	02/17/2024 17:21	WG2228368
1,1-Dichloropropene	U		1.42	10.0	10	02/17/2024 17:21	WG2228368
1,3-Dichloropropane	U		1.10	10.0	10	02/17/2024 17:21	WG2228368
cis-1,3-Dichloropropene	U		1.11	10.0	10	02/17/2024 17:21	WG2228368
trans-1,3-Dichloropropene	U		1.18	10.0	10	02/17/2024 17:21	WG2228368
2,2-Dichloropropane	U		1.61	10.0	10	02/17/2024 17:21	WG2228368
Dicyclopentadiene	U		2.53	10.0	10	02/17/2024 17:21	WG2228368
Di-isopropyl ether	U		1.05	10.0	10	02/17/2024 17:21	WG2228368
Ethylbenzene	U		1.37	10.0	10	02/17/2024 17:21	WG2228368
4-Ethyltoluene	U		2.08	10.0	10	02/17/2024 17:21	WG2228368
Hexachloro-1,3-butadiene	U		3.37	10.0	10	02/17/2024 17:21	WG2228368
n-Hexane	U		7.49	100	10	02/17/2024 17:21	WG2228368
Isopropylbenzene	U		1.05	10.0	10	02/17/2024 17:21	WG2228368
p-Isopropyltoluene	U		1.20	10.0	10	02/17/2024 17:21	WG2228368
2-Butanone (MEK)	U		11.9	100	10	02/17/2024 17:21	WG2228368
Methyl Cyclohexane	U		6.60	10.0	10	02/17/2024 17:21	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methylene Chloride	8.89	E4	4.30	50.0	10	02/20/2024 04:29	WG2229520	¹ Cp
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	02/17/2024 17:21	WG2228368	² Tc
Methyl tert-butyl ether	U		1.01	10.0	10	02/17/2024 17:21	WG2228368	³ Ss
Naphthalene	U		10.0	50.0	10	02/17/2024 17:21	WG2228368	
Propene	U		9.36	25.0	10	02/17/2024 17:21	WG2228368	
n-Propylbenzene	U		0.993	10.0	10	02/17/2024 17:21	WG2228368	
Styrene	U		1.18	10.0	10	02/17/2024 17:21	WG2228368	
1,1,1-Tetrachloroethane	U		1.47	10.0	10	02/17/2024 17:21	WG2228368	
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	02/17/2024 17:21	WG2228368	
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	02/17/2024 17:21	WG2228368	
Tetrachloroethene	U		3.00	10.0	10	02/17/2024 17:21	WG2228368	
Toluene	U		2.78	10.0	10	02/17/2024 17:21	WG2228368	
1,2,3-Trichlorobenzene	U		2.30	10.0	10	02/17/2024 17:21	WG2228368	
1,2,4-Trichlorobenzene	U		4.81	10.0	10	02/17/2024 17:21	WG2228368	
1,1,1-Trichloroethane	U		1.49	10.0	10	02/17/2024 17:21	WG2228368	
1,1,2-Trichloroethane	3.28	E4	1.58	10.0	10	02/17/2024 17:21	WG2228368	
Trichloroethene	1860		1.90	10.0	10	02/17/2024 17:21	WG2228368	
Trichlorofluoromethane	U		1.60	50.0	10	02/17/2024 17:21	WG2228368	
1,2,3-Trichloropropane	U		2.37	25.0	10	02/17/2024 17:21	WG2228368	
1,2,4-Trimethylbenzene	U		3.22	10.0	10	02/17/2024 17:21	WG2228368	
1,2,3-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 17:21	WG2228368	
1,3,5-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 17:21	WG2228368	
Vinyl chloride	U		2.34	10.0	10	02/17/2024 17:21	WG2228368	
Xylenes, Total	U		1.74	30.0	10	02/17/2024 17:21	WG2228368	
(S) Toluene-d8	106			80.0-120		02/17/2024 17:21	WG2228368	
(S) Toluene-d8	108			80.0-120		02/20/2024 04:29	WG2229520	
(S) 4-Bromofluorobenzene	92.5			77.0-126		02/17/2024 17:21	WG2228368	
(S) 4-Bromofluorobenzene	101			77.0-126		02/20/2024 04:29	WG2229520	
(S) 1,2-Dichloroethane-d4	98.6			70.0-130		02/17/2024 17:21	WG2228368	
(S) 1,2-Dichloroethane-d4	87.2			70.0-130		02/20/2024 04:29	WG2229520	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	378		0.597	3.00	1	02/20/2024 18:58	WG2230157
(S) Toluene-d8	99.6			77.0-127		02/20/2024 18:58	WG2230157

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	02/17/2024 11:40	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/17/2024 14:57	WG2228368
Acrolein	U		2.54	50.0	1	02/17/2024 14:57	WG2228368
Acrylonitrile	U		0.671	10.0	1	02/17/2024 14:57	WG2228368
Benzene	U		0.0941	1.00	1	02/17/2024 14:57	WG2228368
Bromobenzene	U		0.118	1.00	1	02/17/2024 14:57	WG2228368
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 14:57	WG2228368
Bromoform	U		0.129	1.00	1	02/17/2024 14:57	WG2228368
Bromomethane	U		0.605	5.00	1	02/17/2024 14:57	WG2228368
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 14:57	WG2228368
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 14:57	WG2228368
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 14:57	WG2228368
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 14:57	WG2228368
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 14:57	WG2228368
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 14:57	WG2228368
Chlorobenzene	U		0.116	1.00	1	02/17/2024 14:57	WG2228368
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 14:57	WG2228368
Chloroethane	U		0.192	5.00	1	02/17/2024 14:57	WG2228368
Chloroform	U		0.111	5.00	1	02/17/2024 14:57	WG2228368
Chloromethane	U		0.960	2.50	1	02/17/2024 14:57	WG2228368
Cyclohexane	U		0.188	1.00	1	02/17/2024 14:57	WG2228368
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 14:57	WG2228368
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 14:57	WG2228368
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 14:57	WG2228368
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 14:57	WG2228368
Dibromomethane	U		0.122	1.00	1	02/17/2024 14:57	WG2228368
1,2-Dichlorobenzene	U		0.107	1.00	1	02/17/2024 14:57	WG2228368
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 14:57	WG2228368
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 14:57	WG2228368
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 14:57	WG2228368
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 14:57	WG2228368
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 14:57	WG2228368
1,1-Dichloroethene	U		0.188	1.00	1	02/20/2024 04:52	WG2229520
cis-1,2-Dichloroethene	0.234	E4	0.126	1.00	1	02/17/2024 14:57	WG2228368
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 14:57	WG2228368
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 14:57	WG2228368
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 14:57	WG2228368
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 14:57	WG2228368
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 14:57	WG2228368
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 14:57	WG2228368
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 14:57	WG2228368
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 14:57	WG2228368
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 14:57	WG2228368
Ethylbenzene	U		0.137	1.00	1	02/17/2024 14:57	WG2228368
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 14:57	WG2228368
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 14:57	WG2228368
n-Hexane	U		0.749	10.0	1	02/17/2024 14:57	WG2228368
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 14:57	WG2228368
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 14:57	WG2228368
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 14:57	WG2228368
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 14:57	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/20/2024 04:52	WG2229520
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 14:57	WG2228368
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 14:57	WG2228368
Naphthalene	U		1.00	5.00	1	02/17/2024 14:57	WG2228368
Propene	U		0.936	2.50	1	02/17/2024 14:57	WG2228368
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 14:57	WG2228368
Styrene	U		0.118	1.00	1	02/17/2024 14:57	WG2228368
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 14:57	WG2228368
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 14:57	WG2228368
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 14:57	WG2228368
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 14:57	WG2228368
Toluene	U		0.278	1.00	1	02/17/2024 14:57	WG2228368
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 14:57	WG2228368
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 14:57	WG2228368
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 14:57	WG2228368
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 14:57	WG2228368
Trichloroethene	3.57		0.190	1.00	1	02/20/2024 04:52	WG2229520
Trichlorofluoromethane	U		0.160	5.00	1	02/17/2024 14:57	WG2228368
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 14:57	WG2228368
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 14:57	WG2228368
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 14:57	WG2228368
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 14:57	WG2228368
Vinyl chloride	U		0.234	1.00	1	02/17/2024 14:57	WG2228368
Xylenes, Total	U		0.174	3.00	1	02/17/2024 14:57	WG2228368
(S) Toluene-d8	101			80.0-120		02/17/2024 14:57	WG2228368
(S) Toluene-d8	103			80.0-120		02/20/2024 04:52	WG2229520
(S) 4-Bromofluorobenzene	91.4			77.0-126		02/17/2024 14:57	WG2228368
(S) 4-Bromofluorobenzene	99.4			77.0-126		02/20/2024 04:52	WG2229520
(S) 1,2-Dichloroethane-d4	101			70.0-130		02/17/2024 14:57	WG2228368
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		02/20/2024 04:52	WG2229520

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	9.87		0.597	3.00	1	02/20/2024 19:20	WG2230157
(S) Toluene-d8	100			77.0-127		02/20/2024 19:20	WG2230157

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	90000		300	4000	1000	02/25/2024 03:12	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		113	500	10	02/17/2024 17:42	WG2228368
Acrolein	U		25.4	500	10	02/17/2024 17:42	WG2228368
Acrylonitrile	U		6.71	100	10	02/17/2024 17:42	WG2228368
Benzene	U		0.941	10.0	10	02/17/2024 17:42	WG2228368
Bromobenzene	U		1.18	10.0	10	02/17/2024 17:42	WG2228368
Bromodichloromethane	U		1.36	10.0	10	02/17/2024 17:42	WG2228368
Bromoform	U		1.29	10.0	10	02/17/2024 17:42	WG2228368
Bromomethane	U		6.05	50.0	10	02/17/2024 17:42	WG2228368
1,3-Butadiene	U		2.99	20.0	10	02/17/2024 17:42	WG2228368
n-Butylbenzene	U		1.57	10.0	10	02/17/2024 17:42	WG2228368
sec-Butylbenzene	U		1.25	10.0	10	02/17/2024 17:42	WG2228368
tert-Butylbenzene	U		1.27	10.0	10	02/17/2024 17:42	WG2228368
Carbon tetrachloride	U		1.28	10.0	10	02/17/2024 17:42	WG2228368
Carbon disulfide	U		0.962	10.0	10	02/17/2024 17:42	WG2228368
Chlorobenzene	U		1.16	10.0	10	02/17/2024 17:42	WG2228368
Chlorodibromomethane	U		1.40	10.0	10	02/17/2024 17:42	WG2228368
Chloroethane	U		1.92	50.0	10	02/17/2024 17:42	WG2228368
Chloroform	1.33	<u>E4</u>	1.11	50.0	10	02/17/2024 17:42	WG2228368
Chloromethane	U		9.60	25.0	10	02/17/2024 17:42	WG2228368
Cyclohexane	U		1.88	10.0	10	02/17/2024 17:42	WG2228368
2-Chlorotoluene	U		1.06	10.0	10	02/17/2024 17:42	WG2228368
4-Chlorotoluene	U		1.14	10.0	10	02/17/2024 17:42	WG2228368
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	02/17/2024 17:42	WG2228368
1,2-Dibromoethane	U		1.26	10.0	10	02/17/2024 17:42	WG2228368
Dibromomethane	U		1.22	10.0	10	02/17/2024 17:42	WG2228368
1,2-Dichlorobenzene	U		1.07	10.0	10	02/17/2024 17:42	WG2228368
1,3-Dichlorobenzene	U		1.10	10.0	10	02/17/2024 17:42	WG2228368
1,4-Dichlorobenzene	U		1.20	10.0	10	02/17/2024 17:42	WG2228368
Dichlorodifluoromethane	U		3.74	50.0	10	02/17/2024 17:42	WG2228368
1,1-Dichloroethane	U		1.00	10.0	10	02/17/2024 17:42	WG2228368
1,2-Dichloroethane	U		0.819	10.0	10	02/17/2024 17:42	WG2228368
1,1-Dichloroethene	88.9		1.88	10.0	10	02/17/2024 17:42	WG2228368
cis-1,2-Dichloroethene	U		1.26	10.0	10	02/17/2024 17:42	WG2228368
trans-1,2-Dichloroethene	U		1.49	10.0	10	02/17/2024 17:42	WG2228368
1,2-Dichloropropane	U		1.49	10.0	10	02/17/2024 17:42	WG2228368
1,1-Dichloropropene	U		1.42	10.0	10	02/17/2024 17:42	WG2228368
1,3-Dichloropropane	U		1.10	10.0	10	02/17/2024 17:42	WG2228368
cis-1,3-Dichloropropene	U		1.11	10.0	10	02/17/2024 17:42	WG2228368
trans-1,3-Dichloropropene	U		1.18	10.0	10	02/17/2024 17:42	WG2228368
2,2-Dichloropropane	U		1.61	10.0	10	02/17/2024 17:42	WG2228368
Dicyclopentadiene	U		2.53	10.0	10	02/17/2024 17:42	WG2228368
Di-isopropyl ether	U		1.05	10.0	10	02/17/2024 17:42	WG2228368
Ethylbenzene	U		1.37	10.0	10	02/17/2024 17:42	WG2228368
4-Ethyltoluene	U		2.08	10.0	10	02/17/2024 17:42	WG2228368
Hexachloro-1,3-butadiene	U		3.37	10.0	10	02/17/2024 17:42	WG2228368
n-Hexane	U		7.49	100	10	02/17/2024 17:42	WG2228368
Isopropylbenzene	U		1.05	10.0	10	02/17/2024 17:42	WG2228368
p-Isopropyltoluene	U		1.20	10.0	10	02/17/2024 17:42	WG2228368
2-Butanone (MEK)	U		11.9	100	10	02/17/2024 17:42	WG2228368
Methyl Cyclohexane	U		6.60	10.0	10	02/17/2024 17:42	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		4.30	50.0	10	02/20/2024 05:15	WG2229520
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	02/17/2024 17:42	WG2228368
Methyl tert-butyl ether	U		1.01	10.0	10	02/17/2024 17:42	WG2228368
Naphthalene	U		10.0	50.0	10	02/17/2024 17:42	WG2228368
Propene	U		9.36	25.0	10	02/17/2024 17:42	WG2228368
n-Propylbenzene	U		0.993	10.0	10	02/17/2024 17:42	WG2228368
Styrene	U		1.18	10.0	10	02/17/2024 17:42	WG2228368
1,1,1-Tetrachloroethane	U		1.47	10.0	10	02/17/2024 17:42	WG2228368
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	02/17/2024 17:42	WG2228368
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	02/17/2024 17:42	WG2228368
Tetrachloroethene	U		3.00	10.0	10	02/17/2024 17:42	WG2228368
Toluene	U		2.78	10.0	10	02/17/2024 17:42	WG2228368
1,2,3-Trichlorobenzene	U		2.30	10.0	10	02/17/2024 17:42	WG2228368
1,2,4-Trichlorobenzene	U		4.81	10.0	10	02/17/2024 17:42	WG2228368
1,1,1-Trichloroethane	U		1.49	10.0	10	02/17/2024 17:42	WG2228368
1,1,2-Trichloroethane	U		1.58	10.0	10	02/17/2024 17:42	WG2228368
Trichloroethene	241		1.90	10.0	10	02/17/2024 17:42	WG2228368
Trichlorofluoromethane	U		1.60	50.0	10	02/17/2024 17:42	WG2228368
1,2,3-Trichloropropane	U		2.37	25.0	10	02/17/2024 17:42	WG2228368
1,2,4-Trimethylbenzene	U		3.22	10.0	10	02/17/2024 17:42	WG2228368
1,2,3-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 17:42	WG2228368
1,3,5-Trimethylbenzene	U		1.04	10.0	10	02/17/2024 17:42	WG2228368
Vinyl chloride	U		2.34	10.0	10	02/17/2024 17:42	WG2228368
Xylenes, Total	U		1.74	30.0	10	02/17/2024 17:42	WG2228368
(S) Toluene-d8	103			80.0-120		02/17/2024 17:42	WG2228368
(S) Toluene-d8	106			80.0-120		02/20/2024 05:15	WG2229520
(S) 4-Bromofluorobenzene	91.4			77.0-126		02/17/2024 17:42	WG2228368
(S) 4-Bromofluorobenzene	99.5			77.0-126		02/20/2024 05:15	WG2229520
(S) 1,2-Dichloroethane-d4	105			70.0-130		02/17/2024 17:42	WG2228368
(S) 1,2-Dichloroethane-d4	85.6			70.0-130		02/20/2024 05:15	WG2229520

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	326		5.97	30.0	10	02/20/2024 22:15	WG2230157
(S) Toluene-d8	99.1			77.0-127		02/20/2024 22:15	WG2230157

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	93200		300	4000	1000	02/25/2024 03:40	WG2228552

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		226	1000	20	02/17/2024 18:02	WG2228368
Acrolein	U		50.8	1000	20	02/17/2024 18:02	WG2228368
Acrylonitrile	U		13.4	200	20	02/17/2024 18:02	WG2228368
Benzene	U		1.88	20.0	20	02/17/2024 18:02	WG2228368
Bromobenzene	U		2.36	20.0	20	02/17/2024 18:02	WG2228368
Bromodichloromethane	U		2.72	20.0	20	02/17/2024 18:02	WG2228368
Bromoform	U		2.58	20.0	20	02/17/2024 18:02	WG2228368
Bromomethane	U		12.1	100	20	02/17/2024 18:02	WG2228368
1,3-Butadiene	U		5.98	40.0	20	02/17/2024 18:02	WG2228368
n-Butylbenzene	U		3.14	20.0	20	02/17/2024 18:02	WG2228368
sec-Butylbenzene	U		2.50	20.0	20	02/17/2024 18:02	WG2228368
tert-Butylbenzene	U		2.54	20.0	20	02/17/2024 18:02	WG2228368
Carbon tetrachloride	U		2.56	20.0	20	02/17/2024 18:02	WG2228368
Carbon disulfide	U		1.92	20.0	20	02/17/2024 18:02	WG2228368
Chlorobenzene	U		2.32	20.0	20	02/17/2024 18:02	WG2228368
Chlorodibromomethane	U		2.80	20.0	20	02/17/2024 18:02	WG2228368
Chloroethane	U		3.84	100	20	02/17/2024 18:02	WG2228368
Chloroform	U		2.22	100	20	02/17/2024 18:02	WG2228368
Chloromethane	U		19.2	50.0	20	02/17/2024 18:02	WG2228368
Cyclohexane	U		3.76	20.0	20	02/17/2024 18:02	WG2228368
2-Chlorotoluene	U		2.12	20.0	20	02/17/2024 18:02	WG2228368
4-Chlorotoluene	U		2.28	20.0	20	02/17/2024 18:02	WG2228368
1,2-Dibromo-3-Chloropropane	U		5.52	100	20	02/17/2024 18:02	WG2228368
1,2-Dibromoethane	U		2.52	20.0	20	02/17/2024 18:02	WG2228368
Dibromomethane	U		2.44	20.0	20	02/17/2024 18:02	WG2228368
1,2-Dichlorobenzene	U		2.14	20.0	20	02/17/2024 18:02	WG2228368
1,3-Dichlorobenzene	U		2.20	20.0	20	02/17/2024 18:02	WG2228368
1,4-Dichlorobenzene	U		2.40	20.0	20	02/17/2024 18:02	WG2228368
Dichlorodifluoromethane	U		7.48	100	20	02/17/2024 18:02	WG2228368
1,1-Dichloroethane	U		2.00	20.0	20	02/17/2024 18:02	WG2228368
1,2-Dichloroethane	U		1.64	20.0	20	02/17/2024 18:02	WG2228368
1,1-Dichloroethene	83.3		3.76	20.0	20	02/17/2024 18:02	WG2228368
cis-1,2-Dichloroethene	U		2.52	20.0	20	02/17/2024 18:02	WG2228368
trans-1,2-Dichloroethene	U		2.98	20.0	20	02/17/2024 18:02	WG2228368
1,2-Dichloropropane	U		2.98	20.0	20	02/17/2024 18:02	WG2228368
1,1-Dichloropropene	U		2.84	20.0	20	02/17/2024 18:02	WG2228368
1,3-Dichloropropane	U		2.20	20.0	20	02/17/2024 18:02	WG2228368
cis-1,3-Dichloropropene	U		2.22	20.0	20	02/17/2024 18:02	WG2228368
trans-1,3-Dichloropropene	U		2.36	20.0	20	02/17/2024 18:02	WG2228368
2,2-Dichloropropane	U		3.22	20.0	20	02/17/2024 18:02	WG2228368
Dicyclopentadiene	U		5.06	20.0	20	02/17/2024 18:02	WG2228368
Di-isopropyl ether	U		2.10	20.0	20	02/17/2024 18:02	WG2228368
Ethylbenzene	U		2.74	20.0	20	02/17/2024 18:02	WG2228368
4-Ethyltoluene	U		4.16	20.0	20	02/17/2024 18:02	WG2228368
Hexachloro-1,3-butadiene	U		6.74	20.0	20	02/17/2024 18:02	WG2228368
n-Hexane	U		15.0	200	20	02/17/2024 18:02	WG2228368
Isopropylbenzene	U		2.10	20.0	20	02/17/2024 18:02	WG2228368
p-Isopropyltoluene	U		2.40	20.0	20	02/17/2024 18:02	WG2228368
2-Butanone (MEK)	U		23.8	200	20	02/17/2024 18:02	WG2228368
Methyl Cyclohexane	U		13.2	20.0	20	02/17/2024 18:02	WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		8.60	100	20	02/20/2024 05:38	WG2229520
4-Methyl-2-pentanone (MIBK)	U		9.56	200	20	02/17/2024 18:02	WG2228368
Methyl tert-butyl ether	U		2.02	20.0	20	02/17/2024 18:02	WG2228368
Naphthalene	U		20.0	100	20	02/17/2024 18:02	WG2228368
Propene	U		18.7	50.0	20	02/17/2024 18:02	WG2228368
n-Propylbenzene	U		1.99	20.0	20	02/17/2024 18:02	WG2228368
Styrene	U		2.36	20.0	20	02/17/2024 18:02	WG2228368
1,1,1,2-Tetrachloroethane	U		2.94	20.0	20	02/17/2024 18:02	WG2228368
1,1,2,2-Tetrachloroethane	U		2.66	20.0	20	02/17/2024 18:02	WG2228368
1,1,2-Trichlorotrifluoroethane	U		3.60	20.0	20	02/17/2024 18:02	WG2228368
Tetrachloroethene	U		6.00	20.0	20	02/17/2024 18:02	WG2228368
Toluene	U		5.56	20.0	20	02/17/2024 18:02	WG2228368
1,2,3-Trichlorobenzene	U		4.60	20.0	20	02/17/2024 18:02	WG2228368
1,2,4-Trichlorobenzene	U		9.62	20.0	20	02/17/2024 18:02	WG2228368
1,1,1-Trichloroethane	U		2.98	20.0	20	02/17/2024 18:02	WG2228368
1,1,2-Trichloroethane	U		3.16	20.0	20	02/17/2024 18:02	WG2228368
Trichloroethene	415		3.80	20.0	20	02/17/2024 18:02	WG2228368
Trichlorofluoromethane	U		3.20	100	20	02/17/2024 18:02	WG2228368
1,2,3-Trichloropropane	U		4.74	50.0	20	02/17/2024 18:02	WG2228368
1,2,4-Trimethylbenzene	U		6.44	20.0	20	02/17/2024 18:02	WG2228368
1,2,3-Trimethylbenzene	U		2.08	20.0	20	02/17/2024 18:02	WG2228368
1,3,5-Trimethylbenzene	U		2.08	20.0	20	02/17/2024 18:02	WG2228368
Vinyl chloride	U		4.68	20.0	20	02/17/2024 18:02	WG2228368
Xylenes, Total	U		3.48	60.0	20	02/17/2024 18:02	WG2228368
(S) Toluene-d8	102			80.0-120		02/17/2024 18:02	WG2228368
(S) Toluene-d8	109			80.0-120		02/20/2024 05:38	WG2229520
(S) 4-Bromofluorobenzene	90.1			77.0-126		02/17/2024 18:02	WG2228368
(S) 4-Bromofluorobenzene	99.1			77.0-126		02/20/2024 05:38	WG2229520
(S) 1,2-Dichloroethane-d4	106			70.0-130		02/17/2024 18:02	WG2228368
(S) 1,2-Dichloroethane-d4	88.4			70.0-130		02/20/2024 05:38	WG2229520

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	256		0.597	3.00	1	02/21/2024 15:12	WG2230690
(S) Toluene-d8	98.4			77.0-127		02/21/2024 15:12	WG2230690

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	468000		1500	20000	5000	02/29/2024 17:10	WG2228553

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		2820	12500	250	02/18/2024 04:48	WG2228641
Acrolein	U		635	12500	250	02/18/2024 04:48	WG2228641
Acrylonitrile	U		168	2500	250	02/18/2024 04:48	WG2228641
Benzene	U		23.5	250	250	02/18/2024 04:48	WG2228641
Bromobenzene	U		29.5	250	250	02/18/2024 04:48	WG2228641
Bromodichloromethane	U		34.0	250	250	02/18/2024 04:48	WG2228641
Bromoform	U		32.3	250	250	02/18/2024 04:48	WG2228641
Bromomethane	U		151	1250	250	02/18/2024 04:48	WG2228641
1,3-Butadiene	U		74.8	500	250	02/18/2024 04:48	WG2228641
n-Butylbenzene	U		39.3	250	250	02/18/2024 04:48	WG2228641
sec-Butylbenzene	U		31.3	250	250	02/18/2024 04:48	WG2228641
tert-Butylbenzene	U		31.8	250	250	02/18/2024 04:48	WG2228641
Carbon tetrachloride	U		32.0	250	250	02/18/2024 04:48	WG2228641
Carbon disulfide	U		24.1	250	250	02/18/2024 04:48	WG2228641
Chlorobenzene	U		29.0	250	250	02/18/2024 04:48	WG2228641
Chlorodibromomethane	U		35.0	250	250	02/18/2024 04:48	WG2228641
Chloroethane	U	<u>L1</u>	48.0	1250	250	02/18/2024 04:48	WG2228641
Chloroform	U		27.8	1250	250	02/18/2024 04:48	WG2228641
Chloromethane	U		240	625	250	02/18/2024 04:48	WG2228641
Cyclohexane	U		47.0	250	250	02/18/2024 04:48	WG2228641
2-Chlorotoluene	U		26.5	250	250	02/18/2024 04:48	WG2228641
4-Chlorotoluene	U		28.5	250	250	02/18/2024 04:48	WG2228641
1,2-Dibromo-3-Chloropropane	U		69.0	1250	250	02/18/2024 04:48	WG2228641
1,2-Dibromoethane	U		31.5	250	250	02/18/2024 04:48	WG2228641
Dibromomethane	U		30.5	250	250	02/18/2024 04:48	WG2228641
1,2-Dichlorobenzene	U	<u>L2</u>	26.8	250	250	02/18/2024 04:48	WG2228641
1,3-Dichlorobenzene	U		27.5	250	250	02/18/2024 04:48	WG2228641
1,4-Dichlorobenzene	U		30.0	250	250	02/18/2024 04:48	WG2228641
Dichlorodifluoromethane	U		93.5	1250	250	02/18/2024 04:48	WG2228641
1,1-Dichloroethane	U		25.0	250	250	02/18/2024 04:48	WG2228641
1,2-Dichloroethane	U		20.5	250	250	02/18/2024 04:48	WG2228641
1,1-Dichloroethene	836		47.0	250	250	02/18/2024 04:48	WG2228641
cis-1,2-Dichloroethene	U		31.5	250	250	02/18/2024 04:48	WG2228641
trans-1,2-Dichloroethene	U		37.3	250	250	02/18/2024 04:48	WG2228641
1,2-Dichloropropane	U		37.3	250	250	02/18/2024 04:48	WG2228641
1,1-Dichloropropene	U		35.5	250	250	02/18/2024 04:48	WG2228641
1,3-Dichloropropane	U		27.5	250	250	02/18/2024 04:48	WG2228641
cis-1,3-Dichloropropene	U		27.8	250	250	02/18/2024 04:48	WG2228641
trans-1,3-Dichloropropene	U		29.5	250	250	02/18/2024 04:48	WG2228641
2,2-Dichloropropane	U		40.3	250	250	02/18/2024 04:48	WG2228641
Dicyclopentadiene	U		63.3	250	250	02/18/2024 04:48	WG2228641
Di-isopropyl ether	U		26.3	250	250	02/18/2024 04:48	WG2228641
Ethylbenzene	U		34.3	250	250	02/18/2024 04:48	WG2228641
4-Ethyltoluene	U		52.0	250	250	02/18/2024 04:48	WG2228641
Hexachloro-1,3-butadiene	U		84.3	250	250	02/18/2024 04:48	WG2228641
n-Hexane	U		187	2500	250	02/18/2024 04:48	WG2228641
Isopropylbenzene	U		26.3	250	250	02/18/2024 04:48	WG2228641
p-Isopropyltoluene	U		30.0	250	250	02/18/2024 04:48	WG2228641
2-Butanone (MEK)	U		298	2500	250	02/18/2024 04:48	WG2228641
Methyl Cyclohexane	U		165	250	250	02/18/2024 04:48	WG2228641

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Methylene Chloride	160	<u>E4</u>	108	1250	250	02/18/2024 04:48	WG2228641
4-Methyl-2-pentanone (MIBK)	U		120	2500	250	02/18/2024 04:48	WG2228641
Methyl tert-butyl ether	U		25.3	250	250	02/18/2024 04:48	WG2228641
Naphthalene	U	<u>L2</u>	250	1250	250	02/18/2024 04:48	WG2228641
Propene	U		234	625	250	02/18/2024 04:48	WG2228641
n-Propylbenzene	U		24.8	250	250	02/18/2024 04:48	WG2228641
Styrene	U		29.5	250	250	02/18/2024 04:48	WG2228641
1,1,1-Tetrachloroethane	U		36.8	250	250	02/18/2024 04:48	WG2228641
1,1,2,2-Tetrachloroethane	U		33.3	250	250	02/18/2024 04:48	WG2228641
1,1,2-Trichlorotrifluoroethane	U		45.0	250	250	02/18/2024 04:48	WG2228641
Tetrachloroethene	U		75.0	250	250	02/18/2024 04:48	WG2228641
Toluene	U		69.5	250	250	02/18/2024 04:48	WG2228641
1,2,3-Trichlorobenzene	U		57.5	250	250	02/18/2024 04:48	WG2228641
1,2,4-Trichlorobenzene	U		120	250	250	02/18/2024 04:48	WG2228641
1,1,1-Trichloroethane	U		37.3	250	250	02/18/2024 04:48	WG2228641
1,1,2-Trichloroethane	U		39.5	250	250	02/18/2024 04:48	WG2228641
Trichloroethene	5930		47.5	250	250	02/18/2024 04:48	WG2228641
Trichlorofluoromethane	U	<u>L1</u>	40.0	1250	250	02/18/2024 04:48	WG2228641
1,2,3-Trichloropropane	U		59.3	625	250	02/18/2024 04:48	WG2228641
1,2,4-Trimethylbenzene	U		80.5	250	250	02/18/2024 04:48	WG2228641
1,2,3-Trimethylbenzene	U		26.0	250	250	02/18/2024 04:48	WG2228641
1,3,5-Trimethylbenzene	U		26.0	250	250	02/18/2024 04:48	WG2228641
Vinyl chloride	U		58.5	250	250	02/18/2024 04:48	WG2228641
Xylenes, Total	U		43.5	750	250	02/18/2024 04:48	WG2228641
(S) Toluene-d8	108			80.0-120		02/18/2024 04:48	WG2228641
(S) 4-Bromofluorobenzene	121			77.0-126		02/18/2024 04:48	WG2228641
(S) 1,2-Dichloroethane-d4	87.9			70.0-130		02/18/2024 04:48	WG2228641

Sample Narrative:

L1705776-21 WG2228641: Target compounds too high to run at a lower dilution.

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
1,4-Dioxane	523		5.97	30.0	10	02/22/2024 13:45	WG2231600
(S) Toluene-d8	96.8			77.0-127		02/22/2024 13:45	WG2231600

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	85600		1500	20000	5000	02/29/2024 17:38	WG2228553

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		282	1250	25	02/18/2024 05:11	WG2228641
Acrolein	U		63.5	1250	25	02/18/2024 05:11	WG2228641
Acrylonitrile	U		16.8	250	25	02/18/2024 05:11	WG2228641
Benzene	U		2.35	25.0	25	02/18/2024 05:11	WG2228641
Bromobenzene	U		2.95	25.0	25	02/18/2024 05:11	WG2228641
Bromodichloromethane	U		3.40	25.0	25	02/18/2024 05:11	WG2228641
Bromoform	U		3.22	25.0	25	02/18/2024 05:11	WG2228641
Bromomethane	U		15.1	125	25	02/18/2024 05:11	WG2228641
1,3-Butadiene	U		7.48	50.0	25	02/18/2024 05:11	WG2228641
n-Butylbenzene	U		3.93	25.0	25	02/18/2024 05:11	WG2228641
sec-Butylbenzene	U		3.13	25.0	25	02/18/2024 05:11	WG2228641
tert-Butylbenzene	U		3.18	25.0	25	02/18/2024 05:11	WG2228641
Carbon tetrachloride	U		3.20	25.0	25	02/18/2024 05:11	WG2228641
Carbon disulfide	U		2.41	25.0	25	02/18/2024 05:11	WG2228641
Chlorobenzene	U		2.90	25.0	25	02/18/2024 05:11	WG2228641
Chlorodibromomethane	U		3.50	25.0	25	02/18/2024 05:11	WG2228641
Chloroethane	U	L1	4.80	125	25	02/18/2024 05:11	WG2228641
Chloroform	U		2.78	125	25	02/18/2024 05:11	WG2228641
Chloromethane	U		24.0	62.5	25	02/18/2024 05:11	WG2228641
Cyclohexane	U		4.70	25.0	25	02/18/2024 05:11	WG2228641
2-Chlorotoluene	U		2.65	25.0	25	02/18/2024 05:11	WG2228641
4-Chlorotoluene	U		2.85	25.0	25	02/18/2024 05:11	WG2228641
1,2-Dibromo-3-Chloropropane	U		6.90	125	25	02/18/2024 05:11	WG2228641
1,2-Dibromoethane	U		3.15	25.0	25	02/18/2024 05:11	WG2228641
Dibromomethane	U		3.05	25.0	25	02/18/2024 05:11	WG2228641
1,2-Dichlorobenzene	U	L2	2.68	25.0	25	02/18/2024 05:11	WG2228641
1,3-Dichlorobenzene	U		2.75	25.0	25	02/18/2024 05:11	WG2228641
1,4-Dichlorobenzene	U		3.00	25.0	25	02/18/2024 05:11	WG2228641
Dichlorodifluoromethane	U		9.35	125	25	02/18/2024 05:11	WG2228641
1,1-Dichloroethane	U		2.50	25.0	25	02/18/2024 05:11	WG2228641
1,2-Dichloroethane	U		2.05	25.0	25	02/18/2024 05:11	WG2228641
1,1-Dichloroethene	91.1		4.70	25.0	25	02/18/2024 05:11	WG2228641
cis-1,2-Dichloroethene	U		3.15	25.0	25	02/18/2024 05:11	WG2228641
trans-1,2-Dichloroethene	U		3.73	25.0	25	02/18/2024 05:11	WG2228641
1,2-Dichloropropane	U		3.73	25.0	25	02/18/2024 05:11	WG2228641
1,1-Dichloropropene	U		3.55	25.0	25	02/18/2024 05:11	WG2228641
1,3-Dichloropropane	U		2.75	25.0	25	02/18/2024 05:11	WG2228641
cis-1,3-Dichloropropene	U		2.78	25.0	25	02/18/2024 05:11	WG2228641
trans-1,3-Dichloropropene	U		2.95	25.0	25	02/18/2024 05:11	WG2228641
2,2-Dichloropropane	U		4.03	25.0	25	02/18/2024 05:11	WG2228641
Dicyclopentadiene	U		6.33	25.0	25	02/18/2024 05:11	WG2228641
Di-isopropyl ether	U		2.63	25.0	25	02/18/2024 05:11	WG2228641
Ethylbenzene	U		3.43	25.0	25	02/18/2024 05:11	WG2228641
4-Ethyltoluene	U		5.20	25.0	25	02/18/2024 05:11	WG2228641
Hexachloro-1,3-butadiene	U		8.43	25.0	25	02/18/2024 05:11	WG2228641
n-Hexane	U		18.7	250	25	02/18/2024 05:11	WG2228641
Isopropylbenzene	U		2.63	25.0	25	02/18/2024 05:11	WG2228641
p-Isopropyltoluene	U		3.00	25.0	25	02/18/2024 05:11	WG2228641
2-Butanone (MEK)	U		29.8	250	25	02/18/2024 05:11	WG2228641
Methyl Cyclohexane	U		16.5	25.0	25	02/18/2024 05:11	WG2228641

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Methylene Chloride	16.1	<u>E4</u>	10.7	125	25	02/18/2024 05:11	WG2228641
4-Methyl-2-pentanone (MIBK)	U		12.0	250	25	02/18/2024 05:11	WG2228641
Methyl tert-butyl ether	U		2.53	25.0	25	02/18/2024 05:11	WG2228641
Naphthalene	U	<u>L2</u>	25.0	125	25	02/18/2024 05:11	WG2228641
Propene	U		23.4	62.5	25	02/18/2024 05:11	WG2228641
n-Propylbenzene	U		2.48	25.0	25	02/18/2024 05:11	WG2228641
Styrene	U		2.95	25.0	25	02/18/2024 05:11	WG2228641
1,1,1-Tetrachloroethane	U		3.68	25.0	25	02/18/2024 05:11	WG2228641
1,1,2,2-Tetrachloroethane	U		3.33	25.0	25	02/18/2024 05:11	WG2228641
1,1,2-Trichlorotrifluoroethane	U		4.50	25.0	25	02/18/2024 05:11	WG2228641
Tetrachloroethene	U		7.50	25.0	25	02/18/2024 05:11	WG2228641
Toluene	U		6.95	25.0	25	02/18/2024 05:11	WG2228641
1,2,3-Trichlorobenzene	U		5.75	25.0	25	02/18/2024 05:11	WG2228641
1,2,4-Trichlorobenzene	U		12.0	25.0	25	02/18/2024 05:11	WG2228641
1,1,1-Trichloroethane	U		3.73	25.0	25	02/18/2024 05:11	WG2228641
1,1,2-Trichloroethane	U		3.95	25.0	25	02/18/2024 05:11	WG2228641
Trichloroethene	588		4.75	25.0	25	02/18/2024 05:11	WG2228641
Trichlorofluoromethane	U	<u>L1</u>	4.00	125	25	02/18/2024 05:11	WG2228641
1,2,3-Trichloropropane	U		5.93	62.5	25	02/18/2024 05:11	WG2228641
1,2,4-Trimethylbenzene	U		8.05	25.0	25	02/18/2024 05:11	WG2228641
1,2,3-Trimethylbenzene	U		2.60	25.0	25	02/18/2024 05:11	WG2228641
1,3,5-Trimethylbenzene	U		2.60	25.0	25	02/18/2024 05:11	WG2228641
Vinyl chloride	U		5.85	25.0	25	02/18/2024 05:11	WG2228641
Xylenes, Total	U		4.35	75.0	25	02/18/2024 05:11	WG2228641
(S) Toluene-d8	108			80.0-120		02/18/2024 05:11	WG2228641
(S) 4-Bromofluorobenzene	128	<u>S10</u>		77.0-126		02/18/2024 05:11	WG2228641
(S) 1,2-Dichloroethane-d4	86.3			70.0-130		02/18/2024 05:11	WG2228641

Sample Narrative:

L1705776-22 WG2228641: Non-target compounds too high to run at a lower dilution.

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
1,4-Dioxane	15.9		0.597	3.00	1	02/20/2024 19:42	WG2230157
(S) Toluene-d8	99.9			77.0-127		02/20/2024 19:42	WG2230157

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U	<u>M2</u>	0.300	4.00	1	02/29/2024 18:06	WG2228553

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/18/2024 02:05	WG2228641
Acrolein	U		2.54	50.0	1	02/18/2024 02:05	WG2228641
Acrylonitrile	U		0.671	10.0	1	02/18/2024 02:05	WG2228641
Benzene	U		0.0941	1.00	1	02/18/2024 02:05	WG2228641
Bromobenzene	U		0.118	1.00	1	02/18/2024 02:05	WG2228641
Bromodichloromethane	U		0.136	1.00	1	02/18/2024 02:05	WG2228641
Bromoform	U		0.129	1.00	1	02/18/2024 02:05	WG2228641
Bromomethane	U		0.605	5.00	1	02/18/2024 02:05	WG2228641
1,3-Butadiene	U		0.299	2.00	1	02/18/2024 02:05	WG2228641
n-Butylbenzene	U		0.157	1.00	1	02/18/2024 02:05	WG2228641
sec-Butylbenzene	U		0.125	1.00	1	02/18/2024 02:05	WG2228641
tert-Butylbenzene	U		0.127	1.00	1	02/18/2024 02:05	WG2228641
Carbon tetrachloride	U		0.128	1.00	1	02/18/2024 02:05	WG2228641
Carbon disulfide	U		0.0962	1.00	1	02/18/2024 02:05	WG2228641
Chlorobenzene	U		0.116	1.00	1	02/18/2024 02:05	WG2228641
Chlorodibromomethane	U		0.140	1.00	1	02/18/2024 02:05	WG2228641
Chloroethane	U	<u>L1</u>	0.192	5.00	1	02/18/2024 02:05	WG2228641
Chloroform	U		0.111	5.00	1	02/18/2024 02:05	WG2228641
Chloromethane	U		0.960	2.50	1	02/18/2024 02:05	WG2228641
Cyclohexane	U		0.188	1.00	1	02/18/2024 02:05	WG2228641
2-Chlorotoluene	U		0.106	1.00	1	02/18/2024 02:05	WG2228641
4-Chlorotoluene	U		0.114	1.00	1	02/18/2024 02:05	WG2228641
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/18/2024 02:05	WG2228641
1,2-Dibromoethane	U		0.126	1.00	1	02/18/2024 02:05	WG2228641
Dibromomethane	U		0.122	1.00	1	02/18/2024 02:05	WG2228641
1,2-Dichlorobenzene	U	<u>L2</u>	0.107	1.00	1	02/18/2024 02:05	WG2228641
1,3-Dichlorobenzene	U		0.110	1.00	1	02/18/2024 02:05	WG2228641
1,4-Dichlorobenzene	U		0.120	1.00	1	02/18/2024 02:05	WG2228641
Dichlorodifluoromethane	U		0.374	5.00	1	02/18/2024 02:05	WG2228641
1,1-Dichloroethane	U		0.100	1.00	1	02/18/2024 02:05	WG2228641
1,2-Dichloroethane	U		0.0819	1.00	1	02/18/2024 02:05	WG2228641
1,1-Dichloroethene	U		0.188	1.00	1	02/18/2024 02:05	WG2228641
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/18/2024 02:05	WG2228641
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/18/2024 02:05	WG2228641
1,2-Dichloropropane	U		0.149	1.00	1	02/18/2024 02:05	WG2228641
1,1-Dichloropropene	U		0.142	1.00	1	02/18/2024 02:05	WG2228641
1,3-Dichloropropane	U		0.110	1.00	1	02/18/2024 02:05	WG2228641
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/18/2024 02:05	WG2228641
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/18/2024 02:05	WG2228641
2,2-Dichloropropane	U		0.161	1.00	1	02/18/2024 02:05	WG2228641
Dicyclopentadiene	U		0.253	1.00	1	02/18/2024 02:05	WG2228641
Di-isopropyl ether	U		0.105	1.00	1	02/18/2024 02:05	WG2228641
Ethylbenzene	U		0.137	1.00	1	02/18/2024 02:05	WG2228641
4-Ethyltoluene	U		0.208	1.00	1	02/18/2024 02:05	WG2228641
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/18/2024 02:05	WG2228641
n-Hexane	U		0.749	10.0	1	02/18/2024 02:05	WG2228641
Isopropylbenzene	U		0.105	1.00	1	02/18/2024 02:05	WG2228641
p-Isopropyltoluene	U		0.120	1.00	1	02/18/2024 02:05	WG2228641
2-Butanone (MEK)	U		1.19	10.0	1	02/18/2024 02:05	WG2228641
Methyl Cyclohexane	U		0.660	1.00	1	02/18/2024 02:05	WG2228641

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Methylene Chloride	U		0.430	5.00	1	02/18/2024 02:05	WG2228641
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/18/2024 02:05	WG2228641
Methyl tert-butyl ether	U		0.101	1.00	1	02/18/2024 02:05	WG2228641
Naphthalene	U	<u>L2</u>	1.00	5.00	1	02/18/2024 02:05	WG2228641
Propene	U		0.936	2.50	1	02/18/2024 02:05	WG2228641
n-Propylbenzene	U		0.0993	1.00	1	02/18/2024 02:05	WG2228641
Styrene	U		0.118	1.00	1	02/18/2024 02:05	WG2228641
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/18/2024 02:05	WG2228641
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/18/2024 02:05	WG2228641
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/18/2024 02:05	WG2228641
Tetrachloroethene	U		0.300	1.00	1	02/18/2024 02:05	WG2228641
Toluene	U		0.278	1.00	1	02/18/2024 02:05	WG2228641
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/18/2024 02:05	WG2228641
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/18/2024 02:05	WG2228641
1,1,1-Trichloroethane	U		0.149	1.00	1	02/18/2024 02:05	WG2228641
1,1,2-Trichloroethane	U		0.158	1.00	1	02/18/2024 02:05	WG2228641
Trichloroethene	U		0.190	1.00	1	02/18/2024 02:05	WG2228641
Trichlorofluoromethane	U	<u>L1</u>	0.160	5.00	1	02/18/2024 02:05	WG2228641
1,2,3-Trichloropropane	U		0.237	2.50	1	02/18/2024 02:05	WG2228641
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/18/2024 02:05	WG2228641
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/18/2024 02:05	WG2228641
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/18/2024 02:05	WG2228641
Vinyl chloride	U		0.234	1.00	1	02/18/2024 02:05	WG2228641
Xylenes, Total	U		0.174	3.00	1	02/18/2024 02:05	WG2228641
(S) Toluene-d8	108			80.0-120		02/18/2024 02:05	WG2228641
(S) 4-Bromofluorobenzene	99.8			77.0-126		02/18/2024 02:05	WG2228641
(S) 1,2-Dichloroethane-d4	86.3			70.0-130		02/18/2024 02:05	WG2228641

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
1,4-Dioxane	U		0.597	3.00	1	02/20/2024 20:04	WG2230157
(S) Toluene-d8	98.8			77.0-127		02/20/2024 20:04	WG2230157

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	02/29/2024 18:34	WG2228553

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/18/2024 02:28	WG2228641
Acrolein	U		2.54	50.0	1	02/18/2024 02:28	WG2228641
Acrylonitrile	U		0.671	10.0	1	02/18/2024 02:28	WG2228641
Benzene	U		0.0941	1.00	1	02/18/2024 02:28	WG2228641
Bromobenzene	U		0.118	1.00	1	02/18/2024 02:28	WG2228641
Bromodichloromethane	U		0.136	1.00	1	02/18/2024 02:28	WG2228641
Bromoform	U		0.129	1.00	1	02/18/2024 02:28	WG2228641
Bromomethane	U		0.605	5.00	1	02/18/2024 02:28	WG2228641
1,3-Butadiene	U		0.299	2.00	1	02/18/2024 02:28	WG2228641
n-Butylbenzene	U		0.157	1.00	1	02/18/2024 02:28	WG2228641
sec-Butylbenzene	U		0.125	1.00	1	02/18/2024 02:28	WG2228641
tert-Butylbenzene	U		0.127	1.00	1	02/18/2024 02:28	WG2228641
Carbon tetrachloride	U		0.128	1.00	1	02/18/2024 02:28	WG2228641
Carbon disulfide	U		0.0962	1.00	1	02/18/2024 02:28	WG2228641
Chlorobenzene	U		0.116	1.00	1	02/18/2024 02:28	WG2228641
Chlorodibromomethane	U		0.140	1.00	1	02/18/2024 02:28	WG2228641
Chloroethane	U	L1	0.192	5.00	1	02/18/2024 02:28	WG2228641
Chloroform	U		0.111	5.00	1	02/18/2024 02:28	WG2228641
Chloromethane	U		0.960	2.50	1	02/18/2024 02:28	WG2228641
Cyclohexane	U		0.188	1.00	1	02/18/2024 02:28	WG2228641
2-Chlorotoluene	U		0.106	1.00	1	02/18/2024 02:28	WG2228641
4-Chlorotoluene	U		0.114	1.00	1	02/18/2024 02:28	WG2228641
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/18/2024 02:28	WG2228641
1,2-Dibromoethane	U		0.126	1.00	1	02/18/2024 02:28	WG2228641
Dibromomethane	U		0.122	1.00	1	02/18/2024 02:28	WG2228641
1,2-Dichlorobenzene	U	L2	0.107	1.00	1	02/18/2024 02:28	WG2228641
1,3-Dichlorobenzene	U		0.110	1.00	1	02/18/2024 02:28	WG2228641
1,4-Dichlorobenzene	U		0.120	1.00	1	02/18/2024 02:28	WG2228641
Dichlorodifluoromethane	U		0.374	5.00	1	02/18/2024 02:28	WG2228641
1,1-Dichloroethane	U		0.100	1.00	1	02/18/2024 02:28	WG2228641
1,2-Dichloroethane	U		0.0819	1.00	1	02/18/2024 02:28	WG2228641
1,1-Dichloroethene	U		0.188	1.00	1	02/18/2024 02:28	WG2228641
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/18/2024 02:28	WG2228641
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/18/2024 02:28	WG2228641
1,2-Dichloropropane	U		0.149	1.00	1	02/18/2024 02:28	WG2228641
1,1-Dichloropropene	U		0.142	1.00	1	02/18/2024 02:28	WG2228641
1,3-Dichloropropane	U		0.110	1.00	1	02/18/2024 02:28	WG2228641
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/18/2024 02:28	WG2228641
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/18/2024 02:28	WG2228641
2,2-Dichloropropane	U		0.161	1.00	1	02/18/2024 02:28	WG2228641
Dicyclopentadiene	U		0.253	1.00	1	02/18/2024 02:28	WG2228641
Di-isopropyl ether	U		0.105	1.00	1	02/18/2024 02:28	WG2228641
Ethylbenzene	U		0.137	1.00	1	02/18/2024 02:28	WG2228641
4-Ethyltoluene	U		0.208	1.00	1	02/18/2024 02:28	WG2228641
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/18/2024 02:28	WG2228641
n-Hexane	U		0.749	10.0	1	02/18/2024 02:28	WG2228641
Isopropylbenzene	U		0.105	1.00	1	02/18/2024 02:28	WG2228641
p-Isopropyltoluene	U		0.120	1.00	1	02/18/2024 02:28	WG2228641
2-Butanone (MEK)	U		1.19	10.0	1	02/18/2024 02:28	WG2228641
Methyl Cyclohexane	U		0.660	1.00	1	02/18/2024 02:28	WG2228641

DUP-02

Collected date/time: 02/13/24 00:00

SAMPLE RESULTS - 24

L1705776

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Methylene Chloride	U		0.430	5.00	1	02/18/2024 02:28	WG2228641
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/18/2024 02:28	WG2228641
Methyl tert-butyl ether	U		0.101	1.00	1	02/18/2024 02:28	WG2228641
Naphthalene	U	<u>L2</u>	1.00	5.00	1	02/18/2024 02:28	WG2228641
Propene	U		0.936	2.50	1	02/18/2024 02:28	WG2228641
n-Propylbenzene	U		0.0993	1.00	1	02/18/2024 02:28	WG2228641
Styrene	U		0.118	1.00	1	02/18/2024 02:28	WG2228641
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/18/2024 02:28	WG2228641
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/18/2024 02:28	WG2228641
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/18/2024 02:28	WG2228641
Tetrachloroethene	U		0.300	1.00	1	02/18/2024 02:28	WG2228641
Toluene	U		0.278	1.00	1	02/18/2024 02:28	WG2228641
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/18/2024 02:28	WG2228641
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/18/2024 02:28	WG2228641
1,1,1-Trichloroethane	U		0.149	1.00	1	02/18/2024 02:28	WG2228641
1,1,2-Trichloroethane	U		0.158	1.00	1	02/18/2024 02:28	WG2228641
Trichloroethene	3.08		0.190	1.00	1	02/18/2024 02:28	WG2228641
Trichlorofluoromethane	U	<u>L1</u>	0.160	5.00	1	02/18/2024 02:28	WG2228641
1,2,3-Trichloropropane	U		0.237	2.50	1	02/18/2024 02:28	WG2228641
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/18/2024 02:28	WG2228641
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/18/2024 02:28	WG2228641
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/18/2024 02:28	WG2228641
Vinyl chloride	U		0.234	1.00	1	02/18/2024 02:28	WG2228641
Xylenes, Total	U		0.174	3.00	1	02/18/2024 02:28	WG2228641
(S) Toluene-d8	109			80.0-120		02/18/2024 02:28	WG2228641
(S) 4-Bromofluorobenzene	99.9			77.0-126		02/18/2024 02:28	WG2228641
(S) 1,2-Dichloroethane-d4	85.6			70.0-130		02/18/2024 02:28	WG2228641

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

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
1,4-Dioxane	U		0.597	3.00	1	02/20/2024 20:26	WG2230157
(S) Toluene-d8	99.1			77.0-127		02/20/2024 20:26	WG2230157

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch	
Acetone	U		11.3	50.0	1	02/17/2024 23:23	WG2228641	¹ Cp
Acrolein	U		2.54	50.0	1	02/17/2024 23:23	WG2228641	² Tc
Acrylonitrile	U		0.671	10.0	1	02/17/2024 23:23	WG2228641	³ Ss
Benzene	U		0.0941	1.00	1	02/17/2024 23:23	WG2228641	⁴ Cn
Bromobenzene	U		0.118	1.00	1	02/17/2024 23:23	WG2228641	⁵ Sr
Bromodichloromethane	U		0.136	1.00	1	02/17/2024 23:23	WG2228641	⁶ Qc
Bromoform	U		0.129	1.00	1	02/17/2024 23:23	WG2228641	⁷ Is
Bromomethane	U		0.605	5.00	1	02/17/2024 23:23	WG2228641	⁸ Gl
1,3-Butadiene	U		0.299	2.00	1	02/17/2024 23:23	WG2228641	⁹ Al
n-Butylbenzene	U		0.157	1.00	1	02/17/2024 23:23	WG2228641	¹⁰ Sc
sec-Butylbenzene	U		0.125	1.00	1	02/17/2024 23:23	WG2228641	
tert-Butylbenzene	U		0.127	1.00	1	02/17/2024 23:23	WG2228641	
Carbon tetrachloride	U		0.128	1.00	1	02/17/2024 23:23	WG2228641	
Carbon disulfide	U		0.0962	1.00	1	02/17/2024 23:23	WG2228641	
Chlorobenzene	U		0.116	1.00	1	02/17/2024 23:23	WG2228641	
Chlorodibromomethane	U		0.140	1.00	1	02/17/2024 23:23	WG2228641	
Chloroethane	U	L1	0.192	5.00	1	02/17/2024 23:23	WG2228641	
Chloroform	U		0.111	5.00	1	02/17/2024 23:23	WG2228641	
Chloromethane	U		0.960	2.50	1	02/17/2024 23:23	WG2228641	
Cyclohexane	U		0.188	1.00	1	02/17/2024 23:23	WG2228641	
2-Chlorotoluene	U		0.106	1.00	1	02/17/2024 23:23	WG2228641	
4-Chlorotoluene	U		0.114	1.00	1	02/17/2024 23:23	WG2228641	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/17/2024 23:23	WG2228641	
1,2-Dibromoethane	U		0.126	1.00	1	02/17/2024 23:23	WG2228641	
Dibromomethane	U		0.122	1.00	1	02/17/2024 23:23	WG2228641	
1,2-Dichlorobenzene	U	L2	0.107	1.00	1	02/17/2024 23:23	WG2228641	
1,3-Dichlorobenzene	U		0.110	1.00	1	02/17/2024 23:23	WG2228641	
1,4-Dichlorobenzene	U		0.120	1.00	1	02/17/2024 23:23	WG2228641	
Dichlorodifluoromethane	U		0.374	5.00	1	02/17/2024 23:23	WG2228641	
1,1-Dichloroethane	U		0.100	1.00	1	02/17/2024 23:23	WG2228641	
1,2-Dichloroethane	U		0.0819	1.00	1	02/17/2024 23:23	WG2228641	
1,1-Dichloroethene	U		0.188	1.00	1	02/17/2024 23:23	WG2228641	
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/17/2024 23:23	WG2228641	
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/17/2024 23:23	WG2228641	
1,2-Dichloropropane	U		0.149	1.00	1	02/17/2024 23:23	WG2228641	
1,1-Dichloropropene	U		0.142	1.00	1	02/17/2024 23:23	WG2228641	
1,3-Dichloropropane	U		0.110	1.00	1	02/17/2024 23:23	WG2228641	
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/17/2024 23:23	WG2228641	
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/17/2024 23:23	WG2228641	
2,2-Dichloropropane	U		0.161	1.00	1	02/17/2024 23:23	WG2228641	
Dicyclopentadiene	U		0.253	1.00	1	02/17/2024 23:23	WG2228641	
Di-isopropyl ether	U		0.105	1.00	1	02/17/2024 23:23	WG2228641	
Ethylbenzene	U		0.137	1.00	1	02/17/2024 23:23	WG2228641	
4-Ethyltoluene	U		0.208	1.00	1	02/17/2024 23:23	WG2228641	
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/17/2024 23:23	WG2228641	
n-Hexane	U		0.749	10.0	1	02/17/2024 23:23	WG2228641	
Isopropylbenzene	U		0.105	1.00	1	02/17/2024 23:23	WG2228641	
p-Isopropyltoluene	U		0.120	1.00	1	02/17/2024 23:23	WG2228641	
2-Butanone (MEK)	U		1.19	10.0	1	02/17/2024 23:23	WG2228641	
Methyl Cyclohexane	U		0.660	1.00	1	02/17/2024 23:23	WG2228641	
Methylene Chloride	U		0.430	5.00	1	02/17/2024 23:23	WG2228641	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/17/2024 23:23	WG2228641	
Methyl tert-butyl ether	U		0.101	1.00	1	02/17/2024 23:23	WG2228641	
Naphthalene	U	L2	1.00	5.00	1	02/17/2024 23:23	WG2228641	
Propene	U		0.936	2.50	1	02/17/2024 23:23	WG2228641	
n-Propylbenzene	U		0.0993	1.00	1	02/17/2024 23:23	WG2228641	

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Styrene	U		0.118	1.00	1	02/17/2024 23:23	WG2228641	¹ Cp
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	02/17/2024 23:23	WG2228641	² Tc
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/17/2024 23:23	WG2228641	³ Ss
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/17/2024 23:23	WG2228641	⁴ Cn
Tetrachloroethene	U		0.300	1.00	1	02/17/2024 23:23	WG2228641	⁵ Sr
Toluene	U		0.278	1.00	1	02/17/2024 23:23	WG2228641	⁶ Qc
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/17/2024 23:23	WG2228641	⁷ Is
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/17/2024 23:23	WG2228641	⁸ Gl
1,1,1-Trichloroethane	U		0.149	1.00	1	02/17/2024 23:23	WG2228641	⁹ Al
1,1,2-Trichloroethane	U		0.158	1.00	1	02/17/2024 23:23	WG2228641	¹⁰ Sc
Trichloroethene	U		0.190	1.00	1	02/17/2024 23:23	WG2228641	
Trichlorofluoromethane	U	L1	0.160	5.00	1	02/17/2024 23:23	WG2228641	
1,2,3-Trichloropropane	U		0.237	2.50	1	02/17/2024 23:23	WG2228641	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/17/2024 23:23	WG2228641	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 23:23	WG2228641	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/17/2024 23:23	WG2228641	
Vinyl chloride	U		0.234	1.00	1	02/17/2024 23:23	WG2228641	
Xylenes, Total	U		0.174	3.00	1	02/17/2024 23:23	WG2228641	
(S) Toluene-d8	108			80.0-120		02/17/2024 23:23	WG2228641	
(S) 4-Bromofluorobenzene	99.7			77.0-126		02/17/2024 23:23	WG2228641	
(S) 1,2-Dichloroethane-d4	87.7			70.0-130		02/17/2024 23:23	WG2228641	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/20/2024 16:03	WG2230157
(S) Toluene-d8	93.3			77.0-127		02/20/2024 16:03	WG2230157

WG2228552

Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

[L1705776-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R4038381-1 02/20/24 23:34

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Method Blank (MB)

(MB) R4038995-1 02/24/24 22:05

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

L1705776-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1705776-08 02/21/24 05:09 • (DUP) R4038381-3 02/21/24 05:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Perchlorate	6.06	5.84	1	3.68		15

L1705776-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1705776-11 02/21/24 07:01 • (DUP) R4038381-4 02/21/24 07:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Perchlorate	24000	22400	1000	6.68		15

L1705776-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1705776-08 02/27/24 17:15 • (DUP) R4038995-7 02/27/24 17:43

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Perchlorate	5.34	5.26	1	1.55		15

QUALITY CONTROL SUMMARY

[L1705776-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20](#)

L1705776-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1705776-11 02/27/24 18:11 • (DUP) R4038995-8 02/27/24 18:39

¹Cp

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	ug/l	ug/l		%		%
Perchlorate	24100	25700	1000	6.46		15

²Tc³Ss⁴Cn

Laboratory Control Sample (LCS)

(LCS) R4038381-2 02/21/24 00:30

⁵Sr

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	ug/l	ug/l	%	%	
Perchlorate	10.0	9.43	94.3	90.0-110	

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R4038995-2 02/24/24 23:01

⁷Is

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	ug/l	ug/l	%	%	
Perchlorate	10.0	9.62	96.2	90.0-110	

⁸Gl⁹Al¹⁰Sc

L1705776-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705776-08 02/27/24 17:15 • (MS) R4038995-3 02/25/24 04:08 • (MSD) R4038995-4 02/25/24 04:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Perchlorate	10.0	5.34	14.8	16.1	94.2	108	1	80.0-120			8.89	15

L1705776-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705776-11 02/27/24 18:11 • (MS) R4038995-5 02/25/24 05:04 • (MSD) R4038995-6 02/25/24 05:31

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Perchlorate	10000	24100	32600	33700	85.1	96.9	1000	80.0-120			3.55	15

WG2228553

Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

[L1705776-21,22,23,24](#)

Method Blank (MB)

(MB) R4042116-1 02/29/24 13:52

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Method Blank (MB)

(MB) R4042116-2 02/29/24 14:50

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

Method Blank (MB)

(MB) R4042116-4 02/29/24 16:14

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

Method Blank (MB)

(MB) R4042116-14 03/01/24 10:15

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

L1706680-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1706680-03 03/01/24 00:29 • (DUP) R4042116-5 03/01/24 00:57

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Perchlorate	10100	12700	1000	22.6	<u>R8</u>	15

L1706680-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1706680-06 03/01/24 03:16 • (DUP) R4042116-6 03/01/24 03:44

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Perchlorate	5.54	5.53	1	0.255		15

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1705776

DATE/TIME:

03/22/24 14:51

PAGE:

61 of 96

QUALITY CONTROL SUMMARY

[L1705776-21,22,23,24](#)

Laboratory Control Sample (LCS)

(LCS) R4042116-3 02/29/24 15:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	9.65	96.5	90.0-110	

¹Cp

L1706682-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1706682-02 03/01/24 05:36 • (MS) R4042116-7 03/01/24 06:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Perchlorate	10.0	U	10.2	102	1	80.0-120	

²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al

L1705776-23 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705776-23 02/29/24 18:06 • (MS) R4042116-8 03/01/24 06:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Perchlorate	10.0	U	7.94	79.4	1	80.0-120	<u>M2</u>

¹⁰Sc

L1706680-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706680-03 03/01/24 00:29 • (MS) R4042116-9 03/01/24 07:00 • (MSD) R4042116-10 03/01/24 08:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits
Perchlorate	10.0	10100	20100	22600	99800	125000	1000	80.0-120	<u>M3</u>	<u>M3</u>	11.9	15

L1706680-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706680-06 03/01/24 03:16 • (MS) R4042116-11 03/01/24 08:51 • (MSD) R4042116-12 03/01/24 09:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits
Perchlorate	10.0	5.54	14.9	15.5	93.3	99.5	1	80.0-120			4.09	15

L1706680-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1706680-08 03/01/24 04:40 • (MS) R4042116-13 03/01/24 09:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Perchlorate	10.0	4.55	13.7	91.8	1	80.0-120	

WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1705776-01,02,03,04,05,06,07,08,10,11,12,13,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R4035581-3 02/17/24 08:23

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Acetone	U		11.3	50.0	¹ Cp
Acrolein	U		2.54	50.0	² Tc
Acrylonitrile	U		0.671	10.0	³ Ss
Benzene	U		0.0941	1.00	⁴ Cn
Bromobenzene	U		0.118	1.00	⁵ Sr
Bromodichloromethane	U		0.136	1.00	
Bromoform	U		0.129	1.00	
Bromomethane	U		0.605	5.00	
1,3-Butadiene	U		0.299	2.00	
n-Butylbenzene	U		0.157	1.00	⁶ Qc
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	⁷ Is
Carbon tetrachloride	U		0.128	1.00	⁸ Gl
Carbon disulfide	U		0.0962	1.00	⁹ Al
Chlorobenzene	U		0.116	1.00	
Chlorodibromomethane	U		0.140	1.00	¹⁰ Sc
Chloroethane	U		0.192	5.00	
Chloroform	U		0.111	5.00	
Chloromethane	U		0.960	2.50	
Cyclohexane	U		0.188	1.00	
2-Chlorotoluene	U		0.106	1.00	
4-Chlorotoluene	U		0.114	1.00	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	
1,2-Dibromoethane	U		0.126	1.00	
Dibromomethane	U		0.122	1.00	
1,2-Dichlorobenzene	U		0.107	1.00	
1,3-Dichlorobenzene	U		0.110	1.00	
1,4-Dichlorobenzene	U		0.120	1.00	
Dichlorodifluoromethane	U		0.374	5.00	
1,1-Dichloroethane	U		0.100	1.00	
1,2-Dichloroethane	U		0.0819	1.00	
1,1-Dichloroethene	U		0.188	1.00	
cis-1,2-Dichloroethene	U		0.126	1.00	
trans-1,2-Dichloroethene	U		0.149	1.00	
1,2-Dichloropropane	U		0.149	1.00	
1,1-Dichloropropene	U		0.142	1.00	
1,3-Dichloropropene	U		0.110	1.00	
cis-1,3-Dichloropropene	U		0.111	1.00	
trans-1,3-Dichloropropene	U		0.118	1.00	
2,2-Dichloropropane	U		0.161	1.00	

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1705776

DATE/TIME:

03/22/24 14:51

PAGE:

63 of 96

QUALITY CONTROL SUMMARY

[L1705776-01,02,03,04,05,06,07,08,10,11,12,13,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R4035581-3 02/17/24 08:23

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Dicyclopentadiene	U		0.253	1.00	¹ Cp
Di-isopropyl ether	U		0.105	1.00	² Tc
Ethylbenzene	U		0.137	1.00	³ Ss
4-Ethyltoluene	U		0.208	1.00	⁴ Cn
Hexachloro-1,3-butadiene	U		0.337	1.00	⁵ Sr
n-Hexane	U		0.749	10.0	⁶ Qc
Isopropylbenzene	U		0.105	1.00	⁷ Is
p-Isopropyltoluene	U		0.120	1.00	⁸ Gl
2-Butanone (MEK)	U		1.19	10.0	⁹ Al
Methyl Cyclohexane	U		0.660	1.00	¹⁰ Sc
Methylene Chloride	U		0.430	5.00	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	
Methyl tert-butyl ether	U		0.101	1.00	
Naphthalene	U		1.00	5.00	
Propene	U		0.936	2.50	
n-Propylbenzene	U		0.0993	1.00	
Styrene	U		0.118	1.00	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	
Tetrachloroethene	U		0.300	1.00	
Toluene	U		0.278	1.00	
1,2,3-Trichlorobenzene	U		0.230	1.00	
1,2,4-Trichlorobenzene	U		0.481	1.00	
1,1,1-Trichloroethane	U		0.149	1.00	
1,1,2-Trichloroethane	U		0.158	1.00	
Trichloroethene	U		0.190	1.00	
Trichlorofluoromethane	U		0.160	5.00	
1,2,3-Trichloropropane	U		0.237	2.50	
1,2,4-Trimethylbenzene	U		0.322	1.00	
1,2,3-Trimethylbenzene	U		0.104	1.00	
1,3,5-Trimethylbenzene	U		0.104	1.00	
Vinyl chloride	U		0.234	1.00	
Xylenes, Total	U		0.174	3.00	
(S) Toluene-d8	102		80.0-120		
(S) 4-Bromofluorobenzene	91.3		77.0-126		
(S) 1,2-Dichloroethane-d4	105		70.0-130		

WG2228368

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1705776-01,02,03,04,05,06,07,08,10,11,12,13,15,16,17,18,19,20](#)

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4035581-1 02/17/24 07:22 • (LCSD) R4035581-2 02/17/24 07:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	25.0	26.2	21.4	105	85.6	19.0-160			20.2	27
Acrolein	25.0	25.4	27.2	102	109	30.0-160			6.84	26
Acrylonitrile	25.0	24.7	25.0	98.8	100	55.0-149			1.21	20
Benzene	5.00	5.25	5.42	105	108	70.0-123			3.19	20
Bromobenzene	5.00	5.27	5.58	105	112	73.0-121			5.71	20
Bromodichloromethane	5.00	5.33	5.53	107	111	75.0-120			3.68	20
Bromoform	5.00	5.16	5.70	103	114	68.0-132			9.94	20
Bromomethane	5.00	4.64	5.12	92.8	102	30.0-160			9.84	25
1,3-Butadiene	5.00	5.49	5.45	110	109	45.0-147			0.731	20
n-Butylbenzene	5.00	4.46	4.68	89.2	93.6	73.0-125			4.81	20
sec-Butylbenzene	5.00	4.59	4.75	91.8	95.0	75.0-125			3.43	20
tert-Butylbenzene	5.00	4.84	5.17	96.8	103	76.0-124			6.59	20
Carbon tetrachloride	5.00	5.81	5.68	116	114	68.0-126			2.26	20
Carbon disulfide	5.00	5.29	5.71	106	114	61.0-128			7.64	20
Chlorobenzene	5.00	5.28	5.69	106	114	80.0-121			7.47	20
Chlorodibromomethane	5.00	5.41	5.51	108	110	77.0-125			1.83	20
Chloroethane	5.00	5.17	5.47	103	109	47.0-150			5.64	20
Chloroform	5.00	5.15	5.31	103	106	73.0-120			3.06	20
Chloromethane	5.00	5.15	5.96	103	119	41.0-142			14.6	20
Cyclohexane	5.00	4.63	4.79	92.6	95.8	71.0-124			3.40	20
2-Chlorotoluene	5.00	5.11	5.42	102	108	76.0-123			5.89	20
4-Chlorotoluene	5.00	5.14	5.24	103	105	75.0-122			1.93	20
1,2-Dibromo-3-Chloropropane	5.00	4.64	4.73	92.8	94.6	58.0-134			1.92	20
1,2-Dibromoethane	5.00	5.31	5.33	106	107	80.0-122			0.376	20
Dibromomethane	5.00	5.44	5.30	109	106	80.0-120			2.61	20
1,2-Dichlorobenzene	5.00	5.15	5.53	103	111	79.0-121			7.12	20
1,3-Dichlorobenzene	5.00	5.15	5.33	103	107	79.0-120			3.44	20
1,4-Dichlorobenzene	5.00	5.28	5.58	106	112	79.0-120			5.52	20
Dichlorodifluoromethane	5.00	4.49	5.03	89.8	101	51.0-149			11.3	20
1,1-Dichloroethane	5.00	5.22	5.53	104	111	70.0-126			5.77	20
1,2-Dichloroethane	5.00	5.41	5.46	108	109	70.0-128			0.920	20
1,1-Dichloroethene	5.00	4.93	5.16	98.6	103	71.0-124			4.56	20
cis-1,2-Dichloroethene	5.00	5.25	5.57	105	111	73.0-120			5.91	20
trans-1,2-Dichloroethene	5.00	5.27	5.53	105	111	73.0-120			4.81	20
1,2-Dichloropropane	5.00	5.06	5.38	101	108	77.0-125			6.13	20
1,1-Dichloropropene	5.00	5.40	5.78	108	116	74.0-126			6.80	20
1,3-Dichloropropane	5.00	5.19	5.25	104	105	80.0-120			1.15	20
cis-1,3-Dichloropropene	5.00	5.16	5.26	103	105	80.0-123			1.92	20
trans-1,3-Dichloropropene	5.00	5.08	5.63	102	113	78.0-124			10.3	20
2,2-Dichloropropane	5.00	5.78	5.79	116	116	58.0-130			0.173	20

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1705776

DATE/TIME:

03/22/24 14:51

PAGE:

65 of 96

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1705776-01,02,03,04,05,06,07,08,10,11,12,13,15,16,17,18,19,20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4035581-1 02/17/24 07:22 • (LCSD) R4035581-2 02/17/24 07:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Dicyclopentadiene	5.00	5.24	5.63	105	113	74.0-126			7.18	20
Di-isopropyl ether	5.00	5.10	5.31	102	106	58.0-138			4.03	20
Ethylbenzene	5.00	4.74	5.44	94.8	109	79.0-123			13.8	20
4-Ethyltoluene	5.00	4.84	5.32	96.8	106	74.0-127			9.45	20
Hexachloro-1,3-butadiene	5.00	5.65	5.44	113	109	54.0-138			3.79	20
n-Hexane	5.00	5.49	5.04	110	101	57.0-133			8.55	20
Isopropylbenzene	5.00	5.09	5.37	102	107	76.0-127			5.35	20
p-Isopropyltoluene	5.00	4.55	4.71	91.0	94.2	76.0-125			3.46	20
2-Butanone (MEK)	25.0	25.4	24.1	102	96.4	44.0-160			5.25	20
Methyl Cyclohexane	5.00	4.54	4.46	90.8	89.2	68.0-126			1.78	20
Methylene Chloride	5.00	5.56	5.47	111	109	67.0-120			1.63	20
4-Methyl-2-pentanone (MIBK)	25.0	25.4	26.2	102	105	68.0-142			3.10	20
Methyl tert-butyl ether	5.00	5.26	5.35	105	107	68.0-125			1.70	20
Naphthalene	5.00	3.86	4.50	77.2	90.0	54.0-135			15.3	20
Propene	5.00	4.67	4.56	93.4	91.2	30.0-160			2.38	20
n-Propylbenzene	5.00	4.89	5.10	97.8	102	77.0-124			4.20	20
Styrene	5.00	5.02	5.52	100	110	73.0-130			9.49	20
1,1,1,2-Tetrachloroethane	5.00	5.12	5.50	102	110	75.0-125			7.16	20
1,1,2,2-Tetrachloroethane	5.00	5.42	5.69	108	114	65.0-130			4.86	20
1,1,2-Trichlorotrifluoroethane	5.00	5.24	5.04	105	101	69.0-132			3.89	20
Tetrachloroethene	5.00	5.44	5.59	109	112	72.0-132			2.72	20
Toluene	5.00	5.07	5.48	101	110	79.0-120			7.77	20
1,2,3-Trichlorobenzene	5.00	5.01	5.69	100	114	50.0-138			12.7	20
1,2,4-Trichlorobenzene	5.00	4.88	5.84	97.6	117	57.0-137			17.9	20
1,1,1-Trichloroethane	5.00	5.48	5.57	110	111	73.0-124			1.63	20
1,1,2-Trichloroethane	5.00	5.41	5.91	108	118	80.0-120			8.83	20
Trichloroethene	5.00	5.13	5.26	103	105	78.0-124			2.50	20
Trichlorofluoromethane	5.00	5.67	5.71	113	114	59.0-147			0.703	20
1,2,3-Trichloropropane	5.00	5.18	5.24	104	105	73.0-130			1.15	20
1,2,4-Trimethylbenzene	5.00	4.66	5.12	93.2	102	76.0-121			9.41	20
1,2,3-Trimethylbenzene	5.00	5.01	5.26	100	105	77.0-120			4.87	20
1,3,5-Trimethylbenzene	5.00	4.88	5.12	97.6	102	76.0-122			4.80	20
Vinyl chloride	5.00	5.08	5.39	102	108	67.0-131			5.92	20
Xylenes, Total	15.0	14.7	16.2	98.0	108	79.0-123			9.71	20
(S) Toluene-d8				97.2	100	80.0-120				
(S) 4-Bromofluorobenzene				91.0	94.6	77.0-126				
(S) 1,2-Dichloroethane-d4				102	99.5	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

QUALITY CONTROL SUMMARY

[L1705776-01,02,03,04,05,06,07,08,10,11,12,13,15,16,17,18,19,20](#)

L1705776-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705776-08 02/17/24 13:35 • (MS) R4035581-4 02/17/24 18:23 • (MSD) R4035581-5 02/17/24 18:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Acetone	25.0	U	17.9	17.2	71.6	68.8	1	10.0-160			3.99	35
Acrolein	25.0	U	17.8	19.3	71.2	77.2	1	10.0-160			8.09	39
Acrylonitrile	25.0	U	19.3	19.9	77.2	79.6	1	21.0-160			3.06	32
Benzene	5.00	U	4.11	4.19	82.2	83.8	1	17.0-158			1.93	27
Bromobenzene	5.00	U	4.26	4.27	85.2	85.4	1	30.0-149			0.234	28
Bromodichloromethane	5.00	U	4.22	4.57	84.4	91.4	1	31.0-150			7.96	27
Bromoform	5.00	U	4.19	4.28	83.8	85.6	1	29.0-150			2.13	29
Bromomethane	5.00	U	3.66	4.08	73.2	81.6	1	10.0-160			10.9	38
1,3-Butadiene	5.00	U	4.26	4.94	85.2	98.8	1	10.0-160			14.8	22
n-Butylbenzene	5.00	U	3.39	3.50	67.8	70.0	1	31.0-150			3.19	30
sec-Butylbenzene	5.00	U	3.63	3.93	72.6	78.6	1	33.0-155			7.94	29
tert-Butylbenzene	5.00	U	3.89	4.03	77.8	80.6	1	34.0-153			3.54	28
Carbon tetrachloride	5.00	U	4.90	5.06	98.0	101	1	23.0-159			3.21	28
Carbon disulfide	5.00	U	3.56	3.65	71.2	73.0	1	10.0-156			2.50	28
Chlorobenzene	5.00	U	4.05	4.32	81.0	86.4	1	33.0-152			6.45	27
Chlorodibromomethane	5.00	U	4.14	4.19	82.8	83.8	1	37.0-149			1.20	27
Chloroethane	5.00	U	5.07	4.51	101	90.2	1	10.0-160			11.7	30
Chloroform	5.00	U	4.09	4.42	81.8	88.4	1	29.0-154			7.76	28
Chloromethane	5.00	U	4.15	4.48	83.0	89.6	1	10.0-160			7.65	29
Cyclohexane	5.00	U	3.91	3.93	78.2	78.6	1	19.0-160			0.510	23
2-Chlorotoluene	5.00	U	4.04	4.14	80.8	82.8	1	32.0-153			2.44	28
4-Chlorotoluene	5.00	U	3.93	4.19	78.6	83.8	1	32.0-150			6.40	28
1,2-Dibromo-3-Chloropropane	5.00	U	3.52	3.86	70.4	77.2	1	22.0-151			9.21	34
1,2-Dibromoethane	5.00	U	3.89	4.14	77.8	82.8	1	34.0-147			6.23	27
Dibromomethane	5.00	U	4.25	4.34	85.0	86.8	1	30.0-151			2.10	27
1,2-Dichlorobenzene	5.00	U	4.09	4.43	81.8	88.6	1	34.0-149			7.98	28
1,3-Dichlorobenzene	5.00	U	4.10	4.25	82.0	85.0	1	36.0-146			3.59	27
1,4-Dichlorobenzene	5.00	U	4.32	4.37	86.4	87.4	1	35.0-142			1.15	27
Dichlorodifluoromethane	5.00	U	4.00	3.98	80.0	79.6	1	10.0-160			0.501	29
1,1-Dichloroethane	5.00	U	4.33	4.40	86.6	88.0	1	25.0-158			1.60	27
1,2-Dichloroethane	5.00	U	4.15	4.41	83.0	88.2	1	29.0-151			6.07	27
1,1-Dichloroethene	5.00	U	4.12	4.17	82.4	83.4	1	11.0-160			1.21	29
cis-1,2-Dichloroethene	5.00	U	4.16	4.30	83.2	86.0	1	10.0-160			3.31	27
trans-1,2-Dichloroethene	5.00	U	4.18	4.17	83.6	83.4	1	17.0-153			0.240	27
1,2-Dichloropropane	5.00	U	4.05	4.26	81.0	85.2	1	30.0-156			5.05	27
1,1-Dichloropropene	5.00	U	4.26	4.66	85.2	93.2	1	25.0-158			8.97	27
1,3-Dichloropropane	5.00	U	3.98	4.34	79.6	86.8	1	38.0-147			8.65	27
cis-1,3-Dichloropropene	5.00	U	3.71	3.66	74.2	73.2	1	34.0-149			1.36	28
trans-1,3-Dichloropropene	5.00	U	3.88	4.07	77.6	81.4	1	32.0-149			4.78	28
2,2-Dichloropropane	5.00	U	4.29	4.42	85.8	88.4	1	24.0-152			2.99	29

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

[L1705776-01,02,03,04,05,06,07,08,10,11,12,13,15,16,17,18,19,20](#)

L1705776-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705776-08 02/17/24 13:35 • (MS) R4035581-4 02/17/24 18:23 • (MSD) R4035581-5 02/17/24 18:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Dicyclopentadiene	5.00	U	2.80	2.83	56.0	56.6	1	51.0-139			1.07	20
Di-isopropyl ether	5.00	U	3.91	4.15	78.2	83.0	1	21.0-160			5.96	28
Ethylbenzene	5.00	U	3.86	4.09	77.2	81.8	1	30.0-155			5.79	27
4-Ethyltoluene	5.00	U	3.89	4.00	77.8	80.0	1	10.0-160			2.79	20
Hexachloro-1,3-butadiene	5.00	U	4.26	4.32	85.2	86.4	1	20.0-154			1.40	34
n-Hexane	5.00	U	4.28	4.51	85.6	90.2	1	10.0-153			5.23	28
Isopropylbenzene	5.00	U	3.99	4.22	79.8	84.4	1	28.0-157			5.60	27
p-Isopropyltoluene	5.00	U	3.62	3.64	72.4	72.8	1	30.0-154			0.551	29
2-Butanone (MEK)	25.0	U	17.8	18.9	71.2	75.6	1	10.0-160			5.99	32
Methyl Cyclohexane	5.00	U	3.75	3.97	75.0	79.4	1	11.0-160			5.70	24
Methylene Chloride	5.00	U	4.26	4.40	85.2	88.0	1	23.0-144			3.23	28
4-Methyl-2-pentanone (MIBK)	25.0	U	18.7	19.6	74.8	78.4	1	29.0-160			4.70	29
Methyl tert-butyl ether	5.00	U	3.92	4.18	78.4	83.6	1	28.0-150			6.42	29
Naphthalene	5.00	U	3.05	3.23	61.0	64.6	1	12.0-156			5.73	35
Propene	5.00	U	3.09	3.34	61.8	66.8	1	10.0-160			7.78	29
n-Propylbenzene	5.00	U	3.98	4.15	79.6	83.0	1	31.0-154			4.18	28
Styrene	5.00	U	3.70	3.86	74.0	77.2	1	33.0-155			4.23	28
1,1,1,2-Tetrachloroethane	5.00	U	4.13	4.43	82.6	88.6	1	36.0-151			7.01	29
1,1,2,2-Tetrachloroethane	5.00	U	4.39	4.65	87.8	93.0	1	33.0-150			5.75	28
1,1,2-Trichlorotrifluoroethane	5.00	U	4.45	4.58	89.0	91.6	1	23.0-160			2.88	30
Tetrachloroethene	5.00	U	4.28	4.36	85.6	87.2	1	10.0-160			1.85	27
Toluene	5.00	U	4.01	4.13	80.2	82.6	1	26.0-154			2.95	28
1,2,3-Trichlorobenzene	5.00	U	3.75	3.76	75.0	75.2	1	17.0-150			0.266	36
1,2,4-Trichlorobenzene	5.00	U	3.59	3.88	71.8	77.6	1	24.0-150			7.76	33
1,1,1-Trichloroethane	5.00	U	4.56	4.80	91.2	96.0	1	23.0-160			5.13	28
1,1,2-Trichloroethane	5.00	U	4.30	4.31	86.0	86.2	1	35.0-147			0.232	27
Trichloroethene	5.00	U	4.63	4.74	92.6	94.8	1	10.0-160			2.35	25
Trichlorofluoromethane	5.00	U	4.86	5.03	97.2	101	1	17.0-160			3.44	31
1,2,3-Trichloropropane	5.00	U	4.18	4.15	83.6	83.0	1	34.0-151			0.720	29
1,2,4-Trimethylbenzene	5.00	U	3.83	4.05	76.6	81.0	1	26.0-154			5.58	27
1,2,3-Trimethylbenzene	5.00	U	3.70	4.13	74.0	82.6	1	32.0-149			11.0	28
1,3,5-Trimethylbenzene	5.00	U	3.71	3.92	74.2	78.4	1	28.0-153			5.50	27
Vinyl chloride	5.00	U	4.18	4.52	83.6	90.4	1	10.0-160			7.82	27
Xylenes, Total	15.0	U	11.4	11.9	76.0	79.3	1	29.0-154			4.29	28
(S) Toluene-d8					93.6	92.1		80.0-120				
(S) 4-Bromofluorobenzene					89.9	89.8		77.0-126				
(S) 1,2-Dichloroethane-d4					101	101		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1705776-01,02,03,04,05,06,07,08,10,11,12,13,15,16,17,18,19,20

L1705776-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705776-11 02/17/24 13:56 • (MS) R4035581-6 02/17/24 19:04 • (MSD) R4035581-7 02/17/24 19:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Acetone	25.0	U	19.3	19.4	77.2	77.6	1	10.0-160			0.517	35
Acrolein	25.0	U	22.3	21.7	89.2	86.8	1	10.0-160			2.73	39
Acrylonitrile	25.0	U	21.7	22.3	86.8	89.2	1	21.0-160			2.73	32
Benzene	5.00	U	4.55	4.68	91.0	93.6	1	17.0-158			2.82	27
Bromobenzene	5.00	U	4.47	4.87	89.4	97.4	1	30.0-149			8.57	28
Bromodichloromethane	5.00	U	4.79	4.93	95.8	98.6	1	31.0-150			2.88	27
Bromoform	5.00	0.241	5.21	5.27	99.4	101	1	29.0-150			1.15	29
Bromomethane	5.00	U	4.34	4.55	86.8	91.0	1	10.0-160			4.72	38
1,3-Butadiene	5.00	U	4.60	4.63	92.0	92.6	1	10.0-160			0.650	22
n-Butylbenzene	5.00	U	3.65	3.71	73.0	74.2	1	31.0-150			1.63	30
sec-Butylbenzene	5.00	U	3.93	4.45	78.6	89.0	1	33.0-155			12.4	29
tert-Butylbenzene	5.00	U	4.22	4.67	84.4	93.4	1	34.0-153			10.1	28
Carbon tetrachloride	5.00	U	5.30	5.28	106	106	1	23.0-159			0.378	28
Carbon disulfide	5.00	U	3.82	3.96	76.4	79.2	1	10.0-156			3.60	28
Chlorobenzene	5.00	U	4.69	4.81	93.8	96.2	1	33.0-152			2.53	27
Chlorodibromomethane	5.00	U	4.79	4.90	95.8	98.0	1	37.0-149			2.27	27
Chloroethane	5.00	U	4.98	5.21	99.6	104	1	10.0-160			4.51	30
Chloroform	5.00	U	4.93	4.98	98.6	99.6	1	29.0-154			1.01	28
Chloromethane	5.00	U	4.77	4.72	95.4	94.4	1	10.0-160			1.05	29
Cyclohexane	5.00	U	4.15	4.35	83.0	87.0	1	19.0-160			4.71	23
2-Chlorotoluene	5.00	U	4.47	4.86	89.4	97.2	1	32.0-153			8.36	28
4-Chlorotoluene	5.00	U	4.37	4.61	87.4	92.2	1	32.0-150			5.35	28
1,2-Dibromo-3-Chloropropane	5.00	U	3.78	4.40	75.6	88.0	1	22.0-151			15.2	34
1,2-Dibromoethane	5.00	U	4.45	4.53	89.0	90.6	1	34.0-147			1.78	27
Dibromomethane	5.00	U	4.65	4.68	93.0	93.6	1	30.0-151			0.643	27
1,2-Dichlorobenzene	5.00	U	4.36	4.68	87.2	93.6	1	34.0-149			7.08	28
1,3-Dichlorobenzene	5.00	U	4.57	4.70	91.4	94.0	1	36.0-146			2.80	27
1,4-Dichlorobenzene	5.00	U	4.49	4.92	89.8	98.4	1	35.0-142			9.14	27
Dichlorodifluoromethane	5.00	U	4.30	4.19	86.0	83.8	1	10.0-160			2.59	29
1,1-Dichloroethane	5.00	U	4.66	4.81	93.2	96.2	1	25.0-158			3.17	27
1,2-Dichloroethane	5.00	U	4.62	4.73	92.4	94.6	1	29.0-151			2.35	27
cis-1,2-Dichloroethene	5.00	4.80	8.77	8.60	79.4	76.0	1	11.0-160			1.96	29
trans-1,2-Dichloroethene	5.00	U	4.56	4.83	91.2	96.6	1	10.0-160			5.75	27
1,2-Dichloropropane	5.00	U	4.31	4.66	86.2	93.2	1	17.0-153			7.80	27
1,1-Dichloropropene	5.00	U	4.51	4.68	90.2	93.6	1	30.0-156			3.70	27
1,3-Dichloropropene	5.00	U	4.65	4.79	93.0	95.8	1	38.0-147			4.53	27
cis-1,3-Dichloropropene	5.00	U	4.13	4.25	82.6	85.0	1	34.0-149			2.86	28
trans-1,3-Dichloropropene	5.00	U	4.46	4.65	89.2	93.0	1	32.0-149			4.17	28
2,2-Dichloropropane	5.00	U	4.79	4.76	95.8	95.2	1	24.0-152			0.628	29

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1705776

DATE/TIME:

03/22/24 14:51

PAGE:

69 of 96

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1705776-01,02,03,04,05,06,07,08,10,11,12,13,15,16,17,18,19,20

L1705776-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705776-11 02/17/24 13:56 • (MS) R4035581-6 02/17/24 19:04 • (MSD) R4035581-7 02/17/24 19:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Dicyclopentadiene	5.00	U	3.34	3.08	66.8	61.6	1	51.0-139			8.10	20
Di-isopropyl ether	5.00	U	4.54	4.56	90.8	91.2	1	21.0-160			0.440	28
Ethylbenzene	5.00	U	4.45	4.69	89.0	93.8	1	30.0-155			5.25	27
4-Ethyltoluene	5.00	U	4.23	4.66	84.6	93.2	1	10.0-160			9.67	20
Hexachloro-1,3-butadiene	5.00	U	4.81	4.85	96.2	97.0	1	20.0-154			0.828	34
n-Hexane	5.00	U	4.64	4.57	92.8	91.4	1	10.0-153			1.52	28
Isopropylbenzene	5.00	U	4.57	4.71	91.4	94.2	1	28.0-157			3.02	27
p-Isopropyltoluene	5.00	U	3.80	4.07	76.0	81.4	1	30.0-154			6.86	29
2-Butanone (MEK)	25.0	U	21.2	21.7	84.8	86.8	1	10.0-160			2.33	32
Methyl Cyclohexane	5.00	U	4.04	4.15	80.8	83.0	1	11.0-160			2.69	24
Methylene Chloride	5.00	U	4.75	4.75	95.0	95.0	1	23.0-144			0.000	28
4-Methyl-2-pentanone (MIBK)	25.0	U	22.6	22.8	90.4	91.2	1	29.0-160			0.881	29
Methyl tert-butyl ether	5.00	U	4.41	4.69	88.2	93.8	1	28.0-150			6.15	29
Naphthalene	5.00	U	3.92	4.07	78.4	81.4	1	12.0-156			3.75	35
Propene	5.00	U	3.22	3.20	64.4	64.0	1	10.0-160			0.623	29
n-Propylbenzene	5.00	U	4.22	4.75	84.4	95.0	1	31.0-154			11.8	28
Styrene	5.00	U	4.24	4.23	84.8	84.6	1	33.0-155			0.236	28
1,1,1,2-Tetrachloroethane	5.00	U	4.74	5.31	94.8	106	1	36.0-151			11.3	29
1,1,2,2-Tetrachloroethane	5.00	U	4.84	5.16	96.8	103	1	33.0-150			6.40	28
1,1,2-Trichlorotrifluoroethane	5.00	U	5.03	4.84	101	96.8	1	23.0-160			3.85	30
Tetrachloroethene	5.00	U	4.67	5.08	93.4	102	1	10.0-160			8.41	27
Toluene	5.00	U	4.60	4.75	92.0	95.0	1	26.0-154			3.21	28
1,2,3-Trichlorobenzene	5.00	U	4.67	5.05	93.4	101	1	17.0-150			7.82	36
1,2,4-Trichlorobenzene	5.00	U	4.61	4.56	92.2	91.2	1	24.0-150			1.09	33
1,1,1-Trichloroethane	5.00	U	5.09	5.21	102	104	1	23.0-160			2.33	28
1,1,2-Trichloroethane	5.00	U	4.96	4.87	99.2	97.4	1	35.0-147			1.83	27
Trichloroethene	5.00	13.6	18.2	17.7	92.0	82.0	1	10.0-160			2.79	25
Trichlorofluoromethane	5.00	U	5.43	5.17	109	103	1	17.0-160			4.91	31
1,2,3-Trichloropropane	5.00	U	4.77	4.88	95.4	97.6	1	34.0-151			2.28	29
1,2,4-Trimethylbenzene	5.00	U	4.10	4.37	82.0	87.4	1	26.0-154			6.38	27
1,2,3-Trimethylbenzene	5.00	U	4.28	4.56	85.6	91.2	1	32.0-149			6.33	28
1,3,5-Trimethylbenzene	5.00	U	4.05	4.43	81.0	88.6	1	28.0-153			8.96	27
Vinyl chloride	5.00	U	4.58	4.65	91.6	93.0	1	10.0-160			1.52	27
Xylenes, Total	15.0	U	13.2	13.8	88.0	92.0	1	29.0-154			4.44	28
(S) Toluene-d8					95.1	96.1		80.0-120				
(S) 4-Bromofluorobenzene					91.3	93.5		77.0-126				
(S) 1,2-Dichloroethane-d4					102	100		70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2228641

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1705776-21,22,23,24,25](#)

Method Blank (MB)

(MB) R4035528-3 02/17/24 21:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l	1 Cp
Acetone	U		11.3	50.0	
Acrolein	U		2.54	50.0	
Acrylonitrile	U		0.671	10.0	
Benzene	U		0.0941	1.00	
Bromobenzene	U		0.118	1.00	
Bromodichloromethane	U		0.136	1.00	
Bromoform	U		0.129	1.00	
Bromomethane	U		0.605	5.00	
1,3-Butadiene	U		0.299	2.00	
n-Butylbenzene	U		0.157	1.00	
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	
Carbon tetrachloride	U		0.128	1.00	
Carbon disulfide	U		0.0962	1.00	
Chlorobenzene	U		0.116	1.00	
Chlorodibromomethane	U		0.140	1.00	
Chloroethane	U		0.192	5.00	
Chloroform	U		0.111	5.00	
Chloromethane	U		0.960	2.50	
Cyclohexane	U		0.188	1.00	
2-Chlorotoluene	U		0.106	1.00	
4-Chlorotoluene	U		0.114	1.00	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	
1,2-Dibromoethane	U		0.126	1.00	
Dibromomethane	U		0.122	1.00	
1,2-Dichlorobenzene	U		0.107	1.00	
1,3-Dichlorobenzene	U		0.110	1.00	
1,4-Dichlorobenzene	U		0.120	1.00	
Dichlorodifluoromethane	U		0.374	5.00	
1,1-Dichloroethane	U		0.100	1.00	
1,2-Dichloroethane	U		0.0819	1.00	
1,1-Dichloroethene	U		0.188	1.00	
cis-1,2-Dichloroethene	U		0.126	1.00	
trans-1,2-Dichloroethene	U		0.149	1.00	
1,2-Dichloropropane	U		0.149	1.00	
1,1-Dichloropropene	U		0.142	1.00	
1,3-Dichloropropene	U		0.110	1.00	
cis-1,3-Dichloropropene	U		0.111	1.00	
trans-1,3-Dichloropropene	U		0.118	1.00	
2,2-Dichloropropane	U		0.161	1.00	

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1705776

DATE/TIME:

03/22/24 14:51

PAGE:

71 of 96

QUALITY CONTROL SUMMARY

[L1705776-21,22,23,24,25](#)

Method Blank (MB)

(MB) R4035528-3 02/17/24 21:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l	
Dicyclopentadiene	U		0.253	1.00	¹ Cp
Di-isopropyl ether	U		0.105	1.00	² Tc
Ethylbenzene	U		0.137	1.00	³ Ss
4-Ethyltoluene	U		0.208	1.00	⁴ Cn
Hexachloro-1,3-butadiene	U		0.337	1.00	⁵ Sr
n-Hexane	U		0.749	10.0	⁶ Qc
Isopropylbenzene	U		0.105	1.00	⁷ Is
p-Isopropyltoluene	U		0.120	1.00	⁸ Gl
2-Butanone (MEK)	U		1.19	10.0	⁹ Al
Methyl Cyclohexane	U		0.660	1.00	¹⁰ Sc
Methylene Chloride	U		0.430	5.00	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	
Methyl tert-butyl ether	U		0.101	1.00	
Naphthalene	U		1.00	5.00	
Propene	U		0.936	2.50	
n-Propylbenzene	U		0.0993	1.00	
Styrene	U		0.118	1.00	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	
Tetrachloroethene	U		0.300	1.00	
Toluene	U		0.278	1.00	
1,2,3-Trichlorobenzene	U		0.230	1.00	
1,2,4-Trichlorobenzene	U		0.481	1.00	
1,1,1-Trichloroethane	U		0.149	1.00	
1,1,2-Trichloroethane	U		0.158	1.00	
Trichloroethene	U		0.190	1.00	
Trichlorofluoromethane	U		0.160	5.00	
1,2,3-Trichloropropane	U		0.237	2.50	
1,2,4-Trimethylbenzene	U		0.322	1.00	
1,2,3-Trimethylbenzene	U		0.104	1.00	
1,3,5-Trimethylbenzene	U		0.104	1.00	
Vinyl chloride	U		0.234	1.00	
Xylenes, Total	U		0.174	3.00	
(S) Toluene-d8	107		80.0-120		
(S) 4-Bromofluorobenzene	99.1		77.0-126		
(S) 1,2-Dichloroethane-d4	85.6		70.0-130		

QUALITY CONTROL SUMMARY

[L1705776-21,22,23,24,25](#)

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4035528-1 02/17/24 20:15 • (LCSD) R4035528-2 02/17/24 20:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	25.0	21.7	21.2	86.8	84.8	19.0-160			2.33	27
Acrolein	25.0	20.2	19.7	80.8	78.8	30.0-160			2.51	26
Acrylonitrile	25.0	20.0	19.2	80.0	76.8	55.0-149			4.08	20
Benzene	5.00	5.02	5.23	100	105	70.0-123			4.10	20
Bromobenzene	5.00	4.20	4.35	84.0	87.0	73.0-121			3.51	20
Bromodichloromethane	5.00	4.78	5.05	95.6	101	75.0-120			5.49	20
Bromoform	5.00	3.43	3.47	68.6	69.4	68.0-132			1.16	20
Bromomethane	5.00	5.87	7.37	117	147	30.0-160			22.7	25
1,3-Butadiene	5.00	4.84	5.10	96.8	102	45.0-147			5.23	20
n-Butylbenzene	5.00	3.73	3.98	74.6	79.6	73.0-125			6.49	20
sec-Butylbenzene	5.00	4.32	4.61	86.4	92.2	75.0-125			6.49	20
tert-Butylbenzene	5.00	4.21	4.42	84.2	88.4	76.0-124			4.87	20
Carbon tetrachloride	5.00	4.89	5.04	97.8	101	68.0-126			3.02	20
Carbon disulfide	5.00	4.72	4.87	94.4	97.4	61.0-128			3.13	20
Chlorobenzene	5.00	4.34	4.60	86.8	92.0	80.0-121			5.82	20
Chlorodibromomethane	5.00	4.09	4.03	81.8	80.6	77.0-125			1.48	20
Chloroethane	5.00	8.56	9.30	171	186	47.0-150	<u>L1</u>	<u>L1</u>	8.29	20
Chloroform	5.00	4.86	5.00	97.2	100	73.0-120			2.84	20
Chloromethane	5.00	4.29	4.68	85.8	93.6	41.0-142			8.70	20
Cyclohexane	5.00	4.80	5.39	96.0	108	71.0-124			11.6	20
2-Chlorotoluene	5.00	4.20	4.38	84.0	87.6	76.0-123			4.20	20
4-Chlorotoluene	5.00	4.09	4.34	81.8	86.8	75.0-122			5.93	20
1,2-Dibromo-3-Chloropropane	5.00	3.30	3.47	66.0	69.4	58.0-134			5.02	20
1,2-Dibromoethane	5.00	4.26	4.36	85.2	87.2	80.0-122			2.32	20
Dibromomethane	5.00	5.03	4.89	101	97.8	80.0-120			2.82	20
1,2-Dichlorobenzene	5.00	3.85	3.96	77.0	79.2	79.0-121	<u>L2</u>		2.82	20
1,3-Dichlorobenzene	5.00	4.06	4.30	81.2	86.0	79.0-120			5.74	20
1,4-Dichlorobenzene	5.00	3.99	4.09	79.8	81.8	79.0-120			2.48	20
Dichlorodifluoromethane	5.00	3.93	4.36	78.6	87.2	51.0-149			10.4	20
1,1-Dichloroethane	5.00	4.64	4.81	92.8	96.2	70.0-126			3.60	20
1,2-Dichloroethane	5.00	4.34	4.51	86.8	90.2	70.0-128			3.84	20
1,1-Dichloroethene	5.00	5.77	5.99	115	120	71.0-124			3.74	20
cis-1,2-Dichloroethene	5.00	4.98	5.00	99.6	100	73.0-120			0.401	20
trans-1,2-Dichloroethene	5.00	4.94	5.27	98.8	105	73.0-120			6.46	20
1,2-Dichloropropane	5.00	4.70	4.83	94.0	96.6	77.0-125			2.73	20
1,1-Dichloropropene	5.00	5.38	5.39	108	108	74.0-126			0.186	20
1,3-Dichloropropane	5.00	4.14	4.47	82.8	89.4	80.0-120			7.67	20
cis-1,3-Dichloropropene	5.00	4.58	4.60	91.6	92.0	80.0-123			0.436	20
trans-1,3-Dichloropropene	5.00	4.16	4.10	83.2	82.0	78.0-124			1.45	20
2,2-Dichloropropane	5.00	4.66	4.76	93.2	95.2	58.0-130			2.12	20

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2228641

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1705776-21,22,23,24,25](#)

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4035528-1 02/17/24 20:15 • (LCSD) R4035528-2 02/17/24 20:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Dicyclopentadiene	5.00	4.30	4.60	86.0	92.0	74.0-126			6.74	20
Di-isopropyl ether	5.00	3.98	4.04	79.6	80.8	58.0-138			1.50	20
Ethylbenzene	5.00	4.35	4.60	87.0	92.0	79.0-123			5.59	20
4-Ethyltoluene	5.00	4.22	4.51	84.4	90.2	74.0-127			6.64	20
Hexachloro-1,3-butadiene	5.00	3.56	3.75	71.2	75.0	54.0-138			5.20	20
n-Hexane	5.00	4.20	4.17	84.0	83.4	57.0-133			0.717	20
Isopropylbenzene	5.00	4.11	4.38	82.2	87.6	76.0-127			6.36	20
p-Isopropyltoluene	5.00	4.07	4.33	81.4	86.6	76.0-125			6.19	20
2-Butanone (MEK)	25.0	19.2	20.0	76.8	80.0	44.0-160			4.08	20
Methyl Cyclohexane	5.00	4.93	5.06	98.6	101	68.0-126			2.60	20
Methylene Chloride	5.00	5.19	5.36	104	107	67.0-120			3.22	20
4-Methyl-2-pentanone (MIBK)	25.0	17.4	17.6	69.6	70.4	68.0-142			1.14	20
Methyl tert-butyl ether	5.00	4.55	4.69	91.0	93.8	68.0-125			3.03	20
Naphthalene	5.00	2.93	2.67	58.6	53.4	54.0-135	<u>L2</u>		9.29	20
Propene	5.00	1.78	2.06	35.6	41.2	30.0-160			14.6	20
n-Propylbenzene	5.00	4.36	4.72	87.2	94.4	77.0-124			7.93	20
Styrene	5.00	3.70	3.87	74.0	77.4	73.0-130			4.49	20
1,1,1,2-Tetrachloroethane	5.00	4.11	4.33	82.2	86.6	75.0-125			5.21	20
1,1,2,2-Tetrachloroethane	5.00	3.75	3.79	75.0	75.8	65.0-130			1.06	20
1,1,2-Trichlorotrifluoroethane	5.00	4.54	4.76	90.8	95.2	69.0-132			4.73	20
Tetrachloroethene	5.00	4.67	5.01	93.4	100	72.0-132			7.02	20
Toluene	5.00	4.54	4.73	90.8	94.6	79.0-120			4.10	20
1,2,3-Trichlorobenzene	5.00	3.92	3.34	78.4	66.8	50.0-138			16.0	20
1,2,4-Trichlorobenzene	5.00	3.27	3.51	65.4	70.2	57.0-137			7.08	20
1,1,1-Trichloroethane	5.00	5.12	5.30	102	106	73.0-124			3.45	20
1,1,2-Trichloroethane	5.00	4.39	4.64	87.8	92.8	80.0-120			5.54	20
Trichloroethene	5.00	5.15	5.37	103	107	78.0-124			4.18	20
Trichlorofluoromethane	5.00	7.28	7.66	146	153	59.0-147	<u>L1</u>		5.09	20
1,2,3-Trichloropropane	5.00	4.30	4.34	86.0	86.8	73.0-130			0.926	20
1,2,4-Trimethylbenzene	5.00	3.99	4.24	79.8	84.8	76.0-121			6.08	20
1,2,3-Trimethylbenzene	5.00	3.96	4.18	79.2	83.6	77.0-120			5.41	20
1,3,5-Trimethylbenzene	5.00	4.14	4.31	82.8	86.2	76.0-122			4.02	20
Vinyl chloride	5.00	5.79	5.84	116	117	67.0-131			0.860	20
Xylenes, Total	15.0	12.6	13.2	84.0	88.0	79.0-123			4.65	20
(S) Toluene-d8				106	106	80.0-120				
(S) 4-Bromofluorobenzene				101	100	77.0-126				
(S) 1,2-Dichloroethane-d4				86.1	84.2	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

QUALITY CONTROL SUMMARY

L1705776-21,22,23,24,25

L1705404-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705404-01 02/18/24 00:33 • (MS) R4035528-4 02/18/24 06:21 • (MSD) R4035528-5 02/18/24 06:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Acetone	25.0	U	18.8	19.4	75.2	77.6	1	10.0-160			3.14	35
Acrolein	25.0	U	31.1	32.4	124	130	1	10.0-160			4.09	39
Acrylonitrile	25.0	U	26.1	20.4	104	81.6	1	21.0-160			24.5	32
Benzene	5.00	U	7.46	5.63	149	113	1	17.0-158	R5		28.0	27
Bromobenzene	5.00	U	5.43	4.97	109	99.4	1	30.0-149			8.85	28
Bromodichloromethane	5.00	U	5.10	5.48	102	110	1	31.0-150			7.18	27
Bromoform	5.00	U	3.48	3.37	69.6	67.4	1	29.0-150			3.21	29
Bromomethane	5.00	U	2.70	4.09	54.0	81.8	1	10.0-160	R5		40.9	38
1,3-Butadiene	5.00	U	6.00	6.90	120	138	1	10.0-160			14.0	22
n-Butylbenzene	5.00	U	4.62	4.59	92.4	91.8	1	31.0-150			0.651	30
sec-Butylbenzene	5.00	U	4.70	5.14	94.0	103	1	33.0-155			8.94	29
tert-Butylbenzene	5.00	U	5.32	5.41	106	108	1	34.0-153			1.68	28
Carbon tetrachloride	5.00	U	5.76	5.80	115	116	1	23.0-159			0.692	28
Carbon disulfide	5.00	U	4.98	5.18	99.6	104	1	10.0-156			3.94	28
Chlorobenzene	5.00	U	4.59	4.51	91.8	90.2	1	33.0-152			1.76	27
Chlorodibromomethane	5.00	U	5.32	3.86	106	77.2	1	37.0-149	R5		31.8	27
Chloroethane	5.00	U	6.91	7.81	138	156	1	10.0-160			12.2	30
Chloroform	5.00	3.49	9.21	8.96	184	179	1	29.0-154	M1	M1	2.75	28
Chloromethane	5.00	U	4.86	5.00	97.2	100	1	10.0-160			2.84	29
Cyclohexane	5.00	U	6.40	6.33	128	127	1	19.0-160			1.10	23
2-Chlorotoluene	5.00	U	4.57	5.42	91.4	108	1	32.0-153			17.0	28
4-Chlorotoluene	5.00	U	5.68	4.88	114	97.6	1	32.0-150			15.2	28
1,2-Dibromo-3-Chloropropane	5.00	U	4.03	3.86	80.6	77.2	1	22.0-151			4.31	34
1,2-Dibromoethane	5.00	U	4.84	4.04	96.8	80.8	1	34.0-147			18.0	27
Dibromomethane	5.00	U	5.79	5.32	116	106	1	30.0-151			8.46	27
1,2-Dichlorobenzene	5.00	U	3.94	4.16	78.8	83.2	1	34.0-149			5.43	28
1,3-Dichlorobenzene	5.00	U	4.08	4.38	81.6	87.6	1	36.0-146			7.09	27
1,4-Dichlorobenzene	5.00	U	3.97	4.26	79.4	85.2	1	35.0-142			7.05	27
Dichlorodifluoromethane	5.00	U	5.12	5.66	102	113	1	10.0-160			10.0	29
1,1-Dichloroethane	5.00	U	6.70	5.31	134	106	1	25.0-158			23.1	27
1,2-Dichloroethane	5.00	U	5.42	5.12	108	102	1	29.0-151			5.69	27
1,1-Dichloroethene	5.00	U	6.85	6.82	137	136	1	11.0-160			0.439	29
cis-1,2-Dichloroethene	5.00	U	5.35	5.35	107	107	1	10.0-160			0.000	27
trans-1,2-Dichloroethene	5.00	U	6.02	5.70	120	114	1	17.0-153			5.46	27
1,2-Dichloropropane	5.00	U	5.66	5.23	113	105	1	30.0-156			7.90	27
1,1-Dichloropropene	5.00	U	6.95	6.14	139	123	1	25.0-158			12.4	27
1,3-Dichloropropane	5.00	U	5.80	4.23	116	84.6	1	38.0-147	R5		31.3	27
cis-1,3-Dichloropropene	5.00	U	4.51	4.93	90.2	98.6	1	34.0-149			8.90	28
trans-1,3-Dichloropropene	5.00	U	4.30	4.30	86.0	86.0	1	32.0-149			0.000	28
2,2-Dichloropropane	5.00	U	5.88	5.71	118	114	1	24.0-152			2.93	29

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1705776-21,22,23,24,25

L1705404-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705404-01 02/18/24 00:33 • (MS) R4035528-4 02/18/24 06:21 • (MSD) R4035528-5 02/18/24 06:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Dicyclopentadiene	5.00	U	3.18	4.45	63.6	89.0	1	51.0-139	R5		33.3	20
Di-isopropyl ether	5.00	U	4.76	4.54	95.2	90.8	1	21.0-160			4.73	28
Ethylbenzene	5.00	U	4.67	4.64	93.4	92.8	1	30.0-155			0.644	27
4-Ethyltoluene	5.00	U	4.70	5.11	94.0	102	1	10.0-160			8.36	20
Hexachloro-1,3-butadiene	5.00	U	5.33	4.13	107	82.6	1	20.0-154			25.4	34
n-Hexane	5.00	U	6.04	5.15	121	103	1	10.0-153			15.9	28
Isopropylbenzene	5.00	U	4.82	4.59	96.4	91.8	1	28.0-157			4.89	27
p-Isopropyltoluene	5.00	U	4.53	4.81	90.6	96.2	1	30.0-154			6.00	29
2-Butanone (MEK)	25.0	U	20.1	18.9	80.4	75.6	1	10.0-160			6.15	32
Methyl Cyclohexane	5.00	U	6.25	6.50	125	130	1	11.0-160			3.92	24
Methylene Chloride	5.00	U	5.70	5.57	114	111	1	23.0-144			2.31	28
4-Methyl-2-pentanone (MIBK)	25.0	U	19.6	18.1	78.4	72.4	1	29.0-160			7.96	29
Methyl tert-butyl ether	5.00	U	5.62	5.05	112	101	1	28.0-150			10.7	29
Naphthalene	5.00	U	4.74	4.00	94.8	80.0	1	12.0-156			16.9	35
Propene	5.00	U	2.87	3.19	57.4	63.8	1	10.0-160			10.6	29
n-Propylbenzene	5.00	U	5.62	5.30	112	106	1	31.0-154			5.86	28
Styrene	5.00	U	3.89	4.40	77.8	88.0	1	33.0-155			12.3	28
1,1,1,2-Tetrachloroethane	5.00	U	4.39	4.38	87.8	87.6	1	36.0-151			0.228	29
1,1,2,2-Tetrachloroethane	5.00	U	5.47	5.00	109	100	1	33.0-150			8.98	28
1,1,2-Trichlorotrifluoroethane	5.00	U	6.13	6.06	123	121	1	23.0-160			1.15	30
Tetrachloroethene	5.00	U	5.35	4.86	107	97.2	1	10.0-160			9.60	27
Toluene	5.00	U	6.82	4.55	136	91.0	1	26.0-154	R5		39.9	28
1,2,3-Trichlorobenzene	5.00	U	12.1	4.73	242	94.6	1	17.0-150	M1	R5	87.6	36
1,2,4-Trichlorobenzene	5.00	U	5.05	4.34	101	86.8	1	24.0-150			15.1	33
1,1,1-Trichloroethane	5.00	U	6.25	5.82	125	116	1	23.0-160			7.13	28
1,1,2-Trichloroethane	5.00	U	5.06	4.46	101	89.2	1	35.0-147			12.6	27
Trichloroethene	5.00	U	5.14	5.05	103	101	1	10.0-160			1.77	25
Trichlorofluoromethane	5.00	U	7.23	8.46	145	169	1	17.0-160	M1		15.7	31
1,2,3-Trichloropropane	5.00	U	5.07	5.02	101	100	1	34.0-151			0.991	29
1,2,4-Trimethylbenzene	5.00	U	4.38	4.76	87.6	95.2	1	26.0-154			8.32	27
1,2,3-Trimethylbenzene	5.00	U	4.25	4.60	85.0	92.0	1	32.0-149			7.91	28
1,3,5-Trimethylbenzene	5.00	U	4.54	5.35	90.8	107	1	28.0-153			16.4	27
Vinyl chloride	5.00	U	6.36	7.11	127	142	1	10.0-160			11.1	27
Xylenes, Total	15.0	U	13.6	14.3	90.7	95.3	1	29.0-154			5.02	28
(S) Toluene-d8					129	95.7		80.0-120	S10			
(S) 4-Bromofluorobenzene					116	95.4		77.0-126				
(S) 1,2-Dichloroethane-d4					113	94.1		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

WG2229520

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1705776-02,09,10,12,13,14,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R4035816-3 02/19/24 19:40

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Acetone	U		11.3	50.0	¹ Cp
Acrolein	U		2.54	50.0	² Tc
Acrylonitrile	U		0.671	10.0	³ Ss
Benzene	U		0.0941	1.00	⁴ Cn
Bromobenzene	U		0.118	1.00	⁵ Sr
Bromodichloromethane	U		0.136	1.00	
Bromoform	U		0.129	1.00	
Bromomethane	U		0.605	5.00	
1,3-Butadiene	U		0.299	2.00	
n-Butylbenzene	U		0.157	1.00	⁶ Qc
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	⁷ Is
Carbon tetrachloride	U		0.128	1.00	⁸ Gl
Carbon disulfide	U		0.0962	1.00	⁹ Al
Chlorobenzene	U		0.116	1.00	
Chlorodibromomethane	U		0.140	1.00	¹⁰ Sc
Chloroethane	U		0.192	5.00	
Chloroform	U		0.111	5.00	
Chloromethane	U		0.960	2.50	
Cyclohexane	U		0.188	1.00	
2-Chlorotoluene	U		0.106	1.00	
4-Chlorotoluene	U		0.114	1.00	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	
1,2-Dibromoethane	U		0.126	1.00	
Dibromomethane	U		0.122	1.00	
1,2-Dichlorobenzene	U		0.107	1.00	
1,3-Dichlorobenzene	U		0.110	1.00	
1,4-Dichlorobenzene	U		0.120	1.00	
Dichlorodifluoromethane	U		0.374	5.00	
1,1-Dichloroethane	U		0.100	1.00	
1,2-Dichloroethane	U		0.0819	1.00	
1,1-Dichloroethene	U		0.188	1.00	
cis-1,2-Dichloroethene	U		0.126	1.00	
trans-1,2-Dichloroethene	U		0.149	1.00	
1,2-Dichloropropane	U		0.149	1.00	
1,1-Dichloropropene	U		0.142	1.00	
1,3-Dichloropropane	U		0.110	1.00	
cis-1,3-Dichloropropene	U		0.111	1.00	
trans-1,3-Dichloropropene	U		0.118	1.00	
2,2-Dichloropropane	U		0.161	1.00	

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1705776

DATE/TIME:

03/22/24 14:51

PAGE:

77 of 96

WG2229520

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1705776-02,09,10,12,13,14,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R4035816-3 02/19/24 19:40

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Dicyclopentadiene	U		0.253	1.00	¹ Cp
Di-isopropyl ether	U		0.105	1.00	² Tc
Ethylbenzene	U		0.137	1.00	³ Ss
4-Ethyltoluene	U		0.208	1.00	⁴ Cn
Hexachloro-1,3-butadiene	U		0.337	1.00	⁵ Sr
n-Hexane	U		0.749	10.0	⁶ Qc
Isopropylbenzene	U		0.105	1.00	⁷ Is
p-Isopropyltoluene	U		0.120	1.00	⁸ Gl
2-Butanone (MEK)	U		1.19	10.0	⁹ Al
Methyl Cyclohexane	U		0.660	1.00	¹⁰ Sc
Methylene Chloride	U		0.430	5.00	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	
Methyl tert-butyl ether	U		0.101	1.00	
Naphthalene	U		1.00	5.00	
Propene	U		0.936	2.50	
n-Propylbenzene	U		0.0993	1.00	
Styrene	U		0.118	1.00	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	
Tetrachloroethene	U		0.300	1.00	
Toluene	U		0.278	1.00	
1,2,3-Trichlorobenzene	U		0.230	1.00	
1,2,4-Trichlorobenzene	U		0.481	1.00	
1,1,1-Trichloroethane	U		0.149	1.00	
1,1,2-Trichloroethane	U		0.158	1.00	
Trichloroethene	U		0.190	1.00	
Trichlorofluoromethane	U		0.160	5.00	
1,2,3-Trichloropropane	U		0.237	2.50	
1,2,4-Trimethylbenzene	U		0.322	1.00	
1,2,3-Trimethylbenzene	U		0.104	1.00	
1,3,5-Trimethylbenzene	U		0.104	1.00	
Vinyl chloride	U		0.234	1.00	
Xylenes, Total	U		0.174	3.00	
(S) Toluene-d8	106		80.0-120		
(S) 4-Bromofluorobenzene	99.5		77.0-126		
(S) 1,2-Dichloroethane-d4	79.7		70.0-130		

QUALITY CONTROL SUMMARY

L1705776-02,09,10,12,13,14,15,16,17,18,19,20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4035816-1 02/19/24 18:31 • (LCSD) R4035816-2 02/19/24 18:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	25.0	19.7	19.4	78.8	77.6	19.0-160			1.53	27
Acrolein	25.0	22.9	26.6	91.6	106	30.0-160			14.9	26
Acrylonitrile	25.0	18.0	19.3	72.0	77.2	55.0-149			6.97	20
Benzene	5.00	5.02	5.19	100	104	70.0-123			3.33	20
Bromobenzene	5.00	4.99	4.54	99.8	90.8	73.0-121			9.44	20
Bromodichloromethane	5.00	4.76	5.18	95.2	104	75.0-120			8.45	20
Bromoform	5.00	3.28	3.47	65.6	69.4	68.0-132	L2		5.63	20
Bromomethane	5.00	6.95	7.14	139	143	30.0-160			2.70	25
1,3-Butadiene	5.00	3.98	3.82	79.6	76.4	45.0-147			4.10	20
n-Butylbenzene	5.00	4.05	4.34	81.0	86.8	73.0-125			6.91	20
sec-Butylbenzene	5.00	4.33	4.58	86.6	91.6	75.0-125			5.61	20
tert-Butylbenzene	5.00	4.19	4.29	83.8	85.8	76.0-124			2.36	20
Carbon tetrachloride	5.00	4.69	4.90	93.8	98.0	68.0-126			4.38	20
Carbon disulfide	5.00	4.04	4.15	80.8	83.0	61.0-128			2.69	20
Chlorobenzene	5.00	4.32	4.55	86.4	91.0	80.0-121			5.19	20
Chlorodibromomethane	5.00	4.08	4.10	81.6	82.0	77.0-125			0.489	20
Chloroethane	5.00	6.66	6.72	133	134	47.0-150			0.897	20
Chloroform	5.00	4.93	5.29	98.6	106	73.0-120			7.05	20
Chloromethane	5.00	3.18	3.35	63.6	67.0	41.0-142			5.21	20
Cyclohexane	5.00	4.94	4.84	98.8	96.8	71.0-124			2.04	20
2-Chlorotoluene	5.00	4.25	4.46	85.0	89.2	76.0-123			4.82	20
4-Chlorotoluene	5.00	4.21	4.31	84.2	86.2	75.0-122			2.35	20
1,2-Dibromo-3-Chloropropane	5.00	3.11	3.59	62.2	71.8	58.0-134			14.3	20
1,2-Dibromoethane	5.00	4.06	4.27	81.2	85.4	80.0-122			5.04	20
Dibromomethane	5.00	4.83	4.86	96.6	97.2	80.0-120			0.619	20
1,2-Dichlorobenzene	5.00	3.72	4.04	74.4	80.8	79.0-121	L2		8.25	20
1,3-Dichlorobenzene	5.00	3.92	4.23	78.4	84.6	79.0-120	L2		7.61	20
1,4-Dichlorobenzene	5.00	3.91	4.24	78.2	84.8	79.0-120	L2		8.10	20
Dichlorodifluoromethane	5.00	3.88	3.99	77.6	79.8	51.0-149			2.80	20
1,1-Dichloroethane	5.00	4.73	4.97	94.6	99.4	70.0-126			4.95	20
1,2-Dichloroethane	5.00	4.57	4.61	91.4	92.2	70.0-128			0.871	20
1,1-Dichloroethene	5.00	5.46	5.92	109	118	71.0-124			8.08	20
cis-1,2-Dichloroethene	5.00	4.82	4.94	96.4	98.8	73.0-120			2.46	20
trans-1,2-Dichloroethene	5.00	4.67	5.28	93.4	106	73.0-120			12.3	20
1,2-Dichloropropane	5.00	4.70	4.84	94.0	96.8	77.0-125			2.94	20
1,1-Dichloropropene	5.00	4.92	5.21	98.4	104	74.0-126			5.73	20
1,3-Dichloropropane	5.00	4.25	4.77	85.0	95.4	80.0-120			11.5	20
cis-1,3-Dichloropropene	5.00	4.59	4.71	91.8	94.2	80.0-123			2.58	20
trans-1,3-Dichloropropene	5.00	4.14	4.37	82.8	87.4	78.0-124			5.41	20
2,2-Dichloropropane	5.00	5.56	5.76	111	115	58.0-130			3.53	20

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

QUALITY CONTROL SUMMARY

L1705776-02,09,10,12,13,14,15,16,17,18,19,20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4035816-1 02/19/24 18:31 • (LCSD) R4035816-2 02/19/24 18:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dicyclopentadiene	5.00	4.81	4.45	96.2	89.0	74.0-126			7.78	20
Di-isopropyl ether	5.00	4.18	4.34	83.6	86.8	58.0-138			3.76	20
Ethylbenzene	5.00	4.30	4.52	86.0	90.4	79.0-123			4.99	20
4-Ethyltoluene	5.00	4.57	4.54	91.4	90.8	74.0-127			0.659	20
Hexachloro-1,3-butadiene	5.00	3.82	4.36	76.4	87.2	54.0-138			13.2	20
n-Hexane	5.00	3.79	3.93	75.8	78.6	57.0-133			3.63	20
Isopropylbenzene	5.00	4.18	4.41	83.6	88.2	76.0-127			5.36	20
p-Isopropyltoluene	5.00	4.62	4.59	92.4	91.8	76.0-125			0.651	20
2-Butanone (MEK)	25.0	17.5	18.2	70.0	72.8	44.0-160			3.92	20
Methyl Cyclohexane	5.00	4.83	4.74	96.6	94.8	68.0-126			1.88	20
Methylene Chloride	5.00	5.39	5.64	108	113	67.0-120			4.53	20
4-Methyl-2-pentanone (MIBK)	25.0	17.3	18.0	69.2	72.0	68.0-142			3.97	20
Methyl tert-butyl ether	5.00	4.54	4.72	90.8	94.4	68.0-125			3.89	20
Naphthalene	5.00	2.97	3.14	59.4	62.8	54.0-135			5.56	20
Propene	5.00	1.90	1.71	38.0	34.2	30.0-160			10.5	20
n-Propylbenzene	5.00	5.11	5.01	102	100	77.0-124			1.98	20
Styrene	5.00	3.64	4.03	72.8	80.6	73.0-130	L2		10.2	20
1,1,1,2-Tetrachloroethane	5.00	4.16	4.49	83.2	89.8	75.0-125			7.63	20
1,1,2,2-Tetrachloroethane	5.00	4.65	4.37	93.0	87.4	65.0-130			6.21	20
1,1,2-Trichlorotrifluoroethane	5.00	4.57	4.88	91.4	97.6	69.0-132			6.56	20
Tetrachloroethene	5.00	4.59	4.74	91.8	94.8	72.0-132			3.22	20
Toluene	5.00	4.43	4.74	88.6	94.8	79.0-120			6.76	20
1,2,3-Trichlorobenzene	5.00	3.32	3.66	66.4	73.2	50.0-138			9.74	20
1,2,4-Trichlorobenzene	5.00	3.52	3.98	70.4	79.6	57.0-137			12.3	20
1,1,1-Trichloroethane	5.00	4.95	5.27	99.0	105	73.0-124			6.26	20
1,1,2-Trichloroethane	5.00	4.27	4.35	85.4	87.0	80.0-120			1.86	20
Trichloroethene	5.00	4.56	4.84	91.2	96.8	78.0-124			5.96	20
Trichlorofluoromethane	5.00	5.76	5.54	115	111	59.0-147			3.89	20
1,2,3-Trichloropropane	5.00	4.09	4.28	81.8	85.6	73.0-130			4.54	20
1,2,4-Trimethylbenzene	5.00	3.94	4.34	78.8	86.8	76.0-121			9.66	20
1,2,3-Trimethylbenzene	5.00	3.98	4.28	79.6	85.6	77.0-120			7.26	20
1,3,5-Trimethylbenzene	5.00	4.26	4.38	85.2	87.6	76.0-122			2.78	20
Vinyl chloride	5.00	4.62	4.49	92.4	89.8	67.0-131			2.85	20
Xylenes, Total	15.0	12.4	13.5	82.7	90.0	79.0-123			8.49	20
(S) Toluene-d8				106	106	80.0-120				
(S) 4-Bromofluorobenzene				123	100	77.0-126				
(S) 1,2-Dichloroethane-d4				85.1	86.7	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2227341

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

QUALITY CONTROL SUMMARY

[L1705776-01,02,03,04,05,06,07](#)

Method Blank (MB)

(MB) R4035347-3 02/15/24 22:44

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	92.9			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4035347-1 02/15/24 21:38 • (LCSD) R4035347-2 02/15/24 22:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	46.7	46.5	93.4	93.0	55.0-138			0.429	24
(S) Toluene-d8			92.3	92.9		77.0-127				

L1705409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705409-01 02/16/24 02:07 • (MS) R4035347-4 02/16/24 07:10 • (MSD) R4035347-5 02/16/24 07:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	34.8	68.3	65.1	67.0	60.6	1	13.0-160			4.80	31
(S) Toluene-d8				96.6	97.4			77.0-127				

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1705776

DATE/TIME:

03/22/24 14:51

PAGE:

81 of 96

WG2230157

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

QUALITY CONTROL SUMMARY

[L1705776-08,09,10,11,12,16,17,18,19,22,23,24,25](#)

Method Blank (MB)

(MB) R4036334-3 02/20/24 11:58

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	94.9			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4036334-1 02/20/24 10:53 • (LCSD) R4036334-2 02/20/24 11:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	43.2	44.8	86.4	89.6	55.0-138			3.64	24
(S) Toluene-d8				95.2	94.9	77.0-127				

L1705776-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705776-08 02/20/24 16:25 • (MS) R4036334-4 02/20/24 23:20 • (MSD) R4036334-5 02/20/24 23:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	U	43.6	52.2	87.2	104	1	13.0-160			18.0	31
(S) Toluene-d8					95.4	97.9		77.0-127				

L1705776-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705776-11 02/20/24 17:31 • (MS) R4036334-6 02/21/24 00:04 • (MSD) R4036334-7 02/21/24 00:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	31.4	81.6	78.5	100	94.2	1	13.0-160			3.87	31
(S) Toluene-d8					98.6	98.3		77.0-127				

WG2230690

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

QUALITY CONTROL SUMMARY

[L1705776-13,14,15,20](#)

Method Blank (MB)

(MB) R4036886-3 02/21/24 13:02

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	95.4			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4036886-1 02/21/24 11:57 • (LCSD) R4036886-2 02/21/24 12:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	53.2	52.6	106	105	55.0-138			1.13	24
(S) Toluene-d8			95.3	95.4	77.0-127					

WG2231600

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

QUALITY CONTROL SUMMARY

[L1705776-21](#)

Method Blank (MB)

(MB) R4037174-3 02/22/24 13:02

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	93.8			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4037174-1 02/22/24 11:40 • (LCSD) R4037174-2 02/22/24 12:02

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	43.1	44.7	86.2	89.4	55.0-138			3.64	24
(S) Toluene-d8				93.8	93.9	77.0-127				

L1707469-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1707469-01 02/22/24 13:24 • (MS) R4037174-4 02/22/24 14:07 • (MSD) R4037174-5 02/22/24 14:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	U	48.8	50.7	97.6	101	1	13.0-160			3.82	31
(S) Toluene-d8					93.5	93.8		77.0-127				

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1705776

DATE/TIME:

03/22/24 14:51

PAGE:

84 of 96

INTERNAL STANDARD SUMMARY

Instrument: VOCMS20 • File ID: 0217_02

¹Cp

02/17/24 07:22

²Tc

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	0217_02	178985	82056	73389
Upper Limit		357970	164112	146778
Lower Limit		89493	41028	36695
LCS R4035581-1 WG2228368 1x	0217_02LCS	178985	82056	73389
LCSD R4035581-2 WG2228368 1x	0217_03	189400	83365	74691
BLANK R4035581-3 WG2228368 1x	0217_05	169332	72597	61265
L1705776-01 WG2228368 1x	0217_06	149886	63248	55448
L1705776-03 WG2228368 1x	0217_07	169600	72527	60412
L1705776-04 WG2228368 1x	0217_08	165955	70111	60000
L1705776-05 WG2228368 1x	0217_09	159842	69451	59424
L1705776-06 WG2228368 1x	0217_10	164016	68367	57134
L1705776-07 WG2228368 1x	0217_11	166442	71494	59286
L1705776-08 WG2228368 1x	0217_12	167705	73223	60160
L1705776-11 WG2228368 1x	0217_13	155025	68709	56707
L1705776-13 WG2228368 1x	0217_14	200108	86372	86945
L1705776-15 WG2228368 1x	0217_15	161913	78879	58858
L1705776-18 WG2228368 1x	0217_16	165878	71000	60023
L1705776-02 WG2228368 10x	0217_17	163942	70856	57154
L1705776-10 WG2228368 10x	0217_19	165497	69827	61667
L1705776-12 WG2228368 10x	0217_20	165379	71930	61037
L1705776-16 WG2228368 5x	0217_22	164066	72914	69665
L1705776-17 WG2228368 10x	0217_23	167644	68885	59335
L1705776-19 WG2228368 10x	0217_24	159083	67988	58704
L1705776-20 WG2228368 20x	0217_25	155534	67176	55885
MS R4035581-4 WG2228368 1x	0217_26	171094	78521	67647
MSD R4035581-5 WG2228368 1x	0217_27	171698	79067	67358
MS R4035581-6 WG2228368 1x	0217_28	172607	77609	71066
MSD R4035581-7 WG2228368 1x	0217_29	178632	79432	69181

³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

INTERNAL STANDARD SUMMARY

Instrument: VOCMS30 • File ID: 0217_27

¹Cp

02/17/24 20:15

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	0217_27	241910	125515	124898
Upper Limit		483820	251030	249796
Lower Limit		120955	62758	62449
LCS R4035528-1 WG2228641 1x	0217_27LCS	241910	125515	124898
LCSD R4035528-2 WG2228641 1x	0217_28	241632	123524	121913
BLANK R4035528-3 WG2228641 1x	0217_30	218894	111895	109016
L1705776-25 WG2228641 1x	0217_33	214964	109465	106702
L1705776-23 WG2228641 1x	0217_40	207761	105528	103053
L1705776-24 WG2228641 1x	0217_41	210866	105878	103752
L1705776-21 WG2228641 250x	0217_47	243158	125378	124335
L1705776-22 WG2228641 25x	0217_48	226908	115206	114749
MS R4035528-4 WG2228641 1x	0217_51	293553	134798	143816
MSD R4035528-5 WG2228641 1x	0217_52	262487	146770	130529

²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al

Instrument: VOCMS30 • File ID: 0219_14

¹⁰Sc

02/19/24 18:31

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	0219_14	252425	128569	128185
Upper Limit		504850	257138	256370
Lower Limit		126213	64285	64093
LCS R4035816-1 WG2229520 1x	0219_14LCSB	252425	128569	128185
LCSD R4035816-2 WG2229520 1x	0219_15B	254832	129414	126380
BLANK R4035816-3 WG2229520 1x	0219_17B	252006	120609	117134
L1705776-02 WG2229520 10x	0219_30	237841	143495	121905
L1705776-09 WG2229520 10x	0219_31	228466	125685	135152
L1705776-10 WG2229520 10x	0219_32	215773	121945	116025
L1705776-12 WG2229520 10x	0219_33	226221	122632	124867
L1705776-13 WG2229520 2500x	0219_34	215854	114014	115757
L1705776-14 WG2229520 20x	0219_35	244033	130363	125757
L1705776-15 WG2229520 1x	0219_36	227649	114226	115815
L1705776-16 WG2229520 5x	0219_37	246567	130636	126107
L1705776-17 WG2229520 10x	0219_38	221003	116042	116726
L1705776-18 WG2229520 1x	0219_39	253943	134458	124858
L1705776-19 WG2229520 10x	0219_40	218266	114755	113614

INTERNAL STANDARD SUMMARY

Instrument: VOCMS30 • File ID: 0219_14

02/19/24 18:31

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
L1705776-20 WG2229520 20x	0219_41	214621	114978	113634

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 0215A_03

02/15/24 20:57

Sample ID	File ID	8260-FLUOROBENZENE Response	
Standard	0215A_03	329629	¹ Cp
Upper Limit		659258	² Tc
Lower Limit		164815	³ Ss
LCS R4035347-1 WG2227341 1x	0215A_04	310737	⁴ Cn
LCSD R4035347-2 WG2227341 1x	0215A_05	315477	⁵ Sr
BLANK R4035347-3 WG2227341 1x	0215A_07	297814	⁶ Qc
L1705776-01 WG2227341 1x	0215A_21	316092	⁷ Is
L1705776-02 WG2227341 1x	0215A_22	332011	⁸ Gl
L1705776-03 WG2227341 1x	0215A_23	328428	⁹ Al
L1705776-04 WG2227341 1x	0215A_24	328059	
L1705776-05 WG2227341 1x	0215A_25	334712	
L1705776-06 WG2227341 1x	0215A_26	329664	
L1705776-07 WG2227341 1x	0215A_27	332564	
MS R4035347-4 WG2227341 1x	0215A_28	293066	
MSD R4035347-5 WG2227341 1x	0215A_29	313329	¹⁰ Sc

Instrument: VOCMS27 • File ID: 0220_03

02/20/24 10:32

Sample ID	File ID	8260-FLUOROBENZENE Response	
Standard	0220_03	344527	
Upper Limit		689054	
Lower Limit		172264	
LCS R4036334-1 WG2230157 1x	0220_04	320440	
LCSD R4036334-2 WG2230157 1x	0220_05	314803	
BLANK R4036334-3 WG2230157 1x	0220_07	292457	
L1705776-25 WG2230157 1x	0220_08	350811	
L1705776-08 WG2230157 1x	0220_09	330385	
L1705776-09 WG2230157 1x	0220_10	305544	
L1705776-10 WG2230157 1x	0220_11	327147	
L1705776-11 WG2230157 1x	0220_12	323713	
L1705776-12 WG2230157 1x	0220_13	330858	
L1705776-17 WG2230157 1x	0220_16	343497	
L1705776-18 WG2230157 1x	0220_17	322569	
L1705776-22 WG2230157 1x	0220_18	326896	

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 0220_03

02/20/24 10:32

Sample ID	File ID	8260-FLUOROBENZENE Response
L1705776-23 WG2230157 1x	0220_19	308527
L1705776-24 WG2230157 1x	0220_20	318609
L1705776-16 WG2230157 5x	0220_24	310905
L1705776-19 WG2230157 10x	0220_25	318869
MS R4036334-4 WG2230157 1x	0220_28	321121
MSD R4036334-5 WG2230157 1x	0220_29	300584
MS R4036334-6 WG2230157 1x	0220_30	307253
MSD R4036334-7 WG2230157 1x	0220_31	314153

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Instrument: VOCMS27 • File ID: 0221_03

02/21/24 11:35

Sample ID	File ID	8260-FLUOROBENZENE Response
Standard	0221_03	303435
Upper Limit		606870
Lower Limit		151718
LCS R4036886-1 WG2230690 1x	0221_04	295880
LCSD R4036886-2 WG2230690 1x	0221_05	287985
BLANK R4036886-3 WG2230690 1x	0221_07	280046
L1705776-14 WG2230690 1x	0221_11	310135
L1705776-15 WG2230690 1x	0221_12	304526
L1705776-20 WG2230690 1x	0221_13	307065
L1705776-13 WG2230690 20x	0221_15	307787

Instrument: VOCMS27 • File ID: 0222_02

02/22/24 11:18

Sample ID	File ID	8260-FLUOROBENZENE Response
Standard	0222_02	312476
Upper Limit		624952
Lower Limit		156238
LCS R4037174-1 WG2231600 1x	0222_03	318906

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 0222_02

02/22/24 11:18

Sample ID	File ID	8260-FLUOROBENZENE Response
LCSD R4037174-2 WG2231600 1x	0222_04	310746
BLANK R4037174-3 WG2231600 1x	0222_06	309059
L1705776-21 WG2231600 10x	0222_08	304679
MS R4037174-4 WG2231600 1x	0222_09	310642
MSD R4037174-5 WG2231600 1x	0222_10	322726

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.	1 Cp
RDL	Reported Detection Limit.	2 Tc
Rec.	Recovery.	3 Ss
RPD	Relative Percent Difference.	4 Cn
SDG	Sample Delivery Group.	5 Sr
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.	6 Qc
U	Not detected at the Reporting Limit (or MDL where applicable).	7 Is
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	8 Gl
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	9 Al
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	10 Sc
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier Description

E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
L1	The associated blank spike recovery was above laboratory acceptance limits.
L2	The associated blank spike recovery was below laboratory acceptance limits.
M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
R5	MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
R8	Sample RPD exceeded the method acceptance limit.
S10	Surrogate recovery was above laboratory and method acceptance limits.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

Company Name/Address: Pinyon Environmental 3222 S. Vance Street Suite 200 Lakewood, CO 80227			Billing Information: Accounts Payable 3222 S Vance Street Suite 200 Lakewood, CO 80227			Pres Chk	Analysis / Container / Preservative						Chain of Custody	Page 1 of 3																																																																																																																																																									
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Project Description: Nammo TTU Groundwater Monitoring			City/State Collected: Mesa, AZ		Please Circle: PT <input checked="" type="checkbox"/> MT <input type="checkbox"/> CT <input type="checkbox"/> ET																																																																																																																																																																		
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Sample ID		Comp/Grab	Matrix *	Depth	Date	Time																																																																																																																																																																	
<table border="1"> <thead> <tr> <th colspan="2">PERCHLORATE 125mlHDPE-NoPres</th> <th colspan="2">V8260AZ 40mlAmb+HCl</th> <th colspan="2">V8260LL14D 40mlAmb+HCl</th> <th colspan="2"></th> <th colspan="2"></th> <th colspan="2"></th> <th colspan="2"></th> </tr> </thead> <tbody> <tr><td>TTU-1-50-20240213</td><td>C</td><td>GW</td><td>50</td><td>2/13/24</td><td>1027</td><td>7</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td>-01</td></tr> <tr><td>TTU-2-114-20240213</td><td>C</td><td>GW</td><td>114</td><td>2/13/24</td><td>1101</td><td>7</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td>-02</td></tr> <tr><td>TTU-3-108-20240212</td><td>G</td><td>GW</td><td>108</td><td>2/12/24</td><td>1518</td><td>7</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td>-03</td></tr> <tr><td>TTU-4-57-20240213</td><td>G</td><td>GW</td><td>57</td><td>2/13/24</td><td>1528</td><td>7</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td>-04</td></tr> <tr><td>TTU-5-110-20240213</td><td>G</td><td>GW</td><td>110</td><td>2/13/24</td><td>1450</td><td>7</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td>-05</td></tr> <tr><td>TTU-6-143-20240212</td><td>G</td><td>GW</td><td>143</td><td>2/12/24</td><td>1458</td><td>7</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td>-06</td></tr> <tr><td>TTU-7-345-20240212</td><td>G</td><td>GW</td><td>345</td><td>2/12/24</td><td>1435</td><td>7</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td>-07</td></tr> <tr><td>TTU-8-</td><td></td><td>GW</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>TTU-9a-161-20240213</td><td>G</td><td>GW</td><td>61</td><td>2/13/24</td><td>0932</td><td>14</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td>MS/MSD 06</td></tr> <tr><td>TTU-10-</td><td></td><td>GW</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>														PERCHLORATE 125mlHDPE-NoPres		V8260AZ 40mlAmb+HCl		V8260LL14D 40mlAmb+HCl										TTU-1-50-20240213	C	GW	50	2/13/24	1027	7	X	X	X				-01	TTU-2-114-20240213	C	GW	114	2/13/24	1101	7	X	X	X				-02	TTU-3-108-20240212	G	GW	108	2/12/24	1518	7	X	X	X				-03	TTU-4-57-20240213	G	GW	57	2/13/24	1528	7	X	X	X				-04	TTU-5-110-20240213	G	GW	110	2/13/24	1450	7	X	X	X				-05	TTU-6-143-20240212	G	GW	143	2/12/24	1458	7	X	X	X				-06	TTU-7-345-20240212	G	GW	345	2/12/24	1435	7	X	X	X				-07	TTU-8-		GW												TTU-9a-161-20240213	G	GW	61	2/13/24	0932	14	X	X	X				MS/MSD 06	TTU-10-		GW											
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TTU-6-143-20240212	G	GW	143	2/12/24	1458	7	X	X	X				-06																																																																																																																																																										
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Relinquished by : (Signature) Isabella Foster		Date: 2/13/24	Time: 1556	Received by: (Signature) Maja		Trip Blank Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No HCl/MeoH TBR		Temp: °C		Bottles Received:	Sample Receipt Checklist																																																																																																																																																												
Relinquished by : (Signature) Maja		Date: 2/13/24	Time: 1658	Received by: (Signature) S. B. K.		Temp: °C		Bottles Received:		COC Seal Present/Intact: <input type="checkbox"/> NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N																																																																																																																																																													
Relinquished by : (Signature) Isabella Foster		Date: 2-13-24	Time: 1800	Received for lab by: (Signature) Isabella Foster		Date: 2/14/24	Time: 0800	Hold:		If preservation required by Login: Date/Time																																																																																																																																																													
										Condition: <input checked="" type="checkbox"/> NCF <input type="checkbox"/> OK																																																																																																																																																													

Company Name/Address: Pinyon Environmental 3222 S. Vance Street Suite 200 Lakewood, CO 80227		Billing Information: Accounts Payable 3222 S Vance Street Suite 200 Lakewood, CO 80227		Pres Chk	Analysis / Container / Preservative						Chain of Custody	Page <u>1</u> of <u>3</u>		
Report to: Isabella Foster and Andrew Parker		Email To: foster@pinyon-env.com; parker@pinyon-												
Project Description: Nammo TTU Groundwater Monitoring		City/State Collected: Mesa, AZ		Please Circle: PT <input checked="" type="checkbox"/> MT <input type="checkbox"/> CT <input type="checkbox"/> ET										
Phone: 303-785-7697		Client Project # 722152201.002		Lab Project # PINYONMAZ-722152201										
Collected by (print): Isabella Foster		Site/Facility ID #		P.O. #										
Collected by (signature): <i>Isabella Foster</i>		Rush? (Lab MUST Be Notified)		Quote #										
		<input type="checkbox"/> Same Day <input type="checkbox"/> Five Day												
		<input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only)												
		<input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only)												
		<input type="checkbox"/> Three Day												
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		Date Results Needed		Standard TAT		No. of Cntrs								
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time							Remarks	Sample # (lab only)
TTU-11-73-20240213		G	GW	73	2/13/24	1225	7	X	X	X				-09
TTU-12-82-20240212		G	GW	82	2/12/24	1055	7	X	X	X				-10
TTU-13-51-20240212		G	GW	51	2/12/24	0905	14	X	X	X				MS/MSD -11
TTU-14-64-20240212		G	GW	64	2/12/24	0935	7	X	X	X				-12
TTU-15-75-20240213		G	GW	75	2/13/24	1302	7	X	X	X				-13
TTU-16-80-20240213		G	GW	80	2/13/24	1325	7	X	X	X				-14
TTU-17-80-20240212		G	GW	80	2/12/24	1035	7	X	X	X				-15
TTU-19-73-20240213		G	GW	73	2/13/24	1200	7	X	X	X				-16
TTU-20-73-20240213		G	GW	73	2/13/24	1140	7	X	X	X				-17
TTU-E1-5-80-20240213		G	GW	80	2/13/24	1415	7	X	X	X				-18
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:								pH _____	Temp _____	Sample Receipt Checklist		
										Flow _____	Other _____	COC Seal Present/Intact: <input type="checkbox"/> NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
										COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
										Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
										Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
										Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
										If Applicable				
										VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
										Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
										RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
Relinquished by : (Signature) <i>Isabella Foster</i>		Date: 2/13/24	Time: 1556	Received by: (Signature) <i>Min</i>		Trip Blank Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		HCl / MeOH		TBR		If preservation required by Login: Date/Time		
Relinquished by : (Signature) <i>Min</i>		Date: 2/13/24	Time: 1658	Received by: (Signature) <i>Min</i>		Temp: °C		Bottles Received:						
Relinquished by : (Signature) <i>Min</i>		Date: 2/13/24	Time: 1800	Received for lab by: (Signature) <i>Min</i>		Date: 2/14/24		Time: 0800		Hold:		Condition: NCF / OK		

Company Name/Address: Pinyon Environmental 3222 S. Vance Street Suite 200 Lakewood, CO 80227		Billing Information: Accounts Payable 3222 S Vance Street Suite 200 Lakewood, CO 80227		Pres Chk	Analysis / Container / Preservative						Chain of Custody				
Report to: Isabella Foster and Andrew Parker		Email To: foster@pinyon-env.com;parker@pinyon-											Page 3 of 3		
Project Description: Nammo TTU Groundwater Monitoring		City/State Collected: Mesa, AZ		Please Circle: PT <input checked="" type="checkbox"/> MT <input type="checkbox"/> CT <input type="checkbox"/> ET							Pace PEOPLE ADVANCING SCIENCE				
Phone: 303-785-7697		Client Project # 722152201.002		Lab Project # PINYONMAZ-722152201								MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf			
Collected by (print): Isabella Foster		Site/Facility ID #		P.O. #								SDG # U1705776			
Collected by (signature): Isabella Foster		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #								Table #			
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				Date Results Needed Standard TAT								Acctnum: PINYONMAZ			
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs							Template: T205653	
TTU-EX-1-69-20240213		6	GW	69	2-13-24	1343	7	X X X	V8250AZ 40mlAmb-HCl	V8260LL14D 40mlAmb-HCl				-19	
TTU-EX-2-74-20240213		6	GW	74	2-13-24	1359	7	X X X						-20	
TTU-EX-3-76-20240212		6	GW	76	2-12-24	1100	7	X X X						-21	
TTU-EX-4-77-20240212		6	GW	77	2-12-24	1113	7	X X X						-22	
Dup-01		—	GW	—	—	—	7	X X X						-23	
Dup-02		—	GW	—	—	—	7	X X X						-24	
Trip Blank		—	GW	—	—	—	1	X X						-25	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:								pH _____	Temp _____	Sample Receipt Checklist			
										Flow _____	Other _____	COC Seal Present/Intact: <input type="checkbox"/> NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	COC Signed/Accurate: <input type="checkbox"/> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
												Bottles arrive intact: <input type="checkbox"/> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Correct bottles used: <input type="checkbox"/> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
												Sufficient volume sent: <input type="checkbox"/> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	If Applicable <input type="checkbox"/> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
												VOA Zero Headspace: <input type="checkbox"/> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Preservation Correct/Checked: <input type="checkbox"/> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
												RAD Screen <0.5 mR/hr: <input type="checkbox"/> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
Samples returned via: UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier _____		Tracking #												If preservation required by Login: Date/Time	
Relinquished by: (Signature) Isabella Foster		Date: 2/13/24	Time: 15550	Received by: (Signature) Min		Trip Blank Received: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> HCl <input type="checkbox"/> MeOH <input type="checkbox"/> TBR									
Relinquished by: (Signature) Min		Date: 2/13/24	Time: 1658	Received by: (Signature) Min		Temp: °C		Bottles Received:							
Relinquished by: (Signature) Min		Date: 2/13/24	Time: 1800	Received for Lab by: (Signature) Min		Date: 2/13/24		Time: 0800		Hold:		Condition: NCF / OK			

Tracking Numbers

SWA

SWR

DRAS 6.9 +0

DRAS 1.5 +0

Temperature

470576

Name

Date



ANALYTICAL REPORT

March 27, 2024

Revised Report

Pinyon Environmental

Sample Delivery Group: L1706682
Samples Received: 02/16/2024
Project Number: 722152201.002
Description: Nammo TTU

Report To: Isabella Foster and Andrew Parker
3222 S. Vance Street Suite 200
Lakewood, CO 80227

Entire Report Reviewed By:

Daphne Richards
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

TABLE OF CONTENTS

Cp: Cover Page	1	 ¹ Cp
Tc: Table of Contents	2	 ² Tc
Ss: Sample Summary	3	 ³ Ss
Cn: Case Narrative	4	 ⁴ Cn
Sr: Sample Results	5	 ⁵ Sr
PF-2-400-20240214 L1706682-01	5	 ⁶ Qc
TTU-8-164-20240214 L1706682-02	7	 ⁷ Is
TTU-10-172-20240214 L1706682-03	9	 ⁸ Gl
DUP-03 L1706682-04	11	 ⁹ Al
Qc: Quality Control Summary	13	 ¹⁰ Sc
Wet Chemistry by Method 314.0 Mod	13	
Volatile Organic Compounds (GC/MS) by Method 8260B	17	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	27	
Is: Internal Standard Summary	29	
Volatile Organic Compounds (GC/MS) by Method 8260B	29	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	30	
Gl: Glossary of Terms	31	
Al: Accreditations & Locations	32	
Sc: Sample Chain of Custody	33	

SAMPLE SUMMARY

PF-2-400-20240214 L1706682-01 GW				Collected by Isabella Foster	Collected date/time 02/14/24 15:00	Received date/time 02/16/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2230378	1	02/21/24 05:43	02/21/24 05:43	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2231965	1	02/25/24 15:16	02/25/24 15:16	JCP	Mt. Juliet, TN
TTU-8-164-20240214 L1706682-02 GW				Collected by Isabella Foster	Collected date/time 02/14/24 15:20	Received date/time 02/16/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2228553	1	03/01/24 05:36	03/01/24 05:36	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2230378	1	02/21/24 06:05	02/21/24 06:05	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2231221	1	02/22/24 05:29	02/22/24 05:29	ACG	Mt. Juliet, TN
TTU-10-172-20240214 L1706682-03 GW				Collected by Isabella Foster	Collected date/time 02/14/24 13:49	Received date/time 02/16/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2234696	1	03/03/24 22:32	03/03/24 22:32	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2230378	1	02/21/24 06:26	02/21/24 06:26	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2231221	1	02/22/24 05:51	02/22/24 05:51	ACG	Mt. Juliet, TN
DUP-03 L1706682-04 GW				Collected by Isabella Foster	Collected date/time 02/14/24 00:00	Received date/time 02/16/24 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2234696	1	03/03/24 23:00	03/03/24 23:00	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2230965	1	02/22/24 05:07	02/22/24 05:07	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2231221	1	02/22/24 06:13	02/22/24 06:13	ACG	Mt. Juliet, TN



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Daphne Richards
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

Report Revision History

Level II Report - Version 1: 03/07/24 09:14

Project Narrative

Sample description and project number update

Sample Delivery Group (SDG) Narrative

Insufficient sample volume to perform MS/MSD analyses per method QC requirements.

<u>Lab Sample ID</u> L1706682-04	<u>Project Sample ID</u> DUP-03	<u>Method</u> 8260B
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Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch	
Acetone	U		11.3	50.0	1	02/21/2024 05:43	WG2230378	¹ Cp
Acrolein	U		2.54	50.0	1	02/21/2024 05:43	WG2230378	² Tc
Acrylonitrile	U		0.671	10.0	1	02/21/2024 05:43	WG2230378	³ Ss
Benzene	U		0.0941	1.00	1	02/21/2024 05:43	WG2230378	⁴ Cn
Bromobenzene	U		0.118	1.00	1	02/21/2024 05:43	WG2230378	⁵ Sr
Bromodichloromethane	U		0.136	1.00	1	02/21/2024 05:43	WG2230378	⁶ Qc
Bromoform	U		0.129	1.00	1	02/21/2024 05:43	WG2230378	⁷ Is
Bromomethane	U		0.605	5.00	1	02/21/2024 05:43	WG2230378	⁸ Gl
1,3-Butadiene	U		0.299	2.00	1	02/21/2024 05:43	WG2230378	⁹ Al
n-Butylbenzene	U		0.157	1.00	1	02/21/2024 05:43	WG2230378	¹⁰ Sc
sec-Butylbenzene	U		0.125	1.00	1	02/21/2024 05:43	WG2230378	
tert-Butylbenzene	U		0.127	1.00	1	02/21/2024 05:43	WG2230378	
Carbon tetrachloride	U		0.128	1.00	1	02/21/2024 05:43	WG2230378	
Carbon disulfide	0.172	<u>B1 E4</u>	0.0962	1.00	1	02/21/2024 05:43	WG2230378	
Chlorobenzene	U		0.116	1.00	1	02/21/2024 05:43	WG2230378	
Chlorodibromomethane	U		0.140	1.00	1	02/21/2024 05:43	WG2230378	
Chloroethane	U		0.192	5.00	1	02/21/2024 05:43	WG2230378	
Chloroform	U		0.111	5.00	1	02/21/2024 05:43	WG2230378	
Chloromethane	U		0.960	2.50	1	02/21/2024 05:43	WG2230378	
Cyclohexane	U		0.188	1.00	1	02/21/2024 05:43	WG2230378	
2-Chlorotoluene	U		0.106	1.00	1	02/21/2024 05:43	WG2230378	
4-Chlorotoluene	U		0.114	1.00	1	02/21/2024 05:43	WG2230378	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/21/2024 05:43	WG2230378	
1,2-Dibromoethane	U		0.126	1.00	1	02/21/2024 05:43	WG2230378	
Dibromomethane	U		0.122	1.00	1	02/21/2024 05:43	WG2230378	
1,2-Dichlorobenzene	U		0.107	1.00	1	02/21/2024 05:43	WG2230378	
1,3-Dichlorobenzene	U		0.110	1.00	1	02/21/2024 05:43	WG2230378	
1,4-Dichlorobenzene	U		0.120	1.00	1	02/21/2024 05:43	WG2230378	
Dichlorodifluoromethane	U		0.374	5.00	1	02/21/2024 05:43	WG2230378	
1,1-Dichloroethane	U		0.100	1.00	1	02/21/2024 05:43	WG2230378	
1,2-Dichloroethane	U		0.0819	1.00	1	02/21/2024 05:43	WG2230378	
1,1-Dichloroethene	U		0.188	1.00	1	02/21/2024 05:43	WG2230378	
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/21/2024 05:43	WG2230378	
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/21/2024 05:43	WG2230378	
1,2-Dichloropropane	U		0.149	1.00	1	02/21/2024 05:43	WG2230378	
1,1-Dichloropropene	U		0.142	1.00	1	02/21/2024 05:43	WG2230378	
1,3-Dichloropropane	U		0.110	1.00	1	02/21/2024 05:43	WG2230378	
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/21/2024 05:43	WG2230378	
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/21/2024 05:43	WG2230378	
2,2-Dichloropropane	U		0.161	1.00	1	02/21/2024 05:43	WG2230378	
Dicyclopentadiene	U		0.253	1.00	1	02/21/2024 05:43	WG2230378	
Di-isopropyl ether	U	<u>M1</u>	0.105	1.00	1	02/21/2024 05:43	WG2230378	
Ethylbenzene	U		0.137	1.00	1	02/21/2024 05:43	WG2230378	
4-Ethyltoluene	U		0.208	1.00	1	02/21/2024 05:43	WG2230378	
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/21/2024 05:43	WG2230378	
n-Hexane	U		0.749	10.0	1	02/21/2024 05:43	WG2230378	
Isopropylbenzene	U		0.105	1.00	1	02/21/2024 05:43	WG2230378	
p-Isopropyltoluene	U		0.120	1.00	1	02/21/2024 05:43	WG2230378	
2-Butanone (MEK)	U		1.19	10.0	1	02/21/2024 05:43	WG2230378	
Methyl Cyclohexane	U		0.660	1.00	1	02/21/2024 05:43	WG2230378	
Methylene Chloride	U		0.430	5.00	1	02/21/2024 05:43	WG2230378	
4-Methyl-2-pentanone (MIBK)	U	<u>M1</u>	0.478	10.0	1	02/21/2024 05:43	WG2230378	
Methyl tert-butyl ether	U		0.101	1.00	1	02/21/2024 05:43	WG2230378	
Naphthalene	U		1.00	5.00	1	02/21/2024 05:43	WG2230378	
Propene	U		0.936	2.50	1	02/21/2024 05:43	WG2230378	
n-Propylbenzene	U		0.0993	1.00	1	02/21/2024 05:43	WG2230378	

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Styrene	U		0.118	1.00	1	02/21/2024 05:43	WG2230378
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	02/21/2024 05:43	WG2230378
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/21/2024 05:43	WG2230378
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/21/2024 05:43	WG2230378
Tetrachloroethene	U		0.300	1.00	1	02/21/2024 05:43	WG2230378
Toluene	U		0.278	1.00	1	02/21/2024 05:43	WG2230378
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/21/2024 05:43	WG2230378
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/21/2024 05:43	WG2230378
1,1,1-Trichloroethane	U		0.149	1.00	1	02/21/2024 05:43	WG2230378
1,1,2-Trichloroethane	U		0.158	1.00	1	02/21/2024 05:43	WG2230378
Trichloroethene	U		0.190	1.00	1	02/21/2024 05:43	WG2230378
Trichlorofluoromethane	U		0.160	5.00	1	02/21/2024 05:43	WG2230378
1,2,3-Trichloropropane	U		0.237	2.50	1	02/21/2024 05:43	WG2230378
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/21/2024 05:43	WG2230378
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/21/2024 05:43	WG2230378
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/21/2024 05:43	WG2230378
Vinyl chloride	U		0.234	1.00	1	02/21/2024 05:43	WG2230378
Xylenes, Total	U		0.174	3.00	1	02/21/2024 05:43	WG2230378
(S) Toluene-d8	114			80.0-120		02/21/2024 05:43	WG2230378
(S) 4-Bromofluorobenzene	107			77.0-126		02/21/2024 05:43	WG2230378
(S) 1,2-Dichloroethane-d4	124			70.0-130		02/21/2024 05:43	WG2230378

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/25/2024 15:16	WG2231965
(S) Toluene-d8	94.2			77.0-127		02/25/2024 15:16	WG2231965

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	03/01/2024 05:36	WG2228553

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/21/2024 06:05	WG2230378
Acrolein	U		2.54	50.0	1	02/21/2024 06:05	WG2230378
Acrylonitrile	U		0.671	10.0	1	02/21/2024 06:05	WG2230378
Benzene	U		0.0941	1.00	1	02/21/2024 06:05	WG2230378
Bromobenzene	U		0.118	1.00	1	02/21/2024 06:05	WG2230378
Bromodichloromethane	U		0.136	1.00	1	02/21/2024 06:05	WG2230378
Bromoform	U		0.129	1.00	1	02/21/2024 06:05	WG2230378
Bromomethane	U	R7	0.605	5.00	1	02/21/2024 06:05	WG2230378
1,3-Butadiene	U	R7	0.299	2.00	1	02/21/2024 06:05	WG2230378
n-Butylbenzene	U		0.157	1.00	1	02/21/2024 06:05	WG2230378
sec-Butylbenzene	U		0.125	1.00	1	02/21/2024 06:05	WG2230378
tert-Butylbenzene	U		0.127	1.00	1	02/21/2024 06:05	WG2230378
Carbon tetrachloride	U		0.128	1.00	1	02/21/2024 06:05	WG2230378
Carbon disulfide	0.186	B1 E4 R7	0.0962	1.00	1	02/21/2024 06:05	WG2230378
Chlorobenzene	U		0.116	1.00	1	02/21/2024 06:05	WG2230378
Chlorodibromomethane	U		0.140	1.00	1	02/21/2024 06:05	WG2230378
Chloroethane	U		0.192	5.00	1	02/21/2024 06:05	WG2230378
Chloroform	U		0.111	5.00	1	02/21/2024 06:05	WG2230378
Chloromethane	U	R7	0.960	2.50	1	02/21/2024 06:05	WG2230378
Cyclohexane	U		0.188	1.00	1	02/21/2024 06:05	WG2230378
2-Chlorotoluene	U		0.106	1.00	1	02/21/2024 06:05	WG2230378
4-Chlorotoluene	U		0.114	1.00	1	02/21/2024 06:05	WG2230378
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/21/2024 06:05	WG2230378
1,2-Dibromoethane	U		0.126	1.00	1	02/21/2024 06:05	WG2230378
Dibromomethane	U		0.122	1.00	1	02/21/2024 06:05	WG2230378
1,2-Dichlorobenzene	U		0.107	1.00	1	02/21/2024 06:05	WG2230378
1,3-Dichlorobenzene	U		0.110	1.00	1	02/21/2024 06:05	WG2230378
1,4-Dichlorobenzene	U		0.120	1.00	1	02/21/2024 06:05	WG2230378
Dichlorodifluoromethane	U	R7	0.374	5.00	1	02/21/2024 06:05	WG2230378
1,1-Dichloroethane	U		0.100	1.00	1	02/21/2024 06:05	WG2230378
1,2-Dichloroethane	U		0.0819	1.00	1	02/21/2024 06:05	WG2230378
1,1-Dichloroethene	U		0.188	1.00	1	02/21/2024 06:05	WG2230378
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/21/2024 06:05	WG2230378
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/21/2024 06:05	WG2230378
1,2-Dichloropropane	U		0.149	1.00	1	02/21/2024 06:05	WG2230378
1,1-Dichloropropene	U		0.142	1.00	1	02/21/2024 06:05	WG2230378
1,3-Dichloropropane	U		0.110	1.00	1	02/21/2024 06:05	WG2230378
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/21/2024 06:05	WG2230378
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/21/2024 06:05	WG2230378
2,2-Dichloropropane	U		0.161	1.00	1	02/21/2024 06:05	WG2230378
Dicyclopentadiene	U		0.253	1.00	1	02/21/2024 06:05	WG2230378
Di-isopropyl ether	U		0.105	1.00	1	02/21/2024 06:05	WG2230378
Ethylbenzene	U		0.137	1.00	1	02/21/2024 06:05	WG2230378
4-Ethyltoluene	U		0.208	1.00	1	02/21/2024 06:05	WG2230378
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/21/2024 06:05	WG2230378
n-Hexane	U		0.749	10.0	1	02/21/2024 06:05	WG2230378
Isopropylbenzene	U		0.105	1.00	1	02/21/2024 06:05	WG2230378
p-Isopropyltoluene	U		0.120	1.00	1	02/21/2024 06:05	WG2230378
2-Butanone (MEK)	U		1.19	10.0	1	02/21/2024 06:05	WG2230378
Methyl Cyclohexane	U		0.660	1.00	1	02/21/2024 06:05	WG2230378

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/21/2024 06:05	WG2230378
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/21/2024 06:05	WG2230378
Methyl tert-butyl ether	U		0.101	1.00	1	02/21/2024 06:05	WG2230378
Naphthalene	U		1.00	5.00	1	02/21/2024 06:05	WG2230378
Propene	U	R7	0.936	2.50	1	02/21/2024 06:05	WG2230378
n-Propylbenzene	U		0.0993	1.00	1	02/21/2024 06:05	WG2230378
Styrene	U		0.118	1.00	1	02/21/2024 06:05	WG2230378
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/21/2024 06:05	WG2230378
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/21/2024 06:05	WG2230378
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/21/2024 06:05	WG2230378
Tetrachloroethene	U		0.300	1.00	1	02/21/2024 06:05	WG2230378
Toluene	U		0.278	1.00	1	02/21/2024 06:05	WG2230378
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/21/2024 06:05	WG2230378
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/21/2024 06:05	WG2230378
1,1,1-Trichloroethane	U		0.149	1.00	1	02/21/2024 06:05	WG2230378
1,1,2-Trichloroethane	U		0.158	1.00	1	02/21/2024 06:05	WG2230378
Trichloroethene	U		0.190	1.00	1	02/21/2024 06:05	WG2230378
Trichlorofluoromethane	U		0.160	5.00	1	02/21/2024 06:05	WG2230378
1,2,3-Trichloropropane	U		0.237	2.50	1	02/21/2024 06:05	WG2230378
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/21/2024 06:05	WG2230378
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/21/2024 06:05	WG2230378
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/21/2024 06:05	WG2230378
Vinyl chloride	U		0.234	1.00	1	02/21/2024 06:05	WG2230378
Xylenes, Total	U		0.174	3.00	1	02/21/2024 06:05	WG2230378
(S) Toluene-d8	114			80.0-120		02/21/2024 06:05	WG2230378
(S) 4-Bromofluorobenzene	106			77.0-126		02/21/2024 06:05	WG2230378
(S) 1,2-Dichloroethane-d4	124			70.0-130		02/21/2024 06:05	WG2230378

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 ls
- 8 Gl
- 9 Al
- 10 Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/22/2024 05:29	WG2231221
(S) Toluene-d8	96.0			77.0-127		02/22/2024 05:29	WG2231221

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	U		0.300	4.00	1	03/03/2024 22:32	WG2234696

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		11.3	50.0	1	02/21/2024 06:26	WG2230378
Acrolein	U		2.54	50.0	1	02/21/2024 06:26	WG2230378
Acrylonitrile	U		0.671	10.0	1	02/21/2024 06:26	WG2230378
Benzene	U		0.0941	1.00	1	02/21/2024 06:26	WG2230378
Bromobenzene	U		0.118	1.00	1	02/21/2024 06:26	WG2230378
Bromodichloromethane	U		0.136	1.00	1	02/21/2024 06:26	WG2230378
Bromoform	U		0.129	1.00	1	02/21/2024 06:26	WG2230378
Bromomethane	U	R7	0.605	5.00	1	02/21/2024 06:26	WG2230378
1,3-Butadiene	U	R7	0.299	2.00	1	02/21/2024 06:26	WG2230378
n-Butylbenzene	U		0.157	1.00	1	02/21/2024 06:26	WG2230378
sec-Butylbenzene	U		0.125	1.00	1	02/21/2024 06:26	WG2230378
tert-Butylbenzene	U		0.127	1.00	1	02/21/2024 06:26	WG2230378
Carbon tetrachloride	U		0.128	1.00	1	02/21/2024 06:26	WG2230378
Carbon disulfide	0.170	B1 E4 R7	0.0962	1.00	1	02/21/2024 06:26	WG2230378
Chlorobenzene	U		0.116	1.00	1	02/21/2024 06:26	WG2230378
Chlorodibromomethane	U		0.140	1.00	1	02/21/2024 06:26	WG2230378
Chloroethane	U		0.192	5.00	1	02/21/2024 06:26	WG2230378
Chloroform	U		0.111	5.00	1	02/21/2024 06:26	WG2230378
Chloromethane	U	R7	0.960	2.50	1	02/21/2024 06:26	WG2230378
Cyclohexane	U		0.188	1.00	1	02/21/2024 06:26	WG2230378
2-Chlorotoluene	U		0.106	1.00	1	02/21/2024 06:26	WG2230378
4-Chlorotoluene	U		0.114	1.00	1	02/21/2024 06:26	WG2230378
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/21/2024 06:26	WG2230378
1,2-Dibromoethane	U		0.126	1.00	1	02/21/2024 06:26	WG2230378
Dibromomethane	U		0.122	1.00	1	02/21/2024 06:26	WG2230378
1,2-Dichlorobenzene	U		0.107	1.00	1	02/21/2024 06:26	WG2230378
1,3-Dichlorobenzene	U		0.110	1.00	1	02/21/2024 06:26	WG2230378
1,4-Dichlorobenzene	U		0.120	1.00	1	02/21/2024 06:26	WG2230378
Dichlorodifluoromethane	U	R7	0.374	5.00	1	02/21/2024 06:26	WG2230378
1,1-Dichloroethane	U		0.100	1.00	1	02/21/2024 06:26	WG2230378
1,2-Dichloroethane	U		0.0819	1.00	1	02/21/2024 06:26	WG2230378
1,1-Dichloroethene	U		0.188	1.00	1	02/21/2024 06:26	WG2230378
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/21/2024 06:26	WG2230378
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/21/2024 06:26	WG2230378
1,2-Dichloropropane	U		0.149	1.00	1	02/21/2024 06:26	WG2230378
1,1-Dichloropropene	U		0.142	1.00	1	02/21/2024 06:26	WG2230378
1,3-Dichloropropane	U		0.110	1.00	1	02/21/2024 06:26	WG2230378
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/21/2024 06:26	WG2230378
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/21/2024 06:26	WG2230378
2,2-Dichloropropane	U		0.161	1.00	1	02/21/2024 06:26	WG2230378
Dicyclopentadiene	U		0.253	1.00	1	02/21/2024 06:26	WG2230378
Di-isopropyl ether	U		0.105	1.00	1	02/21/2024 06:26	WG2230378
Ethylbenzene	U		0.137	1.00	1	02/21/2024 06:26	WG2230378
4-Ethyltoluene	U		0.208	1.00	1	02/21/2024 06:26	WG2230378
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/21/2024 06:26	WG2230378
n-Hexane	U		0.749	10.0	1	02/21/2024 06:26	WG2230378
Isopropylbenzene	U		0.105	1.00	1	02/21/2024 06:26	WG2230378
p-Isopropyltoluene	U		0.120	1.00	1	02/21/2024 06:26	WG2230378
2-Butanone (MEK)	U		1.19	10.0	1	02/21/2024 06:26	WG2230378
Methyl Cyclohexane	U		0.660	1.00	1	02/21/2024 06:26	WG2230378

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/21/2024 06:26	WG2230378
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/21/2024 06:26	WG2230378
Methyl tert-butyl ether	U		0.101	1.00	1	02/21/2024 06:26	WG2230378
Naphthalene	U		1.00	5.00	1	02/21/2024 06:26	WG2230378
Propene	U	R7	0.936	2.50	1	02/21/2024 06:26	WG2230378
n-Propylbenzene	U		0.0993	1.00	1	02/21/2024 06:26	WG2230378
Styrene	U		0.118	1.00	1	02/21/2024 06:26	WG2230378
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/21/2024 06:26	WG2230378
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/21/2024 06:26	WG2230378
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/21/2024 06:26	WG2230378
Tetrachloroethene	U		0.300	1.00	1	02/21/2024 06:26	WG2230378
Toluene	U		0.278	1.00	1	02/21/2024 06:26	WG2230378
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/21/2024 06:26	WG2230378
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/21/2024 06:26	WG2230378
1,1,1-Trichloroethane	U		0.149	1.00	1	02/21/2024 06:26	WG2230378
1,1,2-Trichloroethane	U		0.158	1.00	1	02/21/2024 06:26	WG2230378
Trichloroethene	U		0.190	1.00	1	02/21/2024 06:26	WG2230378
Trichlorofluoromethane	U		0.160	5.00	1	02/21/2024 06:26	WG2230378
1,2,3-Trichloropropane	U		0.237	2.50	1	02/21/2024 06:26	WG2230378
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/21/2024 06:26	WG2230378
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/21/2024 06:26	WG2230378
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/21/2024 06:26	WG2230378
Vinyl chloride	U		0.234	1.00	1	02/21/2024 06:26	WG2230378
Xylenes, Total	U		0.174	3.00	1	02/21/2024 06:26	WG2230378
(S) Toluene-d8	113			80.0-120		02/21/2024 06:26	WG2230378
(S) 4-Bromofluorobenzene	105			77.0-126		02/21/2024 06:26	WG2230378
(S) 1,2-Dichloroethane-d4	127			70.0-130		02/21/2024 06:26	WG2230378

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/22/2024 05:51	WG2231221
(S) Toluene-d8	95.8			77.0-127		02/22/2024 05:51	WG2231221

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	U		0.300	4.00	1	03/03/2024 23:00	WG2234696

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	02/22/2024 05:07	WG2230965
Acrolein	U	L1	2.54	50.0	1	02/22/2024 05:07	WG2230965
Acrylonitrile	U		0.671	10.0	1	02/22/2024 05:07	WG2230965
Benzene	U		0.0941	1.00	1	02/22/2024 05:07	WG2230965
Bromobenzene	U		0.118	1.00	1	02/22/2024 05:07	WG2230965
Bromodichloromethane	U		0.136	1.00	1	02/22/2024 05:07	WG2230965
Bromoform	U		0.129	1.00	1	02/22/2024 05:07	WG2230965
Bromomethane	U	R7	0.605	5.00	1	02/22/2024 05:07	WG2230965
1,3-Butadiene	U		0.299	2.00	1	02/22/2024 05:07	WG2230965
n-Butylbenzene	U		0.157	1.00	1	02/22/2024 05:07	WG2230965
sec-Butylbenzene	U		0.125	1.00	1	02/22/2024 05:07	WG2230965
tert-Butylbenzene	U		0.127	1.00	1	02/22/2024 05:07	WG2230965
Carbon tetrachloride	U		0.128	1.00	1	02/22/2024 05:07	WG2230965
Carbon disulfide	U		0.0962	1.00	1	02/22/2024 05:07	WG2230965
Chlorobenzene	U		0.116	1.00	1	02/22/2024 05:07	WG2230965
Chlorodibromomethane	U		0.140	1.00	1	02/22/2024 05:07	WG2230965
Chloroethane	U		0.192	5.00	1	02/22/2024 05:07	WG2230965
Chloroform	U		0.111	5.00	1	02/22/2024 05:07	WG2230965
Chloromethane	U		0.960	2.50	1	02/22/2024 05:07	WG2230965
Cyclohexane	U		0.188	1.00	1	02/22/2024 05:07	WG2230965
2-Chlorotoluene	U		0.106	1.00	1	02/22/2024 05:07	WG2230965
4-Chlorotoluene	U		0.114	1.00	1	02/22/2024 05:07	WG2230965
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	02/22/2024 05:07	WG2230965
1,2-Dibromoethane	U		0.126	1.00	1	02/22/2024 05:07	WG2230965
Dibromomethane	U		0.122	1.00	1	02/22/2024 05:07	WG2230965
1,2-Dichlorobenzene	U		0.107	1.00	1	02/22/2024 05:07	WG2230965
1,3-Dichlorobenzene	U		0.110	1.00	1	02/22/2024 05:07	WG2230965
1,4-Dichlorobenzene	U		0.120	1.00	1	02/22/2024 05:07	WG2230965
Dichlorodifluoromethane	U		0.374	5.00	1	02/22/2024 05:07	WG2230965
1,1-Dichloroethane	U		0.100	1.00	1	02/22/2024 05:07	WG2230965
1,2-Dichloroethane	U		0.0819	1.00	1	02/22/2024 05:07	WG2230965
1,1-Dichloroethene	U		0.188	1.00	1	02/22/2024 05:07	WG2230965
cis-1,2-Dichloroethene	U		0.126	1.00	1	02/22/2024 05:07	WG2230965
trans-1,2-Dichloroethene	U		0.149	1.00	1	02/22/2024 05:07	WG2230965
1,2-Dichloropropane	U		0.149	1.00	1	02/22/2024 05:07	WG2230965
1,1-Dichloropropene	U		0.142	1.00	1	02/22/2024 05:07	WG2230965
1,3-Dichloropropane	U		0.110	1.00	1	02/22/2024 05:07	WG2230965
cis-1,3-Dichloropropene	U		0.111	1.00	1	02/22/2024 05:07	WG2230965
trans-1,3-Dichloropropene	U		0.118	1.00	1	02/22/2024 05:07	WG2230965
2,2-Dichloropropane	U		0.161	1.00	1	02/22/2024 05:07	WG2230965
Dicyclopentadiene	U		0.253	1.00	1	02/22/2024 05:07	WG2230965
Di-isopropyl ether	U		0.105	1.00	1	02/22/2024 05:07	WG2230965
Ethylbenzene	U		0.137	1.00	1	02/22/2024 05:07	WG2230965
4-Ethyltoluene	U		0.208	1.00	1	02/22/2024 05:07	WG2230965
Hexachloro-1,3-butadiene	U		0.337	1.00	1	02/22/2024 05:07	WG2230965
n-Hexane	U		0.749	10.0	1	02/22/2024 05:07	WG2230965
Isopropylbenzene	U		0.105	1.00	1	02/22/2024 05:07	WG2230965
p-Isopropyltoluene	U		0.120	1.00	1	02/22/2024 05:07	WG2230965
2-Butanone (MEK)	U		1.19	10.0	1	02/22/2024 05:07	WG2230965
Methyl Cyclohexane	U		0.660	1.00	1	02/22/2024 05:07	WG2230965

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	02/22/2024 05:07	WG2230965
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	02/22/2024 05:07	WG2230965
Methyl tert-butyl ether	U		0.101	1.00	1	02/22/2024 05:07	WG2230965
Naphthalene	1.20	E4	1.00	5.00	1	02/22/2024 05:07	WG2230965
Propene	U		0.936	2.50	1	02/22/2024 05:07	WG2230965
n-Propylbenzene	U		0.0993	1.00	1	02/22/2024 05:07	WG2230965
Styrene	U		0.118	1.00	1	02/22/2024 05:07	WG2230965
1,1,1-Tetrachloroethane	U		0.147	1.00	1	02/22/2024 05:07	WG2230965
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	02/22/2024 05:07	WG2230965
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	02/22/2024 05:07	WG2230965
Tetrachloroethene	U		0.300	1.00	1	02/22/2024 05:07	WG2230965
Toluene	U		0.278	1.00	1	02/22/2024 05:07	WG2230965
1,2,3-Trichlorobenzene	U		0.230	1.00	1	02/22/2024 05:07	WG2230965
1,2,4-Trichlorobenzene	U		0.481	1.00	1	02/22/2024 05:07	WG2230965
1,1,1-Trichloroethane	U		0.149	1.00	1	02/22/2024 05:07	WG2230965
1,1,2-Trichloroethane	U		0.158	1.00	1	02/22/2024 05:07	WG2230965
Trichloroethene	U		0.190	1.00	1	02/22/2024 05:07	WG2230965
Trichlorofluoromethane	U		0.160	5.00	1	02/22/2024 05:07	WG2230965
1,2,3-Trichloropropane	U		0.237	2.50	1	02/22/2024 05:07	WG2230965
1,2,4-Trimethylbenzene	U		0.322	1.00	1	02/22/2024 05:07	WG2230965
1,2,3-Trimethylbenzene	U		0.104	1.00	1	02/22/2024 05:07	WG2230965
1,3,5-Trimethylbenzene	U		0.104	1.00	1	02/22/2024 05:07	WG2230965
Vinyl chloride	U		0.234	1.00	1	02/22/2024 05:07	WG2230965
Xylenes, Total	U		0.174	3.00	1	02/22/2024 05:07	WG2230965
(S) Toluene-d8	105			80.0-120		02/22/2024 05:07	WG2230965
(S) 4-Bromofluorobenzene	96.4			77.0-126		02/22/2024 05:07	WG2230965
(S) 1,2-Dichloroethane-d4	97.2			70.0-130		02/22/2024 05:07	WG2230965

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.597	3.00	1	02/22/2024 06:13	WG2231221
(S) Toluene-d8	96.1			77.0-127		02/22/2024 06:13	WG2231221

WG2228553

Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

L1706682-02

Method Blank (MB)

(MB) R4042116-1 02/29/24 13:52

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Method Blank (MB)

(MB) R4042116-2 02/29/24 14:50

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

Method Blank (MB)

(MB) R4042116-4 02/29/24 16:14

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

Method Blank (MB)

(MB) R4042116-14 03/01/24 10:15

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

L1706680-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1706680-03 03/01/24 00:29 • (DUP) R4042116-5 03/01/24 00:57

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Perchlorate	10100	12700	1000	22.6	<u>R8</u>	15

L1706680-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1706680-06 03/01/24 03:16 • (DUP) R4042116-6 03/01/24 03:44

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Perchlorate	5.54	5.53	1	0.255		15

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

13 of 33

QUALITY CONTROL SUMMARY

L1706682-02

Laboratory Control Sample (LCS)

(LCS) R4042116-3 02/29/24 15:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	9.65	96.5	90.0-110	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

L1706682-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1706682-02 03/01/24 05:36 • (MS) R4042116-7 03/01/24 06:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Perchlorate	10.0	U	10.2	102	1	80.0-120	

L1705776-23 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705776-23 02/29/24 18:06 • (MS) R4042116-8 03/01/24 06:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Perchlorate	10.0	U	7.94	79.4	1	80.0-120	<u>M2</u>

L1706680-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706680-03 03/01/24 00:29 • (MS) R4042116-9 03/01/24 07:00 • (MSD) R4042116-10 03/01/24 08:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits
Perchlorate	10.0	10100	20100	22600	99800	125000	1000	80.0-120	<u>M3</u>	<u>M3</u>	11.9	15

L1706680-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706680-06 03/01/24 03:16 • (MS) R4042116-11 03/01/24 08:51 • (MSD) R4042116-12 03/01/24 09:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits
Perchlorate	10.0	5.54	14.9	15.5	93.3	99.5	1	80.0-120			4.09	15

L1706680-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1706680-08 03/01/24 04:40 • (MS) R4042116-13 03/01/24 09:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Perchlorate	10.0	4.55	13.7	91.8	1	80.0-120	

WG2234696

Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

L1706682-03.04

Method Blank (MB)

(MB) R4042154-1 03/03/24 20:12

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Method Blank (MB)

(MB) R4042154-3 03/03/24 21:36

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

L1708086-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1708086-06 03/04/24 05:58 • (DUP) R4042154-4 03/04/24 07:22

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Perchlorate	U	U	1	0.000		15

L1708086-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1708086-07 03/04/24 08:46 • (DUP) R4042154-7 03/04/24 09:14

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Perchlorate	U	U	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R4042154-2 03/03/24 21:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	9.38	93.8	90.0-110	

L1708086-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1708086-06 03/04/24 05:58 • (MS) R4042154-5 03/04/24 07:50 • (MSD) R4042154-6 03/04/24 08:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Perchlorate	10.0	U	4.42	6.73	44.2	67.3	1	80.0-120	<u>M2</u>	<u>M2 R5</u>	41.4	15

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

15 of 33

QUALITY CONTROL SUMMARY

L1706682-03.04

L1708086-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1708086-06 03/04/24 05:58 • (MS) R4042154-5 03/04/24 07:50 • (MSD) R4042154-6 03/04/24 08:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
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Sample Narrative:

MS: spike failed due to sample matrix

MSD: spike failed due to sample matrix

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

L1708086-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1708086-07 03/04/24 08:46 • (MS) R4042154-8 03/04/24 09:42 • (MSD) R4042154-9 03/04/24 10:10

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Perchlorate	10.0	U	8.65	9.01	86.5	90.1	1	80.0-120			4.05	15

WG2230378

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1706682-01,02,03](#)

Method Blank (MB)

(MB) R4036492-4 02/20/24 22:46

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l	
Acetone	U		11.3	50.0	¹ Cp
Acrolein	U		2.54	50.0	² Tc
Acrylonitrile	U		0.671	10.0	³ Ss
Benzene	U		0.0941	1.00	⁴ Cn
Bromobenzene	U		0.118	1.00	⁵ Sr
Bromodichloromethane	U		0.136	1.00	
Bromoform	U		0.129	1.00	
Bromomethane	U		0.605	5.00	
1,3-Butadiene	U		0.299	2.00	
n-Butylbenzene	U		0.157	1.00	⁶ Qc
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	⁷ Is
Carbon tetrachloride	U		0.128	1.00	⁸ Gl
Carbon disulfide	0.156	^{E4}	0.0962	1.00	⁹ Al
Chlorobenzene	U		0.116	1.00	
Chlorodibromomethane	U		0.140	1.00	
Chloroethane	U		0.192	5.00	
Chloroform	U		0.111	5.00	
Chloromethane	U		0.960	2.50	
Cyclohexane	U		0.188	1.00	
2-Chlorotoluene	U		0.106	1.00	
4-Chlorotoluene	U		0.114	1.00	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	
1,2-Dibromoethane	U		0.126	1.00	
Dibromomethane	U		0.122	1.00	
1,2-Dichlorobenzene	U		0.107	1.00	
1,3-Dichlorobenzene	U		0.110	1.00	
1,4-Dichlorobenzene	U		0.120	1.00	
Dichlorodifluoromethane	U		0.374	5.00	
1,1-Dichloroethane	U		0.100	1.00	
1,2-Dichloroethane	U		0.0819	1.00	
1,1-Dichloroethene	U		0.188	1.00	
cis-1,2-Dichloroethene	U		0.126	1.00	
trans-1,2-Dichloroethene	U		0.149	1.00	
1,2-Dichloropropane	U		0.149	1.00	
1,1-Dichloropropene	U		0.142	1.00	
1,3-Dichloropropene	U		0.110	1.00	
cis-1,3-Dichloropropene	U		0.111	1.00	
trans-1,3-Dichloropropene	U		0.118	1.00	
2,2-Dichloropropane	U		0.161	1.00	¹⁰ Sc

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

17 of 33

WG2230378

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L1706682-01,02,03

Method Blank (MB)

(MB) R4036492-4 02/20/24 22:46

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Dicyclopentadiene	U		0.253	1.00	¹ Cp
Di-isopropyl ether	U		0.105	1.00	² Tc
Ethylbenzene	U		0.137	1.00	³ Ss
4-Ethyltoluene	U		0.208	1.00	⁴ Cn
Hexachloro-1,3-butadiene	U		0.337	1.00	⁵ Sr
n-Hexane	U		0.749	10.0	⁶ Qc
Isopropylbenzene	U		0.105	1.00	⁷ Is
p-Isopropyltoluene	U		0.120	1.00	⁸ Gl
2-Butanone (MEK)	U		1.19	10.0	⁹ Al
Methyl Cyclohexane	U		0.660	1.00	¹⁰ Sc
Methylene Chloride	U		0.430	5.00	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	
Methyl tert-butyl ether	U		0.101	1.00	
Naphthalene	U		1.00	5.00	
Propene	U		0.936	2.50	
n-Propylbenzene	U		0.0993	1.00	
Styrene	U		0.118	1.00	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	
Tetrachloroethene	U		0.300	1.00	
Toluene	U		0.278	1.00	
1,2,3-Trichlorobenzene	U		0.230	1.00	
1,2,4-Trichlorobenzene	U		0.481	1.00	
1,1,1-Trichloroethane	U		0.149	1.00	
1,1,2-Trichloroethane	U		0.158	1.00	
Trichloroethene	U		0.190	1.00	
Trichlorofluoromethane	U		0.160	5.00	
1,2,3-Trichloropropane	U		0.237	2.50	
1,2,4-Trimethylbenzene	U		0.322	1.00	
1,2,3-Trimethylbenzene	U		0.104	1.00	
1,3,5-Trimethylbenzene	U		0.104	1.00	
Vinyl chloride	U		0.234	1.00	
Xylenes, Total	U		0.174	3.00	
(S) Toluene-d8	111		80.0-120		
(S) 4-Bromofluorobenzene	105		77.0-126		
(S) 1,2-Dichloroethane-d4	122		70.0-130		

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

18 of 33

QUALITY CONTROL SUMMARY

L1706682-01,02,03

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4036492-1 02/20/24 21:20 • (LCSD) R4036492-2 02/20/24 21:42

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	25.0	21.5	16.4	86.0	65.6	19.0-160			26.9	27
Acrolein	25.0	21.8	24.6	87.2	98.4	30.0-160			12.1	26
Acrylonitrile	25.0	29.9	27.8	120	111	55.0-149			7.28	20
Benzene	5.00	4.64	4.62	92.8	92.4	70.0-123			0.432	20
Bromobenzene	5.00	4.53	4.47	90.6	89.4	73.0-121			1.33	20
Bromodichloromethane	5.00	4.64	4.28	92.8	85.6	75.0-120			8.07	20
Bromoform	5.00	3.73	3.49	74.6	69.8	68.0-132			6.65	20
Bromomethane	5.00	3.38	4.38	67.6	87.6	30.0-160	R7		25.8	25
1,3-Butadiene	5.00	3.74	4.78	74.8	95.6	45.0-147	R7		24.4	20
n-Butylbenzene	5.00	4.71	4.67	94.2	93.4	73.0-125			0.853	20
sec-Butylbenzene	5.00	4.58	4.33	91.6	86.6	75.0-125			5.61	20
tert-Butylbenzene	5.00	4.79	4.50	95.8	90.0	76.0-124			6.24	20
Carbon tetrachloride	5.00	4.84	4.78	96.8	95.6	68.0-126			1.25	20
Carbon disulfide	5.00	3.14	3.96	62.8	79.2	61.0-128	R7		23.1	20
Chlorobenzene	5.00	4.94	4.58	98.8	91.6	80.0-121			7.56	20
Chlorodibromomethane	5.00	4.38	4.00	87.6	80.0	77.0-125			9.07	20
Chloroethane	5.00	4.73	5.14	94.6	103	47.0-150			8.31	20
Chloroform	5.00	4.76	4.74	95.2	94.8	73.0-120			0.421	20
Chloromethane	5.00	3.85	4.96	77.0	99.2	41.0-142	R7		25.2	20
Cyclohexane	5.00	4.07	4.40	81.4	88.0	71.0-124			7.79	20
2-Chlorotoluene	5.00	4.64	4.38	92.8	87.6	76.0-123			5.76	20
4-Chlorotoluene	5.00	4.55	4.46	91.0	89.2	75.0-122			2.00	20
1,2-Dibromo-3-Chloropropane	5.00	3.27	3.05	65.4	61.0	58.0-134			6.96	20
1,2-Dibromoethane	5.00	4.42	4.41	88.4	88.2	80.0-122			0.227	20
Dibromomethane	5.00	4.50	4.37	90.0	87.4	80.0-120			2.93	20
1,2-Dichlorobenzene	5.00	4.82	4.56	96.4	91.2	79.0-121			5.54	20
1,3-Dichlorobenzene	5.00	4.94	4.68	98.8	93.6	79.0-120			5.41	20
1,4-Dichlorobenzene	5.00	4.85	4.78	97.0	95.6	79.0-120			1.45	20
Dichlorodifluoromethane	5.00	3.67	5.31	73.4	106	51.0-149	R7		36.5	20
1,1-Dichloroethane	5.00	5.30	4.98	106	99.6	70.0-126			6.23	20
1,2-Dichloroethane	5.00	5.19	5.28	104	106	70.0-128			1.72	20
1,1-Dichloroethene	5.00	4.17	4.28	83.4	85.6	71.0-124			2.60	20
cis-1,2-Dichloroethene	5.00	4.71	4.60	94.2	92.0	73.0-120			2.36	20
trans-1,2-Dichloroethene	5.00	4.39	4.46	87.8	89.2	73.0-120			1.58	20
1,2-Dichloropropane	5.00	5.40	5.26	108	105	77.0-125			2.63	20
1,1-Dichloropropene	5.00	4.72	4.76	94.4	95.2	74.0-126			0.844	20
1,3-Dichloropropane	5.00	4.92	4.75	98.4	95.0	80.0-120			3.52	20
cis-1,3-Dichloropropene	5.00	5.00	4.67	100	93.4	80.0-123			6.83	20
trans-1,3-Dichloropropene	5.00	5.05	4.79	101	95.8	78.0-124			5.28	20
2,2-Dichloropropane	5.00	5.21	4.79	104	95.8	58.0-130			8.40	20

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

19 of 33

WG2230378

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L1706682-01,02,03

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4036492-1 02/20/24 21:20 • (LCSD) R4036492-2 02/20/24 21:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Dicyclopentadiene	5.00	4.70	4.43	94.0	88.6	74.0-126			5.91	20
Di-isopropyl ether	5.00	6.38	6.08	128	122	58.0-138			4.82	20
Ethylbenzene	5.00	4.77	4.74	95.4	94.8	79.0-123			0.631	20
4-Ethyltoluene	5.00	4.75	4.51	95.0	90.2	74.0-127			5.18	20
Hexachloro-1,3-butadiene	5.00	4.38	4.22	87.6	84.4	54.0-138			3.72	20
n-Hexane	5.00	4.25	5.09	85.0	102	57.0-133			18.0	20
Isopropylbenzene	5.00	4.95	4.63	99.0	92.6	76.0-127			6.68	20
p-Isopropyltoluene	5.00	4.79	4.52	95.8	90.4	76.0-125			5.80	20
2-Butanone (MEK)	25.0	24.6	22.7	98.4	90.8	44.0-160			8.03	20
Methyl Cyclohexane	5.00	3.82	4.32	76.4	86.4	68.0-126			12.3	20
Methylene Chloride	5.00	4.96	4.34	99.2	86.8	67.0-120			13.3	20
4-Methyl-2-pentanone (MIBK)	25.0	32.5	30.7	130	123	68.0-142			5.70	20
Methyl tert-butyl ether	5.00	4.80	4.57	96.0	91.4	68.0-125			4.91	20
Naphthalene	5.00	2.99	2.88	59.8	57.6	54.0-135			3.75	20
Propene	5.00	2.38	4.23	47.6	84.6	30.0-160	R7		56.0	20
n-Propylbenzene	5.00	4.63	4.40	92.6	88.0	77.0-124			5.09	20
Styrene	5.00	4.65	4.30	93.0	86.0	73.0-130			7.82	20
1,1,1,2-Tetrachloroethane	5.00	4.68	4.38	93.6	87.6	75.0-125			6.62	20
1,1,2,2-Tetrachloroethane	5.00	4.37	4.38	87.4	87.6	65.0-130			0.229	20
1,1,2-Trichlorotrifluoroethane	5.00	4.61	4.75	92.2	95.0	69.0-132			2.99	20
Tetrachloroethene	5.00	4.92	4.88	98.4	97.6	72.0-132			0.816	20
Toluene	5.00	4.89	4.77	97.8	95.4	79.0-120			2.48	20
1,2,3-Trichlorobenzene	5.00	3.65	3.64	73.0	72.8	50.0-138			0.274	20
1,2,4-Trichlorobenzene	5.00	3.80	3.56	76.0	71.2	57.0-137			6.52	20
1,1,1-Trichloroethane	5.00	4.82	4.48	96.4	89.6	73.0-124			7.31	20
1,1,2-Trichloroethane	5.00	4.62	4.40	92.4	88.0	80.0-120			4.88	20
Trichloroethene	5.00	5.14	4.71	103	94.2	78.0-124			8.73	20
Trichlorofluoromethane	5.00	4.92	5.22	98.4	104	59.0-147			5.92	20
1,2,3-Trichloropropane	5.00	4.56	4.23	91.2	84.6	73.0-130			7.51	20
1,2,4-Trimethylbenzene	5.00	4.46	4.23	89.2	84.6	76.0-121			5.29	20
1,2,3-Trimethylbenzene	5.00	4.31	4.24	86.2	84.8	77.0-120			1.64	20
1,3,5-Trimethylbenzene	5.00	4.60	4.36	92.0	87.2	76.0-122			5.36	20
Vinyl chloride	5.00	4.42	5.20	88.4	104	67.0-131			16.2	20
Xylenes, Total	15.0	14.3	13.7	95.3	91.3	79.0-123			4.29	20
(S) Toluene-d8				111	111	80.0-120				
(S) 4-Bromofluorobenzene				105	105	77.0-126				
(S) 1,2-Dichloroethane-d4				124	126	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

QUALITY CONTROL SUMMARY

L1706682-01,02,03

L1706682-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706682-01 02/21/24 05:43 • (MS) R4036492-6 02/21/24 08:36 • (MSD) R4036492-7 02/21/24 08:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Acetone	25.0	U	21.5	21.9	86.0	87.6	1	10.0-160			1.84	35
Acrolein	25.0	U	34.9	34.1	140	136	1	10.0-160			2.32	39
Acrylonitrile	25.0	U	38.1	36.8	152	147	1	21.0-160			3.47	32
Benzene	5.00	U	6.15	5.84	123	117	1	17.0-158			5.17	27
Bromobenzene	5.00	U	5.98	5.67	120	113	1	30.0-149			5.32	28
Bromodichloromethane	5.00	U	5.66	5.73	113	115	1	31.0-150			1.23	27
Bromoform	5.00	U	4.73	4.23	94.6	84.6	1	29.0-150			11.2	29
Bromomethane	5.00	U	4.70	4.87	94.0	97.4	1	10.0-160			3.55	38
1,3-Butadiene	5.00	U	6.16	5.85	123	117	1	10.0-160			5.16	22
n-Butylbenzene	5.00	U	6.52	5.96	130	119	1	31.0-150			8.97	30
sec-Butylbenzene	5.00	U	6.30	6.03	126	121	1	33.0-155			4.38	29
tert-Butylbenzene	5.00	U	6.40	6.13	128	123	1	34.0-153			4.31	28
Carbon tetrachloride	5.00	U	6.40	6.16	128	123	1	23.0-159			3.82	28
Carbon disulfide	5.00	0.172	3.61	3.41	68.8	64.8	1	10.0-156			5.70	28
Chlorobenzene	5.00	U	6.14	6.07	123	121	1	33.0-152			1.15	27
Chlorodibromomethane	5.00	U	5.40	5.18	108	104	1	37.0-149			4.16	27
Chloroethane	5.00	U	6.23	5.90	125	118	1	10.0-160			5.44	30
Chloroform	5.00	U	5.94	5.90	119	118	1	29.0-154			0.676	28
Chloromethane	5.00	U	4.74	4.31	94.8	86.2	1	10.0-160			9.50	29
Cyclohexane	5.00	U	5.61	5.30	112	106	1	19.0-160			5.68	23
2-Chlorotoluene	5.00	U	6.24	5.86	125	117	1	32.0-153			6.28	28
4-Chlorotoluene	5.00	U	6.15	5.79	123	116	1	32.0-150			6.03	28
1,2-Dibromo-3-Chloropropane	5.00	U	4.34	4.21	86.8	84.2	1	22.0-151			3.04	34
1,2-Dibromoethane	5.00	U	5.65	5.36	113	107	1	34.0-147			5.27	27
Dibromomethane	5.00	U	5.60	5.54	112	111	1	30.0-151			1.08	27
1,2-Dichlorobenzene	5.00	U	6.44	6.16	129	123	1	34.0-149			4.44	28
1,3-Dichlorobenzene	5.00	U	6.49	6.19	130	124	1	36.0-146			4.73	27
1,4-Dichlorobenzene	5.00	U	6.54	6.21	131	124	1	35.0-142			5.18	27
Dichlorodifluoromethane	5.00	U	5.48	4.97	110	99.4	1	10.0-160			9.76	29
1,1-Dichloroethane	5.00	U	6.68	6.58	134	132	1	25.0-158			1.51	27
1,2-Dichloroethane	5.00	U	6.67	6.58	133	132	1	29.0-151			1.36	27
1,1-Dichloroethene	5.00	U	5.46	5.15	109	103	1	11.0-160			5.84	29
cis-1,2-Dichloroethene	5.00	U	5.96	5.86	119	117	1	10.0-160			1.69	27
trans-1,2-Dichloroethene	5.00	U	5.33	5.14	107	103	1	17.0-153			3.63	27
1,2-Dichloropropane	5.00	U	6.91	6.55	138	131	1	30.0-156			5.35	27
1,1-Dichloropropene	5.00	U	6.06	5.83	121	117	1	25.0-158			3.87	27
1,3-Dichloropropene	5.00	U	6.25	6.05	125	121	1	38.0-147			3.25	27
cis-1,3-Dichloropropene	5.00	U	5.94	5.66	119	113	1	34.0-149			4.83	28
trans-1,3-Dichloropropene	5.00	U	6.04	5.92	121	118	1	32.0-149			2.01	28
2,2-Dichloropropane	5.00	U	6.20	6.03	124	121	1	24.0-152			2.78	29

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1706682-01,02,03

L1706682-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706682-01 02/21/24 05:43 • (MS) R4036492-6 02/21/24 08:36 • (MSD) R4036492-7 02/21/24 08:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Dicyclopentadiene	5.00	U	6.01	5.77	120	115	1	51.0-139			4.07	20
Di-isopropyl ether	5.00	U	8.32	8.08	166	162	1	21.0-160	M1	M1	2.93	28
Ethylbenzene	5.00	U	6.42	6.16	128	123	1	30.0-155			4.13	27
4-Ethyltoluene	5.00	U	6.78	6.09	136	122	1	10.0-160			10.7	20
Hexachloro-1,3-butadiene	5.00	U	5.70	5.52	114	110	1	20.0-154			3.21	34
n-Hexane	5.00	U	5.45	5.28	109	106	1	10.0-153			3.17	28
Isopropylbenzene	5.00	U	6.52	6.36	130	127	1	28.0-157			2.48	27
p-Isopropyltoluene	5.00	U	6.53	6.05	131	121	1	30.0-154			7.63	29
2-Butanone (MEK)	25.0	U	31.2	30.5	125	122	1	10.0-160			2.27	32
Methyl Cyclohexane	5.00	U	5.41	5.16	108	103	1	11.0-160			4.73	24
Methylene Chloride	5.00	U	5.66	5.50	113	110	1	23.0-144			2.87	28
4-Methyl-2-pentanone (MIBK)	25.0	U	42.3	40.2	169	161	1	29.0-160	M1	M1	5.09	29
Methyl tert-butyl ether	5.00	U	6.16	6.04	123	121	1	28.0-150			1.97	29
Naphthalene	5.00	U	5.11	4.14	102	82.8	1	12.0-156			21.0	35
Propene	5.00	U	3.84	3.95	76.8	79.0	1	10.0-160			2.82	29
n-Propylbenzene	5.00	U	6.17	5.82	123	116	1	31.0-154			5.84	28
Styrene	5.00	U	6.00	5.73	120	115	1	33.0-155			4.60	28
1,1,1,2-Tetrachloroethane	5.00	U	6.00	5.70	120	114	1	36.0-151			5.13	29
1,1,2,2-Tetrachloroethane	5.00	U	5.81	5.67	116	113	1	33.0-150			2.44	28
1,1,2-Trichlorotrifluoroethane	5.00	U	6.48	6.13	130	123	1	23.0-160			5.55	30
Tetrachloroethene	5.00	U	6.33	6.11	127	122	1	10.0-160			3.54	27
Toluene	5.00	U	6.60	6.12	132	122	1	26.0-154			7.55	28
1,2,3-Trichlorobenzene	5.00	U	5.13	4.88	103	97.6	1	17.0-150			5.00	36
1,2,4-Trichlorobenzene	5.00	U	5.17	4.96	103	99.2	1	24.0-150			4.15	33
1,1,1-Trichloroethane	5.00	U	6.24	6.01	125	120	1	23.0-160			3.76	28
1,1,2-Trichloroethane	5.00	U	5.78	5.51	116	110	1	35.0-147			4.78	27
Trichloroethene	5.00	U	6.02	5.90	120	118	1	10.0-160			2.01	25
Trichlorofluoromethane	5.00	U	6.89	6.55	138	131	1	17.0-160			5.06	31
1,2,3-Trichloropropane	5.00	U	5.51	5.27	110	105	1	34.0-151			4.45	29
1,2,4-Trimethylbenzene	5.00	U	7.02	6.02	140	120	1	26.0-154			15.3	27
1,2,3-Trimethylbenzene	5.00	U	5.97	5.50	119	110	1	32.0-149			8.20	28
1,3,5-Trimethylbenzene	5.00	U	6.36	5.82	127	116	1	28.0-153			8.87	27
Vinyl chloride	5.00	U	6.24	5.92	125	118	1	10.0-160			5.26	27
Xylenes, Total	15.0	U	19.7	18.3	131	122	1	29.0-154			7.37	28
(S) Toluene-d8					107	108		80.0-120				
(S) 4-Bromofluorobenzene					106	108		77.0-126				
(S) 1,2-Dichloroethane-d4					124	125		70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2230965

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1706682-04](#)

Method Blank (MB)

(MB) R4036917-4 02/21/24 21:14

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Acetone	U		11.3	50.0	¹ Cp
Acrolein	U		2.54	50.0	² Tc
Acrylonitrile	U		0.671	10.0	³ Ss
Benzene	U		0.0941	1.00	⁴ Cn
Bromobenzene	U		0.118	1.00	⁵ Sr
Bromodichloromethane	U		0.136	1.00	
Bromoform	U		0.129	1.00	
Bromomethane	U		0.605	5.00	
1,3-Butadiene	U		0.299	2.00	
n-Butylbenzene	U		0.157	1.00	⁶ Qc
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	⁷ Is
Carbon tetrachloride	U		0.128	1.00	⁸ Gl
Carbon disulfide	U		0.0962	1.00	⁹ Al
Chlorobenzene	U		0.116	1.00	
Chlorodibromomethane	U		0.140	1.00	¹⁰ Sc
Chloroethane	U		0.192	5.00	
Chloroform	U		0.111	5.00	
Chloromethane	U		0.960	2.50	
Cyclohexane	U		0.188	1.00	
2-Chlorotoluene	U		0.106	1.00	
4-Chlorotoluene	U		0.114	1.00	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	
1,2-Dibromoethane	U		0.126	1.00	
Dibromomethane	U		0.122	1.00	
1,2-Dichlorobenzene	U		0.107	1.00	
1,3-Dichlorobenzene	U		0.110	1.00	
1,4-Dichlorobenzene	U		0.120	1.00	
Dichlorodifluoromethane	U		0.374	5.00	
1,1-Dichloroethane	U		0.100	1.00	
1,2-Dichloroethane	U		0.0819	1.00	
1,1-Dichloroethene	U		0.188	1.00	
cis-1,2-Dichloroethene	U		0.126	1.00	
trans-1,2-Dichloroethene	U		0.149	1.00	
1,2-Dichloropropane	U		0.149	1.00	
1,1-Dichloropropene	U		0.142	1.00	
1,3-Dichloropropene	U		0.110	1.00	
cis-1,3-Dichloropropene	U		0.111	1.00	
trans-1,3-Dichloropropene	U		0.118	1.00	
2,2-Dichloropropane	U		0.161	1.00	

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

23 of 33

WG2230965

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

[L1706682-04](#)

Method Blank (MB)

(MB) R4036917-4 02/21/24 21:14

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Dicyclopentadiene	U		0.253	1.00	¹ Cp
Di-isopropyl ether	U		0.105	1.00	² Tc
Ethylbenzene	U		0.137	1.00	³ Ss
4-Ethyltoluene	U		0.208	1.00	⁴ Cn
Hexachloro-1,3-butadiene	U		0.337	1.00	⁵ Sr
n-Hexane	U		0.749	10.0	⁶ Qc
Isopropylbenzene	U		0.105	1.00	⁷ Is
p-Isopropyltoluene	U		0.120	1.00	⁸ Gl
2-Butanone (MEK)	U		1.19	10.0	⁹ Al
Methyl Cyclohexane	U		0.660	1.00	¹⁰ Sc
Methylene Chloride	U		0.430	5.00	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	
Methyl tert-butyl ether	U		0.101	1.00	
Naphthalene	U		1.00	5.00	
Propene	U		0.936	2.50	
n-Propylbenzene	U		0.0993	1.00	
Styrene	U		0.118	1.00	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	
Tetrachloroethene	U		0.300	1.00	
Toluene	U		0.278	1.00	
1,2,3-Trichlorobenzene	U		0.230	1.00	
1,2,4-Trichlorobenzene	U		0.481	1.00	
1,1,1-Trichloroethane	U		0.149	1.00	
1,1,2-Trichloroethane	U		0.158	1.00	
Trichloroethene	U		0.190	1.00	
Trichlorofluoromethane	U		0.160	5.00	
1,2,3-Trichloropropane	U		0.237	2.50	
1,2,4-Trimethylbenzene	U		0.322	1.00	
1,2,3-Trimethylbenzene	U		0.104	1.00	
1,3,5-Trimethylbenzene	U		0.104	1.00	
Vinyl chloride	U		0.234	1.00	
Xylenes, Total	U		0.174	3.00	
(S) Toluene-d8	104		80.0-120		
(S) 4-Bromofluorobenzene	95.6		77.0-126		
(S) 1,2-Dichloroethane-d4	101		70.0-130		

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

24 of 33

QUALITY CONTROL SUMMARY

L1706682-04

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4036917-1 02/21/24 19:33 • (LCSD) R4036917-2 02/21/24 19:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	25.0	23.4	25.0	93.6	100	19.0-160			6.61	27
Acrolein	25.0	102	99.6	408	398	30.0-160	L1	L1	2.38	26
Acrylonitrile	25.0	25.3	27.3	101	109	55.0-149			7.60	20
Benzene	5.00	4.93	5.21	98.6	104	70.0-123			5.52	20
Bromobenzene	5.00	4.67	4.81	93.4	96.2	73.0-121			2.95	20
Bromodichloromethane	5.00	4.72	4.88	94.4	97.6	75.0-120			3.33	20
Bromoform	5.00	3.87	4.17	77.4	83.4	68.0-132			7.46	20
Bromomethane	5.00	3.34	4.42	66.8	88.4	30.0-160	R7		27.8	25
1,3-Butadiene	5.00	4.13	4.58	82.6	91.6	45.0-147			10.3	20
n-Butylbenzene	5.00	3.86	4.05	77.2	81.0	73.0-125			4.80	20
sec-Butylbenzene	5.00	4.46	4.63	89.2	92.6	75.0-125			3.74	20
tert-Butylbenzene	5.00	4.31	4.48	86.2	89.6	76.0-124			3.87	20
Carbon tetrachloride	5.00	4.69	5.42	93.8	108	68.0-126			14.4	20
Carbon disulfide	5.00	4.61	5.22	92.2	104	61.0-128			12.4	20
Chlorobenzene	5.00	4.42	4.68	88.4	93.6	80.0-121			5.71	20
Chlorodibromomethane	5.00	4.08	4.38	81.6	87.6	77.0-125			7.09	20
Chloroethane	5.00	5.13	5.38	103	108	47.0-150			4.76	20
Chloroform	5.00	4.98	5.12	99.6	102	73.0-120			2.77	20
Chloromethane	5.00	5.31	6.04	106	121	41.0-142			12.9	20
Cyclohexane	5.00	4.66	4.93	93.2	98.6	71.0-124			5.63	20
2-Chlorotoluene	5.00	4.65	4.88	93.0	97.6	76.0-123			4.83	20
4-Chlorotoluene	5.00	4.30	4.52	86.0	90.4	75.0-122			4.99	20
1,2-Dibromo-3-Chloropropane	5.00	3.62	3.84	72.4	76.8	58.0-134			5.90	20
1,2-Dibromoethane	5.00	4.39	4.52	87.8	90.4	80.0-122			2.92	20
Dibromomethane	5.00	4.72	5.03	94.4	101	80.0-120			6.36	20
1,2-Dichlorobenzene	5.00	4.39	4.54	87.8	90.8	79.0-121			3.36	20
1,3-Dichlorobenzene	5.00	4.35	4.49	87.0	89.8	79.0-120			3.17	20
1,4-Dichlorobenzene	5.00	4.35	4.55	87.0	91.0	79.0-120			4.49	20
Dichlorodifluoromethane	5.00	5.83	6.20	117	124	51.0-149			6.15	20
1,1-Dichloroethane	5.00	4.94	5.26	98.8	105	70.0-126			6.27	20
1,2-Dichloroethane	5.00	5.15	5.38	103	108	70.0-128			4.37	20
1,1-Dichloroethene	5.00	4.96	5.30	99.2	106	71.0-124			6.63	20
cis-1,2-Dichloroethene	5.00	4.63	5.04	92.6	101	73.0-120			8.48	20
trans-1,2-Dichloroethene	5.00	4.77	5.09	95.4	102	73.0-120			6.49	20
1,2-Dichloropropane	5.00	4.95	5.31	99.0	106	77.0-125			7.02	20
1,1-Dichloropropene	5.00	4.93	5.42	98.6	108	74.0-126			9.47	20
1,3-Dichloropropane	5.00	4.58	4.87	91.6	97.4	80.0-120			6.14	20
cis-1,3-Dichloropropene	5.00	4.60	4.85	92.0	97.0	80.0-123			5.29	20
trans-1,3-Dichloropropene	5.00	4.18	4.60	83.6	92.0	78.0-124			9.57	20
2,2-Dichloropropane	5.00	5.03	5.14	101	103	58.0-130			2.16	20

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2230965

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L1706682-04

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4036917-1 02/21/24 19:33 • (LCSD) R4036917-2 02/21/24 19:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Dicyclopentadiene	5.00	4.57	4.86	91.4	97.2	74.0-126			6.15	20
Di-isopropyl ether	5.00	4.90	5.17	98.0	103	58.0-138			5.36	20
Ethylbenzene	5.00	4.39	4.65	87.8	93.0	79.0-123			5.75	20
4-Ethyltoluene	5.00	4.39	4.53	87.8	90.6	74.0-127			3.14	20
Hexachloro-1,3-butadiene	5.00	4.31	4.50	86.2	90.0	54.0-138			4.31	20
n-Hexane	5.00	5.07	5.17	101	103	57.0-133			1.95	20
Isopropylbenzene	5.00	4.25	4.59	85.0	91.8	76.0-127			7.69	20
p-Isopropyltoluene	5.00	4.35	4.60	87.0	92.0	76.0-125			5.59	20
2-Butanone (MEK)	25.0	23.2	24.8	92.8	99.2	44.0-160			6.67	20
Methyl Cyclohexane	5.00	4.52	5.02	90.4	100	68.0-126			10.5	20
Methylene Chloride	5.00	4.98	5.16	99.6	103	67.0-120			3.55	20
4-Methyl-2-pentanone (MIBK)	25.0	24.2	25.7	96.8	103	68.0-142			6.01	20
Methyl tert-butyl ether	5.00	4.84	4.99	96.8	99.8	68.0-125			3.05	20
Naphthalene	5.00	3.36	3.84	67.2	76.8	54.0-135			13.3	20
Propene	5.00	3.26	3.79	65.2	75.8	30.0-160			15.0	20
n-Propylbenzene	5.00	4.51	4.79	90.2	95.8	77.0-124			6.02	20
Styrene	5.00	3.97	4.30	79.4	86.0	73.0-130			7.98	20
1,1,1,2-Tetrachloroethane	5.00	4.42	4.56	88.4	91.2	75.0-125			3.12	20
1,1,2,2-Tetrachloroethane	5.00	4.77	4.70	95.4	94.0	65.0-130			1.48	20
1,1,2-Trichlorotrifluoroethane	5.00	4.63	4.73	92.6	94.6	69.0-132			2.14	20
Tetrachloroethene	5.00	4.63	4.82	92.6	96.4	72.0-132			4.02	20
Toluene	5.00	4.43	4.73	88.6	94.6	79.0-120			6.55	20
1,2,3-Trichlorobenzene	5.00	4.35	5.12	87.0	102	50.0-138			16.3	20
1,2,4-Trichlorobenzene	5.00	4.11	4.51	82.2	90.2	57.0-137			9.28	20
1,1,1-Trichloroethane	5.00	4.97	5.28	99.4	106	73.0-124			6.05	20
1,1,2-Trichloroethane	5.00	4.64	4.85	92.8	97.0	80.0-120			4.43	20
Trichloroethene	5.00	4.66	5.31	93.2	106	78.0-124			13.0	20
Trichlorofluoromethane	5.00	5.21	5.47	104	109	59.0-147			4.87	20
1,2,3-Trichloropropane	5.00	4.66	4.89	93.2	97.8	73.0-130			4.82	20
1,2,4-Trimethylbenzene	5.00	4.27	4.47	85.4	89.4	76.0-121			4.58	20
1,2,3-Trimethylbenzene	5.00	4.45	4.63	89.0	92.6	77.0-120			3.96	20
1,3,5-Trimethylbenzene	5.00	4.43	4.60	88.6	92.0	76.0-122			3.77	20
Vinyl chloride	5.00	5.22	5.81	104	116	67.0-131			10.7	20
Xylenes, Total	15.0	12.6	13.5	84.0	90.0	79.0-123			6.90	20
(S) Toluene-d8				101	100	80.0-120				
(S) 4-Bromofluorobenzene				94.8	97.0	77.0-126				
(S) 1,2-Dichloroethane-d4				100	99.5	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2231221

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

QUALITY CONTROL SUMMARY

[L1706682-02,03,04](#)

Method Blank (MB)

(MB) R4037088-3 02/21/24 22:25

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	93.1			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4037088-1 02/21/24 21:20 • (LCSD) R4037088-2 02/21/24 21:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	45.5	43.9	91.0	87.8	55.0-138			3.58	24
(S) Toluene-d8				96.1	95.9	77.0-127				

L1706680-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706680-06 02/22/24 04:24 • (MS) R4037088-4 02/22/24 09:28 • (MSD) R4037088-5 02/22/24 09:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	U	37.5	48.3	75.0	96.6	1	13.0-160			25.2	31
(S) Toluene-d8					96.3	96.1		77.0-127				

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

27 of 33

WG2231965

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

QUALITY CONTROL SUMMARY

[L1706682-01](#)

Method Blank (MB)

(MB) R4038326-3 02/25/24 13:01

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	94.3			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4038326-1 02/25/24 11:56 • (LCSD) R4038326-2 02/25/24 12:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	45.3	44.0	90.6	88.0	55.0-138			2.91	24
(S) Toluene-d8			94.3	94.6	94.6	77.0-127				

L1706682-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706682-01 02/25/24 15:16 • (MS) R4038326-4 02/26/24 00:34 • (MSD) R4038326-5 02/26/24 00:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	50.0	U	39.2	43.1	78.4	86.2	1	13.0-160			9.48	31
(S) Toluene-d8				94.5	94.6	94.6		77.0-127				

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1706682

DATE/TIME:

03/27/24 17:26

PAGE:

28 of 33

INTERNAL STANDARD SUMMARY

Instrument: VOCMS23 • File ID: 0220_28

02/20/24 21:20

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	0220_28	451930	211496	200886
Upper Limit		903860	422992	401772
Lower Limit		225965	105748	100443
LCS R4036492-1 WG2230378 1x	0220_28LCSA	451930	211496	200886
LCSD R4036492-2 WG2230378 1x	0220_29A	461579	214257	202421
BLANK R4036492-4 WG2230378 1x	0220_32	454490	208042	189610
L1706682-01 WG2230378 1x	0220_50	411383	184436	179916
L1706682-02 WG2230378 1x	0220_51	394696	175771	167965
L1706682-03 WG2230378 1x	0220_52	392083	176422	165080
MS R4036492-6 WG2230378 1x	0220_58	457483	214925	204309
MSD R4036492-7 WG2230378 1x	0220_59	466129	220202	214877

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Instrument: VOCMS26 • File ID: 0221_34

02/21/24 19:33

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	0221_34	219583	106973	90711
Upper Limit		439166	213946	181422
Lower Limit		109792	53487	45356
LCS R4036917-1 WG2230965 1x	0221_34LCSA	219583	106973	90711
LCSD R4036917-2 WG2230965 1x	0221_35A	214492	104605	92123
BLANK R4036917-4 WG2230965 1x	0221_39	227009	106124	89131
L1706682-04 WG2230965 1x	0221_61	232976	108419	94516

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 0221_29

02/21/24 20:58

Sample ID	File ID	8260-FLUOROBENZENE Response	
Standard	0221_29	300793	¹ Cp
Upper Limit		601586	² Tc
Lower Limit		150397	³ Ss
LCS R4037088-1 WG2231221 1x	0221_30	304185	⁴ Cn
LCSD R4037088-2 WG2231221 1x	0221_31	309267	⁵ Sr
BLANK R4037088-3 WG2231221 1x	0221_33	292020	⁶ Qc
L1706682-02 WG2231221 1x	0221_45	314572	⁷ Is
L1706682-03 WG2231221 1x	0221_46	313268	⁸ Gl
L1706682-04 WG2231221 1x	0221_47	318978	⁹ Al
MS R4037088-4 WG2231221 1x	0221_56	312611	¹⁰ Sc
MSD R4037088-5 WG2231221 1x	0221_57	301721	

Instrument: VOCMS27 • File ID: 0225_03

02/25/24 11:35

Sample ID	File ID	8260-FLUOROBENZENE Response	
Standard	0225_03	311101	
Upper Limit		622202	
Lower Limit		155551	
LCS R4038326-1 WG2231965 1x	0225_04A	301989	
LCSD R4038326-2 WG2231965 1x	0225_05A	298077	
BLANK R4038326-3 WG2231965 1x	0225_07A	288668	
L1706682-01 WG2231965 1x	0225_10	296690	
MS R4038326-4 WG2231965 1x	0225_30	321017	
MSD R4038326-5 WG2231965 1x	0225_31	302706	

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.	1 Cp
RDL	Reported Detection Limit.	2 Tc
Rec.	Recovery.	3 Ss
RPD	Relative Percent Difference.	4 Cn
SDG	Sample Delivery Group.	5 Sr
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.	6 Qc
U	Not detected at the Reporting Limit (or MDL where applicable).	7 Is
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	8 Gl
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	9 Al
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	10 Sc
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier Description

B1	Target analyte detected in method blank at or above the method reporting limit.
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
L1	The associated blank spike recovery was above laboratory acceptance limits.
M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
R5	MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
R7	LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
R8	Sample RPD exceeded the method acceptance limit.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Is

⁸ Gl

⁹ Al

¹⁰ Sc

Company Name/Address:

Pinyon Environmental3222 S. Vance Street Suite 200
Lakewood, CO 80227

Billing Information:

Accounts Payable
3222 S Vance Street
Suite 200
Lakewood, CO 80227Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Report to:
Isabella Foster and Andrew ParkerEmail To: foster@pinyon-
env.com;parker@pinyon-Project Description:
Nammo WBO Groundwater MonitoringCity/State
Collected:

MESA, AZ

Please Circle:
PT MT CT ET

Phone: 303-785-7697

Client Project #
722152201Lab Project #
PINYONMAZ-722152201

Collected by (print):

Isabella Foster

Site/Facility ID #

P.O. #

Collected by (signature):

Isabella Foster

Rush? (Lab MUST Be Notified)

Quote #

Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Date Results Needed

STANDARD TAT

No.
of
CntrsImmediately
Packed on Ice N Y X

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cntrs

PF-2-400-20240214

C

GW

400

2-14-24

1500

12

7/14/24

X

X

* MS/MSD - 01

- 02

TU-8-164-20240214

G1

GW

164

2-14-24

1520

7

X

X

X

TU-10-172-20240214

G1

GW

172

2-14-24

1349

7

X

X

X

DUP-03

—

GW

—

—

—

7

X

X

X

Trip Blank

—

GW

—

—

—

—

1

- 02

- 03

- 04

- 05

* Matrix:

SS - Soil AIR - Air F - Filter

GW - Groundwater B - Bioassay

WW - WasteWATER

DW - Drinking Water

OT - Other _____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact: NP Y NCOC Signed/Accurate: Y NBottles arrive intact: Y NCorrect bottles used: Y NSufficient volume sent: Y N

If Applicable

VOA Zero Headspace: Y NPreservation Correct/Checked: Y NRAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)

Date:

2-15-24

0943

Time:

Received by: (Signature)

Isabella FosterTrip Blank Received: Yes No

HCl / MeOH

TBR

Relinquished by : (Signature)

Date:

2-15-24

1800

Time:

Received by: (Signature)

Isabella Foster

Temp: °C

0PA8 4.4+0:4.4

Bottles Received:

Relinquished by : (Signature)

Date:

2-16-24

Time:

Received for lab by: (Signature)

Bob Wolff

Date:

2-16-24

Time:

8:00

If preservation required by Login: Date/Time

Hold: _____

Condition:

NCF / OK

 PACE
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

 12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody
 constitutes acknowledgment and acceptance of the
 Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG # 1706682

B130

Acctnum: PINYONMAZ

Template: T205686

Prelogin: P1054555

PM: 288 - Daphne Richards

PB:

Shipped Via:

Remarks Sample # (lab only)

PUPAZ



ANALYTICAL REPORT

March 20, 2024

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Is

⁸Gl

⁹Al

¹⁰Sc

Pinyon Environmental

Sample Delivery Group: L1716428
Samples Received: 03/19/2024
Project Number: 722152201.002
Description: Nammo TTU Groundwater Monitoring

Report To: Isabella Foster and Andrew Parker
3222 S. Vance Street Suite 200
Lakewood, CO 80227

Entire Report Reviewed By:

Daphne Richards
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	² Tc
Ss: Sample Summary	3	³ Ss
Cn: Case Narrative	4	⁴ Cn
Sr: Sample Results	5	⁵ Sr
TTU-3-108-20240318 L1716428-01	5	
Qc: Quality Control Summary	6	⁶ Qc
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	6	
Is: Internal Standard Summary	7	⁷ Is
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	7	
Gl: Glossary of Terms	8	⁸ Gl
Al: Accreditations & Locations	9	⁹ Al
Sc: Sample Chain of Custody	10	¹⁰ Sc

SAMPLE SUMMARY

TTU-3-108-20240318 L1716428-01 GW		Collected by	Collected date/time	Received date/time
			03/18/24 14:22	03/19/24 09:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2249950	1	03/20/24 01:05	03/20/24 01:05

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ ls
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Daphne Richards
Project Manager

Sample Delivery Group (SDG) Narrative

Insufficient sample volume to perform MS/MSD analyses per method QC requirements.

Lab Sample ID	Project Sample ID	Method
L1716428-01	TTU-3-108-20240318	8260B-SIM

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ ls
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,4-Dioxane	U		0.597	3.00	1	03/20/2024 01:05	WG2249950	¹ Cp
(S) Toluene-d8	95.9			77.0-127		03/20/2024 01:05	WG2249950	² Tc ³ Ss ⁴ Cn ⁵ Sr ⁶ Qc ⁷ Is ⁸ Gl ⁹ Al ¹⁰ Sc

WG2249950

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

QUALITY CONTROL SUMMARY

[L1716428-01](#)

Method Blank (MB)

(MB) R4047904-3 03/20/24 00:30

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	96.5			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4047904-1 03/19/24 23:25 • (LCSD) R4047904-2 03/19/24 23:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits %
1,4-Dioxane	50.0	43.3	42.3	86.6	84.6	55.0-138			2.34	24
(S) Toluene-d8				96.4	96.4	77.0-127				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 0319_04

03/19/24 23:03

Sample ID	File ID	8260-FLUOROBENZENE Response
Standard	0319_04	347261
Upper Limit		694522
Lower Limit		173631
LCS R4047904-1 WG2249950 1x	0319_05	344162
LCSD R4047904-2 WG2249950 1x	0319_06	361034
BLANK R4047904-3 WG2249950 1x	0319_08	366776
L1716428-01 WG2249950 1x	0319_09	310130

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

GLOSSARY OF TERMS

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Abbreviations and Definitions

MDL	Method Detection Limit.	¹ Cp
RDL	Reported Detection Limit.	² Tc
Rec.	Recovery.	³ Ss
RPD	Relative Percent Difference.	⁴ Cn
SDG	Sample Delivery Group.	⁵ Sr
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.	⁶ Qc
U	Not detected at the Reporting Limit (or MDL where applicable).	⁷ Is
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	⁸ Gl
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	⁹ Al
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	¹⁰ Sc
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier	Description
The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.	

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Is

⁸ Gl

⁹ Al

¹⁰ Sc

Company Name/Address:

Pinyon Environmental3222 S. Vance Street Suite 200
Lakewood, CO 80227

Billing Information:

Accounts Payable
3222 S Vance Street
Suite 200
Lakewood, CO 80227

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Report to:
Isabella Foster and Andrew Parker

Email To: foster@pinyon-env.com;parker@pinyon-

Project Description:
Nammo TTU Groundwater MonitoringCity/State
Collected: **MESA, AZ**Please Circle:
 PT MT CT ETPhone: **303-785-7697**Client Project #
722152201.002Lab Project #
PINYONMAZ-722152201

Collected by (print):

Isabella Foster

Collected by (signature):

*clllllm 1/28***Rush?** (Lab MUST Be Notified) Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day

Date Results Needed

48 hoursNo.
of
Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

TTU-3-108-20240318**G****GW****108****3/18/24****1422****3****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW****GW**

* Matrix:
SS - Soil **AIR - Air** **F - Filter**
GW - Groundwater **B - Bioassay**
WW - WasteWater
DW - Drinking Water
OT - Other _____

Remarks:Samples returned via:
UPS **FedEx** **Courier** _____**Tracking #****pH** _____ **Temp** _____**Flow** _____ **Other** _____

Sample Receipt Checklist	
COC Seal Present/Intact:	NP <input checked="" type="checkbox"/> N <input type="checkbox"/>
COC Signed/Accurate:	<input checked="" type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> N
Sufficient volume sent:	If Applicable <input checked="" type="checkbox"/> N
VOA Zero Headspace:	Y <input type="checkbox"/> N
Preservation Correct/Checked:	<input checked="" type="checkbox"/> N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> N

Relinquished by: (Signature)
*clllllm 1/28*Date: **3-18-24** Time: **1523**Received by: (Signature)
*JM*Trip Blank Received: **Yes** **No**
HCL / MeOH
TBRRelinquished by: (Signature)
*JM*Date: **3-18-24** Time: **1800**Received by: (Signature)
*JM*Temp: **22.0 °C** Bottles Received: **3**Relinquished by: (Signature)
JM

Date: _____ Time: _____

Received for lab by: (Signature)
*Christopher Yellin*Date: **3/19/24** Time: **0945**Hold: _____ Condition: **NCF / OK**
MT JULIET, TN
 12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubs/pas-standard-terms.pdf>
SDG # **L171642****F052**Acctnum: **PINYONMAZ**Template: **T205653**Prelogin: **P1054553**PM: **288 - Daphne Richards**

PB:

Shipped Via:

Remarks _____ Sample # (lab only) _____



ANALYTICAL REPORT

April 15, 2024

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Is

⁸Gl

⁹Al

¹⁰Sc

Pinyon Environmental

Sample Delivery Group: L1724110
Samples Received: 04/10/2024
Project Number: 722152201.002
Description: Nammo TTU Groundwater

Report To: Andrew Parker
4815 E. Carefree Highway
#108-274
Cave Creek, AZ 85331

Entire Report Reviewed By:

Daphne Richards
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	² Tc
Ss: Sample Summary	3	³ Ss
Cn: Case Narrative	4	⁴ Cn
Sr: Sample Results	5	⁵ Sr
TTU-15-75-20240409 L1724110-01	5	
TTU-16-80-20240409 L1724110-02	7	
TRIP BLANK L1724110-03	9	
Qc: Quality Control Summary	11	⁶ Qc
Wet Chemistry by Method 314.0 Mod	11	
Volatile Organic Compounds (GC/MS) by Method 8260B	12	
Is: Internal Standard Summary	16	⁷ Is
Volatile Organic Compounds (GC/MS) by Method 8260B	16	
Gl: Glossary of Terms	17	⁸ Gl
Al: Accreditations & Locations	18	⁹ Al
Sc: Sample Chain of Custody	19	¹⁰ Sc

SAMPLE SUMMARY

TTU-15-75-20240409 L1724110-01 GW			Collected by Crissa Wolf	Collected date/time 04/09/24 10:46	Received date/time 04/10/24 09:15	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2264996	500	04/13/24 22:25	04/13/24 22:25	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2264870	20	04/11/24 19:17	04/11/24 19:17	DYW	Mt. Juliet, TN
TTU-16-80-20240409 L1724110-02 GW			Collected by Crissa Wolf	Collected date/time 04/09/24 10:26	Received date/time 04/10/24 09:15	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2264996	50000	04/13/24 23:24	04/13/24 23:24	ASM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2264870	2500	04/11/24 19:37	04/11/24 19:37	DYW	Mt. Juliet, TN
TRIP BLANK L1724110-03 GW			Collected by Crissa Wolf	Collected date/time 04/09/24 00:00	Received date/time 04/10/24 09:15	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2264870	1	04/11/24 15:51	04/11/24 15:51	DYW	Mt. Juliet, TN



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Daphne Richards
Project Manager

Sample Delivery Group (SDG) Narrative

Insufficient sample volume to perform MS/MSD analyses per method QC requirements.

Lab Sample ID	Project Sample ID	Method
L1724110-01	TTU-15-75-20240409	8260B
L1724110-02	TTU-16-80-20240409	8260B
L1724110-03	TRIP BLANK	8260B

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 ls
- 8 Gl
- 9 Al
- 10 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	11100		150	2000	500	04/13/2024 22:25	WG2264996

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		226	1000	20	04/11/2024 19:17	WG2264870
Acrolein	U		50.8	1000	20	04/11/2024 19:17	WG2264870
Acrylonitrile	U		13.4	200	20	04/11/2024 19:17	WG2264870
Benzene	U		1.88	20.0	20	04/11/2024 19:17	WG2264870
Bromobenzene	U		2.36	20.0	20	04/11/2024 19:17	WG2264870
Bromodichloromethane	U		2.72	20.0	20	04/11/2024 19:17	WG2264870
Bromoform	U		2.58	20.0	20	04/11/2024 19:17	WG2264870
Bromomethane	U		12.1	100	20	04/11/2024 19:17	WG2264870
1,3-Butadiene	U		5.98	40.0	20	04/11/2024 19:17	WG2264870
n-Butylbenzene	U		3.14	20.0	20	04/11/2024 19:17	WG2264870
sec-Butylbenzene	U		2.50	20.0	20	04/11/2024 19:17	WG2264870
tert-Butylbenzene	U		2.54	20.0	20	04/11/2024 19:17	WG2264870
Carbon tetrachloride	U		2.56	20.0	20	04/11/2024 19:17	WG2264870
Carbon disulfide	3.98	B1 E4	1.92	20.0	20	04/11/2024 19:17	WG2264870
Chlorobenzene	U		2.32	20.0	20	04/11/2024 19:17	WG2264870
Chlorodibromomethane	U		2.80	20.0	20	04/11/2024 19:17	WG2264870
Chloroethane	U		3.84	100	20	04/11/2024 19:17	WG2264870
Chloroform	U		2.22	100	20	04/11/2024 19:17	WG2264870
Chloromethane	U		19.2	50.0	20	04/11/2024 19:17	WG2264870
Cyclohexane	U		3.76	20.0	20	04/11/2024 19:17	WG2264870
2-Chlorotoluene	U		2.12	20.0	20	04/11/2024 19:17	WG2264870
4-Chlorotoluene	U		2.28	20.0	20	04/11/2024 19:17	WG2264870
1,2-Dibromo-3-Chloropropane	U		5.52	100	20	04/11/2024 19:17	WG2264870
1,2-Dibromoethane	U		2.52	20.0	20	04/11/2024 19:17	WG2264870
Dibromomethane	U		2.44	20.0	20	04/11/2024 19:17	WG2264870
1,2-Dichlorobenzene	U		2.14	20.0	20	04/11/2024 19:17	WG2264870
1,3-Dichlorobenzene	U		2.20	20.0	20	04/11/2024 19:17	WG2264870
1,4-Dichlorobenzene	U		2.40	20.0	20	04/11/2024 19:17	WG2264870
Dichlorodifluoromethane	U		7.48	100	20	04/11/2024 19:17	WG2264870
1,1-Dichloroethane	U		2.00	20.0	20	04/11/2024 19:17	WG2264870
1,2-Dichloroethane	U		1.64	20.0	20	04/11/2024 19:17	WG2264870
1,1-Dichloroethene	U		3.76	20.0	20	04/11/2024 19:17	WG2264870
cis-1,2-Dichloroethene	U		2.52	20.0	20	04/11/2024 19:17	WG2264870
trans-1,2-Dichloroethene	U		2.98	20.0	20	04/11/2024 19:17	WG2264870
1,2-Dichloropropane	U		2.98	20.0	20	04/11/2024 19:17	WG2264870
1,1-Dichloropropene	U		2.84	20.0	20	04/11/2024 19:17	WG2264870
1,3-Dichloropropane	U		2.20	20.0	20	04/11/2024 19:17	WG2264870
cis-1,3-Dichloropropene	U		2.22	20.0	20	04/11/2024 19:17	WG2264870
trans-1,3-Dichloropropene	U		2.36	20.0	20	04/11/2024 19:17	WG2264870
2,2-Dichloropropane	U		3.22	20.0	20	04/11/2024 19:17	WG2264870
Dicyclopentadiene	U		5.06	20.0	20	04/11/2024 19:17	WG2264870
Di-isopropyl ether	U		2.10	20.0	20	04/11/2024 19:17	WG2264870
Ethylbenzene	U		2.74	20.0	20	04/11/2024 19:17	WG2264870
4-Ethyltoluene	U		4.16	20.0	20	04/11/2024 19:17	WG2264870
Hexachloro-1,3-butadiene	U		6.74	20.0	20	04/11/2024 19:17	WG2264870
n-Hexane	U		15.0	200	20	04/11/2024 19:17	WG2264870
Isopropylbenzene	U		2.10	20.0	20	04/11/2024 19:17	WG2264870
p-Isopropyltoluene	U		2.40	20.0	20	04/11/2024 19:17	WG2264870
2-Butanone (MEK)	U		23.8	200	20	04/11/2024 19:17	WG2264870
Methyl Cyclohexane	U		13.2	20.0	20	04/11/2024 19:17	WG2264870

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		8.60	100	20	04/11/2024 19:17	WG2264870
4-Methyl-2-pentanone (MIBK)	U		9.56	200	20	04/11/2024 19:17	WG2264870
Methyl tert-butyl ether	U		2.02	20.0	20	04/11/2024 19:17	WG2264870
Naphthalene	U		20.0	100	20	04/11/2024 19:17	WG2264870
Propene	U		18.7	50.0	20	04/11/2024 19:17	WG2264870
n-Propylbenzene	U		1.99	20.0	20	04/11/2024 19:17	WG2264870
Styrene	U		2.36	20.0	20	04/11/2024 19:17	WG2264870
1,1,1,2-Tetrachloroethane	U		2.94	20.0	20	04/11/2024 19:17	WG2264870
1,1,2,2-Tetrachloroethane	U		2.66	20.0	20	04/11/2024 19:17	WG2264870
1,1,2-Trichlorotrifluoroethane	U		3.60	20.0	20	04/11/2024 19:17	WG2264870
Tetrachloroethene	U		6.00	20.0	20	04/11/2024 19:17	WG2264870
Toluene	U		5.56	20.0	20	04/11/2024 19:17	WG2264870
1,2,3-Trichlorobenzene	U		4.60	20.0	20	04/11/2024 19:17	WG2264870
1,2,4-Trichlorobenzene	U		9.62	20.0	20	04/11/2024 19:17	WG2264870
1,1,1-Trichloroethane	U		2.98	20.0	20	04/11/2024 19:17	WG2264870
1,1,2-Trichloroethane	U		3.16	20.0	20	04/11/2024 19:17	WG2264870
Trichloroethene	U		3.80	20.0	20	04/11/2024 19:17	WG2264870
Trichlorofluoromethane	U		3.20	100	20	04/11/2024 19:17	WG2264870
1,2,3-Trichloropropane	U		4.74	50.0	20	04/11/2024 19:17	WG2264870
1,2,4-Trimethylbenzene	U		6.44	20.0	20	04/11/2024 19:17	WG2264870
1,2,3-Trimethylbenzene	U		2.08	20.0	20	04/11/2024 19:17	WG2264870
1,3,5-Trimethylbenzene	U		2.08	20.0	20	04/11/2024 19:17	WG2264870
Vinyl chloride	U		4.68	20.0	20	04/11/2024 19:17	WG2264870
Xylenes, Total	U		3.48	60.0	20	04/11/2024 19:17	WG2264870
(S) Toluene-d8	108			80.0-120		04/11/2024 19:17	WG2264870
(S) 4-Bromofluorobenzene	94.1			77.0-126		04/11/2024 19:17	WG2264870
(S) 1,2-Dichloroethane-d4	86.3			70.0-130		04/11/2024 19:17	WG2264870

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Perchlorate	817000		15000	200000	50000	04/13/2024 23:24	WG2264996

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	<u>Qualifier</u>	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U		28200	125000	2500	04/11/2024 19:37	WG2264870
Acrolein	U		6350	125000	2500	04/11/2024 19:37	WG2264870
Acrylonitrile	U		1680	25000	2500	04/11/2024 19:37	WG2264870
Benzene	260	E4	235	2500	2500	04/11/2024 19:37	WG2264870
Bromobenzene	U		295	2500	2500	04/11/2024 19:37	WG2264870
Bromodichloromethane	U		340	2500	2500	04/11/2024 19:37	WG2264870
Bromoform	U		322	2500	2500	04/11/2024 19:37	WG2264870
Bromomethane	U		1510	12500	2500	04/11/2024 19:37	WG2264870
1,3-Butadiene	U		748	5000	2500	04/11/2024 19:37	WG2264870
n-Butylbenzene	U		393	2500	2500	04/11/2024 19:37	WG2264870
sec-Butylbenzene	U		313	2500	2500	04/11/2024 19:37	WG2264870
tert-Butylbenzene	U		318	2500	2500	04/11/2024 19:37	WG2264870
Carbon tetrachloride	U		320	2500	2500	04/11/2024 19:37	WG2264870
Carbon disulfide	494	B1 E4	241	2500	2500	04/11/2024 19:37	WG2264870
Chlorobenzene	U		290	2500	2500	04/11/2024 19:37	WG2264870
Chlorodibromomethane	U		350	2500	2500	04/11/2024 19:37	WG2264870
Chloroethane	U		480	12500	2500	04/11/2024 19:37	WG2264870
Chloroform	U		278	12500	2500	04/11/2024 19:37	WG2264870
Chloromethane	U		2400	6250	2500	04/11/2024 19:37	WG2264870
Cyclohexane	U		470	2500	2500	04/11/2024 19:37	WG2264870
2-Chlorotoluene	U		265	2500	2500	04/11/2024 19:37	WG2264870
4-Chlorotoluene	U		285	2500	2500	04/11/2024 19:37	WG2264870
1,2-Dibromo-3-Chloropropane	U		690	12500	2500	04/11/2024 19:37	WG2264870
1,2-Dibromoethane	U		315	2500	2500	04/11/2024 19:37	WG2264870
Dibromomethane	U		305	2500	2500	04/11/2024 19:37	WG2264870
1,2-Dichlorobenzene	U		268	2500	2500	04/11/2024 19:37	WG2264870
1,3-Dichlorobenzene	U		275	2500	2500	04/11/2024 19:37	WG2264870
1,4-Dichlorobenzene	U		300	2500	2500	04/11/2024 19:37	WG2264870
Dichlorodifluoromethane	U		935	12500	2500	04/11/2024 19:37	WG2264870
1,1-Dichloroethane	U		250	2500	2500	04/11/2024 19:37	WG2264870
1,2-Dichloroethane	U		205	2500	2500	04/11/2024 19:37	WG2264870
1,1-Dichloroethene	2440	E4	470	2500	2500	04/11/2024 19:37	WG2264870
cis-1,2-Dichloroethene	U		315	2500	2500	04/11/2024 19:37	WG2264870
trans-1,2-Dichloroethene	U		373	2500	2500	04/11/2024 19:37	WG2264870
1,2-Dichloropropane	U		373	2500	2500	04/11/2024 19:37	WG2264870
1,1-Dichloropropene	U		355	2500	2500	04/11/2024 19:37	WG2264870
1,3-Dichloropropane	U		275	2500	2500	04/11/2024 19:37	WG2264870
cis-1,3-Dichloropropene	U		278	2500	2500	04/11/2024 19:37	WG2264870
trans-1,3-Dichloropropene	U		295	2500	2500	04/11/2024 19:37	WG2264870
2,2-Dichloropropane	U		403	2500	2500	04/11/2024 19:37	WG2264870
Dicyclopentadiene	U		633	2500	2500	04/11/2024 19:37	WG2264870
Di-isopropyl ether	U		263	2500	2500	04/11/2024 19:37	WG2264870
Ethylbenzene	U		343	2500	2500	04/11/2024 19:37	WG2264870
4-Ethyltoluene	U		520	2500	2500	04/11/2024 19:37	WG2264870
Hexachloro-1,3-butadiene	U		843	2500	2500	04/11/2024 19:37	WG2264870
n-Hexane	U		1870	25000	2500	04/11/2024 19:37	WG2264870
Isopropylbenzene	U		263	2500	2500	04/11/2024 19:37	WG2264870
p-Isopropyltoluene	U		300	2500	2500	04/11/2024 19:37	WG2264870
2-Butanone (MEK)	U		2980	25000	2500	04/11/2024 19:37	WG2264870
Methyl Cyclohexane	U		1650	2500	2500	04/11/2024 19:37	WG2264870

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	52100		1080	12500	2500	04/11/2024 19:37	WG2264870
4-Methyl-2-pentanone (MIBK)	U		1200	25000	2500	04/11/2024 19:37	WG2264870
Methyl tert-butyl ether	U		253	2500	2500	04/11/2024 19:37	WG2264870
Naphthalene	U		2500	12500	2500	04/11/2024 19:37	WG2264870
Propene	U		2340	6250	2500	04/11/2024 19:37	WG2264870
n-Propylbenzene	U		248	2500	2500	04/11/2024 19:37	WG2264870
Styrene	U		295	2500	2500	04/11/2024 19:37	WG2264870
1,1,1,2-Tetrachloroethane	U		368	2500	2500	04/11/2024 19:37	WG2264870
1,1,2,2-Tetrachloroethane	U		333	2500	2500	04/11/2024 19:37	WG2264870
1,1,2-Trichlorotrifluoroethane	U		450	2500	2500	04/11/2024 19:37	WG2264870
Tetrachloroethene	U		750	2500	2500	04/11/2024 19:37	WG2264870
Toluene	U		695	2500	2500	04/11/2024 19:37	WG2264870
1,2,3-Trichlorobenzene	U		575	2500	2500	04/11/2024 19:37	WG2264870
1,2,4-Trichlorobenzene	U		1200	2500	2500	04/11/2024 19:37	WG2264870
1,1,1-Trichloroethane	U		373	2500	2500	04/11/2024 19:37	WG2264870
1,1,2-Trichloroethane	U		395	2500	2500	04/11/2024 19:37	WG2264870
Trichloroethene	68500		475	2500	2500	04/11/2024 19:37	WG2264870
Trichlorofluoromethane	U		400	12500	2500	04/11/2024 19:37	WG2264870
1,2,3-Trichloropropane	U		592	6250	2500	04/11/2024 19:37	WG2264870
1,2,4-Trimethylbenzene	U		805	2500	2500	04/11/2024 19:37	WG2264870
1,2,3-Trimethylbenzene	U		260	2500	2500	04/11/2024 19:37	WG2264870
1,3,5-Trimethylbenzene	U		260	2500	2500	04/11/2024 19:37	WG2264870
Vinyl chloride	U		585	2500	2500	04/11/2024 19:37	WG2264870
Xylenes, Total	U		435	7500	2500	04/11/2024 19:37	WG2264870
(S) Toluene-d8	110			80.0-120		04/11/2024 19:37	WG2264870
(S) 4-Bromofluorobenzene	96.3			77.0-126		04/11/2024 19:37	WG2264870
(S) 1,2-Dichloroethane-d4	85.4			70.0-130		04/11/2024 19:37	WG2264870

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	1 Cp
Acetone	U		11.3	50.0	1	04/11/2024 15:51	WG2264870	2 Tc
Acrolein	U		2.54	50.0	1	04/11/2024 15:51	WG2264870	3 Ss
Acrylonitrile	U		0.671	10.0	1	04/11/2024 15:51	WG2264870	4 Cn
Benzene	U		0.0941	1.00	1	04/11/2024 15:51	WG2264870	5 Sr
Bromobenzene	U		0.118	1.00	1	04/11/2024 15:51	WG2264870	6 Qc
Bromodichloromethane	U		0.136	1.00	1	04/11/2024 15:51	WG2264870	7 ls
Bromoform	U		0.129	1.00	1	04/11/2024 15:51	WG2264870	8 Gl
Bromomethane	U		0.605	5.00	1	04/11/2024 15:51	WG2264870	9 Al
1,3-Butadiene	U		0.299	2.00	1	04/11/2024 15:51	WG2264870	10 Sc
n-Butylbenzene	U		0.157	1.00	1	04/11/2024 15:51	WG2264870	
sec-Butylbenzene	U		0.125	1.00	1	04/11/2024 15:51	WG2264870	
tert-Butylbenzene	U		0.127	1.00	1	04/11/2024 15:51	WG2264870	
Carbon tetrachloride	U		0.128	1.00	1	04/11/2024 15:51	WG2264870	
Carbon disulfide	0.162	B1 E4	0.0962	1.00	1	04/11/2024 15:51	WG2264870	
Chlorobenzene	U		0.116	1.00	1	04/11/2024 15:51	WG2264870	
Chlorodibromomethane	U		0.140	1.00	1	04/11/2024 15:51	WG2264870	
Chloroethane	U		0.192	5.00	1	04/11/2024 15:51	WG2264870	
Chloroform	U		0.111	5.00	1	04/11/2024 15:51	WG2264870	
Chloromethane	U		0.960	2.50	1	04/11/2024 15:51	WG2264870	
Cyclohexane	U		0.188	1.00	1	04/11/2024 15:51	WG2264870	
2-Chlorotoluene	U		0.106	1.00	1	04/11/2024 15:51	WG2264870	
4-Chlorotoluene	U		0.114	1.00	1	04/11/2024 15:51	WG2264870	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/11/2024 15:51	WG2264870	
1,2-Dibromoethane	U		0.126	1.00	1	04/11/2024 15:51	WG2264870	
Dibromomethane	U		0.122	1.00	1	04/11/2024 15:51	WG2264870	
1,2-Dichlorobenzene	U		0.107	1.00	1	04/11/2024 15:51	WG2264870	
1,3-Dichlorobenzene	U		0.110	1.00	1	04/11/2024 15:51	WG2264870	
1,4-Dichlorobenzene	U		0.120	1.00	1	04/11/2024 15:51	WG2264870	
Dichlorodifluoromethane	U		0.374	5.00	1	04/11/2024 15:51	WG2264870	
1,1-Dichloroethane	U		0.100	1.00	1	04/11/2024 15:51	WG2264870	
1,2-Dichloroethane	U		0.0819	1.00	1	04/11/2024 15:51	WG2264870	
1,1-Dichloroethene	U		0.188	1.00	1	04/11/2024 15:51	WG2264870	
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/11/2024 15:51	WG2264870	
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/11/2024 15:51	WG2264870	
1,2-Dichloropropane	U		0.149	1.00	1	04/11/2024 15:51	WG2264870	
1,1-Dichloropropene	U		0.142	1.00	1	04/11/2024 15:51	WG2264870	
1,3-Dichloropropane	U		0.110	1.00	1	04/11/2024 15:51	WG2264870	
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/11/2024 15:51	WG2264870	
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/11/2024 15:51	WG2264870	
2,2-Dichloropropane	U		0.161	1.00	1	04/11/2024 15:51	WG2264870	
Dicyclopentadiene	U		0.253	1.00	1	04/11/2024 15:51	WG2264870	
Di-isopropyl ether	U		0.105	1.00	1	04/11/2024 15:51	WG2264870	
Ethylbenzene	U		0.137	1.00	1	04/11/2024 15:51	WG2264870	
4-Ethyltoluene	U		0.208	1.00	1	04/11/2024 15:51	WG2264870	
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/11/2024 15:51	WG2264870	
n-Hexane	U		0.749	10.0	1	04/11/2024 15:51	WG2264870	
Isopropylbenzene	U		0.105	1.00	1	04/11/2024 15:51	WG2264870	
p-Isopropyltoluene	U		0.120	1.00	1	04/11/2024 15:51	WG2264870	
2-Butanone (MEK)	U		1.19	10.0	1	04/11/2024 15:51	WG2264870	
Methyl Cyclohexane	U		0.660	1.00	1	04/11/2024 15:51	WG2264870	
Methylene Chloride	U		0.430	5.00	1	04/11/2024 15:51	WG2264870	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/11/2024 15:51	WG2264870	
Methyl tert-butyl ether	U		0.101	1.00	1	04/11/2024 15:51	WG2264870	
Naphthalene	U		1.00	5.00	1	04/11/2024 15:51	WG2264870	
Propene	U		0.936	2.50	1	04/11/2024 15:51	WG2264870	
n-Propylbenzene	U		0.0993	1.00	1	04/11/2024 15:51	WG2264870	

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Styrene	U		0.118	1.00	1	04/11/2024 15:51	WG2264870	¹ Cp
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/11/2024 15:51	WG2264870	² Tc
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/11/2024 15:51	WG2264870	³ Ss
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/11/2024 15:51	WG2264870	
Tetrachloroethene	U		0.300	1.00	1	04/11/2024 15:51	WG2264870	⁴ Cn
Toluene	U		0.278	1.00	1	04/11/2024 15:51	WG2264870	⁵ Sr
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/11/2024 15:51	WG2264870	⁶ Qc
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/11/2024 15:51	WG2264870	⁷ Is
1,1,1-Trichloroethane	U		0.149	1.00	1	04/11/2024 15:51	WG2264870	
1,1,2-Trichloroethane	U		0.158	1.00	1	04/11/2024 15:51	WG2264870	⁸ Gl
Trichloroethene	U		0.190	1.00	1	04/11/2024 15:51	WG2264870	⁹ Al
Trichlorofluoromethane	U		0.160	5.00	1	04/11/2024 15:51	WG2264870	
1,2,3-Trichloropropane	U		0.237	2.50	1	04/11/2024 15:51	WG2264870	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/11/2024 15:51	WG2264870	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/11/2024 15:51	WG2264870	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/11/2024 15:51	WG2264870	
Vinyl chloride	U		0.234	1.00	1	04/11/2024 15:51	WG2264870	
Xylenes, Total	U		0.174	3.00	1	04/11/2024 15:51	WG2264870	
(S) Toluene-d8	108			80.0-120		04/11/2024 15:51	WG2264870	
(S) 4-Bromofluorobenzene	93.6			77.0-126		04/11/2024 15:51	WG2264870	
(S) 1,2-Dichloroethane-d4	86.9			70.0-130		04/11/2024 15:51	WG2264870	¹⁰ Sc

QUALITY CONTROL SUMMARY

[L1724110-01,02](#)

Method Blank (MB)

(MB) R4057423-1 04/13/24 20:11

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

L1724110-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1724110-01 04/13/24 22:25 • (DUP) R4057423-3 04/13/24 22:56

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Perchlorate	11100	10700	500	3.96		15

Laboratory Control Sample (LCS)

(LCS) R4057423-2 04/13/24 21:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	11.0	110	90.0-110	

⁷Is⁸Gl⁹Al

L1724110-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1724110-02 04/13/24 23:24 • (MS) R4057423-4 04/13/24 23:53 • (MSD) R4057423-5 04/14/24 00:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Perchlorate	500000	817000	1330000	1270000	103	90.5	50000	80.0-120			4.63	15

WG2264870

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L1724110-01,02,03

Method Blank (MB)

(MB) R4056937-4 04/11/24 10:10

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	1 ¹ Cp
Acetone	U		11.3	50.0	
Acrolein	U		2.54	50.0	
Acrylonitrile	U		0.671	10.0	
Benzene	U		0.0941	1.00	
Bromobenzene	U		0.118	1.00	
Bromodichloromethane	U		0.136	1.00	
Bromoform	U		0.129	1.00	
Bromomethane	U		0.605	5.00	
1,3-Butadiene	U		0.299	2.00	
n-Butylbenzene	U		0.157	1.00	
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	
Carbon tetrachloride	U		0.128	1.00	
Carbon disulfide	0.224	E4	0.0962	1.00	
Chlorobenzene	U		0.116	1.00	
Chlorodibromomethane	U		0.140	1.00	
Chloroethane	U		0.192	5.00	
Chloroform	U		0.111	5.00	
Chloromethane	U		0.960	2.50	
Cyclohexane	U		0.188	1.00	
2-Chlorotoluene	U		0.106	1.00	
4-Chlorotoluene	U		0.114	1.00	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	
1,2-Dibromoethane	U		0.126	1.00	
Dibromomethane	U		0.122	1.00	
1,2-Dichlorobenzene	U		0.107	1.00	
1,3-Dichlorobenzene	U		0.110	1.00	
1,4-Dichlorobenzene	U		0.120	1.00	
Dichlorodifluoromethane	U		0.374	5.00	
1,1-Dichloroethane	U		0.100	1.00	
1,2-Dichloroethane	U		0.0819	1.00	
1,1-Dichloroethene	U		0.188	1.00	
cis-1,2-Dichloroethene	U		0.126	1.00	
trans-1,2-Dichloroethene	U		0.149	1.00	
1,2-Dichloropropane	U		0.149	1.00	
1,1-Dichloropropene	U		0.142	1.00	
1,3-Dichloropropene	U		0.110	1.00	
cis-1,3-Dichloropropene	U		0.111	1.00	
trans-1,3-Dichloropropene	U		0.118	1.00	
2,2-Dichloropropane	U		0.161	1.00	

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1724110

DATE/TIME:

04/15/24 10:08

PAGE:

12 of 19

WG2264870

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L1724110-01,02,03

Method Blank (MB)

(MB) R4056937-4 04/11/24 10:10

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Dicyclopentadiene	U		0.253	1.00	¹ Cp
Di-isopropyl ether	U		0.105	1.00	² Tc
Ethylbenzene	U		0.137	1.00	³ Ss
4-Ethyltoluene	U		0.208	1.00	⁴ Cn
Hexachloro-1,3-butadiene	U		0.337	1.00	⁵ Sr
n-Hexane	U		0.749	10.0	⁶ Qc
Isopropylbenzene	U		0.105	1.00	⁷ Is
p-Isopropyltoluene	U		0.120	1.00	⁸ Gl
2-Butanone (MEK)	U		1.19	10.0	⁹ Al
Methyl Cyclohexane	U		0.660	1.00	¹⁰ Sc
Methylene Chloride	U		0.430	5.00	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	
Methyl tert-butyl ether	U		0.101	1.00	
Naphthalene	U		1.00	5.00	
Propene	U		0.936	2.50	
n-Propylbenzene	U		0.0993	1.00	
Styrene	U		0.118	1.00	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	
1,1,2,2-Tetrachloroethane	U		0.133	1.00	
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	
Tetrachloroethene	U		0.300	1.00	
Toluene	U		0.278	1.00	
1,2,3-Trichlorobenzene	U		0.230	1.00	
1,2,4-Trichlorobenzene	U		0.481	1.00	
1,1,1-Trichloroethane	U		0.149	1.00	
1,1,2-Trichloroethane	U		0.158	1.00	
Trichloroethene	U		0.190	1.00	
Trichlorofluoromethane	U		0.160	5.00	
1,2,3-Trichloropropane	U		0.237	2.50	
1,2,4-Trimethylbenzene	U		0.322	1.00	
1,2,3-Trimethylbenzene	U		0.104	1.00	
1,3,5-Trimethylbenzene	U		0.104	1.00	
Vinyl chloride	U		0.234	1.00	
Xylenes, Total	U		0.174	3.00	
(S) Toluene-d8	108		80.0-120		
(S) 4-Bromofluorobenzene	93.3		77.0-126		
(S) 1,2-Dichloroethane-d4	86.3		70.0-130		

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1724110

DATE/TIME:

04/15/24 10:08

PAGE:

13 of 19

WG2264870

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L1724110-01,02,03

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4056937-1 04/11/24 08:48 • (LCSD) R4056937-2 04/11/24 09:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	23.5	21.8	94.0	87.2	19.0-160			7.51	27
Acrolein	25.0	15.9	15.8	63.6	63.2	30.0-160			0.631	26
Acrylonitrile	25.0	17.9	17.4	71.6	69.6	55.0-149			2.83	20
Benzene	5.00	4.63	4.60	92.6	92.0	70.0-123			0.650	20
Bromobenzene	5.00	4.71	4.79	94.2	95.8	73.0-121			1.68	20
Bromodichloromethane	5.00	4.68	4.73	93.6	94.6	75.0-120			1.06	20
Bromoform	5.00	4.35	4.32	87.0	86.4	68.0-132			0.692	20
Bromomethane	5.00	1.82	1.72	36.4	34.4	30.0-160			5.65	25
1,3-Butadiene	5.00	3.06	2.92	61.2	58.4	45.0-147			4.68	20
n-Butylbenzene	5.00	5.24	5.36	105	107	73.0-125			2.26	20
sec-Butylbenzene	5.00	5.02	4.92	100	98.4	75.0-125			2.01	20
tert-Butylbenzene	5.00	5.28	5.09	106	102	76.0-124			3.66	20
Carbon tetrachloride	5.00	5.29	4.90	106	98.0	68.0-126			7.65	20
Carbon disulfide	5.00	4.48	4.05	89.6	81.0	61.0-128			10.1	20
Chlorobenzene	5.00	6.04	6.01	121	120	80.0-121			0.498	20
Chlorodibromomethane	5.00	5.43	5.52	109	110	77.0-125			1.64	20
Chloroethane	5.00	4.45	4.05	89.0	81.0	47.0-150			9.41	20
Chloroform	5.00	4.85	4.49	97.0	89.8	73.0-120			7.71	20
Chloromethane	5.00	5.54	5.48	111	110	41.0-142			1.09	20
Cyclohexane	5.00	4.52	4.43	90.4	88.6	71.0-124			2.01	20
2-Chlorotoluene	5.00	5.17	5.08	103	102	76.0-123			1.76	20
4-Chlorotoluene	5.00	5.31	5.20	106	104	75.0-122			2.09	20
1,2-Dibromo-3-Chloropropane	5.00	3.91	4.53	78.2	90.6	58.0-134			14.7	20
1,2-Dibromoethane	5.00	5.54	5.21	111	104	80.0-122			6.14	20
Dibromomethane	5.00	4.89	4.86	97.8	97.2	80.0-120			0.615	20
1,2-Dichlorobenzene	5.00	5.25	5.36	105	107	79.0-121			2.07	20
1,3-Dichlorobenzene	5.00	5.52	5.42	110	108	79.0-120			1.83	20
1,4-Dichlorobenzene	5.00	5.27	5.09	105	102	79.0-120			3.47	20
Dichlorodifluoromethane	5.00	4.57	4.28	91.4	85.6	51.0-149			6.55	20
1,1-Dichloroethane	5.00	4.68	4.45	93.6	89.0	70.0-126			5.04	20
1,2-Dichloroethane	5.00	4.26	4.24	85.2	84.8	70.0-128			0.471	20
1,1-Dichloroethene	5.00	4.91	4.53	98.2	90.6	71.0-124			8.05	20
cis-1,2-Dichloroethene	5.00	5.41	5.03	108	101	73.0-120			7.28	20
trans-1,2-Dichloroethene	5.00	5.16	4.81	103	96.2	73.0-120			7.02	20
1,2-Dichloropropane	5.00	4.89	4.57	97.8	91.4	77.0-125			6.77	20
1,1-Dichloropropene	5.00	4.82	4.65	96.4	93.0	74.0-126			3.59	20
1,3-Dichloropropane	5.00	5.14	5.00	103	100	80.0-120			2.76	20
cis-1,3-Dichloropropene	5.00	4.77	4.45	95.4	89.0	80.0-123			6.94	20
trans-1,3-Dichloropropene	5.00	4.80	4.74	96.0	94.8	78.0-124			1.26	20
2,2-Dichloropropane	5.00	4.70	4.31	94.0	86.2	58.0-130			8.66	20

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1724110

DATE/TIME:

04/15/24 10:08

PAGE:

14 of 19

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1724110-01,02,03

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4056937-1 04/11/24 08:48 • (LCSD) R4056937-2 04/11/24 09:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Dicyclopentadiene	5.00	4.42	4.27	88.4	85.4	74.0-126			3.45	20
Di-isopropyl ether	5.00	4.08	4.07	81.6	81.4	58.0-138			0.245	20
Ethylbenzene	5.00	5.61	5.45	112	109	79.0-123			2.89	20
4-Ethyltoluene	5.00	5.23	5.06	105	101	74.0-127			3.30	20
Hexachloro-1,3-butadiene	5.00	4.46	4.44	89.2	88.8	54.0-138			0.449	20
n-Hexane	5.00	4.40	3.87	88.0	77.4	57.0-133			12.8	20
Isopropylbenzene	5.00	5.38	5.29	108	106	76.0-127			1.69	20
p-Isopropyltoluene	5.00	5.26	5.05	105	101	76.0-125			4.07	20
2-Butanone (MEK)	25.0	20.8	19.7	83.2	78.8	44.0-160			5.43	20
Methyl Cyclohexane	5.00	4.26	4.16	85.2	83.2	68.0-126			2.38	20
Methylene Chloride	5.00	4.66	4.43	93.2	88.6	67.0-120			5.06	20
4-Methyl-2-pentanone (MIBK)	25.0	19.5	19.6	78.0	78.4	68.0-142			0.512	20
Methyl tert-butyl ether	5.00	4.30	4.27	86.0	85.4	68.0-125			0.700	20
Naphthalene	5.00	3.79	4.23	75.8	84.6	54.0-135			11.0	20
Propene	5.00	2.03	1.83	40.6	36.6	30.0-160			10.4	20
n-Propylbenzene	5.00	5.07	4.85	101	97.0	77.0-124			4.44	20
Styrene	5.00	5.20	5.38	104	108	73.0-130			3.40	20
1,1,1,2-Tetrachloroethane	5.00	5.79	5.62	116	112	75.0-125			2.98	20
1,1,2,2-Tetrachloroethane	5.00	4.69	4.72	93.8	94.4	65.0-130			0.638	20
1,1,2-Trichlorotrifluoroethane	5.00	4.70	4.58	94.0	91.6	69.0-132			2.59	20
Tetrachloroethene	5.00	5.92	5.78	118	116	72.0-132			2.39	20
Toluene	5.00	5.64	5.32	113	106	79.0-120			5.84	20
1,2,3-Trichlorobenzene	5.00	4.53	5.28	90.6	106	50.0-138			15.3	20
1,2,4-Trichlorobenzene	5.00	4.36	4.26	87.2	85.2	57.0-137			2.32	20
1,1,1-Trichloroethane	5.00	4.97	4.73	99.4	94.6	73.0-124			4.95	20
1,1,2-Trichloroethane	5.00	5.34	5.31	107	106	80.0-120			0.563	20
Trichloroethene	5.00	5.79	5.35	116	107	78.0-124			7.90	20
Trichlorofluoromethane	5.00	5.46	5.17	109	103	59.0-147			5.46	20
1,2,3-Trichloropropane	5.00	5.15	5.22	103	104	73.0-130			1.35	20
1,2,4-Trimethylbenzene	5.00	5.04	4.98	101	99.6	76.0-121			1.20	20
1,2,3-Trimethylbenzene	5.00	5.12	5.07	102	101	77.0-120			0.981	20
1,3,5-Trimethylbenzene	5.00	4.94	4.82	98.8	96.4	76.0-122			2.46	20
Vinyl chloride	5.00	4.52	4.09	90.4	81.8	67.0-131			9.99	20
Xylenes, Total	15.0	16.8	16.0	112	107	79.0-123			4.88	20
(S) Toluene-d8				107	107	80.0-120				
(S) 4-Bromofluorobenzene				94.1	94.5	77.0-126				
(S) 1,2-Dichloroethane-d4				84.7	88.4	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

INTERNAL STANDARD SUMMARY

Instrument: VOCMS36 • File ID: 0411_02

04/11/24 08:48

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	0411_02	526369	221954	196760
Upper Limit		1052738	443908	393520
Lower Limit		263185	110977	98380
LCS R4056937-1 WG2264870 1x	0411_02LCS	526369	221954	196760
LCSD R4056937-2 WG2264870 1x	0411_03	532817	222295	195924
BLANK R4056937-4 WG2264870 1x	0411_06A	518347	211264	182116
L1724110-03 WG2264870 1x	0411_20	499717	205677	175827
L1724110-01 WG2264870 20x	0411_30	503711	206161	175212
L1724110-02 WG2264870 2500x	0411_31	504283	204289	174603

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.	1 Cp
RDL	Reported Detection Limit.	2 Tc
Rec.	Recovery.	3 Ss
RPD	Relative Percent Difference.	4 Cn
SDG	Sample Delivery Group.	5 Sr
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.	6 Qc
U	Not detected at the Reporting Limit (or MDL where applicable).	7 Is
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	8 Gl
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	9 Al
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	10 Sc
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier Description

B1	Target analyte detected in method blank at or above the method reporting limit.
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Is

⁸ Gl

⁹ Al

¹⁰ Sc

Pinyon Environmental
3222 S. Vance St. Suite 200
Lakewood, CO 80227

Billing Information:

accounts Payable
ap@Pinyon-env.com

Pres
Chk

Analysis / Container / Preservative

Report to:
Andrew Parker

Email To:

Parker@Pinyon-env.com

Project Description:
Nammo TTV Groundwater

City/State

Collected: Mesa, AZ

Please Circle:
PT MT CT ET

Phone: 303.785.7697

Client Project #
72215201.002

Lab Project #

Collected by (print):
Crisa Wolf

Collected by (signature):
Crisa Wolf

Immediately
Packed on Ice N Y X

Sample ID

Comp/Grab

Matrix*

Depth

Date

Time

No.
of
Cntrs

HCl

VOL 8260 At/40ml amber

Purchlorate 34.0/125 ml

Chain of Custody

Page 1 of 1



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



SDG # L1724110
D043

Acctnum: PNYONMAZ

Template:

Prelogin:

PM:

PB:

Shipped Via:

Remarks	Sample # (lab only)
---------	---------------------

TTV-15-75-20240409	Grab	GW	75	4-9-24	1046	4	X	X					-01
TTV-16-80-20240409	1	1	80	4-9-24	1026	4	X	X					-02
Trip Blank	-	-	-	-	-	1	X	X					-03

* Matrix:

SS - Soil AIR - Air

F - Filter

GW - Groundwater

B - Bioassay

WW - WasteWater

DW - Drinking Water

OT - Other

Remarks:

Samples returned via:

UPS FedEx Courier

pH Temp

Flow Other

Sample Receipt Checklist		
COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:	X	N
Bottles arrive intact:	X	N
Correct bottles used:	Y	N
Sufficient volume sent:	Y	N
If Applicable		
VOA Zero Headspace:	Y	N
Preservation Correct/Checked:	Y	N
RAD Screen <0.5 mR/hr:	Y	N

Relinquished by: (Signature)

Crisa Wolf

Date: 4-9-24 Time: 1200

Received by: (Signature)

Jeanne Salazar

Trip Blank Received: Yes / No

1 HCl / MeOH

TBR

Temp: 20°C Bottles Received:

3.8±0.1=3.9 8

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Cheri Reliqui

Date: 4-9-24 Time: 1800

Received by: (Signature)

SWA

Date: 4-10-24 Time: 0915

Received for lab by: (Signature)

Demarly

Hold:

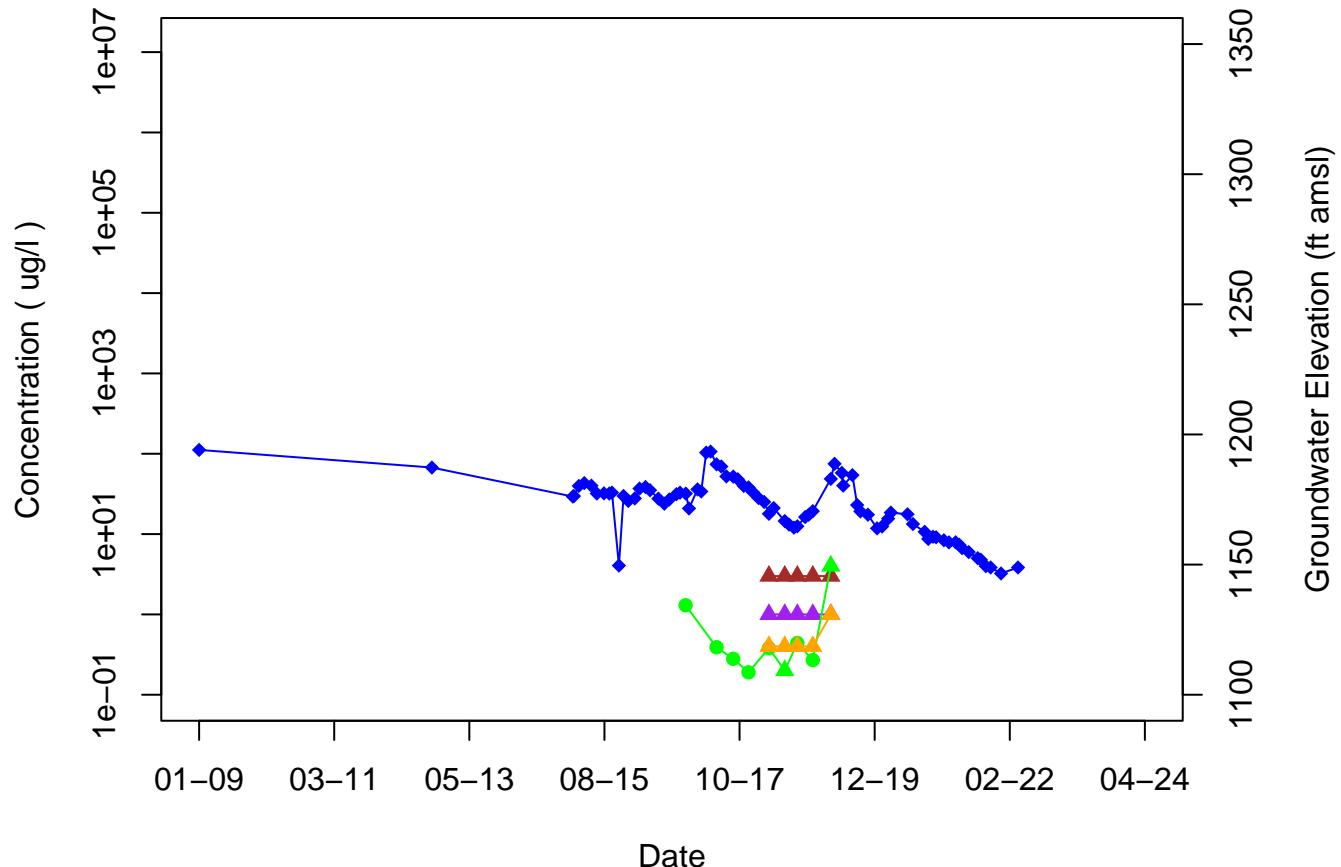
Condition:

NCF / OK

PNPAZ

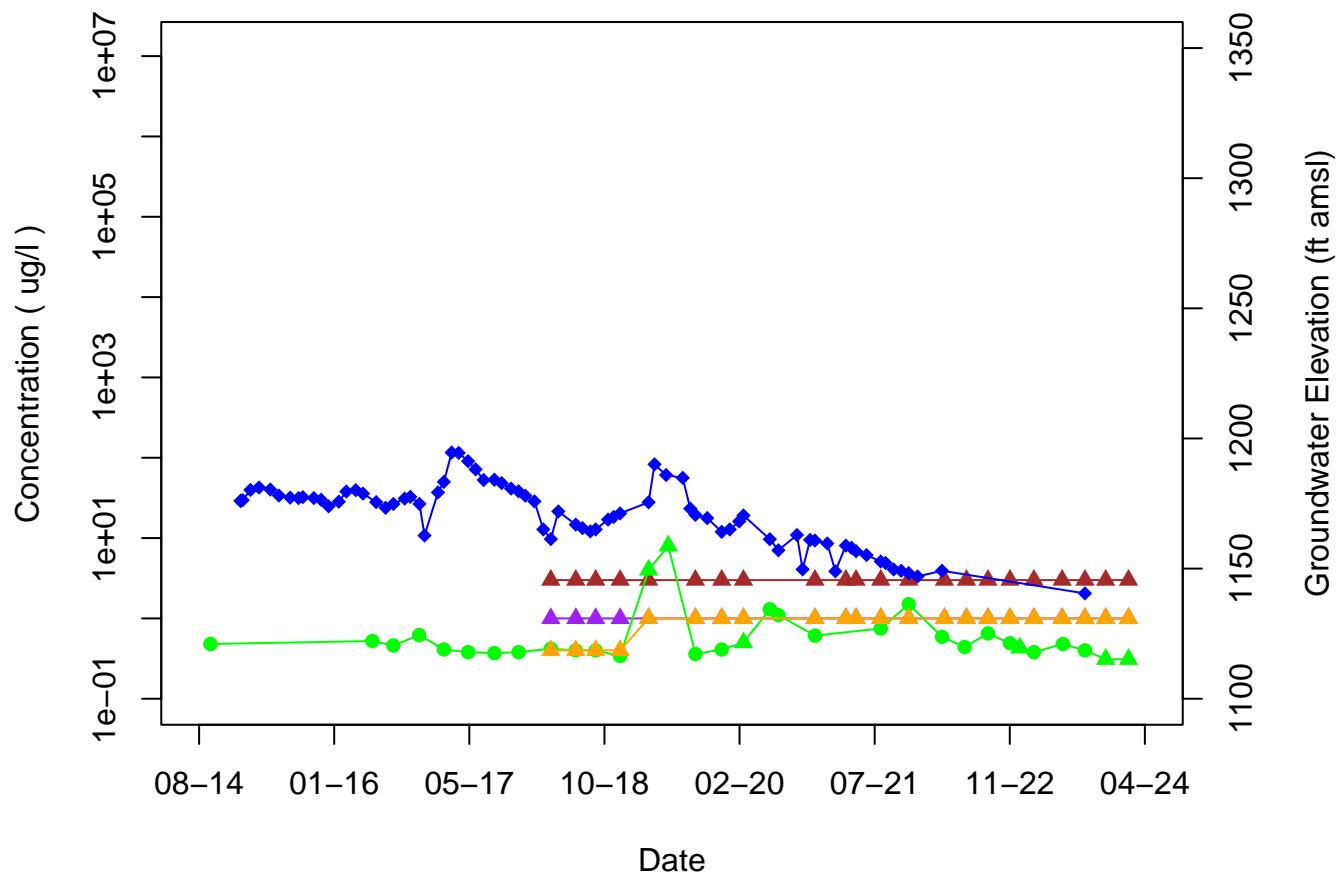
Attachment 3 – Concentration and Groundwater Elevation versus Time Plots

PF-1



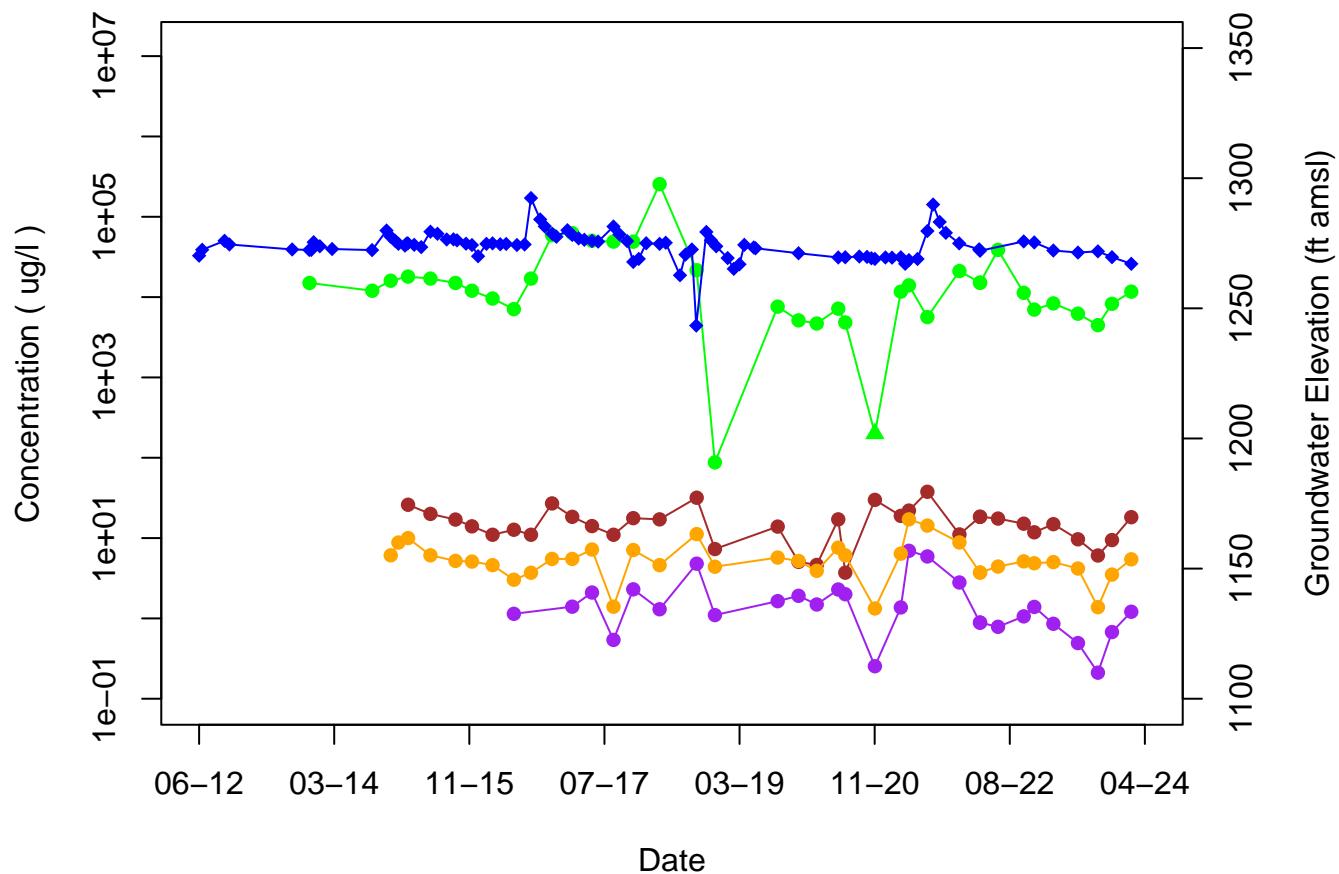
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

PF-2



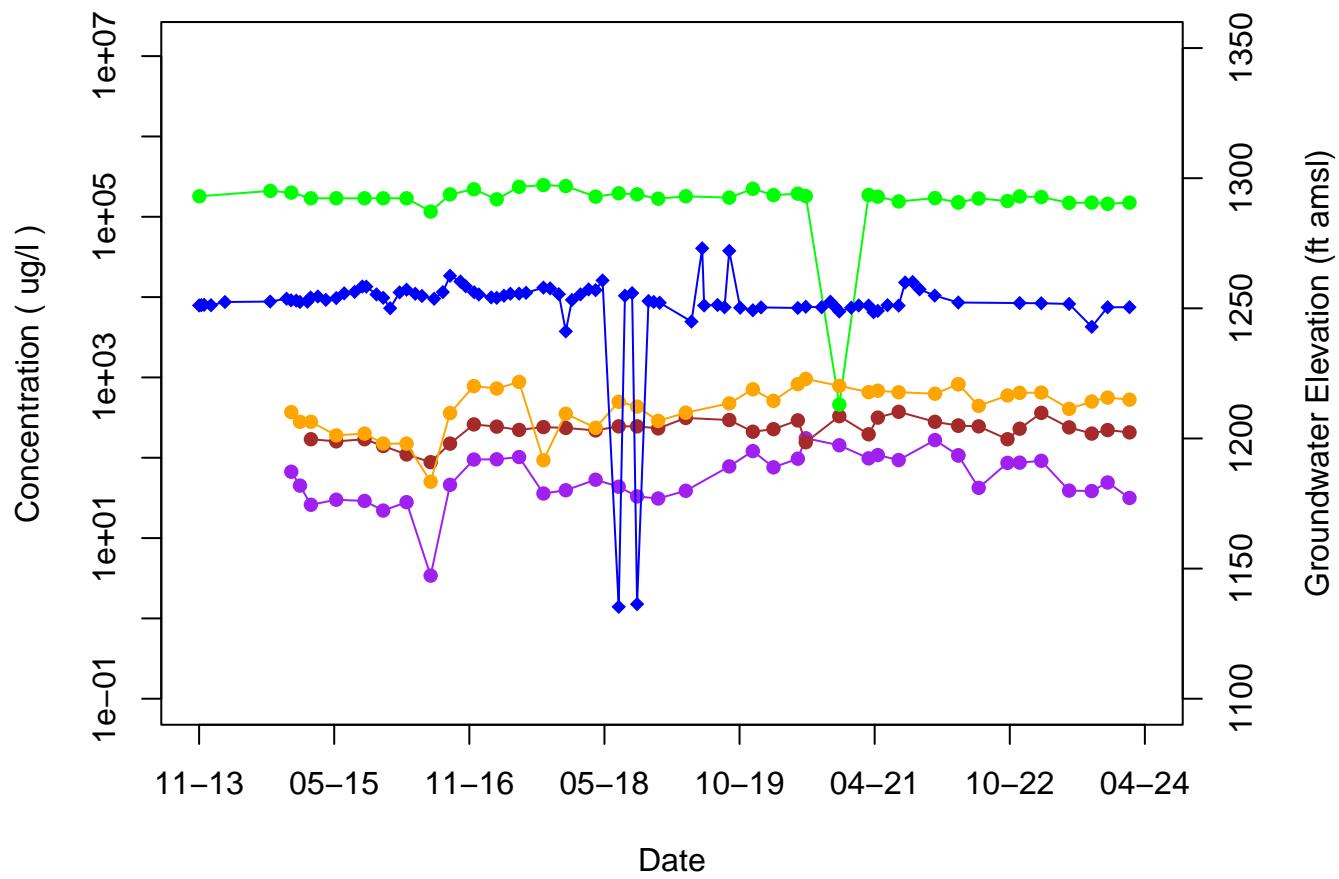
● Detect	● 1,1-Dichloroethene	● Trichloroethene
▲ Non-Detect	● 1,4-Dioxane	
◆ Groundwater Elevation	● Perchlorate	

TTU-1



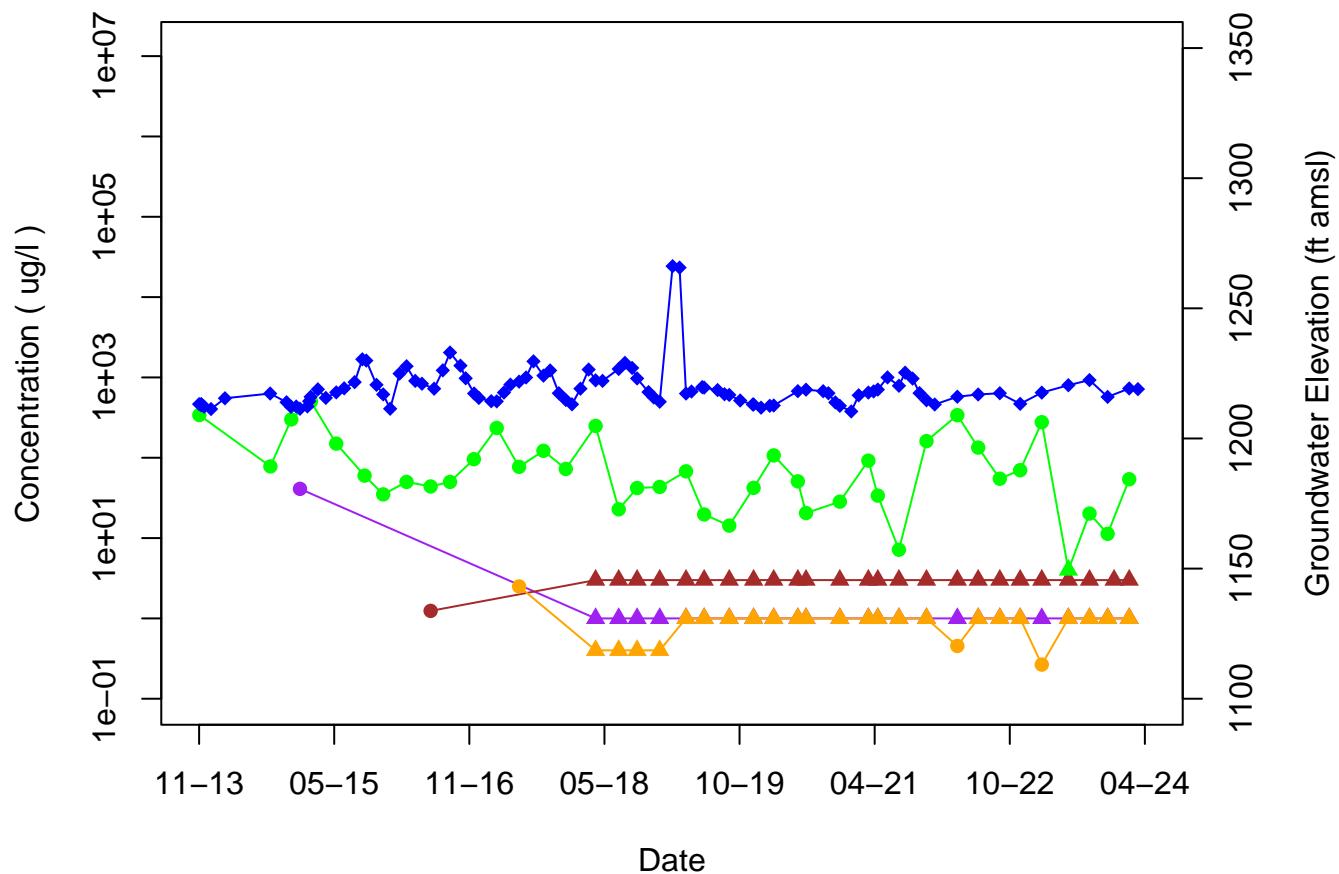
●	Detect	●	1,1-Dichloroethene	○	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	Perchlorate
◆	Groundwater Elevation	●		●	

TTU-2



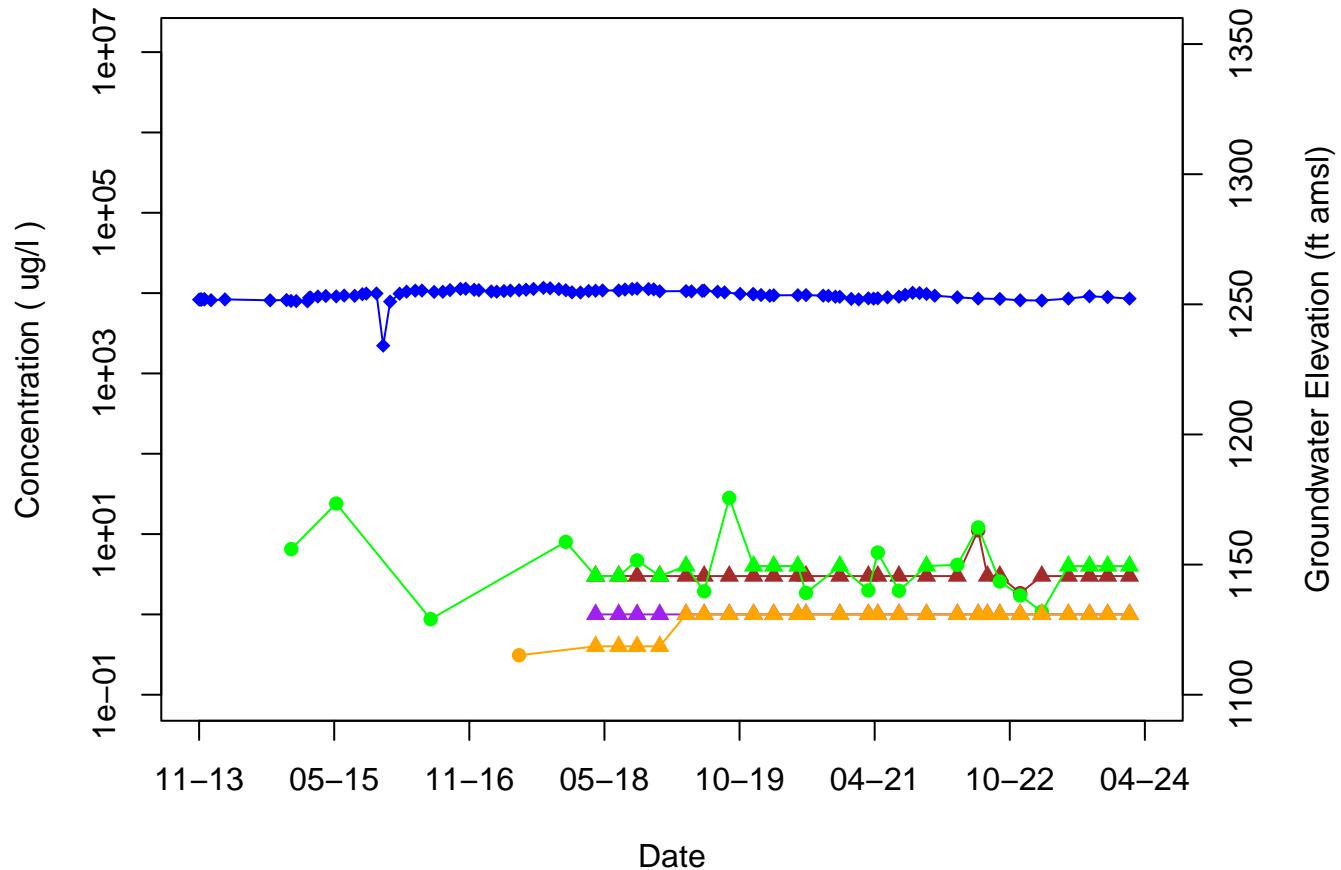
●	Detect	○	1,1-Dichloroethene	○	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	
◆	Groundwater Elevation	○	Perchlorate	○	

TTU-3



●	Detect	○	1,1-Dichloroethene	○	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	Perchlorate
◆	Groundwater Elevation	●		●	

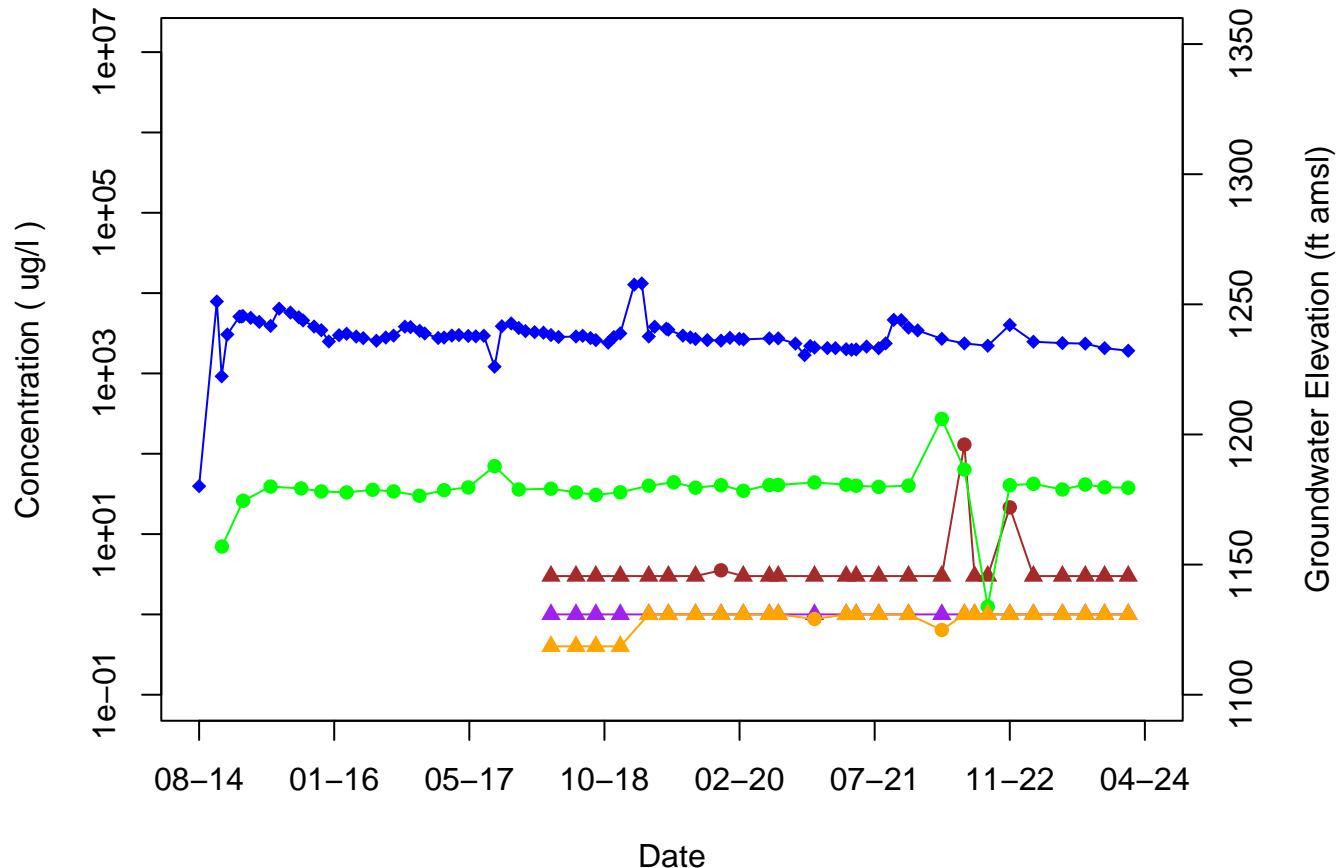
TTU-4



Date

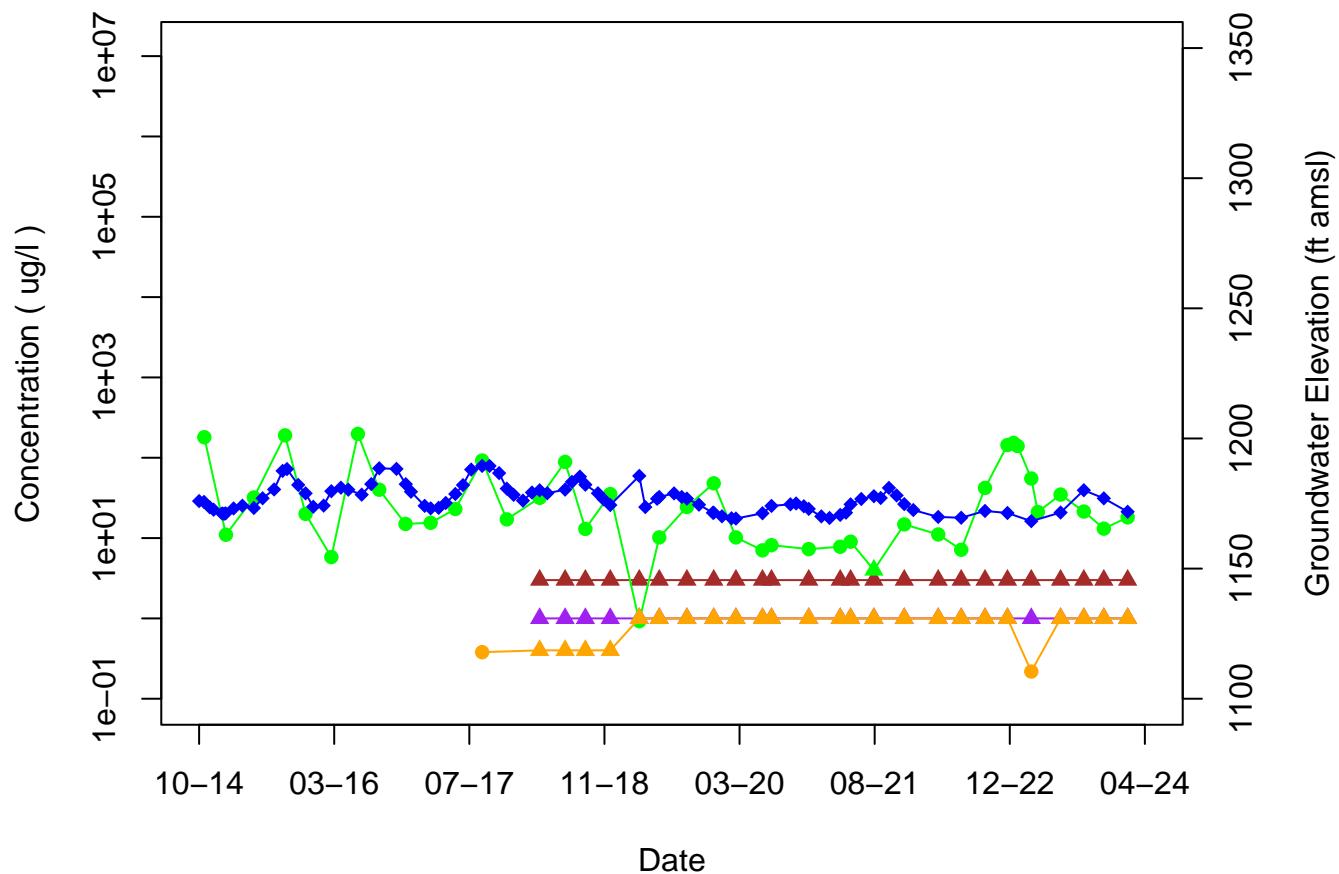
- | | | |
|-------------------------|----------------------|---------------------|
| ● Detect | ● 1,1-Dichloroethene | ● Trichloroethylene |
| ▲ Non-Detect | ● 1,4-Dioxane | ● |
| ◆ Groundwater Elevation | ● Perchlorate | ● |

TTU-5



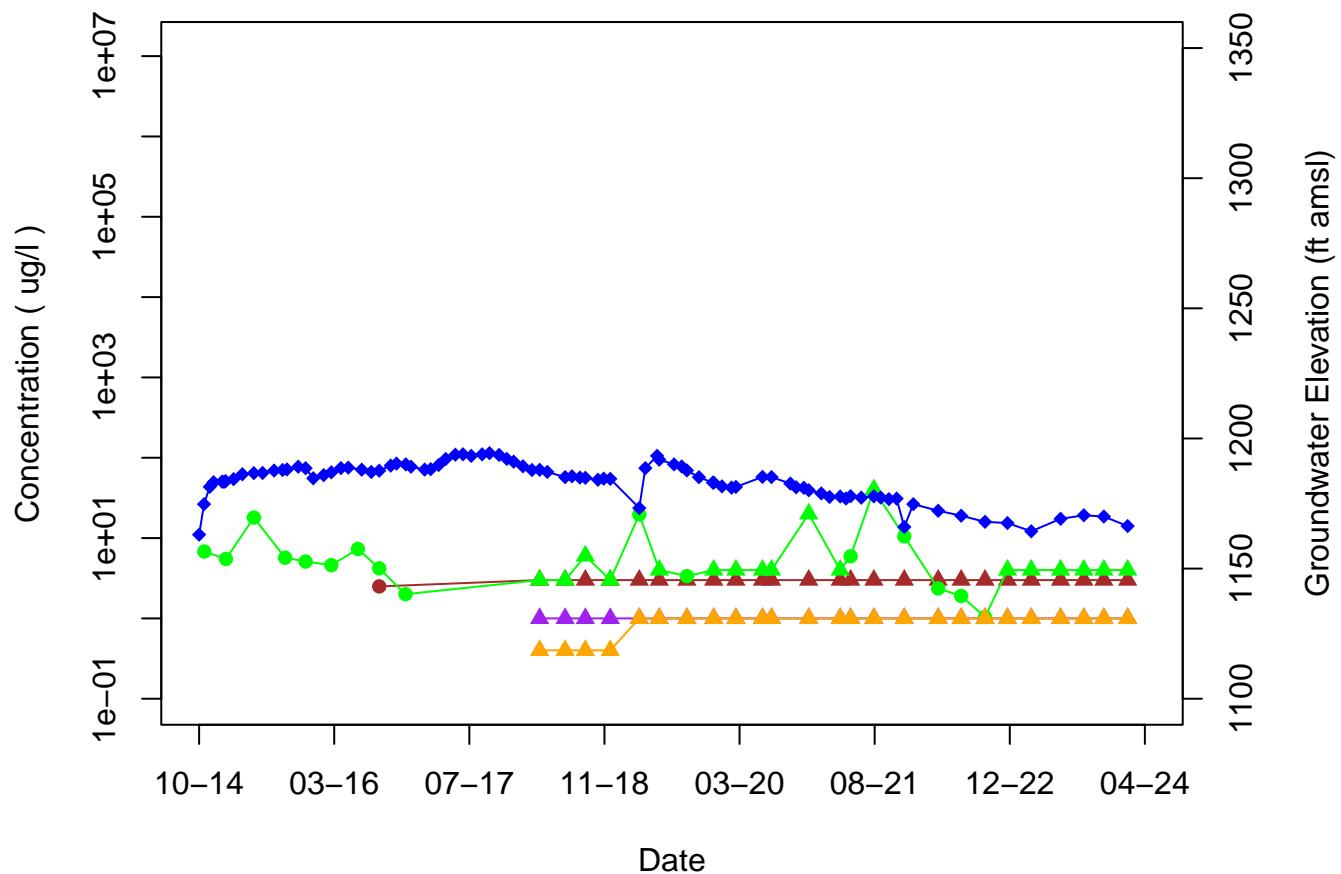
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

TTU-6



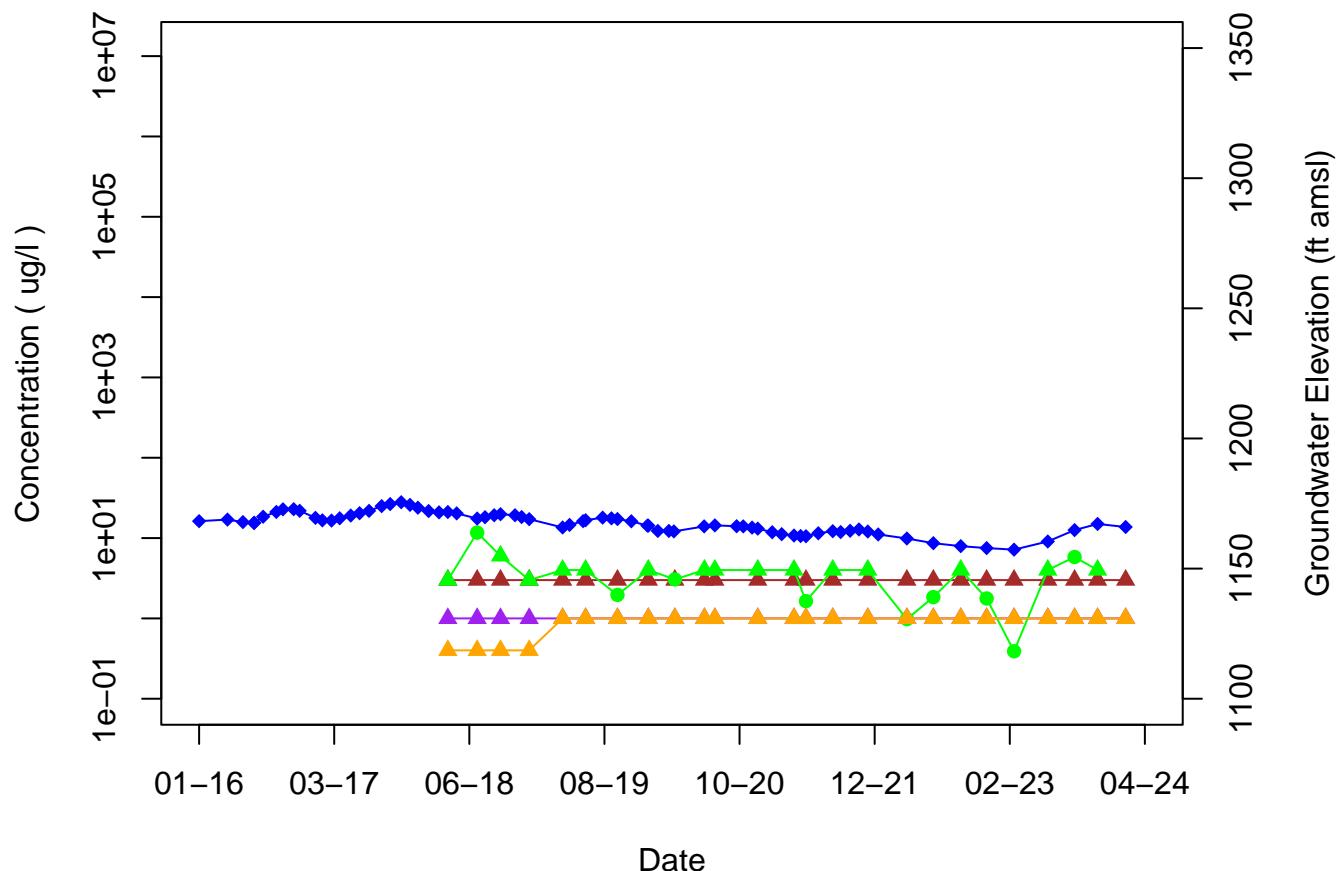
- | | | |
|-------------------------|----------------------|-------------------|
| ● Detect | ○ 1,1-Dichloroethene | ○ Trichloroethene |
| ▲ Non-Detect | ● 1,4-Dioxane | |
| ◆ Groundwater Elevation | ○ Perchlorate | |

TTU-7



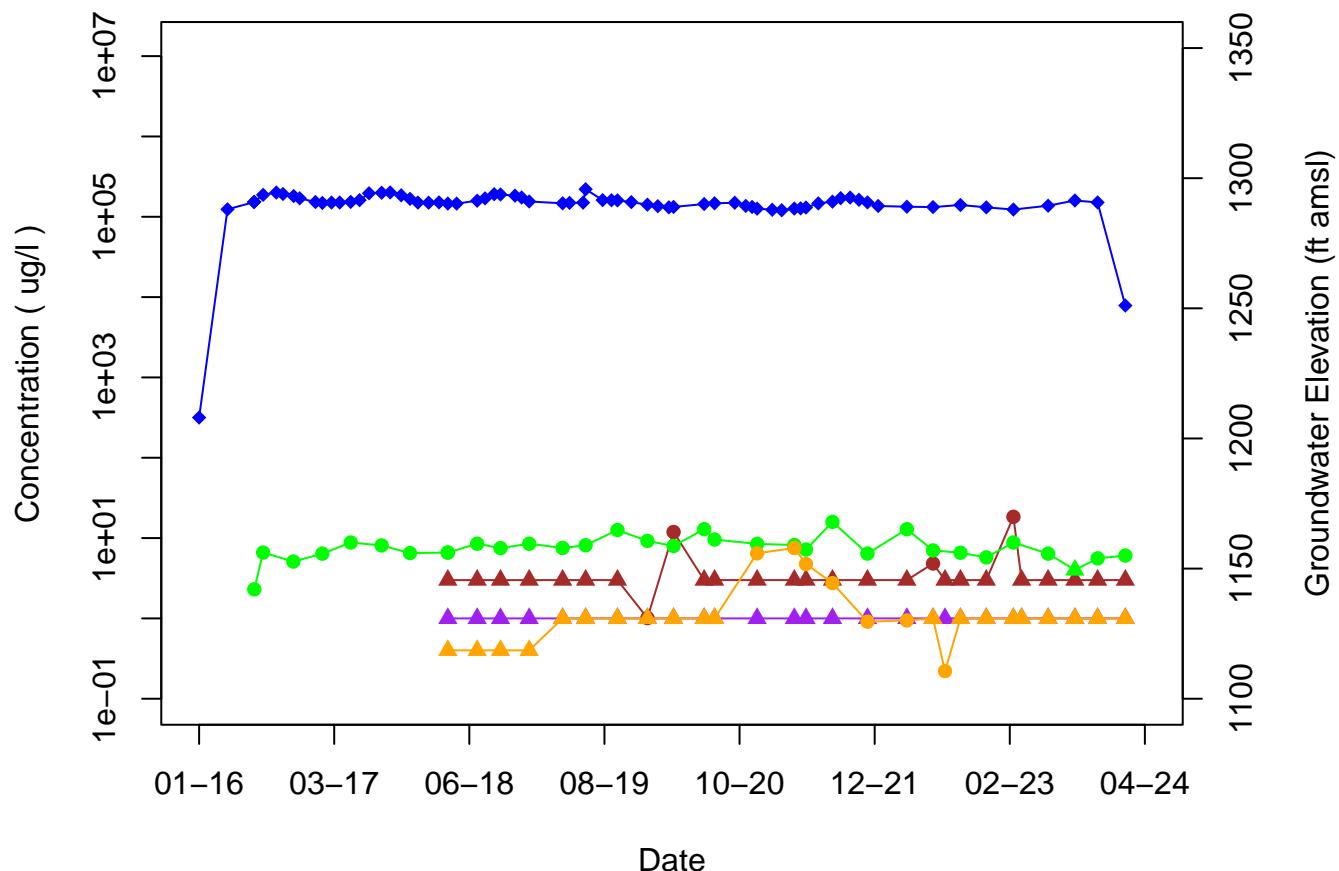
●	Detect	●	1,1-Dichloroethene	●	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	▲	
◆	Groundwater Elevation	●	Perchlorate	●	

TTU-8



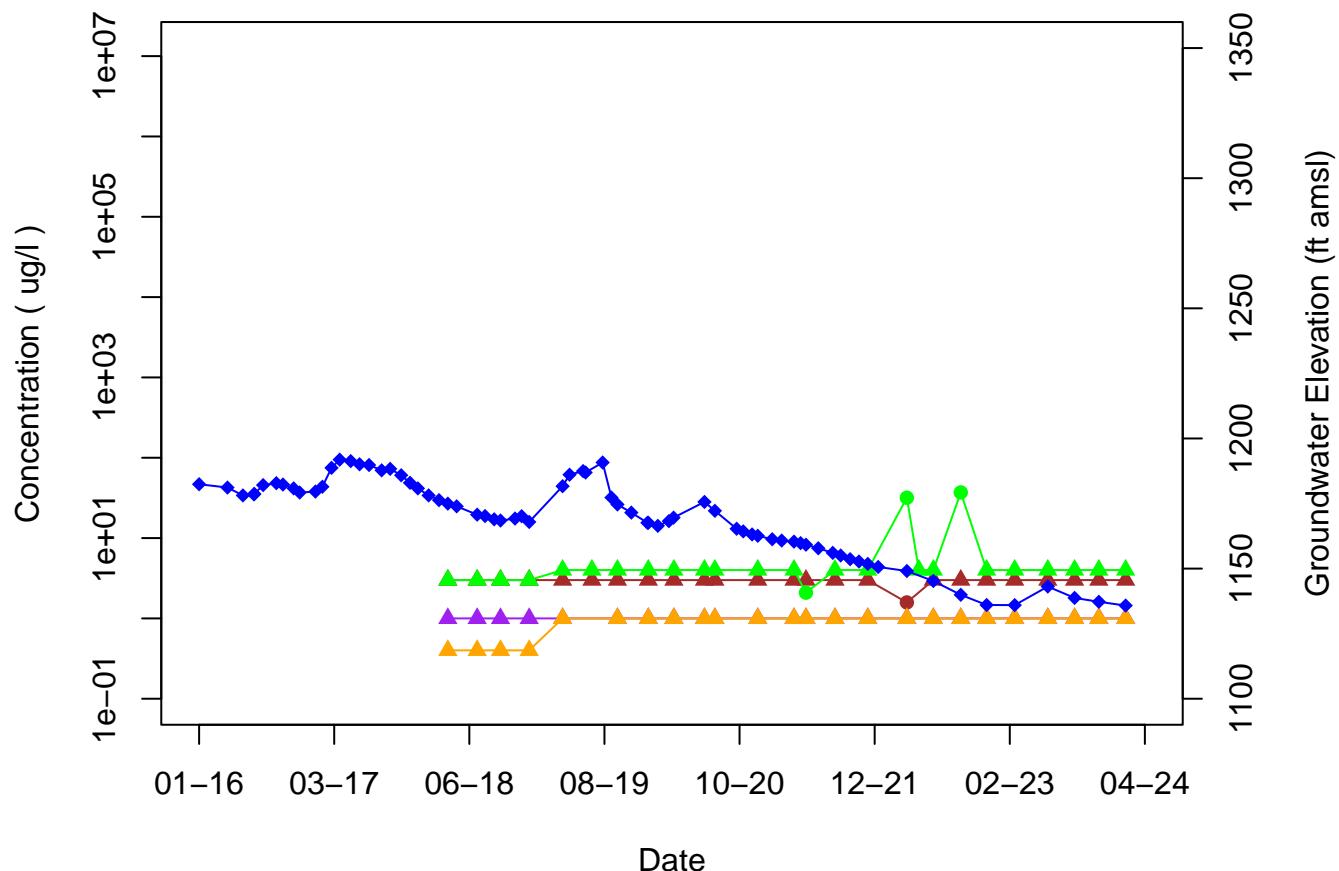
● Detect	● 1,1-Dichloroethene	● Trichloroethene
▲ Non-Detect	● 1,4-Dioxane	
◆ Groundwater Elevation	● Perchlorate	

TTU-9A



●	Detect	●	1,1-Dichloroethene	●	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	
◆	Groundwater Elevation	●	Perchlorate	●	

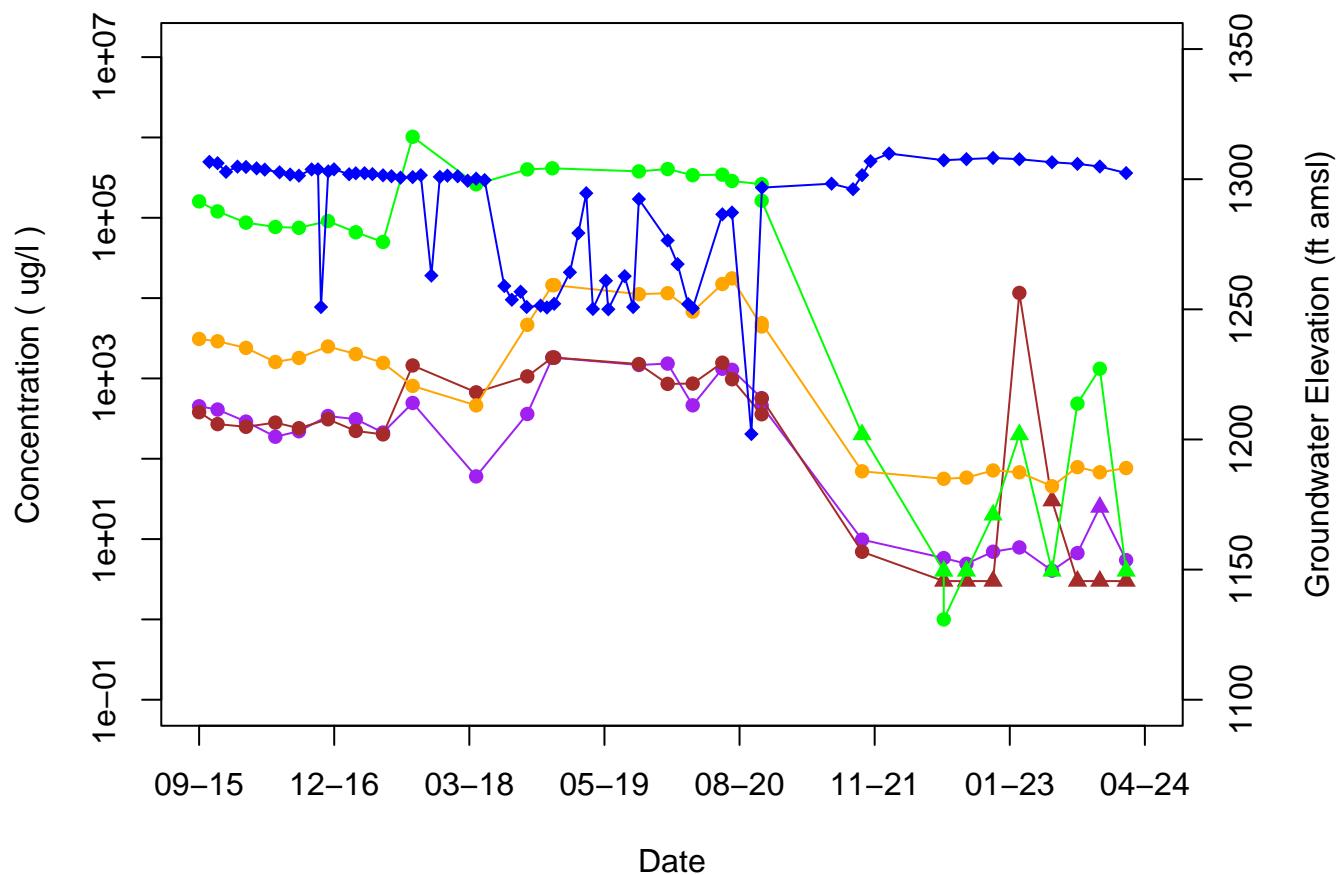
TTU-10



Date

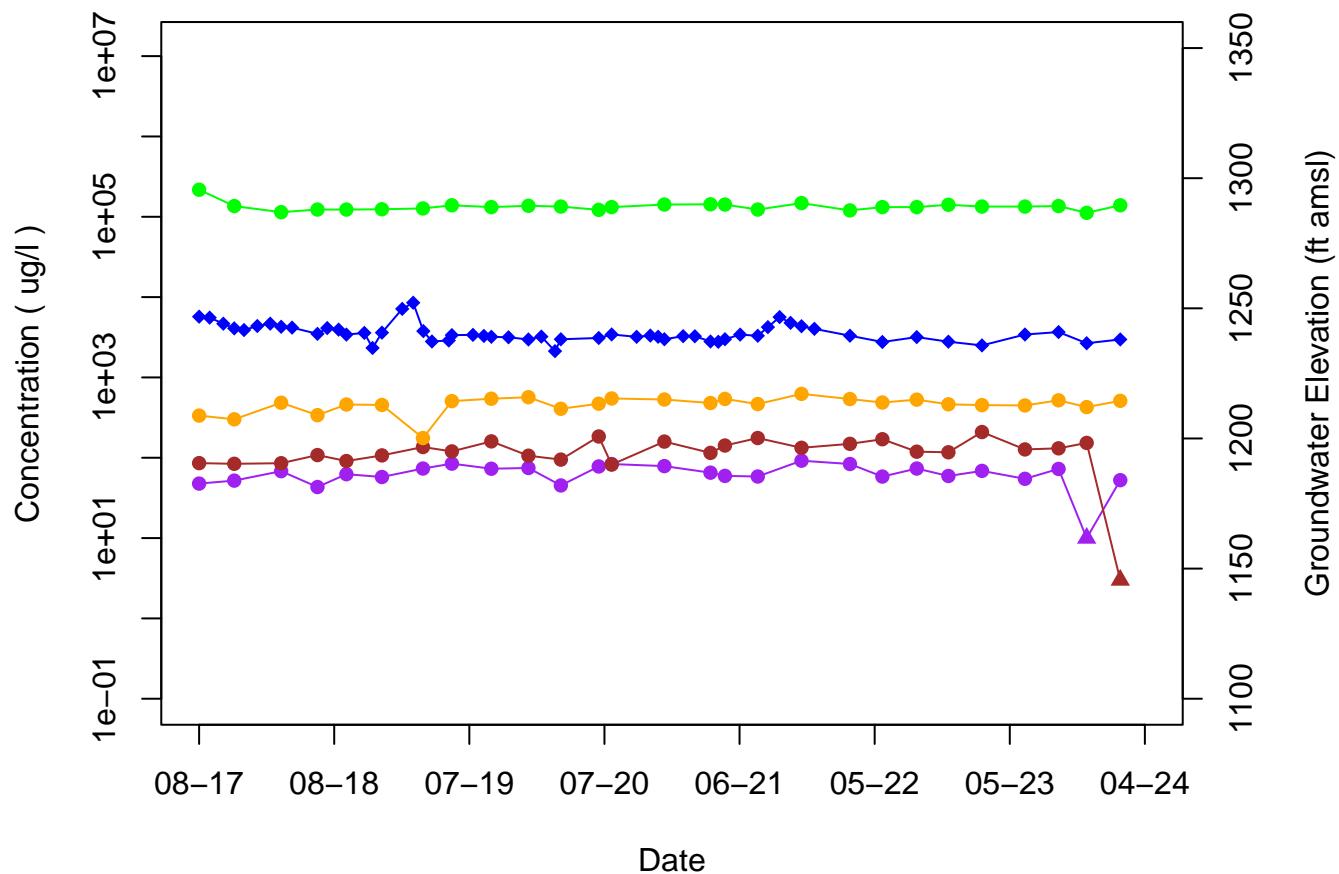
- | | | |
|-------------------------|----------------------|-------------------|
| ● Detect | ● 1,1-Dichloroethene | ● Trichloroethene |
| ▲ Non-Detect | ● 1,4-Dioxane | ● |
| ◆ Groundwater Elevation | ● Perchlorate | ● |

TTU-11



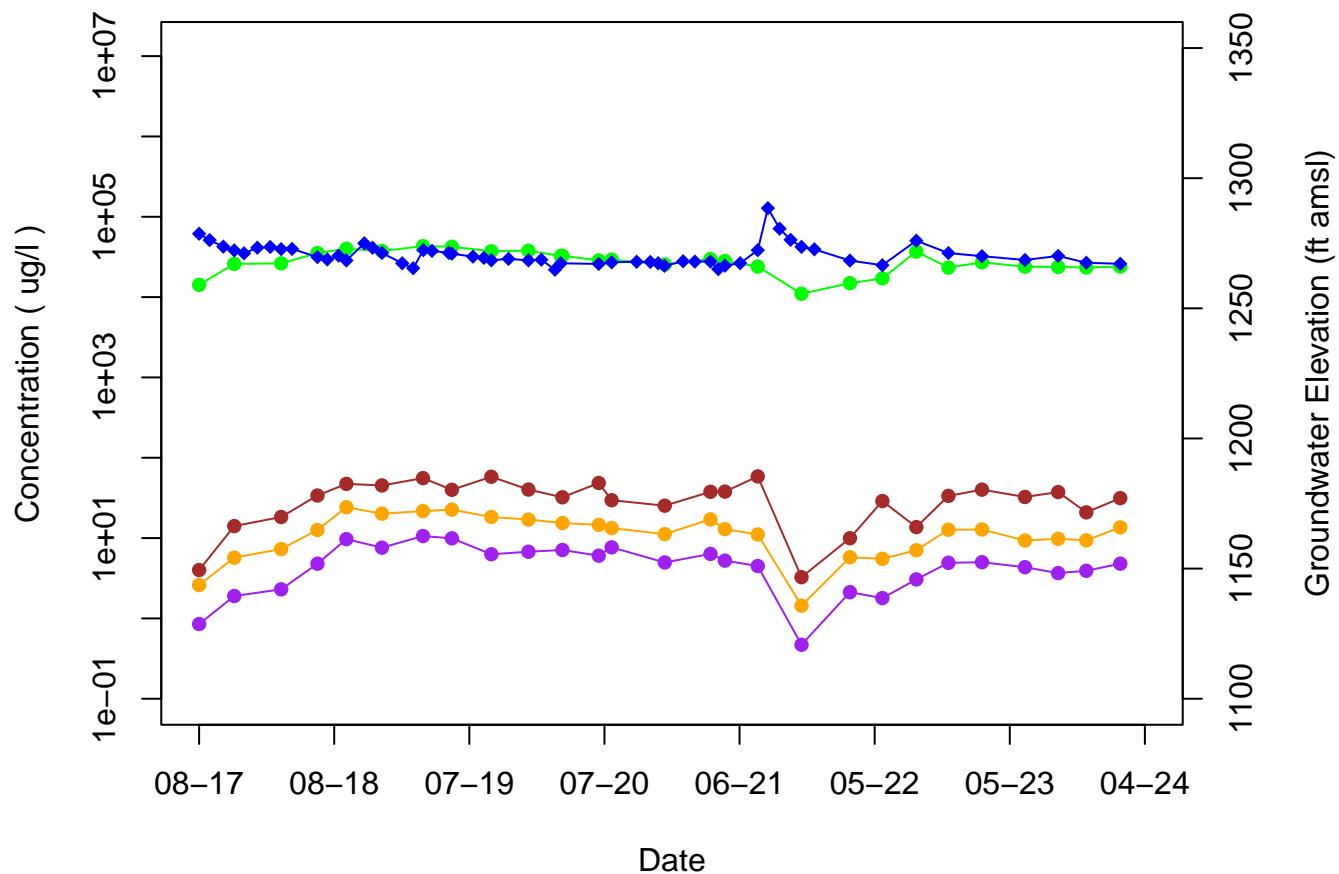
●	Detect	●	1,1-Dichloroethene	●	Trichloroethylene
▲	Non-Detect	▲	1,4-Dioxane	▲	
◆	Groundwater Elevation	◆	Perchlorate	◆	

TTU-12



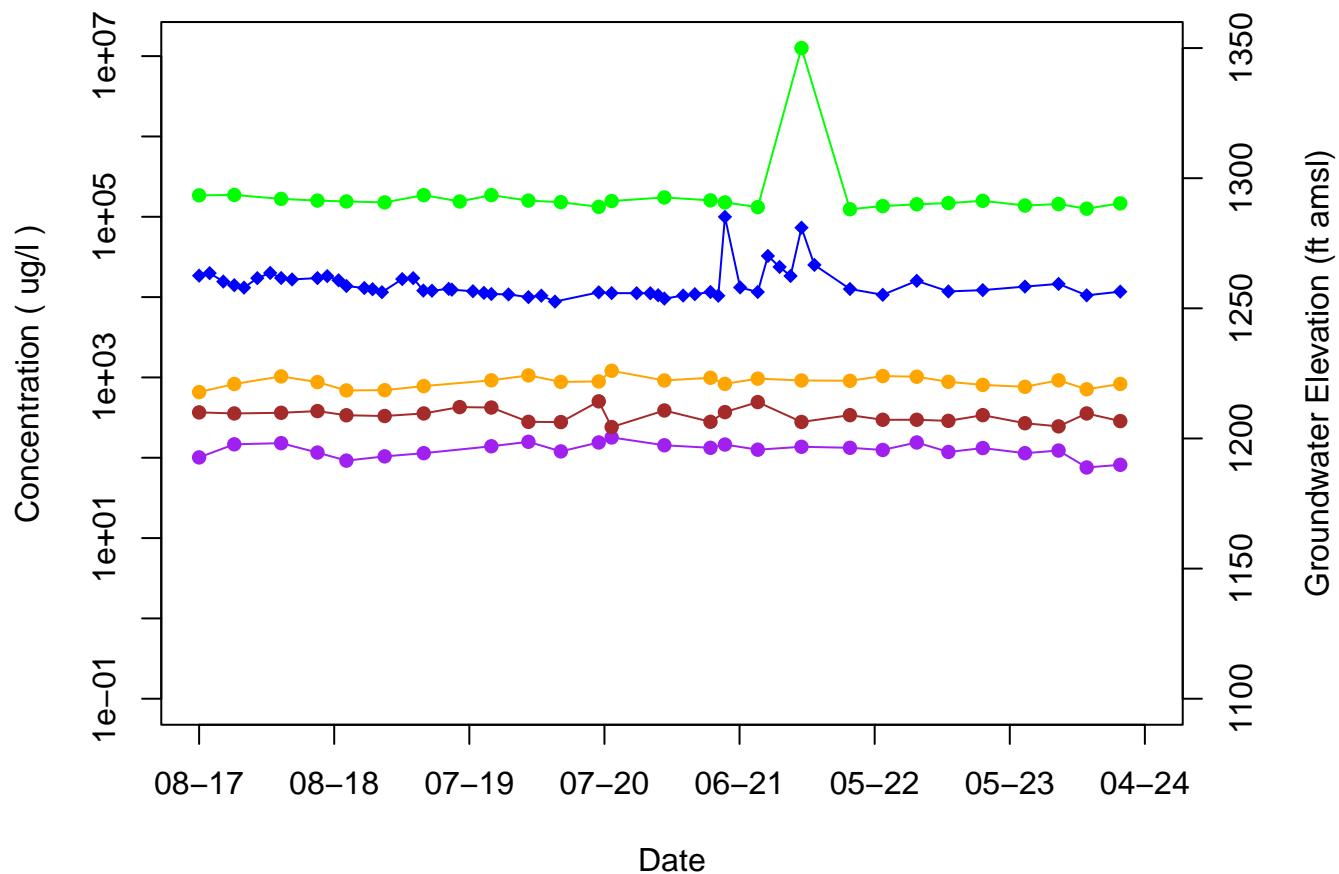
● Detect	● 1,1-Dichloroethene	● Trichloroethene
▲ Non-Detect	● 1,4-Dioxane	● Perchlorate
◆ Groundwater Elevation		

TTU-13



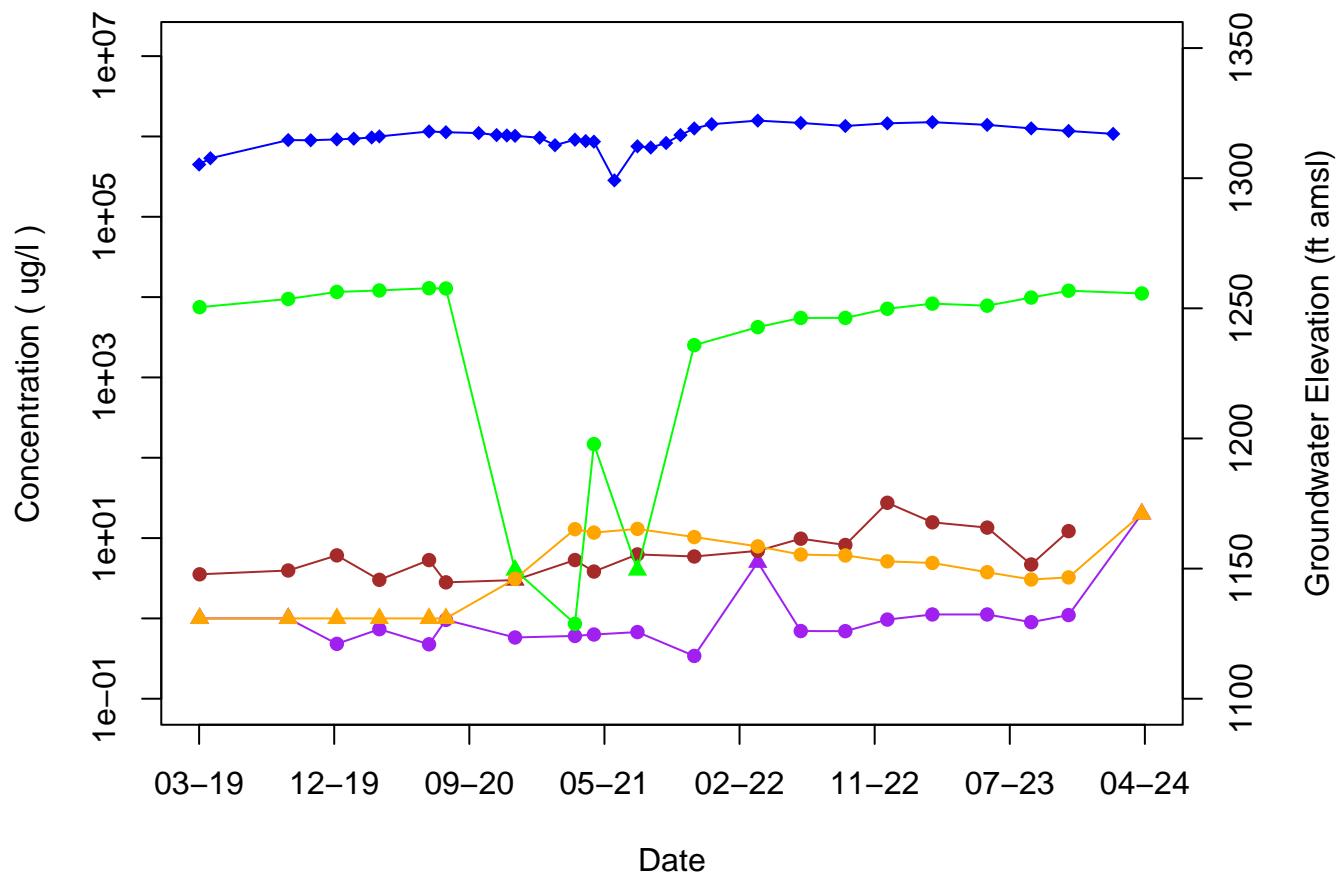
●	Detect	●	1,1-Dichloroethene	●	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	
◆	Groundwater Elevation	●	Perchlorate	●	

TTU-14



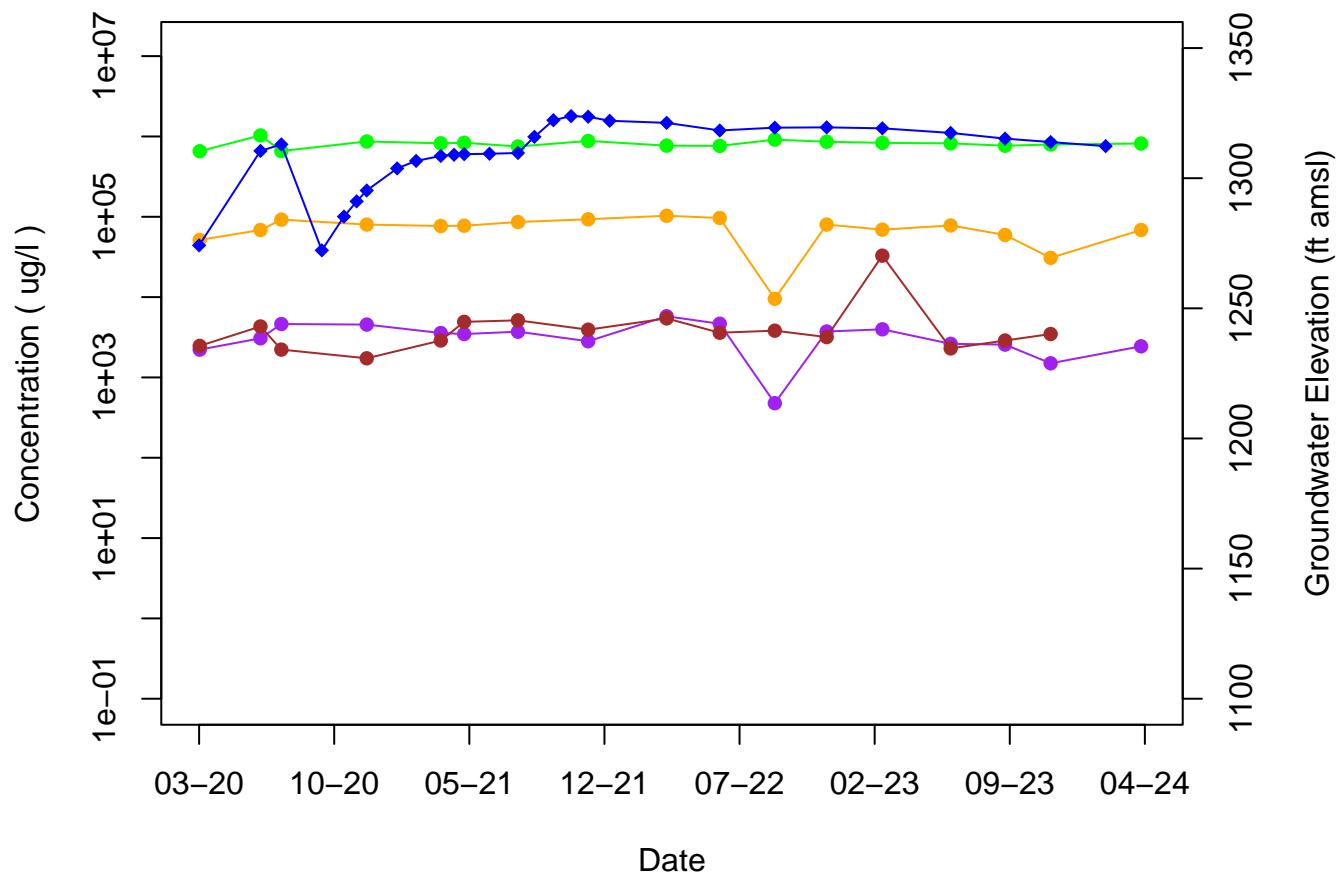
- | | | | | | |
|---|-----------------------|---|--------------------|---|-----------------|
| ● | Detect | ● | 1,1-Dichloroethene | ● | Trichloroethene |
| ▲ | Non-Detect | ● | 1,4-Dioxane | ● | Perchlorate |
| ◆ | Groundwater Elevation | ● | | ◆ | |

TTU-15



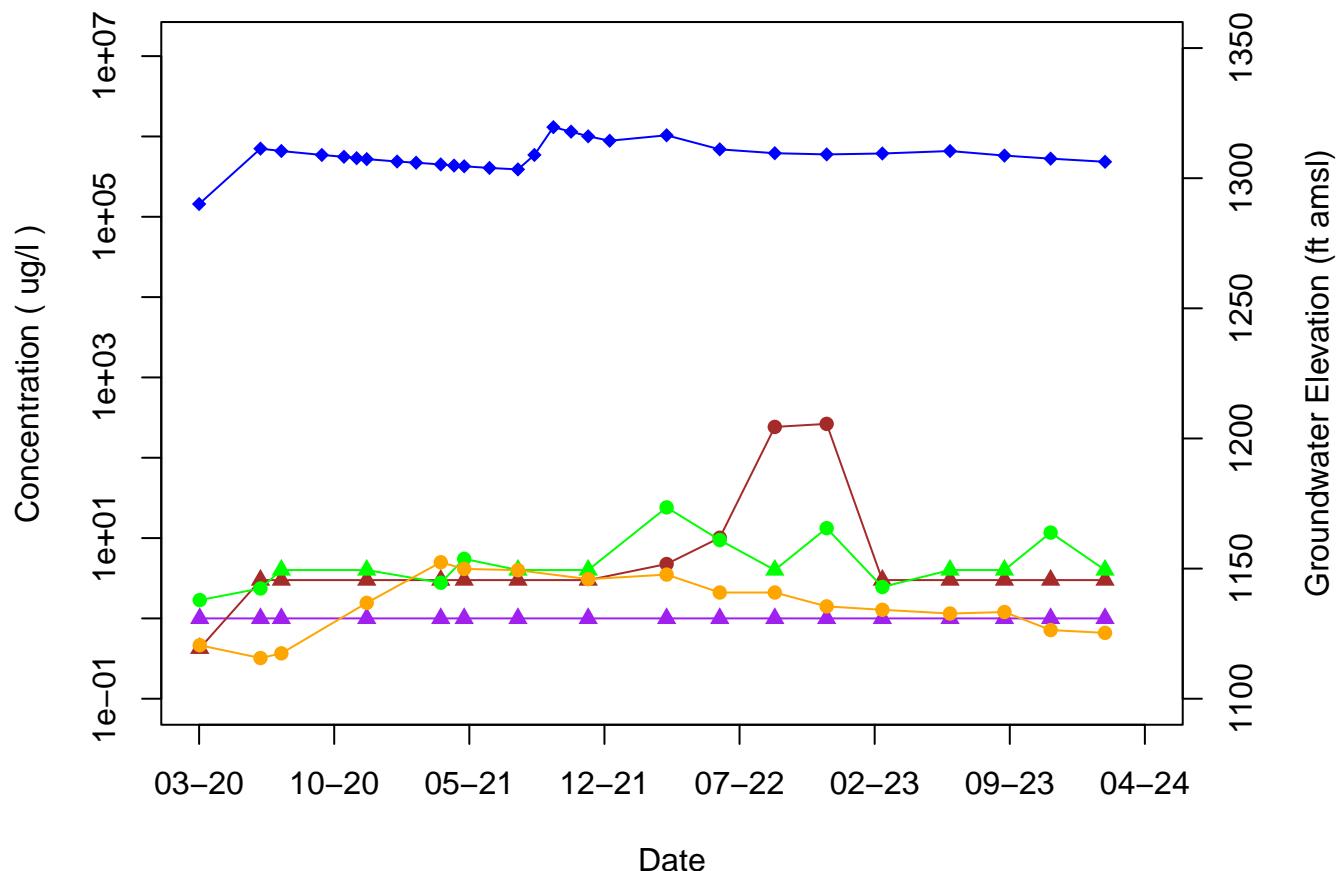
●	Detect	○	1,1-Dichloroethene	◆	Trichloroethene
▲	Non-Detect	■	1,4-Dioxane	◆	
◆	Groundwater Elevation	◆	Perchlorate	◆	

TTU-16



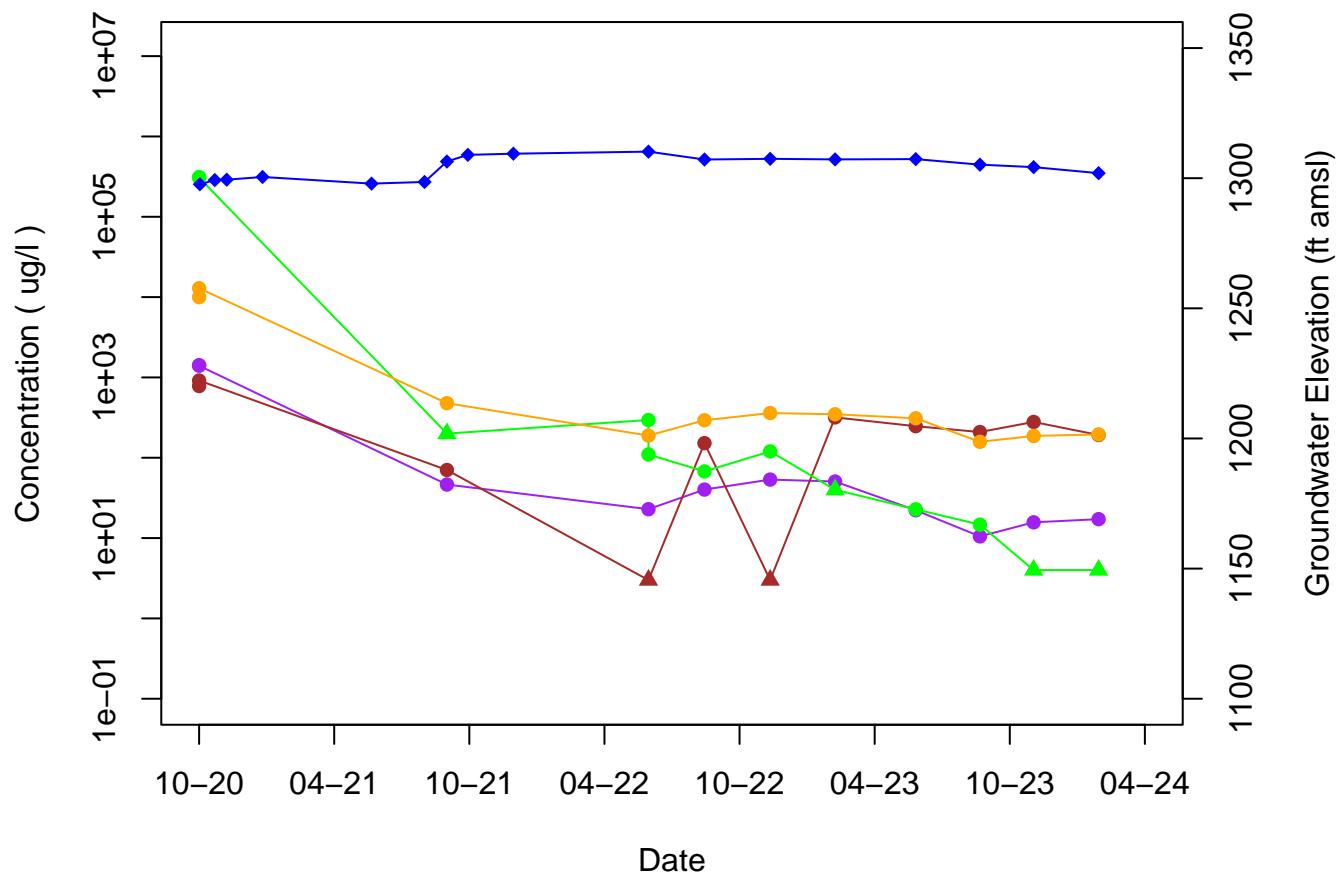
●	Detect	○	1,1-Dichloroethene	◆	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	Perchlorate
◆	Groundwater Elevation	●			

TTU-17



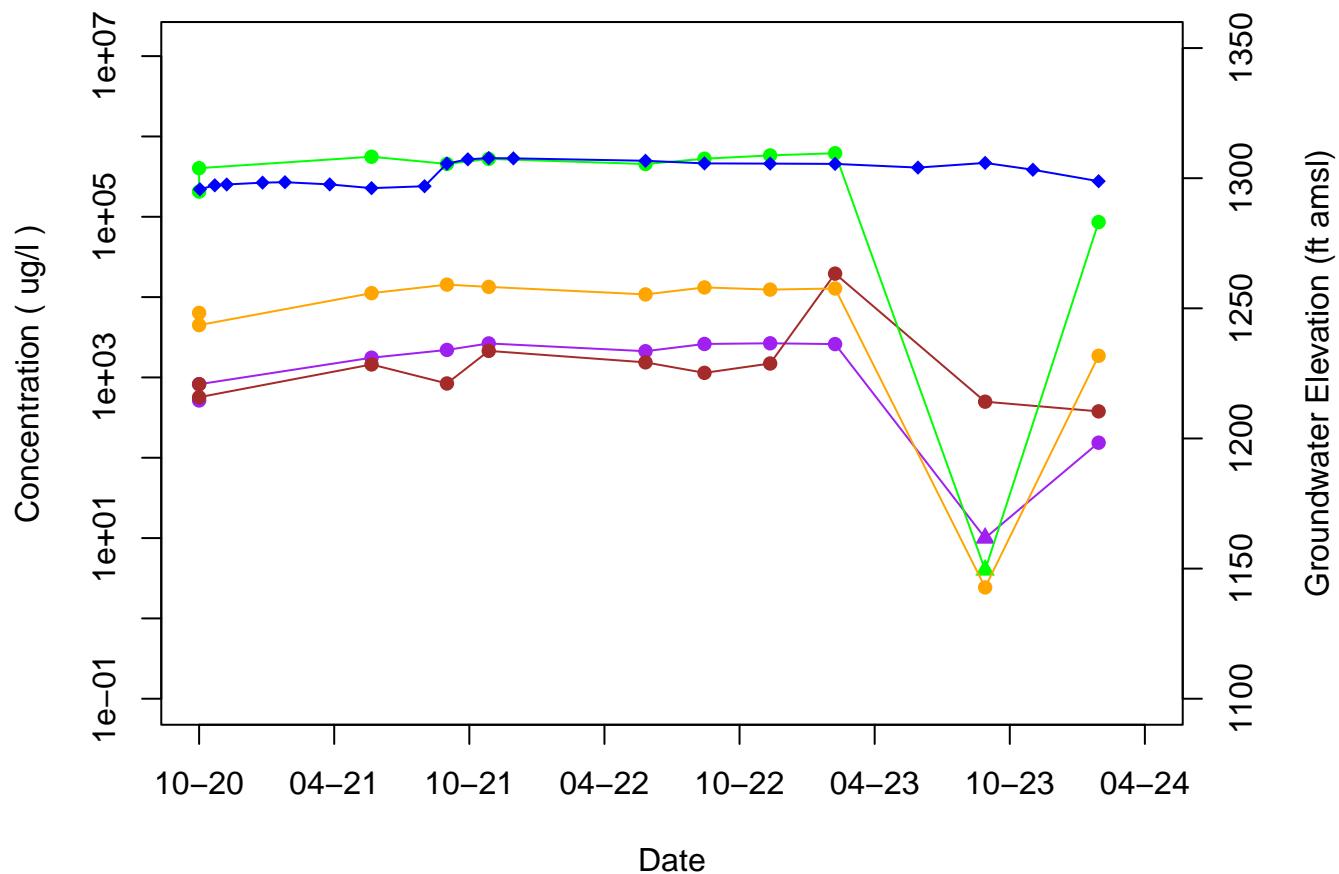
- | | | | | | |
|---|-----------------------|---|--------------------|---|-----------------|
| ● | Detect | ○ | 1,1-Dichloroethene | ◆ | Trichloroethene |
| ▲ | Non-Detect | ■ | 1,4-Dioxane | ○ | |
| ◆ | Groundwater Elevation | ◆ | Perchlorate | ○ | |

TTU-19



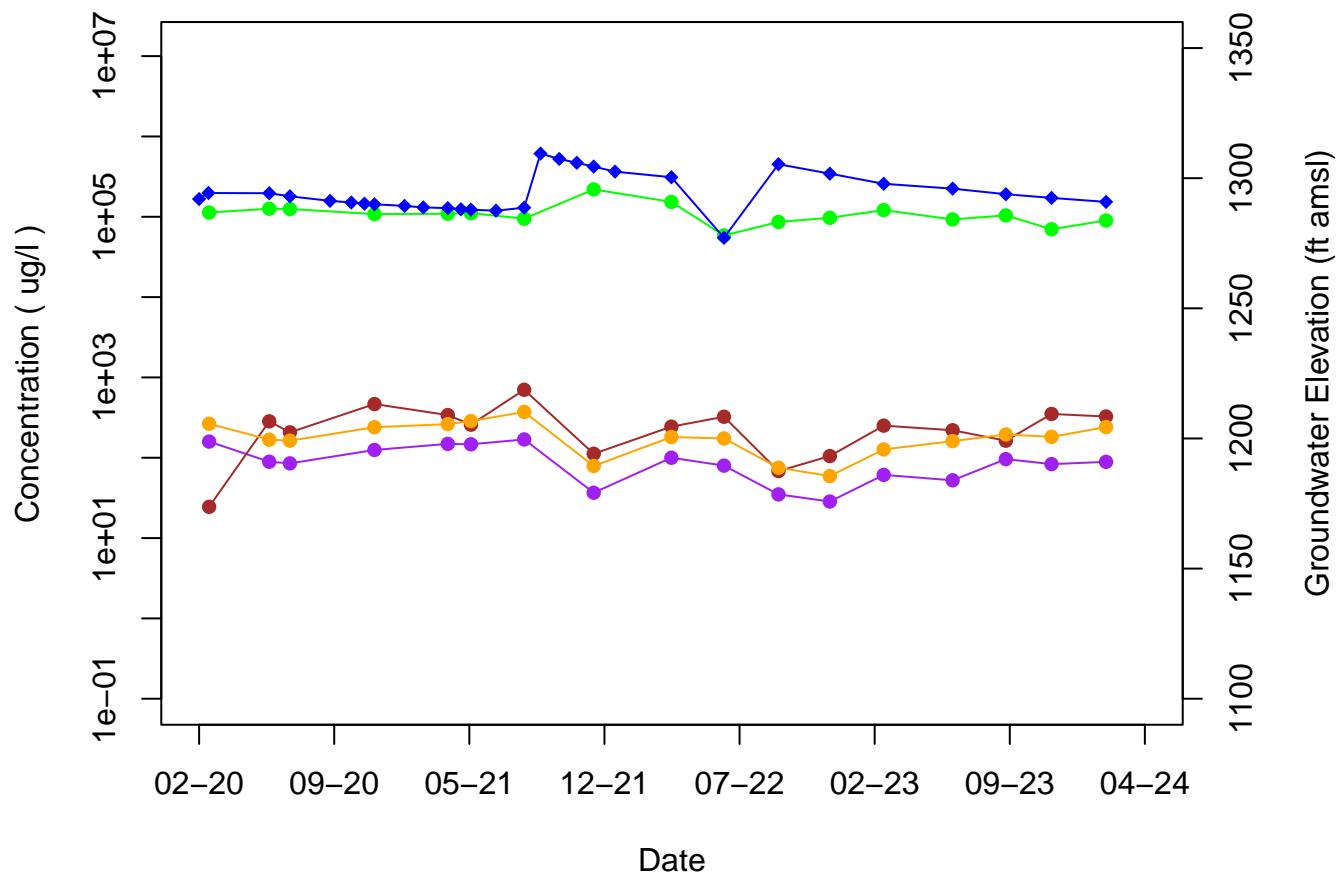
●	Detect	○	1,1-Dichloroethene	○	Trichloroethene
▲	Non-Detect	■	1,4-Dioxane	●	Perchlorate
◆	Groundwater Elevation	●		●	

TTU-20



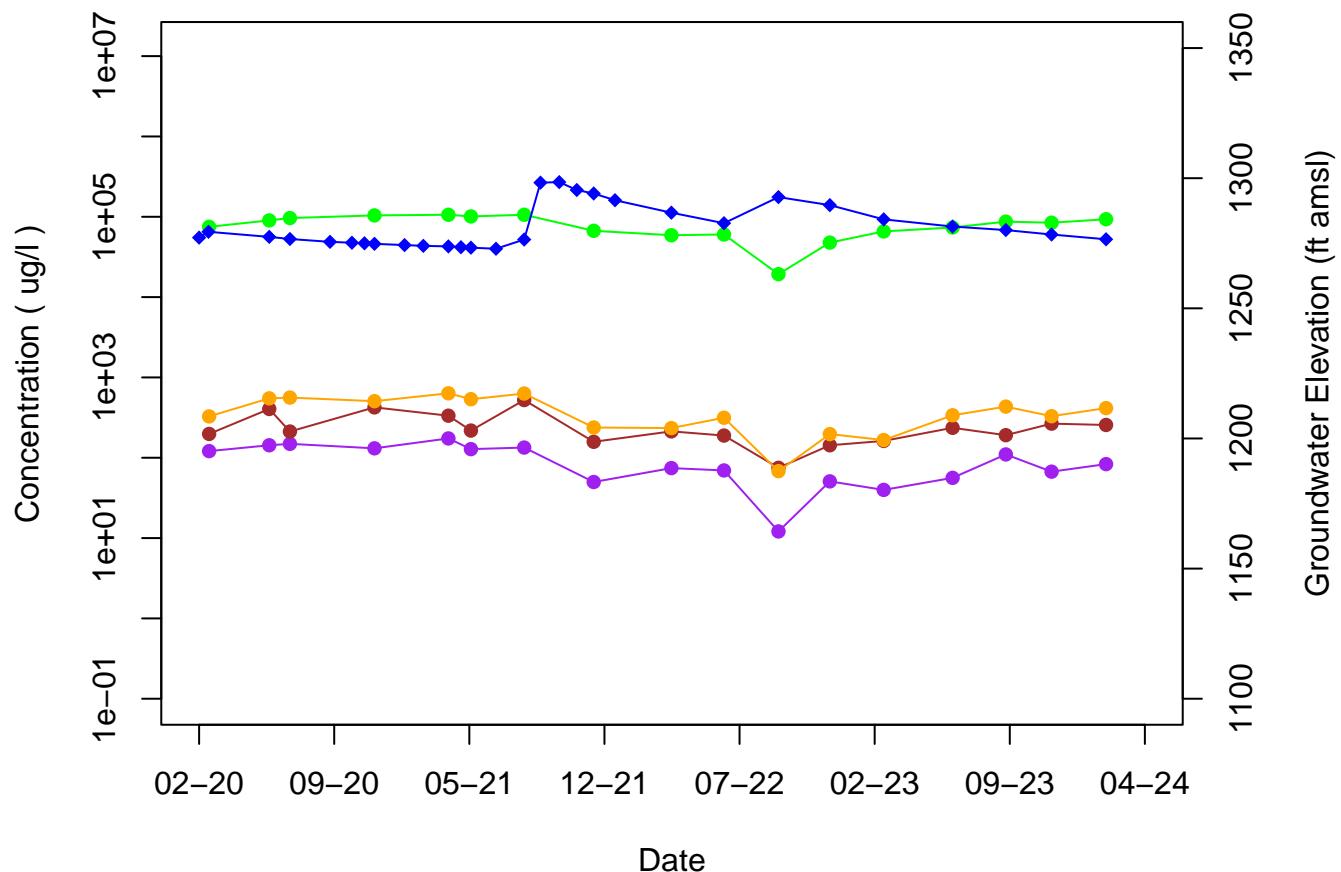
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

TTU-EX-1



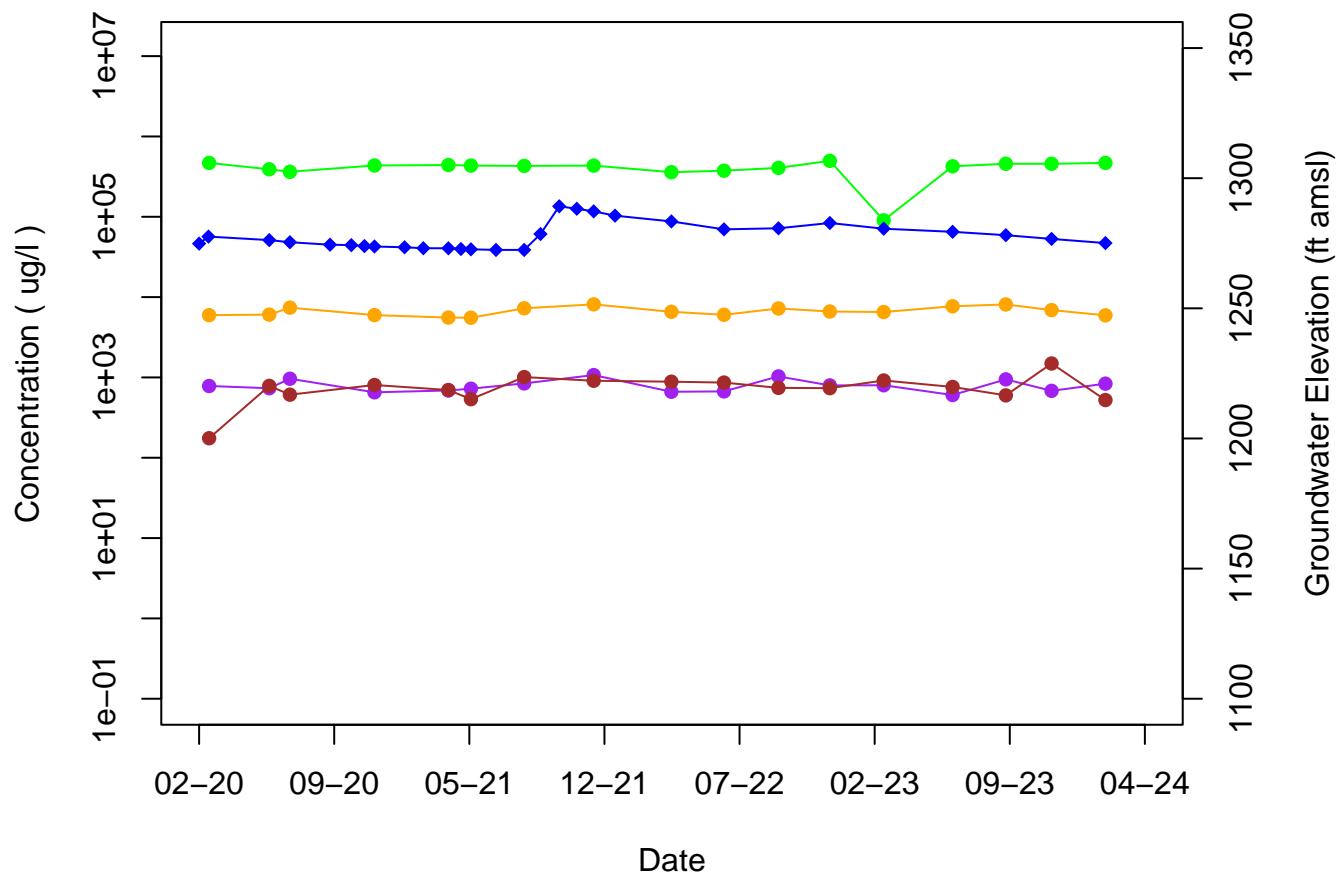
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

TTU-EX-2



- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

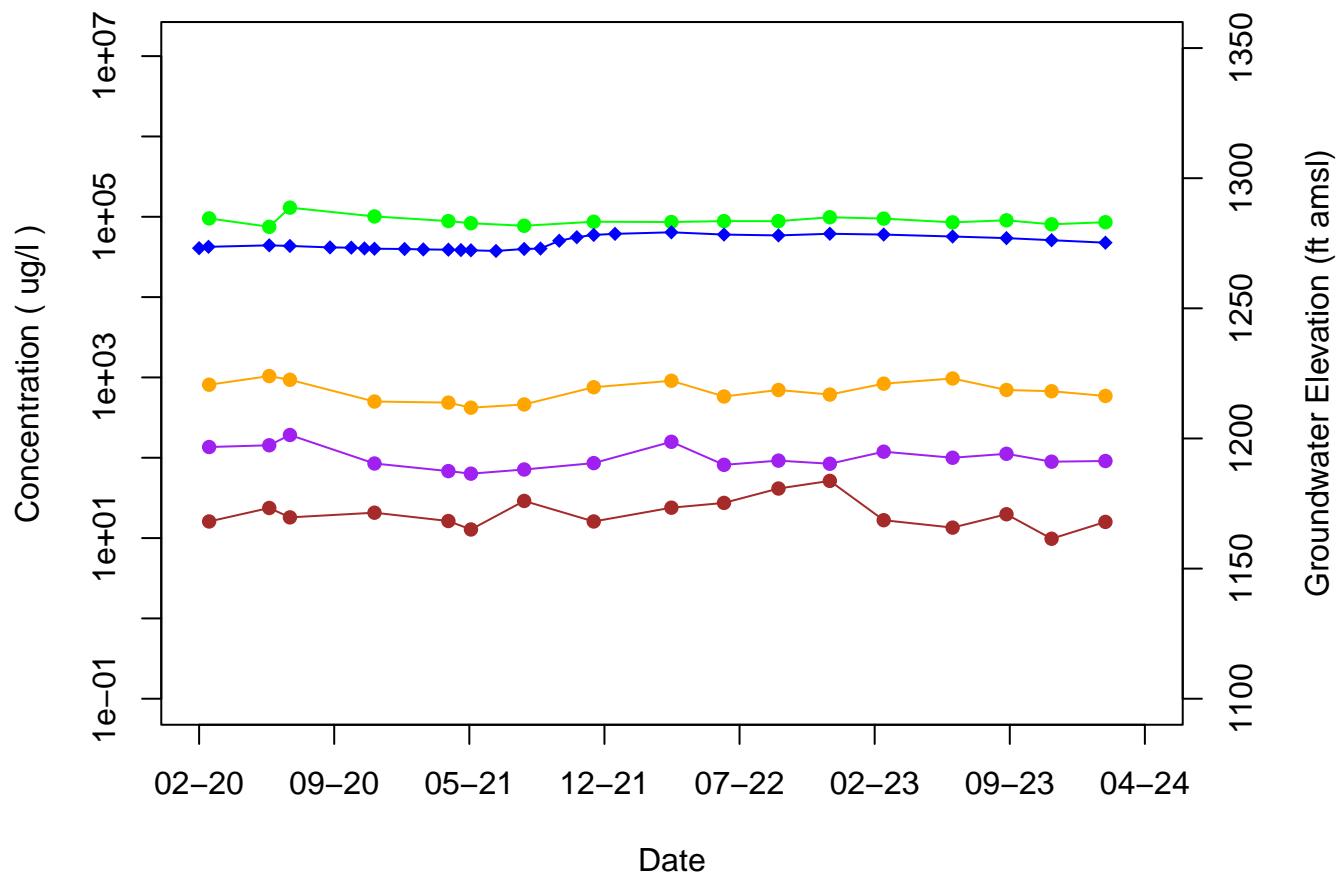
TTU-EX-3



Date

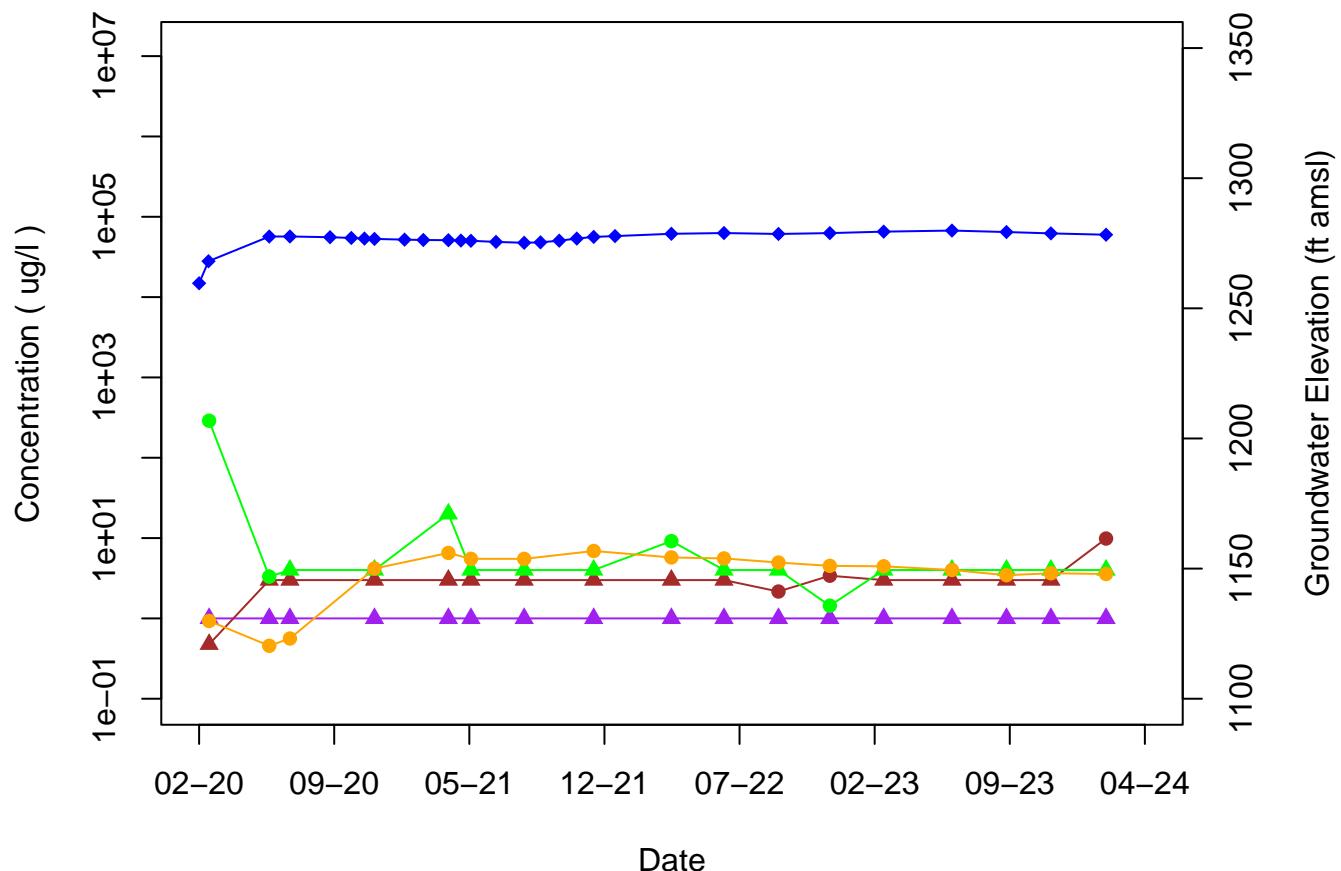
- | | | |
|-------------------------|----------------------|-------------------|
| ● Detect | ○ 1,1-Dichloroethene | ◆ Trichloroethene |
| ▲ Non-Detect | ■ 1,4-Dioxane | ● Perchlorate |
| ◆ Groundwater Elevation | ● | ● |

TTU-EX-4



●	Detect	○	1,1-Dichloroethene	○	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	Perchlorate
◆	Groundwater Elevation	●			

TTU-EX-5



- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

Attachment 4 – Data Validation Documentation



Data Receipt Checklist

Project Name: _____ Date Collected: _____

Laboratory Report(s): _____

Samples Submitted:

Number of Sample Type	Analysis:	Analysis:	Analysis:	Analysis:
Total				
Duplicate samples				
Trip blanks				
Field blanks				
Equipment blanks				
MS/MSD				
Other:				

How were samples relinquished to the lab? Drop-off Courier Shipped to Lab

Date relinquished to lab: _____ Date received by lab: _____

Yes No Do names samples match the COC? _____

Yes No Do dates and times for samples match the COC? _____

Yes No Did the lab assign date/time to samples (i.e. duplicate without date/time listed on COC)? _____

Yes No Were samples preserved appropriately? _____

Preservatives: _____

Yes No Where samples analyzed within holding time? _____

Holding Times: _____

Yes No Where samples received within temperature? _____

Temperature Received: _____

Yes No Are tentatively identified compounds (TICs) reported? _____

Yes No Any analytes detect in the trip blank/field blank/equipment blank? _____

Yes No Was an EDD received? _____

Yes No Is data validation required? _____

Data Checker: _____ Date: _____



Data Receipt Checklist

Sample Summary:

Data Checker:

Date:

Page:



Data Validation Checklist

Project Name: _____ Date Collected: _____

Laboratory Report(s): _____

Analysis Notes:

Yes No Was anything noted in the case narrative? _____

Yes No Were surrogate recoveries within limits? _____

Yes No Were samples reported to MDLs? _____

Yes No Any elevated reporting limits for non-detects? _____

Yes No Any analytes detected in the method blank? _____

Yes No Are there qualifiers reported for laboratory QC samples? _____

Data Validator: _____ Date: _____



Data Validation Checklist

Laboratory Report(s): _____

Laboratory QC Samples:

Batch Number	Analysis	Method Blank	MS/MSD	Lab Duplicate	LCS/LCSD	Other
Example 1234	8260B	1	2; 1 (MS only)	0	1	0

Data Validator: _____

Date: _____

Page: _____



Data Receipt Checklist

Project Name: _____ Date Collected: _____

Laboratory Report(s): _____

Samples Submitted:

Number of Sample Type	Analysis:	Analysis:	Analysis:	Analysis:
Total				
Duplicate samples				
Trip blanks				
Field blanks				
Equipment blanks				
MS/MSD				
Other:				

How were samples relinquished to the lab? Drop-off Courier Shipped to Lab

Date relinquished to lab: _____ Date received by lab: _____

Yes No Do names samples match the COC? _____

Yes No Do dates and times for samples match the COC? _____

Yes No Did the lab assign date/time to samples (i.e. duplicate without date/time listed on COC)? _____

Yes No Were samples preserved appropriately? _____

Preservatives: _____

Yes No Where samples analyzed within holding time? _____

Holding Times: _____

Yes No Where samples received within temperature? _____

Temperature Received: _____

Yes No Are tentatively identified compounds (TICs) reported? _____

Yes No Any analytes detect in the trip blank/field blank/equipment blank? _____

Yes No Was an EDD received? _____

Yes No Is data validation required? _____

Data Checker: _____ Date: _____



Data Receipt Checklist

Sample Summary:

Data Checker:

Date:

Page:



Data Validation Checklist

Project Name: _____ Date Collected: _____

Laboratory Report(s): _____

Analysis Notes:

Yes No Was anything noted in the case narrative? _____

Yes No Were surrogate recoveries within limits? _____

Yes No Were samples reported to MDLs? _____

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Data Validator: _____ Date: _____



Data Validation Checklist

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Laboratory QC Samples:

Batch Number	Analysis	Method Blank	MS/MSD	Lab Duplicate	LCS/LCSD	Other
Example 1234	8260B	1	2; 1 (MS only)	0	1	0

Data Validator: _____

Date: _____

Page: _____



Data Receipt Checklist

Project Name: _____ Date Collected: _____

Laboratory Report(s): _____

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Number of Sample Type	Analysis:	Analysis:	Analysis:	Analysis:
Total				
Duplicate samples				
Trip blanks				
Field blanks				
Equipment blanks				
MS/MSD				
Other:				

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Date relinquished to lab: _____ Date received by lab: _____

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Holding Times: _____

Yes No Where samples received within temperature? _____

Temperature Received: _____

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Yes No Was an EDD received? _____

Yes No Is data validation required? _____

Data Checker: _____ Date: _____



Data Receipt Checklist

Sample Summary:

Data Checker:

Date:

Page:



Data Validation Checklist

Project Name: _____ Date Collected: _____

Laboratory Report(s): _____

Analysis Notes:

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Data Validation Checklist

Laboratory Report(s): _____

Laboratory QC Samples:

Batch Number	Analysis	Method Blank	MS/MSD	Lab Duplicate	LCS/LCSD	Other
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Data Receipt Checklist

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Laboratory Report(s): _____

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Total				
Duplicate samples				
Trip blanks				
Field blanks				
Equipment blanks				
MS/MSD				
Other:				

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Preservatives: _____

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Holding Times: _____

Yes No Where samples received within temperature? _____

Temperature Received: _____

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Yes No Any analytes detect in the trip blank/field blank/equipment blank? _____

Yes No Was an EDD received? _____

Yes No Is data validation required? _____

Data Checker: _____ Date: _____



Data Receipt Checklist

Sample Summary:

Data Checker:

Date:

Page:



Data Validation Checklist

Project Name: _____ Date Collected: _____

Laboratory Report(s): _____

Analysis Notes:

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Yes No Were samples reported to MDLs? _____

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Data Validation Checklist

Laboratory Report(s): _____

Laboratory QC Samples:

Batch Number	Analysis	Method Blank	MS/MSD	Lab Duplicate	LCS/LCSD	Other
Example 1234	8260B	1	2; 1 (MS only)	0	1	0

Data Validator: _____

Date: _____

Page: _____



Data Receipt Checklist

Project Name: _____ Date Collected: _____

Laboratory Report(s): _____

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Total				
Duplicate samples				
Trip blanks				
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Equipment blanks				
MS/MSD				
Other:				

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Data Validation Checklist

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Data Validation Checklist

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Laboratory QC Samples:

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Date: _____

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