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Subject: Fourth Quarter 2023 Groundwater Monitoring Results, Former Thermal Treatment Unit, Nammo Defense Systems Inc., Mesa, Arizona

Dear Ms. Clark:

Pinyon Environmental, Inc. (Pinyon), has prepared the following Fourth Quarter 2023 (Q4 2023) 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 November 17 and 21, 2023. Well construction details are summarized in Table 1. A Site Vicinity Map and well locations are shown on Figures 1 and 2, respectively.

I.I Deviations from Work Plan

The Q4 2023 groundwater monitoring was conducted in accordance with the TTU SAP and NDS Facility QAPP, with the following exceptions:

- From October through the remainder of Q4, well TTU-20 experienced pumping issues and thus was inoperable; and
- Depth to groundwater was not obtained from well PF-2 as the water level meter was too large to fit in sounding tube. Based on approval from the EPA on November 15, 2023, the sample from production well PF-2 was submitted to Eurofins-Phoenix (Eurofins) for analysis of perchlorate via EPA

United States Environmental Protection Agency (USEPA) Method 314.0. Upon receipt of the laboratory data package from Eurofins, it was noted that the sample results included a T5 data qualifier, indicating that Eurofins does not carry the ADHS certification for analysis of perchlorate in groundwater using EPA Method 314.0. Since the water from PF-2 is used for watering the primates at the facility, the chain of custody was revised to reflect the sample media as drinking water, thus the data qualifier was removed.

I.2 Groundwater Elevation Measurement

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 was observed to be dry during the Q4 event. A summary of groundwater elevation data for the Q4 2023 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, 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 Q4 2023 sampling event are provided in Attachment I.

Monitoring wells and other non-pumping wells were sampled utilizing HydraSleeve samplers that were deployed by Pinyon at the end of the Q3 2023 sampling event. 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 Q3 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 13 of the 24 wells sampled. 1,4-dioxane was detected at concentrations above the interim screening level of 3.5 $\mu\text{g}/\text{L}$ in 13 of the 24 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 8 of the 24 wells sampled. Trichloroethene (TCE) was detected at concentrations above the AWQS of 5 $\mu\text{g}/\text{L}$ in 11 of the 24 wells sampled. Analytical results for Q4 2023 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 Q4 2023 monitoring activities were generally consistent with Q3 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 November sampling event, 1,4-dioxane was detected at 9.22 $\mu\text{g}/\text{L}$ 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 $\mu\text{g}/\text{L}$). Due to the sample concentrations being an order of magnitude¹ higher than the average of the three previous sampling events, TTU-3 was subsequently resampled in December 2023. 1,4-dioxane was not detected in the December resampling, thus additional monthly sampling was not necessary.

¹ To establish consistency regarding the trigger or action levels (TL or AL) based on concentration changes for different compounds, Pinyon offers the following definition for a concentration change of one order of magnitude or more: If the current concentration is greater than 10 times the average of the most recent 3 quarterly sampling events (the baseline) for a COPC, an increase of more than one order of magnitude has occurred. Similarly, if the current concentration of a COPC is less than 1/10th of the baseline concentration, a concentration decrease of more than one order of magnitude has occurred. For results where no detectable concentration is reported one-half of the method detection limit will be used for calculation of the average.

2.3 Groundwater Concentration Versus Time and Trend Analysis

Data from this event did not result in groundwater elevations or chemical concentrations outside of their respective historical ranges. TCE, 1,1-DCE, perchlorate, and 1,4-dioxane concentration and groundwater elevation versus time plots are presented in Attachment 3.

Concentrations were analyzed for increasing/decreasing trend (minimum 95% confidence), probably increasing/decreasing trend (90-95% confidence), stable trend (less than 90% confidence and a coefficient of variability standard deviation divided by mean less than one with a negative p value), and no trend (less than 90% confidence and a coefficient of variability of more than one or a positive p value).

Perchlorate Concentration Trends

Long-term (full data set) decreasing trends were observed at wells TTU-1, TTU-2, TTU-3, TTU-7, TTU-13, TTU-14, and TTU-19. Long term stable trends were observed at wells TTU-16, TTU-EX-2, TTU-EX-3, and TTU-EX-4. Long-term increasing trends were observed in TTU-5 and TTU-20.

Short-term (3-year data set) decreasing trends were observed at wells TTU-2 and TTU-9A. Short-term stable trends were observed at wells TTU-1, TTU-12, TTU-13, TTU-16, TTU-4, TTU-EX-1, and TTU-EX-2. Short-term increasing trends were observed at only well TTU-15.

A short-term probably decreasing trend was observed in well PF-2.

TCE Concentration Trends

Long-term decreasing trends were observed at wells TTU-9A, TTU-15, and TTU-19. Long term stable trends were observed at wells TTU-1, TTU-16, TTU-17, TTU-EX-1, and TTU-EX-5. Long-term increasing trends were observed at well TTU-2.

Short-term decreasing trends were observed at wells TTU-1, TTU-12, TTU-15, TTU-17, TTU-9A, and TTU-EX-5. Short-term stable trends were observed at wells TTU-13, TTU-16, TTU-19, TTU-20, TTU-EX-1, and TTU-EX-2. No short-term increasing trends were observed.

1,1-DCE Concentration Trends

Long-term decreasing trends were observed at wells TTU-19, TTU-EX-1, TTU-EX-2. Long term stable trends were observed at wells TTU-13 and TTU-16. Long-term increasing trends were observed at well TTU-15, TTU-2, and TTU-20.

Short-term decreasing trends were observed at wells TTU-1 and TTU-2. Short-term stable trends were observed at wells TTU-11, TTU-12, TTU-13, TTU-16, TTU-19, and TTU-EX-2. Short-term increasing trends were observed at wells TTU-15 and TTU-EX-4.

1,4-Dioxane Concentration Trends

Long term stable trends were observed at wells TTU-1, TTU-13, TTU-19, TTU-EX-1, and TTU-EX-2. Increasing trends were observed at wells TTU-2, TTU-12, and TTU-15.

Short-term decreasing trend was observed at well TTU-1. Short-term stable trends were observed at wells TTU-2, TTU-13, TTU-14, TTU-EX-1, TTU-EX-2, and TTU-EX-4. Short-term increasing trends were observed only at well TTU-15.

A summary of the Mann-Kendall Trends by sampling location are provided in Table 6.

2.4 Discussion

On November 17, 2023, 1,4-dioxane was detected at TTU-3 at a concentration of 9.22 µg/L, which exceeded the established trigger level. TTU-3 was subsequently resampled for 1,4-dioxane on December 12, 2023, 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 used for determining 1,4-dioxane plume geometry. Using the definition of order of magnitude changes established in Section 2.2, Footnote 1, no other order of magnitude concentration increases were observed between Q3 2023 and Q4 of 2023 for any other COPC.

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.

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
													Open Borehole	8		None	
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	PVC	4	135-185	190	204
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	24-99	104	105
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
													Open Borehole	5		None	
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	Steel	5.5	30-80	30	80
													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
													Open Borehole	5		None	
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	Steel	5	10-100	10	100
													Open Borehole	4.5		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
													Open Borehole	8		None	
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	Steel	8	20-101	20	101
													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	
TTU-20	9/24/2020	33 29 55.17	-111 42 51.58	NP	NP	1336.90	NP	0.85	55-232968	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	PVC	4	25-95	95	100

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-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.

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 - FOURTH QUARTER 2023
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	11/17/2023	43.07	1,269.66
TTU-2	909087.852	761148.265	1314.44	11/17/2023	64.03	1,250.41
TTU-3	909303.363	760888.204	1308.03	11/17/2023	92.07	1,215.96
TTU-4	909673.680	761041.975	1305.12	11/17/2023	52.35	1,252.77
TTU-5	908747.636	761102.227	1314.93	11/17/2023	81.76	1,233.17
TTU-6	909260.820	760560.096	1300.84	11/17/2023	123.85	1,176.99
TTU-7	909287.611	760527.269	1301.84	11/17/2023	131.85	1,169.99
TTU-8	909699.266	760514.908	1310.23	11/17/2023	143.08	1,167.15
TTU-9A	909974.490	761710.151	1318.04	11/17/2023	27.35	1,290.69
TTU-10	908960.114	760297.013	1302.42	11/21/2023	165.18	1,137.24
TTU-11	909029.758	761706.470	1339.20	11/18/2023	34.33	1,304.87
TTU-12	909105.990	761103.280	1312.21	11/18/2023	75.62	1,236.59
TTU-13	909405.920	761232.180	1310.79	11/17/2023	43.27	1,267.52
TTU-14	909224.260	761181.230	1316.80	11/18/2023	61.81	1,254.99
TTU-15	909185.100	762065.910	1350.85	11/18/2023	32.70	1,318.15
TTU-16	909124.980	761848.851	1338.55	11/18/2023	24.67	1,313.88
TTU-17	909370.903	762179.168	1347.49	11/18/2023	39.98	1,307.51
TTU-18	908215.829	761130.011	1320.25	11/18/2023		DRY
TTU-19	909030.750	761687.700	1336.81	11/18/2023	32.56	1,304.25
TTU-20	909022.530	761681.990	1336.90	11/17/2023	33.65	1,303.25
TTU-EX-1	909350.574	761597.823	1321.69	11/18/2023	29.27	1,292.42
TTU-EX-2	909268.187	761493.214	1316.40	11/18/2023	38.04	1,278.36
TTU-EX-3	909134.941	761465.507	1316.85	11/18/2023	40.18	1,276.67
TTU-EX-4	909051.298	761442.876	1319.96	11/18/2023	43.78	1,276.18
TTU-EX-5	908971.770	761423.325	1319.50	11/17/2023	40.71	1,278.79
PF-1	909161.578	760140.434	1295.99	11/21/2023	NM*	--
PF-2	909166.890	760122.250	1296.35	11/21/2023	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

** - DTW not obtained due to waterlevel meter being too thick for sounding tubes

TABLE 3:
SUMMARY OF PERCHLORATE CONCENTRATIONS - FOURTH QUARTER 2023
 FORMER THERMAL TREATMENT UNIT
 NAMMO DEFENSE SYSTEMS INC.

			Analyte	Perchlorate	
			EPA Method	314	314.0
			Units	$\mu\text{g/l}$	
			HBGL	14	
Location	Sample Depth (ft btoc)	Sample Date	Sample Type	Concentration	
PF-2	400	11/21/2023	Primary	--	<1.0 E8
TTU-1	50	11/17/2023	Primary	8,250	--
TTU-2	114	11/17/2023	Primary	145,000	--
TTU-3	108	11/17/2023	Primary	11.3	--
TTU-4	57	11/17/2023	Primary	<4.00	--
TTU-5	110	11/17/2023	Primary	38.2	--
DUP-02		11/17/2023	Duplicate	37.5	--
TTU-6	143	11/17/2023	Primary	13.1	--
TTU-7	345	11/17/2023	Primary	<4.00 M2	--
TTU-8	164	11/17/2023	Primary	<4.00 M2,R2	--
DUP-01		11/17/2023	Duplicate	<4.00	--
TTU-9A	61	11/17/2023	Primary	5.59	--
TTU-10	172	11/21/2023	Primary	<4.00	--
DUP-05		11/21/2023	Duplicate	<4.00	--
TTU-11	73	11/18/2023	Primary	1,320	--
TTU-12	82	11/18/2023	Primary	112,000	--
TTU-13	51	11/17/2023	Primary	23,400	--
TTU-14	64	11/18/2023	Primary	126,000	--
TTU-15	75	11/18/2023	Primary	12,000	--
DUP-03			Duplicate	11,000	--
TTU-16	80	11/18/2023	Primary	794,000	--
TTU-17	80	11/18/2023	Primary	11.7	--
TTU-19	73	11/18/2023	Primary	<4.00 M1,R5	--
DUP-04			Duplicate	<4.00	--
TTU-20	73	NS	Primary	NS	--
TTU-EX-1	69	11/18/2023	Primary	69,900 M3	--
TTU-EX-2	74	11/18/2023	Primary	84,300	--
TTU-EX-3	76	11/18/2023	Primary	457,000	--
TTU-EX-4	77	11/18/2023	Primary	80,600	--
TTU-EX-5	80	11/17/2023	Primary	<4.00	--

Notes:

ft btoc - feet below top of casing

$\mu\text{g/l}$ - 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 $\mu\text{g/l}$ and the trigger level is 3.2 $\mu\text{g/l}$

-- Not reported

BOLD - Concentration exceeds its respective HBGL

NS - Not sampled. Well pump was not working.

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

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

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

R2 - RPD/RSD exceeded the laboratory acceptance limit.

R5 - MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance

TABLE 4:
SUMMARY OF DETECTED VOC CONCENTRATIONS - FOURTH QUARTER 2023
 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	dis-1,2-dichloroethene	Dichloromethane (methylene chloride)	Isopropylbenzene	Tetrachloroethene	Toluene	trans-1,2-dichloroethene	1,1,2-trichloroethane	Trichloroethene	Vinyl chloride	2-butanone (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	11/21/2023	<0.597	<11.3 M2;R5	<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 L1	<0.234	<1.19	<0.478	<0.174
TTU-1	50	11/17/2023	9.45	<11.3	<0.100	0.676 E4	<0.0819	<0.0941	0.106 BI;E4	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	3.51	<0.234	<1.19	<0.478	<0.174
TTU-2	114	11/17/2023	221	<11.3	1.04 E4	49.2	<0.819	1.31 E4	1.15 BI;E4	2.24 E4	2.32 E4	13.0 E4	<1.05	<3.00	<2.78	<1.49	<1.58	561	<2.34	<11.9	<4.78	<1.74
TTU-3	108	11/17/2023	9.22	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.126 BI;E4	<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 ¹		12/12/2023	<0.597	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TTU-4	57	11/17/2023	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.105 BI;E4	<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	11/17/2023	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.097 BI;E4	<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-02		<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.109 BI;E4	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234 L1	<1.19	<0.478	<0.174	
TTU-6	143	11/17/2023	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.122 BI;E4	<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	11/17/2023	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.119 BI;E4	<0.111	<0.126	<0.430	<0.105	<0.300	0.600 E4	<0.149	<0.158	<0.190	<0.234	<1.19	<0.478	<0.174
TTU-8	164	11/17/2023	<0.597	<11.3	<0.100	<0.188	<0.0819	<0.0941	0.113 BI;E4	<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	0.129 BI;E4	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	<0.190	<0.234 L1	<1.19	<0.478	<0.174	
TTU-9A	61	11/17/2023	<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	11/21/2023	<0.597	<11.3	<0.100 R7	<0.188 R7	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105 R7	<0.300 R7	<0.278 R7	<0.149	<0.158 R7	<0.190 L1;R7	<0.234 R7	<1.19	<0.478	<0.174 R7
DUP-05		<0.597	<11.3	<0.100 R7	<0.188 R7	<0.0819	<0.0941	<0.0962	<0.111	<0.126	<0.430	<0.105 R7	<0.300 R7	<0.278 R7	<0.149	<0.158 R7	<0.190 L1;R7	<0.234 R7	<1.19	<0.478	<0.174 R7	
TTU-11	73	11/18/2023	<0.597	397 E4	<2.50	<4.70	<2.05	<2.35	4.41 E4	<2.78	23.9 E4	<10.7 R7	<2.63	<7.50	<6.95	<3.73	<3.95	67.9	<5.85 R7	489	74.9 E4	<4.35
TTU-12	82	11/18/2023	153	<11.3	<1.00	<1.88	<0.819	<0.941	<0.962	<1.11	<1.26	<4.30 R7	<1.05	<3.00	<2.78	<1.49	<1.58	427	<2.34 R7	<11.9	<4.78	<1.74
TTU-13	51	11/17/2023	20.9	<11.3	<0.100	3.92	<0.0819	<0.0941	0.110 BI;E4	<0.111	<0.126	<0.430	<0.105	<0.300	<0.278	<0.149	<0.158	9.37	<0.234	<1.19	<0.478	<0.174
TTU-14	62	11/18/2023	356	<11.3	<1.00	75.7	<0.819	2.04 E4	<0.962	1.99 E4	3.37 E4	<4.30 R7	<1.05	<3.00	<2.78	<1.49	<1.58	712	<2.34 R7	<11.9	<4.78	<1.74
TTU-15	75	11/18/2023	12.2	<11.3	<0.100	1.10	<0.0819	<0.0941	<0.0962	<0.111	0.984 E4	<0.430 R7	<0.105	<0.300	<0.278	<0.149	<0.158	3.24	<0.234 R7	<1.19	<0.478	<0.174
DUP-03		6.38	<11.3	<0.100	0.968 E4	<0.0819	<0.0941	<0.0962	<0.111	0.877 E4	<0.430 R7	<0.105	<0.300	<0.278	<0.149	<0.158	3.21	<0.234 R7	<1.19	<0.478	<0.174	
TTU-16	80	11/18/2023	3470	<22600	<200	1500 E4	<164	949 E4	331 E4	<222	<252	23700 R7	<210	<600	1780 E4</b							

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

		Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	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
PF-2	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
	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
	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

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	
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	12/22/2021	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

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

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

		Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
		Sample Date		
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
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 J3
	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
	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

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

		Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
	Sample Date			
TTU-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	12/20/2019	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
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

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	
TTU-7	Screening Level	3.5 ⁽¹⁾	5	
		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
	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
TTU-8	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	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
	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

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-9A	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
TTU-10	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

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-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
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

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	
TTU-13	Primary	Screening Level	3.5 ⁽¹⁾	5
		Sample Date		
		8/29/2017	4	2.6
		11/27/2017	14.1	5.7
		3/27/2018	18.3	7.3
		6/28/2018	33.9	12.6
		9/10/2018	47.3	24.2
		12/10/2018	45.2	20.1
		3/25/2019	55.8	21.7
		6/7/2019	39.9	22.6
		9/16/2019	58	18.3
		12/20/2019	40.2	17
		3/16/2020	32.2 J	15.4
		Field Duplicate	33.5 J	14.9
		6/17/2020	48.5	14.6
		Field Duplicate	54.1	16.6
		7/20/2020	29.6	13.3
		Field Duplicate	27.7	13.8
		Primary	25.3	11.2 J
		3/30/2021	37.7 J	17.1
		Primary	37.9	12.9
		7/29/2021	58.6	11.1
		Primary	3.26	1.44 J
		3/22/2022	9.96	5.76
		Primary	28.9	5.52
		9/8/2022	13.7	7.06
		Primary	33.5	12.7
		2/23/2023	40.1	12.8
		Primary	32.5	9.34
		9/6/2023	37.4	9.79
		Primary	20.9	9.37
TTU-14	Primary	8/29/2017	367	657
		11/27/2017	356	828
		3/27/2018	363	1030
		6/28/2018	381	875
		9/10/2018	338	689
		12/17/2018	331	694
		3/27/2019	356	780
		9/16/2019	422	921
		12/20/2019	280	1060
		3/12/2020	278 J	880
		6/17/2020	504	891
		7/20/2020	241	1210
		12/2/2020	388	917
		3/30/2021	280 J	990
		5/6/2021	370	831
		7/29/2021	493	966
		11/18/2021	279	917
		3/22/2022	339	908
		Field Duplicate	321	879
		6/14/2022	297 J3	1040
		9/9/2022	297	1020
		11/29/2022	288	882
		2/25/2023	339	807
		6/13/2023	269	764
		9/7/2023	246	921
		11/18/2023	356	712

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-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	<0.190U
	Primary	7/20/2020	2.81 J	<0.190U
	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
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
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

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

		Chemical Name	1,4-Dioxane	Trichloroethene
		EPA Method	8260B SIM	8260B
		Unit	µg/l	
Location	Sample Type	Screening Level	3.5 ⁽¹⁾	5
		Sample Date		
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	10/26/2020	567 J	4480
TTU-20	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	3/13/2020	24.5	265
	Primary	6/17/2020	284	168
TTU-EX-1	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
	Field Duplicate	9/6/2023	202	194
	Primary	11/18/2023	351	182

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-EX-2	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
	Primary	6/13/2023	220	161 L1
	Primary	9/6/2023	191	433
	Primary	11/18/2023	266	329
TTU-EX-3	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

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 ^(I)	5		
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
TTU-EX-5	Primary	3/13/2020	<0.0532 U	0.929 J
	Field Duplicate	3/13/2020	<0.055 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

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

(I) - 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 concentration of

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.

TABLE 6 - Summary of Mann-Kendall Trends
Nammo Defense Systems Thermal Treatment Unit, Mesa Arizona

Well Name	Parameter	Full Period Trend ¹							3-Year Trend ²						
		Trend	Slope	Intercept	Number of Points	Mann Kendall Test Value	p Value	Calculated COV	Trend	Slope	Intercept	Number of Points	Mann Kendall Test Value	p Value	Calculated COV
PF-2	1,1-Dichloroethene	NA	NA	NA	20	NA	NA	NA	NA	NA	NA	11	NA	NA	NA
TTU-I	1,1-Dichloroethene	Probably Decreasing	0.000	5.17	26	-78	0.0896	0.8965	Decreasing	-0.01	98.80	12	-41	0.0060	1.1135
TTU-10	1,1-Dichloroethene	NA	NA	NA	22	NA	NA	NA	NA	NA	NA	11	NA	NA	NA
TTU-11	1,1-Dichloroethene	Probably Decreasing	-0.093	2209.27	27	-86	0.0763	1.1273	Stable	0.00	90.47	7	-5	0.5480	0.2921
TTU-12	1,1-Dichloroethene	No Trend	0.005	-28.20	25	45	0.3040	0.1962	Stable	0.00	111.83	11	-7	0.6404	0.1736
TTU-13	1,1-Dichloroethene	Stable	-0.001	23.45	25	-64	0.1412	0.5395	Stable	0.00	14.53	11	-7	0.6404	0.4640
TTU-14	1,1-Dichloroethene	No Trend	0.004	66.10	24	1	1.0000	0.1559	Probably Decreasing	-0.02	462.76	11	-24	0.0725	0.0912
TTU-15	1,1-Dichloroethene	Increasing	0.000	-5.21	18	50	0.0152	0.3209	Increasing	0.00	-10.44	11	30	0.0092	0.3194
TTU-16	1,1-Dichloroethene	Stable	-0.470	12359.78	15	-7	0.7665	0.3647	Stable	-1.05	23540.03	11	-9	0.5334	0.3946
TTU-17	1,1-Dichloroethene	NA	NA	NA	15	NA	NA	NA	NA	NA	NA	11	NA	NA	NA
TTU-19	1,1-Dichloroethene	Decreasing	-1.327	25736.33	9	-22	0.0286	1.7799	Stable	-0.03	675.83	7	-7	0.3675	0.4717
TTU-2	1,1-Dichloroethene	Increasing	0.020	-288.93	37	211	0.0060	0.5884	Decreasing	-0.07	1519.38	12	-37	0.0133	0.4065
TTU-20	1,1-Dichloroethene	Increasing	2.236	-40470.85	10	24	0.0165	0.4078	No Trend	1.02	-17038.79	8	9	0.2296	0.1477
TTU-3	1,1-Dichloroethene	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	11	NA	NA	NA
TTU-4	1,1-Dichloroethene	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-5	1,1-Dichloroethene	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-6	1,1-Dichloroethene	NA	NA	NA	23	NA	NA	NA	NA	NA	NA	11	NA	NA	NA
TTU-7	1,1-Dichloroethene	NA	NA	NA	23	NA	NA	NA	NA	NA	NA	11	NA	NA	NA
TTU-8	1,1-Dichloroethene	NA	NA	NA	23	NA	NA	NA	NA	NA	NA	11	NA	NA	NA
TTU-9A	1,1-Dichloroethene	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	13	NA	NA	NA
TTU-EX-1	1,1-Dichloroethene	Decreasing	-0.066	1354.51	15	-41	0.0478	0.4983	Probably Decreasing	-0.10	2070.24	11	-23	0.0868	0.5760
TTU-EX-2	1,1-Dichloroethene	Decreasing	-0.083	1664.19	15	-49	0.0175	0.5028	Stable	-0.09	1851.64	11	-21	0.1195	0.5949
TTU-EX-3	1,1-Dichloroethene	No Trend	0.025	318.96	15	5	0.8431	0.1817	No Trend	0.04	88.51	11	3	0.8763	0.1934
TTU-EX-4	1,1-Dichloroethene	No Trend	-0.023	548.91	15	3	0.9212	0.3488	Increasing	0.04	-759.26	11	31	0.0195	0.2911
TTU-EX-5	1,1-Dichloroethene	NA	NA	NA	15	NA	NA	NA	NA	NA	NA	11	NA	NA	NA
PF-2	1,4-Dioxane	NA	NA	NA	21	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-I	1,4-Dioxane	Stable	-0.001	36.54	34	-84	0.2181	0.4913	Decreasing	-0.02	358.40	13	-55	0.0010	0.4883
TTU-10	1,4-Dioxane	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-11	1,4-Dioxane	Probably Increasing	1.669	-28473.22	28	60	0.0960	1.9220	NA	NA	NA	8	NA	NA	NA
TTU-12	1,4-Dioxane	Increasing	0.028	-381.98	26	129	0.0048	0.2646	No Trend	0.01	29.88	12	6	0.7317	0.1949
TTU-13	1,4-Dioxane	Stable	-0.001	58.79	26	-23	0.6277	0.4774	Stable	-0.01	142.25	12	-2	0.9453	0.5184
TTU-14	1,4-Dioxane	Probably Decreasing	-0.032	942.58	26	-83	0.0702	0.1996	Stable	-0.07	1704.70	12	-14	0.3704	0.2055
TTU-15	1,4-Dioxane	Increasing	0.007	-122.07	19	85	0.0015	0.7600	Increasing	0.01	-167.38	12	30	0.0467	0.6663
TTU-16	1,4-Dioxane	No Trend	4.271	-75857.13	16	11	0.6522	1.3931	No Trend	3.83	-67256.48	12	-15	0.3359	1.3611

TABLE 6 - Summary of Mann-Kendall Trends
Nammo Defense Systems Thermal Treatment Unit, Mesa Arizona

Well Name	Parameter	Full Period Trend ¹							3-Year Trend ²						
		Trend	Slope	Intercept	Number of Points	Mann Kendall Test Value	p Value	Calculated COV	Trend	Slope	Intercept	Number of Points	Mann Kendall Test Value	p Value	Calculated COV
TTU-17	1,4-Dioxane	Probably Increasing	1.198	-22869.13	16	6	0.0894	1.0912	Probably Increasing	1.20	-22869.13	12	6	0.0894	1.0912
TTU-19	1,4-Dioxane	Stable	-0.472	9432.70	10	-4	0.7105	0.8237	No Trend	0.25	-4664.39	8	7	0.2597	0.4240
TTU-2	1,4-Dioxane	Increasing	0.032	-355.05	36	169	0.0220	0.2827	Stable	-0.06	1466.32	13	-27	0.1120	0.2402
TTU-20	1,4-Dioxane	No Trend	5.871	-108842.62	10	11	0.3711	1.9445	No Trend	7.11	-132761.68	8	0	1.0000	1.8087
TTU-3	1,4-Dioxane	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-4	1,4-Dioxane	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	13	NA	NA	NA
TTU-5	1,4-Dioxane	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	13	NA	NA	NA
TTU-6	1,4-Dioxane	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-7	1,4-Dioxane	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-8	1,4-Dioxane	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-9A	1,4-Dioxane	No Trend	0.007	-125.37	26	4	0.3082	0.8530	NA	NA	NA	14	NA	NA	NA
TTU-EX-1	1,4-Dioxane	Stable	-0.038	972.32	16	-6	0.8219	0.6416	Stable	-0.17	3436.63	12	-12	0.4507	0.6400
TTU-EX-2	1,4-Dioxane	Stable	-0.111	2355.36	16	-24	0.3004	0.4776	Stable	-0.13	2744.15	12	-8	0.6312	0.5050
TTU-EX-3	1,4-Dioxane	No Trend	0.328	-5449.54	16	28	0.2241	0.3476	No Trend	0.25	-4031.91	12	4	0.8370	0.2904
TTU-EX-4	1,4-Dioxane	No Trend	0.003	-28.84	16	1	1.0000	0.4895	Stable	0.00	32.03	12	-2	0.9453	0.5389
TTU-EX-5	1,4-Dioxane	NA	NA	NA	16	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
PF-2	Perchlorate	No Trend	0.000	-1.64	31	37	0.3406	0.5355	Probably Decreasing	0.00	16.91	11	-11	0.0603	0.5460
TTU-I	Perchlorate	Decreasing	-6.154	135076.53	37	-152	0.0396	1.7460	Stable	-8.54	176662.16	13	-27	0.1120	0.7087
TTU-10	Perchlorate	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	13	NA	NA	NA
TTU-11	Perchlorate	No Trend	-19.885	583176.37	28	-19	0.6118	1.0048	NA	NA	NA	9	NA	NA	NA
TTU-12	Perchlorate	No Trend	-6.005	246000.27	26	23	0.6262	0.1420	Stable	-12.14	366116.16	12	-14	0.3704	0.0783
TTU-13	Perchlorate	Decreasing	-4.946	120301.06	27	-131	0.0067	0.2990	Stable	0.59	12279.20	12	-8	0.6312	0.2927
TTU-14	Perchlorate	Decreasing	389.675	-6597498.57	26	-137	0.0027	3.8541	No Trend	-2491.9485	48999246.46	12	-12	0.45067	3.047784265
TTU-15	Perchlorate	No Trend	-1.147	29276.26	19	14	0.5923	0.5489	Increasing	11.52	-215665.09	12	53	0.0001	0.6667
TTU-16	Perchlorate	Stable	14.468	538150.37	16	0	1.0000	0.1133	Stable	-8.81	985714.98	12	-6	0.7317	0.0621
TTU-17	Perchlorate	Probably Increasing	0.008	-137.66	16	18	0.0763	0.9086	No Trend	0.00	-77.02	12	3	0.7639	0.7626
TTU-19	Perchlorate	Decreasing	-333.565	6462715.44	11	-24	0.0044	1.8492	Probably Decreasing	-0.39	7731.23	9	-11	0.0603	0.9772
TTU-2	Perchlorate	Decreasing	-11.053	374205.34	39	-219	0.0083	0.2256	Decreasing	-23.67	617014.87	13	-35	0.0377	0.0869
TTU-20	Perchlorate	Increasing	294.060	-5102508.86	10	24	0.0165	0.2569	No Trend	124.92	-1855679.22	8	9	0.2296	0.1154
TTU-3	Perchlorate	Decreasing	-0.032	673.41	39	-158	0.0484	1.0536	No Trend	-0.02	440.20	12	-7	0.6404	1.0150
TTU-4	Perchlorate	No Trend	-0.003	59.03	28	-30	0.1917	1.2161	Stable	0.00	24.72	12	-10	0.2655	0.9274
TTU-5	Perchlorate	Increasing	0.009	-124.89	37	253	0.0010	0.9263	No Trend	-0.03	555.12	12	-6	0.7317	1.1875
TTU-6	Perchlorate	No Trend	-0.008	196.06	40	-50	0.5533	1.2314	No Trend	0.05	-925.66	15	21	0.2736	1.1351
TTU-7	Perchlorate	Decreasing	-0.001	25.43	33	-48	0.0343	0.8278	Probably Decreasing	-0.01	268.74	12	-8	0.0864	0.9003

TABLE 6 - Summary of Mann-Kendall Trends
Nammo Defense Systems Thermal Treatment Unit, Mesa Arizona

Well Name	Parameter	Full Period Trend ¹							3-Year Trend ²						
		Trend	Slope	Intercept	Number of Points	Mann Kendall Test Value	p Value	Calculated COV	Trend	Slope	Intercept	Number of Points	Mann Kendall Test Value	p Value	Calculated COV
TTU-8	Perchlorate	No Trend	-0.003	59.02	24	-12	0.2515	1.0902	No Trend	0.00	-61.62	12	3	0.7071	0.9240
TTU-9A	Perchlorate	No Trend	0.001	-5.81	32	50	0.4044	0.3293	Decreasing	-0.0044268	93.02651644	12	-27	0.04296	0.394759175
TTU-EX-1	Perchlorate	Probably Decreasing	-25.207	590844.35	16	-42	0.0649	0.3255	Stable	-43.62	946736.58	12	-16	0.3037	0.3830
TTU-EX-2	Perchlorate	Stable	-24.094	535556.15	16	-27	0.2413	0.3107	Stable	-26.78	586912.96	12	-11	0.4919	0.3518
TTU-EX-3	Perchlorate	Stable	-26.561	908645.71	16	0	1.0000	0.2276	No Trend	-35.33	1078374.82	12	2	0.9451	0.2605
TTU-EX-4	Perchlorate	Stable	-7.515	233423.75	16	-12	0.6204	0.1404	No Trend	4.71	-3102.32	12	8	0.6312	0.0663
TTU-EX-5	Perchlorate	No Trend	-0.184	3540.90	16	-4	0.3082	1.8780	NA	NA	NA	12	NA	NA	NA
PF-2	Trichloroethene	NA	NA	NA	21	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-1	Trichloroethene	Stable	0.000	10.28	36	-118	0.1109	0.5547	Decreasing	-0.01	199.40	13	-41	0.0145	0.7120
TTU-10	Trichloroethene	NA	NA	NA	23	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-11	Trichloroethene	Probably Decreasing	-0.600	15335.66	28	-91	0.0753	1.2314	No Trend	0.00	9.14	8	4	0.7105	0.1623
TTU-12	Trichloroethene	No Trend	0.056	-573.23	26	45	0.3321	0.2027	Decreasing	-0.07	1913.07	12	-32	0.0335	0.1100
TTU-13	Trichloroethene	Probably Decreasing	-0.003	59.08	26	-87	0.0580	0.4900	Stable	0.00	43.06	12	-6	0.7317	0.4385
TTU-14	Trichloroethene	No Trend	0.028	359.74	25	32	0.4688	0.1485	Probably Decreasing	-0.16	3924.05	12	-26	0.0865	0.1139
TTU-15	Trichloroethene	Decreasing	-0.007	142.86	19	-50	0.0028	0.5351	Decreasing	-0.01	216.66	12	-60	0.0001	0.5070
TTU-16	Trichloroethene	Stable	-15.644	369312.56	16	-9	0.7184	0.3409	Stable	-37.64	793879.26	12	-18	0.2437	0.3794
TTU-17	Trichloroethene	Stable	0.000	7.82	16	-21	0.3674	0.7316	Decreasing	0.00	81.49	12	-61	0.0000	0.5742
TTU-19	Trichloroethene	Decreasing	-9.709	188895.91	10	-27	0.0200	1.8855	Stable	-0.28	5701.87	8	-12	0.1735	0.3733
TTU-2	Trichloroethene	Increasing	0.131	-1861.22	38	234	0.0034	0.4853	Probably Decreasing	-0.20	4445.71	13	-33	0.0505	0.2005
TTU-20	Trichloroethene	No Trend	-0.103	11864.79	10	1	1.0000	0.4759	Stable	-10.11	204794.59	8	-10	0.2655	0.4171
TTU-3	Trichloroethene	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-4	Trichloroethene	NA	NA	NA	26	NA	NA	NA	NA	NA	NA	13	NA	NA	NA
TTU-5	Trichloroethene	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	13	NA	NA	NA
TTU-6	Trichloroethene	NA	NA	NA	25	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-7	Trichloroethene	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-8	Trichloroethene	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	12	NA	NA	NA
TTU-9A	Trichloroethene	Decreasing	-0.013	240.72	26	-17	0.0163	0.8658	Decreasing	-0.01	253.99	14	-13	0.0242	0.9898
TTU-EX-1	Trichloroethene	Stable	-0.080	1705.53	16	-26	0.2604	0.4470	Stable	-0.13	2743.09	12	-14	0.3727	0.5154
TTU-EX-2	Trichloroethene	Probably Decreasing	-0.218	4518.42	16	-38	0.0957	0.4627	Stable	-0.27	5576.50	12	-18	0.2437	0.5305
TTU-EX-3	Trichloroethene	Probably Increasing	0.924	-10838.13	16	38	0.0957	0.1258	No Trend	1.27	-17474.61	12	20	0.1926	0.1285
TTU-EX-4	Trichloroethene	No Trend	-0.001	738.22	16	1	1.0000	0.2722	Probably Increasing	0.30	-5169.32	12	25	0.0990	0.2586
TTU-EX-5	Trichloroethene	Stable	0.002	-27.28	16	-6	0.8219	0.4784	Decreasing	0.00	61.14	12	-50	0.0008	0.2153

Notes:

NA - not applicable. In most instances, an NA designation suggests concentrations at this location have been below the laboratory detection limits, as concentrations below the detection limits were not used in the Mann-Kendall statistic calculation.

I - Full Period - all available data used to calculate Mann-Kendall statistic

No Trend - no increasing or decreasing trend is suggested by the data

2 - 3 year period, included data collected from 1/1/2021 to present in calcultion of Mann-Kendall statistic

Stable Trend - data suggests concentration is not increasing or decreasing

Increasing Trend - data suggests concentration is increasing over time with 95% or greater confidence

Decreasing Trend - data suggests concentration is decreasing over time with 95% or greater confidence

Probably Increasing Trend - data suggests concentratlon is increasing over time with 90% to 95% conficence

Probably Decreasing Trend - data suggests concentration is decreasing over time with 90% to 95% confidence

TABLE 6 - Summary of Mann-Kendall Trends
Nammo Defense Systems Thermal Treatment Unit, Mesa Arizona

Well Name	Parameter	Full Period Trend ¹						3-Year Trend ²					
		Trend	Slope	Intercept	Number of Points	Mann Kendall Test Value	p Value	Calculated COV	Trend	Slope	Intercept	Number of Points	Mann Kendall Test Value

Mann-Kendall Statistic Limits:

Mann Kendall Statistic Value	Confidence in Trend	Concentration Trend
$S > 0$	> 95%	Increasing
$S > 0$	90% to 95%	Probably Increasing
$S > 0$	< 90%	No Trend
$S \leq 0$	< 90% and COV ≥ 1	No Trend
$S \leq 0$	90% and COV < 1	Stable
$S < 0$	90% to 95%	Probably Decreasing
$S < 0$	95%	Decreasing

COV - coefficient of variance = standard deviation divided by mean. It shows the extent of variability in relation to the mean of the population. The coefficient of variation should be computed only for data measured on scales that have a meaningful zero (ratio scale) and hence allows relative comparison of two measurements.

p Value - The probability that a particular statistical measure, such as the mean or standard deviation, of an assumed probability distribution will be greater than or equal to (or less than or equal to in some instances) observed results.

NA - not enough data points with concentrations in excess of the laboratory detection limits to calculate the statistics

Figures



LEGEND



Approximate Property Boundary



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

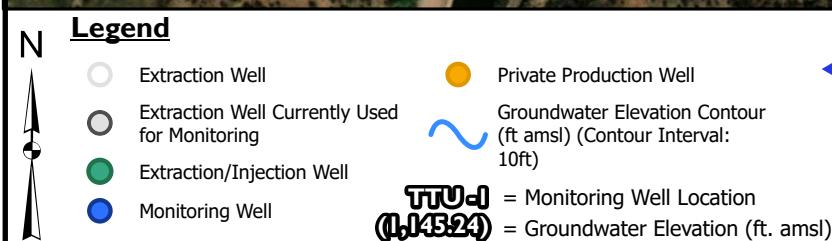
Drawn By: SJA

Figure: 1

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

Reviewed By: AP

Date: 2/2/2024



Estimated Regional Groundwater Flow Direction

0 130 260
Feet

Pinyon
Environmental Inc.

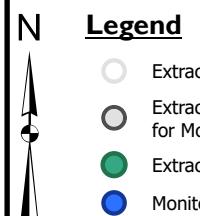
QUARTERLY GROUNDWATER CONTOUR MAP- FOURTH QUARTER 2023
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

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.REM001.4

Reviewed By: AP Date: 1/26/2024



Legend

- Extraction Well
- Private Production Well
- Extraction Well Currently Used for Monitoring
- Dashed where Inferred
- Extraction/Injection Well
- Perchlorate Isoconcentration Contour
- Monitoring Well

(Result/Duplicate Result)

0 100 200
Feet

Pinyon
Environmental, Inc.

**PERCHLORATE DETECTIONS
IN GROUNDWATER - FOURTH QUARTER 2023**
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

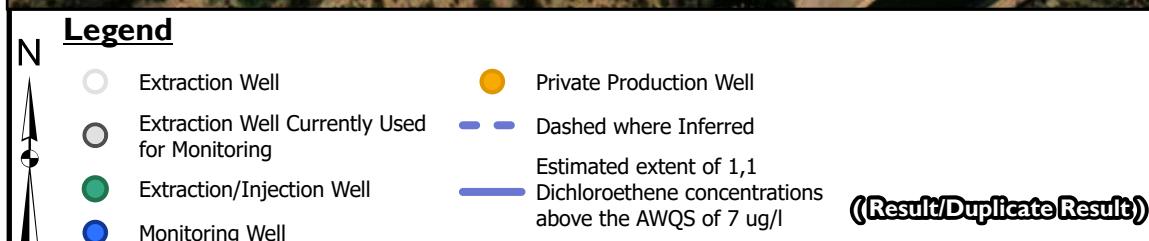
Drawn By: CJB | Figure: 3

Pinyon Project Number: 7/22-1522-01.REM001.4

Reviewed By: AP | Date: 1/26/2024



Legend		I,4-DIOXANE DETECTIONS IN GROUNDWATER - FOURTH QUARTER 2023	
	Extraction Well		Pinyon Environmental, Inc.
	Extraction Well Currently Used for Monitoring		I,4-DIOXANE DETECTIONS IN GROUNDWATER - FOURTH QUARTER 2023
	Extraction/Injection Well		Nammo Defense Systems Inc. Former Thermal Treatment Unit (TTU) Mesa, Arizona
	Monitoring Well	0 100 200 Feet	Drawn By: CJB Figure: 4
Site Location: Sections 23, Townships 12 North, Range 6 East, Gila-Salt River Meridian		Reviewed By: AP	Date: 1/26/2024
Pinyon Project Number: 7/22-1522-01.REM001.4			



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

Pinyon Project Number: 7/22-1522-01.REM001.4

0 100 200
Feet



I, I DICHLORETHENE DETECTIONS
IN GROUNDWATER - FOURTH QUARTER 2023
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Drawn By: CJB Figure: 5
Reviewed By: AP Date: 1/26/2024



Legend

- | | |
|---|--|
| ○ Extraction Well | ● Private Production Well |
| ○ Extraction Well Currently Used for Monitoring | — Dashed where Inferred |
| ● Extraction/Injection Well | Estimated extent of Trichloroethene (TCE) concentrations above the AWQS of 5 $\mu\text{g/l}$ |
| ● 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.REM001.4

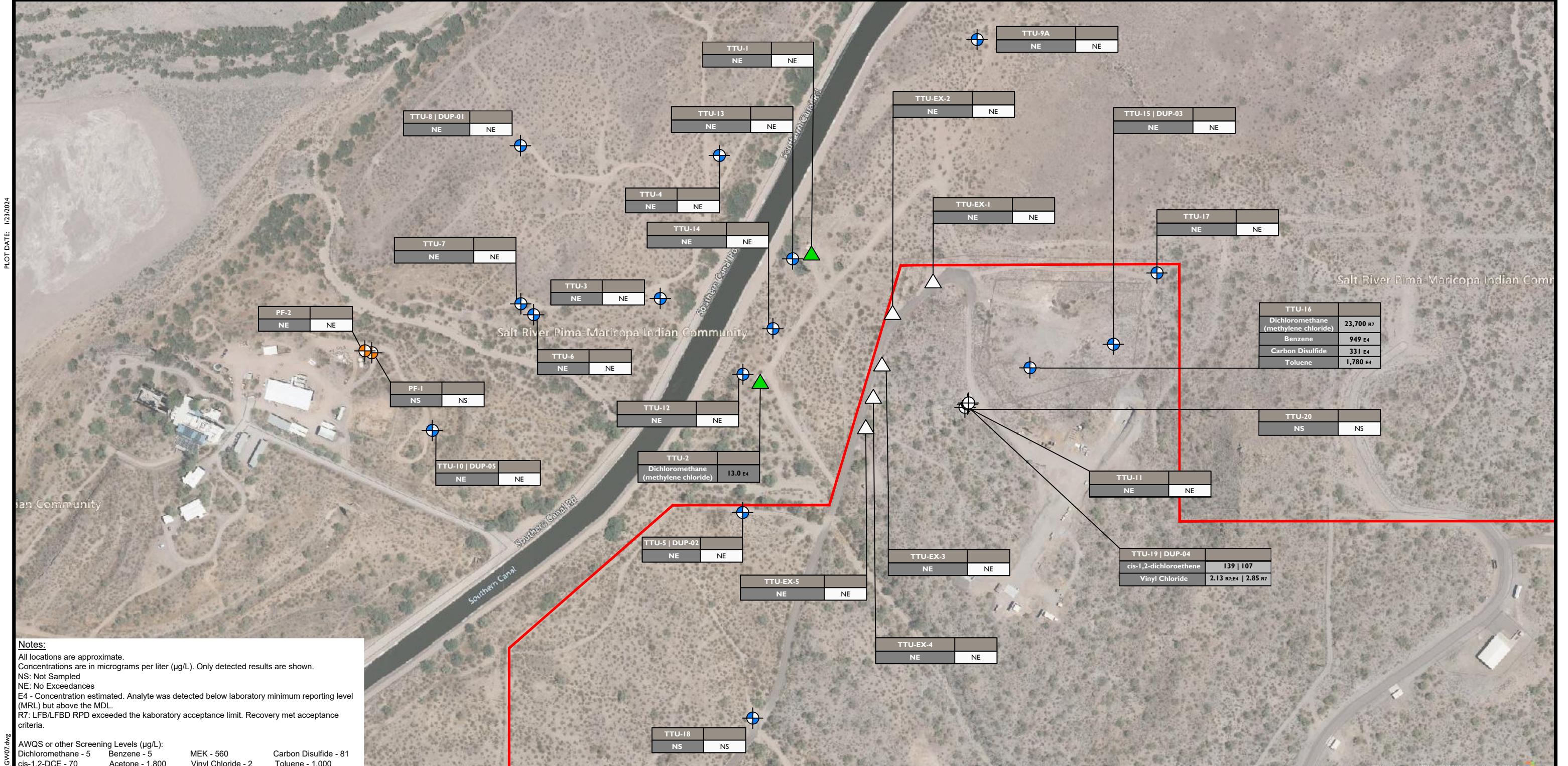
0 150 300
Feet



**TRICHLOROETHENE DETECTIONS
IN GROUNDWATER - FOURTH QUARTER 2023**
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Drawn By: CJB Figure: 6
Reviewed By: AP Date: 1/26/2024

PLOT DATE: 1/23/2024



C:\Users\HernandezOneDrive - Pinyon Environmental Inc\Work\TTU_GW07.dwg

LEGEND

- Extraction Well
- Monitoring / Injection Well
- Monitoring Well
- Extraction Well Currently used for Monitoring
- Primate Production Well
- TTU-1 = Monitoring Well Location
- Extraction and Pilot Test Injection Well
- NDS Leased Property Boundary with SRP-MIC

5.76

Exceeds Aquifer Water Quality Standards or other applicable screening levels

**OTHER VOC EXCEEDANCES IN GROUNDWATER - FOURTH QUARTER 2023**

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

Site Location: Section 23, Township 12N, Range 6E, Gila-Salt River Meridian

Drawn By: SJA Figure: 7

Pinyon Project Number: 7/22-1522-01.REM001.4

Reviewed By: AP Date: 1/23/2024

Coordinate System: NAD83 ARIZONA STATE PLANES, CENTRAL ZONE, US FOOT - AZ83-CF

Attachments

Attachment I – Field Notes

Location	Measurement Date	Depth to Groundwater (ft btoc)	Measurement Date	Depth to Groundwater (ft btoc)
TTU-1	9/14/2023	40.83	11/17/23	43.07
TTU-2	9/14/2023	71.54	11/17/23	64.03
TTU-3	9/5/2023	85.60	11/17/23	92.07
TTU-4	9/5/2023	52.05	11/17/23	52.35
TTU-5	9/6/2023	80.03	11/17/23	81.76
TTU-6	9/6/2023	120.73	11-17-23	123.85
TTU-7	9/5/2023	131.35	11/17/23	131.85
TTU-8	9/5/2023	145.44	11/17/23	143.08
TTU-9A	9/6/2023	26.61	11-17-23	27.35
TTU-10	9/5/2023	163.68	11-18-23	165.18
TTU-11	9/5/2023	33.31	11-18-23	34.33
TTU-12	9/7/2023	71.33	11/18/23	75.62
TTU-13	9/6/2023	40.66	11-17-23	43.27
TTU-14	9/7/2023	57.41	11/18/23	61.81
TTU-15	9/6/2023	31.71	11-18-23	31.71 ^{aw} 32.70
TTU-16	9/7/2023	23.35	11-18-23	24.67
TTU-17	9/6/2023	38.80	11-18-23	39.98
TTU-18	9/5/2023	Dry	11-18-23	Dry
TTU-19	9/7/2023	31.60	11-18-23	32.56
TTU-20	9/14/2023	31.03	11/17/23	33.65
TTU-EX-1	9/6/2023	27.85	11-18-23	29.27
TTU-EX-2	9/6/2023	36.33	11-18-23	38.04
TTU-EX-3	9/6/2023	38.75	11-18-23	40.18
TTU-EX-4	9/7/2023	42.98	11-18-23	43.78

* Double checked

TTU-EX-5	9/7/2023	40.19	11-17-23	40.71
PF-1	NM	NM	11 21 23	NM NO sound
PF-2	9/5/2023	N/A	1	NM

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Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-1 / 55-914440					
Date Completed	6/6/2012					
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	NA					
Type of Sampler	Production Well; spigot					
Size of Sampler	NA					
DTW (ft btoc)	40.83 on 9/14/23					
Deployment Depth (ft btoc)	50					
Personnel	IGF					
Notes	System is odorous					
Retrieval and/or Sampling						
Date / Time	11-17-23 @ 1342					
DTW (ft btoc)	43.07 *Collect before turning well on					
Sampler Integrity	NA, pump					
Personnel	TGF, CJW					
Notes	water clear					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 1318	27.3	7.54	61.3	970	4.61	5.4
1323	27.2	7.57	99.5	997	4.47	3.4
1328	27.3	7.55	89.4	1001	4.61	2.1
1333	27.2	7.52	73.4	1001	4.27	2.0
Sample ID	TTU-1-50-20231117					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (5) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes	**Make sure well has been off for 1 week and has been emptied. When sampling, turn on and let run for 1 hour before sampling. Keep well on after, notify Antonio. *Historically high Concentrations*					
	Well on @ 1213					

Well left on upon departure.

Cont.
→

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-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	NA					
Type of Sampler	Production Well; spigot					
Size of Sampler	NA					
DTW (ft btoc)	71.54 on 9/14/23					
Deployment Depth (ft btoc)	114.5					
Personnel	IGF					
Notes	None					
Retrieval and/or Sampling						
Date / Time	11-17-23 @ 1412					
DTW (ft btoc)	(64.03 *Collect before turning well on					
Sampler Integrity	NA - pump					
Personnel	IGF, CJW					
Notes						
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 1355	27.2	6.80	67.2	3091	46.8	0.95
1400	27.2	6.90	62.3	3785	4.18	2.4
1405	26.0	6.99	63.5	3637	4.82	1.4
1410	26.	7.01	59.3	3624	4.59	1.7
Sample ID	TTU-2-114-20231117					
QAQC Samples	-					
Containers	(2) 125 mL HDPE (no pres.) & (5) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes				<input checked="" type="checkbox"/> No	
Notes	**Make sure well has been off for 1 week and has been emptied. When sampling, turn on and let run for 1 hour before sampling. Keep well on after, notify Antonio. *Historically high concentrations*					
	Well on @ 11:40.					

Well left on upon departure.

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADVWR #	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	9/5/2023 at 11:34					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	85.60					
Deployment Depth (ft btoc)	108					
Personnel	BCB & IGF					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	11-17-23 @ 1125					
DTW (ft btoc)	92.07					
Sampler Integrity	Good					
Personnel	16F, CJW					
Notes	water a little cloudy					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 @ 1131	24.1	7.00	41.6	1452	4.26	8.8
Sample ID	TTU-3-108- 20231117					
QAQC Samples	<u>—</u>					
Containers	(1) 125 mL HDPE (no pres.) & (5) 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 TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-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	9/5/2023 at 10:25					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	52.05					
Deployment Depth (ft btoc)	57					
Personnel	BCB & IGF					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	11-17-23 @ 0954					
DTW (ft btoc)	52.35					
Sampler Integrity	G100%					
Personnel	16F, CJW					
Notes	11 11					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 @ 100%	23.1	7.35	124.7	2240	2.94	3.6
Sample ID	TTU-4-57- 20231117					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (5) 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-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	9/6/2023 at 12:23					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	80.03					
Deployment Depth (ft btoc)	110					
Personnel	IGF & HMC					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	11-17-23 @ 1300					
DTW (ft btoc)	81.76					
Sampler Integrity	(Good)					
Personnel	IGF, CSW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 @ 1307	26.9	7.6 ^{cw} 7.25	78.0	730	3.40	2.3
Sample ID	TTU-5-110-20231117					
QAQC Samples	DUP-02					
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						

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	9/5/2023 at 11:13					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	120.73					
Deployment Depth (ft btoc)	143					
Personnel	BCB & IGF					
Notes	Water clear; DTW was 129.30 on 6/12					
Retrieval and/or Sampling						
Date / Time	11-17-23 @ 1105					
DTW (ft btoc)	123.85					
Sampler Integrity	Good					
Personnel	LGF, CJW					
Notes	water clear					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 @ 1112	23.3	7.12	28.1	3315	3.42	29
Sample ID	TTU-6-143- 20231117					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (5) 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	9/5/2023 at 10:50					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	131.35					
Deployment Depth (ft btoc)	345					
Personnel	BCB					
Notes	Black sediment in bottom half of sleeve					
Retrieval and/or Sampling						
Date / Time	11-17-23 @ 1048					
DTW (ft btoc)	131.85					
Sampler Integrity	Good					
Personnel	16F - CJW					
Notes	Black "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 @ 1053	23.5	7.22	43.6	4156	2.01	15
Sample ID	TTU-7-345- 20231117					
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-8 / NA					
Date Completed	4/18/2016					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	135-185					
Well Total Depth (ft btoc)	190					
Survey Information	Northing: 909699.266 / Easting: 760514.908					
Deployment						
Date / Time	9/5/2023 at 10:00					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	145.44					
Deployment Depth (ft btoc)	164					
Personnel	BCB & IGF					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	11/17/23 @ 1018					
DTW (ft btoc)	143.08					
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
11/17/23 @ 1026	23.6	6.98	138.7	3164	2.61	5.6
Sample ID	TTU-8-164-1017					
QAQC Samples	DUP ✓					
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						

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-9A / NA					
Date Completed	6/16/2016					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	24-99					
Well Total Depth (ft btoc)	104					
Survey Information	Northing: 909974.490 / Easting: 761710.151					
Deployment						
Date / Time	9/6/2023 at 9:23					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	26.61					
Deployment Depth (ft btoc)	61					
Personnel	IGF & HMC					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	11/17/23 @ 1224					
DTW (ft btoc)	27.35					
Sampler Integrity	(100%)					
Personnel	IGF, CJW					
Notes	11					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11/17/23 @ 1234	25.4	7.47	43.6	1734	5.15 IGF 4.80 * took @ 1232	5.4
Sample ID	TTU-9A-61-20231117					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (5) 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-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	9/5/2023 at 12:10					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	163.68					
Deployment Depth (ft btoc)	172					
Personnel	BCB & IGF					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	11/21/23 @ 1240					
DTW (ft btoc)	165.18					
Sampler Integrity	Good					
Personnel	IGF CJW					
Notes	" " small bit of sediment @ bottom					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11/21/23 @ 1254	25.1	7.31	162.2	1499	61.2	5.0
Sample ID	TTU-10-172-20231121					
QAQC Samples	Dup - 45					
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						

Pinyon

Environmental, Inc.

Well Sampling Record						
Project Name	Nammo TTU					
Project Number	722152201.002					
Well ID / ADWR #	TTU-11 / 55-918534					
Date Completed	9/11/2015					
Casing Material	PVC					
Casing Diameter (in)	4					
Screen (ft btoc)	24-89					
Well Total Depth (ft btoc)	94					
Survey Information	Northing: 909029.758 / Easting: 761706.470					
Deployment						
Date / Time	9/5/2023 at 13:55					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	33.31					
Deployment Depth (ft btoc)	73					
Personnel	BCB & IGF					
Notes	Odorous, effervescent, decrease in gel-like substance from Q2					
Retrieval and/or Sampling						
Date / Time	11-18-23 @ 1415					
DTW (ft btoc)	34.33					
Sampler Integrity	Good.					
Personnel	IGF, CJW					
Notes	" ...from Q3					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-18-23 @ 1424	25.5	5.59	-98.1	1575	1.52	70
Sample ID	TTU-11-73- <u>2</u> 20231118					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (5) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	<input checked="" type="radio"/> 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	9/7/23 at 12:34					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	71.33					
Deployment Depth (ft btoc)	82					
Personnel	IGF & HMC					
Notes	Black small rocks on the outside of sleeve, some gravel at bottom of HS					
Retrieval and/or Sampling						
Date / Time	11/18/23 @ 1015					
DTW (ft btoc)	75.62					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	HS only 42 full					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11/18/23 @ 1022	22.1	6.87	98.4	*Over 3000 last time 3354	4.17	12
Sample ID	TTU-12-82- 20231118					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (5) 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	9/6/23 at 9:50					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	40.66					
Deployment Depth (ft btoc)	51					
Personnel	IGF & HMC					
Notes	Tree/plant roots on outside of sleeve					
Retrieval and/or Sampling						
Date / Time	11-17-2023 @ 1435					
DTW (ft btoc)	43.27					
Sampler Integrity	Good					
Personnel	16F, CW					
Notes	11					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 @ 1441	23.8	7.02	62.4	1491	4.27	5.2
Sample ID	TTU-13-51- 20231117					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (5) 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	9/7/23 at 12:05					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	57.41					
Deployment Depth (ft btoc)	64					
Personnel	IGF & HMC					
Notes	Water cloudy, ~1" sediment at bottom of HS					
Retrieval and/or Sampling						
Date / Time	11/18/23 @ 0954					
DTW (ft btoc)	61.81					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	Small amount of rocky sediment.					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11/18/23 e 1000	21.9	6.85	141.3	3042	45.3	10
Sample ID	TTU-14-64- 20231118					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (5) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes	**Be careful, tether not hooked into anything					

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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	9/6/2023 at 10:55					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	31.71					
Deployment Depth (ft btoc)	75					
Personnel	IGF & HMC					
Notes	Water clear					
Retrieval and/or Sampling						
Date / Time	11-18-23 @ 1225					
DTW (ft btoc)	32.70					
Sampler Integrity	Good					
Personnel	IGF - CSW					
Notes	Slightly cloudy					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-18-23 @ 1234	25.2	7.07	96.8	2457	23.0	3.6
Sample ID	TTU-15-75-20231118					
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-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	9/7/2023 at 10:43					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	23.35					
Deployment Depth (ft btoc)	80					
Personnel	IGF & HMC					
Notes	Water had red tint, slightly effervescent					
Retrieval and/or Sampling						
Date / Time	11-18-23 @ 1304					
DTW (ft btoc)	24.67					
Sampler Integrity	(Good)					
Personnel	16F, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-18-23 @ 1312	25.8	6.51	46.2	*Was over 9,000 last time 8177	1.97	65
Sample ID	TTU-16-80-20231118					
QAQC Samples	-					
Containers	(2) 125 mL HDPE (no pres.) & (5) 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	9/6/2023 at 10:20					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	38.80					
Deployment Depth (ft btoc)	80					
Personnel	IGF & HMC					
Notes	~3" sediment in bottom of HS, bottom 1/3 cloudy, sulfur smell					
Retrieval and/or Sampling						
Date / Time	11-18-23 @ 1158					
DTW (ft btoc)	39.98					
Sampler Integrity	(good)					
Personnel	IGF, CJW					
Notes	enter " 2" sediment @ bottom.					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-18-23 @ 1209	23.3	7.06	12.4	1094	23.7	23
Sample ID	TTU-17-80- 20231118					
QAQC Samples	1DQ-03 MS1MSD#2					
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						

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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	9/7/2023 at 10:15					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	31.60					
Deployment Depth (ft btoc)	73					
Personnel	IGF & HMC					
Notes	Lots of black sed at bottom of HS, odorous, slightly effervescent					
Retrieval and/or Sampling						
Date / Time	11-18-23 @ 1344					
DTW (ft btoc)	32.50					
Sampler Integrity	(Good)					
Personnel	16F, CJW					
Notes	"					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-18-23 @ 1355	26.5	6.57	-109.3	2478	2.11	450
Sample ID	TTU-19-73- 20231118					
QAQC Samples	Dup -04					
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						

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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	11-17-23 @ cu					
Type of Sampler	Dedicated pump					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	31.03 on 9/14/23					
Deployment Depth (ft btoc)	73					
Personnel	IGF					
Notes	—					
Retrieval and/or Sampling						
Date / Time	11-17-23 @					
DTW (ft btoc)	N/A 33.65 IGF					
Sampler Integrity	N/A					
Personnel	IGF, CJW					
Notes	N/A					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23	N/A	N/A	N/A	N/A	N/A	N/A
Sample ID	TTU-20-73-20231117					
QAQC Samples	N/A					
Containers	(-) 125 mL HDPE (no pres.) & (-) 40 mL amber VOAs					
Preservatives	HCl					
Analysis	Perchlorate / VOCs / 1,4-Dioxane					
Sampler Reset	Yes			No		
Notes						
Known high concentrations						
- Well on @ 1447						

- No Water, well was off upon arrival
- No Sample Collected, No Water

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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	9/6/2023 at 11:19					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	27.85					
Deployment Depth (ft btoc)	69					
Personnel	IGF & HMC					
Notes	Bottom 1/3 of HS cloudy, ~2" silt at bottom					
Retrieval and/or Sampling						
Date / Time	11/18/23 @ 1132					
DTW (ft btoc)	29.27					
Sampler Integrity	(Good)					
Personnel	IGF, CJW					
Notes	Bottom 1/2 cloudy, 1" silt/sediment					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11/18/23 @ 24.2		6.98	81.8	2832	3.38	55
Sample ID	TTU-EX-1-69-20231118					
QAQC Samples	-					
Containers	(1) 125 mL HDPE (no pres.) & (5) 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	9/6/2023 at 11:40					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	36.33					
Deployment Depth (ft btoc)	74					
Personnel	IGF & HMC					
Notes	Bottom 1/2 of sleeve cloudy					
Retrieval and/or Sampling						
Date / Time	11/18/23 @ 1112					
DTW (ft btoc)	38.04					
Sampler Integrity						
Personnel	IGF, CJW					
Notes	" "					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11/18/23 e 1120	23.6	6.99	74.4	2251	2.27	30
Sample ID	TTU-EX-2-74- <u>20231118</u>					
QAQC Samples	—					
Containers	(1) 125 mL HDPE (no pres.) & (5) 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	9/6/2023 at 11:57					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	38.75					
Deployment Depth (ft btoc)	76					
Personnel	IGF & HMC					
Notes	Water slightly cloudy, pieces of well fell into HS					
Retrieval and/or Sampling						
Date / Time	11-18-23 @ 1056					
DTW (ft btoc)	40.18					
Sampler Integrity	(Good)					
Personnel	IGF, CW					
Notes	Rocky sediment on + In bag					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-18-23 @ 102	23.4	6.59	117.2	5969	2.49	11
Sample ID	TTU-EX-3-76- 00231118					
QAQC Samples	—					
Containers	5 cu (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-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	9/7/2023 at 11:12					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-1L					
DTW (ft btoc)	42.98					
Deployment Depth (ft btoc)	77					
Personnel	IGF & HMC					
Notes	Water slightly cloudy, ~1" sed in bottom of HS					
Retrieval and/or Sampling						
Date / Time	11-18-23 @ 1038					
DTW (ft btoc)	43.78					
Sampler Integrity	Good					
Personnel	IGF, CJW					
Notes	Partial cloudy bottom 1/2					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-18-23 @ 1047	22.7	6.88	73.3	2189	3.49	35
Sample ID	TTU-EX-4-77- 20231118					
QAQC Samples	— 5					
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-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	9/7/2023 at 11:40					
Type of Sampler	HydraSleeve					
Size of Sampler	HS-2-IL					
DTW (ft btoc)	40.19					
Deployment Depth (ft btoc)	80					
Personnel	IGF & HMC					
Notes	2" black sediment at bottom, water cloudy					
Retrieval and/or Sampling						
Date / Time	11-17-23 @ 1507					
DTW (ft btoc)	43.27 IGF 40.71					
Sampler Integrity	Good.					
Personnel	IGF, CJW					
Notes	Cloudy towards Bottom of Hydra					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
11-17-23 @ 1517	25.1	7.13	22.4	1205	1.85	12
Sample ID	TTU-EX-5-80- 20231117					
QAQC Samples	x MS/MSD					
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						

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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)						
Deployment Depth (ft btoc)	400					
Personnel	NA					
Notes	Purge 15 minutes. Take parameters (starting and 15 min. after)					
Retrieval and/or Sampling						
Date / Time	11/21/23 @ 1345					
DTW (ft btoc)	NA					
Sampler Integrity	NA - SP1907					
Personnel	GF CJW					
Notes	Purged					
Field Parameters						
Date / Time	Water Temp (°C)	pH (SU)	ORP (mV)	Sp Cond (µS/cm)	DO (mg/L)	Turbidity
1310	25.0	7.10	223.3	1323	3.52	7.4
1315	24.5	7.09	183.5	1307	3.44	1.6
1320	24.3	7.19	152.1	1307	3.72	1.6
1325	24.3	7.22	130.7	1307	3.80	1.7
Sample ID	PF-2-400-20231121					
QAQC Samples	MS/MSD#3 (Pace)					
Containers	(1) 250 mL HDPE (no pres. & filtered) & (10) 40 mL amber VOAs					
Preservatives	HCl 500 314.1 → Pace					
Analysis	Perchlorate (Method 6850, filtered) VOCs / 1,4-Dioxane					
Sampler Reset	Yes [] No []					
Notes	<ul style="list-style-type: none"> - Turned on well @ 1305 - Unable to get DTW for PF-1 or 2. 					

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Cont. →

- Turned off well 1400
 PF-2 → no spot DTW probe will fit
 PF-1 → DTW went to 159' + stopped. No water.

Attachment 2 – Laboratory Analytical Reports

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

NDS TTU

JOB NUMBER

550-210888-1

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

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Authorization



Authorized for release by
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Revision 1

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Definitions/Glossary

Client: Pinyon Environmental Inc
Project/Site: NDS TTU

Job ID: 550-210888-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
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/Site: NDS TTU

Job ID: 550-210888-1

Job ID: 550-210888-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative 550-210888-1

REVISION

The report being provided is a revision of the original report sent on 12/1/2023. The report (revision 1) is being revised due to samples needing to be logged in for potable water.

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.

Receipt

The sample was received on 11/21/2023 3:24 PM. 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 3.0°C

HPLC/IC

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

Sample Summary

Client: Pinyon Environmental Inc
Project/Site: NDS TTU

Job ID: 550-210888-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-210888-1	PF-2-400-20231121	Water	11/21/23 13:45	11/21/23 15:24

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Detection Summary

Client: Pinyon Environmental Inc
Project/Site: NDS TTU

Job ID: 550-210888-1

Client Sample ID: PF-2-400-20231121

Lab Sample ID: 550-210888-1

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

Client Sample Results

Client: Pinyon Environmental Inc
Project/Site: NDS TTU

Job ID: 550-210888-1

Client Sample ID: PF-2-400-20231121
Date Collected: 11/21/23 13:45
Date Received: 11/21/23 15:24

Lab Sample ID: 550-210888-1
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			11/30/23 19:54	1

QC Sample Results

Client: Pinyon Environmental Inc
Project/Site: NDS TTU

Job ID: 550-210888-1

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 550-312003/1002

Matrix: Water

Analysis Batch: 312003

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	E8	1.0	0.31	ug/L			11/30/23 12:49	1

Lab Sample ID: LCS 550-312003/4

Matrix: Water

Analysis Batch: 312003

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	RPD
Perchlorate	25.0	26.0		ug/L		104	85 - 115

Lab Sample ID: LCSD 550-312003/5

Matrix: Water

Analysis Batch: 312003

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD
Perchlorate	25.0	25.9		ug/L		104	85 - 115

Lab Sample ID: MRL 550-312003/1003

Matrix: Water

Analysis Batch: 312003

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	RPD
Perchlorate	1.00	1.13		ug/L		113	75 - 125

Lab Sample ID: 550-210554-A-6 MS ^50

Matrix: Water

Analysis Batch: 312003

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD
Perchlorate	1800	D1	1250	2880	E2	ug/L		84	80 - 120

Lab Sample ID: 550-210554-A-6 MSD ^50

Matrix: Water

Analysis Batch: 312003

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Perchlorate	1800	D1	1250	2910	E2	ug/L		87	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: NDS TTU

Job ID: 550-210888-1

HPLC/IC

Analysis Batch: 312003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-210888-1	PF-2-400-20231121	Total/NA	Water	314.0	
MB 550-312003/1002	Method Blank	Total/NA	Water	314.0	
LCS 550-312003/4	Lab Control Sample	Total/NA	Water	314.0	
LCSD 550-312003/5	Lab Control Sample Dup	Total/NA	Water	314.0	
MRL 550-312003/1003	Lab Control Sample	Total/NA	Water	314.0	
550-210554-A-6 MS ^50	Matrix Spike	Total/NA	Water	314.0	
550-210554-A-6 MSD ^50	Matrix Spike Duplicate	Total/NA	Water	314.0	

Lab Chronicle

Client: Pinyon Environmental Inc
Project/Site: NDS TTU

Job ID: 550-210888-1

Client Sample ID: PF-2-400-20231121
Date Collected: 11/21/23 13:45
Date Received: 11/21/23 15:24

Lab Sample ID: 550-210888-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	314.0		1	312003	RDC	EET PHX	11/30/23 19:54

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: NDS TTU

Job ID: 550-210888-1

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: NDS TTU

Job ID: 550-210888-1

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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Eurofins Phoenix

Chain of Custody Record



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

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

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Spécial Instructions/QC Requirements & Comments:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

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

A standard linear barcode is positioned vertically on the right side of the page. It consists of vertical black bars of varying widths on a white background.

550-2108888 Chain of Gistadly

Login Sample Receipt Checklist

Client: Pinyon Environmental Inc

Job Number: 550-210888-1

Login Number: 210888

List Source: Eurofins Phoenix

List Number: 1

Creator: Gravlin, Andrea

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

December 06, 2023

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Is

⁸Gl

⁹Al

¹⁰Sc

Pinyon Environmental

Sample Delivery Group: L1679895
Samples Received: 11/18/2023
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

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SAMPLE SUMMARY

TTU-1-50-20231117 L1679895-01 GW Collected by Isabella Foster Collected date/time 11/17/23 13:42 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1000	11/28/23 05:23	11/28/23 05:23	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 01:21	11/27/23 01:21	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/26/23 21:56	11/26/23 21:56	KSD	Mt. Juliet, TN

TTU-2-114-20231117 L1679895-02 GW Collected by Isabella Foster Collected date/time 11/17/23 14:12 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	10000	12/04/23 18:53	12/04/23 18:53	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	10	11/27/23 04:32	11/27/23 04:32	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/26/23 22:18	11/26/23 22:18	KSD	Mt. Juliet, TN

TTU-3-108-20231117 L1679895-03 GW Collected by Isabella Foster Collected date/time 11/17/23 11:25 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 06:19	11/28/23 06:19	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 01:43	11/27/23 01:43	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/26/23 22:40	11/26/23 22:40	KSD	Mt. Juliet, TN

TTU-4-57-20231117 L1679895-04 GW Collected by Isabella Foster Collected date/time 11/17/23 09:54 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 06:47	11/28/23 06:47	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 02:04	11/27/23 02:04	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/26/23 23:01	11/26/23 23:01	KSD	Mt. Juliet, TN

TTU-5-110-20231117 L1679895-05 GW Collected by Isabella Foster Collected date/time 11/17/23 13:00 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 07:15	11/28/23 07:15	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 02:25	11/27/23 02:25	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/26/23 23:22	11/26/23 23:22	KSD	Mt. Juliet, TN

TTU-6-143-20231117 L1679895-06 GW Collected by Isabella Foster Collected date/time 11/17/23 11:05 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 07:43	11/28/23 07:43	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 02:46	11/27/23 02:46	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/26/23 23:44	11/26/23 23:44	KSD	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

SAMPLE SUMMARY

TTU-7-345-20231117 L1679895-07 GW Collected by Isabella Foster Collected date/time 11/17/23 10:48 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 08:10	11/28/23 08:10	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 03:07	11/27/23 03:07	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/27/23 00:05	11/27/23 00:05	KSD	Mt. Juliet, TN

TTU-8-164-20231117 L1679895-08 GW Collected by Isabella Foster Collected date/time 11/17/23 10:18 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 08:38	11/28/23 08:38	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 03:29	11/27/23 03:29	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/27/23 00:27	11/27/23 00:27	KSD	Mt. Juliet, TN

TTU-9A-61-20231117 L1679895-09 GW Collected by Isabella Foster Collected date/time 11/17/23 12:24 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 09:06	11/28/23 09:06	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 03:50	11/27/23 03:50	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/27/23 00:48	11/27/23 00:48	KSD	Mt. Juliet, TN

TTU-13-51-20231117 L1679895-10 GW Collected by Isabella Foster Collected date/time 11/17/23 14:35 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	500	11/28/23 10:30	11/28/23 10:30	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2177691	1	11/27/23 04:11	11/27/23 04:11	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/27/23 01:10	11/27/23 01:10	KSD	Mt. Juliet, TN

TTU-EX-5-80-20231117 L1679895-11 GW Collected by Isabella Foster Collected date/time 11/17/23 15:07 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 10:58	11/28/23 10:58	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2178289	1	11/28/23 07:02	11/28/23 07:02	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/27/23 01:31	11/27/23 01:31	KSD	Mt. Juliet, TN

DUP-01 L1679895-12 GW Collected by Isabella Foster Collected date/time 11/17/23 00:00 Received date/time 11/18/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/28/23 11:26	11/28/23 11:26	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2178289	1	11/28/23 07:24	11/28/23 07:24	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/27/23 01:53	11/27/23 01:53	KSD	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

SAMPLE SUMMARY

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

DUP-02 L1679895-13 GW

			Collected by Isabella Foster	Collected date/time 11/17/23 00:00	Received date/time 11/18/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2175502	1	11/29/23 01:03	11/29/23 01:03	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2178289	1	11/28/23 07:45	11/28/23 07:45	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2177693	1	11/27/23 02:14	11/27/23 02:14	KSD	Mt. Juliet, TN

TRIP BLANK L1679895-14 GW

			Collected by Isabella Foster	Collected date/time 11/17/23 00:00	Received date/time 11/18/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2178289	1	11/28/23 00:58	11/28/23 00:58	ADM	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
L1679895-01	TTU-1-50-20231117	8260B-SIM, 8260B
L1679895-02	TTU-2-114-20231117	8260B, 8260B-SIM
L1679895-03	TTU-3-108-20231117	8260B, 8260B-SIM
L1679895-04	TTU-4-57-20231117	8260B, 8260B-SIM
L1679895-05	TTU-5-110-20231117	8260B, 8260B-SIM
L1679895-06	TTU-6-143-20231117	8260B, 8260B-SIM
L1679895-07	TTU-7-345-20231117	8260B, 8260B-SIM
L1679895-08	TTU-8-164-20231117	8260B, 8260B-SIM
L1679895-09	TTU-9A-61-20231117	8260B, 8260B-SIM
L1679895-10	TTU-13-51-20231117	8260B, 8260B-SIM
L1679895-11	TTU-EX-5-80-20231117	8260B, 8260B-SIM
L1679895-12	DUP-01	8260B, 8260B-SIM
L1679895-13	DUP-02	8260B, 8260B-SIM
L1679895-14	TRIP BLANK	8260B

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ GI
- 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	8250		300	4000	1000	11/28/2023 05:23	WG2175502

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	11/27/2023 01:21	WG2177691
Acrolein	U		2.54	50.0	1	11/27/2023 01:21	WG2177691
Acrylonitrile	U		0.671	10.0	1	11/27/2023 01:21	WG2177691
Benzene	U		0.0941	1.00	1	11/27/2023 01:21	WG2177691
Bromobenzene	U		0.118	1.00	1	11/27/2023 01:21	WG2177691
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 01:21	WG2177691
Bromoform	U		0.129	1.00	1	11/27/2023 01:21	WG2177691
Bromomethane	U		0.605	5.00	1	11/27/2023 01:21	WG2177691
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 01:21	WG2177691
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 01:21	WG2177691
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 01:21	WG2177691
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 01:21	WG2177691
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 01:21	WG2177691
Carbon disulfide	0.106	B1 E4	0.0962	1.00	1	11/27/2023 01:21	WG2177691
Chlorobenzene	U		0.116	1.00	1	11/27/2023 01:21	WG2177691
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 01:21	WG2177691
Chloroethane	U		0.192	5.00	1	11/27/2023 01:21	WG2177691
Chloroform	U		0.111	5.00	1	11/27/2023 01:21	WG2177691
Chloromethane	U		0.960	2.50	1	11/27/2023 01:21	WG2177691
Cyclohexane	U		0.188	1.00	1	11/27/2023 01:21	WG2177691
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 01:21	WG2177691
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 01:21	WG2177691
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 01:21	WG2177691
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 01:21	WG2177691
Dibromomethane	U		0.122	1.00	1	11/27/2023 01:21	WG2177691
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 01:21	WG2177691
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 01:21	WG2177691
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 01:21	WG2177691
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 01:21	WG2177691
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 01:21	WG2177691
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 01:21	WG2177691
1,1-Dichloroethylene	0.676	E4	0.188	1.00	1	11/27/2023 01:21	WG2177691
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 01:21	WG2177691
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 01:21	WG2177691
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 01:21	WG2177691
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 01:21	WG2177691
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 01:21	WG2177691
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 01:21	WG2177691
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 01:21	WG2177691
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 01:21	WG2177691
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 01:21	WG2177691
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 01:21	WG2177691
Ethylbenzene	U		0.137	1.00	1	11/27/2023 01:21	WG2177691
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 01:21	WG2177691
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 01:21	WG2177691
n-Hexane	U		0.749	10.0	1	11/27/2023 01:21	WG2177691
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 01:21	WG2177691
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 01:21	WG2177691
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 01:21	WG2177691
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 01:21	WG2177691

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	11/27/2023 01:21	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 01:21	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 01:21	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 01:21	WG2177691
Propene	U		0.936	2.50	1	11/27/2023 01:21	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 01:21	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 01:21	WG2177691
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 01:21	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 01:21	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 01:21	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 01:21	WG2177691
Toluene	U		0.278	1.00	1	11/27/2023 01:21	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 01:21	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 01:21	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 01:21	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 01:21	WG2177691
Trichloroethene	3.51		0.190	1.00	1	11/27/2023 01:21	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 01:21	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 01:21	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 01:21	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 01:21	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 01:21	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 01:21	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 01:21	WG2177691
(S) Toluene-d8	111			80.0-120		11/27/2023 01:21	WG2177691
(S) 4-Bromofluorobenzene	112			77.0-126		11/27/2023 01:21	WG2177691
(S) 1,2-Dichloroethane-d4	107			70.0-130		11/27/2023 01:21	WG2177691

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	9.45		0.597	3.00	1	11/26/2023 21:56	WG2177693
(S) Toluene-d8	98.3			77.0-127		11/26/2023 21:56	WG2177693

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	145000		3000	40000	10000	12/04/2023 18:53	WG2175502

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		113	500	10	11/27/2023 04:32	WG2177691
Acrolein	U		25.4	500	10	11/27/2023 04:32	WG2177691
Acrylonitrile	U		6.71	100	10	11/27/2023 04:32	WG2177691
Benzene	1.31	E4	0.941	10.0	10	11/27/2023 04:32	WG2177691
Bromobenzene	U		1.18	10.0	10	11/27/2023 04:32	WG2177691
Bromodichloromethane	U		1.36	10.0	10	11/27/2023 04:32	WG2177691
Bromoform	U		1.29	10.0	10	11/27/2023 04:32	WG2177691
Bromomethane	U		6.05	50.0	10	11/27/2023 04:32	WG2177691
1,3-Butadiene	U		2.99	20.0	10	11/27/2023 04:32	WG2177691
n-Butylbenzene	U		1.57	10.0	10	11/27/2023 04:32	WG2177691
sec-Butylbenzene	U		1.25	10.0	10	11/27/2023 04:32	WG2177691
tert-Butylbenzene	U		1.27	10.0	10	11/27/2023 04:32	WG2177691
Carbon tetrachloride	U		1.28	10.0	10	11/27/2023 04:32	WG2177691
Carbon disulfide	1.15	B1 E4	0.962	10.0	10	11/27/2023 04:32	WG2177691
Chlorobenzene	U		1.16	10.0	10	11/27/2023 04:32	WG2177691
Chlorodibromomethane	U		1.40	10.0	10	11/27/2023 04:32	WG2177691
Chloroethane	U		1.92	50.0	10	11/27/2023 04:32	WG2177691
Chloroform	2.24	E4	1.11	50.0	10	11/27/2023 04:32	WG2177691
Chloromethane	U		9.60	25.0	10	11/27/2023 04:32	WG2177691
Cyclohexane	U		1.88	10.0	10	11/27/2023 04:32	WG2177691
2-Chlorotoluene	U		1.06	10.0	10	11/27/2023 04:32	WG2177691
4-Chlorotoluene	U		1.14	10.0	10	11/27/2023 04:32	WG2177691
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	11/27/2023 04:32	WG2177691
1,2-Dibromoethane	U		1.26	10.0	10	11/27/2023 04:32	WG2177691
Dibromomethane	U		1.22	10.0	10	11/27/2023 04:32	WG2177691
1,2-Dichlorobenzene	U		1.07	10.0	10	11/27/2023 04:32	WG2177691
1,3-Dichlorobenzene	U		1.10	10.0	10	11/27/2023 04:32	WG2177691
1,4-Dichlorobenzene	U		1.20	10.0	10	11/27/2023 04:32	WG2177691
Dichlorodifluoromethane	U		3.74	50.0	10	11/27/2023 04:32	WG2177691
1,1-Dichloroethane	1.04	E4	1.00	10.0	10	11/27/2023 04:32	WG2177691
1,2-Dichloroethane	U		0.819	10.0	10	11/27/2023 04:32	WG2177691
cis-1,2-Dichloroethene	49.2		1.88	10.0	10	11/27/2023 04:32	WG2177691
trans-1,2-Dichloroethene	2.32	E4	1.26	10.0	10	11/27/2023 04:32	WG2177691
1,2-Dichloropropane	U		1.49	10.0	10	11/27/2023 04:32	WG2177691
1,1-Dichloropropene	U		1.42	10.0	10	11/27/2023 04:32	WG2177691
1,3-Dichloropropane	U		1.10	10.0	10	11/27/2023 04:32	WG2177691
cis-1,3-Dichloropropene	U		1.11	10.0	10	11/27/2023 04:32	WG2177691
trans-1,3-Dichloropropene	U		1.18	10.0	10	11/27/2023 04:32	WG2177691
2,2-Dichloropropane	U		1.61	10.0	10	11/27/2023 04:32	WG2177691
Dicyclopentadiene	U		2.53	10.0	10	11/27/2023 04:32	WG2177691
Di-isopropyl ether	U		1.05	10.0	10	11/27/2023 04:32	WG2177691
Ethylbenzene	U		1.37	10.0	10	11/27/2023 04:32	WG2177691
4-Ethyltoluene	U		2.08	10.0	10	11/27/2023 04:32	WG2177691
Hexachloro-1,3-butadiene	U		3.37	10.0	10	11/27/2023 04:32	WG2177691
n-Hexane	U		7.49	100	10	11/27/2023 04:32	WG2177691
Isopropylbenzene	U		1.05	10.0	10	11/27/2023 04:32	WG2177691
p-Isopropyltoluene	U		1.20	10.0	10	11/27/2023 04:32	WG2177691
2-Butanone (MEK)	U		11.9	100	10	11/27/2023 04:32	WG2177691
Methyl Cyclohexane	U		6.60	10.0	10	11/27/2023 04:32	WG2177691

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	13.0	<u>E4</u>	4.30	50.0	10	11/27/2023 04:32	WG2177691
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	11/27/2023 04:32	WG2177691
Methyl tert-butyl ether	U		1.01	10.0	10	11/27/2023 04:32	WG2177691
Naphthalene	U		10.0	50.0	10	11/27/2023 04:32	WG2177691
Propene	U		9.36	25.0	10	11/27/2023 04:32	WG2177691
n-Propylbenzene	U		0.993	10.0	10	11/27/2023 04:32	WG2177691
Styrene	U		1.18	10.0	10	11/27/2023 04:32	WG2177691
1,1,1-Tetrachloroethane	U		1.47	10.0	10	11/27/2023 04:32	WG2177691
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	11/27/2023 04:32	WG2177691
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	11/27/2023 04:32	WG2177691
Tetrachloroethene	U		3.00	10.0	10	11/27/2023 04:32	WG2177691
Toluene	U		2.78	10.0	10	11/27/2023 04:32	WG2177691
1,2,3-Trichlorobenzene	U		2.30	10.0	10	11/27/2023 04:32	WG2177691
1,2,4-Trichlorobenzene	U		4.81	10.0	10	11/27/2023 04:32	WG2177691
1,1,1-Trichloroethane	U		1.49	10.0	10	11/27/2023 04:32	WG2177691
1,1,2-Trichloroethane	U		1.58	10.0	10	11/27/2023 04:32	WG2177691
Trichloroethene	561		1.90	10.0	10	11/27/2023 04:32	WG2177691
Trichlorofluoromethane	U		1.60	50.0	10	11/27/2023 04:32	WG2177691
1,2,3-Trichloropropane	U		2.37	25.0	10	11/27/2023 04:32	WG2177691
1,2,4-Trimethylbenzene	U		3.22	10.0	10	11/27/2023 04:32	WG2177691
1,2,3-Trimethylbenzene	U		1.04	10.0	10	11/27/2023 04:32	WG2177691
1,3,5-Trimethylbenzene	U		1.04	10.0	10	11/27/2023 04:32	WG2177691
Vinyl chloride	U		2.34	10.0	10	11/27/2023 04:32	WG2177691
Xylenes, Total	U		1.74	30.0	10	11/27/2023 04:32	WG2177691
(S) Toluene-d8	111			80.0-120		11/27/2023 04:32	WG2177691
(S) 4-Bromofluorobenzene	110			77.0-126		11/27/2023 04:32	WG2177691
(S) 1,2-Dichloroethane-d4	108			70.0-130		11/27/2023 04:32	WG2177691

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	221		0.597	3.00	1	11/26/2023 22:18	WG2177693
(S) Toluene-d8	99.1			77.0-127		11/26/2023 22:18	WG2177693

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	11.3		0.300	4.00	1	11/28/2023 06:19	WG2175502

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	11/27/2023 01:43	WG2177691
Acrolein	U		2.54	50.0	1	11/27/2023 01:43	WG2177691
Acrylonitrile	U		0.671	10.0	1	11/27/2023 01:43	WG2177691
Benzene	U		0.0941	1.00	1	11/27/2023 01:43	WG2177691
Bromobenzene	U		0.118	1.00	1	11/27/2023 01:43	WG2177691
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 01:43	WG2177691
Bromoform	U		0.129	1.00	1	11/27/2023 01:43	WG2177691
Bromomethane	U		0.605	5.00	1	11/27/2023 01:43	WG2177691
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 01:43	WG2177691
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 01:43	WG2177691
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 01:43	WG2177691
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 01:43	WG2177691
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 01:43	WG2177691
Carbon disulfide	0.126	B1 E4	0.0962	1.00	1	11/27/2023 01:43	WG2177691
Chlorobenzene	U		0.116	1.00	1	11/27/2023 01:43	WG2177691
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 01:43	WG2177691
Chloroethane	U		0.192	5.00	1	11/27/2023 01:43	WG2177691
Chloroform	U		0.111	5.00	1	11/27/2023 01:43	WG2177691
Chloromethane	U		0.960	2.50	1	11/27/2023 01:43	WG2177691
Cyclohexane	U		0.188	1.00	1	11/27/2023 01:43	WG2177691
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 01:43	WG2177691
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 01:43	WG2177691
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 01:43	WG2177691
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 01:43	WG2177691
Dibromomethane	U		0.122	1.00	1	11/27/2023 01:43	WG2177691
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 01:43	WG2177691
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 01:43	WG2177691
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 01:43	WG2177691
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 01:43	WG2177691
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 01:43	WG2177691
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 01:43	WG2177691
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2023 01:43	WG2177691
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 01:43	WG2177691
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 01:43	WG2177691
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 01:43	WG2177691
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 01:43	WG2177691
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 01:43	WG2177691
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 01:43	WG2177691
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 01:43	WG2177691
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 01:43	WG2177691
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 01:43	WG2177691
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 01:43	WG2177691
Ethylbenzene	U		0.137	1.00	1	11/27/2023 01:43	WG2177691
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 01:43	WG2177691
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 01:43	WG2177691
n-Hexane	U		0.749	10.0	1	11/27/2023 01:43	WG2177691
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 01:43	WG2177691
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 01:43	WG2177691
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 01:43	WG2177691
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 01:43	WG2177691

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ ls⁸ Gl⁹ Al¹⁰ Sc

SAMPLE RESULTS - 03

L1679895

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	11/27/2023 01:43	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 01:43	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 01:43	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 01:43	WG2177691
Propene	U		0.936	2.50	1	11/27/2023 01:43	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 01:43	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 01:43	WG2177691
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 01:43	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 01:43	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 01:43	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 01:43	WG2177691
Toluene	U		0.278	1.00	1	11/27/2023 01:43	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 01:43	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 01:43	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 01:43	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 01:43	WG2177691
Trichloroethene	U		0.190	1.00	1	11/27/2023 01:43	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 01:43	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 01:43	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 01:43	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 01:43	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 01:43	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 01:43	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 01:43	WG2177691
(S) Toluene-d8	111			80.0-120		11/27/2023 01:43	WG2177691
(S) 4-Bromofluorobenzene	110			77.0-126		11/27/2023 01:43	WG2177691
(S) 1,2-Dichloroethane-d4	107			70.0-130		11/27/2023 01:43	WG2177691

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	9.22		0.597	3.00	1	11/26/2023 22:40	WG2177693
(S) Toluene-d8	95.8			77.0-127		11/26/2023 22:40	WG2177693

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	11/28/2023 06:47	WG2175502

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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	11/27/2023 02:04	WG2177691
Acrolein	U		2.54	50.0	1	11/27/2023 02:04	WG2177691
Acrylonitrile	U		0.671	10.0	1	11/27/2023 02:04	WG2177691
Benzene	U		0.0941	1.00	1	11/27/2023 02:04	WG2177691
Bromobenzene	U		0.118	1.00	1	11/27/2023 02:04	WG2177691
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 02:04	WG2177691
Bromoform	U		0.129	1.00	1	11/27/2023 02:04	WG2177691
Bromomethane	U		0.605	5.00	1	11/27/2023 02:04	WG2177691
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 02:04	WG2177691
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 02:04	WG2177691
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 02:04	WG2177691
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 02:04	WG2177691
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 02:04	WG2177691
Carbon disulfide	0.105	B1 E4	0.0962	1.00	1	11/27/2023 02:04	WG2177691
Chlorobenzene	U		0.116	1.00	1	11/27/2023 02:04	WG2177691
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 02:04	WG2177691
Chloroethane	U		0.192	5.00	1	11/27/2023 02:04	WG2177691
Chloroform	U		0.111	5.00	1	11/27/2023 02:04	WG2177691
Chloromethane	U		0.960	2.50	1	11/27/2023 02:04	WG2177691
Cyclohexane	U		0.188	1.00	1	11/27/2023 02:04	WG2177691
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 02:04	WG2177691
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 02:04	WG2177691
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 02:04	WG2177691
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 02:04	WG2177691
Dibromomethane	U		0.122	1.00	1	11/27/2023 02:04	WG2177691
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 02:04	WG2177691
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 02:04	WG2177691
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 02:04	WG2177691
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 02:04	WG2177691
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 02:04	WG2177691
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 02:04	WG2177691
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2023 02:04	WG2177691
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 02:04	WG2177691
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 02:04	WG2177691
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 02:04	WG2177691
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 02:04	WG2177691
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 02:04	WG2177691
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 02:04	WG2177691
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 02:04	WG2177691
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 02:04	WG2177691
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 02:04	WG2177691
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 02:04	WG2177691
Ethylbenzene	U		0.137	1.00	1	11/27/2023 02:04	WG2177691
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 02:04	WG2177691
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 02:04	WG2177691
n-Hexane	U		0.749	10.0	1	11/27/2023 02:04	WG2177691
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 02:04	WG2177691
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 02:04	WG2177691
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 02:04	WG2177691
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 02:04	WG2177691

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	11/27/2023 02:04	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 02:04	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 02:04	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 02:04	WG2177691
Propene	U		0.936	2.50	1	11/27/2023 02:04	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 02:04	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 02:04	WG2177691
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 02:04	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 02:04	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 02:04	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 02:04	WG2177691
Toluene	U		0.278	1.00	1	11/27/2023 02:04	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 02:04	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 02:04	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 02:04	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 02:04	WG2177691
Trichloroethene	U		0.190	1.00	1	11/27/2023 02:04	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 02:04	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 02:04	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 02:04	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 02:04	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 02:04	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 02:04	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 02:04	WG2177691
(S) Toluene-d8	112			80.0-120		11/27/2023 02:04	WG2177691
(S) 4-Bromofluorobenzene	111			77.0-126		11/27/2023 02:04	WG2177691
(S) 1,2-Dichloroethane-d4	106			70.0-130		11/27/2023 02:04	WG2177691

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	11/26/2023 23:01	WG2177693
(S) Toluene-d8	95.6			77.0-127		11/26/2023 23:01	WG2177693

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	38.2		0.300	4.00	1	11/28/2023 07:15	WG2175502

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	11/27/2023 02:25	WG2177691
Acrolein	U		2.54	50.0	1	11/27/2023 02:25	WG2177691
Acrylonitrile	U		0.671	10.0	1	11/27/2023 02:25	WG2177691
Benzene	U		0.0941	1.00	1	11/27/2023 02:25	WG2177691
Bromobenzene	U		0.118	1.00	1	11/27/2023 02:25	WG2177691
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 02:25	WG2177691
Bromoform	U		0.129	1.00	1	11/27/2023 02:25	WG2177691
Bromomethane	U		0.605	5.00	1	11/27/2023 02:25	WG2177691
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 02:25	WG2177691
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 02:25	WG2177691
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 02:25	WG2177691
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 02:25	WG2177691
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 02:25	WG2177691
Carbon disulfide	0.0972	B1 E4	0.0962	1.00	1	11/27/2023 02:25	WG2177691
Chlorobenzene	U		0.116	1.00	1	11/27/2023 02:25	WG2177691
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 02:25	WG2177691
Chloroethane	U		0.192	5.00	1	11/27/2023 02:25	WG2177691
Chloroform	U		0.111	5.00	1	11/27/2023 02:25	WG2177691
Chloromethane	U		0.960	2.50	1	11/27/2023 02:25	WG2177691
Cyclohexane	U		0.188	1.00	1	11/27/2023 02:25	WG2177691
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 02:25	WG2177691
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 02:25	WG2177691
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 02:25	WG2177691
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 02:25	WG2177691
Dibromomethane	U		0.122	1.00	1	11/27/2023 02:25	WG2177691
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 02:25	WG2177691
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 02:25	WG2177691
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 02:25	WG2177691
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 02:25	WG2177691
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 02:25	WG2177691
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 02:25	WG2177691
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2023 02:25	WG2177691
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 02:25	WG2177691
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 02:25	WG2177691
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 02:25	WG2177691
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 02:25	WG2177691
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 02:25	WG2177691
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 02:25	WG2177691
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 02:25	WG2177691
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 02:25	WG2177691
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 02:25	WG2177691
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 02:25	WG2177691
Ethylbenzene	U		0.137	1.00	1	11/27/2023 02:25	WG2177691
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 02:25	WG2177691
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 02:25	WG2177691
n-Hexane	U		0.749	10.0	1	11/27/2023 02:25	WG2177691
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 02:25	WG2177691
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 02:25	WG2177691
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 02:25	WG2177691
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 02:25	WG2177691

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	11/27/2023 02:25	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 02:25	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 02:25	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 02:25	WG2177691
Propene	U		0.936	2.50	1	11/27/2023 02:25	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 02:25	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 02:25	WG2177691
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 02:25	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 02:25	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 02:25	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 02:25	WG2177691
Toluene	U		0.278	1.00	1	11/27/2023 02:25	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 02:25	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 02:25	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 02:25	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 02:25	WG2177691
Trichloroethene	U		0.190	1.00	1	11/27/2023 02:25	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 02:25	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 02:25	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 02:25	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 02:25	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 02:25	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 02:25	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 02:25	WG2177691
(S) Toluene-d8	109			80.0-120		11/27/2023 02:25	WG2177691
(S) 4-Bromofluorobenzene	109			77.0-126		11/27/2023 02:25	WG2177691
(S) 1,2-Dichloroethane-d4	107			70.0-130		11/27/2023 02:25	WG2177691

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	11/26/2023 23:22	WG2177693
(S) Toluene-d8	95.6			77.0-127		11/26/2023 23:22	WG2177693

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	13.1		0.300	4.00	1	11/28/2023 07:43	WG2175502

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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	11/27/2023 02:46	WG2177691
Acrolein	U		2.54	50.0	1	11/27/2023 02:46	WG2177691
Acrylonitrile	U		0.671	10.0	1	11/27/2023 02:46	WG2177691
Benzene	U		0.0941	1.00	1	11/27/2023 02:46	WG2177691
Bromobenzene	U		0.118	1.00	1	11/27/2023 02:46	WG2177691
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 02:46	WG2177691
Bromoform	U		0.129	1.00	1	11/27/2023 02:46	WG2177691
Bromomethane	U		0.605	5.00	1	11/27/2023 02:46	WG2177691
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 02:46	WG2177691
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 02:46	WG2177691
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 02:46	WG2177691
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 02:46	WG2177691
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 02:46	WG2177691
Carbon disulfide	0.122	B1 E4	0.0962	1.00	1	11/27/2023 02:46	WG2177691
Chlorobenzene	U		0.116	1.00	1	11/27/2023 02:46	WG2177691
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 02:46	WG2177691
Chloroethane	U		0.192	5.00	1	11/27/2023 02:46	WG2177691
Chloroform	U		0.111	5.00	1	11/27/2023 02:46	WG2177691
Chloromethane	U		0.960	2.50	1	11/27/2023 02:46	WG2177691
Cyclohexane	U		0.188	1.00	1	11/27/2023 02:46	WG2177691
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 02:46	WG2177691
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 02:46	WG2177691
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 02:46	WG2177691
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 02:46	WG2177691
Dibromomethane	U		0.122	1.00	1	11/27/2023 02:46	WG2177691
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 02:46	WG2177691
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 02:46	WG2177691
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 02:46	WG2177691
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 02:46	WG2177691
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 02:46	WG2177691
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 02:46	WG2177691
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2023 02:46	WG2177691
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 02:46	WG2177691
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 02:46	WG2177691
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 02:46	WG2177691
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 02:46	WG2177691
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 02:46	WG2177691
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 02:46	WG2177691
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 02:46	WG2177691
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 02:46	WG2177691
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 02:46	WG2177691
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 02:46	WG2177691
Ethylbenzene	U		0.137	1.00	1	11/27/2023 02:46	WG2177691
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 02:46	WG2177691
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 02:46	WG2177691
n-Hexane	U		0.749	10.0	1	11/27/2023 02:46	WG2177691
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 02:46	WG2177691
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 02:46	WG2177691
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 02:46	WG2177691
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 02:46	WG2177691

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	11/27/2023 02:46	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 02:46	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 02:46	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 02:46	WG2177691
Propene	U		0.936	2.50	1	11/27/2023 02:46	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 02:46	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 02:46	WG2177691
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 02:46	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 02:46	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 02:46	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 02:46	WG2177691
Toluene	U		0.278	1.00	1	11/27/2023 02:46	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 02:46	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 02:46	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 02:46	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 02:46	WG2177691
Trichloroethene	U		0.190	1.00	1	11/27/2023 02:46	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 02:46	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 02:46	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 02:46	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 02:46	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 02:46	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 02:46	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 02:46	WG2177691
(S) Toluene-d8	113			80.0-120		11/27/2023 02:46	WG2177691
(S) 4-Bromofluorobenzene	113			77.0-126		11/27/2023 02:46	WG2177691
(S) 1,2-Dichloroethane-d4	107			70.0-130		11/27/2023 02:46	WG2177691

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	11/26/2023 23:44	WG2177693
(S) Toluene-d8	95.6			77.0-127		11/26/2023 23:44	WG2177693

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	11/28/2023 08:10	WG2175502

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	11/27/2023 03:07	WG2177691
Acrolein	U		2.54	50.0	1	11/27/2023 03:07	WG2177691
Acrylonitrile	U		0.671	10.0	1	11/27/2023 03:07	WG2177691
Benzene	U		0.0941	1.00	1	11/27/2023 03:07	WG2177691
Bromobenzene	U		0.118	1.00	1	11/27/2023 03:07	WG2177691
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 03:07	WG2177691
Bromoform	U		0.129	1.00	1	11/27/2023 03:07	WG2177691
Bromomethane	U		0.605	5.00	1	11/27/2023 03:07	WG2177691
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 03:07	WG2177691
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 03:07	WG2177691
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 03:07	WG2177691
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 03:07	WG2177691
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 03:07	WG2177691
Carbon disulfide	0.119	<u>B1 E4</u>	0.0962	1.00	1	11/27/2023 03:07	WG2177691
Chlorobenzene	U		0.116	1.00	1	11/27/2023 03:07	WG2177691
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 03:07	WG2177691
Chloroethane	U		0.192	5.00	1	11/27/2023 03:07	WG2177691
Chloroform	U		0.111	5.00	1	11/27/2023 03:07	WG2177691
Chloromethane	U		0.960	2.50	1	11/27/2023 03:07	WG2177691
Cyclohexane	U		0.188	1.00	1	11/27/2023 03:07	WG2177691
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 03:07	WG2177691
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 03:07	WG2177691
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 03:07	WG2177691
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 03:07	WG2177691
Dibromomethane	U		0.122	1.00	1	11/27/2023 03:07	WG2177691
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 03:07	WG2177691
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 03:07	WG2177691
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 03:07	WG2177691
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 03:07	WG2177691
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 03:07	WG2177691
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 03:07	WG2177691
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2023 03:07	WG2177691
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 03:07	WG2177691
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 03:07	WG2177691
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 03:07	WG2177691
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 03:07	WG2177691
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 03:07	WG2177691
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 03:07	WG2177691
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 03:07	WG2177691
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 03:07	WG2177691
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 03:07	WG2177691
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 03:07	WG2177691
Ethylbenzene	U		0.137	1.00	1	11/27/2023 03:07	WG2177691
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 03:07	WG2177691
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 03:07	WG2177691
n-Hexane	U		0.749	10.0	1	11/27/2023 03:07	WG2177691
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 03:07	WG2177691
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 03:07	WG2177691
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 03:07	WG2177691
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 03:07	WG2177691

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	11/27/2023 03:07	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 03:07	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 03:07	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 03:07	WG2177691
Propene	3.30		0.936	2.50	1	11/27/2023 03:07	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 03:07	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 03:07	WG2177691
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 03:07	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 03:07	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 03:07	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 03:07	WG2177691
Toluene	0.600	E4	0.278	1.00	1	11/27/2023 03:07	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 03:07	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 03:07	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 03:07	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 03:07	WG2177691
Trichloroethene	U		0.190	1.00	1	11/27/2023 03:07	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 03:07	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 03:07	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 03:07	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 03:07	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 03:07	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 03:07	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 03:07	WG2177691
(S) Toluene-d8	111			80.0-120		11/27/2023 03:07	WG2177691
(S) 4-Bromofluorobenzene	111			77.0-126		11/27/2023 03:07	WG2177691
(S) 1,2-Dichloroethane-d4	109			70.0-130		11/27/2023 03:07	WG2177691

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	11/27/2023 00:05	WG2177693
(S) Toluene-d8	95.6			77.0-127		11/27/2023 00:05	WG2177693

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 R2</u>	0.300	4.00	1	11/28/2023 08:38	<u>WG2175502</u>

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	11/27/2023 03:29	<u>WG2177691</u>
Acrolein	U		2.54	50.0	1	11/27/2023 03:29	<u>WG2177691</u>
Acrylonitrile	U		0.671	10.0	1	11/27/2023 03:29	<u>WG2177691</u>
Benzene	U		0.0941	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Bromobenzene	U		0.118	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Bromoform	U		0.129	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Bromomethane	U		0.605	5.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 03:29	<u>WG2177691</u>
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Carbon disulfide	0.113	<u>B1 E4</u>	0.0962	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Chlorobenzene	U		0.116	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Chloroethane	U		0.192	5.00	1	11/27/2023 03:29	<u>WG2177691</u>
Chloroform	U		0.111	5.00	1	11/27/2023 03:29	<u>WG2177691</u>
Chloromethane	U		0.960	2.50	1	11/27/2023 03:29	<u>WG2177691</u>
Cyclohexane	U		0.188	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Dibromomethane	U		0.122	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Ethylbenzene	U		0.137	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
n-Hexane	U		0.749	10.0	1	11/27/2023 03:29	<u>WG2177691</u>
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 03:29	<u>WG2177691</u>
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 03:29	<u>WG2177691</u>
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 03:29	<u>WG2177691</u>

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	11/27/2023 03:29	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 03:29	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 03:29	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 03:29	WG2177691
Propene	U		0.936	2.50	1	11/27/2023 03:29	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 03:29	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 03:29	WG2177691
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 03:29	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 03:29	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 03:29	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 03:29	WG2177691
Toluene	U		0.278	1.00	1	11/27/2023 03:29	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 03:29	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 03:29	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 03:29	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 03:29	WG2177691
Trichloroethene	U		0.190	1.00	1	11/27/2023 03:29	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 03:29	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 03:29	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 03:29	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 03:29	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 03:29	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 03:29	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 03:29	WG2177691
(S) Toluene-d8	111			80.0-120		11/27/2023 03:29	WG2177691
(S) 4-Bromofluorobenzene	111			77.0-126		11/27/2023 03:29	WG2177691
(S) 1,2-Dichloroethane-d4	112			70.0-130		11/27/2023 03:29	WG2177691

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	11/27/2023 00:27	WG2177693
(S) Toluene-d8	95.5			77.0-127		11/27/2023 00:27	WG2177693

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	5.59		0.300	4.00	1	11/28/2023 09:06	WG2175502

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	11/27/2023 03:50	WG2177691
Acrolein	U		2.54	50.0	1	11/27/2023 03:50	WG2177691
Acrylonitrile	U		0.671	10.0	1	11/27/2023 03:50	WG2177691
Benzene	U		0.0941	1.00	1	11/27/2023 03:50	WG2177691
Bromobenzene	U		0.118	1.00	1	11/27/2023 03:50	WG2177691
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 03:50	WG2177691
Bromoform	U		0.129	1.00	1	11/27/2023 03:50	WG2177691
Bromomethane	U		0.605	5.00	1	11/27/2023 03:50	WG2177691
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 03:50	WG2177691
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 03:50	WG2177691
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 03:50	WG2177691
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 03:50	WG2177691
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 03:50	WG2177691
Carbon disulfide	U		0.0962	1.00	1	11/27/2023 03:50	WG2177691
Chlorobenzene	U		0.116	1.00	1	11/27/2023 03:50	WG2177691
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 03:50	WG2177691
Chloroethane	U		0.192	5.00	1	11/27/2023 03:50	WG2177691
Chloroform	U		0.111	5.00	1	11/27/2023 03:50	WG2177691
Chloromethane	U		0.960	2.50	1	11/27/2023 03:50	WG2177691
Cyclohexane	U		0.188	1.00	1	11/27/2023 03:50	WG2177691
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 03:50	WG2177691
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 03:50	WG2177691
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 03:50	WG2177691
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 03:50	WG2177691
Dibromomethane	U		0.122	1.00	1	11/27/2023 03:50	WG2177691
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 03:50	WG2177691
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 03:50	WG2177691
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 03:50	WG2177691
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 03:50	WG2177691
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 03:50	WG2177691
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 03:50	WG2177691
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2023 03:50	WG2177691
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 03:50	WG2177691
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 03:50	WG2177691
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 03:50	WG2177691
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 03:50	WG2177691
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 03:50	WG2177691
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 03:50	WG2177691
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 03:50	WG2177691
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 03:50	WG2177691
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 03:50	WG2177691
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 03:50	WG2177691
Ethylbenzene	U		0.137	1.00	1	11/27/2023 03:50	WG2177691
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 03:50	WG2177691
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 03:50	WG2177691
n-Hexane	U		0.749	10.0	1	11/27/2023 03:50	WG2177691
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 03:50	WG2177691
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 03:50	WG2177691
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 03:50	WG2177691
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 03:50	WG2177691

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	11/27/2023 03:50	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 03:50	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 03:50	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 03:50	WG2177691
Propene	U		0.936	2.50	1	11/27/2023 03:50	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 03:50	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 03:50	WG2177691
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 03:50	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 03:50	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 03:50	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 03:50	WG2177691
Toluene	U		0.278	1.00	1	11/27/2023 03:50	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 03:50	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 03:50	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 03:50	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 03:50	WG2177691
Trichloroethene	U		0.190	1.00	1	11/27/2023 03:50	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 03:50	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 03:50	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 03:50	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 03:50	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 03:50	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 03:50	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 03:50	WG2177691
(S) Toluene-d8	113			80.0-120		11/27/2023 03:50	WG2177691
(S) 4-Bromofluorobenzene	110			77.0-126		11/27/2023 03:50	WG2177691
(S) 1,2-Dichloroethane-d4	108			70.0-130		11/27/2023 03:50	WG2177691

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	11/27/2023 00:48	WG2177693
(S) Toluene-d8	95.6			77.0-127		11/27/2023 00:48	WG2177693

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	23400		150	2000	500	11/28/2023 10:30	WG2175502

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>
	ug/l		ug/l	ug/l			
Acetone	U		11.3	50.0	1	11/27/2023 04:11	WG2177691
Acrolein	U		2.54	50.0	1	11/27/2023 04:11	WG2177691
Acrylonitrile	U		0.671	10.0	1	11/27/2023 04:11	WG2177691
Benzene	U		0.0941	1.00	1	11/27/2023 04:11	WG2177691
Bromobenzene	U		0.118	1.00	1	11/27/2023 04:11	WG2177691
Bromodichloromethane	U		0.136	1.00	1	11/27/2023 04:11	WG2177691
Bromoform	U		0.129	1.00	1	11/27/2023 04:11	WG2177691
Bromomethane	U		0.605	5.00	1	11/27/2023 04:11	WG2177691
1,3-Butadiene	U		0.299	2.00	1	11/27/2023 04:11	WG2177691
n-Butylbenzene	U		0.157	1.00	1	11/27/2023 04:11	WG2177691
sec-Butylbenzene	U		0.125	1.00	1	11/27/2023 04:11	WG2177691
tert-Butylbenzene	U		0.127	1.00	1	11/27/2023 04:11	WG2177691
Carbon tetrachloride	U		0.128	1.00	1	11/27/2023 04:11	WG2177691
Carbon disulfide	0.110	B1 E4	0.0962	1.00	1	11/27/2023 04:11	WG2177691
Chlorobenzene	U		0.116	1.00	1	11/27/2023 04:11	WG2177691
Chlorodibromomethane	U		0.140	1.00	1	11/27/2023 04:11	WG2177691
Chloroethane	U		0.192	5.00	1	11/27/2023 04:11	WG2177691
Chloroform	U		0.111	5.00	1	11/27/2023 04:11	WG2177691
Chloromethane	U		0.960	2.50	1	11/27/2023 04:11	WG2177691
Cyclohexane	U		0.188	1.00	1	11/27/2023 04:11	WG2177691
2-Chlorotoluene	U		0.106	1.00	1	11/27/2023 04:11	WG2177691
4-Chlorotoluene	U		0.114	1.00	1	11/27/2023 04:11	WG2177691
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2023 04:11	WG2177691
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2023 04:11	WG2177691
Dibromomethane	U		0.122	1.00	1	11/27/2023 04:11	WG2177691
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2023 04:11	WG2177691
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2023 04:11	WG2177691
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2023 04:11	WG2177691
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2023 04:11	WG2177691
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2023 04:11	WG2177691
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2023 04:11	WG2177691
1,1-Dichloroethene	3.92		0.188	1.00	1	11/27/2023 04:11	WG2177691
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2023 04:11	WG2177691
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2023 04:11	WG2177691
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2023 04:11	WG2177691
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2023 04:11	WG2177691
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2023 04:11	WG2177691
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2023 04:11	WG2177691
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2023 04:11	WG2177691
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2023 04:11	WG2177691
Dicyclopentadiene	U		0.253	1.00	1	11/27/2023 04:11	WG2177691
Di-isopropyl ether	U		0.105	1.00	1	11/27/2023 04:11	WG2177691
Ethylbenzene	U		0.137	1.00	1	11/27/2023 04:11	WG2177691
4-Ethyltoluene	U		0.208	1.00	1	11/27/2023 04:11	WG2177691
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2023 04:11	WG2177691
n-Hexane	U		0.749	10.0	1	11/27/2023 04:11	WG2177691
Isopropylbenzene	U		0.105	1.00	1	11/27/2023 04:11	WG2177691
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2023 04:11	WG2177691
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2023 04:11	WG2177691
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2023 04:11	WG2177691

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	11/27/2023 04:11	WG2177691
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2023 04:11	WG2177691
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2023 04:11	WG2177691
Naphthalene	U		1.00	5.00	1	11/27/2023 04:11	WG2177691
Propene	U		0.936	2.50	1	11/27/2023 04:11	WG2177691
n-Propylbenzene	U		0.0993	1.00	1	11/27/2023 04:11	WG2177691
Styrene	U		0.118	1.00	1	11/27/2023 04:11	WG2177691
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2023 04:11	WG2177691
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2023 04:11	WG2177691
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2023 04:11	WG2177691
Tetrachloroethene	U		0.300	1.00	1	11/27/2023 04:11	WG2177691
Toluene	U		0.278	1.00	1	11/27/2023 04:11	WG2177691
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2023 04:11	WG2177691
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2023 04:11	WG2177691
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2023 04:11	WG2177691
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2023 04:11	WG2177691
Trichloroethene	9.37		0.190	1.00	1	11/27/2023 04:11	WG2177691
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2023 04:11	WG2177691
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2023 04:11	WG2177691
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2023 04:11	WG2177691
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 04:11	WG2177691
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2023 04:11	WG2177691
Vinyl chloride	U		0.234	1.00	1	11/27/2023 04:11	WG2177691
Xylenes, Total	U		0.174	3.00	1	11/27/2023 04:11	WG2177691
(S) Toluene-d8	111			80.0-120		11/27/2023 04:11	WG2177691
(S) 4-Bromofluorobenzene	110			77.0-126		11/27/2023 04:11	WG2177691
(S) 1,2-Dichloroethane-d4	106			70.0-130		11/27/2023 04:11	WG2177691

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	20.9		0.597	3.00	1	11/27/2023 01:10	WG2177693
(S) Toluene-d8	98.6			77.0-127		11/27/2023 01:10	WG2177693

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	11/28/2023 10:58	WG2175502

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	11/28/2023 07:02	WG2178289
Acrolein	U		2.54	50.0	1	11/28/2023 07:02	WG2178289
Acrylonitrile	U		0.671	10.0	1	11/28/2023 07:02	WG2178289
Benzene	U		0.0941	1.00	1	11/28/2023 07:02	WG2178289
Bromobenzene	U		0.118	1.00	1	11/28/2023 07:02	WG2178289
Bromodichloromethane	U		0.136	1.00	1	11/28/2023 07:02	WG2178289
Bromoform	U		0.129	1.00	1	11/28/2023 07:02	WG2178289
Bromomethane	U		0.605	5.00	1	11/28/2023 07:02	WG2178289
1,3-Butadiene	U		0.299	2.00	1	11/28/2023 07:02	WG2178289
n-Butylbenzene	U		0.157	1.00	1	11/28/2023 07:02	WG2178289
sec-Butylbenzene	U		0.125	1.00	1	11/28/2023 07:02	WG2178289
tert-Butylbenzene	U		0.127	1.00	1	11/28/2023 07:02	WG2178289
Carbon tetrachloride	U		0.128	1.00	1	11/28/2023 07:02	WG2178289
Carbon disulfide	0.0968	B1 E4	0.0962	1.00	1	11/28/2023 07:02	WG2178289
Chlorobenzene	U		0.116	1.00	1	11/28/2023 07:02	WG2178289
Chlorodibromomethane	U		0.140	1.00	1	11/28/2023 07:02	WG2178289
Chloroethane	U		0.192	5.00	1	11/28/2023 07:02	WG2178289
Chloroform	U		0.111	5.00	1	11/28/2023 07:02	WG2178289
Chloromethane	U		0.960	2.50	1	11/28/2023 07:02	WG2178289
Cyclohexane	U		0.188	1.00	1	11/28/2023 07:02	WG2178289
2-Chlorotoluene	U		0.106	1.00	1	11/28/2023 07:02	WG2178289
4-Chlorotoluene	U		0.114	1.00	1	11/28/2023 07:02	WG2178289
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2023 07:02	WG2178289
1,2-Dibromoethane	U		0.126	1.00	1	11/28/2023 07:02	WG2178289
Dibromomethane	U		0.122	1.00	1	11/28/2023 07:02	WG2178289
1,2-Dichlorobenzene	U		0.107	1.00	1	11/28/2023 07:02	WG2178289
1,3-Dichlorobenzene	U		0.110	1.00	1	11/28/2023 07:02	WG2178289
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2023 07:02	WG2178289
Dichlorodifluoromethane	U	R7	0.374	5.00	1	11/28/2023 07:02	WG2178289
1,1-Dichloroethane	U		0.100	1.00	1	11/28/2023 07:02	WG2178289
1,2-Dichloroethane	U		0.0819	1.00	1	11/28/2023 07:02	WG2178289
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2023 07:02	WG2178289
cis-1,2-Dichloroethene	0.224	E4	0.126	1.00	1	11/28/2023 07:02	WG2178289
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/28/2023 07:02	WG2178289
1,2-Dichloropropane	U		0.149	1.00	1	11/28/2023 07:02	WG2178289
1,1-Dichloropropene	U		0.142	1.00	1	11/28/2023 07:02	WG2178289
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2023 07:02	WG2178289
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/28/2023 07:02	WG2178289
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2023 07:02	WG2178289
2,2-Dichloropropane	U		0.161	1.00	1	11/28/2023 07:02	WG2178289
Dicyclopentadiene	U		0.253	1.00	1	11/28/2023 07:02	WG2178289
Di-isopropyl ether	U		0.105	1.00	1	11/28/2023 07:02	WG2178289
Ethylbenzene	U		0.137	1.00	1	11/28/2023 07:02	WG2178289
4-Ethyltoluene	U		0.208	1.00	1	11/28/2023 07:02	WG2178289
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2023 07:02	WG2178289
n-Hexane	U	R7	0.749	10.0	1	11/28/2023 07:02	WG2178289
Isopropylbenzene	U		0.105	1.00	1	11/28/2023 07:02	WG2178289
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2023 07:02	WG2178289
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2023 07:02	WG2178289
Methyl Cyclohexane	U	R7	0.660	1.00	1	11/28/2023 07:02	WG2178289

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	11/28/2023 07:02	WG2178289
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2023 07:02	WG2178289
Methyl tert-butyl ether	U		0.101	1.00	1	11/28/2023 07:02	WG2178289
Naphthalene	U		1.00	5.00	1	11/28/2023 07:02	WG2178289
Propene	U		0.936	2.50	1	11/28/2023 07:02	WG2178289
n-Propylbenzene	U		0.0993	1.00	1	11/28/2023 07:02	WG2178289
Styrene	U		0.118	1.00	1	11/28/2023 07:02	WG2178289
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/28/2023 07:02	WG2178289
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2023 07:02	WG2178289
1,1,2-Trichlorotrifluoroethane	U	R7	0.180	1.00	1	11/28/2023 07:02	WG2178289
Tetrachloroethene	U		0.300	1.00	1	11/28/2023 07:02	WG2178289
Toluene	U		0.278	1.00	1	11/28/2023 07:02	WG2178289
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2023 07:02	WG2178289
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2023 07:02	WG2178289
1,1,1-Trichloroethane	U		0.149	1.00	1	11/28/2023 07:02	WG2178289
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2023 07:02	WG2178289
Trichloroethene	3.65		0.190	1.00	1	11/28/2023 07:02	WG2178289
Trichlorofluoromethane	U		0.160	5.00	1	11/28/2023 07:02	WG2178289
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2023 07:02	WG2178289
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/28/2023 07:02	WG2178289
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/28/2023 07:02	WG2178289
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/28/2023 07:02	WG2178289
Vinyl chloride	U	L1	0.234	1.00	1	11/28/2023 07:02	WG2178289
Xylenes, Total	U		0.174	3.00	1	11/28/2023 07:02	WG2178289
(S) Toluene-d8	112			80.0-120		11/28/2023 07:02	WG2178289
(S) 4-Bromofluorobenzene	113			77.0-126		11/28/2023 07:02	WG2178289
(S) 1,2-Dichloroethane-d4	114			70.0-130		11/28/2023 07:02	WG2178289

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	11/27/2023 01:31	WG2177693
(S) Toluene-d8	98.5			77.0-127		11/27/2023 01:31	WG2177693

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	11/28/2023 11:26	WG2175502

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	11/28/2023 07:24	WG2178289
Acrolein	U		2.54	50.0	1	11/28/2023 07:24	WG2178289
Acrylonitrile	U		0.671	10.0	1	11/28/2023 07:24	WG2178289
Benzene	U		0.0941	1.00	1	11/28/2023 07:24	WG2178289
Bromobenzene	U		0.118	1.00	1	11/28/2023 07:24	WG2178289
Bromodichloromethane	U		0.136	1.00	1	11/28/2023 07:24	WG2178289
Bromoform	U		0.129	1.00	1	11/28/2023 07:24	WG2178289
Bromomethane	U		0.605	5.00	1	11/28/2023 07:24	WG2178289
1,3-Butadiene	U		0.299	2.00	1	11/28/2023 07:24	WG2178289
n-Butylbenzene	U		0.157	1.00	1	11/28/2023 07:24	WG2178289
sec-Butylbenzene	U		0.125	1.00	1	11/28/2023 07:24	WG2178289
tert-Butylbenzene	U		0.127	1.00	1	11/28/2023 07:24	WG2178289
Carbon tetrachloride	U		0.128	1.00	1	11/28/2023 07:24	WG2178289
Carbon disulfide	0.129	B1 E4	0.0962	1.00	1	11/28/2023 07:24	WG2178289
Chlorobenzene	U		0.116	1.00	1	11/28/2023 07:24	WG2178289
Chlorodibromomethane	U		0.140	1.00	1	11/28/2023 07:24	WG2178289
Chloroethane	U		0.192	5.00	1	11/28/2023 07:24	WG2178289
Chloroform	U		0.111	5.00	1	11/28/2023 07:24	WG2178289
Chloromethane	U		0.960	2.50	1	11/28/2023 07:24	WG2178289
Cyclohexane	U		0.188	1.00	1	11/28/2023 07:24	WG2178289
2-Chlorotoluene	U		0.106	1.00	1	11/28/2023 07:24	WG2178289
4-Chlorotoluene	U		0.114	1.00	1	11/28/2023 07:24	WG2178289
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2023 07:24	WG2178289
1,2-Dibromoethane	U		0.126	1.00	1	11/28/2023 07:24	WG2178289
Dibromomethane	U		0.122	1.00	1	11/28/2023 07:24	WG2178289
1,2-Dichlorobenzene	U		0.107	1.00	1	11/28/2023 07:24	WG2178289
1,3-Dichlorobenzene	U		0.110	1.00	1	11/28/2023 07:24	WG2178289
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2023 07:24	WG2178289
Dichlorodifluoromethane	U	R7	0.374	5.00	1	11/28/2023 07:24	WG2178289
1,1-Dichloroethane	U		0.100	1.00	1	11/28/2023 07:24	WG2178289
1,2-Dichloroethane	U		0.0819	1.00	1	11/28/2023 07:24	WG2178289
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2023 07:24	WG2178289
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/28/2023 07:24	WG2178289
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/28/2023 07:24	WG2178289
1,2-Dichloropropane	U		0.149	1.00	1	11/28/2023 07:24	WG2178289
1,1-Dichloropropene	U		0.142	1.00	1	11/28/2023 07:24	WG2178289
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2023 07:24	WG2178289
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/28/2023 07:24	WG2178289
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2023 07:24	WG2178289
2,2-Dichloropropane	U		0.161	1.00	1	11/28/2023 07:24	WG2178289
Dicyclopentadiene	U		0.253	1.00	1	11/28/2023 07:24	WG2178289
Di-isopropyl ether	U		0.105	1.00	1	11/28/2023 07:24	WG2178289
Ethylbenzene	U		0.137	1.00	1	11/28/2023 07:24	WG2178289
4-Ethyltoluene	U		0.208	1.00	1	11/28/2023 07:24	WG2178289
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2023 07:24	WG2178289
n-Hexane	U	R7	0.749	10.0	1	11/28/2023 07:24	WG2178289
Isopropylbenzene	U		0.105	1.00	1	11/28/2023 07:24	WG2178289
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2023 07:24	WG2178289
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2023 07:24	WG2178289
Methyl Cyclohexane	U	R7	0.660	1.00	1	11/28/2023 07:24	WG2178289

DUP-01

Collected date/time: 11/17/23 00:00

SAMPLE RESULTS - 12

L1679895

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	11/28/2023 07:24	WG2178289
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2023 07:24	WG2178289
Methyl tert-butyl ether	U		0.101	1.00	1	11/28/2023 07:24	WG2178289
Naphthalene	U		1.00	5.00	1	11/28/2023 07:24	WG2178289
Propene	U		0.936	2.50	1	11/28/2023 07:24	WG2178289
n-Propylbenzene	U		0.0993	1.00	1	11/28/2023 07:24	WG2178289
Styrene	U		0.118	1.00	1	11/28/2023 07:24	WG2178289
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/28/2023 07:24	WG2178289
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2023 07:24	WG2178289
1,1,2-Trichlorotrifluoroethane	U	R7	0.180	1.00	1	11/28/2023 07:24	WG2178289
Tetrachloroethene	U		0.300	1.00	1	11/28/2023 07:24	WG2178289
Toluene	U		0.278	1.00	1	11/28/2023 07:24	WG2178289
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2023 07:24	WG2178289
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2023 07:24	WG2178289
1,1,1-Trichloroethane	U		0.149	1.00	1	11/28/2023 07:24	WG2178289
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2023 07:24	WG2178289
Trichloroethene	U		0.190	1.00	1	11/28/2023 07:24	WG2178289
Trichlorofluoromethane	U		0.160	5.00	1	11/28/2023 07:24	WG2178289
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2023 07:24	WG2178289
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/28/2023 07:24	WG2178289
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/28/2023 07:24	WG2178289
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/28/2023 07:24	WG2178289
Vinyl chloride	U	L1	0.234	1.00	1	11/28/2023 07:24	WG2178289
Xylenes, Total	U		0.174	3.00	1	11/28/2023 07:24	WG2178289
(S) Toluene-d8	113			80.0-120		11/28/2023 07:24	WG2178289
(S) 4-Bromofluorobenzene	116			77.0-126		11/28/2023 07:24	WG2178289
(S) 1,2-Dichloroethane-d4	110			70.0-130		11/28/2023 07:24	WG2178289

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	11/27/2023 01:53	WG2177693
(S) Toluene-d8	95.6			77.0-127		11/27/2023 01:53	WG2177693

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	37.5		0.300	4.00	1	11/29/2023 01:03	WG2175502

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	ug/l		ug/l	ug/l			
Acetone	U		11.3	50.0	1	11/28/2023 07:45	WG2178289
Acrolein	U		2.54	50.0	1	11/28/2023 07:45	WG2178289
Acrylonitrile	U		0.671	10.0	1	11/28/2023 07:45	WG2178289
Benzene	U		0.0941	1.00	1	11/28/2023 07:45	WG2178289
Bromobenzene	U		0.118	1.00	1	11/28/2023 07:45	WG2178289
Bromodichloromethane	U		0.136	1.00	1	11/28/2023 07:45	WG2178289
Bromoform	U		0.129	1.00	1	11/28/2023 07:45	WG2178289
Bromomethane	U		0.605	5.00	1	11/28/2023 07:45	WG2178289
1,3-Butadiene	U		0.299	2.00	1	11/28/2023 07:45	WG2178289
n-Butylbenzene	U		0.157	1.00	1	11/28/2023 07:45	WG2178289
sec-Butylbenzene	U		0.125	1.00	1	11/28/2023 07:45	WG2178289
tert-Butylbenzene	U		0.127	1.00	1	11/28/2023 07:45	WG2178289
Carbon tetrachloride	U		0.128	1.00	1	11/28/2023 07:45	WG2178289
Carbon disulfide	0.109	B1 E4	0.0962	1.00	1	11/28/2023 07:45	WG2178289
Chlorobenzene	U		0.116	1.00	1	11/28/2023 07:45	WG2178289
Chlorodibromomethane	U		0.140	1.00	1	11/28/2023 07:45	WG2178289
Chloroethane	U		0.192	5.00	1	11/28/2023 07:45	WG2178289
Chloroform	U		0.111	5.00	1	11/28/2023 07:45	WG2178289
Chloromethane	U		0.960	2.50	1	11/28/2023 07:45	WG2178289
Cyclohexane	U		0.188	1.00	1	11/28/2023 07:45	WG2178289
2-Chlorotoluene	U		0.106	1.00	1	11/28/2023 07:45	WG2178289
4-Chlorotoluene	U		0.114	1.00	1	11/28/2023 07:45	WG2178289
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2023 07:45	WG2178289
1,2-Dibromoethane	U		0.126	1.00	1	11/28/2023 07:45	WG2178289
Dibromomethane	U		0.122	1.00	1	11/28/2023 07:45	WG2178289
1,2-Dichlorobenzene	U		0.107	1.00	1	11/28/2023 07:45	WG2178289
1,3-Dichlorobenzene	U		0.110	1.00	1	11/28/2023 07:45	WG2178289
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2023 07:45	WG2178289
Dichlorodifluoromethane	U	R7	0.374	5.00	1	11/28/2023 07:45	WG2178289
1,1-Dichloroethane	U		0.100	1.00	1	11/28/2023 07:45	WG2178289
1,2-Dichloroethane	U		0.0819	1.00	1	11/28/2023 07:45	WG2178289
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2023 07:45	WG2178289
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/28/2023 07:45	WG2178289
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/28/2023 07:45	WG2178289
1,2-Dichloropropane	U		0.149	1.00	1	11/28/2023 07:45	WG2178289
1,1-Dichloropropene	U		0.142	1.00	1	11/28/2023 07:45	WG2178289
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2023 07:45	WG2178289
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/28/2023 07:45	WG2178289
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2023 07:45	WG2178289
2,2-Dichloropropane	U		0.161	1.00	1	11/28/2023 07:45	WG2178289
Dicyclopentadiene	U		0.253	1.00	1	11/28/2023 07:45	WG2178289
Di-isopropyl ether	U		0.105	1.00	1	11/28/2023 07:45	WG2178289
Ethylbenzene	U		0.137	1.00	1	11/28/2023 07:45	WG2178289
4-Ethyltoluene	U		0.208	1.00	1	11/28/2023 07:45	WG2178289
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2023 07:45	WG2178289
n-Hexane	U	R7	0.749	10.0	1	11/28/2023 07:45	WG2178289
Isopropylbenzene	U		0.105	1.00	1	11/28/2023 07:45	WG2178289
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2023 07:45	WG2178289
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2023 07:45	WG2178289
Methyl Cyclohexane	U	R7	0.660	1.00	1	11/28/2023 07:45	WG2178289

DUP-02

Collected date/time: 11/17/23 00:00

SAMPLE RESULTS - 13

L1679895

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	11/28/2023 07:45	WG2178289
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2023 07:45	WG2178289
Methyl tert-butyl ether	U		0.101	1.00	1	11/28/2023 07:45	WG2178289
Naphthalene	U		1.00	5.00	1	11/28/2023 07:45	WG2178289
Propene	U		0.936	2.50	1	11/28/2023 07:45	WG2178289
n-Propylbenzene	U		0.0993	1.00	1	11/28/2023 07:45	WG2178289
Styrene	U		0.118	1.00	1	11/28/2023 07:45	WG2178289
1,1,1-Tetrachloroethane	U		0.147	1.00	1	11/28/2023 07:45	WG2178289
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2023 07:45	WG2178289
1,1,2-Trichlorotrifluoroethane	U	R7	0.180	1.00	1	11/28/2023 07:45	WG2178289
Tetrachloroethene	U		0.300	1.00	1	11/28/2023 07:45	WG2178289
Toluene	U		0.278	1.00	1	11/28/2023 07:45	WG2178289
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2023 07:45	WG2178289
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2023 07:45	WG2178289
1,1,1-Trichloroethane	U		0.149	1.00	1	11/28/2023 07:45	WG2178289
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2023 07:45	WG2178289
Trichloroethene	U		0.190	1.00	1	11/28/2023 07:45	WG2178289
Trichlorofluoromethane	U		0.160	5.00	1	11/28/2023 07:45	WG2178289
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2023 07:45	WG2178289
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/28/2023 07:45	WG2178289
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/28/2023 07:45	WG2178289
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/28/2023 07:45	WG2178289
Vinyl chloride	U	L1	0.234	1.00	1	11/28/2023 07:45	WG2178289
Xylenes, Total	U		0.174	3.00	1	11/28/2023 07:45	WG2178289
(S) Toluene-d8	112			80.0-120		11/28/2023 07:45	WG2178289
(S) 4-Bromofluorobenzene	113			77.0-126		11/28/2023 07:45	WG2178289
(S) 1,2-Dichloroethane-d4	110			70.0-130		11/28/2023 07:45	WG2178289

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	11/27/2023 02:14	WG2177693
(S) Toluene-d8	95.4			77.0-127		11/27/2023 02:14	WG2177693

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	11/28/2023 00:58	WG2178289	¹ Cp
Acrolein	U		2.54	50.0	1	11/28/2023 00:58	WG2178289	² Tc
Acrylonitrile	U		0.671	10.0	1	11/28/2023 00:58	WG2178289	³ Ss
Benzene	U		0.0941	1.00	1	11/28/2023 00:58	WG2178289	⁴ Cn
Bromobenzene	U		0.118	1.00	1	11/28/2023 00:58	WG2178289	⁵ Sr
Bromodichloromethane	U		0.136	1.00	1	11/28/2023 00:58	WG2178289	⁶ Qc
Bromoform	U		0.129	1.00	1	11/28/2023 00:58	WG2178289	⁷ Is
Bromomethane	U		0.605	5.00	1	11/28/2023 00:58	WG2178289	⁸ Gl
1,3-Butadiene	U		0.299	2.00	1	11/28/2023 00:58	WG2178289	⁹ Al
n-Butylbenzene	U		0.157	1.00	1	11/28/2023 00:58	WG2178289	¹⁰ Sc
sec-Butylbenzene	U		0.125	1.00	1	11/28/2023 00:58	WG2178289	
tert-Butylbenzene	U		0.127	1.00	1	11/28/2023 00:58	WG2178289	
Carbon tetrachloride	U		0.128	1.00	1	11/28/2023 00:58	WG2178289	
Carbon disulfide	0.129	B1 E4	0.0962	1.00	1	11/28/2023 00:58	WG2178289	
Chlorobenzene	U		0.116	1.00	1	11/28/2023 00:58	WG2178289	
Chlorodibromomethane	U		0.140	1.00	1	11/28/2023 00:58	WG2178289	
Chloroethane	U		0.192	5.00	1	11/28/2023 00:58	WG2178289	
Chloroform	U		0.111	5.00	1	11/28/2023 00:58	WG2178289	
Chloromethane	U		0.960	2.50	1	11/28/2023 00:58	WG2178289	
Cyclohexane	U		0.188	1.00	1	11/28/2023 00:58	WG2178289	
2-Chlorotoluene	U		0.106	1.00	1	11/28/2023 00:58	WG2178289	
4-Chlorotoluene	U		0.114	1.00	1	11/28/2023 00:58	WG2178289	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2023 00:58	WG2178289	
1,2-Dibromoethane	U		0.126	1.00	1	11/28/2023 00:58	WG2178289	
Dibromomethane	U		0.122	1.00	1	11/28/2023 00:58	WG2178289	
1,2-Dichlorobenzene	U		0.107	1.00	1	11/28/2023 00:58	WG2178289	
1,3-Dichlorobenzene	U		0.110	1.00	1	11/28/2023 00:58	WG2178289	
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2023 00:58	WG2178289	
Dichlorodifluoromethane	U	R7	0.374	5.00	1	11/28/2023 00:58	WG2178289	
1,1-Dichloroethane	U		0.100	1.00	1	11/28/2023 00:58	WG2178289	
1,2-Dichloroethane	U		0.0819	1.00	1	11/28/2023 00:58	WG2178289	
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2023 00:58	WG2178289	
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/28/2023 00:58	WG2178289	
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/28/2023 00:58	WG2178289	
1,2-Dichloropropane	U		0.149	1.00	1	11/28/2023 00:58	WG2178289	
1,1-Dichloropropene	U		0.142	1.00	1	11/28/2023 00:58	WG2178289	
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2023 00:58	WG2178289	
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/28/2023 00:58	WG2178289	
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2023 00:58	WG2178289	
2,2-Dichloropropane	U		0.161	1.00	1	11/28/2023 00:58	WG2178289	
Dicyclopentadiene	U		0.253	1.00	1	11/28/2023 00:58	WG2178289	
Di-isopropyl ether	U		0.105	1.00	1	11/28/2023 00:58	WG2178289	
Ethylbenzene	U		0.137	1.00	1	11/28/2023 00:58	WG2178289	
4-Ethyltoluene	U		0.208	1.00	1	11/28/2023 00:58	WG2178289	
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2023 00:58	WG2178289	
n-Hexane	U	R7	0.749	10.0	1	11/28/2023 00:58	WG2178289	
Isopropylbenzene	U		0.105	1.00	1	11/28/2023 00:58	WG2178289	
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2023 00:58	WG2178289	
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2023 00:58	WG2178289	
Methyl Cyclohexane	U	R7	0.660	1.00	1	11/28/2023 00:58	WG2178289	
Methylene Chloride	U		0.430	5.00	1	11/28/2023 00:58	WG2178289	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2023 00:58	WG2178289	
Methyl tert-butyl ether	U		0.101	1.00	1	11/28/2023 00:58	WG2178289	
Naphthalene	U		1.00	5.00	1	11/28/2023 00:58	WG2178289	
Propene	U		0.936	2.50	1	11/28/2023 00:58	WG2178289	
n-Propylbenzene	U		0.0993	1.00	1	11/28/2023 00:58	WG2178289	

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	11/28/2023 00:58	WG2178289	¹ Cp
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/28/2023 00:58	WG2178289	² Tc
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2023 00:58	WG2178289	³ Ss
1,1,2-Trichlorotrifluoroethane	U	R7	0.180	1.00	1	11/28/2023 00:58	WG2178289	
Tetrachloroethene	U		0.300	1.00	1	11/28/2023 00:58	WG2178289	⁴ Cn
Toluene	U		0.278	1.00	1	11/28/2023 00:58	WG2178289	⁵ Sr
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2023 00:58	WG2178289	⁶ Qc
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2023 00:58	WG2178289	⁷ Is
1,1,1-Trichloroethane	U		0.149	1.00	1	11/28/2023 00:58	WG2178289	
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2023 00:58	WG2178289	⁸ Gl
Trichloroethene	U		0.190	1.00	1	11/28/2023 00:58	WG2178289	⁹ Al
Trichlorofluoromethane	U		0.160	5.00	1	11/28/2023 00:58	WG2178289	¹⁰ Sc
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2023 00:58	WG2178289	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/28/2023 00:58	WG2178289	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/28/2023 00:58	WG2178289	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/28/2023 00:58	WG2178289	
Vinyl chloride	U	L1	0.234	1.00	1	11/28/2023 00:58	WG2178289	
Xylenes, Total	U		0.174	3.00	1	11/28/2023 00:58	WG2178289	
(S) Toluene-d8	109			80.0-120		11/28/2023 00:58	WG2178289	
(S) 4-Bromofluorobenzene	110			77.0-126		11/28/2023 00:58	WG2178289	
(S) 1,2-Dichloroethane-d4	117			70.0-130		11/28/2023 00:58	WG2178289	

WG2175502

Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

[L1679895-01,02,03,04,05,06,07,08,09,10,11,12,13](#)

Method Blank (MB)

(MB) R4008429-1 11/28/23 00:16

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) R4008452-1 12/04/23 17:01

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

L1679895-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1679895-07 11/28/23 08:10 • (DUP) R4008429-3 11/29/23 20:39

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

L1679895-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1679895-08 11/28/23 08:38 • (DUP) R4008429-6 11/29/23 22:03

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) R4008429-2 11/28/23 01:12

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

Laboratory Control Sample (LCS)

(LCS) R4008452-2 12/04/23 17:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	9.16	91.6	90.0-110	

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1679895

DATE/TIME:

12/06/23 09:55

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QUALITY CONTROL SUMMARY

[L1679895-01,02,03,04,05,06,07,08,09,10,11,12,13](#)

L1679895-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1679895-07 11/28/23 08:10 • (MS) R4008429-4 11/29/23 21:07 • (MSD) R4008429-5 11/29/23 21:35

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	7.79	8.96	77.9	89.6	1	80.0-120	<u>M2</u>		14.0	15

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

L1679895-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1679895-08 11/28/23 08:38 • (MS) R4008429-7 11/30/23 11:54 • (MSD) R4008429-8 11/30/23 12:22

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	7.93	9.54	79.3	95.4	1	80.0-120	<u>M2</u>	<u>R2</u>	18.5	15

WG2177691

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

QUALITY CONTROL SUMMARY

[L1679895-01,02,03,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R4005670-3 11/26/23 19:36

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	⁶ Qc
Bromoform	U		0.129	1.00	⁷ Is
Bromomethane	U		0.605	5.00	⁸ Gl
1,3-Butadiene	U		0.299	2.00	⁹ Al
n-Butylbenzene	U		0.157	1.00	¹⁰ Sc
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	
Carbon tetrachloride	U		0.128	1.00	
Carbon disulfide	0.107	<u>E4</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-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:

L1679895

DATE/TIME:

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

QUALITY CONTROL SUMMARY

[L1679895-01,02,03,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R4005670-3 11/26/23 19:36

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	116		80.0-120		
(S) 4-Bromofluorobenzene	113		77.0-126		
(S) 1,2-Dichloroethane-d4	105		70.0-130		

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1679895

DATE/TIME:

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QUALITY CONTROL SUMMARY

L1679895-01,02,03,04,05,06,07,08,09,10

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

(LCS) R4005670-1 11/26/23 18:10 • (LCSD) R4005670-2 11/26/23 18:32

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	28.2	22.2	113	88.8	19.0-160			23.8	27
Acrolein	25.0	20.3	18.2	81.2	72.8	30.0-160			10.9	26
Acrylonitrile	25.0	25.9	25.0	104	100	55.0-149			3.54	20
Benzene	5.00	4.87	4.90	97.4	98.0	70.0-123			0.614	20
Bromobenzene	5.00	4.87	5.19	97.4	104	73.0-121			6.36	20
Bromodichloromethane	5.00	4.99	5.21	99.8	104	75.0-120			4.31	20
Bromoform	5.00	5.22	4.77	104	95.4	68.0-132			9.01	20
Bromomethane	5.00	3.68	4.51	73.6	90.2	30.0-160			20.3	25
1,3-Butadiene	5.00	6.65	5.86	133	117	45.0-147			12.6	20
n-Butylbenzene	5.00	4.17	4.40	83.4	88.0	73.0-125			5.37	20
sec-Butylbenzene	5.00	5.02	5.02	100	100	75.0-125			0.000	20
tert-Butylbenzene	5.00	4.59	4.72	91.8	94.4	76.0-124			2.79	20
Carbon tetrachloride	5.00	4.81	4.81	96.2	96.2	68.0-126			0.000	20
Carbon disulfide	5.00	4.98	4.67	99.6	93.4	61.0-128			6.42	20
Chlorobenzene	5.00	4.97	5.07	99.4	101	80.0-121			1.99	20
Chlorodibromomethane	5.00	5.00	4.88	100	97.6	77.0-125			2.43	20
Chloroethane	5.00	5.85	6.21	117	124	47.0-150			5.97	20
Chloroform	5.00	4.99	4.96	99.8	99.2	73.0-120			0.603	20
Chloromethane	5.00	4.76	4.61	95.2	92.2	41.0-142			3.20	20
Cyclohexane	5.00	5.15	4.54	103	90.8	71.0-124			12.6	20
2-Chlorotoluene	5.00	4.90	5.26	98.0	105	76.0-123			7.09	20
4-Chlorotoluene	5.00	4.95	5.07	99.0	101	75.0-122			2.40	20
1,2-Dibromo-3-Chloropropane	5.00	3.99	4.53	79.8	90.6	58.0-134			12.7	20
1,2-Dibromoethane	5.00	5.08	4.98	102	99.6	80.0-122			1.99	20
Dibromomethane	5.00	5.11	5.40	102	108	80.0-120			5.52	20
1,2-Dichlorobenzene	5.00	4.92	4.87	98.4	97.4	79.0-121			1.02	20
1,3-Dichlorobenzene	5.00	4.62	4.87	92.4	97.4	79.0-120			5.27	20
1,4-Dichlorobenzene	5.00	4.91	5.08	98.2	102	79.0-120			3.40	20
Dichlorodifluoromethane	5.00	6.09	5.22	122	104	51.0-149			15.4	20
1,1-Dichloroethane	5.00	4.68	4.61	93.6	92.2	70.0-126			1.51	20
1,2-Dichloroethane	5.00	4.89	4.75	97.8	95.0	70.0-128			2.90	20
1,1-Dichloroethene	5.00	5.39	4.85	108	97.0	71.0-124			10.5	20
cis-1,2-Dichloroethene	5.00	5.40	5.27	108	105	73.0-120			2.44	20
trans-1,2-Dichloroethene	5.00	5.15	5.07	103	101	73.0-120			1.57	20
1,2-Dichloropropane	5.00	4.65	4.36	93.0	87.2	77.0-125			6.44	20
1,1-Dichloropropene	5.00	4.85	4.76	97.0	95.2	74.0-126			1.87	20
1,3-Dichloropropane	5.00	5.22	5.06	104	101	80.0-120			3.11	20
cis-1,3-Dichloropropene	5.00	4.91	5.03	98.2	101	80.0-123			2.41	20
trans-1,3-Dichloropropene	5.00	5.21	5.12	104	102	78.0-124			1.74	20
2,2-Dichloropropane	5.00	5.32	5.27	106	105	58.0-130			0.944	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1679895-01,02,03,04,05,06,07,08,09,10

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

(LCS) R4005670-1 11/26/23 18:10 • (LCSD) R4005670-2 11/26/23 18:32

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	4.94	5.10	98.8	102	74.0-126			3.19	20
Di-isopropyl ether	5.00	5.42	5.16	108	103	58.0-138			4.91	20
Ethylbenzene	5.00	4.97	5.13	99.4	103	79.0-123			3.17	20
4-Ethyltoluene	5.00	4.69	4.81	93.8	96.2	74.0-127			2.53	20
Hexachloro-1,3-butadiene	5.00	5.26	5.40	105	108	54.0-138			2.63	20
n-Hexane	5.00	5.43	4.98	109	99.6	57.0-133			8.65	20
Isopropylbenzene	5.00	4.88	4.75	97.6	95.0	76.0-127			2.70	20
p-Isopropyltoluene	5.00	4.79	4.81	95.8	96.2	76.0-125			0.417	20
2-Butanone (MEK)	25.0	26.8	26.0	107	104	44.0-160			3.03	20
Methyl Cyclohexane	5.00	4.93	4.63	98.6	92.6	68.0-126			6.28	20
Methylene Chloride	5.00	5.23	5.11	105	102	67.0-120			2.32	20
4-Methyl-2-pentanone (MIBK)	25.0	28.6	28.9	114	116	68.0-142			1.04	20
Methyl tert-butyl ether	5.00	4.76	4.61	95.2	92.2	68.0-125			3.20	20
Naphthalene	5.00	3.59	3.72	71.8	74.4	54.0-135			3.56	20
Propene	5.00	4.30	3.89	86.0	77.8	30.0-160			10.0	20
n-Propylbenzene	5.00	5.29	5.17	106	103	77.0-124			2.29	20
Styrene	5.00	4.66	4.73	93.2	94.6	73.0-130			1.49	20
1,1,1,2-Tetrachloroethane	5.00	4.97	4.73	99.4	94.6	75.0-125			4.95	20
1,1,2,2-Tetrachloroethane	5.00	5.35	5.53	107	111	65.0-130			3.31	20
1,1,2-Trichlorotrifluoroethane	5.00	5.00	4.62	100	92.4	69.0-132			7.90	20
Tetrachloroethene	5.00	5.08	4.96	102	99.2	72.0-132			2.39	20
Toluene	5.00	5.24	5.46	105	109	79.0-120			4.11	20
1,2,3-Trichlorobenzene	5.00	4.92	4.37	98.4	87.4	50.0-138			11.8	20
1,2,4-Trichlorobenzene	5.00	4.43	4.58	88.6	91.6	57.0-137			3.33	20
1,1,1-Trichloroethane	5.00	5.20	5.12	104	102	73.0-124			1.55	20
1,1,2-Trichloroethane	5.00	5.56	5.32	111	106	80.0-120			4.41	20
Trichloroethene	5.00	4.66	4.91	93.2	98.2	78.0-124			5.22	20
Trichlorofluoromethane	5.00	5.47	4.67	109	93.4	59.0-147			15.8	20
1,2,3-Trichloropropane	5.00	4.91	5.12	98.2	102	73.0-130			4.19	20
1,2,4-Trimethylbenzene	5.00	4.71	4.81	94.2	96.2	76.0-121			2.10	20
1,2,3-Trimethylbenzene	5.00	4.69	4.58	93.8	91.6	77.0-120			2.37	20
1,3,5-Trimethylbenzene	5.00	5.01	5.03	100	101	76.0-122			0.398	20
Vinyl chloride	5.00	5.82	5.75	116	115	67.0-131			1.21	20
Xylenes, Total	15.0	14.5	14.5	96.7	96.7	79.0-123			0.000	20
(S) Toluene-d8				109	107	80.0-120				
(S) 4-Bromofluorobenzene				110	111	77.0-126				
(S) 1,2-Dichloroethane-d4				99.1	98.9	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2178289

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

QUALITY CONTROL SUMMARY

[L1679895-11,12,13,14](#)

Method Blank (MB)

(MB) R4005349-3 11/27/23 21:23

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	⁶ Qc
Bromoform	U		0.129	1.00	⁷ Is
Bromomethane	U		0.605	5.00	⁸ Gl
1,3-Butadiene	U		0.299	2.00	⁹ Al
n-Butylbenzene	U		0.157	1.00	¹⁰ Sc
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	
Carbon tetrachloride	U		0.128	1.00	
Carbon disulfide	0.134	<u>E4</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:

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

QUALITY CONTROL SUMMARY

[L1679895-11,12,13,14](#)

Method Blank (MB)

(MB) R4005349-3 11/27/23 21:23

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dicyclopentadiene	U		0.253	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
4-Ethyltoluene	U		0.208	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00
n-Hexane	U		0.749	10.0
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methyl Cyclohexane	U		0.660	1.00
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	109		80.0-120	
(S) 4-Bromofluorobenzene	110		77.0-126	
(S) 1,2-Dichloroethane-d4	118		70.0-130	

QUALITY CONTROL SUMMARY

[L1679895-11,12,13,14](#)

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

(LCS) R4005349-1 11/27/23 20:19 • (LCSD) R4005349-2 11/27/23 20:41

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	28.9	30.1	116	120	19.0-160			4.07	27
Acrolein	25.0	17.5	17.0	70.0	68.0	30.0-160			2.90	26
Acrylonitrile	25.0	25.7	26.3	103	105	55.0-149			2.31	20
Benzene	5.00	4.60	5.18	92.0	104	70.0-123			11.9	20
Bromobenzene	5.00	4.81	4.68	96.2	93.6	73.0-121			2.74	20
Bromodichloromethane	5.00	5.02	5.59	100	112	75.0-120			10.7	20
Bromoform	5.00	5.41	5.65	108	113	68.0-132			4.34	20
Bromomethane	5.00	3.94	4.27	78.8	85.4	30.0-160			8.04	25
1,3-Butadiene	5.00	6.28	7.05	126	141	45.0-147			11.6	20
n-Butylbenzene	5.00	4.23	4.97	84.6	99.4	73.0-125			16.1	20
sec-Butylbenzene	5.00	4.80	5.15	96.0	103	75.0-125			7.04	20
tert-Butylbenzene	5.00	4.73	4.93	94.6	98.6	76.0-124			4.14	20
Carbon tetrachloride	5.00	5.36	6.21	107	124	68.0-126			14.7	20
Carbon disulfide	5.00	4.55	4.95	91.0	99.0	61.0-128			8.42	20
Chlorobenzene	5.00	4.79	5.10	95.8	102	80.0-121			6.27	20
Chlorodibromomethane	5.00	5.11	5.49	102	110	77.0-125			7.17	20
Chloroethane	5.00	6.36	5.98	127	120	47.0-150			6.16	20
Chloroform	5.00	5.29	5.59	106	112	73.0-120			5.51	20
Chloromethane	5.00	4.34	4.56	86.8	91.2	41.0-142			4.94	20
Cyclohexane	5.00	4.79	5.07	95.8	101	71.0-124			5.68	20
2-Chlorotoluene	5.00	5.17	5.31	103	106	76.0-123			2.67	20
4-Chlorotoluene	5.00	4.92	5.35	98.4	107	75.0-122			8.37	20
1,2-Dibromo-3-Chloropropane	5.00	4.47	3.87	89.4	77.4	58.0-134			14.4	20
1,2-Dibromoethane	5.00	4.62	4.99	92.4	99.8	80.0-122			7.70	20
Dibromomethane	5.00	5.61	5.61	112	112	80.0-120			0.000	20
1,2-Dichlorobenzene	5.00	4.78	5.22	95.6	104	79.0-121			8.80	20
1,3-Dichlorobenzene	5.00	4.73	4.95	94.6	99.0	79.0-120			4.55	20
1,4-Dichlorobenzene	5.00	4.88	5.14	97.6	103	79.0-120			5.19	20
Dichlorodifluoromethane	5.00	5.43	6.65	109	133	51.0-149	R7		20.2	20
1,1-Dichloroethane	5.00	4.36	5.24	87.2	105	70.0-126			18.3	20
1,2-Dichloroethane	5.00	5.62	5.94	112	119	70.0-128			5.54	20
1,1-Dichloroethene	5.00	4.91	5.61	98.2	112	71.0-124			13.3	20
cis-1,2-Dichloroethene	5.00	5.02	5.55	100	111	73.0-120			10.0	20
trans-1,2-Dichloroethene	5.00	4.83	5.46	96.6	109	73.0-120			12.2	20
1,2-Dichloropropane	5.00	4.18	4.46	83.6	89.2	77.0-125			6.48	20
1,1-Dichloropropene	5.00	4.65	5.54	93.0	111	74.0-126			17.5	20
1,3-Dichloropropane	5.00	4.98	5.24	99.6	105	80.0-120			5.09	20
cis-1,3-Dichloropropene	5.00	4.80	5.26	96.0	105	80.0-123			9.15	20
trans-1,3-Dichloropropene	5.00	4.97	5.42	99.4	108	78.0-124			8.66	20
2,2-Dichloropropane	5.00	5.72	5.73	114	115	58.0-130			0.175	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

[L1679895-11,12,13,14](#)

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

(LCS) R4005349-1 11/27/23 20:19 • (LCSD) R4005349-2 11/27/23 20:41

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	4.89	88.4	97.8	74.0-126			10.1	20
Di-isopropyl ether	5.00	5.19	5.46	104	109	58.0-138			5.07	20
Ethylbenzene	5.00	4.99	5.19	99.8	104	79.0-123			3.93	20
4-Ethyltoluene	5.00	4.62	4.98	92.4	99.6	74.0-127			7.50	20
Hexachloro-1,3-butadiene	5.00	5.07	5.59	101	112	54.0-138			9.76	20
n-Hexane	5.00	4.29	5.81	85.8	116	57.0-133	R7		30.1	20
Isopropylbenzene	5.00	4.74	5.16	94.8	103	76.0-127			8.48	20
p-Isopropyltoluene	5.00	4.60	5.16	92.0	103	76.0-125			11.5	20
2-Butanone (MEK)	25.0	27.7	27.7	111	111	44.0-160			0.000	20
Methyl Cyclohexane	5.00	4.31	5.29	86.2	106	68.0-126	R7		20.4	20
Methylene Chloride	5.00	4.81	4.96	96.2	99.2	67.0-120			3.07	20
4-Methyl-2-pentanone (MIBK)	25.0	27.2	28.5	109	114	68.0-142			4.67	20
Methyl tert-butyl ether	5.00	4.84	4.87	96.8	97.4	68.0-125			0.618	20
Naphthalene	5.00	3.45	3.95	69.0	79.0	54.0-135			13.5	20
Propene	5.00	3.78	4.06	75.6	81.2	30.0-160			7.14	20
n-Propylbenzene	5.00	4.93	5.41	98.6	108	77.0-124			9.28	20
Styrene	5.00	4.61	4.59	92.2	91.8	73.0-130			0.435	20
1,1,1,2-Tetrachloroethane	5.00	5.11	5.60	102	112	75.0-125			9.15	20
1,1,2,2-Tetrachloroethane	5.00	5.26	5.06	105	101	65.0-130			3.88	20
1,1,2-Trichlorotrifluoroethane	5.00	4.64	5.95	92.8	119	69.0-132	R7		24.7	20
Tetrachloroethene	5.00	4.90	5.36	98.0	107	72.0-132			8.97	20
Toluene	5.00	4.88	5.19	97.6	104	79.0-120			6.16	20
1,2,3-Trichlorobenzene	5.00	4.99	4.84	99.8	96.8	50.0-138			3.05	20
1,2,4-Trichlorobenzene	5.00	4.40	4.66	88.0	93.2	57.0-137			5.74	20
1,1,1-Trichloroethane	5.00	5.71	5.94	114	119	73.0-124			3.95	20
1,1,2-Trichloroethane	5.00	5.23	5.07	105	101	80.0-120			3.11	20
Trichloroethene	5.00	5.15	5.23	103	105	78.0-124			1.54	20
Trichlorofluoromethane	5.00	5.52	6.62	110	132	59.0-147			18.1	20
1,2,3-Trichloropropane	5.00	5.01	4.95	100	99.0	73.0-130			1.20	20
1,2,4-Trimethylbenzene	5.00	4.69	4.91	93.8	98.2	76.0-121			4.58	20
1,2,3-Trimethylbenzene	5.00	4.79	5.11	95.8	102	77.0-120			6.46	20
1,3,5-Trimethylbenzene	5.00	4.86	5.49	97.2	110	76.0-122			12.2	20
Vinyl chloride	5.00	5.96	6.59	119	132	67.0-131	L1		10.0	20
Xylenes, Total	15.0	13.7	14.7	91.3	98.0	79.0-123			7.04	20
(S) Toluene-d8				105	106	80.0-120				
(S) 4-Bromofluorobenzene				113	111	77.0-126				
(S) 1,2-Dichloroethane-d4				114	113	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2177693

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

QUALITY CONTROL SUMMARY

[L1679895-01,02,03,04,05,06,07,08,09,10,11,12,13](#)

Method Blank (MB)

(MB) R4005615-3 11/26/23 21:13

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	95.7			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

(LCS) R4005615-1 11/26/23 20:08 • (LCSD) R4005615-2 11/26/23 20:30

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	38.8	42.7	77.6	85.4	55.0-138			9.57	24
(S) Toluene-d8				95.5	95.8	77.0-127				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS23 • File ID: 1126_28

11/26/23 18:10

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	1126_28	638572	306801	274074
Upper Limit		1277144	613602	548148
Lower Limit		319286	153401	137037
LCS R4005670-1 WG21776911x	1126_28LCS	638572	306801	274074
LCSD R4005670-2 WG21776911x	1126_29	643375	306793	269289
BLANK R4005670-3 WG21776911x	1126_32	608849	280242	239806
L1679895-01 WG21776911x	1126_47	566396	266492	229524
L1679895-03 WG21776911x	1126_48	581983	273861	231143
L1679895-04 WG21776911x	1126_49	564304	266136	223656
L1679895-05 WG21776911x	1126_50	564993	261508	223984
L1679895-06 WG21776911x	1126_51	550279	254828	219767
L1679895-07 WG21776911x	1126_52	558255	261785	224718
L1679895-08 WG21776911x	1126_53	543768	255859	204396
L1679895-09 WG21776911x	1126_54	538247	251789	219696
L1679895-10 WG21776911x	1126_55	560688	261448	210982
L1679895-02 WG217769110x	1126_56	532279	251591	209359

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Instrument: VOCMS23 • File ID: 1127_38

11/27/23 20:19

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	1127_38	505027	256034	228320
Upper Limit		1010054	512068	456640
Lower Limit		252514	128017	114160
LCS R4005349-1 WG2178289 1x	1127_38LCS	505027	256034	228320
LCSD R4005349-2 WG2178289 1x	1127_39	512994	255928	231343
BLANK R4005349-3 WG2178289 1x	1127_41	503738	245992	206510
L1679895-14 WG2178289 1x	1127_49	474148	233507	197081
L1679895-11 WG2178289 1x	1127_66	531067	254747	240310
L1679895-12 WG2178289 1x	1127_67	537478	250984	219646
L1679895-13 WG2178289 1x	1127_68	539457	258813	236138

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 1126_03

11/26/23 19:46

Sample ID	File ID	8260-FLUOROBENZENE Response
Standard	1126_03	283071
Upper Limit		566142
Lower Limit		141536
LCS R4005615-1 WG2177693 1x	1126_04	277581
LCSD R4005615-2 WG2177693 1x	1126_05	279746
BLANK R4005615-3 WG2177693 1x	1126_07	280821
L1679895-01 WG2177693 1x	1126_09	266832
L1679895-02 WG2177693 1x	1126_10	276487
L1679895-03 WG2177693 1x	1126_11	276689
L1679895-04 WG2177693 1x	1126_12	296209
L1679895-05 WG2177693 1x	1126_13	279588
L1679895-06 WG2177693 1x	1126_14	282751
L1679895-07 WG2177693 1x	1126_15	282165
L1679895-08 WG2177693 1x	1126_16	283794
L1679895-09 WG2177693 1x	1126_17	295839
L1679895-10 WG2177693 1x	1126_18	287114
L1679895-11 WG2177693 1x	1126_19	274842
L1679895-12 WG2177693 1x	1126_20	280882
L1679895-13 WG2177693 1x	1126_21	276203

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.
L1	The associated blank spike recovery was above laboratory acceptance limits.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
R2	RPD/RSD exceeded the laboratory acceptance limit.
R7	LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

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 Street, Suite 200 Lakewood, CO 80227			Billing Information: Accounts Payable Ap@Pinyon-env.com		Pres Chk	Analysis / Container / Preservative						Chain of Custody	Page ____ of ____			
Report to: Andrew Parker	Email To: Parker@Pinyon-env.com													12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859	Pace Analytical® National Center for Testing & Innovation	
Project Description: Nammo TTU Groundwater Monitoring	City/State Collected: Meso, Az													L# L1679895 G203		
Phone: 303.785.7697 Fax:	Client Project # 722152201.002	Lab Project #														
Collected by (print): Isabella Foster	Site/Facility ID #	P.O. #												Acctnum: PINYONMAZ		
Collected by (signature):	Rush? (Lab MUST Be Notified)	Quote #												Template:		
Immediately Packed on Ice N Y X	<input type="checkbox"/> Same Day <input type="checkbox"/> Next Day <input type="checkbox"/> Two Day <input type="checkbox"/> Three Day	<input type="checkbox"/> Five Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> 10 Day (Rad Only)												Prelogin:		
	Date Results Needed Standard TAT						No. of Cntrs							TSR: Daphne Richards		
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time									Remarks	Sample # (lab only)	
TTU-1-50-20231117	Grab	GW	50	11-17-23	1342	7	✓	✓	✓	✓				*	- 01	
TTU-2-114-20231117			114	11-17-23	1412	7	✓	✓	✓	✓				*	- 02	
TTU-3-108-20231117			108	11-17-23	1125	6	✓	✓	✓	✓					- 03	
TTU-4-57-20231117			57	11-17-23	0954	6	✓	✓	✓	✓					- 04	
TTU-5-110-20231117			110	11-17-23	1300	6	✓	✓	✓	✓					- 05	
TTU-6-143-20231117			143	11-17-23	1105	6	✓	✓	✓	✓					- 06	
TTU-7-345-20231117			345	11-17-23	1048	6	✓	✓	✓	✓					- 07	
TTU-8-164-20231117			164	11-17-23	1018	6	✓	✓	✓	✓					- 08	
TTU-9A-61-20231117			1d	11-17-23	1224	6	✓	✓	✓	✓					- 09	
TTU-13-51-20231117			51	11-17-23	1435	6	✓	✓	✓	✓					- 10	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWATER DW - Drinking Water OT - Other _____	Remarks: *historically high concentrations, report all runs													Sample Receipt Checklist		
	Samples returned via: UPS FedEx Courier						Tracking #						COC Seal Present/Intact: <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 type="checkbox"/> Y <input checked="" type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
Relinquished by : (Signature) clm	Date: 11/17/23	Time: 140146	Received by: (Signature)			Trip Blank Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> HCl / MeOH TBR			If preservation required by Login: Date/Time							
Relinquished by : (Signature) mee	Date: 11/17/23	Time: 1800	Received by: (Signature) SWA			Temp: CC48°C Bottles Received: 13 to 13 86										
Relinquished by : (Signature) PNPAZ	Date:	Time:	Received for lab by: (Signature) PNPAZ 14			Date: 11/18/23 Time: 800			Hold:			Condition: NCF <input checked="" type="checkbox"/> OK				

Pinyon Environmental 3222 S. Vance Street, Suite 200 Lakewood, CO 80227			Billing Information: Accounts Payable ape@pinyon-env.com		Pres Chk	Analysis / Container / Preservative						Chain of Custody	Page 2 of 2			
Report to: Andrew Parker			Email To: parther@pinyon-env.com								12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859					
Project Nammo TTU Groundwater Monitoring Description:			City/State Collected: Mesa, AZ													
Phone: 303.785.7697 Fax:	Client Project # 722152201.002		Lab Project #								L# L1679895					
Collected by (print): Isabella Foster	Site/Facility ID #		P.O. #								Table #					
Collected by (signature): <i>clllyn</i>	Rush? (Lab MUST Be Notified) Same Day <input type="checkbox"/> Five Day <input checked="" type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input checked="" type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input checked="" type="checkbox"/> Three Day <input type="checkbox"/>		Quote # Standard TAT		Date Results Needed	No. of Cntrs							Acctnum: PINYONMAZ			
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>													Template:			
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time							Prelogin:				
TTU-EX-5-80-2023117 G1 GW 80	1	GW	80	11/17/23	150712	P	VOC 8260AZ / 40ml amber / HCl	1,4 Dioxane V8260LL14D/40mL amb/ HCl							TSR: Daphne Richards	
DUP-01	1	—	—	—	—	X	X	X							PB:	
DUP-02	1	—	—	—	—	X	X	X							Shipped Via:	
Trip Blank	—	—	—	—	—	1	X								Remarks	Sample # (lab only)
Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Samples returned via: UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>												pH _____ Temp _____ Flow _____ Other _____			
Relinquished by : (Signature) <i>clllyn</i>	Date: 11/17/23	Time: 1616	Received by: (Signature) <i>me</i>	Tracking #	Trip Blank Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> HCl / MeOH TBR	Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: Correct bottles used: Sufficient volume sent: <i>If Applicable</i> VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N										
Relinquished by : (Signature) <i>ccw</i>	Date: 11/17/23	Time: 1800	Received by: (Signature) <i>SWA</i>		Temp: 22°C Bottles Received: 86 13+0=13	If preservation required by Login: Date/Time										
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) <i>dkh</i>	Date: 11/18/23	Time: 800	Hold:	Condition: NCF / OK									

PNPAZ



ANALYTICAL REPORT

December 13, 2023

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Is

⁸Gl

⁹Al

¹⁰Sc

Pinyon Environmental

Sample Delivery Group: L1680469
Samples Received: 11/21/2023
Project Number: 722152201.002
Description: Nammo TTU Groundwater Monitoring

Report To: Isabella Foster
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

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SAMPLE SUMMARY

			Collected by CW	Collected date/time 11/18/23 14:15	Received date/time 11/21/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	100	12/04/23 03:09	12/04/23 03:09	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	25	12/01/23 13:18	12/01/23 13:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 15:55	11/27/23 15:55	KSD	Mt. Juliet, TN
TTU-12-82-20231118 L1680469-02 GW			Collected by CW	Collected date/time 11/18/23 10:15	Received date/time 11/21/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	10000	11/30/23 19:13	11/30/23 19:13	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	10	12/01/23 13:37	12/01/23 13:37	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 16:17	11/27/23 16:17	KSD	Mt. Juliet, TN
TTU-14-62-20231118 L1680469-03 GW			Collected by CW	Collected date/time 11/18/23 09:54	Received date/time 11/21/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	10000	11/30/23 19:42	11/30/23 19:42	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	10	12/01/23 13:56	12/01/23 13:56	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 16:39	11/27/23 16:39	KSD	Mt. Juliet, TN
TTU-15-75-20231118 L1680469-04 GW			Collected by CW	Collected date/time 11/18/23 12:25	Received date/time 11/21/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	1000	11/29/23 00:43	11/29/23 00:43	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	1	12/01/23 12:01	12/01/23 12:01	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 17:01	11/27/23 17:01	KSD	Mt. Juliet, TN
TTU-16-80-20231118 L1680469-05 GW			Collected by CW	Collected date/time 11/18/23 13:04	Received date/time 11/21/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	10000	12/04/23 18:27	12/04/23 18:27	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	2000	12/01/23 14:15	12/01/23 14:15	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	25	11/27/23 22:23	11/27/23 22:23	KSD	Mt. Juliet, TN
TTU-17-80-20231118 L1680469-06 GW			Collected by CW	Collected date/time 11/18/23 11:58	Received date/time 11/21/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2186708	1	12/11/23 10:19	12/11/23 10:19	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2181570	1	12/02/23 23:45	12/02/23 23:45	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2179265	1	11/30/23 13:52	11/30/23 13:52	JHH	Mt. Juliet, TN



SAMPLE SUMMARY

				Collected by CW	Collected date/time 11/18/23 13:44	Received date/time 11/21/23 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	1	11/28/23 12:24	11/28/23 12:24	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	5	12/01/23 14:34	12/01/23 14:34	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 17:44	11/27/23 17:44	KSD	Mt. Juliet, TN
TTU-EX-1-69-20231118 L1680469-08 GW				Collected by CW	Collected date/time 11/18/23 11:32	Received date/time 11/21/23 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	10000	11/30/23 20:39	11/30/23 20:39	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	10	12/01/23 14:53	12/01/23 14:53	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 18:05	11/27/23 18:05	KSD	Mt. Juliet, TN
TTU-EX-2-74-20231118 L1680469-09 GW				Collected by CW	Collected date/time 11/18/23 11:12	Received date/time 11/21/23 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	10000	11/30/23 22:32	11/30/23 22:32	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	20	12/01/23 15:12	12/01/23 15:12	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 18:27	11/27/23 18:27	KSD	Mt. Juliet, TN
TTU-EX-3-76-20231118 L1680469-10 GW				Collected by CW	Collected date/time 11/18/23 10:56	Received date/time 11/21/23 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	10000	11/30/23 23:01	11/30/23 23:01	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	250	12/01/23 15:31	12/01/23 15:31	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	20	11/27/23 22:45	11/27/23 22:45	KSD	Mt. Juliet, TN
TTU-EX-4-77-20231118 L1680469-11 GW				Collected by CW	Collected date/time 11/18/23 10:38	Received date/time 11/21/23 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	10000	11/30/23 23:29	11/30/23 23:29	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	25	12/01/23 15:51	12/01/23 15:51	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2179265	1	11/30/23 14:14	11/30/23 14:14	JHH	Mt. Juliet, TN
DUP-03 L1680469-12 GW				Collected by CW	Collected date/time 11/18/23 00:00	Received date/time 11/21/23 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2178276	1000	11/29/23 01:11	11/29/23 01:11	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	1	12/01/23 12:40	12/01/23 12:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 19:10	11/27/23 19:10	KSD	Mt. Juliet, TN



SAMPLE SUMMARY

DUP-04 L1680469-13 GW			Collected by CW	Collected date/time 11/18/23 00:00	Received date/time 11/21/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2180436	1	12/03/23 02:17	12/03/23 02:17	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	1	12/01/23 12:59	12/01/23 12:59	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2178102	1	11/27/23 19:31	11/27/23 19:31	KSD	Mt. Juliet, TN

TRIP BLANK L1680469-14 GW			Collected by CW	Collected date/time 11/18/23 00:00	Received date/time 11/21/23 08:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2180856	1	12/01/23 09:48	12/01/23 09:48	ADM	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

Analyzed from headspace vial.

Lab Sample ID	Project Sample ID	Method
L1680469-06	TTU-17-80-20231118	8260B

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1680469-07	TTU-19-73-20231118	8260B-SIM
L1680469-13	DUP-04	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	1320		30.0	400	100	12/04/2023 03:09	WG2178276

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	397	E4	282	1250	25	12/01/2023 13:18	WG2180856
Acrolein	U	L2 R7	63.5	1250	25	12/01/2023 13:18	WG2180856
Acrylonitrile	U		16.8	250	25	12/01/2023 13:18	WG2180856
Benzene	U		2.35	25.0	25	12/01/2023 13:18	WG2180856
Bromobenzene	U		2.95	25.0	25	12/01/2023 13:18	WG2180856
Bromodichloromethane	U		3.40	25.0	25	12/01/2023 13:18	WG2180856
Bromoform	U		3.22	25.0	25	12/01/2023 13:18	WG2180856
Bromomethane	U		15.1	125	25	12/01/2023 13:18	WG2180856
1,3-Butadiene	U		7.48	50.0	25	12/01/2023 13:18	WG2180856
n-Butylbenzene	U		3.93	25.0	25	12/01/2023 13:18	WG2180856
sec-Butylbenzene	U		3.13	25.0	25	12/01/2023 13:18	WG2180856
tert-Butylbenzene	U		3.18	25.0	25	12/01/2023 13:18	WG2180856
Carbon tetrachloride	U		3.20	25.0	25	12/01/2023 13:18	WG2180856
Carbon disulfide	4.41	E4	2.41	25.0	25	12/01/2023 13:18	WG2180856
Chlorobenzene	U		2.90	25.0	25	12/01/2023 13:18	WG2180856
Chlorodibromomethane	U		3.50	25.0	25	12/01/2023 13:18	WG2180856
Chloroethane	U	R7	4.80	125	25	12/01/2023 13:18	WG2180856
Chloroform	U		2.78	125	25	12/01/2023 13:18	WG2180856
Chloromethane	U	R7	24.0	62.5	25	12/01/2023 13:18	WG2180856
Cyclohexane	U		4.70	25.0	25	12/01/2023 13:18	WG2180856
2-Chlorotoluene	U		2.65	25.0	25	12/01/2023 13:18	WG2180856
4-Chlorotoluene	U		2.85	25.0	25	12/01/2023 13:18	WG2180856
1,2-Dibromo-3-Chloropropane	U		6.90	125	25	12/01/2023 13:18	WG2180856
1,2-Dibromoethane	U		3.15	25.0	25	12/01/2023 13:18	WG2180856
Dibromomethane	U		3.05	25.0	25	12/01/2023 13:18	WG2180856
1,2-Dichlorobenzene	U		2.68	25.0	25	12/01/2023 13:18	WG2180856
1,3-Dichlorobenzene	U		2.75	25.0	25	12/01/2023 13:18	WG2180856
1,4-Dichlorobenzene	U		3.00	25.0	25	12/01/2023 13:18	WG2180856
Dichlorodifluoromethane	U		9.35	125	25	12/01/2023 13:18	WG2180856
1,1-Dichloroethane	U		2.50	25.0	25	12/01/2023 13:18	WG2180856
1,2-Dichloroethane	U		2.05	25.0	25	12/01/2023 13:18	WG2180856
1,1-Dichloroethylene	U		4.70	25.0	25	12/01/2023 13:18	WG2180856
cis-1,2-Dichloroethene	23.9	E4	3.15	25.0	25	12/01/2023 13:18	WG2180856
trans-1,2-Dichloroethene	U		3.73	25.0	25	12/01/2023 13:18	WG2180856
1,2-Dichloropropane	U		3.73	25.0	25	12/01/2023 13:18	WG2180856
1,1-Dichloropropene	U		3.55	25.0	25	12/01/2023 13:18	WG2180856
1,3-Dichloropropane	U		2.75	25.0	25	12/01/2023 13:18	WG2180856
cis-1,3-Dichloropropene	U		2.78	25.0	25	12/01/2023 13:18	WG2180856
trans-1,3-Dichloropropene	U		2.95	25.0	25	12/01/2023 13:18	WG2180856
2,2-Dichloropropane	U		4.03	25.0	25	12/01/2023 13:18	WG2180856
Dicyclopentadiene	U		6.33	25.0	25	12/01/2023 13:18	WG2180856
Di-isopropyl ether	U		2.63	25.0	25	12/01/2023 13:18	WG2180856
Ethylbenzene	U		3.43	25.0	25	12/01/2023 13:18	WG2180856
4-Ethyltoluene	U		5.20	25.0	25	12/01/2023 13:18	WG2180856
Hexachloro-1,3-butadiene	U		8.43	25.0	25	12/01/2023 13:18	WG2180856
n-Hexane	U	R7	18.7	250	25	12/01/2023 13:18	WG2180856
Isopropylbenzene	U		2.63	25.0	25	12/01/2023 13:18	WG2180856
p-Isopropyltoluene	U		3.00	25.0	25	12/01/2023 13:18	WG2180856
2-Butanone (MEK)	489		29.8	250	25	12/01/2023 13:18	WG2180856
Methyl Cyclohexane	U		16.5	25.0	25	12/01/2023 13:18	WG2180856

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	<u>R7</u>	10.7	125	25	12/01/2023 13:18	WG2180856
4-Methyl-2-pentanone (MIBK)	74.9	<u>E4</u>	12.0	250	25	12/01/2023 13:18	WG2180856
Methyl tert-butyl ether	U		2.53	25.0	25	12/01/2023 13:18	WG2180856
Naphthalene	U		25.0	125	25	12/01/2023 13:18	WG2180856
Propene	U		23.4	62.5	25	12/01/2023 13:18	WG2180856
n-Propylbenzene	U		2.48	25.0	25	12/01/2023 13:18	WG2180856
Styrene	U		2.95	25.0	25	12/01/2023 13:18	WG2180856
1,1,1-Tetrachloroethane	U		3.68	25.0	25	12/01/2023 13:18	WG2180856
1,1,2,2-Tetrachloroethane	U		3.33	25.0	25	12/01/2023 13:18	WG2180856
1,1,2-Trichlorotrifluoroethane	U		4.50	25.0	25	12/01/2023 13:18	WG2180856
Tetrachloroethene	U		7.50	25.0	25	12/01/2023 13:18	WG2180856
Toluene	U		6.95	25.0	25	12/01/2023 13:18	WG2180856
1,2,3-Trichlorobenzene	U		5.75	25.0	25	12/01/2023 13:18	WG2180856
1,2,4-Trichlorobenzene	U		12.0	25.0	25	12/01/2023 13:18	WG2180856
1,1,1-Trichloroethane	U		3.73	25.0	25	12/01/2023 13:18	WG2180856
1,1,2-Trichloroethane	U		3.95	25.0	25	12/01/2023 13:18	WG2180856
Trichloroethene	67.9		4.75	25.0	25	12/01/2023 13:18	WG2180856
Trichlorofluoromethane	U		4.00	125	25	12/01/2023 13:18	WG2180856
1,2,3-Trichloropropane	U		5.93	62.5	25	12/01/2023 13:18	WG2180856
1,2,4-Trimethylbenzene	U		8.05	25.0	25	12/01/2023 13:18	WG2180856
1,2,3-Trimethylbenzene	U		2.60	25.0	25	12/01/2023 13:18	WG2180856
1,3,5-Trimethylbenzene	U		2.60	25.0	25	12/01/2023 13:18	WG2180856
Vinyl chloride	U	<u>R7</u>	5.85	25.0	25	12/01/2023 13:18	WG2180856
Xylenes, Total	U		4.35	75.0	25	12/01/2023 13:18	WG2180856
(S) Toluene-d8	101			80.0-120		12/01/2023 13:18	WG2180856
(S) 4-Bromofluorobenzene	99.9			77.0-126		12/01/2023 13:18	WG2180856
(S) 1,2-Dichloroethane-d4	88.3			70.0-130		12/01/2023 13:18	WG2180856

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	11/27/2023 15:55	WG2178102
(S) Toluene-d8	111			77.0-127		11/27/2023 15:55	WG2178102

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	112000		3000	40000	10000	11/30/2023 19:13	WG2178276

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	12/01/2023 13:37	WG2180856
Acrolein	U	L2 R7	25.4	500	10	12/01/2023 13:37	WG2180856
Acrylonitrile	U		6.71	100	10	12/01/2023 13:37	WG2180856
Benzene	U		0.941	10.0	10	12/01/2023 13:37	WG2180856
Bromobenzene	U		1.18	10.0	10	12/01/2023 13:37	WG2180856
Bromodichloromethane	U		1.36	10.0	10	12/01/2023 13:37	WG2180856
Bromoform	U		1.29	10.0	10	12/01/2023 13:37	WG2180856
Bromomethane	U		6.05	50.0	10	12/01/2023 13:37	WG2180856
1,3-Butadiene	U		2.99	20.0	10	12/01/2023 13:37	WG2180856
n-Butylbenzene	U		1.57	10.0	10	12/01/2023 13:37	WG2180856
sec-Butylbenzene	U		1.25	10.0	10	12/01/2023 13:37	WG2180856
tert-Butylbenzene	U		1.27	10.0	10	12/01/2023 13:37	WG2180856
Carbon tetrachloride	U		1.28	10.0	10	12/01/2023 13:37	WG2180856
Carbon disulfide	U		0.962	10.0	10	12/01/2023 13:37	WG2180856
Chlorobenzene	U		1.16	10.0	10	12/01/2023 13:37	WG2180856
Chlorodibromomethane	U		1.40	10.0	10	12/01/2023 13:37	WG2180856
Chloroethane	U	R7	1.92	50.0	10	12/01/2023 13:37	WG2180856
Chloroform	U		1.11	50.0	10	12/01/2023 13:37	WG2180856
Chloromethane	U	R7	9.60	25.0	10	12/01/2023 13:37	WG2180856
Cyclohexane	U		1.88	10.0	10	12/01/2023 13:37	WG2180856
2-Chlorotoluene	U		1.06	10.0	10	12/01/2023 13:37	WG2180856
4-Chlorotoluene	U		1.14	10.0	10	12/01/2023 13:37	WG2180856
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	12/01/2023 13:37	WG2180856
1,2-Dibromoethane	U		1.26	10.0	10	12/01/2023 13:37	WG2180856
Dibromomethane	U		1.22	10.0	10	12/01/2023 13:37	WG2180856
1,2-Dichlorobenzene	U		1.07	10.0	10	12/01/2023 13:37	WG2180856
1,3-Dichlorobenzene	U		1.10	10.0	10	12/01/2023 13:37	WG2180856
1,4-Dichlorobenzene	U		1.20	10.0	10	12/01/2023 13:37	WG2180856
Dichlorodifluoromethane	U		3.74	50.0	10	12/01/2023 13:37	WG2180856
1,1-Dichloroethane	U		1.00	10.0	10	12/01/2023 13:37	WG2180856
1,2-Dichloroethane	U		0.819	10.0	10	12/01/2023 13:37	WG2180856
1,1-Dichloroethene	U		1.88	10.0	10	12/01/2023 13:37	WG2180856
cis-1,2-Dichloroethene	U		1.26	10.0	10	12/01/2023 13:37	WG2180856
trans-1,2-Dichloroethene	U		1.49	10.0	10	12/01/2023 13:37	WG2180856
1,2-Dichloropropane	U		1.49	10.0	10	12/01/2023 13:37	WG2180856
1,1-Dichloropropene	U		1.42	10.0	10	12/01/2023 13:37	WG2180856
1,3-Dichloropropane	U		1.10	10.0	10	12/01/2023 13:37	WG2180856
cis-1,3-Dichloropropene	U		1.11	10.0	10	12/01/2023 13:37	WG2180856
trans-1,3-Dichloropropene	U		1.18	10.0	10	12/01/2023 13:37	WG2180856
2,2-Dichloropropane	U		1.61	10.0	10	12/01/2023 13:37	WG2180856
Dicyclopentadiene	U		2.53	10.0	10	12/01/2023 13:37	WG2180856
Di-isopropyl ether	U		1.05	10.0	10	12/01/2023 13:37	WG2180856
Ethylbenzene	U		1.37	10.0	10	12/01/2023 13:37	WG2180856
4-Ethyltoluene	U		2.08	10.0	10	12/01/2023 13:37	WG2180856
Hexachloro-1,3-butadiene	U		3.37	10.0	10	12/01/2023 13:37	WG2180856
n-Hexane	U	R7	7.49	100	10	12/01/2023 13:37	WG2180856
Isopropylbenzene	U		1.05	10.0	10	12/01/2023 13:37	WG2180856
p-Isopropyltoluene	U		1.20	10.0	10	12/01/2023 13:37	WG2180856
2-Butanone (MEK)	U		11.9	100	10	12/01/2023 13:37	WG2180856
Methyl Cyclohexane	U		6.60	10.0	10	12/01/2023 13:37	WG2180856

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	<u>R7</u>	4.30	50.0	10	12/01/2023 13:37	WG2180856
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	12/01/2023 13:37	WG2180856
Methyl tert-butyl ether	U		1.01	10.0	10	12/01/2023 13:37	WG2180856
Naphthalene	U		10.0	50.0	10	12/01/2023 13:37	WG2180856
Propene	U		9.36	25.0	10	12/01/2023 13:37	WG2180856
n-Propylbenzene	U		0.993	10.0	10	12/01/2023 13:37	WG2180856
Styrene	U		1.18	10.0	10	12/01/2023 13:37	WG2180856
1,1,1-Tetrachloroethane	U		1.47	10.0	10	12/01/2023 13:37	WG2180856
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	12/01/2023 13:37	WG2180856
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	12/01/2023 13:37	WG2180856
Tetrachloroethene	U		3.00	10.0	10	12/01/2023 13:37	WG2180856
Toluene	U		2.78	10.0	10	12/01/2023 13:37	WG2180856
1,2,3-Trichlorobenzene	U		2.30	10.0	10	12/01/2023 13:37	WG2180856
1,2,4-Trichlorobenzene	U		4.81	10.0	10	12/01/2023 13:37	WG2180856
1,1,1-Trichloroethane	U		1.49	10.0	10	12/01/2023 13:37	WG2180856
1,1,2-Trichloroethane	U		1.58	10.0	10	12/01/2023 13:37	WG2180856
Trichloroethene	427		1.90	10.0	10	12/01/2023 13:37	WG2180856
Trichlorofluoromethane	U		1.60	50.0	10	12/01/2023 13:37	WG2180856
1,2,3-Trichloropropane	U		2.37	25.0	10	12/01/2023 13:37	WG2180856
1,2,4-Trimethylbenzene	U		3.22	10.0	10	12/01/2023 13:37	WG2180856
1,2,3-Trimethylbenzene	U		1.04	10.0	10	12/01/2023 13:37	WG2180856
1,3,5-Trimethylbenzene	U		1.04	10.0	10	12/01/2023 13:37	WG2180856
Vinyl chloride	U	<u>R7</u>	2.34	10.0	10	12/01/2023 13:37	WG2180856
Xylenes, Total	U		1.74	30.0	10	12/01/2023 13:37	WG2180856
(S) Toluene-d8	109			80.0-120		12/01/2023 13:37	WG2180856
(S) 4-Bromofluorobenzene	107			77.0-126		12/01/2023 13:37	WG2180856
(S) 1,2-Dichloroethane-d4	98.4			70.0-130		12/01/2023 13:37	WG2180856



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	153		0.597	3.00	1	11/27/2023 16:17	WG2178102
(S) Toluene-d8	101			77.0-127		11/27/2023 16:17	WG2178102

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	126000		3000	40000	10000	11/30/2023 19:42	WG2178276

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	12/01/2023 13:56	WG2180856
Acrolein	U	L2 R7	25.4	500	10	12/01/2023 13:56	WG2180856
Acrylonitrile	U		6.71	100	10	12/01/2023 13:56	WG2180856
Benzene	2.04	E4	0.941	10.0	10	12/01/2023 13:56	WG2180856
Bromobenzene	U		1.18	10.0	10	12/01/2023 13:56	WG2180856
Bromodichloromethane	U		1.36	10.0	10	12/01/2023 13:56	WG2180856
Bromoform	U		1.29	10.0	10	12/01/2023 13:56	WG2180856
Bromomethane	U		6.05	50.0	10	12/01/2023 13:56	WG2180856
1,3-Butadiene	U		2.99	20.0	10	12/01/2023 13:56	WG2180856
n-Butylbenzene	U		1.57	10.0	10	12/01/2023 13:56	WG2180856
sec-Butylbenzene	U		1.25	10.0	10	12/01/2023 13:56	WG2180856
tert-Butylbenzene	U		1.27	10.0	10	12/01/2023 13:56	WG2180856
Carbon tetrachloride	U		1.28	10.0	10	12/01/2023 13:56	WG2180856
Carbon disulfide	U		0.962	10.0	10	12/01/2023 13:56	WG2180856
Chlorobenzene	U		1.16	10.0	10	12/01/2023 13:56	WG2180856
Chlorodibromomethane	U		1.40	10.0	10	12/01/2023 13:56	WG2180856
Chloroethane	U	R7	1.92	50.0	10	12/01/2023 13:56	WG2180856
Chloroform	1.99	E4	1.11	50.0	10	12/01/2023 13:56	WG2180856
Chloromethane	U	R7	9.60	25.0	10	12/01/2023 13:56	WG2180856
Cyclohexane	U		1.88	10.0	10	12/01/2023 13:56	WG2180856
2-Chlorotoluene	U		1.06	10.0	10	12/01/2023 13:56	WG2180856
4-Chlorotoluene	U		1.14	10.0	10	12/01/2023 13:56	WG2180856
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	12/01/2023 13:56	WG2180856
1,2-Dibromoethane	U		1.26	10.0	10	12/01/2023 13:56	WG2180856
Dibromomethane	U		1.22	10.0	10	12/01/2023 13:56	WG2180856
1,2-Dichlorobenzene	U		1.07	10.0	10	12/01/2023 13:56	WG2180856
1,3-Dichlorobenzene	U		1.10	10.0	10	12/01/2023 13:56	WG2180856
1,4-Dichlorobenzene	U		1.20	10.0	10	12/01/2023 13:56	WG2180856
Dichlorodifluoromethane	U		3.74	50.0	10	12/01/2023 13:56	WG2180856
1,1-Dichloroethane	U		1.00	10.0	10	12/01/2023 13:56	WG2180856
1,2-Dichloroethane	U		0.819	10.0	10	12/01/2023 13:56	WG2180856
1,1-Dichloroethylene	75.7		1.88	10.0	10	12/01/2023 13:56	WG2180856
cis-1,2-Dichloroethene	3.37	E4	1.26	10.0	10	12/01/2023 13:56	WG2180856
trans-1,2-Dichloroethene	U		1.49	10.0	10	12/01/2023 13:56	WG2180856
1,2-Dichloropropane	U		1.49	10.0	10	12/01/2023 13:56	WG2180856
1,1-Dichloropropene	U		1.42	10.0	10	12/01/2023 13:56	WG2180856
1,3-Dichloropropane	U		1.10	10.0	10	12/01/2023 13:56	WG2180856
cis-1,3-Dichloropropene	U		1.11	10.0	10	12/01/2023 13:56	WG2180856
trans-1,3-Dichloropropene	U		1.18	10.0	10	12/01/2023 13:56	WG2180856
2,2-Dichloropropane	U		1.61	10.0	10	12/01/2023 13:56	WG2180856
Dicyclopentadiene	U		2.53	10.0	10	12/01/2023 13:56	WG2180856
Di-isopropyl ether	U		1.05	10.0	10	12/01/2023 13:56	WG2180856
Ethylbenzene	U		1.37	10.0	10	12/01/2023 13:56	WG2180856
4-Ethyltoluene	U		2.08	10.0	10	12/01/2023 13:56	WG2180856
Hexachloro-1,3-butadiene	U		3.37	10.0	10	12/01/2023 13:56	WG2180856
n-Hexane	U	R7	7.49	100	10	12/01/2023 13:56	WG2180856
Isopropylbenzene	U		1.05	10.0	10	12/01/2023 13:56	WG2180856
p-Isopropyltoluene	U		1.20	10.0	10	12/01/2023 13:56	WG2180856
2-Butanone (MEK)	U		11.9	100	10	12/01/2023 13:56	WG2180856
Methyl Cyclohexane	U		6.60	10.0	10	12/01/2023 13:56	WG2180856

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	<u>R7</u>	4.30	50.0	10	12/01/2023 13:56	WG2180856
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	12/01/2023 13:56	WG2180856
Methyl tert-butyl ether	U		1.01	10.0	10	12/01/2023 13:56	WG2180856
Naphthalene	U		10.0	50.0	10	12/01/2023 13:56	WG2180856
Propene	U		9.36	25.0	10	12/01/2023 13:56	WG2180856
n-Propylbenzene	U		0.993	10.0	10	12/01/2023 13:56	WG2180856
Styrene	U		1.18	10.0	10	12/01/2023 13:56	WG2180856
1,1,1-Tetrachloroethane	U		1.47	10.0	10	12/01/2023 13:56	WG2180856
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	12/01/2023 13:56	WG2180856
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	12/01/2023 13:56	WG2180856
Tetrachloroethene	U		3.00	10.0	10	12/01/2023 13:56	WG2180856
Toluene	U		2.78	10.0	10	12/01/2023 13:56	WG2180856
1,2,3-Trichlorobenzene	U		2.30	10.0	10	12/01/2023 13:56	WG2180856
1,2,4-Trichlorobenzene	U		4.81	10.0	10	12/01/2023 13:56	WG2180856
1,1,1-Trichloroethane	U		1.49	10.0	10	12/01/2023 13:56	WG2180856
1,1,2-Trichloroethane	U		1.58	10.0	10	12/01/2023 13:56	WG2180856
Trichloroethene	712		1.90	10.0	10	12/01/2023 13:56	WG2180856
Trichlorofluoromethane	U		1.60	50.0	10	12/01/2023 13:56	WG2180856
1,2,3-Trichloropropane	U		2.37	25.0	10	12/01/2023 13:56	WG2180856
1,2,4-Trimethylbenzene	U		3.22	10.0	10	12/01/2023 13:56	WG2180856
1,2,3-Trimethylbenzene	U		1.04	10.0	10	12/01/2023 13:56	WG2180856
1,3,5-Trimethylbenzene	U		1.04	10.0	10	12/01/2023 13:56	WG2180856
Vinyl chloride	U	<u>R7</u>	2.34	10.0	10	12/01/2023 13:56	WG2180856
Xylenes, Total	U		1.74	30.0	10	12/01/2023 13:56	WG2180856
(S) Toluene-d8	105			80.0-120		12/01/2023 13:56	WG2180856
(S) 4-Bromofluorobenzene	101			77.0-126		12/01/2023 13:56	WG2180856
(S) 1,2-Dichloroethane-d4	113			70.0-130		12/01/2023 13:56	WG2180856



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	356		0.597	3.00	1	11/27/2023 16:39	WG2178102
(S) Toluene-d8	100			77.0-127		11/27/2023 16:39	WG2178102

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	12000		300	4000	1000	11/29/2023 00:43	WG2178276

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

Analyte	Result	<u>Qualifier</u>	MDL	RDL	Dilution	Analysis date / time	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l			
Acetone	U		11.3	50.0	1	12/01/2023 12:01	WG2180856
Acrolein	U	L2 R7	2.54	50.0	1	12/01/2023 12:01	WG2180856
Acrylonitrile	U		0.671	10.0	1	12/01/2023 12:01	WG2180856
Benzene	U		0.0941	1.00	1	12/01/2023 12:01	WG2180856
Bromobenzene	U		0.118	1.00	1	12/01/2023 12:01	WG2180856
Bromodichloromethane	U		0.136	1.00	1	12/01/2023 12:01	WG2180856
Bromoform	U		0.129	1.00	1	12/01/2023 12:01	WG2180856
Bromomethane	U		0.605	5.00	1	12/01/2023 12:01	WG2180856
1,3-Butadiene	U		0.299	2.00	1	12/01/2023 12:01	WG2180856
n-Butylbenzene	U		0.157	1.00	1	12/01/2023 12:01	WG2180856
sec-Butylbenzene	U		0.125	1.00	1	12/01/2023 12:01	WG2180856
tert-Butylbenzene	U		0.127	1.00	1	12/01/2023 12:01	WG2180856
Carbon tetrachloride	U		0.128	1.00	1	12/01/2023 12:01	WG2180856
Carbon disulfide	U		0.0962	1.00	1	12/01/2023 12:01	WG2180856
Chlorobenzene	U		0.116	1.00	1	12/01/2023 12:01	WG2180856
Chlorodibromomethane	U		0.140	1.00	1	12/01/2023 12:01	WG2180856
Chloroethane	U	R7	0.192	5.00	1	12/01/2023 12:01	WG2180856
Chloroform	U		0.111	5.00	1	12/01/2023 12:01	WG2180856
Chloromethane	U	R7	0.960	2.50	1	12/01/2023 12:01	WG2180856
Cyclohexane	U		0.188	1.00	1	12/01/2023 12:01	WG2180856
2-Chlorotoluene	U		0.106	1.00	1	12/01/2023 12:01	WG2180856
4-Chlorotoluene	U		0.114	1.00	1	12/01/2023 12:01	WG2180856
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/01/2023 12:01	WG2180856
1,2-Dibromoethane	U		0.126	1.00	1	12/01/2023 12:01	WG2180856
Dibromomethane	U		0.122	1.00	1	12/01/2023 12:01	WG2180856
1,2-Dichlorobenzene	U		0.107	1.00	1	12/01/2023 12:01	WG2180856
1,3-Dichlorobenzene	U		0.110	1.00	1	12/01/2023 12:01	WG2180856
1,4-Dichlorobenzene	U		0.120	1.00	1	12/01/2023 12:01	WG2180856
Dichlorodifluoromethane	U		0.374	5.00	1	12/01/2023 12:01	WG2180856
1,1-Dichloroethane	U		0.100	1.00	1	12/01/2023 12:01	WG2180856
1,2-Dichloroethane	U		0.0819	1.00	1	12/01/2023 12:01	WG2180856
1,1-Dichloroethene	1.10		0.188	1.00	1	12/01/2023 12:01	WG2180856
cis-1,2-Dichloroethene	0.984	E4	0.126	1.00	1	12/01/2023 12:01	WG2180856
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/01/2023 12:01	WG2180856
1,2-Dichloropropane	U		0.149	1.00	1	12/01/2023 12:01	WG2180856
1,1-Dichloropropene	U		0.142	1.00	1	12/01/2023 12:01	WG2180856
1,3-Dichloropropane	U		0.110	1.00	1	12/01/2023 12:01	WG2180856
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/01/2023 12:01	WG2180856
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/01/2023 12:01	WG2180856
2,2-Dichloropropane	U		0.161	1.00	1	12/01/2023 12:01	WG2180856
Dicyclopentadiene	U		0.253	1.00	1	12/01/2023 12:01	WG2180856
Di-isopropyl ether	U		0.105	1.00	1	12/01/2023 12:01	WG2180856
Ethylbenzene	U		0.137	1.00	1	12/01/2023 12:01	WG2180856
4-Ethyltoluene	U		0.208	1.00	1	12/01/2023 12:01	WG2180856
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/01/2023 12:01	WG2180856
n-Hexane	U	R7	0.749	10.0	1	12/01/2023 12:01	WG2180856
Isopropylbenzene	U		0.105	1.00	1	12/01/2023 12:01	WG2180856
p-Isopropyltoluene	U		0.120	1.00	1	12/01/2023 12:01	WG2180856
2-Butanone (MEK)	U		1.19	10.0	1	12/01/2023 12:01	WG2180856
Methyl Cyclohexane	U		0.660	1.00	1	12/01/2023 12:01	WG2180856

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	<u>R7</u>	0.430	5.00	1	12/01/2023 12:01	WG2180856
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/01/2023 12:01	WG2180856
Methyl tert-butyl ether	U		0.101	1.00	1	12/01/2023 12:01	WG2180856
Naphthalene	U		1.00	5.00	1	12/01/2023 12:01	WG2180856
Propene	U		0.936	2.50	1	12/01/2023 12:01	WG2180856
n-Propylbenzene	U		0.0993	1.00	1	12/01/2023 12:01	WG2180856
Styrene	U		0.118	1.00	1	12/01/2023 12:01	WG2180856
1,1,1-Tetrachloroethane	U		0.147	1.00	1	12/01/2023 12:01	WG2180856
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/01/2023 12:01	WG2180856
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/01/2023 12:01	WG2180856
Tetrachloroethene	U		0.300	1.00	1	12/01/2023 12:01	WG2180856
Toluene	U		0.278	1.00	1	12/01/2023 12:01	WG2180856
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/01/2023 12:01	WG2180856
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/01/2023 12:01	WG2180856
1,1,1-Trichloroethane	U		0.149	1.00	1	12/01/2023 12:01	WG2180856
1,1,2-Trichloroethane	U		0.158	1.00	1	12/01/2023 12:01	WG2180856
Trichloroethene	3.24		0.190	1.00	1	12/01/2023 12:01	WG2180856
Trichlorofluoromethane	U		0.160	5.00	1	12/01/2023 12:01	WG2180856
1,2,3-Trichloropropane	U		0.237	2.50	1	12/01/2023 12:01	WG2180856
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/01/2023 12:01	WG2180856
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/01/2023 12:01	WG2180856
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/01/2023 12:01	WG2180856
Vinyl chloride	U	<u>R7</u>	0.234	1.00	1	12/01/2023 12:01	WG2180856
Xylenes, Total	U		0.174	3.00	1	12/01/2023 12:01	WG2180856
(S) Toluene-d8	105			80.0-120		12/01/2023 12:01	WG2180856
(S) 4-Bromofluorobenzene	102			77.0-126		12/01/2023 12:01	WG2180856
(S) 1,2-Dichloroethane-d4	118			70.0-130		12/01/2023 12:01	WG2180856



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	12.2		0.597	3.00	1	11/27/2023 17:01	WG2178102
(S) Toluene-d8	100			77.0-127		11/27/2023 17:01	WG2178102

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	794000		3000	40000	10000	12/04/2023 18:27	WG2178276

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		22600	100000	2000	12/01/2023 14:15	WG2180856
Acrolein	U	L2 R7	5080	100000	2000	12/01/2023 14:15	WG2180856
Acrylonitrile	U		1340	20000	2000	12/01/2023 14:15	WG2180856
Benzene	949	E4	188	2000	2000	12/01/2023 14:15	WG2180856
Bromobenzene	U		236	2000	2000	12/01/2023 14:15	WG2180856
Bromodichloromethane	U		272	2000	2000	12/01/2023 14:15	WG2180856
Bromoform	U		258	2000	2000	12/01/2023 14:15	WG2180856
Bromomethane	U		1210	10000	2000	12/01/2023 14:15	WG2180856
1,3-Butadiene	U		598	4000	2000	12/01/2023 14:15	WG2180856
n-Butylbenzene	U		314	2000	2000	12/01/2023 14:15	WG2180856
sec-Butylbenzene	U		250	2000	2000	12/01/2023 14:15	WG2180856
tert-Butylbenzene	U		254	2000	2000	12/01/2023 14:15	WG2180856
Carbon tetrachloride	U		256	2000	2000	12/01/2023 14:15	WG2180856
Carbon disulfide	331	E4	192	2000	2000	12/01/2023 14:15	WG2180856
Chlorobenzene	U		232	2000	2000	12/01/2023 14:15	WG2180856
Chlorodibromomethane	U		280	2000	2000	12/01/2023 14:15	WG2180856
Chloroethane	U	R7	384	10000	2000	12/01/2023 14:15	WG2180856
Chloroform	U		222	10000	2000	12/01/2023 14:15	WG2180856
Chloromethane	U	R7	1920	5000	2000	12/01/2023 14:15	WG2180856
Cyclohexane	3440		376	2000	2000	12/01/2023 14:15	WG2180856
2-Chlorotoluene	U		212	2000	2000	12/01/2023 14:15	WG2180856
4-Chlorotoluene	U		228	2000	2000	12/01/2023 14:15	WG2180856
1,2-Dibromo-3-Chloropropane	U		552	10000	2000	12/01/2023 14:15	WG2180856
1,2-Dibromoethane	U		252	2000	2000	12/01/2023 14:15	WG2180856
Dibromomethane	U		244	2000	2000	12/01/2023 14:15	WG2180856
1,2-Dichlorobenzene	U		214	2000	2000	12/01/2023 14:15	WG2180856
1,3-Dichlorobenzene	U		220	2000	2000	12/01/2023 14:15	WG2180856
1,4-Dichlorobenzene	U		240	2000	2000	12/01/2023 14:15	WG2180856
Dichlorodifluoromethane	U		748	10000	2000	12/01/2023 14:15	WG2180856
1,1-Dichloroethane	U		200	2000	2000	12/01/2023 14:15	WG2180856
1,2-Dichloroethane	U		164	2000	2000	12/01/2023 14:15	WG2180856
1,1-Dichloroethylene	1500	E4	376	2000	2000	12/01/2023 14:15	WG2180856
cis-1,2-Dichloroethene	U		252	2000	2000	12/01/2023 14:15	WG2180856
trans-1,2-Dichloroethene	U		298	2000	2000	12/01/2023 14:15	WG2180856
1,2-Dichloropropane	U		298	2000	2000	12/01/2023 14:15	WG2180856
1,1-Dichloropropene	U		284	2000	2000	12/01/2023 14:15	WG2180856
1,3-Dichloropropane	U		220	2000	2000	12/01/2023 14:15	WG2180856
cis-1,3-Dichloropropene	U		222	2000	2000	12/01/2023 14:15	WG2180856
trans-1,3-Dichloropropene	U		236	2000	2000	12/01/2023 14:15	WG2180856
2,2-Dichloropropane	U		322	2000	2000	12/01/2023 14:15	WG2180856
Dicyclopentadiene	U		506	2000	2000	12/01/2023 14:15	WG2180856
Di-isopropyl ether	U		210	2000	2000	12/01/2023 14:15	WG2180856
Ethylbenzene	325	E4	274	2000	2000	12/01/2023 14:15	WG2180856
4-Ethyltoluene	1080	E4	416	2000	2000	12/01/2023 14:15	WG2180856
Hexachloro-1,3-butadiene	U		674	2000	2000	12/01/2023 14:15	WG2180856
n-Hexane	5000	E4 R7	1500	20000	2000	12/01/2023 14:15	WG2180856
Isopropylbenzene	U		210	2000	2000	12/01/2023 14:15	WG2180856
p-Isopropyltoluene	U		240	2000	2000	12/01/2023 14:15	WG2180856
2-Butanone (MEK)	U		2380	20000	2000	12/01/2023 14:15	WG2180856
Methyl Cyclohexane	U		1320	2000	2000	12/01/2023 14:15	WG2180856

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	23700	<u>R7</u>	860	10000	2000	12/01/2023 14:15	WG2180856
4-Methyl-2-pentanone (MIBK)	U		956	20000	2000	12/01/2023 14:15	WG2180856
Methyl tert-butyl ether	U		202	2000	2000	12/01/2023 14:15	WG2180856
Naphthalene	U		2000	10000	2000	12/01/2023 14:15	WG2180856
Propene	U		1870	5000	2000	12/01/2023 14:15	WG2180856
n-Propylbenzene	U		199	2000	2000	12/01/2023 14:15	WG2180856
Styrene	U		236	2000	2000	12/01/2023 14:15	WG2180856
1,1,1-Tetrachloroethane	U		294	2000	2000	12/01/2023 14:15	WG2180856
1,1,2,2-Tetrachloroethane	U		266	2000	2000	12/01/2023 14:15	WG2180856
1,1,2-Trichlorotrifluoroethane	U		360	2000	2000	12/01/2023 14:15	WG2180856
Tetrachloroethene	U		600	2000	2000	12/01/2023 14:15	WG2180856
Toluene	1780	<u>E4</u>	556	2000	2000	12/01/2023 14:15	WG2180856
1,2,3-Trichlorobenzene	U		460	2000	2000	12/01/2023 14:15	WG2180856
1,2,4-Trichlorobenzene	U		962	2000	2000	12/01/2023 14:15	WG2180856
1,1,1-Trichloroethane	U		298	2000	2000	12/01/2023 14:15	WG2180856
1,1,2-Trichloroethane	U		316	2000	2000	12/01/2023 14:15	WG2180856
Trichloroethene	30800		380	2000	2000	12/01/2023 14:15	WG2180856
Trichlorofluoromethane	U		320	10000	2000	12/01/2023 14:15	WG2180856
1,2,3-Trichloropropane	U		474	5000	2000	12/01/2023 14:15	WG2180856
1,2,4-Trimethylbenzene	1740	<u>E4</u>	644	2000	2000	12/01/2023 14:15	WG2180856
1,2,3-Trimethylbenzene	728	<u>E4</u>	208	2000	2000	12/01/2023 14:15	WG2180856
1,3,5-Trimethylbenzene	777	<u>E4</u>	208	2000	2000	12/01/2023 14:15	WG2180856
Vinyl chloride	U	<u>R7</u>	468	2000	2000	12/01/2023 14:15	WG2180856
Xylenes, Total	3670	<u>E4</u>	348	6000	2000	12/01/2023 14:15	WG2180856
(S) Toluene-d8	103			80.0-120		12/01/2023 14:15	WG2180856
(S) 4-Bromofluorobenzene	101			77.0-126		12/01/2023 14:15	WG2180856
(S) 1,2-Dichloroethane-d4	130			70.0-130		12/01/2023 14:15	WG2180856

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	3470		14.9	75.0	25	11/27/2023 22:23	WG2178102
(S) Toluene-d8	105			77.0-127		11/27/2023 22:23	WG2178102

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	11.7		0.300	4.00	1	12/11/2023 10:19	WG2186708

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	<u>R5</u>	11.3	50.0	1	12/02/2023 23:45	WG2181570
Acrolein	U	<u>L2 M1 R5</u>	2.54	50.0	1	12/02/2023 23:45	WG2181570
Acrylonitrile	U		0.671	10.0	1	12/02/2023 23:45	WG2181570
Benzene	U		0.0941	1.00	1	12/02/2023 23:45	WG2181570
Bromobenzene	U		0.118	1.00	1	12/02/2023 23:45	WG2181570
Bromodichloromethane	U	<u>M1</u>	0.136	1.00	1	12/02/2023 23:45	WG2181570
Bromoform	U		0.129	1.00	1	12/02/2023 23:45	WG2181570
Bromomethane	U	<u>M1</u>	0.605	5.00	1	12/02/2023 23:45	WG2181570
1,3-Butadiene	U	<u>M1 R5</u>	0.299	2.00	1	12/02/2023 23:45	WG2181570
n-Butylbenzene	U		0.157	1.00	1	12/02/2023 23:45	WG2181570
sec-Butylbenzene	U		0.125	1.00	1	12/02/2023 23:45	WG2181570
tert-Butylbenzene	U		0.127	1.00	1	12/02/2023 23:45	WG2181570
Carbon tetrachloride	U	<u>M1</u>	0.128	1.00	1	12/02/2023 23:45	WG2181570
Carbon disulfide	U	<u>M1</u>	0.0962	1.00	1	12/02/2023 23:45	WG2181570
Chlorobenzene	U		0.116	1.00	1	12/02/2023 23:45	WG2181570
Chlorodibromomethane	U		0.140	1.00	1	12/02/2023 23:45	WG2181570
Chloroethane	U		0.192	5.00	1	12/02/2023 23:45	WG2181570
Chloroform	U	<u>M1</u>	0.111	5.00	1	12/02/2023 23:45	WG2181570
Chloromethane	U	<u>R5</u>	0.960	2.50	1	12/02/2023 23:45	WG2181570
Cyclohexane	U		0.188	1.00	1	12/02/2023 23:45	WG2181570
2-Chlorotoluene	U		0.106	1.00	1	12/02/2023 23:45	WG2181570
4-Chlorotoluene	U		0.114	1.00	1	12/02/2023 23:45	WG2181570
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/02/2023 23:45	WG2181570
1,2-Dibromoethane	U		0.126	1.00	1	12/02/2023 23:45	WG2181570
Dibromomethane	U	<u>M1</u>	0.122	1.00	1	12/02/2023 23:45	WG2181570
1,2-Dichlorobenzene	U		0.107	1.00	1	12/02/2023 23:45	WG2181570
1,3-Dichlorobenzene	U	<u>M1</u>	0.110	1.00	1	12/02/2023 23:45	WG2181570
1,4-Dichlorobenzene	U	<u>M1 R5</u>	0.120	1.00	1	12/02/2023 23:45	WG2181570
Dichlorodifluoromethane	U	<u>M1</u>	0.374	5.00	1	12/02/2023 23:45	WG2181570
1,1-Dichloroethane	U		0.100	1.00	1	12/02/2023 23:45	WG2181570
1,2-Dichloroethane	U	<u>M1</u>	0.0819	1.00	1	12/02/2023 23:45	WG2181570
1,1-Dichloroethylene	U		0.188	1.00	1	12/02/2023 23:45	WG2181570
cis-1,2-Dichloroethene	0.427	<u>E4</u>	0.126	1.00	1	12/02/2023 23:45	WG2181570
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/02/2023 23:45	WG2181570
1,2-Dichloropropane	U		0.149	1.00	1	12/02/2023 23:45	WG2181570
1,1-Dichloropropene	U		0.142	1.00	1	12/02/2023 23:45	WG2181570
1,3-Dichloropropane	U		0.110	1.00	1	12/02/2023 23:45	WG2181570
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/02/2023 23:45	WG2181570
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/02/2023 23:45	WG2181570
2,2-Dichloropropane	U	<u>M1</u>	0.161	1.00	1	12/02/2023 23:45	WG2181570
Dicyclopentadiene	U	<u>R5</u>	0.253	1.00	1	12/02/2023 23:45	WG2181570
Di-isopropyl ether	U		0.105	1.00	1	12/02/2023 23:45	WG2181570
Ethylbenzene	U		0.137	1.00	1	12/02/2023 23:45	WG2181570
4-Ethyltoluene	U	<u>R5</u>	0.208	1.00	1	12/02/2023 23:45	WG2181570
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/02/2023 23:45	WG2181570
n-Hexane	U	<u>M1</u>	0.749	10.0	1	12/02/2023 23:45	WG2181570
Isopropylbenzene	U		0.105	1.00	1	12/02/2023 23:45	WG2181570
p-Isopropyltoluene	U		0.120	1.00	1	12/02/2023 23:45	WG2181570
2-Butanone (MEK)	U		1.19	10.0	1	12/02/2023 23:45	WG2181570
Methyl Cyclohexane	U	<u>R5</u>	0.660	1.00	1	12/02/2023 23:45	WG2181570

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	12/02/2023 23:45	WG2181570
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/02/2023 23:45	WG2181570
Methyl tert-butyl ether	U	M1	0.101	1.00	1	12/02/2023 23:45	WG2181570
Naphthalene	U		1.00	5.00	1	12/02/2023 23:45	WG2181570
Propene	U		0.936	2.50	1	12/02/2023 23:45	WG2181570
n-Propylbenzene	U		0.0993	1.00	1	12/02/2023 23:45	WG2181570
Styrene	U		0.118	1.00	1	12/02/2023 23:45	WG2181570
1,1,1-Tetrachloroethane	U		0.147	1.00	1	12/02/2023 23:45	WG2181570
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/02/2023 23:45	WG2181570
1,1,2-Trichlorotrifluoroethane	U	M1	0.180	1.00	1	12/02/2023 23:45	WG2181570
Tetrachloroethene	U		0.300	1.00	1	12/02/2023 23:45	WG2181570
Toluene	U		0.278	1.00	1	12/02/2023 23:45	WG2181570
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/02/2023 23:45	WG2181570
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/02/2023 23:45	WG2181570
1,1,1-Trichloroethane	U	M1	0.149	1.00	1	12/02/2023 23:45	WG2181570
1,1,2-Trichloroethane	U		0.158	1.00	1	12/02/2023 23:45	WG2181570
Trichloroethene	0.716	E4	0.190	1.00	1	12/02/2023 23:45	WG2181570
Trichlorofluoromethane	U	M1	0.160	5.00	1	12/02/2023 23:45	WG2181570
1,2,3-Trichloropropane	U	M1 R5	0.237	2.50	1	12/02/2023 23:45	WG2181570
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/02/2023 23:45	WG2181570
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/02/2023 23:45	WG2181570
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/02/2023 23:45	WG2181570
Vinyl chloride	U		0.234	1.00	1	12/02/2023 23:45	WG2181570
Xylenes, Total	U		0.174	3.00	1	12/02/2023 23:45	WG2181570
(S) Toluene-d8	103			80.0-120		12/02/2023 23:45	WG2181570
(S) 4-Bromofluorobenzene	99.6			77.0-126		12/02/2023 23:45	WG2181570
(S) 1,2-Dichloroethane-d4	114			70.0-130		12/02/2023 23:45	WG2181570

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	11/30/2023 13:52	WG2179265
(S) Toluene-d8	92.0			77.0-127		11/30/2023 13:52	WG2179265

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>M1 R5</u>	0.300	4.00	1	11/28/2023 12:24	<u>WG2178276</u>

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		56.5	250	5	12/01/2023 14:34	<u>WG2180856</u>
Acrolein	U	<u>L2 R7</u>	12.7	250	5	12/01/2023 14:34	<u>WG2180856</u>
Acrylonitrile	U		3.36	50.0	5	12/01/2023 14:34	<u>WG2180856</u>
Benzene	3.23	<u>E4</u>	0.471	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Bromobenzene	U		0.590	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Bromodichloromethane	U		0.680	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Bromoform	U		0.645	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Bromomethane	U		3.03	25.0	5	12/01/2023 14:34	<u>WG2180856</u>
1,3-Butadiene	U		1.49	10.0	5	12/01/2023 14:34	<u>WG2180856</u>
n-Butylbenzene	U		0.785	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
sec-Butylbenzene	U		0.625	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
tert-Butylbenzene	U		0.635	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Carbon tetrachloride	U		0.640	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Carbon disulfide	U		0.481	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Chlorobenzene	U		0.580	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Chlorodibromomethane	U		0.700	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Chloroethane	U	<u>R7</u>	0.960	25.0	5	12/01/2023 14:34	<u>WG2180856</u>
Chloroform	U		0.555	25.0	5	12/01/2023 14:34	<u>WG2180856</u>
Chloromethane	U	<u>R7</u>	4.80	12.5	5	12/01/2023 14:34	<u>WG2180856</u>
Cyclohexane	U		0.940	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
2-Chlorotoluene	U		0.530	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
4-Chlorotoluene	U		0.570	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,2-Dibromo-3-Chloropropane	U		1.38	25.0	5	12/01/2023 14:34	<u>WG2180856</u>
1,2-Dibromoethane	U		0.630	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Dibromomethane	U		0.610	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,2-Dichlorobenzene	U		0.535	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,3-Dichlorobenzene	U		0.550	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,4-Dichlorobenzene	U		0.600	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Dichlorodifluoromethane	U		1.87	25.0	5	12/01/2023 14:34	<u>WG2180856</u>
1,1-Dichloroethane	U		0.500	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,2-Dichloroethane	U		0.409	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,1-Dichloroethene	15.7		0.940	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
cis-1,2-Dichloroethene	139		0.630	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
trans-1,2-Dichloroethene	5.19		0.745	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,2-Dichloropropane	U		0.745	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,1-Dichloropropene	U		0.710	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
1,3-Dichloropropane	U		0.550	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
cis-1,3-Dichloropropene	U		0.555	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
trans-1,3-Dichloropropene	U		0.590	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
2,2-Dichloropropane	U		0.805	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Dicyclopentadiene	U		1.27	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Di-isopropyl ether	U		0.525	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Ethylbenzene	U		0.685	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
4-Ethyltoluene	U		1.04	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
Hexachloro-1,3-butadiene	U		1.69	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
n-Hexane	U	<u>R7</u>	3.74	50.0	5	12/01/2023 14:34	<u>WG2180856</u>
Isopropylbenzene	U		0.525	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
p-Isopropyltoluene	U		0.600	5.00	5	12/01/2023 14:34	<u>WG2180856</u>
2-Butanone (MEK)	U		5.95	50.0	5	12/01/2023 14:34	<u>WG2180856</u>
Methyl Cyclohexane	U		3.30	5.00	5	12/01/2023 14:34	<u>WG2180856</u>

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	<u>R7</u>	2.15	25.0	5	12/01/2023 14:34	WG2180856
4-Methyl-2-pentanone (MIBK)	U		2.39	50.0	5	12/01/2023 14:34	WG2180856
Methyl tert-butyl ether	U		0.505	5.00	5	12/01/2023 14:34	WG2180856
Naphthalene	U		5.00	25.0	5	12/01/2023 14:34	WG2180856
Propene	U		4.68	12.5	5	12/01/2023 14:34	WG2180856
n-Propylbenzene	U		0.497	5.00	5	12/01/2023 14:34	WG2180856
Styrene	U		0.590	5.00	5	12/01/2023 14:34	WG2180856
1,1,1-Tetrachloroethane	U		0.735	5.00	5	12/01/2023 14:34	WG2180856
1,1,2,2-Tetrachloroethane	U		0.665	5.00	5	12/01/2023 14:34	WG2180856
1,1,2-Trichlorotrifluoroethane	U		0.900	5.00	5	12/01/2023 14:34	WG2180856
Tetrachloroethene	U		1.50	5.00	5	12/01/2023 14:34	WG2180856
Toluene	U		1.39	5.00	5	12/01/2023 14:34	WG2180856
1,2,3-Trichlorobenzene	U		1.15	5.00	5	12/01/2023 14:34	WG2180856
1,2,4-Trichlorobenzene	U		2.41	5.00	5	12/01/2023 14:34	WG2180856
1,1,1-Trichloroethane	U		0.745	5.00	5	12/01/2023 14:34	WG2180856
1,1,2-Trichloroethane	U		0.790	5.00	5	12/01/2023 14:34	WG2180856
Trichloroethene	187		0.950	5.00	5	12/01/2023 14:34	WG2180856
Trichlorofluoromethane	U		0.800	25.0	5	12/01/2023 14:34	WG2180856
1,2,3-Trichloropropane	U		1.19	12.5	5	12/01/2023 14:34	WG2180856
1,2,4-Trimethylbenzene	U		1.61	5.00	5	12/01/2023 14:34	WG2180856
1,2,3-Trimethylbenzene	U		0.520	5.00	5	12/01/2023 14:34	WG2180856
1,3,5-Trimethylbenzene	U		0.520	5.00	5	12/01/2023 14:34	WG2180856
Vinyl chloride	2.13	<u>E4 R7</u>	1.17	5.00	5	12/01/2023 14:34	WG2180856
Xylenes, Total	U		0.870	15.0	5	12/01/2023 14:34	WG2180856
(S) Toluene-d8	103			80.0-120		12/01/2023 14:34	WG2180856
(S) 4-Bromofluorobenzene	104			77.0-126		12/01/2023 14:34	WG2180856
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		12/01/2023 14:34	WG2180856



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	279		0.597	3.00	1	11/27/2023 17:44	WG2178102
(S) Toluene-d8	108			77.0-127		11/27/2023 17:44	WG2178102

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	69900	<u>M3</u>	3000	40000	10000	11/30/2023 20:39	<u>WG2178276</u>

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	12/01/2023 14:53	<u>WG2180856</u>
Acrolein	U	<u>L2 R7</u>	25.4	500	10	12/01/2023 14:53	<u>WG2180856</u>
Acrylonitrile	U		6.71	100	10	12/01/2023 14:53	<u>WG2180856</u>
Benzene	U		0.941	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Bromobenzene	U		1.18	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Bromodichloromethane	U		1.36	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Bromoform	U		1.29	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Bromomethane	U		6.05	50.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,3-Butadiene	U		2.99	20.0	10	12/01/2023 14:53	<u>WG2180856</u>
n-Butylbenzene	U		1.57	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
sec-Butylbenzene	U		1.25	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
tert-Butylbenzene	U		1.27	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Carbon tetrachloride	U		1.28	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Carbon disulfide	U		0.962	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Chlorobenzene	U		1.16	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Chlorodibromomethane	U		1.40	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Chloroethane	U	<u>R7</u>	1.92	50.0	10	12/01/2023 14:53	<u>WG2180856</u>
Chloroform	1.12	<u>E4</u>	1.11	50.0	10	12/01/2023 14:53	<u>WG2180856</u>
Chloromethane	U	<u>R7</u>	9.60	25.0	10	12/01/2023 14:53	<u>WG2180856</u>
Cyclohexane	U		1.88	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
2-Chlorotoluene	U		1.06	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
4-Chlorotoluene	U		1.14	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,2-Dibromo-3-Chloropropane	U		2.76	50.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,2-Dibromoethane	U		1.26	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Dibromomethane	U		1.22	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,2-Dichlorobenzene	U		1.07	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,3-Dichlorobenzene	U		1.10	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,4-Dichlorobenzene	U		1.20	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Dichlorodifluoromethane	U		3.74	50.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,1-Dichloroethane	U		1.00	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,2-Dichloroethane	U		0.819	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,1-Dichloroethene	83.3		1.88	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
cis-1,2-Dichloroethene	U		1.26	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
trans-1,2-Dichloroethene	U		1.49	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,2-Dichloropropane	U		1.49	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,1-Dichloropropene	U		1.42	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
1,3-Dichloropropane	U		1.10	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
cis-1,3-Dichloropropene	U		1.11	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
trans-1,3-Dichloropropene	U		1.18	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
2,2-Dichloropropane	U		1.61	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Dicyclopentadiene	U		2.53	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Di-isopropyl ether	U		1.05	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Ethylbenzene	U		1.37	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
4-Ethyltoluene	U		2.08	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
Hexachloro-1,3-butadiene	U		3.37	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
n-Hexane	U	<u>R7</u>	7.49	100	10	12/01/2023 14:53	<u>WG2180856</u>
Isopropylbenzene	U		1.05	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
p-Isopropyltoluene	U		1.20	10.0	10	12/01/2023 14:53	<u>WG2180856</u>
2-Butanone (MEK)	U		11.9	100	10	12/01/2023 14:53	<u>WG2180856</u>
Methyl Cyclohexane	U		6.60	10.0	10	12/01/2023 14:53	<u>WG2180856</u>

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	<u>R7</u>	4.30	50.0	10	12/01/2023 14:53	WG2180856
4-Methyl-2-pentanone (MIBK)	U		4.78	100	10	12/01/2023 14:53	WG2180856
Methyl tert-butyl ether	U		1.01	10.0	10	12/01/2023 14:53	WG2180856
Naphthalene	U		10.0	50.0	10	12/01/2023 14:53	WG2180856
Propene	U		9.36	25.0	10	12/01/2023 14:53	WG2180856
n-Propylbenzene	U		0.993	10.0	10	12/01/2023 14:53	WG2180856
Styrene	U		1.18	10.0	10	12/01/2023 14:53	WG2180856
1,1,1-Tetrachloroethane	U		1.47	10.0	10	12/01/2023 14:53	WG2180856
1,1,2,2-Tetrachloroethane	U		1.33	10.0	10	12/01/2023 14:53	WG2180856
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	12/01/2023 14:53	WG2180856
Tetrachloroethene	U		3.00	10.0	10	12/01/2023 14:53	WG2180856
Toluene	U		2.78	10.0	10	12/01/2023 14:53	WG2180856
1,2,3-Trichlorobenzene	U		2.30	10.0	10	12/01/2023 14:53	WG2180856
1,2,4-Trichlorobenzene	U		4.81	10.0	10	12/01/2023 14:53	WG2180856
1,1,1-Trichloroethane	U		1.49	10.0	10	12/01/2023 14:53	WG2180856
1,1,2-Trichloroethane	U		1.58	10.0	10	12/01/2023 14:53	WG2180856
Trichloroethene	182		1.90	10.0	10	12/01/2023 14:53	WG2180856
Trichlorofluoromethane	U		1.60	50.0	10	12/01/2023 14:53	WG2180856
1,2,3-Trichloropropane	U		2.37	25.0	10	12/01/2023 14:53	WG2180856
1,2,4-Trimethylbenzene	U		3.22	10.0	10	12/01/2023 14:53	WG2180856
1,2,3-Trimethylbenzene	U		1.04	10.0	10	12/01/2023 14:53	WG2180856
1,3,5-Trimethylbenzene	U		1.04	10.0	10	12/01/2023 14:53	WG2180856
Vinyl chloride	U	<u>R7</u>	2.34	10.0	10	12/01/2023 14:53	WG2180856
Xylenes, Total	U		1.74	30.0	10	12/01/2023 14:53	WG2180856
(S) Toluene-d8	101			80.0-120		12/01/2023 14:53	WG2180856
(S) 4-Bromofluorobenzene	96.9			77.0-126		12/01/2023 14:53	WG2180856
(S) 1,2-Dichloroethane-d4	96.6			70.0-130		12/01/2023 14:53	WG2180856

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	351		0.597	3.00	1	11/27/2023 18:05	WG2178102
(S) Toluene-d8	101			77.0-127		11/27/2023 18:05	WG2178102

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	84300		3000	40000	10000	11/30/2023 22:32	WG2178276

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	12/01/2023 15:12	WG2180856
Acrolein	U	L2 R7	50.8	1000	20	12/01/2023 15:12	WG2180856
Acrylonitrile	U		13.4	200	20	12/01/2023 15:12	WG2180856
Benzene	U		1.88	20.0	20	12/01/2023 15:12	WG2180856
Bromobenzene	U		2.36	20.0	20	12/01/2023 15:12	WG2180856
Bromodichloromethane	U		2.72	20.0	20	12/01/2023 15:12	WG2180856
Bromoform	U		2.58	20.0	20	12/01/2023 15:12	WG2180856
Bromomethane	U		12.1	100	20	12/01/2023 15:12	WG2180856
1,3-Butadiene	U		5.98	40.0	20	12/01/2023 15:12	WG2180856
n-Butylbenzene	U		3.14	20.0	20	12/01/2023 15:12	WG2180856
sec-Butylbenzene	U		2.50	20.0	20	12/01/2023 15:12	WG2180856
tert-Butylbenzene	U		2.54	20.0	20	12/01/2023 15:12	WG2180856
Carbon tetrachloride	U		2.56	20.0	20	12/01/2023 15:12	WG2180856
Carbon disulfide	U		1.92	20.0	20	12/01/2023 15:12	WG2180856
Chlorobenzene	U		2.32	20.0	20	12/01/2023 15:12	WG2180856
Chlorodibromomethane	U		2.80	20.0	20	12/01/2023 15:12	WG2180856
Chloroethane	U	R7	3.84	100	20	12/01/2023 15:12	WG2180856
Chloroform	U		2.22	100	20	12/01/2023 15:12	WG2180856
Chloromethane	U	R7	19.2	50.0	20	12/01/2023 15:12	WG2180856
Cyclohexane	U		3.76	20.0	20	12/01/2023 15:12	WG2180856
2-Chlorotoluene	U		2.12	20.0	20	12/01/2023 15:12	WG2180856
4-Chlorotoluene	U		2.28	20.0	20	12/01/2023 15:12	WG2180856
1,2-Dibromo-3-Chloropropane	U		5.52	100	20	12/01/2023 15:12	WG2180856
1,2-Dibromoethane	U		2.52	20.0	20	12/01/2023 15:12	WG2180856
Dibromomethane	U		2.44	20.0	20	12/01/2023 15:12	WG2180856
1,2-Dichlorobenzene	U		2.14	20.0	20	12/01/2023 15:12	WG2180856
1,3-Dichlorobenzene	U		2.20	20.0	20	12/01/2023 15:12	WG2180856
1,4-Dichlorobenzene	U		2.40	20.0	20	12/01/2023 15:12	WG2180856
Dichlorodifluoromethane	U		7.48	100	20	12/01/2023 15:12	WG2180856
1,1-Dichloroethane	U		2.00	20.0	20	12/01/2023 15:12	WG2180856
1,2-Dichloroethane	U		1.64	20.0	20	12/01/2023 15:12	WG2180856
1,1-Dichloroethene	67.1		3.76	20.0	20	12/01/2023 15:12	WG2180856
cis-1,2-Dichloroethene	U		2.52	20.0	20	12/01/2023 15:12	WG2180856
trans-1,2-Dichloroethene	U		2.98	20.0	20	12/01/2023 15:12	WG2180856
1,2-Dichloropropane	U		2.98	20.0	20	12/01/2023 15:12	WG2180856
1,1-Dichloropropene	U		2.84	20.0	20	12/01/2023 15:12	WG2180856
1,3-Dichloropropane	U		2.20	20.0	20	12/01/2023 15:12	WG2180856
cis-1,3-Dichloropropene	U		2.22	20.0	20	12/01/2023 15:12	WG2180856
trans-1,3-Dichloropropene	U		2.36	20.0	20	12/01/2023 15:12	WG2180856
2,2-Dichloropropane	U		3.22	20.0	20	12/01/2023 15:12	WG2180856
Dicyclopentadiene	U		5.06	20.0	20	12/01/2023 15:12	WG2180856
Di-isopropyl ether	U		2.10	20.0	20	12/01/2023 15:12	WG2180856
Ethylbenzene	U		2.74	20.0	20	12/01/2023 15:12	WG2180856
4-Ethyltoluene	U		4.16	20.0	20	12/01/2023 15:12	WG2180856
Hexachloro-1,3-butadiene	U		6.74	20.0	20	12/01/2023 15:12	WG2180856
n-Hexane	U	R7	15.0	200	20	12/01/2023 15:12	WG2180856
Isopropylbenzene	U		2.10	20.0	20	12/01/2023 15:12	WG2180856
p-Isopropyltoluene	U		2.40	20.0	20	12/01/2023 15:12	WG2180856
2-Butanone (MEK)	U		23.8	200	20	12/01/2023 15:12	WG2180856
Methyl Cyclohexane	U		13.2	20.0	20	12/01/2023 15:12	WG2180856

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	<u>R7</u>	8.60	100	20	12/01/2023 15:12	WG2180856
4-Methyl-2-pentanone (MIBK)	U		9.56	200	20	12/01/2023 15:12	WG2180856
Methyl tert-butyl ether	U		2.02	20.0	20	12/01/2023 15:12	WG2180856
Naphthalene	U		20.0	100	20	12/01/2023 15:12	WG2180856
Propene	U		18.7	50.0	20	12/01/2023 15:12	WG2180856
n-Propylbenzene	U		1.99	20.0	20	12/01/2023 15:12	WG2180856
Styrene	U		2.36	20.0	20	12/01/2023 15:12	WG2180856
1,1,1-Tetrachloroethane	U		2.94	20.0	20	12/01/2023 15:12	WG2180856
1,1,2,2-Tetrachloroethane	U		2.66	20.0	20	12/01/2023 15:12	WG2180856
1,1,2-Trichlorotrifluoroethane	U		3.60	20.0	20	12/01/2023 15:12	WG2180856
Tetrachloroethene	U		6.00	20.0	20	12/01/2023 15:12	WG2180856
Toluene	U		5.56	20.0	20	12/01/2023 15:12	WG2180856
1,2,3-Trichlorobenzene	U		4.60	20.0	20	12/01/2023 15:12	WG2180856
1,2,4-Trichlorobenzene	U		9.62	20.0	20	12/01/2023 15:12	WG2180856
1,1,1-Trichloroethane	U		2.98	20.0	20	12/01/2023 15:12	WG2180856
1,1,2-Trichloroethane	U		3.16	20.0	20	12/01/2023 15:12	WG2180856
Trichloroethene	329		3.80	20.0	20	12/01/2023 15:12	WG2180856
Trichlorofluoromethane	U		3.20	100	20	12/01/2023 15:12	WG2180856
1,2,3-Trichloropropane	U		4.74	50.0	20	12/01/2023 15:12	WG2180856
1,2,4-Trimethylbenzene	U		6.44	20.0	20	12/01/2023 15:12	WG2180856
1,2,3-Trimethylbenzene	U		2.08	20.0	20	12/01/2023 15:12	WG2180856
1,3,5-Trimethylbenzene	U		2.08	20.0	20	12/01/2023 15:12	WG2180856
Vinyl chloride	U	<u>R7</u>	4.68	20.0	20	12/01/2023 15:12	WG2180856
Xylenes, Total	U		3.48	60.0	20	12/01/2023 15:12	WG2180856
(S) Toluene-d8	101			80.0-120		12/01/2023 15:12	WG2180856
(S) 4-Bromofluorobenzene	98.1			77.0-126		12/01/2023 15:12	WG2180856
(S) 1,2-Dichloroethane-d4	129			70.0-130		12/01/2023 15:12	WG2180856

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	266		0.597	3.00	1	11/27/2023 18:27	WG2178102
(S) Toluene-d8	101			77.0-127		11/27/2023 18:27	WG2178102

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	457000		3000	40000	10000	11/30/2023 23:01	WG2178276

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	12/01/2023 15:31	WG2180856
Acrolein	U	L2 R7	635	12500	250	12/01/2023 15:31	WG2180856
Acrylonitrile	U		168	2500	250	12/01/2023 15:31	WG2180856
Benzene	U		23.5	250	250	12/01/2023 15:31	WG2180856
Bromobenzene	U		29.5	250	250	12/01/2023 15:31	WG2180856
Bromodichloromethane	U		34.0	250	250	12/01/2023 15:31	WG2180856
Bromoform	U		32.3	250	250	12/01/2023 15:31	WG2180856
Bromomethane	U		151	1250	250	12/01/2023 15:31	WG2180856
1,3-Butadiene	U		74.8	500	250	12/01/2023 15:31	WG2180856
n-Butylbenzene	U		39.3	250	250	12/01/2023 15:31	WG2180856
sec-Butylbenzene	U		31.3	250	250	12/01/2023 15:31	WG2180856
tert-Butylbenzene	U		31.8	250	250	12/01/2023 15:31	WG2180856
Carbon tetrachloride	U		32.0	250	250	12/01/2023 15:31	WG2180856
Carbon disulfide	U		24.1	250	250	12/01/2023 15:31	WG2180856
Chlorobenzene	U		29.0	250	250	12/01/2023 15:31	WG2180856
Chlorodibromomethane	U		35.0	250	250	12/01/2023 15:31	WG2180856
Chloroethane	U	R7	48.0	1250	250	12/01/2023 15:31	WG2180856
Chloroform	U		27.8	1250	250	12/01/2023 15:31	WG2180856
Chloromethane	U	R7	240	625	250	12/01/2023 15:31	WG2180856
Cyclohexane	U		47.0	250	250	12/01/2023 15:31	WG2180856
2-Chlorotoluene	U		26.5	250	250	12/01/2023 15:31	WG2180856
4-Chlorotoluene	U		28.5	250	250	12/01/2023 15:31	WG2180856
1,2-Dibromo-3-Chloropropane	U		69.0	1250	250	12/01/2023 15:31	WG2180856
1,2-Dibromoethane	U		31.5	250	250	12/01/2023 15:31	WG2180856
Dibromomethane	U		30.5	250	250	12/01/2023 15:31	WG2180856
1,2-Dichlorobenzene	U		26.8	250	250	12/01/2023 15:31	WG2180856
1,3-Dichlorobenzene	U		27.5	250	250	12/01/2023 15:31	WG2180856
1,4-Dichlorobenzene	U		30.0	250	250	12/01/2023 15:31	WG2180856
Dichlorodifluoromethane	U		93.5	1250	250	12/01/2023 15:31	WG2180856
1,1-Dichloroethane	U		25.0	250	250	12/01/2023 15:31	WG2180856
1,2-Dichloroethane	U		20.5	250	250	12/01/2023 15:31	WG2180856
1,1-Dichloroethene	681		47.0	250	250	12/01/2023 15:31	WG2180856
cis-1,2-Dichloroethene	U		31.5	250	250	12/01/2023 15:31	WG2180856
trans-1,2-Dichloroethene	U		37.3	250	250	12/01/2023 15:31	WG2180856
1,2-Dichloropropane	U		37.3	250	250	12/01/2023 15:31	WG2180856
1,1-Dichloropropene	U		35.5	250	250	12/01/2023 15:31	WG2180856
1,3-Dichloropropane	U		27.5	250	250	12/01/2023 15:31	WG2180856
cis-1,3-Dichloropropene	U		27.8	250	250	12/01/2023 15:31	WG2180856
trans-1,3-Dichloropropene	U		29.5	250	250	12/01/2023 15:31	WG2180856
2,2-Dichloropropane	U		40.3	250	250	12/01/2023 15:31	WG2180856
Dicyclopentadiene	U		63.3	250	250	12/01/2023 15:31	WG2180856
Di-isopropyl ether	U		26.3	250	250	12/01/2023 15:31	WG2180856
Ethylbenzene	U		34.3	250	250	12/01/2023 15:31	WG2180856
4-Ethyltoluene	U		52.0	250	250	12/01/2023 15:31	WG2180856
Hexachloro-1,3-butadiene	U		84.3	250	250	12/01/2023 15:31	WG2180856
n-Hexane	U	R7	187	2500	250	12/01/2023 15:31	WG2180856
Isopropylbenzene	U		26.3	250	250	12/01/2023 15:31	WG2180856
p-Isopropyltoluene	U		30.0	250	250	12/01/2023 15:31	WG2180856
2-Butanone (MEK)	U		298	2500	250	12/01/2023 15:31	WG2180856
Methyl Cyclohexane	U		165	250	250	12/01/2023 15:31	WG2180856

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	<u>R7</u>	108	1250	250	12/01/2023 15:31	WG2180856
4-Methyl-2-pentanone (MIBK)	U		120	2500	250	12/01/2023 15:31	WG2180856
Methyl tert-butyl ether	U		25.3	250	250	12/01/2023 15:31	WG2180856
Naphthalene	U		250	1250	250	12/01/2023 15:31	WG2180856
Propene	U		234	625	250	12/01/2023 15:31	WG2180856
n-Propylbenzene	U		24.8	250	250	12/01/2023 15:31	WG2180856
Styrene	U		29.5	250	250	12/01/2023 15:31	WG2180856
1,1,1-Tetrachloroethane	U		36.8	250	250	12/01/2023 15:31	WG2180856
1,1,2,2-Tetrachloroethane	U		33.3	250	250	12/01/2023 15:31	WG2180856
1,1,2-Trichlorotrifluoroethane	U		45.0	250	250	12/01/2023 15:31	WG2180856
Tetrachloroethene	U		75.0	250	250	12/01/2023 15:31	WG2180856
Toluene	U		69.5	250	250	12/01/2023 15:31	WG2180856
1,2,3-Trichlorobenzene	U		57.5	250	250	12/01/2023 15:31	WG2180856
1,2,4-Trichlorobenzene	U		120	250	250	12/01/2023 15:31	WG2180856
1,1,1-Trichloroethane	U		37.3	250	250	12/01/2023 15:31	WG2180856
1,1,2-Trichloroethane	U		39.5	250	250	12/01/2023 15:31	WG2180856
Trichloroethene	6890		47.5	250	250	12/01/2023 15:31	WG2180856
Trichlorofluoromethane	U		40.0	1250	250	12/01/2023 15:31	WG2180856
1,2,3-Trichloropropane	U		59.3	625	250	12/01/2023 15:31	WG2180856
1,2,4-Trimethylbenzene	U		80.5	250	250	12/01/2023 15:31	WG2180856
1,2,3-Trimethylbenzene	U		26.0	250	250	12/01/2023 15:31	WG2180856
1,3,5-Trimethylbenzene	U		26.0	250	250	12/01/2023 15:31	WG2180856
Vinyl chloride	U	<u>R7</u>	58.5	250	250	12/01/2023 15:31	WG2180856
Xylenes, Total	U		43.5	750	250	12/01/2023 15:31	WG2180856
(S) Toluene-d8	101			80.0-120		12/01/2023 15:31	WG2180856
(S) 4-Bromofluorobenzene	99.3			77.0-126		12/01/2023 15:31	WG2180856
(S) 1,2-Dichloroethane-d4	130			70.0-130		12/01/2023 15:31	WG2180856

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	1490		11.9	60.0	20	11/27/2023 22:45	WG2178102
(S) Toluene-d8	105			77.0-127		11/27/2023 22:45	WG2178102

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	80600		3000	40000	10000	11/30/2023 23:29	WG2178276

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		282	1250	25	12/01/2023 15:51	WG2180856
Acrolein	U	L2 R7	63.5	1250	25	12/01/2023 15:51	WG2180856
Acrylonitrile	U		16.8	250	25	12/01/2023 15:51	WG2180856
Benzene	U		2.35	25.0	25	12/01/2023 15:51	WG2180856
Bromobenzene	U		2.95	25.0	25	12/01/2023 15:51	WG2180856
Bromodichloromethane	U		3.40	25.0	25	12/01/2023 15:51	WG2180856
Bromoform	U		3.22	25.0	25	12/01/2023 15:51	WG2180856
Bromomethane	U		15.1	125	25	12/01/2023 15:51	WG2180856
1,3-Butadiene	U		7.48	50.0	25	12/01/2023 15:51	WG2180856
n-Butylbenzene	U		3.93	25.0	25	12/01/2023 15:51	WG2180856
sec-Butylbenzene	U		3.13	25.0	25	12/01/2023 15:51	WG2180856
tert-Butylbenzene	U		3.18	25.0	25	12/01/2023 15:51	WG2180856
Carbon tetrachloride	U		3.20	25.0	25	12/01/2023 15:51	WG2180856
Carbon disulfide	U		2.41	25.0	25	12/01/2023 15:51	WG2180856
Chlorobenzene	U		2.90	25.0	25	12/01/2023 15:51	WG2180856
Chlorodibromomethane	U		3.50	25.0	25	12/01/2023 15:51	WG2180856
Chloroethane	U	R7	4.80	125	25	12/01/2023 15:51	WG2180856
Chloroform	U		2.78	125	25	12/01/2023 15:51	WG2180856
Chloromethane	U	R7	24.0	62.5	25	12/01/2023 15:51	WG2180856
Cyclohexane	U		4.70	25.0	25	12/01/2023 15:51	WG2180856
2-Chlorotoluene	U		2.65	25.0	25	12/01/2023 15:51	WG2180856
4-Chlorotoluene	U		2.85	25.0	25	12/01/2023 15:51	WG2180856
1,2-Dibromo-3-Chloropropane	U		6.90	125	25	12/01/2023 15:51	WG2180856
1,2-Dibromoethane	U		3.15	25.0	25	12/01/2023 15:51	WG2180856
Dibromomethane	U		3.05	25.0	25	12/01/2023 15:51	WG2180856
1,2-Dichlorobenzene	U		2.68	25.0	25	12/01/2023 15:51	WG2180856
1,3-Dichlorobenzene	U		2.75	25.0	25	12/01/2023 15:51	WG2180856
1,4-Dichlorobenzene	U		3.00	25.0	25	12/01/2023 15:51	WG2180856
Dichlorodifluoromethane	U		9.35	125	25	12/01/2023 15:51	WG2180856
1,1-Dichloroethane	U		2.50	25.0	25	12/01/2023 15:51	WG2180856
1,2-Dichloroethane	U		2.05	25.0	25	12/01/2023 15:51	WG2180856
1,1-Dichloroethene	89.3		4.70	25.0	25	12/01/2023 15:51	WG2180856
cis-1,2-Dichloroethene	U		3.15	25.0	25	12/01/2023 15:51	WG2180856
trans-1,2-Dichloroethene	U		3.73	25.0	25	12/01/2023 15:51	WG2180856
1,2-Dichloropropane	U		3.73	25.0	25	12/01/2023 15:51	WG2180856
1,1-Dichloropropene	U		3.55	25.0	25	12/01/2023 15:51	WG2180856
1,3-Dichloropropane	U		2.75	25.0	25	12/01/2023 15:51	WG2180856
cis-1,3-Dichloropropene	U		2.78	25.0	25	12/01/2023 15:51	WG2180856
trans-1,3-Dichloropropene	U		2.95	25.0	25	12/01/2023 15:51	WG2180856
2,2-Dichloropropane	U		4.03	25.0	25	12/01/2023 15:51	WG2180856
Dicyclopentadiene	U		6.33	25.0	25	12/01/2023 15:51	WG2180856
Di-isopropyl ether	U		2.63	25.0	25	12/01/2023 15:51	WG2180856
Ethylbenzene	U		3.43	25.0	25	12/01/2023 15:51	WG2180856
4-Ethyltoluene	U		5.20	25.0	25	12/01/2023 15:51	WG2180856
Hexachloro-1,3-butadiene	U		8.43	25.0	25	12/01/2023 15:51	WG2180856
n-Hexane	U	R7	18.7	250	25	12/01/2023 15:51	WG2180856
Isopropylbenzene	U		2.63	25.0	25	12/01/2023 15:51	WG2180856
p-Isopropyltoluene	U		3.00	25.0	25	12/01/2023 15:51	WG2180856
2-Butanone (MEK)	U		29.8	250	25	12/01/2023 15:51	WG2180856
Methyl Cyclohexane	U		16.5	25.0	25	12/01/2023 15:51	WG2180856

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	<u>R7</u>	10.7	125	25	12/01/2023 15:51	WG2180856
4-Methyl-2-pentanone (MIBK)	U		12.0	250	25	12/01/2023 15:51	WG2180856
Methyl tert-butyl ether	U		2.53	25.0	25	12/01/2023 15:51	WG2180856
Naphthalene	U		25.0	125	25	12/01/2023 15:51	WG2180856
Propene	U		23.4	62.5	25	12/01/2023 15:51	WG2180856
n-Propylbenzene	U		2.48	25.0	25	12/01/2023 15:51	WG2180856
Styrene	U		2.95	25.0	25	12/01/2023 15:51	WG2180856
1,1,1-Tetrachloroethane	U		3.68	25.0	25	12/01/2023 15:51	WG2180856
1,1,2,2-Tetrachloroethane	U		3.33	25.0	25	12/01/2023 15:51	WG2180856
1,1,2-Trichlorotrifluoroethane	U		4.50	25.0	25	12/01/2023 15:51	WG2180856
Tetrachloroethene	U		7.50	25.0	25	12/01/2023 15:51	WG2180856
Toluene	U		6.95	25.0	25	12/01/2023 15:51	WG2180856
1,2,3-Trichlorobenzene	U		5.75	25.0	25	12/01/2023 15:51	WG2180856
1,2,4-Trichlorobenzene	U		12.0	25.0	25	12/01/2023 15:51	WG2180856
1,1,1-Trichloroethane	U		3.73	25.0	25	12/01/2023 15:51	WG2180856
1,1,2-Trichloroethane	U		3.95	25.0	25	12/01/2023 15:51	WG2180856
Trichloroethene	673		4.75	25.0	25	12/01/2023 15:51	WG2180856
Trichlorofluoromethane	U		4.00	125	25	12/01/2023 15:51	WG2180856
1,2,3-Trichloropropane	U		5.93	62.5	25	12/01/2023 15:51	WG2180856
1,2,4-Trimethylbenzene	U		8.05	25.0	25	12/01/2023 15:51	WG2180856
1,2,3-Trimethylbenzene	U		2.60	25.0	25	12/01/2023 15:51	WG2180856
1,3,5-Trimethylbenzene	U		2.60	25.0	25	12/01/2023 15:51	WG2180856
Vinyl chloride	U	<u>R7</u>	5.85	25.0	25	12/01/2023 15:51	WG2180856
Xylenes, Total	U		4.35	75.0	25	12/01/2023 15:51	WG2180856
(S) Toluene-d8	104			80.0-120		12/01/2023 15:51	WG2180856
(S) 4-Bromofluorobenzene	99.2			77.0-126		12/01/2023 15:51	WG2180856
(S) 1,2-Dichloroethane-d4	118			70.0-130		12/01/2023 15:51	WG2180856

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	9.81		0.597	3.00	1	11/30/2023 14:14	WG2179265
(S) Toluene-d8	95.3			77.0-127		11/30/2023 14:14	WG2179265

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	11000		300	4000	1000	11/29/2023 01:11	WG2178276

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Is⁸ Gl⁹ Al¹⁰ Sc

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	12/01/2023 12:40	WG2180856
Acrolein	U	L2 R7	2.54	50.0	1	12/01/2023 12:40	WG2180856
Acrylonitrile	U		0.671	10.0	1	12/01/2023 12:40	WG2180856
Benzene	U		0.0941	1.00	1	12/01/2023 12:40	WG2180856
Bromobenzene	U		0.118	1.00	1	12/01/2023 12:40	WG2180856
Bromodichloromethane	U		0.136	1.00	1	12/01/2023 12:40	WG2180856
Bromoform	U		0.129	1.00	1	12/01/2023 12:40	WG2180856
Bromomethane	U		0.605	5.00	1	12/01/2023 12:40	WG2180856
1,3-Butadiene	U		0.299	2.00	1	12/01/2023 12:40	WG2180856
n-Butylbenzene	U		0.157	1.00	1	12/01/2023 12:40	WG2180856
sec-Butylbenzene	U		0.125	1.00	1	12/01/2023 12:40	WG2180856
tert-Butylbenzene	U		0.127	1.00	1	12/01/2023 12:40	WG2180856
Carbon tetrachloride	U		0.128	1.00	1	12/01/2023 12:40	WG2180856
Carbon disulfide	U		0.0962	1.00	1	12/01/2023 12:40	WG2180856
Chlorobenzene	U		0.116	1.00	1	12/01/2023 12:40	WG2180856
Chlorodibromomethane	U		0.140	1.00	1	12/01/2023 12:40	WG2180856
Chloroethane	U	R7	0.192	5.00	1	12/01/2023 12:40	WG2180856
Chloroform	U		0.111	5.00	1	12/01/2023 12:40	WG2180856
Chloromethane	U	R7	0.960	2.50	1	12/01/2023 12:40	WG2180856
Cyclohexane	U		0.188	1.00	1	12/01/2023 12:40	WG2180856
2-Chlorotoluene	U		0.106	1.00	1	12/01/2023 12:40	WG2180856
4-Chlorotoluene	U		0.114	1.00	1	12/01/2023 12:40	WG2180856
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/01/2023 12:40	WG2180856
1,2-Dibromoethane	U		0.126	1.00	1	12/01/2023 12:40	WG2180856
Dibromomethane	U		0.122	1.00	1	12/01/2023 12:40	WG2180856
1,2-Dichlorobenzene	U		0.107	1.00	1	12/01/2023 12:40	WG2180856
1,3-Dichlorobenzene	U		0.110	1.00	1	12/01/2023 12:40	WG2180856
1,4-Dichlorobenzene	U		0.120	1.00	1	12/01/2023 12:40	WG2180856
Dichlorodifluoromethane	U		0.374	5.00	1	12/01/2023 12:40	WG2180856
1,1-Dichloroethane	U		0.100	1.00	1	12/01/2023 12:40	WG2180856
1,2-Dichloroethane	U		0.0819	1.00	1	12/01/2023 12:40	WG2180856
1,1-Dichloroethylene	0.968	E4	0.188	1.00	1	12/01/2023 12:40	WG2180856
cis-1,2-Dichloroethene	0.877	E4	0.126	1.00	1	12/01/2023 12:40	WG2180856
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/01/2023 12:40	WG2180856
1,2-Dichloropropane	U		0.149	1.00	1	12/01/2023 12:40	WG2180856
1,1-Dichloropropene	U		0.142	1.00	1	12/01/2023 12:40	WG2180856
1,3-Dichloropropane	U		0.110	1.00	1	12/01/2023 12:40	WG2180856
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/01/2023 12:40	WG2180856
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/01/2023 12:40	WG2180856
2,2-Dichloropropane	U		0.161	1.00	1	12/01/2023 12:40	WG2180856
Dicyclopentadiene	U		0.253	1.00	1	12/01/2023 12:40	WG2180856
Di-isopropyl ether	U		0.105	1.00	1	12/01/2023 12:40	WG2180856
Ethylbenzene	U		0.137	1.00	1	12/01/2023 12:40	WG2180856
4-Ethyltoluene	U		0.208	1.00	1	12/01/2023 12:40	WG2180856
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/01/2023 12:40	WG2180856
n-Hexane	U	R7	0.749	10.0	1	12/01/2023 12:40	WG2180856
Isopropylbenzene	U		0.105	1.00	1	12/01/2023 12:40	WG2180856
p-Isopropyltoluene	U		0.120	1.00	1	12/01/2023 12:40	WG2180856
2-Butanone (MEK)	U		1.19	10.0	1	12/01/2023 12:40	WG2180856
Methyl Cyclohexane	U		0.660	1.00	1	12/01/2023 12:40	WG2180856

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	<u>R7</u>	0.430	5.00	1	12/01/2023 12:40	WG2180856
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/01/2023 12:40	WG2180856
Methyl tert-butyl ether	U		0.101	1.00	1	12/01/2023 12:40	WG2180856
Naphthalene	U		1.00	5.00	1	12/01/2023 12:40	WG2180856
Propene	U		0.936	2.50	1	12/01/2023 12:40	WG2180856
n-Propylbenzene	U		0.0993	1.00	1	12/01/2023 12:40	WG2180856
Styrene	U		0.118	1.00	1	12/01/2023 12:40	WG2180856
1,1,1-Tetrachloroethane	U		0.147	1.00	1	12/01/2023 12:40	WG2180856
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/01/2023 12:40	WG2180856
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/01/2023 12:40	WG2180856
Tetrachloroethene	U		0.300	1.00	1	12/01/2023 12:40	WG2180856
Toluene	U		0.278	1.00	1	12/01/2023 12:40	WG2180856
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/01/2023 12:40	WG2180856
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/01/2023 12:40	WG2180856
1,1,1-Trichloroethane	U		0.149	1.00	1	12/01/2023 12:40	WG2180856
1,1,2-Trichloroethane	U		0.158	1.00	1	12/01/2023 12:40	WG2180856
Trichloroethene	3.21		0.190	1.00	1	12/01/2023 12:40	WG2180856
Trichlorofluoromethane	U		0.160	5.00	1	12/01/2023 12:40	WG2180856
1,2,3-Trichloropropane	U		0.237	2.50	1	12/01/2023 12:40	WG2180856
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/01/2023 12:40	WG2180856
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/01/2023 12:40	WG2180856
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/01/2023 12:40	WG2180856
Vinyl chloride	U	<u>R7</u>	0.234	1.00	1	12/01/2023 12:40	WG2180856
Xylenes, Total	U		0.174	3.00	1	12/01/2023 12:40	WG2180856
(S) Toluene-d8	108			80.0-120		12/01/2023 12:40	WG2180856
(S) 4-Bromofluorobenzene	103			77.0-126		12/01/2023 12:40	WG2180856
(S) 1,2-Dichloroethane-d4	109			70.0-130		12/01/2023 12:40	WG2180856

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	6.38		0.597	3.00	1	11/27/2023 19:10	WG2178102
(S) Toluene-d8	100			77.0-127		11/27/2023 19:10	WG2178102

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	12/03/2023 02:17	WG2180436

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
			ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	12/01/2023 12:59	WG2180856
Acrolein	U	L2 R7	2.54	50.0	1	12/01/2023 12:59	WG2180856
Acrylonitrile	U		0.671	10.0	1	12/01/2023 12:59	WG2180856
Benzene	2.58		0.0941	1.00	1	12/01/2023 12:59	WG2180856
Bromobenzene	U		0.118	1.00	1	12/01/2023 12:59	WG2180856
Bromodichloromethane	U		0.136	1.00	1	12/01/2023 12:59	WG2180856
Bromoform	U		0.129	1.00	1	12/01/2023 12:59	WG2180856
Bromomethane	U		0.605	5.00	1	12/01/2023 12:59	WG2180856
1,3-Butadiene	U		0.299	2.00	1	12/01/2023 12:59	WG2180856
n-Butylbenzene	U		0.157	1.00	1	12/01/2023 12:59	WG2180856
sec-Butylbenzene	U		0.125	1.00	1	12/01/2023 12:59	WG2180856
tert-Butylbenzene	U		0.127	1.00	1	12/01/2023 12:59	WG2180856
Carbon tetrachloride	U		0.128	1.00	1	12/01/2023 12:59	WG2180856
Carbon disulfide	0.701	E4	0.0962	1.00	1	12/01/2023 12:59	WG2180856
Chlorobenzene	U		0.116	1.00	1	12/01/2023 12:59	WG2180856
Chlorodibromomethane	U		0.140	1.00	1	12/01/2023 12:59	WG2180856
Chloroethane	0.316	E4 R7	0.192	5.00	1	12/01/2023 12:59	WG2180856
Chloroform	U		0.111	5.00	1	12/01/2023 12:59	WG2180856
Chloromethane	U	R7	0.960	2.50	1	12/01/2023 12:59	WG2180856
Cyclohexane	U		0.188	1.00	1	12/01/2023 12:59	WG2180856
2-Chlorotoluene	U		0.106	1.00	1	12/01/2023 12:59	WG2180856
4-Chlorotoluene	U		0.114	1.00	1	12/01/2023 12:59	WG2180856
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/01/2023 12:59	WG2180856
1,2-Dibromoethane	U		0.126	1.00	1	12/01/2023 12:59	WG2180856
Dibromomethane	U		0.122	1.00	1	12/01/2023 12:59	WG2180856
1,2-Dichlorobenzene	U		0.107	1.00	1	12/01/2023 12:59	WG2180856
1,3-Dichlorobenzene	U		0.110	1.00	1	12/01/2023 12:59	WG2180856
1,4-Dichlorobenzene	U		0.120	1.00	1	12/01/2023 12:59	WG2180856
Dichlorodifluoromethane	U		0.374	5.00	1	12/01/2023 12:59	WG2180856
1,1-Dichloroethane	U		0.100	1.00	1	12/01/2023 12:59	WG2180856
1,2-Dichloroethane	U		0.0819	1.00	1	12/01/2023 12:59	WG2180856
1,1-Dichloroethene	16.4		0.188	1.00	1	12/01/2023 12:59	WG2180856
cis-1,2-Dichloroethene	107		0.126	1.00	1	12/01/2023 12:59	WG2180856
trans-1,2-Dichloroethene	4.67		0.149	1.00	1	12/01/2023 12:59	WG2180856
1,2-Dichloropropane	U		0.149	1.00	1	12/01/2023 12:59	WG2180856
1,1-Dichloropropene	U		0.142	1.00	1	12/01/2023 12:59	WG2180856
1,3-Dichloropropane	U		0.110	1.00	1	12/01/2023 12:59	WG2180856
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/01/2023 12:59	WG2180856
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/01/2023 12:59	WG2180856
2,2-Dichloropropane	U		0.161	1.00	1	12/01/2023 12:59	WG2180856
Dicyclopentadiene	U		0.253	1.00	1	12/01/2023 12:59	WG2180856
Di-isopropyl ether	U		0.105	1.00	1	12/01/2023 12:59	WG2180856
Ethylbenzene	U		0.137	1.00	1	12/01/2023 12:59	WG2180856
4-Ethyltoluene	U		0.208	1.00	1	12/01/2023 12:59	WG2180856
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/01/2023 12:59	WG2180856
n-Hexane	U	R7	0.749	10.0	1	12/01/2023 12:59	WG2180856
Isopropylbenzene	U		0.105	1.00	1	12/01/2023 12:59	WG2180856
p-Isopropyltoluene	U		0.120	1.00	1	12/01/2023 12:59	WG2180856
2-Butanone (MEK)	U		1.19	10.0	1	12/01/2023 12:59	WG2180856
Methyl Cyclohexane	U		0.660	1.00	1	12/01/2023 12:59	WG2180856

DUP-04

Collected date/time: 11/18/23 00:00

SAMPLE RESULTS - 13

L1680469

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	<u>R7</u>	0.430	5.00	1	12/01/2023 12:59	WG2180856
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/01/2023 12:59	WG2180856
Methyl tert-butyl ether	U		0.101	1.00	1	12/01/2023 12:59	WG2180856
Naphthalene	U		1.00	5.00	1	12/01/2023 12:59	WG2180856
Propene	U		0.936	2.50	1	12/01/2023 12:59	WG2180856
n-Propylbenzene	U		0.0993	1.00	1	12/01/2023 12:59	WG2180856
Styrene	U		0.118	1.00	1	12/01/2023 12:59	WG2180856
1,1,1-Tetrachloroethane	U		0.147	1.00	1	12/01/2023 12:59	WG2180856
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/01/2023 12:59	WG2180856
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/01/2023 12:59	WG2180856
Tetrachloroethene	U		0.300	1.00	1	12/01/2023 12:59	WG2180856
Toluene	0.334	<u>E4</u>	0.278	1.00	1	12/01/2023 12:59	WG2180856
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/01/2023 12:59	WG2180856
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/01/2023 12:59	WG2180856
1,1,1-Trichloroethane	U		0.149	1.00	1	12/01/2023 12:59	WG2180856
1,1,2-Trichloroethane	U		0.158	1.00	1	12/01/2023 12:59	WG2180856
Trichloroethene	164		0.190	1.00	1	12/01/2023 12:59	WG2180856
Trichlorofluoromethane	U		0.160	5.00	1	12/01/2023 12:59	WG2180856
1,2,3-Trichloropropane	U		0.237	2.50	1	12/01/2023 12:59	WG2180856
1,2,4-Trimethylbenzene	0.578	<u>E4</u>	0.322	1.00	1	12/01/2023 12:59	WG2180856
1,2,3-Trimethylbenzene	0.207	<u>E4</u>	0.104	1.00	1	12/01/2023 12:59	WG2180856
1,3,5-Trimethylbenzene	0.174	<u>E4</u>	0.104	1.00	1	12/01/2023 12:59	WG2180856
Vinyl chloride	2.85	<u>R7</u>	0.234	1.00	1	12/01/2023 12:59	WG2180856
Xylenes, Total	0.507	<u>E4</u>	0.174	3.00	1	12/01/2023 12:59	WG2180856
(S) Toluene-d8	105			80.0-120		12/01/2023 12:59	WG2180856
(S) 4-Bromofluorobenzene	99.3			77.0-126		12/01/2023 12:59	WG2180856
(S) 1,2-Dichloroethane-d4	86.8			70.0-130		12/01/2023 12:59	WG2180856

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	232		0.597	3.00	1	11/27/2023 19:31	WG2178102
(S) Toluene-d8	108			77.0-127		11/27/2023 19:31	WG2178102

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	12/01/2023 09:48	WG210856	¹ Cp
Acrolein	U	L2 R7	2.54	50.0	1	12/01/2023 09:48	WG210856	² Tc
Acrylonitrile	U		0.671	10.0	1	12/01/2023 09:48	WG210856	³ Ss
Benzene	U		0.0941	1.00	1	12/01/2023 09:48	WG210856	⁴ Cn
Bromobenzene	U		0.118	1.00	1	12/01/2023 09:48	WG210856	⁵ Sr
Bromodichloromethane	U		0.136	1.00	1	12/01/2023 09:48	WG210856	⁶ Qc
Bromoform	U		0.129	1.00	1	12/01/2023 09:48	WG210856	⁷ Is
Bromomethane	U		0.605	5.00	1	12/01/2023 09:48	WG210856	⁸ Gl
1,3-Butadiene	U		0.299	2.00	1	12/01/2023 09:48	WG210856	⁹ Al
n-Butylbenzene	U		0.157	1.00	1	12/01/2023 09:48	WG210856	¹⁰ Sc
sec-Butylbenzene	U		0.125	1.00	1	12/01/2023 09:48	WG210856	
tert-Butylbenzene	U		0.127	1.00	1	12/01/2023 09:48	WG210856	
Carbon tetrachloride	U		0.128	1.00	1	12/01/2023 09:48	WG210856	
Carbon disulfide	U		0.0962	1.00	1	12/01/2023 09:48	WG210856	
Chlorobenzene	U		0.116	1.00	1	12/01/2023 09:48	WG210856	
Chlorodibromomethane	U		0.140	1.00	1	12/01/2023 09:48	WG210856	
Chloroethane	U	R7	0.192	5.00	1	12/01/2023 09:48	WG210856	
Chloroform	U		0.111	5.00	1	12/01/2023 09:48	WG210856	
Chloromethane	U	R7	0.960	2.50	1	12/01/2023 09:48	WG210856	
Cyclohexane	U		0.188	1.00	1	12/01/2023 09:48	WG210856	
2-Chlorotoluene	U		0.106	1.00	1	12/01/2023 09:48	WG210856	
4-Chlorotoluene	U		0.114	1.00	1	12/01/2023 09:48	WG210856	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/01/2023 09:48	WG210856	
1,2-Dibromoethane	U		0.126	1.00	1	12/01/2023 09:48	WG210856	
Dibromomethane	U		0.122	1.00	1	12/01/2023 09:48	WG210856	
1,2-Dichlorobenzene	U		0.107	1.00	1	12/01/2023 09:48	WG210856	
1,3-Dichlorobenzene	U		0.110	1.00	1	12/01/2023 09:48	WG210856	
1,4-Dichlorobenzene	U		0.120	1.00	1	12/01/2023 09:48	WG210856	
Dichlorodifluoromethane	U		0.374	5.00	1	12/01/2023 09:48	WG210856	
1,1-Dichloroethane	U		0.100	1.00	1	12/01/2023 09:48	WG210856	
1,2-Dichloroethane	U		0.0819	1.00	1	12/01/2023 09:48	WG210856	
1,1-Dichloroethene	U		0.188	1.00	1	12/01/2023 09:48	WG210856	
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/01/2023 09:48	WG210856	
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/01/2023 09:48	WG210856	
1,2-Dichloropropane	U		0.149	1.00	1	12/01/2023 09:48	WG210856	
1,1-Dichloropropene	U		0.142	1.00	1	12/01/2023 09:48	WG210856	
1,3-Dichloropropane	U		0.110	1.00	1	12/01/2023 09:48	WG210856	
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/01/2023 09:48	WG210856	
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/01/2023 09:48	WG210856	
2,2-Dichloropropane	U		0.161	1.00	1	12/01/2023 09:48	WG210856	
Dicyclopentadiene	U		0.253	1.00	1	12/01/2023 09:48	WG210856	
Di-isopropyl ether	U		0.105	1.00	1	12/01/2023 09:48	WG210856	
Ethylbenzene	U		0.137	1.00	1	12/01/2023 09:48	WG210856	
4-Ethyltoluene	U		0.208	1.00	1	12/01/2023 09:48	WG210856	
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/01/2023 09:48	WG210856	
n-Hexane	U	R7	0.749	10.0	1	12/01/2023 09:48	WG210856	
Isopropylbenzene	U		0.105	1.00	1	12/01/2023 09:48	WG210856	
p-Isopropyltoluene	U		0.120	1.00	1	12/01/2023 09:48	WG210856	
2-Butanone (MEK)	U		1.19	10.0	1	12/01/2023 09:48	WG210856	
Methyl Cyclohexane	U		0.660	1.00	1	12/01/2023 09:48	WG210856	
Methylene Chloride	U	R7	0.430	5.00	1	12/01/2023 09:48	WG210856	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/01/2023 09:48	WG210856	
Methyl tert-butyl ether	U		0.101	1.00	1	12/01/2023 09:48	WG210856	
Naphthalene	U		1.00	5.00	1	12/01/2023 09:48	WG210856	
Propene	U		0.936	2.50	1	12/01/2023 09:48	WG210856	
n-Propylbenzene	U		0.0993	1.00	1	12/01/2023 09:48	WG210856	

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	12/01/2023 09:48	WG2180856	¹ Cp
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/01/2023 09:48	WG2180856	² Tc
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/01/2023 09:48	WG2180856	³ Ss
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/01/2023 09:48	WG2180856	
Tetrachloroethene	U		0.300	1.00	1	12/01/2023 09:48	WG2180856	⁴ Cn
Toluene	U		0.278	1.00	1	12/01/2023 09:48	WG2180856	⁵ Sr
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/01/2023 09:48	WG2180856	⁶ Qc
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/01/2023 09:48	WG2180856	⁷ Is
1,1,1-Trichloroethane	U		0.149	1.00	1	12/01/2023 09:48	WG2180856	⁸ Gl
1,1,2-Trichloroethane	U		0.158	1.00	1	12/01/2023 09:48	WG2180856	⁹ Al
Trichloroethene	U		0.190	1.00	1	12/01/2023 09:48	WG2180856	¹⁰ Sc
Trichlorofluoromethane	U		0.160	5.00	1	12/01/2023 09:48	WG2180856	
1,2,3-Trichloropropane	U		0.237	2.50	1	12/01/2023 09:48	WG2180856	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/01/2023 09:48	WG2180856	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/01/2023 09:48	WG2180856	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/01/2023 09:48	WG2180856	
Vinyl chloride	U	R7	0.234	1.00	1	12/01/2023 09:48	WG2180856	
Xylenes, Total	U		0.174	3.00	1	12/01/2023 09:48	WG2180856	
(S) Toluene-d8	103			80.0-120		12/01/2023 09:48	WG2180856	
(S) 4-Bromofluorobenzene	102			77.0-126		12/01/2023 09:48	WG2180856	
(S) 1,2-Dichloroethane-d4	130			70.0-130		12/01/2023 09:48	WG2180856	

WG2178276

Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

[L1680469-01,02,03,04,05,07,08,09,10,11,12](#)

Method Blank (MB)

(MB) R4008465-1 11/28/23 03:24

¹Cp

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

²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

L1680469-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1680469-07 11/28/23 12:24 • (DUP) R4008465-3 11/30/23 12:31

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

L1680469-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1680469-08 11/30/23 20:39 • (DUP) R4008465-6 11/30/23 21:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Perchlorate	69900	71100	10000	1.76		15

Laboratory Control Sample (LCS)

(LCS) R4008465-2 11/28/23 04:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	9.87	98.7	90.0-110	

L1680469-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680469-07 11/28/23 12:24 • (MS) R4008465-4 11/30/23 12:59 • (MSD) R4008465-5 11/30/23 13:28

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	9.11	13.8	91.1	138	1	80.0-120		M1 R5	41.1	15

L1680469-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680469-08 11/30/23 20:39 • (MS) R4008465-7 11/30/23 21:35 • (MSD) R4008465-8 11/30/23 22:04

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	69900	180000	163000	1100000	932000	10000	80.0-120	M3	M3	9.84	15

ACCOUNT:

Pinyon Environmental

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Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

[L1680469-13](#)

Method Blank (MB)

(MB) R4009605-1 12/03/23 00:54

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

L1681655-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1681655-01 12/03/23 07:25 • (DUP) R4009605-3 12/03/23 16:40

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

L1681655-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1681655-02 12/03/23 07:52 • (DUP) R4009605-6 12/03/23 18:03

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) R4009605-2 12/03/23 01:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	10.2	102	90.0-110	

L1681655-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1681655-01 12/03/23 07:25 • (MS) R4009605-4 12/03/23 17:08 • (MSD) R4009605-5 12/03/23 17:35

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	9.29	10.5	92.9	105	1	80.0-120			12.4	15

L1681655-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1681655-02 12/03/23 07:52 • (MS) R4009605-7 12/03/23 18:31 • (MSD) R4009605-8 12/03/23 18:59

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	8.89	8.95	88.9	89.5	1	80.0-120			0.661	15

ACCOUNT:

Pinyon Environmental

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Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

L1680469-06

Method Blank (MB)

(MB) R4010943-1 12/11/23 07:59

¹Cp

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

²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

L1680469-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1680469-06 12/11/23 10:19 • (DUP) R4010943-3 12/11/23 10:46

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Perchlorate	11.7	12.6	1	7.49		15

Laboratory Control Sample (LCS)

(LCS) R4010943-2 12/11/23 08:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	9.64	96.4	90.0-110	

L1680469-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680469-06 12/11/23 10:19 • (MS) R4010943-4 12/11/23 11:14 • (MSD) R4010943-5 12/11/23 12:38

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	11.7	21.1	21.7	94.6	100	1	80.0-120			2.74	15

WG2180856

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

QUALITY CONTROL SUMMARY

[L1680469-01,02,03,04,05,07,08,09,10,11,12,13,14](#)

Method Blank (MB)

(MB) R4007319-3 12/01/23 06:40

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	⁶ Qc
n-Butylbenzene	U		0.157	1.00	
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

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

QUALITY CONTROL SUMMARY

[L1680469-01,02,03,04,05,07,08,09,10,11,12,13,14](#)

Method Blank (MB)

(MB) R4007319-3 12/01/23 06:40

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	100		80.0-120		
(S) 4-Bromofluorobenzene	101		77.0-126		
(S) 1,2-Dichloroethane-d4	123		70.0-130		

QUALITY CONTROL SUMMARY

[L1680469-01,02,03,04,05,07,08,09,10,11,12,13,14](#)

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

(LCS) R4007319-1 12/01/23 05:43 • (LCSD) R4007319-2 12/01/23 06:02

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 %
Acetone	25.0	14.4	18.1	57.6	72.4	19.0-160			22.8	27
Acrolein	25.0	9.49	3.66	38.0	14.6	30.0-160	<u>L2 R7</u>		88.7	26
Acrylonitrile	25.0	21.8	21.8	87.2	87.2	55.0-149			0.000	20
Benzene	5.00	4.56	5.15	91.2	103	70.0-123			12.2	20
Bromobenzene	5.00	5.08	4.62	102	92.4	73.0-121			9.48	20
Bromodichloromethane	5.00	5.08	5.54	102	111	75.0-120			8.66	20
Bromoform	5.00	4.83	5.09	96.6	102	68.0-132			5.24	20
Bromomethane	5.00	6.48	7.28	130	146	30.0-160			11.6	25
1,3-Butadiene	5.00	4.85	5.66	97.0	113	45.0-147			15.4	20
n-Butylbenzene	5.00	4.24	4.60	84.8	92.0	73.0-125			8.14	20
sec-Butylbenzene	5.00	4.28	4.49	85.6	89.8	75.0-125			4.79	20
tert-Butylbenzene	5.00	4.69	4.52	93.8	90.4	76.0-124			3.69	20
Carbon tetrachloride	5.00	5.44	5.93	109	119	68.0-126			8.62	20
Carbon disulfide	5.00	5.11	5.76	102	115	61.0-128			12.0	20
Chlorobenzene	5.00	4.60	5.16	92.0	103	80.0-121			11.5	20
Chlorodibromomethane	5.00	5.13	5.33	103	107	77.0-125			3.82	20
Chloroethane	5.00	4.62	5.88	92.4	118	47.0-150	<u>R7</u>		24.0	20
Chloroform	5.00	4.95	5.63	99.0	113	73.0-120			12.9	20
Chloromethane	5.00	3.78	4.98	75.6	99.6	41.0-142	<u>R7</u>		27.4	20
Cyclohexane	5.00	4.38	4.77	87.6	95.4	71.0-124			8.52	20
2-Chlorotoluene	5.00	4.68	4.70	93.6	94.0	76.0-123			0.426	20
4-Chlorotoluene	5.00	4.67	4.35	93.4	87.0	75.0-122			7.10	20
1,2-Dibromo-3-Chloropropane	5.00	5.73	4.95	115	99.0	58.0-134			14.6	20
1,2-Dibromoethane	5.00	4.81	4.98	96.2	99.6	80.0-122			3.47	20
Dibromomethane	5.00	5.16	5.41	103	108	80.0-120			4.73	20
1,2-Dichlorobenzene	5.00	4.46	4.86	89.2	97.2	79.0-121			8.58	20
1,3-Dichlorobenzene	5.00	4.68	4.75	93.6	95.0	79.0-120			1.48	20
1,4-Dichlorobenzene	5.00	4.58	4.61	91.6	92.2	79.0-120			0.653	20
Dichlorodifluoromethane	5.00	5.95	7.12	119	142	51.0-149			17.9	20
1,1-Dichloroethane	5.00	4.76	5.62	95.2	112	70.0-126			16.6	20
1,2-Dichloroethane	5.00	5.20	5.73	104	115	70.0-128			9.70	20
1,1-Dichloroethene	5.00	4.52	5.07	90.4	101	71.0-124			11.5	20
cis-1,2-Dichloroethene	5.00	4.76	5.26	95.2	105	73.0-120			9.98	20
trans-1,2-Dichloroethene	5.00	4.84	5.47	96.8	109	73.0-120			12.2	20
1,2-Dichloropropane	5.00	4.35	5.01	87.0	100	77.0-125			14.1	20
1,1-Dichloropropene	5.00	4.45	5.15	89.0	103	74.0-126			14.6	20
1,3-Dichloropropane	5.00	4.61	4.72	92.2	94.4	80.0-120			2.36	20
cis-1,3-Dichloropropene	5.00	4.03	4.30	80.6	86.0	80.0-123			6.48	20
trans-1,3-Dichloropropene	5.00	4.17	4.44	83.4	88.8	78.0-124			6.27	20
2,2-Dichloropropane	5.00	4.36	5.24	87.2	105	58.0-130			18.3	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

[L1680469-01,02,03,04,05,07,08,09,10,11,12,13,14](#)

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

(LCS) R4007319-1 12/01/23 05:43 • (LCSD) R4007319-2 12/01/23 06:02

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 %
Dicyclopentadiene	5.00	4.19	4.52	83.8	90.4	74.0-126			7.58	20
Di-isopropyl ether	5.00	4.38	4.76	87.6	95.2	58.0-138			8.32	20
Ethylbenzene	5.00	4.10	4.91	82.0	98.2	79.0-123			18.0	20
4-Ethyltoluene	5.00	4.49	4.69	89.8	93.8	74.0-127			4.36	20
Hexachloro-1,3-butadiene	5.00	4.91	4.68	98.2	93.6	54.0-138			4.80	20
n-Hexane	5.00	3.51	4.42	70.2	88.4	57.0-133	R7		23.0	20
Isopropylbenzene	5.00	4.21	4.89	84.2	97.8	76.0-127			14.9	20
p-Isopropyltoluene	5.00	4.34	4.65	86.8	93.0	76.0-125			6.90	20
2-Butanone (MEK)	25.0	19.9	22.9	79.6	91.6	44.0-160			14.0	20
Methyl Cyclohexane	5.00	3.58	4.21	71.6	84.2	68.0-126			16.2	20
Methylene Chloride	5.00	4.25	5.21	85.0	104	67.0-120	R7		20.3	20
4-Methyl-2-pentanone (MIBK)	25.0	23.9	25.6	95.6	102	68.0-142			6.87	20
Methyl tert-butyl ether	5.00	4.99	5.26	99.8	105	68.0-125			5.27	20
Naphthalene	5.00	4.47	4.46	89.4	89.2	54.0-135			0.224	20
Propene	5.00	4.94	5.25	98.8	105	30.0-160			6.08	20
n-Propylbenzene	5.00	4.48	4.51	89.6	90.2	77.0-124			0.667	20
Styrene	5.00	4.57	4.70	91.4	94.0	73.0-130			2.80	20
1,1,1,2-Tetrachloroethane	5.00	5.04	5.56	101	111	75.0-125			9.81	20
1,1,2,2-Tetrachloroethane	5.00	4.58	4.36	91.6	87.2	65.0-130			4.92	20
1,1,2-Trichlorotrifluoroethane	5.00	4.56	5.44	91.2	109	69.0-132			17.6	20
Tetrachloroethene	5.00	4.24	4.89	84.8	97.8	72.0-132			14.2	20
Toluene	5.00	4.47	4.93	89.4	98.6	79.0-120			9.79	20
1,2,3-Trichlorobenzene	5.00	4.42	4.34	88.4	86.8	50.0-138			1.83	20
1,2,4-Trichlorobenzene	5.00	4.47	4.60	89.4	92.0	57.0-137			2.87	20
1,1,1-Trichloroethane	5.00	5.13	6.17	103	123	73.0-124			18.4	20
1,1,2-Trichloroethane	5.00	4.90	5.07	98.0	101	80.0-120			3.41	20
Trichloroethene	5.00	4.85	5.78	97.0	116	78.0-124			17.5	20
Trichlorofluoromethane	5.00	5.38	6.54	108	131	59.0-147			19.5	20
1,2,3-Trichloropropane	5.00	5.64	5.50	113	110	73.0-130			2.51	20
1,2,4-Trimethylbenzene	5.00	4.44	4.54	88.8	90.8	76.0-121			2.23	20
1,2,3-Trimethylbenzene	5.00	4.63	4.61	92.6	92.2	77.0-120			0.433	20
1,3,5-Trimethylbenzene	5.00	4.51	4.68	90.2	93.6	76.0-122			3.70	20
Vinyl chloride	5.00	4.97	6.16	99.4	123	67.0-131	R7		21.4	20
Xylenes, Total	15.0	12.9	14.4	86.0	96.0	79.0-123			11.0	20
(S) Toluene-d8				102	102	80.0-120				
(S) 4-Bromofluorobenzene				101	99.6	77.0-126				
(S) 1,2-Dichloroethane-d4				118	127	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2181570

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

QUALITY CONTROL SUMMARY

L1680469-06

Method Blank (MB)

(MB) R4007943-3 12/02/23 23:04

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	⁶ Qc
Bromoform	U		0.129	1.00	⁷ Is
Bromomethane	U		0.605	5.00	⁸ Gl
1,3-Butadiene	U		0.299	2.00	⁹ Al
n-Butylbenzene	U		0.157	1.00	¹⁰ Sc
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:

L1680469

DATE/TIME:

12/13/23 08:08

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QUALITY CONTROL SUMMARY

L1680469-06

Method Blank (MB)

(MB) R4007943-3 12/02/23 23:04

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	103		77.0-126		
(S) 1,2-Dichloroethane-d4	114		70.0-130		

QUALITY CONTROL SUMMARY

L1680469-06

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

(LCS) R4007943-1 12/02/23 22:06 • (LCSD) R4007943-2 12/02/23 22:26

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	17.0	17.5	68.0	70.0	19.0-160			2.90	27
Acrolein	25.0	4.22	3.13	16.9	12.5	30.0-160	L2	L2 R7	29.7	26
Acrylonitrile	25.0	18.6	18.9	74.4	75.6	55.0-149			1.60	20
Benzene	5.00	5.03	4.79	101	95.8	70.0-123			4.89	20
Bromobenzene	5.00	5.13	5.07	103	101	73.0-121			1.18	20
Bromodichloromethane	5.00	5.15	4.85	103	97.0	75.0-120			6.00	20
Bromoform	5.00	4.65	4.81	93.0	96.2	68.0-132			3.38	20
Bromomethane	5.00	6.22	6.12	124	122	30.0-160			1.62	25
1,3-Butadiene	5.00	5.47	4.93	109	98.6	45.0-147			10.4	20
n-Butylbenzene	5.00	5.06	5.01	101	100	73.0-125			0.993	20
sec-Butylbenzene	5.00	4.92	4.59	98.4	91.8	75.0-125			6.94	20
tert-Butylbenzene	5.00	4.88	4.69	97.6	93.8	76.0-124			3.97	20
Carbon tetrachloride	5.00	5.26	5.21	105	104	68.0-126			0.955	20
Carbon disulfide	5.00	4.85	5.13	97.0	103	61.0-128			5.61	20
Chlorobenzene	5.00	5.03	4.88	101	97.6	80.0-121			3.03	20
Chlorodibromomethane	5.00	5.07	4.74	101	94.8	77.0-125			6.73	20
Chloroethane	5.00	4.82	5.12	96.4	102	47.0-150			6.04	20
Chloroform	5.00	5.08	5.14	102	103	73.0-120			1.17	20
Chloromethane	5.00	4.32	4.05	86.4	81.0	41.0-142			6.45	20
Cyclohexane	5.00	4.78	4.34	95.6	86.8	71.0-124			9.65	20
2-Chlorotoluene	5.00	5.04	4.60	101	92.0	76.0-123			9.13	20
4-Chlorotoluene	5.00	4.78	4.84	95.6	96.8	75.0-122			1.25	20
1,2-Dibromo-3-Chloropropane	5.00	4.30	5.05	86.0	101	58.0-134			16.0	20
1,2-Dibromoethane	5.00	4.72	4.74	94.4	94.8	80.0-122			0.423	20
Dibromomethane	5.00	5.64	4.87	113	97.4	80.0-120			14.7	20
1,2-Dichlorobenzene	5.00	4.81	4.82	96.2	96.4	79.0-121			0.208	20
1,3-Dichlorobenzene	5.00	5.06	4.81	101	96.2	79.0-120			5.07	20
1,4-Dichlorobenzene	5.00	4.93	5.01	98.6	100	79.0-120			1.61	20
Dichlorodifluoromethane	5.00	5.54	5.43	111	109	51.0-149			2.01	20
1,1-Dichloroethane	5.00	4.98	5.00	99.6	100	70.0-126			0.401	20
1,2-Dichloroethane	5.00	5.55	5.61	111	112	70.0-128			1.08	20
1,1-Dichloroethene	5.00	4.92	4.86	98.4	97.2	71.0-124			1.23	20
cis-1,2-Dichloroethene	5.00	4.97	4.97	99.4	99.4	73.0-120			0.000	20
trans-1,2-Dichloroethene	5.00	5.30	5.00	106	100	73.0-120			5.83	20
1,2-Dichloropropane	5.00	4.23	4.40	84.6	88.0	77.0-125			3.94	20
1,1-Dichloropropene	5.00	4.62	4.71	92.4	94.2	74.0-126			1.93	20
1,3-Dichloropropane	5.00	5.15	5.00	103	100	80.0-120			2.96	20
cis-1,3-Dichloropropene	5.00	4.50	4.39	90.0	87.8	80.0-123			2.47	20
trans-1,3-Dichloropropene	5.00	4.82	4.72	96.4	94.4	78.0-124			2.10	20
2,2-Dichloropropane	5.00	5.58	5.98	112	120	58.0-130			6.92	20

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1680469

DATE/TIME:

12/13/23 08:08

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¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

QUALITY CONTROL SUMMARY

L1680469-06

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

(LCS) R4007943-1 12/02/23 22:06 • (LCSD) R4007943-2 12/02/23 22:26

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	4.39	4.28	87.8	85.6	74.0-126			2.54	20
Di-isopropyl ether	5.00	4.62	4.83	92.4	96.6	58.0-138			4.44	20
Ethylbenzene	5.00	4.66	4.66	93.2	93.2	79.0-123			0.000	20
4-Ethyltoluene	5.00	5.02	4.80	100	96.0	74.0-127			4.48	20
Hexachloro-1,3-butadiene	5.00	4.75	5.19	95.0	104	54.0-138			8.85	20
n-Hexane	5.00	4.36	3.87	87.2	77.4	57.0-133			11.9	20
Isopropylbenzene	5.00	4.70	4.71	94.0	94.2	76.0-127			0.213	20
p-Isopropyltoluene	5.00	4.85	4.64	97.0	92.8	76.0-125			4.43	20
2-Butanone (MEK)	25.0	20.2	23.0	80.8	92.0	44.0-160			13.0	20
Methyl Cyclohexane	5.00	3.95	3.89	79.0	77.8	68.0-126			1.53	20
Methylene Chloride	5.00	4.44	4.75	88.8	95.0	67.0-120			6.75	20
4-Methyl-2-pentanone (MIBK)	25.0	22.2	23.4	88.8	93.6	68.0-142			5.26	20
Methyl tert-butyl ether	5.00	5.16	5.21	103	104	68.0-125			0.964	20
Naphthalene	5.00	4.05	4.50	81.0	90.0	54.0-135			10.5	20
Propene	5.00	4.88	5.10	97.6	102	30.0-160			4.41	20
n-Propylbenzene	5.00	5.02	4.70	100	94.0	77.0-124			6.58	20
Styrene	5.00	4.92	4.68	98.4	93.6	73.0-130			5.00	20
1,1,1,2-Tetrachloroethane	5.00	4.97	5.21	99.4	104	75.0-125			4.72	20
1,1,2,2-Tetrachloroethane	5.00	5.29	5.03	106	101	65.0-130			5.04	20
1,1,2-Trichlorotrifluoroethane	5.00	5.04	4.41	101	88.2	69.0-132			13.3	20
Tetrachloroethene	5.00	4.54	4.95	90.8	99.0	72.0-132			8.64	20
Toluene	5.00	4.72	4.66	94.4	93.2	79.0-120			1.28	20
1,2,3-Trichlorobenzene	5.00	4.91	5.15	98.2	103	50.0-138			4.77	20
1,2,4-Trichlorobenzene	5.00	4.33	4.53	86.6	90.6	57.0-137			4.51	20
1,1,1-Trichloroethane	5.00	5.41	5.36	108	107	73.0-124			0.929	20
1,1,2-Trichloroethane	5.00	5.21	4.78	104	95.6	80.0-120			8.61	20
Trichloroethene	5.00	5.44	5.15	109	103	78.0-124			5.48	20
Trichlorofluoromethane	5.00	5.47	5.50	109	110	59.0-147			0.547	20
1,2,3-Trichloropropane	5.00	4.98	5.11	99.6	102	73.0-130			2.58	20
1,2,4-Trimethylbenzene	5.00	4.68	4.71	93.6	94.2	76.0-121			0.639	20
1,2,3-Trimethylbenzene	5.00	4.89	4.83	97.8	96.6	77.0-120			1.23	20
1,3,5-Trimethylbenzene	5.00	4.89	4.67	97.8	93.4	76.0-122			4.60	20
Vinyl chloride	5.00	5.18	4.85	104	97.0	67.0-131			6.58	20
Xylenes, Total	15.0	13.6	13.8	90.7	92.0	79.0-123			1.46	20
(S) Toluene-d8				101	102	80.0-120				
(S) 4-Bromofluorobenzene				101	99.4	77.0-126				
(S) 1,2-Dichloroethane-d4				110	110	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

QUALITY CONTROL SUMMARY

L1680469-06

L1680469-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680469-06 12/02/23 23:45 • (MS) R4007943-4 12/03/23 00:04 • (MSD) R4007943-5 12/03/23 00:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Acetone	25.0	U	15.5	23.2	62.0	92.8	1	10.0-160	R5		39.8	35	
Acrolein	25.0	U	34.7	59.3	139	237	1	10.0-160	M1 R5		52.3	39	
Acrylonitrile	25.0	U	22.2	28.3	88.8	113	1	21.0-160			24.2	32	
Benzene	5.00	U	5.85	7.43	117	149	1	17.0-158			23.8	27	
Bromobenzene	5.00	U	5.75	7.34	115	147	1	30.0-149			24.3	28	
Bromodichloromethane	5.00	U	6.13	7.60	123	152	1	31.0-150	M1		21.4	27	
Bromoform	5.00	U	5.93	6.92	119	138	1	29.0-150			15.4	29	
Bromomethane	5.00	U	7.48	8.83	150	177	1	10.0-160	M1		16.6	38	
1,3-Butadiene	5.00	U	6.47	8.30	129	166	1	10.0-160	M1 R5		24.8	22	
n-Butylbenzene	5.00	U	5.72	7.22	114	144	1	31.0-150			23.2	30	
sec-Butylbenzene	5.00	U	5.53	7.33	111	147	1	33.0-155			28.0	29	
tert-Butylbenzene	5.00	U	5.68	7.25	114	145	1	34.0-153			24.3	28	
Carbon tetrachloride	5.00	U	6.61	8.03	132	161	1	23.0-159	M1		19.4	28	
Carbon disulfide	5.00	U	6.89	8.46	138	169	1	10.0-156	M1		20.5	28	
Chlorobenzene	5.00	U	5.85	7.40	117	148	1	33.0-152			23.4	27	
Chlorodibromomethane	5.00	U	5.80	7.06	116	141	1	37.0-149			19.6	27	
Chloroethane	5.00	U	6.11	7.39	122	148	1	10.0-160			19.0	30	
Chloroform	5.00	U	6.36	7.74	127	155	1	29.0-154	M1		19.6	28	
Chloromethane	5.00	U	4.21	6.03	84.2	121	1	10.0-160	R5		35.5	29	
Cyclohexane	5.00	U	6.19	7.68	124	154	1	19.0-160			21.5	23	
2-Chlorotoluene	5.00	U	5.71	7.50	114	150	1	32.0-153			27.1	28	
4-Chlorotoluene	5.00	U	5.71	7.40	114	148	1	32.0-150			25.8	28	
1,2-Dibromo-3-Chloropropane	5.00	U	5.76	6.67	115	133	1	22.0-151			14.6	34	
1,2-Dibromoethane	5.00	U	5.90	6.95	118	139	1	34.0-147			16.3	27	
Dibromomethane	5.00	U	6.35	8.02	127	160	1	30.0-151	M1		23.2	27	
1,2-Dichlorobenzene	5.00	U	5.65	7.27	113	145	1	34.0-149			25.1	28	
1,3-Dichlorobenzene	5.00	U	5.81	7.40	116	148	1	36.0-146	M1		24.1	27	
1,4-Dichlorobenzene	5.00	U	5.44	7.23	109	145	1	35.0-142	M1 R5		28.3	27	
Dichlorodifluoromethane	5.00	U	7.83	9.94	157	199	1	10.0-160	M1		23.7	29	
1,1-Dichloroethane	5.00	U	5.99	7.52	120	150	1	25.0-158			22.6	27	
1,2-Dichloroethane	5.00	U	6.40	7.77	128	155	1	29.0-151	M1		19.3	27	
cis-1,2-Dichloroethene	5.00	U	5.90	7.34	118	147	1	11.0-160			21.8	29	
trans-1,2-Dichloroethene	5.00	U	0.427	7.01	8.40	132	159	1	10.0-160			18.0	27
1,2-Dichloropropane	5.00	U	5.94	7.62	119	152	1	17.0-153			24.8	27	
1,1-Dichloropropene	5.00	U	5.54	6.49	111	130	1	30.0-156			15.8	27	
1,3-Dichloropropene	5.00	U	6.00	7.73	120	155	1	25.0-158			25.2	27	
cis-1,3-Dichloropropene	5.00	U	5.74	6.85	115	137	1	38.0-147			17.6	27	
trans-1,3-Dichloropropene	5.00	U	5.25	6.76	105	135	1	34.0-149			25.1	28	
2,2-Dichloropropane	5.00	U	5.45	6.83	109	137	1	32.0-149			22.5	28	
			7.58	9.67	152	193	1	24.0-152	M1		24.2	29	

ACCOUNT:

Pinyon Environmental

PROJECT:

722152201.002

SDG:

L1680469

DATE/TIME:

12/13/23 08:08

PAGE:

46 of 56

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1680469-06

L1680469-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680469-06 12/02/23 23:45 • (MS) R4007943-4 12/03/23 00:04 • (MSD) R4007943-5 12/03/23 00:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Dicyclopentadiene	5.00	U	5.18	6.85	104	137	1	51.0-139	R5		27.8	20
Di-isopropyl ether	5.00	U	5.60	7.01	112	140	1	21.0-160			22.4	28
Ethylbenzene	5.00	U	5.89	7.02	118	140	1	30.0-155			17.5	27
4-Ethyltoluene	5.00	U	5.57	7.62	111	152	1	10.0-160	R5		31.1	20
Hexachloro-1,3-butadiene	5.00	U	5.35	7.33	107	147	1	20.0-154			31.2	34
n-Hexane	5.00	U	6.44	7.85	129	157	1	10.0-153	M1		19.7	28
Isopropylbenzene	5.00	U	5.65	7.06	113	141	1	28.0-157			22.2	27
p-Isopropyltoluene	5.00	U	5.70	7.39	114	148	1	30.0-154			25.8	29
2-Butanone (MEK)	25.0	U	22.2	25.6	88.8	102	1	10.0-160			14.2	32
Methyl Cyclohexane	5.00	U	5.51	7.31	110	146	1	11.0-160	R5		28.1	24
Methylene Chloride	5.00	U	5.42	6.98	108	140	1	23.0-144			25.2	28
4-Methyl-2-pentanone (MIBK)	25.0	U	26.1	32.0	104	128	1	29.0-160			20.3	29
Methyl tert-butyl ether	5.00	U	6.01	7.66	120	153	1	28.0-150	M1		24.1	29
Naphthalene	5.00	U	4.73	6.24	94.6	125	1	12.0-156			27.5	35
Propene	5.00	U	6.54	7.55	131	151	1	10.0-160			14.3	29
n-Propylbenzene	5.00	U	5.75	7.41	115	148	1	31.0-154			25.2	28
Styrene	5.00	U	5.60	6.89	112	138	1	33.0-155			20.7	28
1,1,1,2-Tetrachloroethane	5.00	U	6.04	7.34	121	147	1	36.0-151			19.4	29
1,1,2,2-Tetrachloroethane	5.00	U	5.67	7.16	113	143	1	33.0-150			23.2	28
1,1,2-Trichlorotrifluoroethane	5.00	U	6.71	8.59	134	172	1	23.0-160	M1		24.6	30
Tetrachloroethene	5.00	U	5.64	7.35	113	147	1	10.0-160			26.3	27
Toluene	5.00	U	5.42	6.90	108	138	1	26.0-154			24.0	28
1,2,3-Trichlorobenzene	5.00	U	5.19	6.48	104	130	1	17.0-150			22.1	36
1,2,4-Trichlorobenzene	5.00	U	5.05	6.51	101	130	1	24.0-150			25.3	33
1,1,1-Trichloroethane	5.00	U	6.86	8.50	137	170	1	23.0-160	M1		21.4	28
1,1,2-Trichloroethane	5.00	U	5.65	6.91	113	138	1	35.0-147			20.1	27
Trichloroethene	5.00	0.716	6.72	8.21	120	150	1	10.0-160			20.0	25
Trichlorofluoromethane	5.00	U	6.87	8.65	137	173	1	17.0-160	M1		22.9	31
1,2,3-Trichloropropane	5.00	U	5.57	7.61	111	152	1	34.0-151	M1 R5		31.0	29
1,2,4-Trimethylbenzene	5.00	U	5.53	7.07	111	141	1	26.0-154			24.4	27
1,2,3-Trimethylbenzene	5.00	U	5.64	7.13	113	143	1	32.0-149			23.3	28
1,3,5-Trimethylbenzene	5.00	U	5.75	7.40	115	148	1	28.0-153			25.1	27
Vinyl chloride	5.00	U	6.14	7.97	123	159	1	10.0-160			25.9	27
Xylenes, Total	15.0	U	16.4	21.6	109	144	1	29.0-154			27.4	28
(S) Toluene-d8					101	102		80.0-120				
(S) 4-Bromofluorobenzene					101	102		77.0-126				
(S) 1,2-Dichloroethane-d4					117	111		70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

WG2178102

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

QUALITY CONTROL SUMMARY

[L1680469-01,02,03,04,05,07,08,09,10,12,13](#)

Method Blank (MB)

(MB) R4005633-3 11/27/23 13:31

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	96.9			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

(LCS) R4005633-1 11/27/23 12:26 • (LCSD) R4005633-2 11/27/23 12:47

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	49.6	44.3	99.2	88.6	55.0-138			11.3	24
(S) Toluene-d8				96.9	96.4	77.0-127				

WG2179265

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

QUALITY CONTROL SUMMARY

L1680469-06,11

Method Blank (MB)

(MB) R4007070-3 11/30/23 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	92.9			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

(LCS) R4007070-1 11/30/23 11:57 • (LCSD) R4007070-2 11/30/23 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	37.6	33.3	75.2	66.6	55.0-138			12.1	24
(S) Toluene-d8			93.3	92.9	77.0-127					

L1680469-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680469-06 11/30/23 13:52 • (MS) R4007070-4 11/30/23 21:51 • (MSD) R4007070-5 11/30/23 22:13

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	31.4	39.9	62.8	79.8	1	13.0-160			23.8	31
(S) Toluene-d8				91.7	90.2			77.0-127				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS32 • File ID: 1201_03

12/01/23 05:43

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	1201_03	246626	107828	86816
Upper Limit		493252	215656	173632
Lower Limit		123313	53914	43408
LCS R4007319-1 WG2180856 1x	1201_03LCS	246626	107828	86816
LCSD R4007319-2 WG2180856 1x	1201_04	236217	105557	97362
BLANK R4007319-3 WG2180856 1x	1201_06	236117	102557	85846
L1680469-14 WG2180856 1x	1201_14	227201	94871	87094
L1680469-04 WG2180856 1x	1201_21	249990	108319	87102
L1680469-12 WG2180856 1x	1201_23	227950	92437	79646
L1680469-13 WG2180856 1x	1201_24	196712	92016	72363
L1680469-01 WG2180856 25x	1201_25	180920	88215	72771
L1680469-02 WG2180856 10x	1201_26	147096	65600	56096
L1680469-03 WG2180856 10x	1201_27	206685	87898	73911
L1680469-05 WG2180856 2000x	1201_28	203471	88873	77214
L1680469-07 WG2180856 5x	1201_29	176451	78635	66297
L1680469-08 WG2180856 10x	1201_30	177648	82066	64237
L1680469-09 WG2180856 20x	1201_31	209953	94280	80298
L1680469-10 WG2180856 250x	1201_32	211022	93925	80831
L1680469-11 WG2180856 25x	1201_33	210105	89286	76124

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

Instrument: VOCMS32 • File ID: 1202_27

12/02/23 22:06

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	1202_27	264952	121273	97043
Upper Limit		529904	242546	194086
Lower Limit		132476	60637	48522
LCS R4007943-1 WG2181570 1x	1202_27LCSA	264952	121273	97043
LCSD R4007943-2 WG2181570 1x	1202_28A	264574	116139	98479
BLANK R4007943-3 WG2181570 1x	1202_30A	254625	110099	93292
L1680469-06 WG2181570 1x	1202_31	268251	119681	96252
MS R4007943-4 WG2181570 1x	1202_32	268506	118575	100595
MSD R4007943-5 WG2181570 1x	1202_33	263119	114947	94218

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 1127_03

11/27/23 12:04

Sample ID	File ID	8260-FLUOROBENZENE Response	
Standard	1127_03	269873	¹ Cp
Upper Limit		539746	² Tc
Lower Limit		134937	³ Ss
LCS R4005633-1 WG2178102 1x	1127_04	269614	⁴ Cn
LCSD R4005633-2 WG2178102 1x	1127_05	269932	⁵ Sr
BLANK R4005633-3 WG2178102 1x	1127_07	266221	⁶ Qc
L1680469-01 WG2178102 1x	1127_08	298488	⁷ Is
L1680469-02 WG2178102 1x	1127_09	296210	⁸ Gl
L1680469-03 WG2178102 1x	1127_10	289691	⁹ Al
L1680469-04 WG2178102 1x	1127_11	301666	¹⁰ Sc
L1680469-07 WG2178102 1x	1127_13	284276	
L1680469-08 WG2178102 1x	1127_14	290818	
L1680469-09 WG2178102 1x	1127_15	296524	
L1680469-12 WG2178102 1x	1127_17	290508	
L1680469-13 WG2178102 1x	1127_18	291756	
L1680469-05 WG2178102 25x	1127_26	279215	
L1680469-10 WG2178102 20x	1127_27	148911	

Instrument: VOCMS27 • File ID: 1130_06

11/30/23 11:36

Sample ID	File ID	8260-FLUOROBENZENE Response	
Standard	1130_06	327380	
Upper Limit		654760	
Lower Limit		163690	
LCS R4007070-1 WG2179265 1x	1130_07	316317	
LCSD R4007070-2 WG2179265 1x	1130_08	340627	
BLANK R4007070-3 WG2179265 1x	1130_10	317653	
L1680469-06 WG2179265 1x	1130_11	332572	
L1680469-11 WG2179265 1x	1130_12	330602	
MS R4007070-4 WG2179265 1x	1130_33	327998	
MSD R4007070-5 WG2179265 1x	1130_34	314022	

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.
L2	The associated blank spike recovery was below laboratory acceptance limits.
M1	Matrix spike recovery was high, 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.

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 Street, Suite 200 Lakewood, CO 80227				Billing Information: Accounts Payable ap@pinyon-env.com	Pres Chk	Analysis / Container / Preservative						Chain of Custody Pace Analytical® National Center for Testing & Innovation		
Report to: Andrew Parker				Email To: Parker@Pinyon-env.com									12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859	
Project Nammo TTU Groundwater Monitoring Description:				City/State Collected:	Mesa, Az								L # L16504601 B168	
Phone: 303.785.7697 Fax:	Client Project # 722152201.002			Lab Project #								Tab		
Collected by (print): Crissa Wolf	Site/Facility ID #			P.O. #								Acctnum: PINYONMAZ		
Collected by (signature): Crissa Wolf	Rush? (Lab MUST Be Notified) Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day			Quote #			Date Results Needed Standard TAT	No. of Cntrs				Template:		
Immediately Packed on Ice N Y X	Sample ID	Comp/Grab	Matrix *	Depth	Date	Time						Prelogin:		
							VOC 8260AZ / 40ml amber / HCl	Perchlorate 314.0 / 125ml HDPE / NoPres				TSR: Daphne Richards		
							1,4 Dioxane V8260LL14D/40mL amb/ HCl				PB:			
											Shipped Via:			
											Remarks Sample # (lab only)			
TIU-11-73-20231118	Grab	GW	73	11-18-23	1415	6	✓	✓	✓			-01		
TIU-12-82-20231118	Grab	GW	82	11-18-23	1015	6	✓	✓	✓			-02		
TIU-14-62-20231118			62	11-18-23	0954	6	✓	✓	✓			-03		
TIU-15-75-20231118			75	11-18-23	1225	6	✓	✓	✓			-04		
TIU-16-80-20231118			80	11-18-23	1304	7	✓	✓	✓		*	-05		
TIU-17-80-20231118			80	11-18-23	1158	12	✓	✓	✓			MS/MSD -06		
TIU-19-73-20231118			73	11-18-23	1344	6	✓	✓	✓			-07		
TIU-Ex-1-69-20231118			69	11-18-23	1132	6	✓	✓	✓			-08		
TIU-Ex-a-74-20231118	Y		74	11-18-23	1112	6	✓	✓	✓			-09		
TIU-Ex-3-76-20231118	Y		76	11-18-23	1056	6	✓	✓	✓			-10		
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Remarks: * Known high concentrations, report all runs													
	Samples returned via: UPS FedEx Courier				Tracking #							Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input checked="" type="checkbox"/> Y N COC Signed/Accurate: <input checked="" type="checkbox"/> Bottles arrive intact: <input checked="" type="checkbox"/> Correct bottles used: <input checked="" type="checkbox"/> Sufficient volume sent: <input checked="" type="checkbox"/> If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Preservation Correct/Checked: <input checked="" type="checkbox"/>		
Relinquished by : (Signature) Crissa Wolf	Date: 11-20-23	Time: 1138	Received by: (Signature) Alma				Trip Blank Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No HCl / MeOH TBR	Temp: °C Bottles Received: 89 If preservation required by Login: Date/Time						
Relinquished by : (Signature) Alma	Date: 11/20/23	Time: 1800	Received by: (Signature) SWA				Temp: °C	Bottles Received: 89						
Relinquished by : (Signature) Alma	Date:	Time:	Received for lab by: (Signature) J (O)				Date: 11/21/23	Time: 8:00	Hold:			Condition: NCF / OK		

L 16804/69



ANALYTICAL REPORT

December 08, 2023

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Is

⁸Gl

⁹Al

¹⁰Sc

Pinyon Environmental

Sample Delivery Group: L1680703
Samples Received: 11/22/2023
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

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SAMPLE SUMMARY

PF-2-400-20231121 L1680703-01 GW Collected by Crissa Wolf Collected date/time 11/21/23 13:45 Received date/time 11/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2181318	1	12/02/23 03:48	12/02/23 03:48	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2179029	1	11/29/23 07:58	11/29/23 07:58	JBE	Mt. Juliet, TN

TTU-10-172-20231121 L1680703-02 GW Collected by Crissa Wolf Collected date/time 11/21/23 12:40 Received date/time 11/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2180436	1	12/03/23 04:09	12/03/23 04:09	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2181318	1	12/02/23 04:07	12/02/23 04:07	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2179029	1	11/29/23 08:19	11/29/23 08:19	JBE	Mt. Juliet, TN

DUP-05 L1680703-03 GW Collected by Crissa Wolf Collected date/time 11/21/23 00:00 Received date/time 11/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG2180436	1	12/06/23 16:49	12/06/23 16:49	NCJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2181318	1	12/02/23 04:26	12/02/23 04:26	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2179029	1	11/29/23 08:41	11/29/23 08:41	JBE	Mt. Juliet, TN

TRIP BLANK L1680703-04 GW Collected by Crissa Wolf Collected date/time 11/21/23 00:00 Received date/time 11/22/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2181318	1	12/02/23 03:10	12/02/23 03:10	JAH	Mt. Juliet, TN

¹Cp

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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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch	
Acetone	U	M2 R5	11.3	50.0	1	12/02/2023 03:48	WG2181318	¹ Cp
Acrolein	U	L2 M1	2.54	50.0	1	12/02/2023 03:48	WG2181318	² Tc
Acrylonitrile	U		0.671	10.0	1	12/02/2023 03:48	WG2181318	³ Ss
Benzene	U		0.0941	1.00	1	12/02/2023 03:48	WG2181318	⁴ Cn
Bromobenzene	U		0.118	1.00	1	12/02/2023 03:48	WG2181318	⁵ Sr
Bromodichloromethane	U		0.136	1.00	1	12/02/2023 03:48	WG2181318	⁶ Qc
Bromoform	U		0.129	1.00	1	12/02/2023 03:48	WG2181318	⁷ Is
Bromomethane	U		0.605	5.00	1	12/02/2023 03:48	WG2181318	⁸ Gl
1,3-Butadiene	U		0.299	2.00	1	12/02/2023 03:48	WG2181318	⁹ Al
n-Butylbenzene	U		0.157	1.00	1	12/02/2023 03:48	WG2181318	¹⁰ Sc
sec-Butylbenzene	U		0.125	1.00	1	12/02/2023 03:48	WG2181318	
tert-Butylbenzene	U		0.127	1.00	1	12/02/2023 03:48	WG2181318	
Carbon tetrachloride	U		0.128	1.00	1	12/02/2023 03:48	WG2181318	
Carbon disulfide	U		0.0962	1.00	1	12/02/2023 03:48	WG2181318	
Chlorobenzene	U		0.116	1.00	1	12/02/2023 03:48	WG2181318	
Chlorodibromomethane	U		0.140	1.00	1	12/02/2023 03:48	WG2181318	
Chloroethane	U		0.192	5.00	1	12/02/2023 03:48	WG2181318	
Chloroform	U		0.111	5.00	1	12/02/2023 03:48	WG2181318	
Chloromethane	U		0.960	2.50	1	12/02/2023 03:48	WG2181318	
Cyclohexane	U		0.188	1.00	1	12/02/2023 03:48	WG2181318	
2-Chlorotoluene	U		0.106	1.00	1	12/02/2023 03:48	WG2181318	
4-Chlorotoluene	U		0.114	1.00	1	12/02/2023 03:48	WG2181318	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/02/2023 03:48	WG2181318	
1,2-Dibromoethane	U		0.126	1.00	1	12/02/2023 03:48	WG2181318	
Dibromomethane	U		0.122	1.00	1	12/02/2023 03:48	WG2181318	
1,2-Dichlorobenzene	U		0.107	1.00	1	12/02/2023 03:48	WG2181318	
1,3-Dichlorobenzene	U		0.110	1.00	1	12/02/2023 03:48	WG2181318	
1,4-Dichlorobenzene	U		0.120	1.00	1	12/02/2023 03:48	WG2181318	
Dichlorodifluoromethane	U	M1	0.374	5.00	1	12/02/2023 03:48	WG2181318	
1,1-Dichloroethane	U		0.100	1.00	1	12/02/2023 03:48	WG2181318	
1,2-Dichloroethane	U		0.0819	1.00	1	12/02/2023 03:48	WG2181318	
1,1-Dichloroethene	U		0.188	1.00	1	12/02/2023 03:48	WG2181318	
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/02/2023 03:48	WG2181318	
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/02/2023 03:48	WG2181318	
1,2-Dichloropropane	U		0.149	1.00	1	12/02/2023 03:48	WG2181318	
1,1-Dichloropropene	U		0.142	1.00	1	12/02/2023 03:48	WG2181318	
1,3-Dichloropropane	U		0.110	1.00	1	12/02/2023 03:48	WG2181318	
cis-1,3-Dichloropropene	U	L2	0.111	1.00	1	12/02/2023 03:48	WG2181318	
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/02/2023 03:48	WG2181318	
2,2-Dichloropropane	U		0.161	1.00	1	12/02/2023 03:48	WG2181318	
Dicyclopentadiene	U	R5	0.253	1.00	1	12/02/2023 03:48	WG2181318	
Di-isopropyl ether	U		0.105	1.00	1	12/02/2023 03:48	WG2181318	
Ethylbenzene	U		0.137	1.00	1	12/02/2023 03:48	WG2181318	
4-Ethyltoluene	U		0.208	1.00	1	12/02/2023 03:48	WG2181318	
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/02/2023 03:48	WG2181318	
n-Hexane	U		0.749	10.0	1	12/02/2023 03:48	WG2181318	
Isopropylbenzene	U		0.105	1.00	1	12/02/2023 03:48	WG2181318	
p-Isopropyltoluene	U		0.120	1.00	1	12/02/2023 03:48	WG2181318	
2-Butanone (MEK)	U		1.19	10.0	1	12/02/2023 03:48	WG2181318	
Methyl Cyclohexane	U		0.660	1.00	1	12/02/2023 03:48	WG2181318	
Methylene Chloride	U		0.430	5.00	1	12/02/2023 03:48	WG2181318	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/02/2023 03:48	WG2181318	
Methyl tert-butyl ether	U		0.101	1.00	1	12/02/2023 03:48	WG2181318	
Naphthalene	U		1.00	5.00	1	12/02/2023 03:48	WG2181318	
Propene	U		0.936	2.50	1	12/02/2023 03:48	WG2181318	
n-Propylbenzene	U		0.0993	1.00	1	12/02/2023 03:48	WG2181318	

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	12/02/2023 03:48	WG2181318
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/02/2023 03:48	WG2181318
1,1,2,2-Tetrachloroethane	U	L2	0.133	1.00	1	12/02/2023 03:48	WG2181318
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/02/2023 03:48	WG2181318
Tetrachloroethene	U		0.300	1.00	1	12/02/2023 03:48	WG2181318
Toluene	U		0.278	1.00	1	12/02/2023 03:48	WG2181318
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/02/2023 03:48	WG2181318
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/02/2023 03:48	WG2181318
1,1,1-Trichloroethane	U		0.149	1.00	1	12/02/2023 03:48	WG2181318
1,1,2-Trichloroethane	U		0.158	1.00	1	12/02/2023 03:48	WG2181318
Trichloroethene	U	L1	0.190	1.00	1	12/02/2023 03:48	WG2181318
Trichlorofluoromethane	U	M1	0.160	5.00	1	12/02/2023 03:48	WG2181318
1,2,3-Trichloropropane	U		0.237	2.50	1	12/02/2023 03:48	WG2181318
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/02/2023 03:48	WG2181318
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/02/2023 03:48	WG2181318
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/02/2023 03:48	WG2181318
Vinyl chloride	U		0.234	1.00	1	12/02/2023 03:48	WG2181318
Xylenes, Total	U		0.174	3.00	1	12/02/2023 03:48	WG2181318
(S) Toluene-d8	103			80.0-120		12/02/2023 03:48	WG2181318
(S) 4-Bromofluorobenzene	100			77.0-126		12/02/2023 03:48	WG2181318
(S) 1,2-Dichloroethane-d4	105			70.0-130		12/02/2023 03:48	WG2181318

- 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	U		0.597	3.00	1	11/29/2023 07:58	WG2179029
(S) Toluene-d8	91.4			77.0-127		11/29/2023 07:58	WG2179029

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	12/03/2023 04:09	WG2180436

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	12/02/2023 04:07	WG2181318
Acrolein	U	L2 R5	2.54	50.0	1	12/02/2023 04:07	WG2181318
Acrylonitrile	U		0.671	10.0	1	12/02/2023 04:07	WG2181318
Benzene	U		0.0941	1.00	1	12/02/2023 04:07	WG2181318
Bromobenzene	U	R7	0.118	1.00	1	12/02/2023 04:07	WG2181318
Bromodichloromethane	U	R7	0.136	1.00	1	12/02/2023 04:07	WG2181318
Bromoform	U		0.129	1.00	1	12/02/2023 04:07	WG2181318
Bromomethane	U		0.605	5.00	1	12/02/2023 04:07	WG2181318
1,3-Butadiene	U		0.299	2.00	1	12/02/2023 04:07	WG2181318
n-Butylbenzene	U		0.157	1.00	1	12/02/2023 04:07	WG2181318
sec-Butylbenzene	U	R7	0.125	1.00	1	12/02/2023 04:07	WG2181318
tert-Butylbenzene	U	R7	0.127	1.00	1	12/02/2023 04:07	WG2181318
Carbon tetrachloride	U		0.128	1.00	1	12/02/2023 04:07	WG2181318
Carbon disulfide	U		0.0962	1.00	1	12/02/2023 04:07	WG2181318
Chlorobenzene	U	R7	0.116	1.00	1	12/02/2023 04:07	WG2181318
Chlorodibromomethane	U		0.140	1.00	1	12/02/2023 04:07	WG2181318
Chloroethane	U	R7	0.192	5.00	1	12/02/2023 04:07	WG2181318
Chloroform	U		0.111	5.00	1	12/02/2023 04:07	WG2181318
Chloromethane	U	R7	0.960	2.50	1	12/02/2023 04:07	WG2181318
Cyclohexane	U	R7	0.188	1.00	1	12/02/2023 04:07	WG2181318
2-Chlorotoluene	U	R7	0.106	1.00	1	12/02/2023 04:07	WG2181318
4-Chlorotoluene	U	R7	0.114	1.00	1	12/02/2023 04:07	WG2181318
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/02/2023 04:07	WG2181318
1,2-Dibromoethane	U		0.126	1.00	1	12/02/2023 04:07	WG2181318
Dibromomethane	U		0.122	1.00	1	12/02/2023 04:07	WG2181318
1,2-Dichlorobenzene	U		0.107	1.00	1	12/02/2023 04:07	WG2181318
1,3-Dichlorobenzene	U		0.110	1.00	1	12/02/2023 04:07	WG2181318
1,4-Dichlorobenzene	U	R7	0.120	1.00	1	12/02/2023 04:07	WG2181318
Dichlorodifluoromethane	U	R5	0.374	5.00	1	12/02/2023 04:07	WG2181318
1,1-Dichloroethane	U	R7	0.100	1.00	1	12/02/2023 04:07	WG2181318
1,2-Dichloroethane	U		0.0819	1.00	1	12/02/2023 04:07	WG2181318
1,1-Dichloroethene	U	R7	0.188	1.00	1	12/02/2023 04:07	WG2181318
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/02/2023 04:07	WG2181318
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/02/2023 04:07	WG2181318
1,2-Dichloropropane	U		0.149	1.00	1	12/02/2023 04:07	WG2181318
1,1-Dichloropropene	U	R7	0.142	1.00	1	12/02/2023 04:07	WG2181318
1,3-Dichloropropane	U		0.110	1.00	1	12/02/2023 04:07	WG2181318
cis-1,3-Dichloropropene	U	L2	0.111	1.00	1	12/02/2023 04:07	WG2181318
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/02/2023 04:07	WG2181318
2,2-Dichloropropane	U	R7	0.161	1.00	1	12/02/2023 04:07	WG2181318
Dicyclopentadiene	U	R5	0.253	1.00	1	12/02/2023 04:07	WG2181318
Di-isopropyl ether	U		0.105	1.00	1	12/02/2023 04:07	WG2181318
Ethylbenzene	U	R7	0.137	1.00	1	12/02/2023 04:07	WG2181318
4-Ethyltoluene	U	R7	0.208	1.00	1	12/02/2023 04:07	WG2181318
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/02/2023 04:07	WG2181318
n-Hexane	U		0.749	10.0	1	12/02/2023 04:07	WG2181318
Isopropylbenzene	U	R7	0.105	1.00	1	12/02/2023 04:07	WG2181318
p-Isopropyltoluene	U	R7	0.120	1.00	1	12/02/2023 04:07	WG2181318
2-Butanone (MEK)	U		1.19	10.0	1	12/02/2023 04:07	WG2181318
Methyl Cyclohexane	U		0.660	1.00	1	12/02/2023 04:07	WG2181318

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	12/02/2023 04:07	WG2181318
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/02/2023 04:07	WG2181318
Methyl tert-butyl ether	U		0.101	1.00	1	12/02/2023 04:07	WG2181318
Naphthalene	U		1.00	5.00	1	12/02/2023 04:07	WG2181318
Propene	U		0.936	2.50	1	12/02/2023 04:07	WG2181318
n-Propylbenzene	U	R7	0.0993	1.00	1	12/02/2023 04:07	WG2181318
Styrene	U	R7	0.118	1.00	1	12/02/2023 04:07	WG2181318
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/02/2023 04:07	WG2181318
1,1,2,2-Tetrachloroethane	U	L2 R7	0.133	1.00	1	12/02/2023 04:07	WG2181318
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/02/2023 04:07	WG2181318
Tetrachloroethene	U	R7	0.300	1.00	1	12/02/2023 04:07	WG2181318
Toluene	U	R7	0.278	1.00	1	12/02/2023 04:07	WG2181318
1,2,3-Trichlorobenzene	U	R7	0.230	1.00	1	12/02/2023 04:07	WG2181318
1,2,4-Trichlorobenzene	U	R7	0.481	1.00	1	12/02/2023 04:07	WG2181318
1,1,1-Trichloroethane	U		0.149	1.00	1	12/02/2023 04:07	WG2181318
1,1,2-Trichloroethane	U	R7	0.158	1.00	1	12/02/2023 04:07	WG2181318
Trichloroethene	U	L1 R7	0.190	1.00	1	12/02/2023 04:07	WG2181318
Trichlorofluoromethane	U		0.160	5.00	1	12/02/2023 04:07	WG2181318
1,2,3-Trichloropropane	U		0.237	2.50	1	12/02/2023 04:07	WG2181318
1,2,4-Trimethylbenzene	U	R7	0.322	1.00	1	12/02/2023 04:07	WG2181318
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/02/2023 04:07	WG2181318
1,3,5-Trimethylbenzene	U	R7	0.104	1.00	1	12/02/2023 04:07	WG2181318
Vinyl chloride	U	R7	0.234	1.00	1	12/02/2023 04:07	WG2181318
Xylenes, Total	U	R7	0.174	3.00	1	12/02/2023 04:07	WG2181318
(S) Toluene-d8	103			80.0-120		12/02/2023 04:07	WG2181318
(S) 4-Bromofluorobenzene	98.6			77.0-126		12/02/2023 04:07	WG2181318
(S) 1,2-Dichloroethane-d4	107			70.0-130		12/02/2023 04:07	WG2181318

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	11/29/2023 08:19	WG2179029
(S) Toluene-d8	91.4			77.0-127		11/29/2023 08:19	WG2179029

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	12/06/2023 16:49	WG2180436

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	12/02/2023 04:26	WG2181318
Acrolein	U	L2 R5	2.54	50.0	1	12/02/2023 04:26	WG2181318
Acrylonitrile	U		0.671	10.0	1	12/02/2023 04:26	WG2181318
Benzene	U		0.0941	1.00	1	12/02/2023 04:26	WG2181318
Bromobenzene	U	R7	0.118	1.00	1	12/02/2023 04:26	WG2181318
Bromodichloromethane	U	R7	0.136	1.00	1	12/02/2023 04:26	WG2181318
Bromoform	U		0.129	1.00	1	12/02/2023 04:26	WG2181318
Bromomethane	U		0.605	5.00	1	12/02/2023 04:26	WG2181318
1,3-Butadiene	U		0.299	2.00	1	12/02/2023 04:26	WG2181318
n-Butylbenzene	U		0.157	1.00	1	12/02/2023 04:26	WG2181318
sec-Butylbenzene	U	R7	0.125	1.00	1	12/02/2023 04:26	WG2181318
tert-Butylbenzene	U	R7	0.127	1.00	1	12/02/2023 04:26	WG2181318
Carbon tetrachloride	U		0.128	1.00	1	12/02/2023 04:26	WG2181318
Carbon disulfide	U		0.0962	1.00	1	12/02/2023 04:26	WG2181318
Chlorobenzene	U	R7	0.116	1.00	1	12/02/2023 04:26	WG2181318
Chlorodibromomethane	U		0.140	1.00	1	12/02/2023 04:26	WG2181318
Chloroethane	U	R7	0.192	5.00	1	12/02/2023 04:26	WG2181318
Chloroform	U		0.111	5.00	1	12/02/2023 04:26	WG2181318
Chloromethane	U	R7	0.960	2.50	1	12/02/2023 04:26	WG2181318
Cyclohexane	U	R7	0.188	1.00	1	12/02/2023 04:26	WG2181318
2-Chlorotoluene	U	R7	0.106	1.00	1	12/02/2023 04:26	WG2181318
4-Chlorotoluene	U	R7	0.114	1.00	1	12/02/2023 04:26	WG2181318
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/02/2023 04:26	WG2181318
1,2-Dibromoethane	U		0.126	1.00	1	12/02/2023 04:26	WG2181318
Dibromomethane	U		0.122	1.00	1	12/02/2023 04:26	WG2181318
1,2-Dichlorobenzene	U		0.107	1.00	1	12/02/2023 04:26	WG2181318
1,3-Dichlorobenzene	U		0.110	1.00	1	12/02/2023 04:26	WG2181318
1,4-Dichlorobenzene	U	R7	0.120	1.00	1	12/02/2023 04:26	WG2181318
Dichlorodifluoromethane	U	R5	0.374	5.00	1	12/02/2023 04:26	WG2181318
1,1-Dichloroethane	U	R7	0.100	1.00	1	12/02/2023 04:26	WG2181318
1,2-Dichloroethane	U		0.0819	1.00	1	12/02/2023 04:26	WG2181318
1,1-Dichloroethene	U	R7	0.188	1.00	1	12/02/2023 04:26	WG2181318
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/02/2023 04:26	WG2181318
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/02/2023 04:26	WG2181318
1,2-Dichloropropane	U		0.149	1.00	1	12/02/2023 04:26	WG2181318
1,1-Dichloropropene	U	R7	0.142	1.00	1	12/02/2023 04:26	WG2181318
1,3-Dichloropropane	U		0.110	1.00	1	12/02/2023 04:26	WG2181318
cis-1,3-Dichloropropene	U	L2	0.111	1.00	1	12/02/2023 04:26	WG2181318
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/02/2023 04:26	WG2181318
2,2-Dichloropropane	U	R7	0.161	1.00	1	12/02/2023 04:26	WG2181318
Dicyclopentadiene	U	R5	0.253	1.00	1	12/02/2023 04:26	WG2181318
Di-isopropyl ether	U		0.105	1.00	1	12/02/2023 04:26	WG2181318
Ethylbenzene	U	R7	0.137	1.00	1	12/02/2023 04:26	WG2181318
4-Ethyltoluene	U	R7	0.208	1.00	1	12/02/2023 04:26	WG2181318
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/02/2023 04:26	WG2181318
n-Hexane	U		0.749	10.0	1	12/02/2023 04:26	WG2181318
Isopropylbenzene	U	R7	0.105	1.00	1	12/02/2023 04:26	WG2181318
p-Isopropyltoluene	U	R7	0.120	1.00	1	12/02/2023 04:26	WG2181318
2-Butanone (MEK)	U		1.19	10.0	1	12/02/2023 04:26	WG2181318
Methyl Cyclohexane	U		0.660	1.00	1	12/02/2023 04:26	WG2181318

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	12/02/2023 04:26	WG2181318	¹ Cp
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/02/2023 04:26	WG2181318	² Tc
Methyl tert-butyl ether	U		0.101	1.00	1	12/02/2023 04:26	WG2181318	³ Ss
Naphthalene	U		1.00	5.00	1	12/02/2023 04:26	WG2181318	
Propene	U		0.936	2.50	1	12/02/2023 04:26	WG2181318	
n-Propylbenzene	U	R7	0.0993	1.00	1	12/02/2023 04:26	WG2181318	
Styrene	U	R7	0.118	1.00	1	12/02/2023 04:26	WG2181318	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/02/2023 04:26	WG2181318	
1,1,2,2-Tetrachloroethane	U	L2 R7	0.133	1.00	1	12/02/2023 04:26	WG2181318	⁴ Cn
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/02/2023 04:26	WG2181318	
Tetrachloroethene	U	R7	0.300	1.00	1	12/02/2023 04:26	WG2181318	⁵ Sr
Toluene	U	R7	0.278	1.00	1	12/02/2023 04:26	WG2181318	⁶ Qc
1,2,3-Trichlorobenzene	U	R7	0.230	1.00	1	12/02/2023 04:26	WG2181318	
1,2,4-Trichlorobenzene	U	R7	0.481	1.00	1	12/02/2023 04:26	WG2181318	⁷ Is
1,1,1-Trichloroethane	U		0.149	1.00	1	12/02/2023 04:26	WG2181318	
1,1,2-Trichloroethane	U	R7	0.158	1.00	1	12/02/2023 04:26	WG2181318	
Trichloroethene	U	L1 R7	0.190	1.00	1	12/02/2023 04:26	WG2181318	
Trichlorofluoromethane	U		0.160	5.00	1	12/02/2023 04:26	WG2181318	
1,2,3-Trichloropropane	U		0.237	2.50	1	12/02/2023 04:26	WG2181318	
1,2,4-Trimethylbenzene	U	R7	0.322	1.00	1	12/02/2023 04:26	WG2181318	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/02/2023 04:26	WG2181318	
1,3,5-Trimethylbenzene	U	R7	0.104	1.00	1	12/02/2023 04:26	WG2181318	
Vinyl chloride	U	R7	0.234	1.00	1	12/02/2023 04:26	WG2181318	
Xylenes, Total	U	R7	0.174	3.00	1	12/02/2023 04:26	WG2181318	
(S) Toluene-d8	105			80.0-120		12/02/2023 04:26	WG2181318	
(S) 4-Bromofluorobenzene	105			77.0-126		12/02/2023 04:26	WG2181318	
(S) 1,2-Dichloroethane-d4	114			70.0-130		12/02/2023 04:26	WG2181318	

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	11/29/2023 08:41	WG2179029
(S) Toluene-d8	92.1			77.0-127		11/29/2023 08:41	WG2179029

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	12/02/2023 03:10	WG2181318	¹ Cp
Acrolein	U	L2 R5	2.54	50.0	1	12/02/2023 03:10	WG2181318	² Tc
Acrylonitrile	U		0.671	10.0	1	12/02/2023 03:10	WG2181318	³ Ss
Benzene	U		0.0941	1.00	1	12/02/2023 03:10	WG2181318	⁴ Cn
Bromobenzene	U	R7	0.118	1.00	1	12/02/2023 03:10	WG2181318	⁵ Sr
Bromodichloromethane	U	R7	0.136	1.00	1	12/02/2023 03:10	WG2181318	⁶ Qc
Bromoform	U		0.129	1.00	1	12/02/2023 03:10	WG2181318	⁷ Is
Bromomethane	U		0.605	5.00	1	12/02/2023 03:10	WG2181318	⁸ Gl
1,3-Butadiene	U		0.299	2.00	1	12/02/2023 03:10	WG2181318	⁹ Al
n-Butylbenzene	U		0.157	1.00	1	12/02/2023 03:10	WG2181318	¹⁰ Sc
sec-Butylbenzene	U	R7	0.125	1.00	1	12/02/2023 03:10	WG2181318	
tert-Butylbenzene	U	R7	0.127	1.00	1	12/02/2023 03:10	WG2181318	
Carbon tetrachloride	U		0.128	1.00	1	12/02/2023 03:10	WG2181318	
Carbon disulfide	U		0.0962	1.00	1	12/02/2023 03:10	WG2181318	
Chlorobenzene	U	R7	0.116	1.00	1	12/02/2023 03:10	WG2181318	
Chlorodibromomethane	U		0.140	1.00	1	12/02/2023 03:10	WG2181318	
Chloroethane	U	R7	0.192	5.00	1	12/02/2023 03:10	WG2181318	
Chloroform	U		0.111	5.00	1	12/02/2023 03:10	WG2181318	
Chloromethane	U	R7	0.960	2.50	1	12/02/2023 03:10	WG2181318	
Cyclohexane	U	R7	0.188	1.00	1	12/02/2023 03:10	WG2181318	
2-Chlorotoluene	U	R7	0.106	1.00	1	12/02/2023 03:10	WG2181318	
4-Chlorotoluene	U	R7	0.114	1.00	1	12/02/2023 03:10	WG2181318	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/02/2023 03:10	WG2181318	
1,2-Dibromoethane	U		0.126	1.00	1	12/02/2023 03:10	WG2181318	
Dibromomethane	U		0.122	1.00	1	12/02/2023 03:10	WG2181318	
1,2-Dichlorobenzene	U		0.107	1.00	1	12/02/2023 03:10	WG2181318	
1,3-Dichlorobenzene	U		0.110	1.00	1	12/02/2023 03:10	WG2181318	
1,4-Dichlorobenzene	U	R7	0.120	1.00	1	12/02/2023 03:10	WG2181318	
Dichlorodifluoromethane	U	R5	0.374	5.00	1	12/02/2023 03:10	WG2181318	
1,1-Dichloroethane	U	R7	0.100	1.00	1	12/02/2023 03:10	WG2181318	
1,2-Dichloroethane	U		0.0819	1.00	1	12/02/2023 03:10	WG2181318	
1,1-Dichloroethene	U	R7	0.188	1.00	1	12/02/2023 03:10	WG2181318	
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/02/2023 03:10	WG2181318	
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/02/2023 03:10	WG2181318	
1,2-Dichloropropane	U		0.149	1.00	1	12/02/2023 03:10	WG2181318	
1,1-Dichloropropene	U	R7	0.142	1.00	1	12/02/2023 03:10	WG2181318	
1,3-Dichloropropane	U		0.110	1.00	1	12/02/2023 03:10	WG2181318	
cis-1,3-Dichloropropene	U	L2	0.111	1.00	1	12/02/2023 03:10	WG2181318	
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/02/2023 03:10	WG2181318	
2,2-Dichloropropane	U	R7	0.161	1.00	1	12/02/2023 03:10	WG2181318	
Dicyclopentadiene	U	R5	0.253	1.00	1	12/02/2023 03:10	WG2181318	
Di-isopropyl ether	U		0.105	1.00	1	12/02/2023 03:10	WG2181318	
Ethylbenzene	U	R7	0.137	1.00	1	12/02/2023 03:10	WG2181318	
4-Ethyltoluene	U	R7	0.208	1.00	1	12/02/2023 03:10	WG2181318	
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/02/2023 03:10	WG2181318	
n-Hexane	U		0.749	10.0	1	12/02/2023 03:10	WG2181318	
Isopropylbenzene	U	R7	0.105	1.00	1	12/02/2023 03:10	WG2181318	
p-Isopropyltoluene	U	R7	0.120	1.00	1	12/02/2023 03:10	WG2181318	
2-Butanone (MEK)	U		1.19	10.0	1	12/02/2023 03:10	WG2181318	
Methyl Cyclohexane	U		0.660	1.00	1	12/02/2023 03:10	WG2181318	
Methylene Chloride	U		0.430	5.00	1	12/02/2023 03:10	WG2181318	
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/02/2023 03:10	WG2181318	
Methyl tert-butyl ether	U		0.101	1.00	1	12/02/2023 03:10	WG2181318	
Naphthalene	U		1.00	5.00	1	12/02/2023 03:10	WG2181318	
Propene	U		0.936	2.50	1	12/02/2023 03:10	WG2181318	
n-Propylbenzene	U	R7	0.0993	1.00	1	12/02/2023 03:10	WG2181318	

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	<u>R7</u>	0.118	1.00	1	12/02/2023 03:10	WG2181318	¹ Cp
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/02/2023 03:10	WG2181318	² Tc
1,1,2,2-Tetrachloroethane	U	<u>L2 R7</u>	0.133	1.00	1	12/02/2023 03:10	WG2181318	³ Ss
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/02/2023 03:10	WG2181318	
Tetrachloroethene	U	<u>R7</u>	0.300	1.00	1	12/02/2023 03:10	WG2181318	⁴ Cn
Toluene	U	<u>R7</u>	0.278	1.00	1	12/02/2023 03:10	WG2181318	⁵ Sr
1,2,3-Trichlorobenzene	U	<u>R7</u>	0.230	1.00	1	12/02/2023 03:10	WG2181318	⁶ Qc
1,2,4-Trichlorobenzene	U	<u>R7</u>	0.481	1.00	1	12/02/2023 03:10	WG2181318	⁷ Is
1,1,1-Trichloroethane	U		0.149	1.00	1	12/02/2023 03:10	WG2181318	⁸ Gl
1,1,2-Trichloroethane	U	<u>R7</u>	0.158	1.00	1	12/02/2023 03:10	WG2181318	⁹ Al
Trichloroethene	U	<u>L1 R7</u>	0.190	1.00	1	12/02/2023 03:10	WG2181318	
Trichlorofluoromethane	U		0.160	5.00	1	12/02/2023 03:10	WG2181318	
1,2,3-Trichloropropane	U		0.237	2.50	1	12/02/2023 03:10	WG2181318	
1,2,4-Trimethylbenzene	U	<u>R7</u>	0.322	1.00	1	12/02/2023 03:10	WG2181318	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/02/2023 03:10	WG2181318	
1,3,5-Trimethylbenzene	U	<u>R7</u>	0.104	1.00	1	12/02/2023 03:10	WG2181318	
Vinyl chloride	U	<u>R7</u>	0.234	1.00	1	12/02/2023 03:10	WG2181318	
Xylenes, Total	U	<u>R7</u>	0.174	3.00	1	12/02/2023 03:10	WG2181318	
(S) Toluene-d8	105			80.0-120		12/02/2023 03:10	WG2181318	
(S) 4-Bromofluorobenzene	97.4			77.0-126		12/02/2023 03:10	WG2181318	
(S) 1,2-Dichloroethane-d4	104			70.0-130		12/02/2023 03:10	WG2181318	¹⁰ Sc

WG2180436

Wet Chemistry by Method 314.0 Mod

QUALITY CONTROL SUMMARY

L1680703-02,03

Method Blank (MB)

(MB) R4009605-1 12/03/23 00:54

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

L1681655-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1681655-01 12/03/23 07:25 • (DUP) R4009605-3 12/03/23 16:40

Analyst	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

L1681655-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1681655-02 12/03/23 07:52 • (DUP) R4009605-6 12/03/23 18:03

Analyst	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) R4009605-2 12/03/23 01:50

Analyst	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Perchlorate	10.0	10.2	102	90.0-110	

L1681655-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1681655-01 12/03/23 07:25 • (MS) R4009605-4 12/03/23 17:08 • (MSD) R4009605-5 12/03/23 17:35

Analyst	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	9.29	10.5	92.9	105	1	80.0-120			12.4	15

L1681655-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1681655-02 12/03/23 07:52 • (MS) R4009605-7 12/03/23 18:31 • (MSD) R4009605-8 12/03/23 18:59

Analyst	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	8.89	8.95	88.9	89.5	1	80.0-120			0.661	15

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QUALITY CONTROL SUMMARY

[L1680703-01,02,03,04](#)

Method Blank (MB)

(MB) R4007916-2 12/02/23 02:51

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	

QUALITY CONTROL SUMMARY

[L1680703-01,02,03,04](#)

Method Blank (MB)

(MB) R4007916-2 12/02/23 02:51

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	101		77.0-126		
(S) 1,2-Dichloroethane-d4	104		70.0-130		

QUALITY CONTROL SUMMARY

L1680703-01,02,03,04

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

(LCS) R4007916-1 12/02/23 01:53 • (LCSD) R4007916-5 12/02/23 11:24

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	18.6	17.8	74.4	71.2	19.0-160			4.40	27
Acrolein	25.0	2.89	6.79	11.6	27.2	30.0-160	<u>L2</u>	<u>L2 R7</u>	80.6	26
Acrylonitrile	25.0	16.8	17.0	67.2	68.0	55.0-149			1.18	20
Benzene	5.00	4.58	5.54	91.6	111	70.0-123			19.0	20
Bromobenzene	5.00	4.31	5.49	86.2	110	73.0-121		<u>R7</u>	24.1	20
Bromodichloromethane	5.00	4.32	5.69	86.4	114	75.0-120		<u>R7</u>	27.4	20
Bromoform	5.00	4.58	4.74	91.6	94.8	68.0-132			3.43	20
Bromomethane	5.00	5.62	6.71	112	134	30.0-160			17.7	25
1,3-Butadiene	5.00	4.80	5.46	96.0	109	45.0-147			12.9	20
n-Butylbenzene	5.00	3.98	4.81	79.6	96.2	73.0-125			18.9	20
sec-Butylbenzene	5.00	3.97	5.23	79.4	105	75.0-125		<u>R7</u>	27.4	20
tert-Butylbenzene	5.00	4.12	5.50	82.4	110	76.0-124		<u>R7</u>	28.7	20
Carbon tetrachloride	5.00	4.55	5.52	91.0	110	68.0-126			19.3	20
Carbon disulfide	5.00	4.41	5.20	88.2	104	61.0-128			16.4	20
Chlorobenzene	5.00	4.26	5.47	85.2	109	80.0-121		<u>R7</u>	24.9	20
Chlorodibromomethane	5.00	4.29	5.13	85.8	103	77.0-125			17.8	20
Chloroethane	5.00	4.49	6.08	89.8	122	47.0-150		<u>R7</u>	30.1	20
Chloroform	5.00	4.81	5.60	96.2	112	73.0-120			15.2	20
Chloromethane	5.00	3.88	4.99	77.6	99.8	41.0-142		<u>R7</u>	25.0	20
Cyclohexane	5.00	3.96	5.12	79.2	102	71.0-124		<u>R7</u>	25.6	20
2-Chlorotoluene	5.00	4.30	5.48	86.0	110	76.0-123		<u>R7</u>	24.1	20
4-Chlorotoluene	5.00	4.29	5.58	85.8	112	75.0-122		<u>R7</u>	26.1	20
1,2-Dibromo-3-Chloropropane	5.00	4.53	5.03	90.6	101	58.0-134			10.5	20
1,2-Dibromoethane	5.00	4.35	5.01	87.0	100	80.0-122			14.1	20
Dibromomethane	5.00	4.70	5.49	94.0	110	80.0-120			15.5	20
1,2-Dichlorobenzene	5.00	4.58	4.97	91.6	99.4	79.0-121			8.17	20
1,3-Dichlorobenzene	5.00	4.44	5.36	88.8	107	79.0-120			18.8	20
1,4-Dichlorobenzene	5.00	4.19	5.38	83.8	108	79.0-120		<u>R7</u>	24.9	20
Dichlorodifluoromethane	5.00	4.76	6.40	95.2	128	51.0-149		<u>R7</u>	29.4	20
1,1-Dichloroethane	5.00	4.50	5.70	90.0	114	70.0-126		<u>R7</u>	23.5	20
1,2-Dichloroethane	5.00	4.77	5.80	95.4	116	70.0-128			19.5	20
cis-1,2-Dichloroethene	5.00	4.42	5.62	88.4	112	71.0-124		<u>R7</u>	23.9	20
trans-1,2-Dichloroethene	5.00	4.63	5.60	92.6	112	73.0-120			19.0	20
1,2-Dichloropropane	5.00	4.81	5.54	96.2	111	73.0-120			14.1	20
1,1-Dichloropropene	5.00	4.51	5.47	90.2	109	77.0-125			19.2	20
1,3-Dichloropropene	5.00	4.25	5.43	85.0	109	74.0-126		<u>R7</u>	24.4	20
cis-1,3-Dichloropropene	5.00	4.43	5.20	88.6	104	80.0-120			16.0	20
trans-1,3-Dichloropropene	5.00	3.88	4.73	77.6	94.6	80.0-123	<u>L2</u>		19.7	20
2,2-Dichloropropane	5.00	3.95	4.70	79.0	94.0	78.0-124			17.3	20
								<u>R7</u>	32.1	20

ACCOUNT:

Pinyon Environmental

PROJECT:

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QUALITY CONTROL SUMMARY

L1680703-01,02,03,04

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

(LCS) R4007916-1 12/02/23 01:53 • (LCSD) R4007916-5 12/02/23 11:24

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	3.95	4.89	79.0	97.8	74.0-126	<u>R7</u>		21.3	20
Di-isopropyl ether	5.00	4.34	5.06	86.8	101	58.0-138			15.3	20
Ethylbenzene	5.00	4.04	5.15	80.8	103	79.0-123	<u>R7</u>		24.2	20
4-Ethyltoluene	5.00	4.22	5.25	84.4	105	74.0-127	<u>R7</u>		21.8	20
Hexachloro-1,3-butadiene	5.00	4.57	4.95	91.4	99.0	54.0-138			7.98	20
n-Hexane	5.00	4.04	3.59	80.8	71.8	57.0-133			11.8	20
Isopropylbenzene	5.00	4.15	5.13	83.0	103	76.0-127	<u>R7</u>		21.1	20
p-Isopropyltoluene	5.00	3.88	4.99	77.6	99.8	76.0-125	<u>R7</u>		25.0	20
2-Butanone (MEK)	25.0	23.2	19.6	92.8	78.4	44.0-160			16.8	20
Methyl Cyclohexane	5.00	3.83	4.41	76.6	88.2	68.0-126			14.1	20
Methylene Chloride	5.00	4.32	5.03	86.4	101	67.0-120			15.2	20
4-Methyl-2-pentanone (MIBK)	25.0	21.7	24.3	86.8	97.2	68.0-142			11.3	20
Methyl tert-butyl ether	5.00	4.81	5.71	96.2	114	68.0-125			17.1	20
Naphthalene	5.00	4.14	4.73	82.8	94.6	54.0-135			13.3	20
Propene	5.00	4.39	4.92	87.8	98.4	30.0-160			11.4	20
n-Propylbenzene	5.00	4.02	5.34	80.4	107	77.0-124	<u>R7</u>		28.2	20
Styrene	5.00	3.93	5.27	78.6	105	73.0-130	<u>R7</u>		29.1	20
1,1,1,2-Tetrachloroethane	5.00	4.53	5.36	90.6	107	75.0-125			16.8	20
1,1,2,2-Tetrachloroethane	5.00	4.38	3.04	87.6	60.8	65.0-130	<u>L2 R7</u>		36.1	20
1,1,2-Trichlorotrifluoroethane	5.00	4.47	5.31	89.4	106	69.0-132			17.2	20
Tetrachloroethene	5.00	4.04	5.09	80.8	102	72.0-132	<u>R7</u>		23.0	20
Toluene	5.00	4.19	5.28	83.8	106	79.0-120	<u>R7</u>		23.0	20
1,2,3-Trichlorobenzene	5.00	3.91	4.91	78.2	98.2	50.0-138	<u>R7</u>		22.7	20
1,2,4-Trichlorobenzene	5.00	3.76	5.09	75.2	102	57.0-137	<u>R7</u>		30.1	20
1,1,1-Trichloroethane	5.00	4.69	5.64	93.8	113	73.0-124			18.4	20
1,1,2-Trichloroethane	5.00	4.42	5.46	88.4	109	80.0-120	<u>R7</u>		21.1	20
Trichloroethene	5.00	4.72	6.76	94.4	135	78.0-124	<u>L1 R7</u>		35.5	20
Trichlorofluoromethane	5.00	4.72	5.65	94.4	113	59.0-147			17.9	20
1,2,3-Trichloropropane	5.00	4.92	5.78	98.4	116	73.0-130			16.1	20
1,2,4-Trimethylbenzene	5.00	4.12	5.29	82.4	106	76.0-121	<u>R7</u>		24.9	20
1,2,3-Trimethylbenzene	5.00	4.33	5.29	86.6	106	77.0-120			20.0	20
1,3,5-Trimethylbenzene	5.00	4.09	5.65	81.8	113	76.0-122	<u>R7</u>		32.0	20
Vinyl chloride	5.00	4.30	5.49	86.0	110	67.0-131	<u>R7</u>		24.3	20
Xylenes, Total	15.0	12.2	15.2	81.3	101	79.0-123	<u>R7</u>		21.9	20
(S) Toluene-d8				101	105	80.0-120				
(S) 4-Bromofluorobenzene				101	96.9	77.0-126				
(S) 1,2-Dichloroethane-d4				112	110	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

QUALITY CONTROL SUMMARY

L1680703-01,02,03,04

L1680703-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680703-01 12/02/23 03:48 • (MS) R4007916-3 12/02/23 09:32 • (MSD) R4007916-4 12/02/23 09:51

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	U	15.8	0.000	63.2	1	10.0-160	M2	R5	200	35
Acrolein	25.0	U	42.5	41.5	170	166	1	10.0-160	M1	M1	2.38	39
Acrylonitrile	25.0	U	20.5	22.6	82.0	90.4	1	21.0-160			9.74	32
Benzene	5.00	U	5.61	6.37	112	127	1	17.0-158			12.7	27
Bromobenzene	5.00	U	5.65	6.61	113	132	1	30.0-149			15.7	28
Bromodichloromethane	5.00	U	5.95	6.58	119	132	1	31.0-150			10.1	27
Bromoform	5.00	U	4.92	5.97	98.4	119	1	29.0-150			19.3	29
Bromomethane	5.00	U	7.22	7.74	144	155	1	10.0-160			6.95	38
1,3-Butadiene	5.00	U	6.35	7.69	127	154	1	10.0-160			19.1	22
n-Butylbenzene	5.00	U	5.76	7.01	115	140	1	31.0-150			19.6	30
sec-Butylbenzene	5.00	U	5.57	6.87	111	137	1	33.0-155			20.9	29
tert-Butylbenzene	5.00	U	5.37	6.71	107	134	1	34.0-153			22.2	28
Carbon tetrachloride	5.00	U	6.68	7.32	134	146	1	23.0-159			9.14	28
Carbon disulfide	5.00	U	5.47	6.51	109	130	1	10.0-156			17.4	28
Chlorobenzene	5.00	U	5.77	6.65	115	133	1	33.0-152			14.2	27
Chlorodibromomethane	5.00	U	5.85	6.39	117	128	1	37.0-149			8.82	27
Chloroethane	5.00	U	5.78	6.84	116	137	1	10.0-160			16.8	30
Chloroform	5.00	U	5.77	7.05	115	141	1	29.0-154			20.0	28
Chloromethane	5.00	U	4.99	5.75	99.8	115	1	10.0-160			14.2	29
Cyclohexane	5.00	U	5.98	6.89	120	138	1	19.0-160			14.1	23
2-Chlorotoluene	5.00	U	5.75	6.70	115	134	1	32.0-153			15.3	28
4-Chlorotoluene	5.00	U	5.65	6.88	113	138	1	32.0-150			19.6	28
1,2-Dibromo-3-Chloropropane	5.00	U	5.36	6.69	107	134	1	22.0-151			22.1	34
1,2-Dibromoethane	5.00	U	5.57	6.25	111	125	1	34.0-147			11.5	27
Dibromomethane	5.00	U	6.40	6.52	128	130	1	30.0-151			1.86	27
1,2-Dichlorobenzene	5.00	U	5.47	6.86	109	137	1	34.0-149			22.5	28
1,3-Dichlorobenzene	5.00	U	5.64	6.64	113	133	1	36.0-146			16.3	27
1,4-Dichlorobenzene	5.00	U	5.13	6.37	103	127	1	35.0-142			21.6	27
Dichlorodifluoromethane	5.00	U	7.13	8.06	143	161	1	10.0-160	M1		12.2	29
1,1-Dichloroethane	5.00	U	6.14	6.83	123	137	1	25.0-158			10.6	27
1,2-Dichloroethane	5.00	U	5.60	6.70	112	134	1	29.0-151			17.9	27
1,1-Dichloroethene	5.00	U	5.75	6.67	115	133	1	11.0-160			14.8	29
cis-1,2-Dichloroethene	5.00	U	6.17	7.28	123	146	1	10.0-160			16.5	27
trans-1,2-Dichloroethene	5.00	U	5.83	7.08	117	142	1	17.0-153			19.4	27
1,2-Dichloropropane	5.00	U	5.52	6.38	110	128	1	30.0-156			14.5	27
1,1-Dichloropropene	5.00	U	6.15	6.69	123	134	1	25.0-158			8.41	27
1,3-Dichloropropene	5.00	U	5.64	6.20	113	124	1	38.0-147			9.46	27
cis-1,3-Dichloropropene	5.00	U	4.99	5.97	99.8	119	1	34.0-149			17.9	28
trans-1,3-Dichloropropene	5.00	U	4.94	5.93	98.8	119	1	32.0-149			18.2	28
2,2-Dichloropropane	5.00	U	6.33	7.26	127	145	1	24.0-152			13.7	29

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

QUALITY CONTROL SUMMARY

L1680703-01,02,03,04

L1680703-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680703-01 12/02/23 03:48 • (MS) R4007916-3 12/02/23 09:32 • (MSD) R4007916-4 12/02/23 09:51

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	5.00	6.18	100	124	1	51.0-139	R5		21.1	20
Di-isopropyl ether	5.00	U	5.49	6.22	110	124	1	21.0-160			12.5	28
Ethylbenzene	5.00	U	5.64	6.60	113	132	1	30.0-155			15.7	27
4-Ethyltoluene	5.00	U	5.79	6.86	116	137	1	10.0-160			16.9	20
Hexachloro-1,3-butadiene	5.00	U	5.24	7.25	105	145	1	20.0-154			32.2	34
n-Hexane	5.00	U	5.02	5.79	100	116	1	10.0-153			14.2	28
Isopropylbenzene	5.00	U	5.60	6.84	112	137	1	28.0-157			19.9	27
p-Isopropyltoluene	5.00	U	5.42	6.73	108	135	1	30.0-154			21.6	29
2-Butanone (MEK)	25.0	U	18.8	20.1	75.2	80.4	1	10.0-160			6.68	32
Methyl Cyclohexane	5.00	U	5.32	6.37	106	127	1	11.0-160			18.0	24
Methylene Chloride	5.00	U	5.58	6.54	112	131	1	23.0-144			15.8	28
4-Methyl-2-pentanone (MIBK)	25.0	U	26.4	28.6	106	114	1	29.0-160			8.00	29
Methyl tert-butyl ether	5.00	U	5.94	6.41	119	128	1	28.0-150			7.61	29
Naphthalene	5.00	U	5.19	6.56	104	131	1	12.0-156			23.3	35
Propene	5.00	U	5.90	6.41	118	128	1	10.0-160			8.29	29
n-Propylbenzene	5.00	U	5.44	6.98	109	140	1	31.0-154			24.8	28
Styrene	5.00	U	5.06	6.47	101	129	1	33.0-155			24.5	28
1,1,1,2-Tetrachloroethane	5.00	U	5.61	7.14	112	143	1	36.0-151			24.0	29
1,1,2,2-Tetrachloroethane	5.00	U	5.89	7.01	118	140	1	33.0-150			17.4	28
1,1,2-Trichlorotrifluoroethane	5.00	U	6.69	7.72	134	154	1	23.0-160			14.3	30
Tetrachloroethene	5.00	U	5.41	7.05	108	141	1	10.0-160			26.3	27
Toluene	5.00	U	5.48	6.61	110	132	1	26.0-154			18.7	28
1,2,3-Trichlorobenzene	5.00	U	5.31	6.96	106	139	1	17.0-150			26.9	36
1,2,4-Trichlorobenzene	5.00	U	5.15	7.15	103	143	1	24.0-150			32.5	33
1,1,1-Trichloroethane	5.00	U	6.63	7.85	133	157	1	23.0-160			16.9	28
1,1,2-Trichloroethane	5.00	U	5.86	6.16	117	123	1	35.0-147			4.99	27
Trichloroethene	5.00	U	5.63	6.32	113	126	1	10.0-160			11.5	25
Trichlorofluoromethane	5.00	U	6.78	8.28	136	166	1	17.0-160	M1		19.9	31
1,2,3-Trichloropropane	5.00	U	5.61	6.77	112	135	1	34.0-151			18.7	29
1,2,4-Trimethylbenzene	5.00	U	5.55	6.75	111	135	1	26.0-154			19.5	27
1,2,3-Trimethylbenzene	5.00	U	5.65	6.94	113	139	1	32.0-149			20.5	28
1,3,5-Trimethylbenzene	5.00	U	5.63	6.41	113	128	1	28.0-153			13.0	27
Vinyl chloride	5.00	U	6.40	6.70	128	134	1	10.0-160			4.58	27
Xylenes, Total	15.0	U	16.4	19.7	109	131	1	29.0-154			18.3	28
(S) Toluene-d8					99.9	105		80.0-120				
(S) 4-Bromofluorobenzene					99.3	105		77.0-126				
(S) 1,2-Dichloroethane-d4					111	106		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Is

8 Gl

9 Al

10 Sc

WG2179029

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

QUALITY CONTROL SUMMARY

L1680703-01,02,03

Method Blank (MB)

(MB) R4006401-3 11/28/23 23:46

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	91.1			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

(LCS) R4006401-1 11/28/23 22:41 • (LCSD) R4006401-2 11/28/23 23:03

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	32.4	36.1	64.8	72.2	55.0-138			10.8	24
(S) Toluene-d8			90.7	90.9	77.0-127					

L1680703-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1680703-01 11/29/23 07:58 • (MS) R4006401-4 11/29/23 10:05 • (MSD) R4006401-5 11/29/23 10:27

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	34.1	35.6	68.2	71.2	1	13.0-160			4.30	31
(S) Toluene-d8				91.3	90.9			77.0-127				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS32 • File ID: 1201A_02

12/02/23 01:34

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response	
Standard	1201A_02	284355	124462	107510	¹ Cp
Upper Limit		568710	248924	215020	² Tc
Lower Limit		142178	62231	53755	³ Ss
LCS R4007916-1 WG2181318 1x	1201A_03	283800	128423	107169	⁴ Cn
BLANK R4007916-2 WG2181318 1x	1201A_06	295760	124141	103168	⁵ Sr
L1680703-04 WG2181318 1x	1201A_07	288532	121283	93251	⁶ Qc
L1680703-01 WG2181318 1x	1201A_09	285963	121742	101124	⁷ Is
L1680703-02 WG2181318 1x	1201A_10	285026	128943	98792	⁸ Gl
L1680703-03 WG2181318 1x	1201A_11	284469	120004	102465	⁹ Al
MS R4007916-3 WG2181318 1x	1201A_27	275178	121902	104559	¹⁰ Sc
MSD R4007916-4 WG2181318 1x	1201A_28	275166	116350	99135	
LCSD R4007916-5 WG2181318 1x	1202_02	283134	129944	104369	

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 1128_04A

11/28/23 22:20

Sample ID	File ID	8260-FLUOROBENZENE Response
Standard	1128_04A	303275
Upper Limit		606550
Lower Limit		151638
LCS R4006401-1 WG2179029 1x	1128_05AB	310462
LCSD R4006401-2 WG2179029 1x	1128_06AB	316607
BLANK R4006401-3 WG2179029 1x	1128_08AB	311238
L1680703-01 WG2179029 1x	1128_31A	316016
L1680703-02 WG2179029 1x	1128_32A	310856
L1680703-03 WG2179029 1x	1128_33A	314418
MS R4006401-4 WG2179029 1x	1128_37A	328053
MSD R4006401-5 WG2179029 1x	1128_38A	307080

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

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.
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.

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 Street, Suite 200 Lakewood, CO 80227			Billing Information: Pres aup@pinyon-env.com accounts Payable			Analysis / Container / Preservative						Chain of Custody Page <u>1</u> of <u>1</u>			
Report to: Andrew Parker			Email To: Darker@Pinyon-env.com									12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859			
Project Description: Nammo TTU Groundwater Monitoring			City/State Collected: Mesa, Az									L# U680703 G112			
Phone: 303.785.7697 Fax:		Client Project # 722152201.002		Lab Project #								Acctnum: PINYONMAZ Template: Prelogin: TSR: Daphne Richards PB: Shipped Via:			
Collected by (print): Crisss Wolf		Site/Facility ID #		P.O. #								Remarks Sample # (lab only)			
Collected by (signature): Crisss Wolf		Rush? (Lab MUST Be Notified) 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 <input type="checkbox"/>		Quote #											
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							MS/MSD	o1		
PF-2-4008-20231121	Grab	GW	4008	11-21-23	1345	10	<	<	<	<	<	<	<	o2	
TTU-18-172-20231121	Grab	GW	172	11-21-23	1240	6	✓	✓	✓	✓				o3	
DW - 05	-	-	-	11-21-23	-	6	-	✓	✓					o4	
Trip Blank	-	-	-	-	-	1		✓							
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks: Samples returned via: UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>						pH _____ Temp _____ Flow _____ Other _____						Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N	
Relinquished by : (Signature) Crisss Wolf		Date: 11-21-23	Time: 1502	Received by: (Signature) Amen		Trip Blank Received: <input checked="" type="checkbox"/> Yes / No HCl / MeOH TBR		If preservation required by Login: Date/Time							
Relinquished by : (Signature) Amen		Date: 11/21/23	Time: 1800	Received by: (Signature) JWA		Temp: 24.8°C Bottles Received: 2.3 + 0 = 2.3 22									
Relinquished by : (Signature)		Date: 11-22-23	Time: 800	Received for lab by: (Signature) Eli Rosen		Date: 11-22-23	Time: 17	Hold: Condition: NCF / O							



ANALYTICAL REPORT

December 18, 2023

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Is

⁸Gl

⁹Al

¹⁰Sc

Pinyon Environmental

Sample Delivery Group: L1688062
Samples Received: 12/14/2023
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-3-108-20231213 L1688062-01	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-3-108-20231213 L1688062-01 GW		Collected by Crissa Wolf	Collected date/time 12/13/23 10:55	Received date/time 12/14/23 08:00		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG2190720	1	12/16/23 17:19	12/16/23 17:19	JAH	Mt. Juliet, TN

- 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.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1688062-01	TTU-3-108-20231213	8260B-SIM

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	U		0.597	3.00	1	12/16/2023 17:19	WG2190720	¹ Cp
(S) Toluene-d8	92.7			77.0-127		12/16/2023 17:19	WG2190720	² Tc ³ Ss ⁴ Cn ⁵ Sr ⁶ Qc ⁷ Is ⁸ Gl ⁹ Al ¹⁰ Sc

QUALITY CONTROL SUMMARY

L1688062-01

Method Blank (MB)

(MB) R4013499-3 12/16/23 11:47

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	93.4			77.0-127

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Is⁸Gl⁹Al¹⁰Sc

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

(LCS) R4013499-1 12/16/23 10:42 • (LCSD) R4013499-2 12/16/23 11:04

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	34.9	38.1	69.8	76.2	55.0-138			8.77	24
(S) Toluene-d8			93.2	93.2		77.0-127				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 1216_03

12/16/23 10:21

Sample ID	File ID	8260-FLUOROBENZENE Response
Standard	1216_03	328607
Upper Limit		657214
Lower Limit		164304
LCS R4013499-1 WG2190720 1x	1216_04	323503
LCSD R4013499-2 WG2190720 1x	1216_05	318984
BLANK R4013499-3 WG2190720 1x	1216_07	317826
L1688062-01 WG2190720 1x	1216_10	326420

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
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.

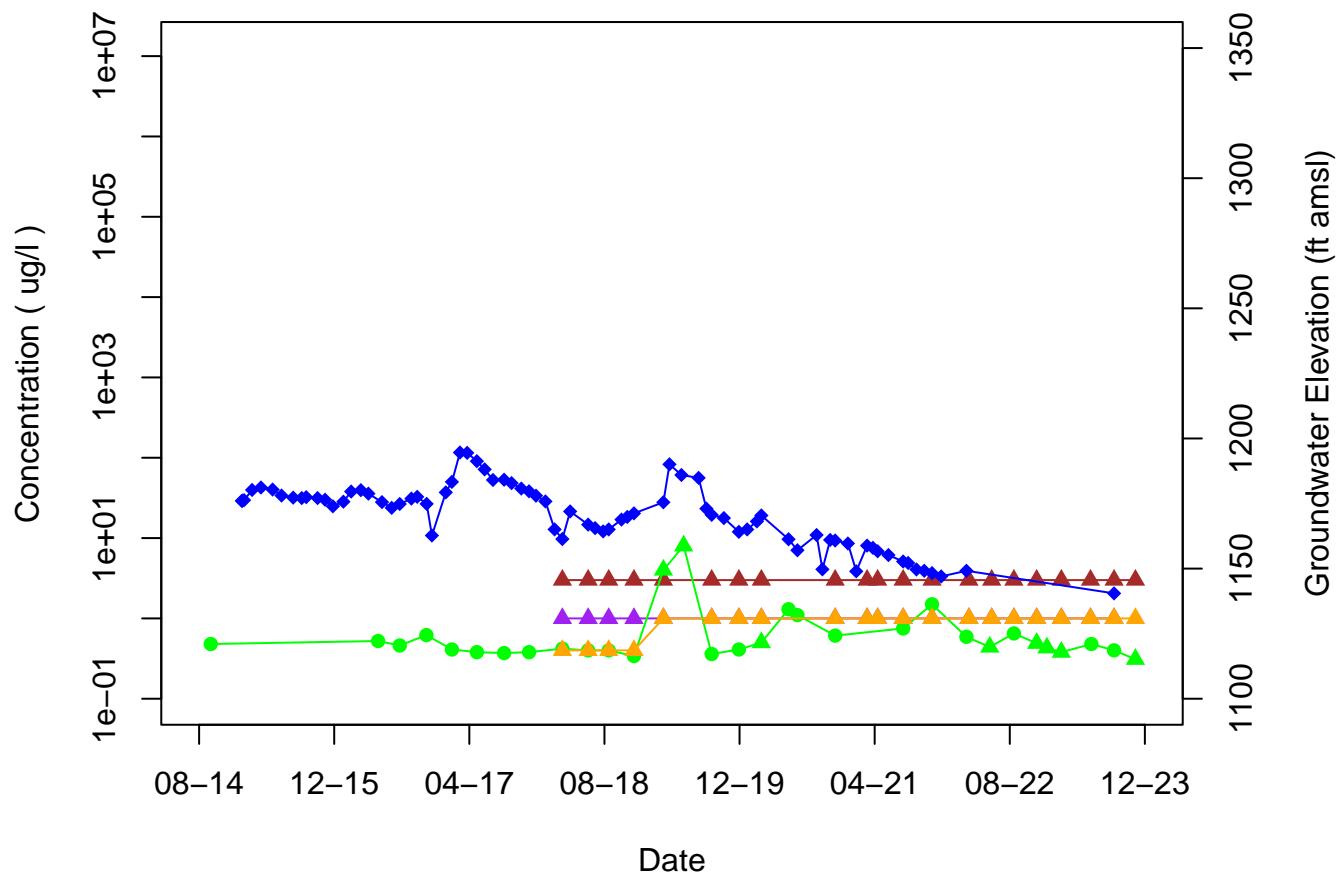
- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Is
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

Pinyon Environmental 3222 S. Vance Street, Suite 200 Lakewood, CO 80227			Billing Information: Accounts Payable ap@Pinyon-env.com		Pres Chk	Analysis / Container / Preservative						Chain of Custody	Page ____ of ____			
Report to: Andrew Parker			Email To: Parkur@Pinyon-env.com									 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859				
Project Description: Nammo TTU Groundwater Monitoring			City/State Collected: Mesa, AZ													
Phone: 303.785.7697	Client Project #		Lab Project #													
Fax:	722152201.002															
Collected by (print): Crissa Wolf	Site/Facility ID #		P.O. #													
Collected by (signature):	Rush? (Lab MUST Be Notified)		Quote #													
Immediately Packed on Ice N <input checked="" type="checkbox"/> Y <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"/> <input checked="" type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> <input type="checkbox"/> Three Day <input type="checkbox"/>		Date Results Needed 48 hr TAT		No. of Cntrs											
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time											
TTU-3-108-20231213	Grab	GW	108	12-13-23	1055	3										-01
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Remarks: Samples returned via: UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>						pH _____	Temp _____							Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> Y <input checked="" 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	
Relinquished by : (Signature) Crissa Wolf	Date: 12-13-23	Time: 1211	Received by: (Signature) Alma	Trip Blank Received: Yes / No HCl / MeOH TBR	Temp: °C	Bottles Received: 3										
Relinquished by : (Signature) Alma	Date: 12/13/23	Time: 1800	Received by: (Signature) SMA	DPA 80.1+0 = 0.1									If preservation required by Login: Date/Time			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) MCW	Date: 12/14/23	Time: 8:00	Hold:							Condition: NCF / OK			

PNPAZ

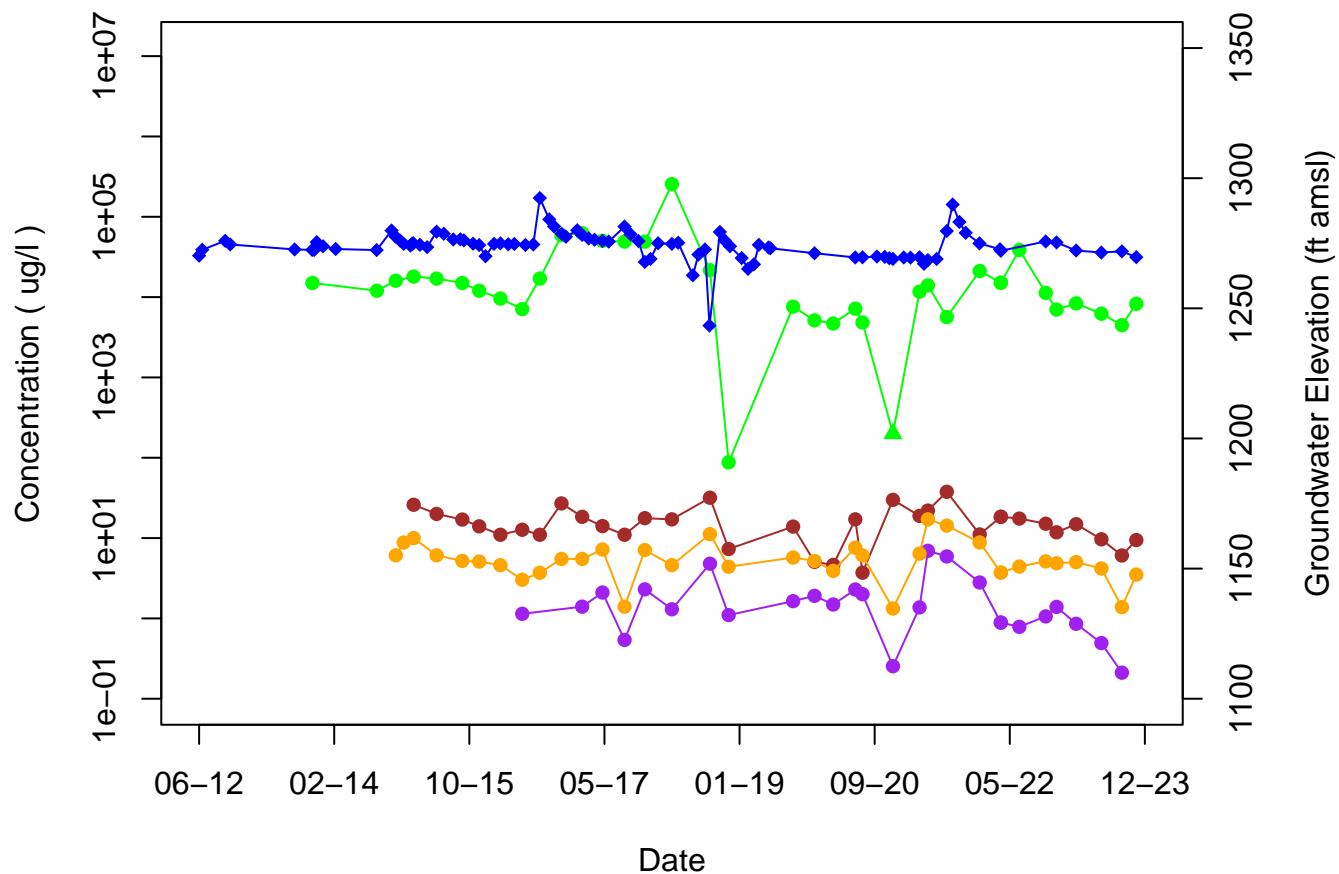
Attachment 3 – Concentration and Groundwater Elevation versus Time Plots

PF-2



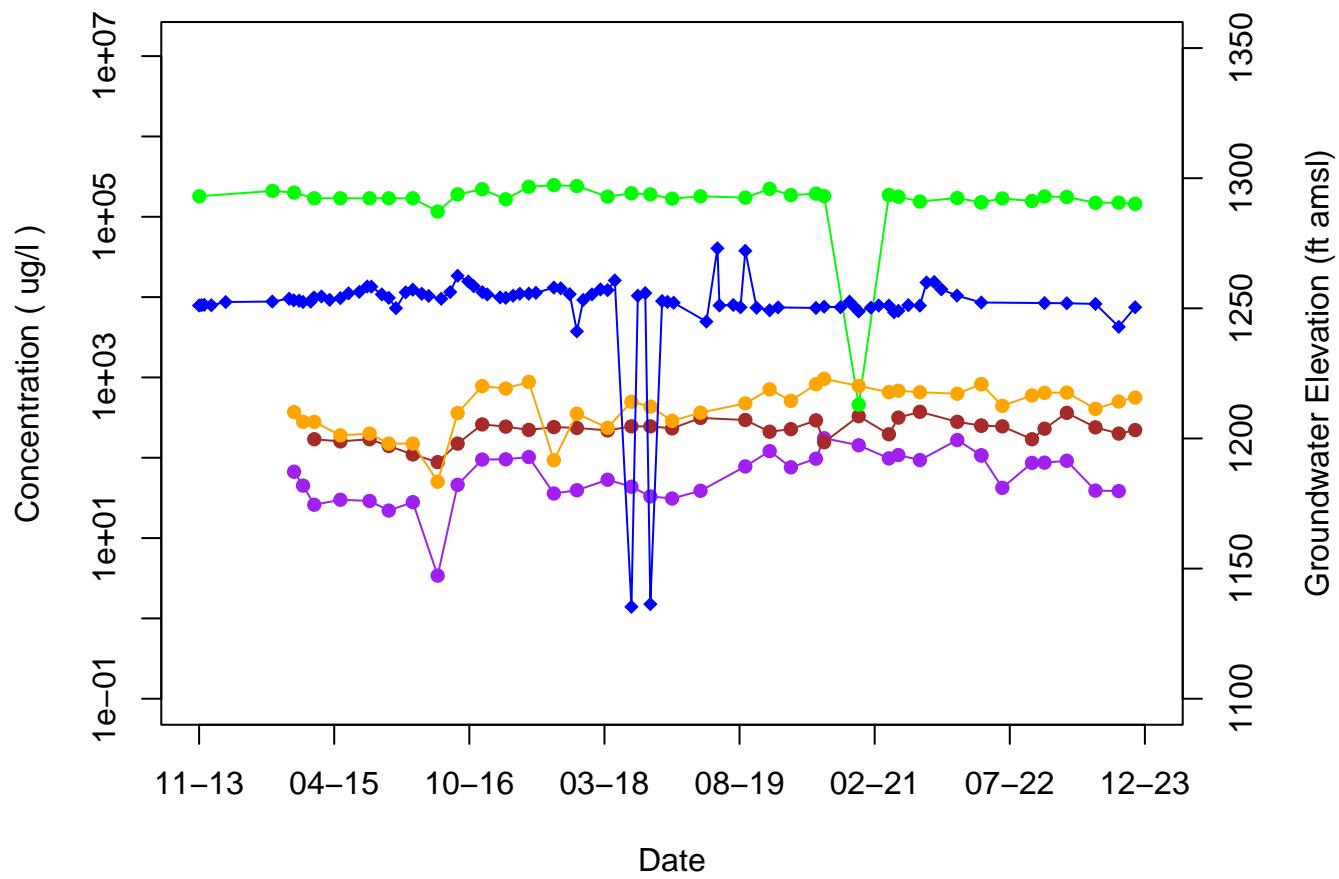
- | | | | | | |
|---|-----------------------|---|--------------------|---|-----------------|
| ● | Detect | ● | 1,1-Dichloroethene | ● | Trichloroethene |
| ▲ | Non-Detect | ● | 1,4-Dioxane | ○ | |
| ◆ | Groundwater Elevation | ● | Perchlorate | ● | |

TTU-1



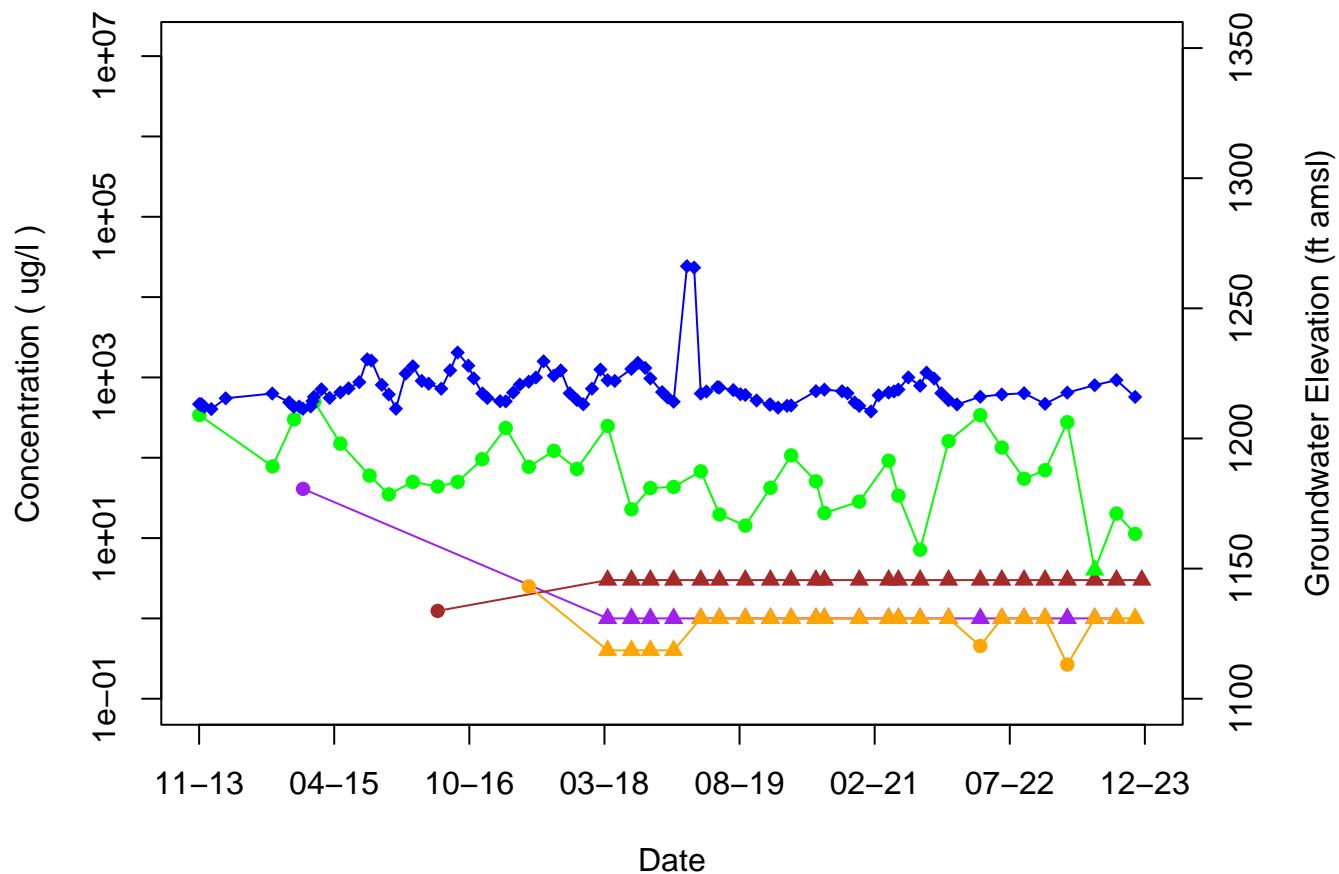
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▲	Non-Detect	●	1,4-Dioxane	●	
◆	Groundwater Elevation	○	Perchlorate	○	

TTU-2



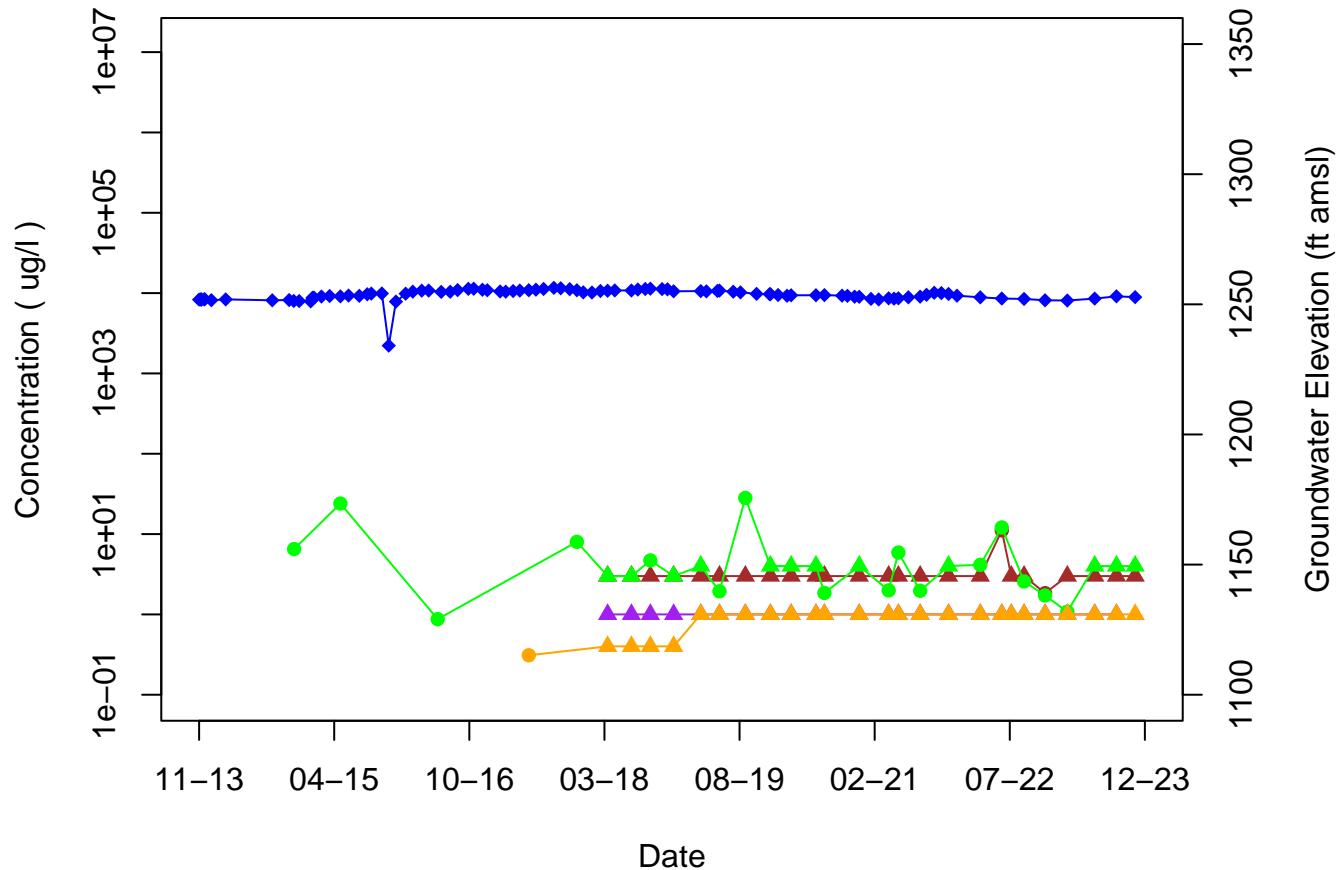
●	Detect	○	1,1-Dichloroethene	○	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	
◆	Groundwater Elevation	○	Perchlorate	○	

TTU-3



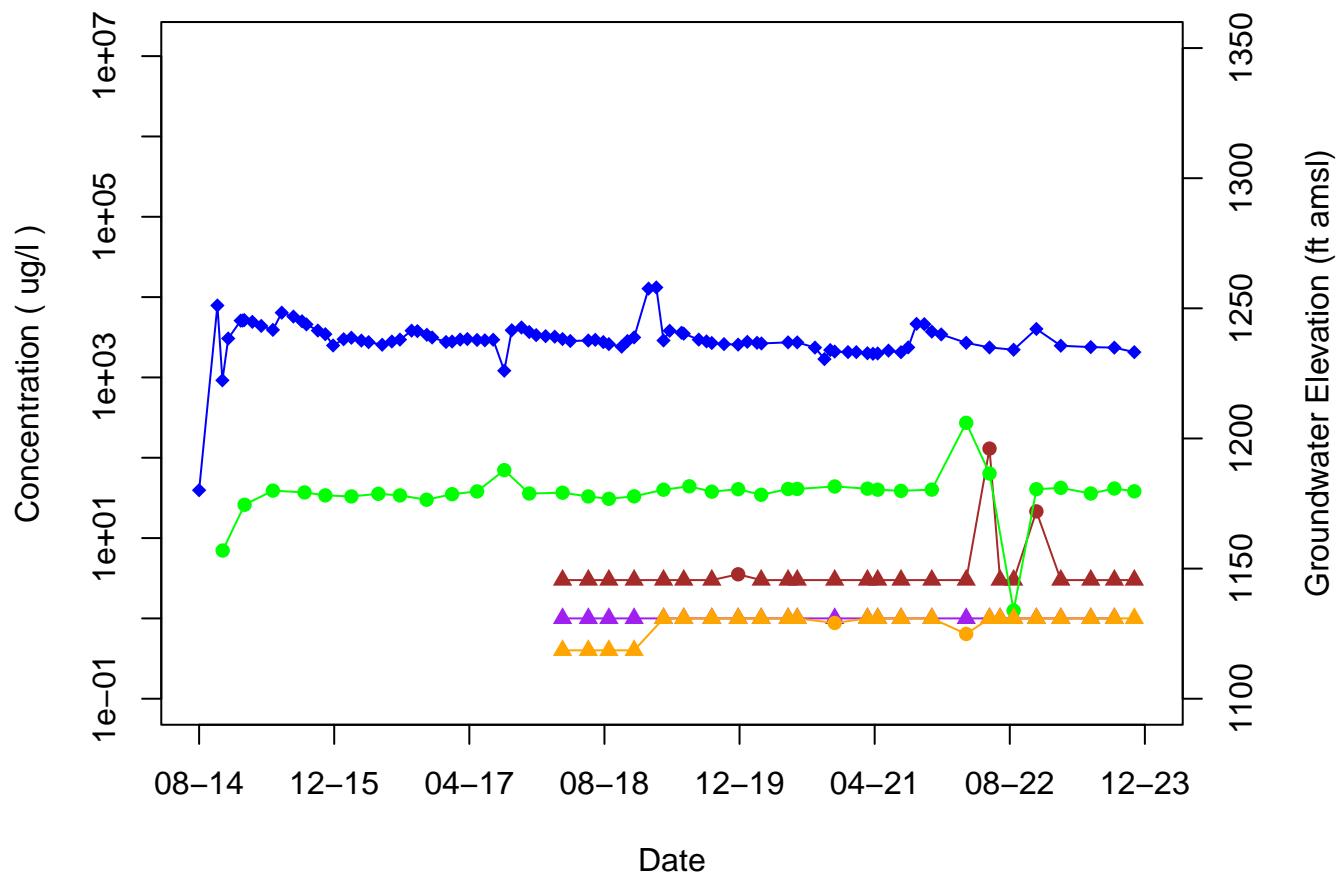
●	Detect	○	1,1-Dichloroethene	○	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	Perchlorate
◆	Groundwater Elevation	◆		◆	

TTU-4



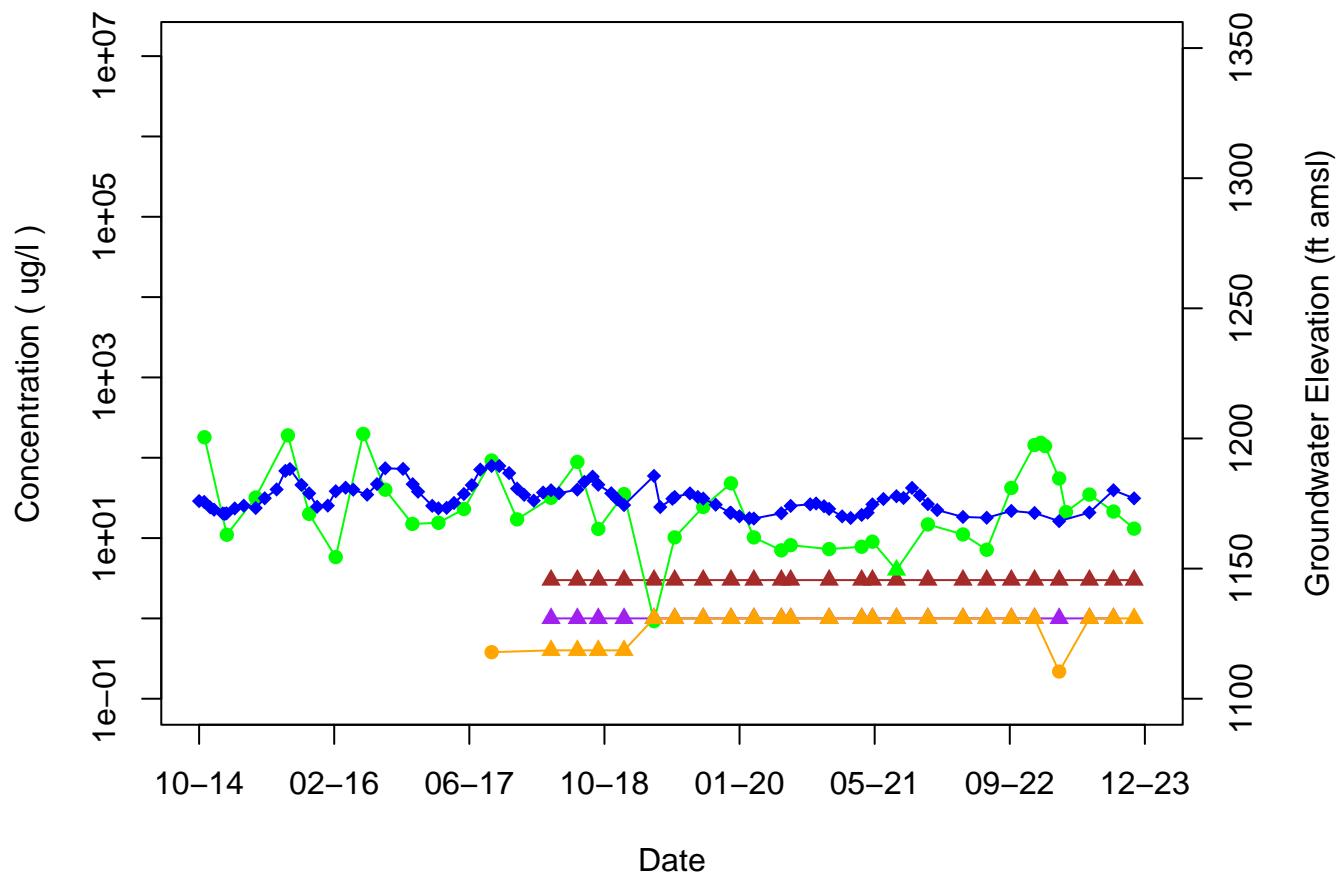
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

TTU-5



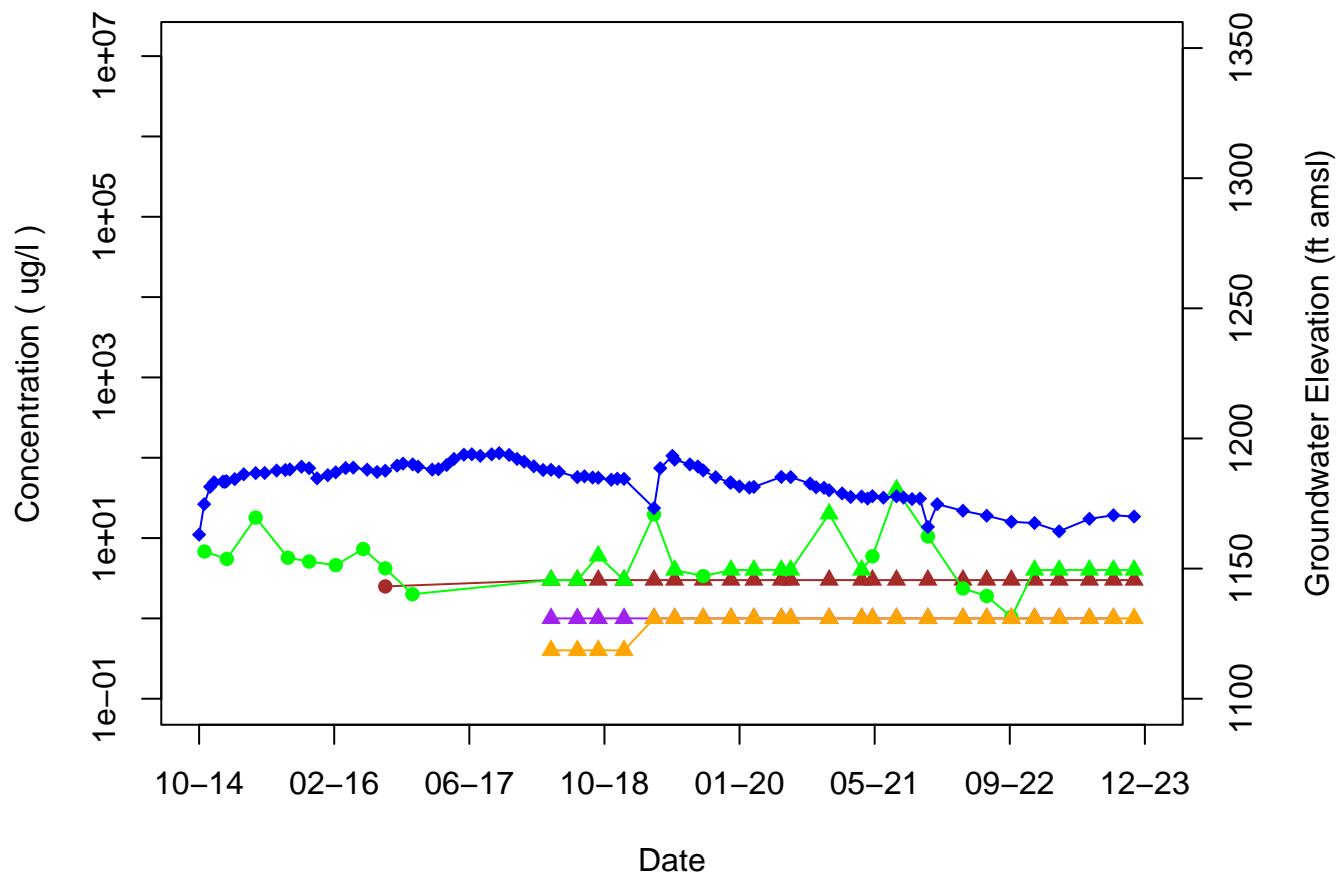
● Detect	○ 1,1-Dichloroethene	○ Trichloroethene
▲ Non-Detect	● 1,4-Dioxane	● Perchlorate
◆ Groundwater Elevation	◆	◆

TTU-6



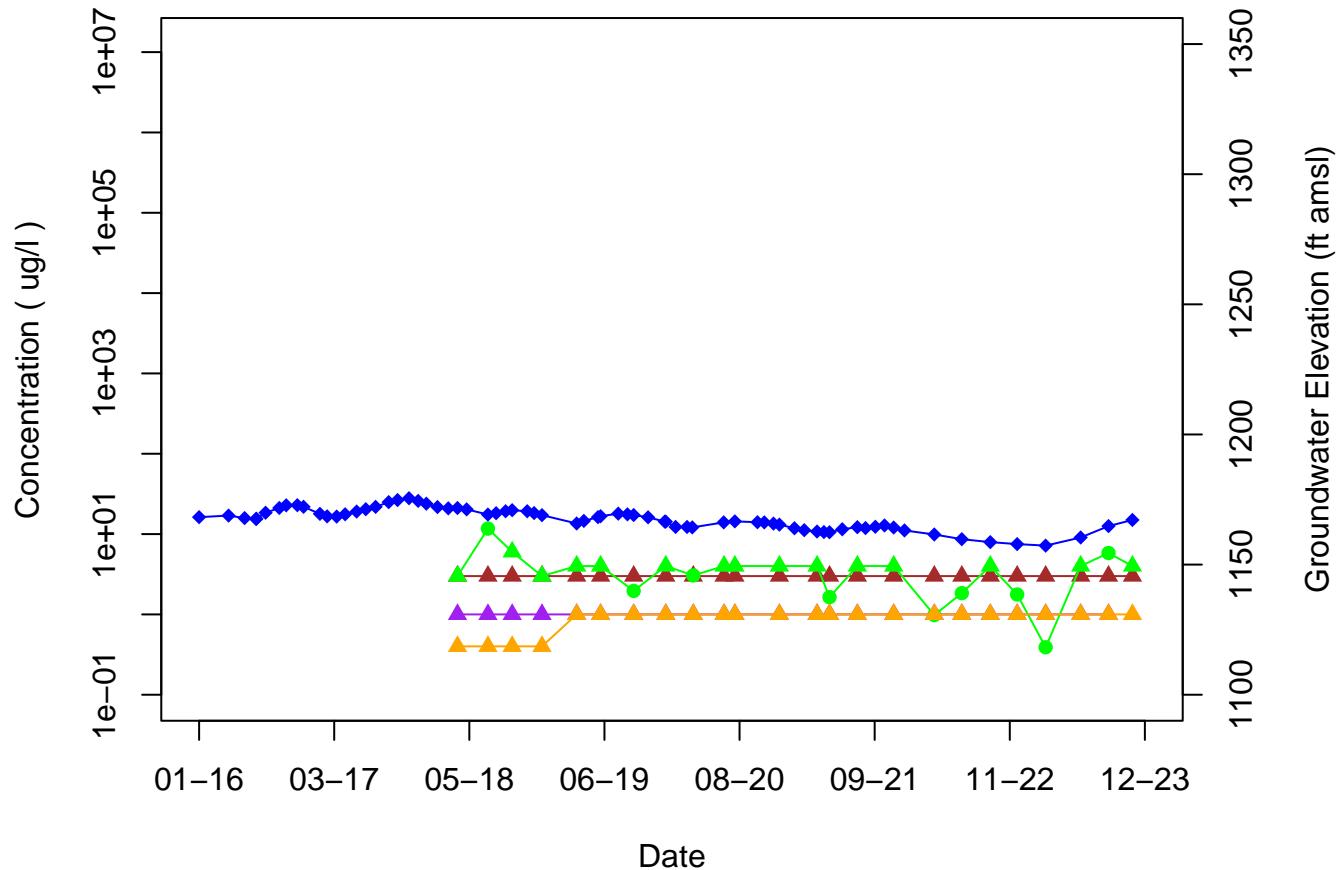
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

TTU-7



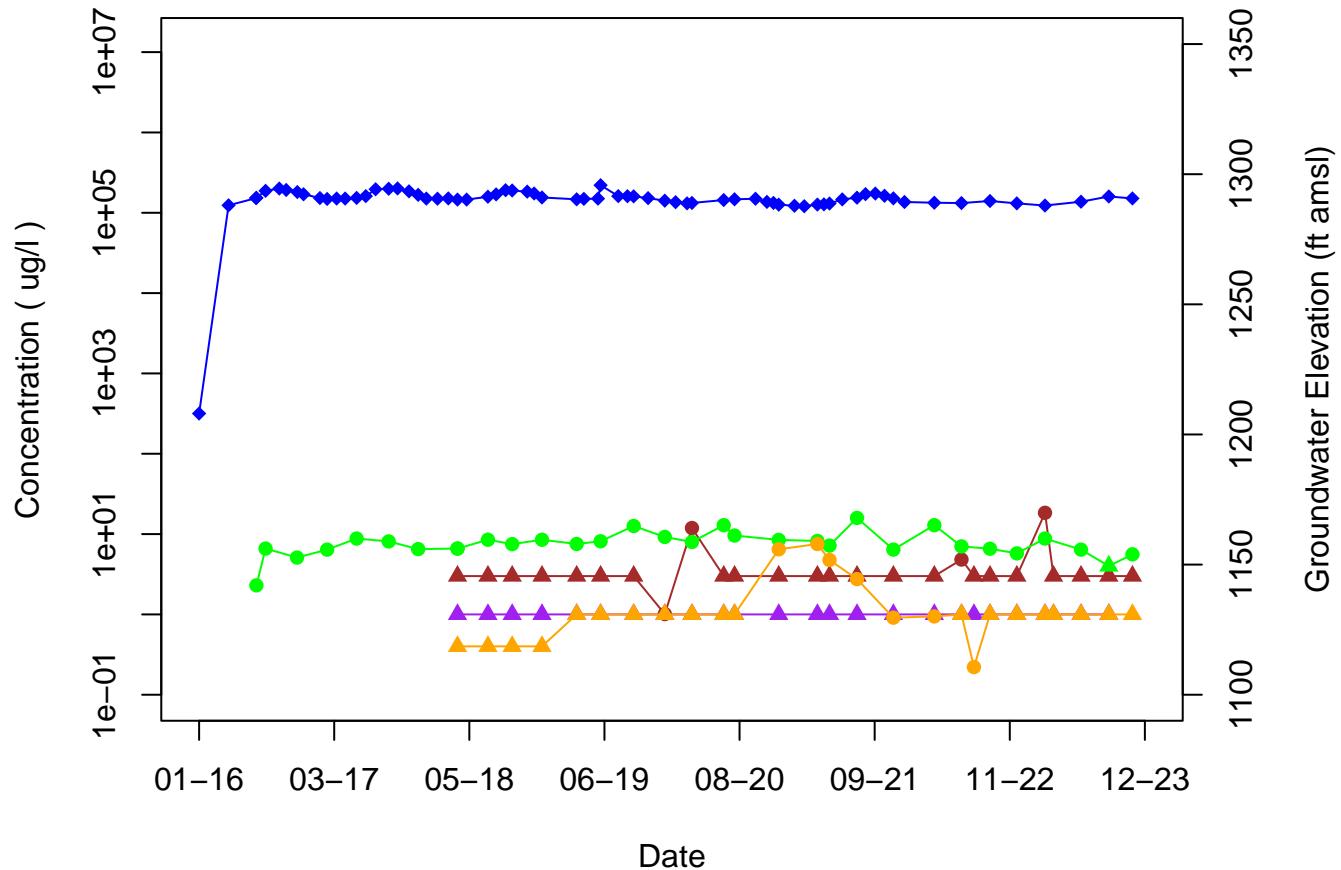
- | | | |
|-------------------------|----------------------|-------------------|
| ● Detect | ○ 1,1-Dichloroethene | ○ Trichloroethene |
| ▲ Non-Detect | ● 1,4-Dioxane | △ Perchlorate |
| ◆ Groundwater Elevation | △ | ○ |

TTU-8



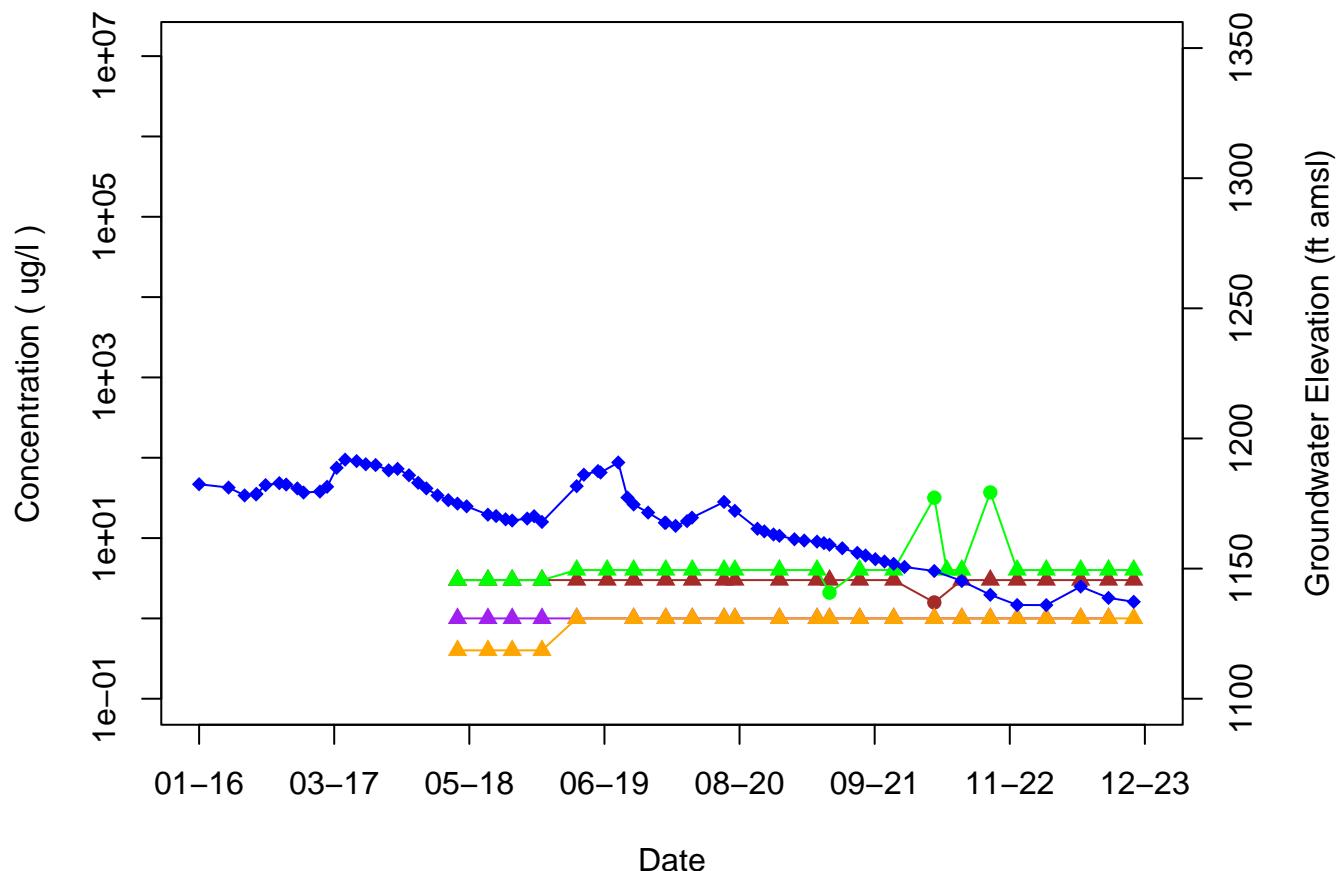
- | | | |
|-------------------------|----------------------|-------------------|
| ● Detect | ○ 1,1-Dichloroethene | ○ Trichloroethene |
| ▲ Non-Detect | ● 1,4-Dioxane | ■ Perchlorate |
| ◆ Groundwater Elevation | ■ | |

TTU-9A



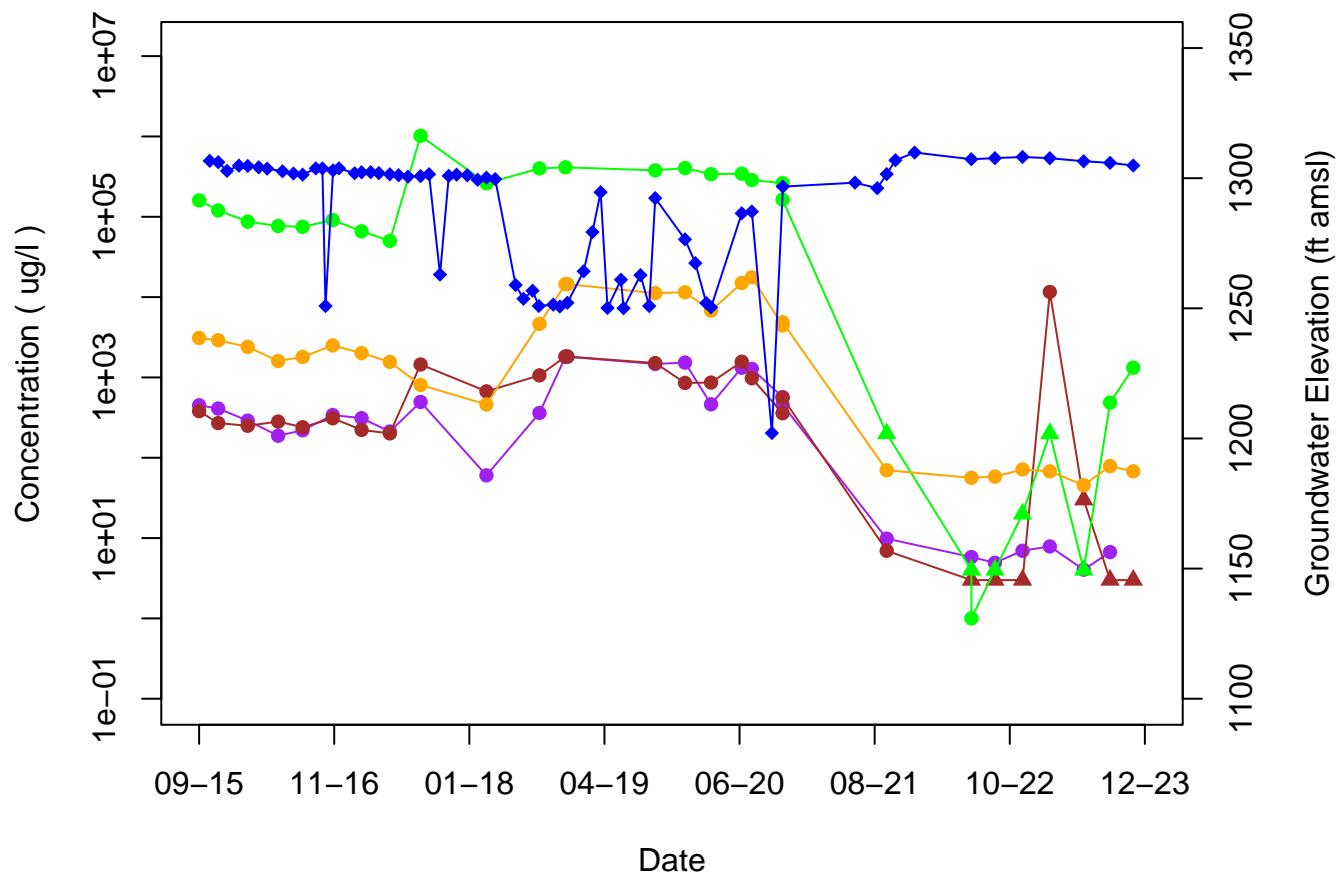
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Trichloroethene
- Perchlorate

TTU-10



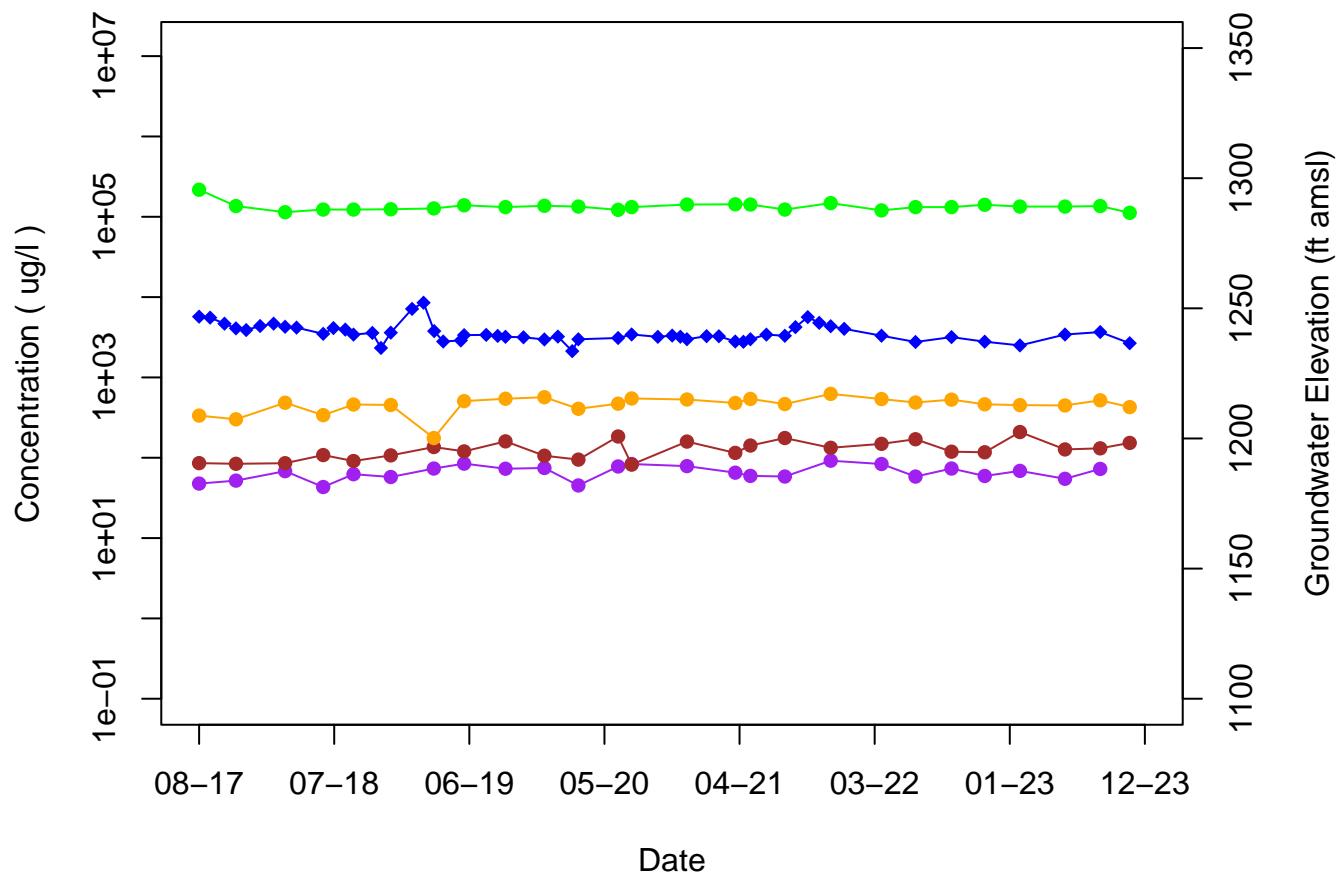
●	Detect	●	1,1-Dichloroethene	●	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	
◆	Groundwater Elevation	●	Perchlorate	●	

TTU-11



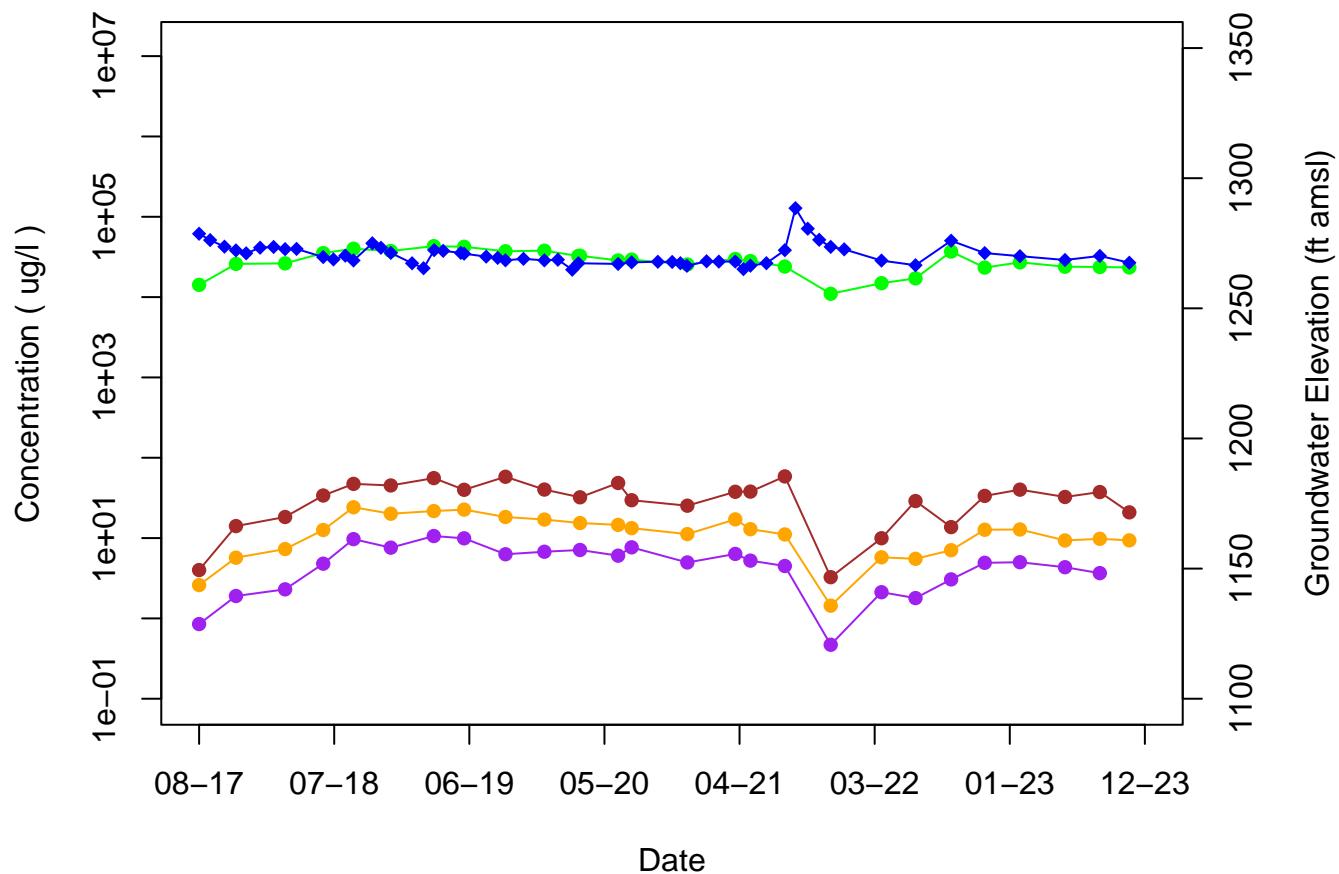
● Detect	○ 1,1-Dichloroethene	○ Trichloroethene
▲ Non-Detect	■ 1,4-Dioxane	
◆ Groundwater Elevation	● Perchlorate	

TTU-12



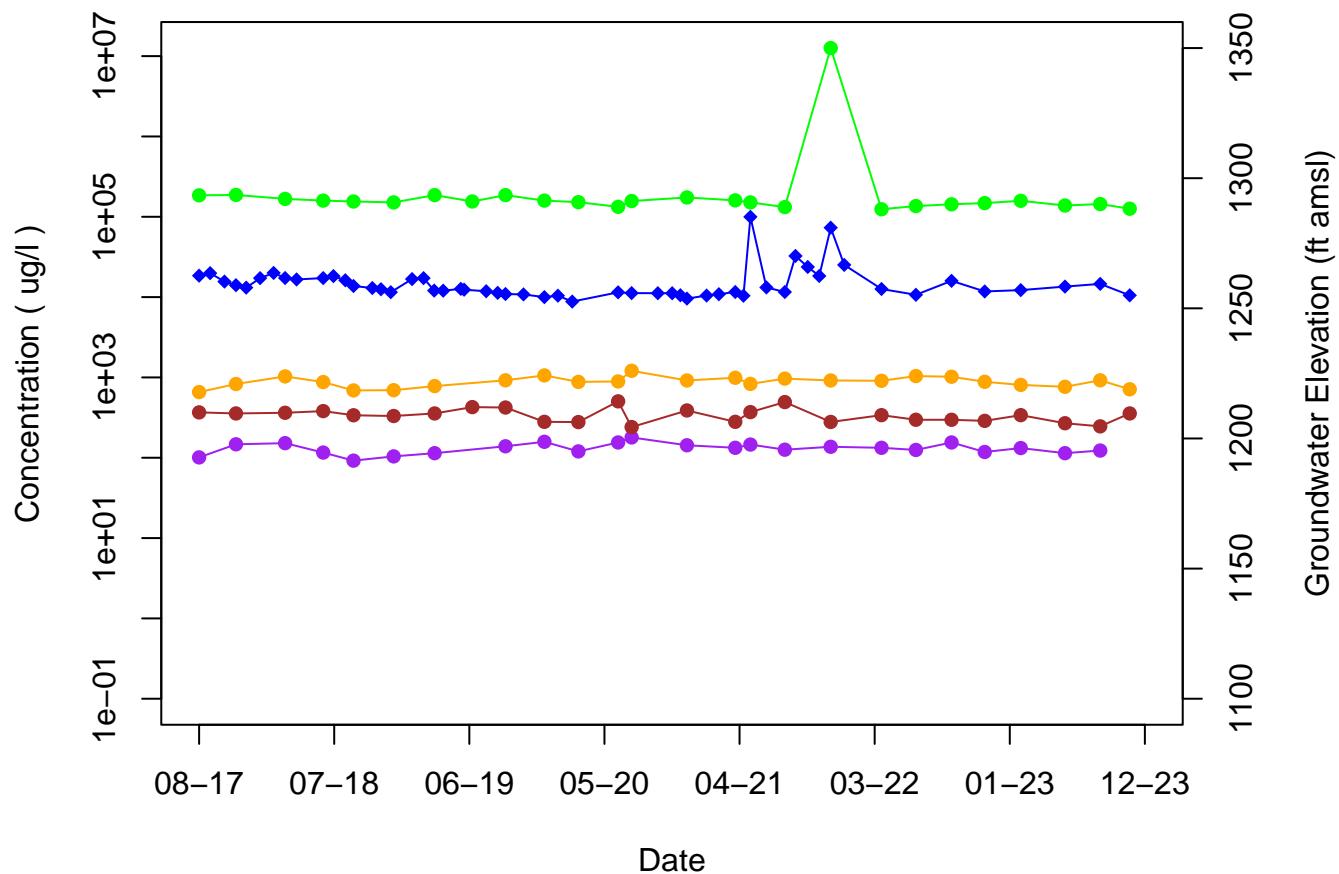
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Trichloroethene
- Perchlorate

TTU-13



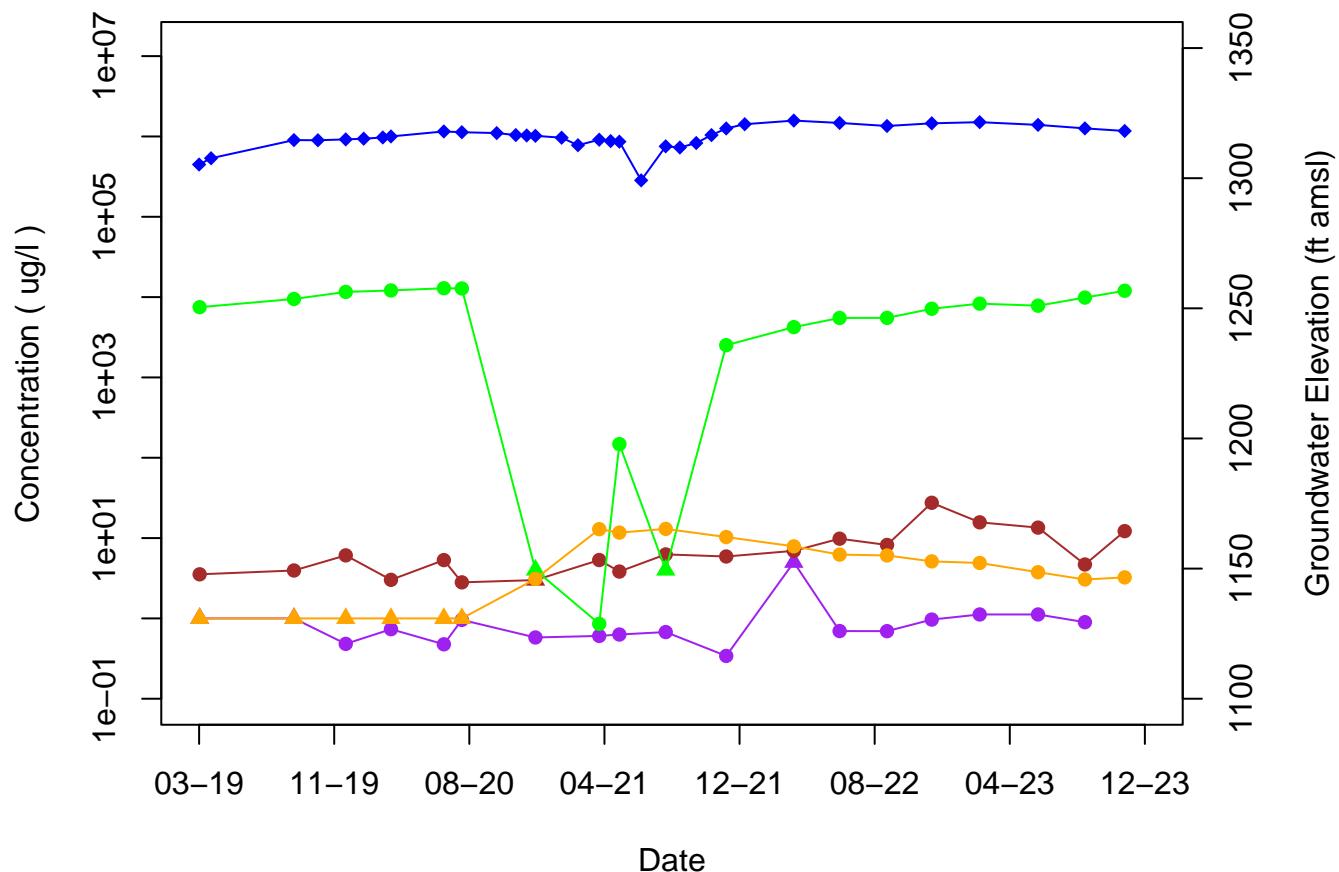
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethylene

TTU-14



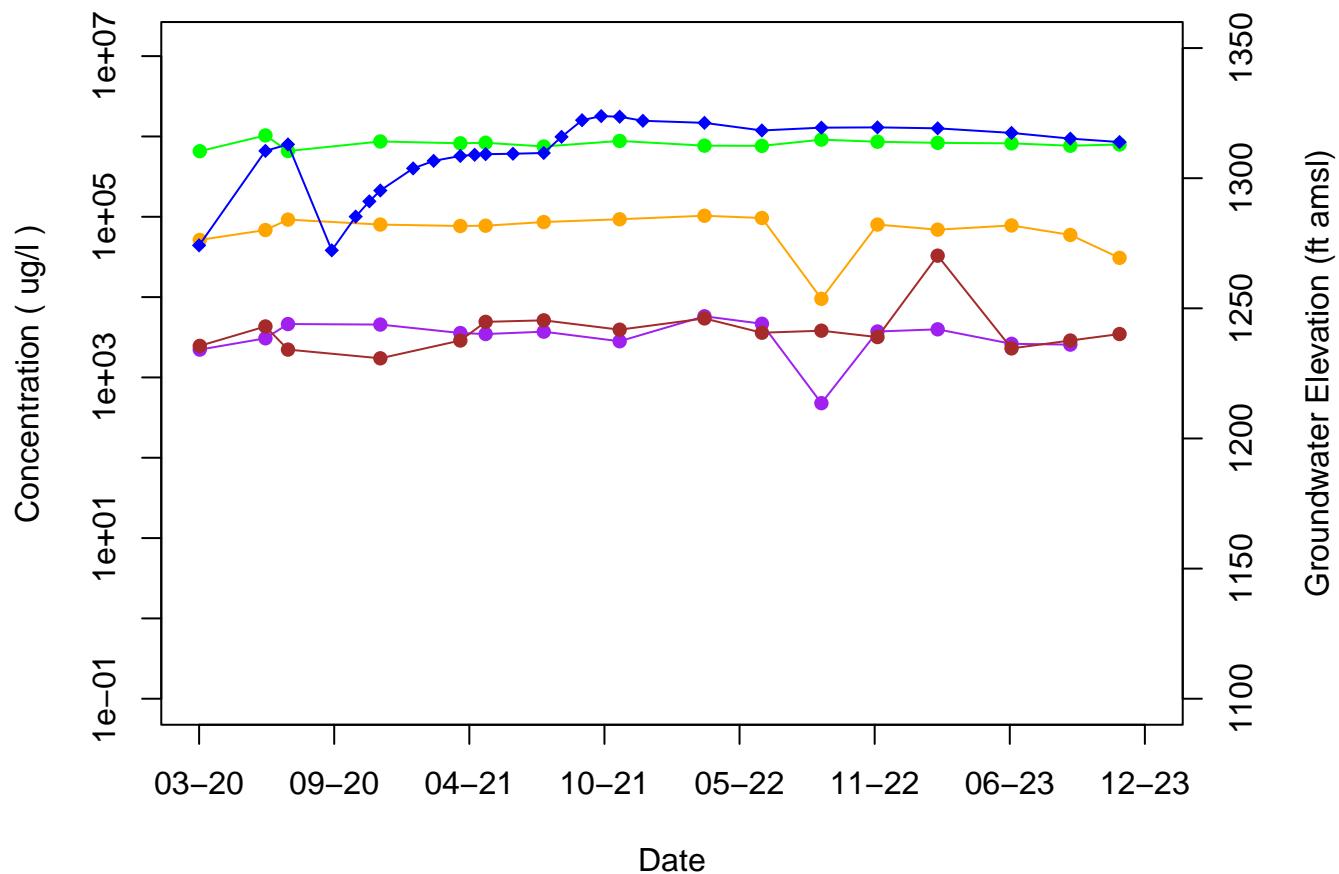
● Detect	○ 1,1-Dichloroethene	● Trichloroethene
▲ Non-Detect	● 1,4-Dioxane	
◆ Groundwater Elevation	● Perchlorate	

TTU-15



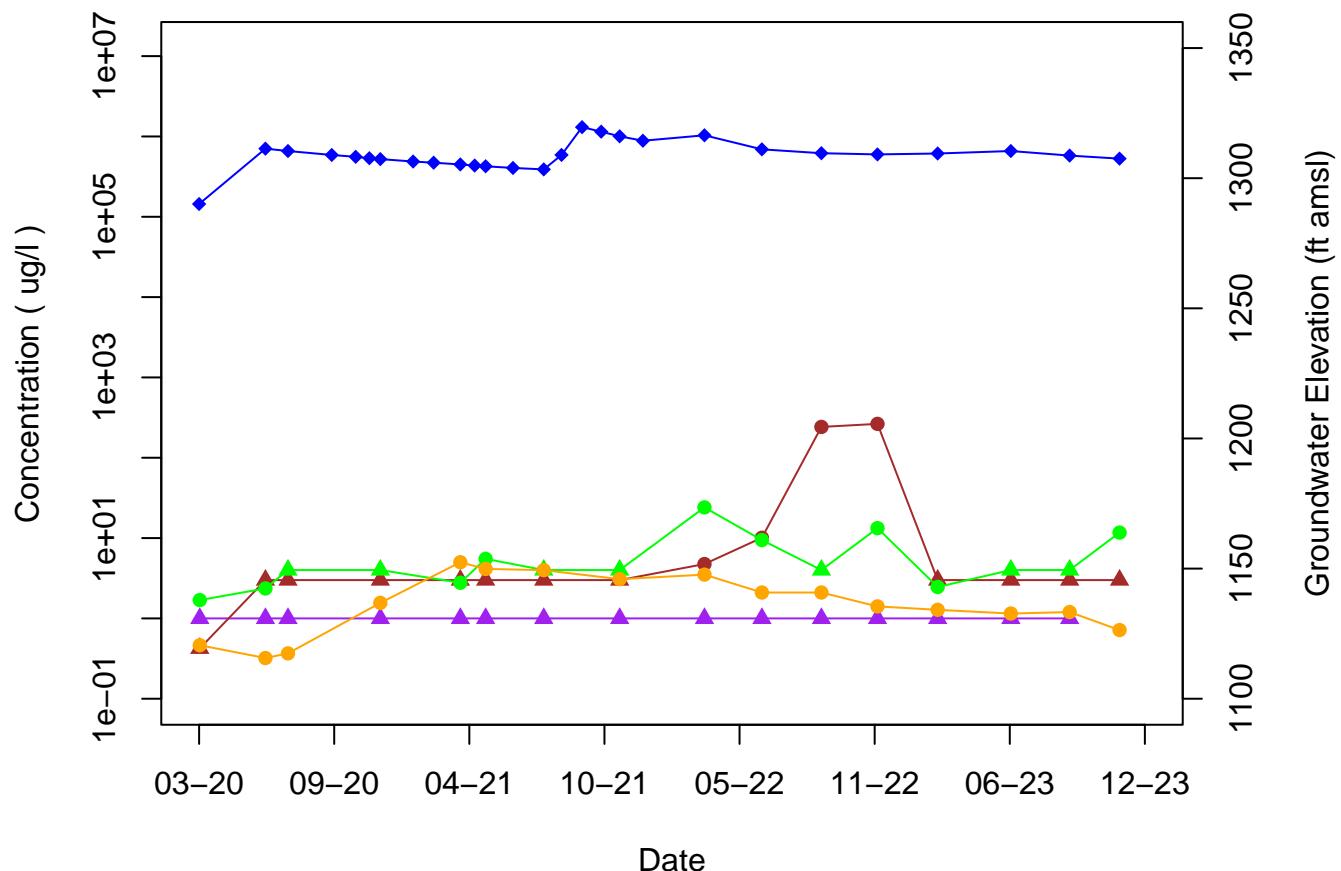
●	Detect	●	1,1-Dichloroethene	●	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	
◆	Groundwater Elevation	●	Perchlorate	●	

TTU-16



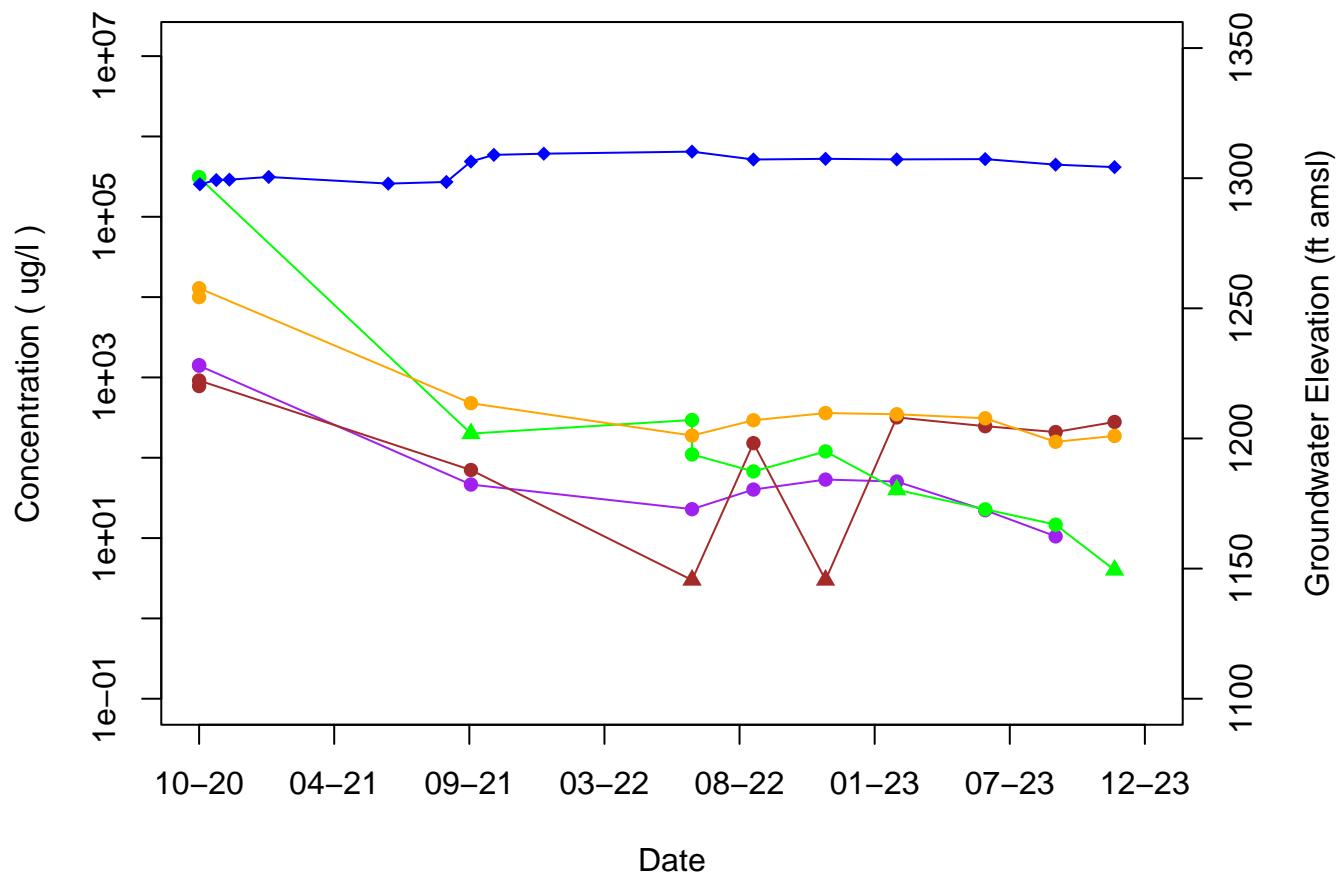
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

TTU-17



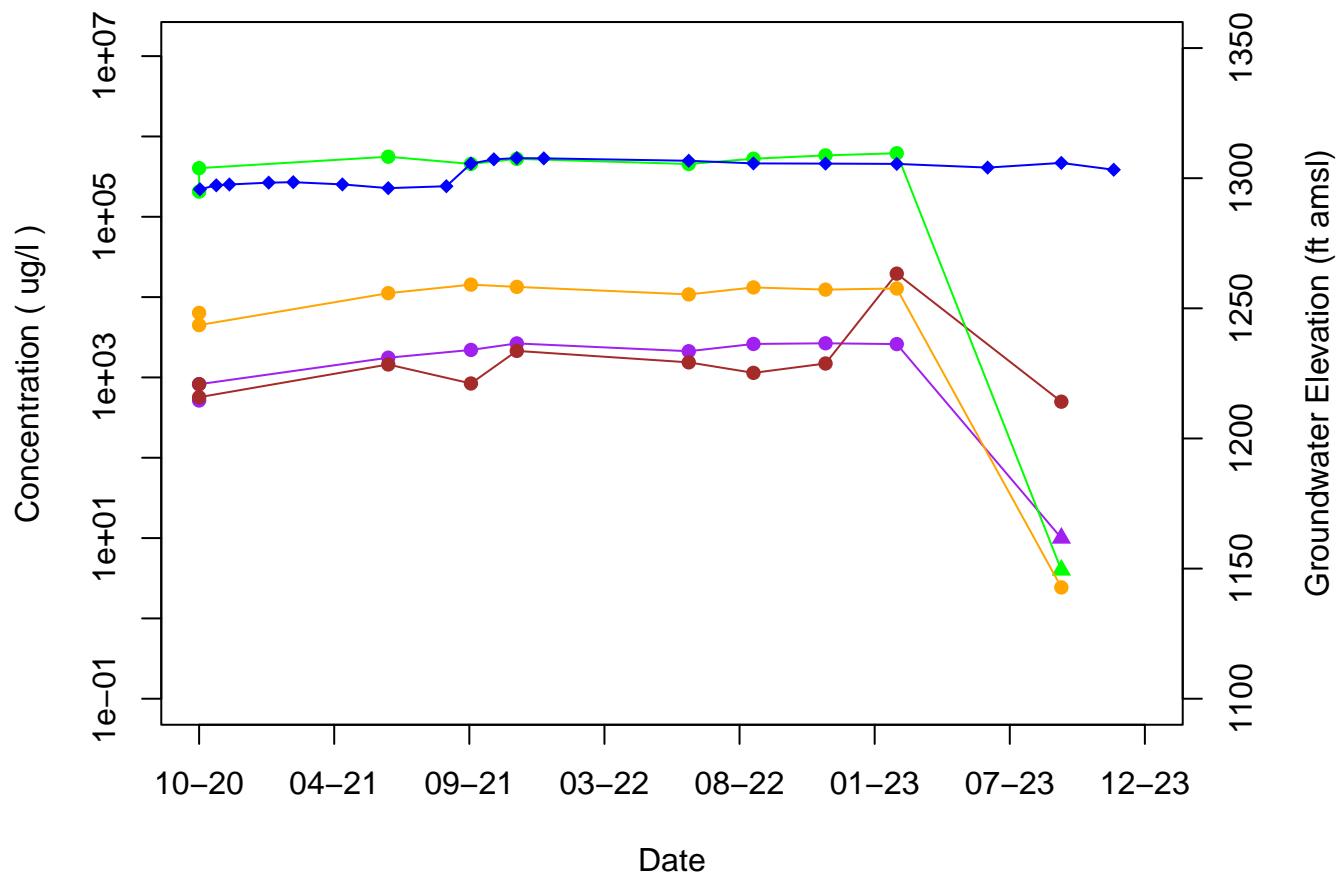
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- △ Trichloroethene
- Perchlorate

TTU-19



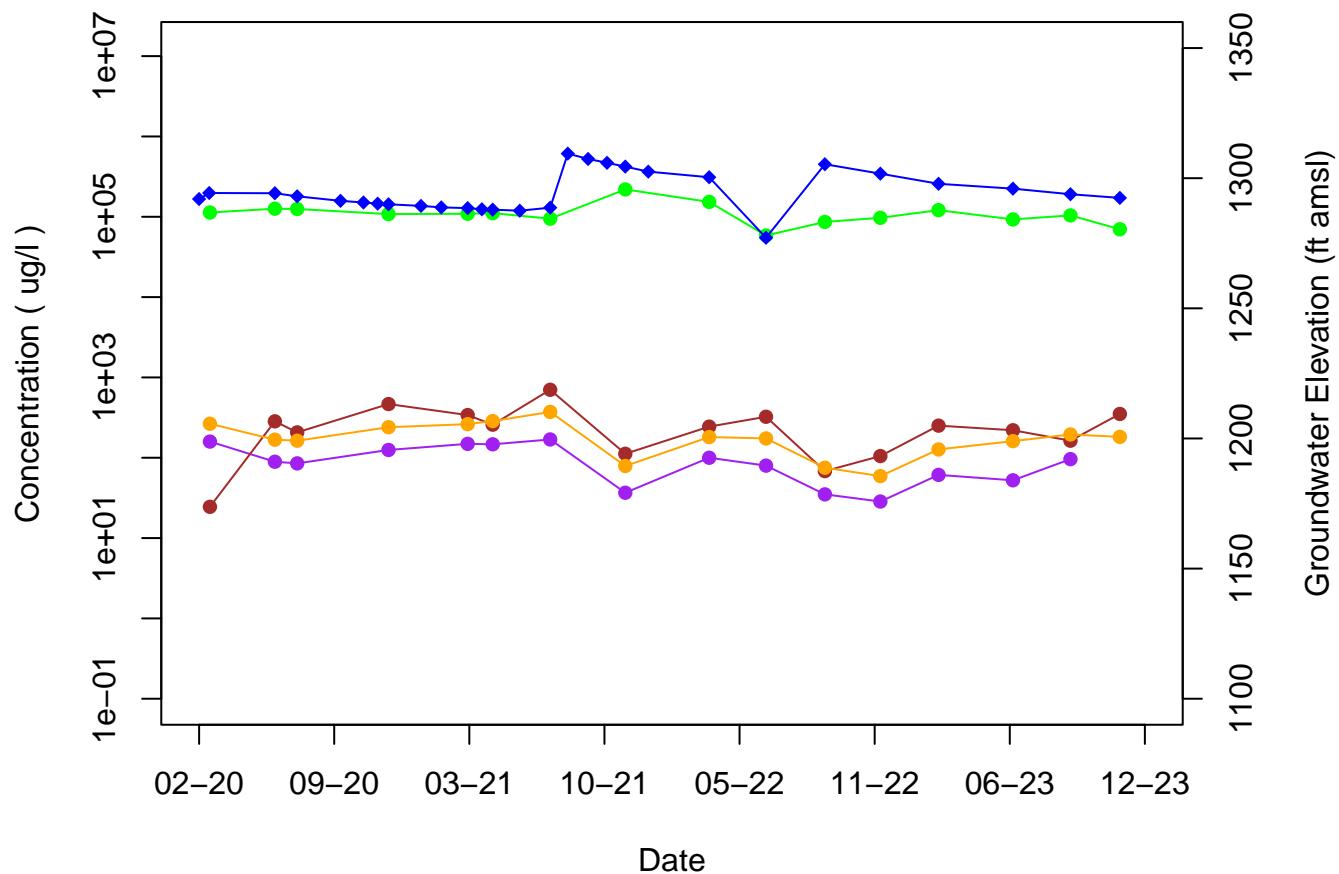
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

TTU-20



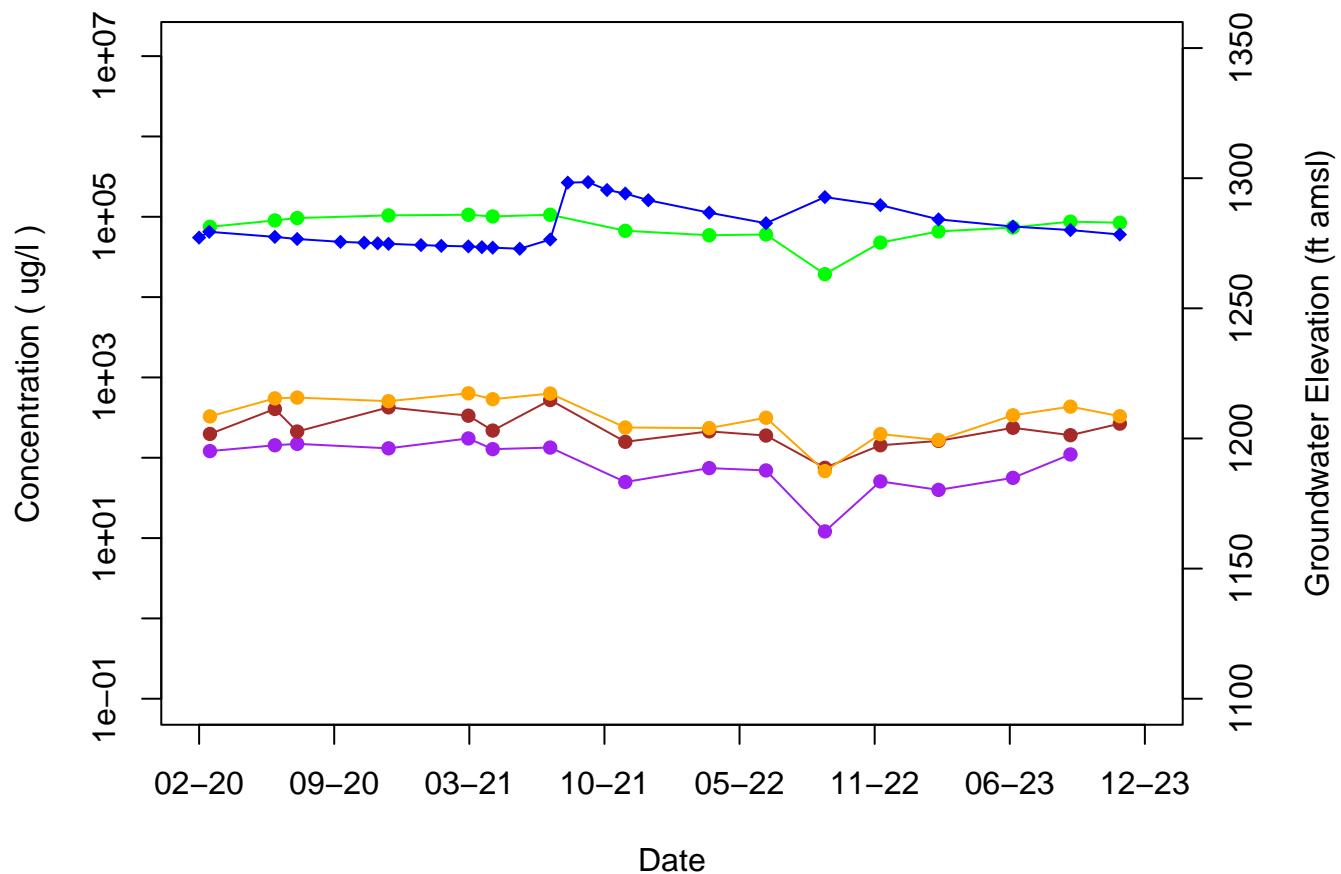
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate
- Trichloroethene

TTU-EX-1



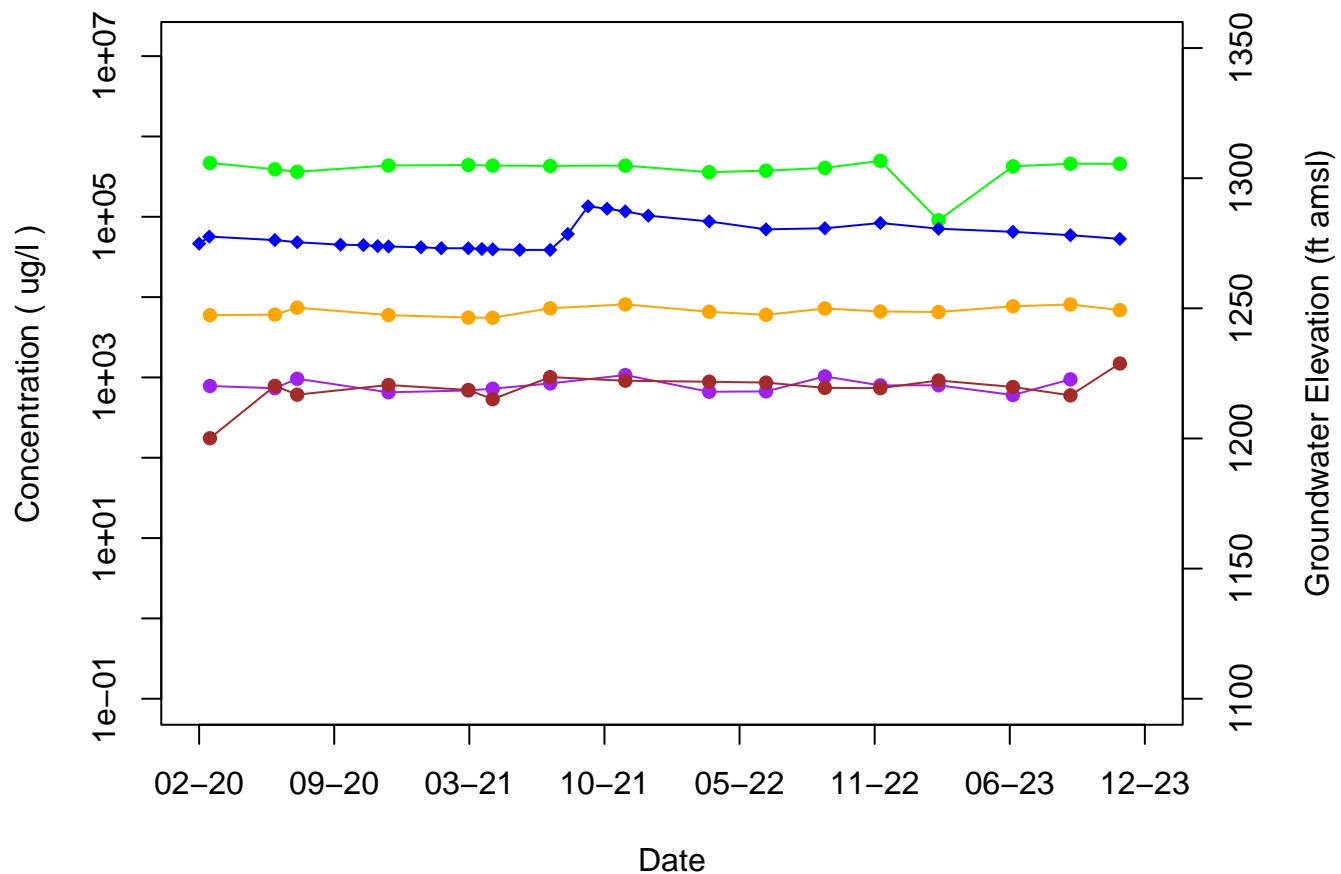
●	Detect	○	1,1-Dichloroethene	●	Trichloroethene
▲	Non-Detect	■	1,4-Dioxane	●	Perchlorate
◆	Groundwater Elevation	●			

TTU-EX-2



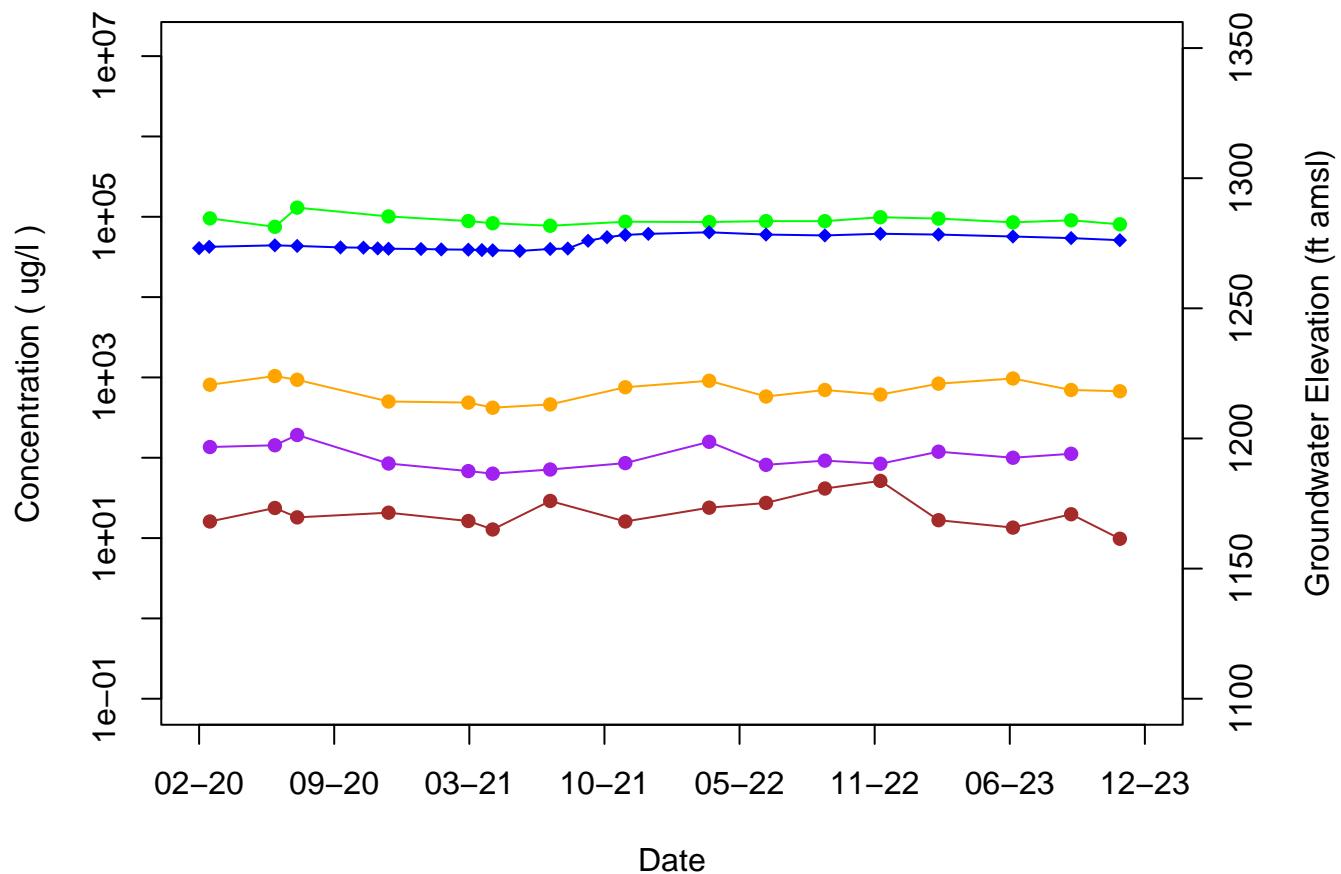
●	Detect	●	1,1-Dichloroethene	●	Trichloroethene
▲	Non-Detect	▲	1,4-Dioxane	▲	
◆	Groundwater Elevation	◆	Perchlorate	◆	

TTU-EX-3



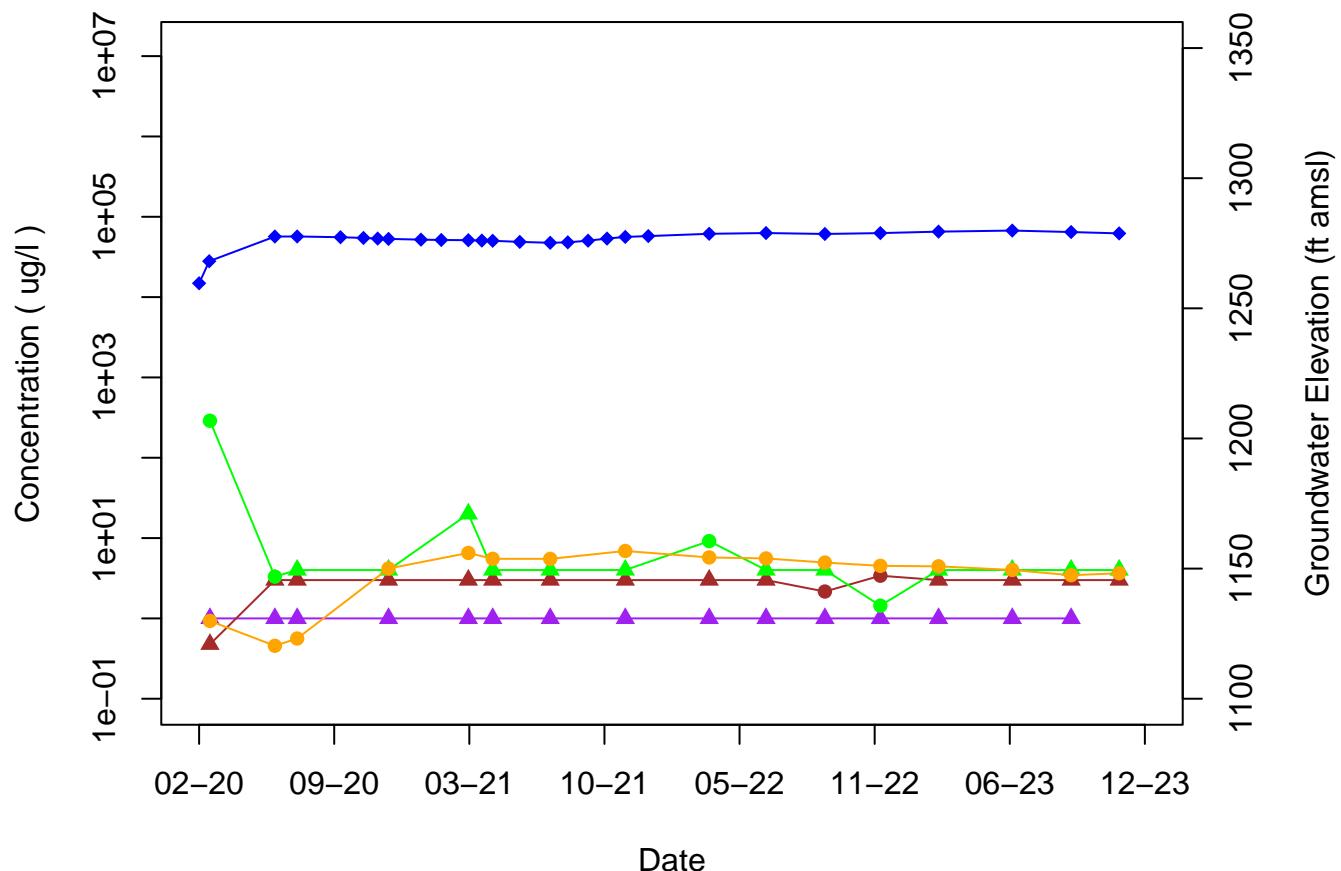
- Detect
- ▲ Non-Detect
- ◆ Groundwater Elevation
- 1,1-Dichloroethene
- 1,4-Dioxane
- Perchlorate

TTU-EX-4



●	Detect	○	1,1-Dichloroethene	○	Trichloroethene
▲	Non-Detect	●	1,4-Dioxane	●	Perchlorate
◆	Groundwater Elevation	●			

TTU-EX-5



Date

- | | | |
|-------------------------|----------------------|-------------------|
| ● Detect | ○ 1,1-Dichloroethene | ○ Trichloroethene |
| ▲ Non-Detect | △ 1,4-Dioxane | |
| ◆ Groundwater Elevation | ● Perchlorate | |

Attachment 4 – Data Validation Tables



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 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? _____

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? _____

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? _____

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 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

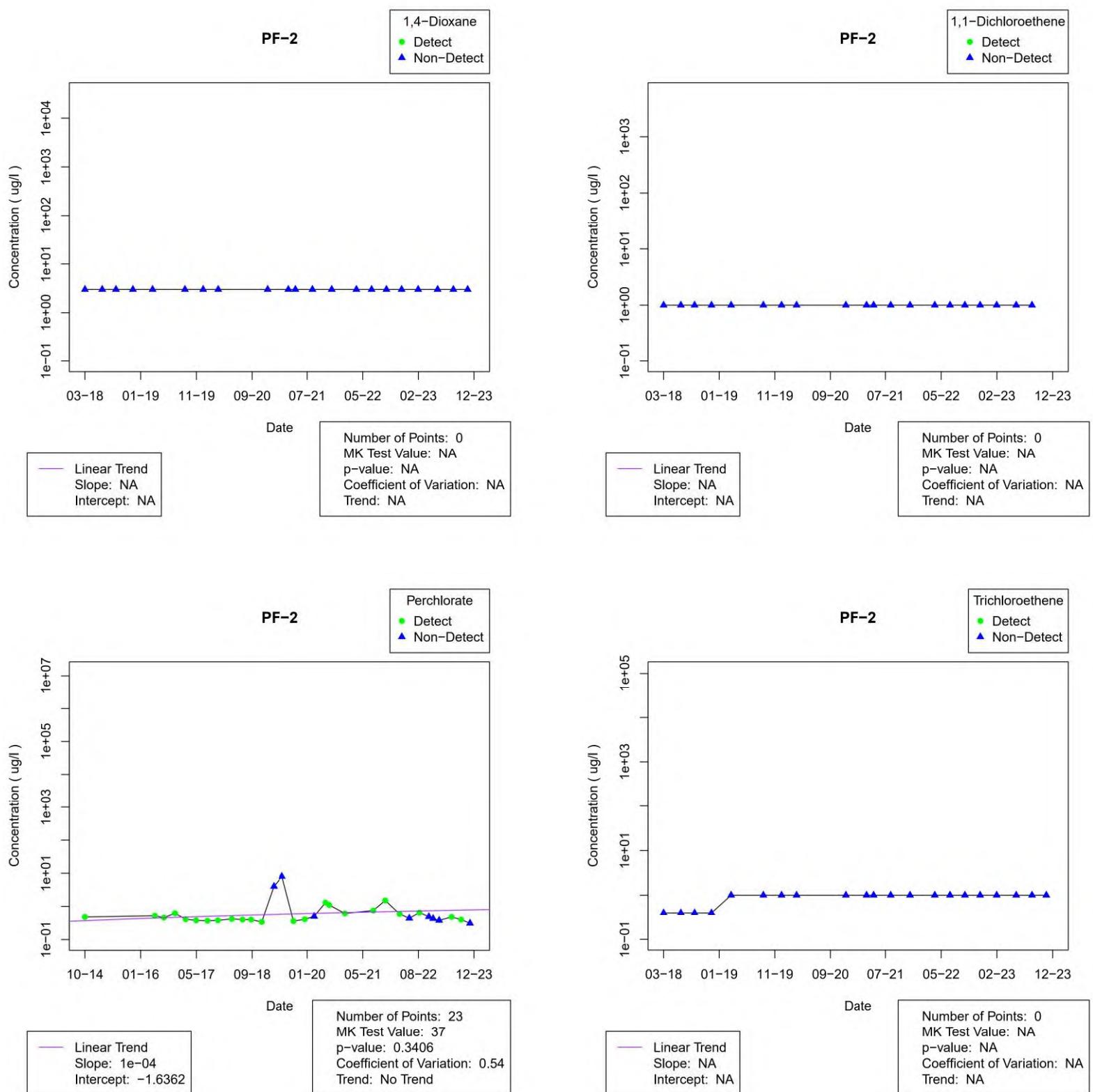
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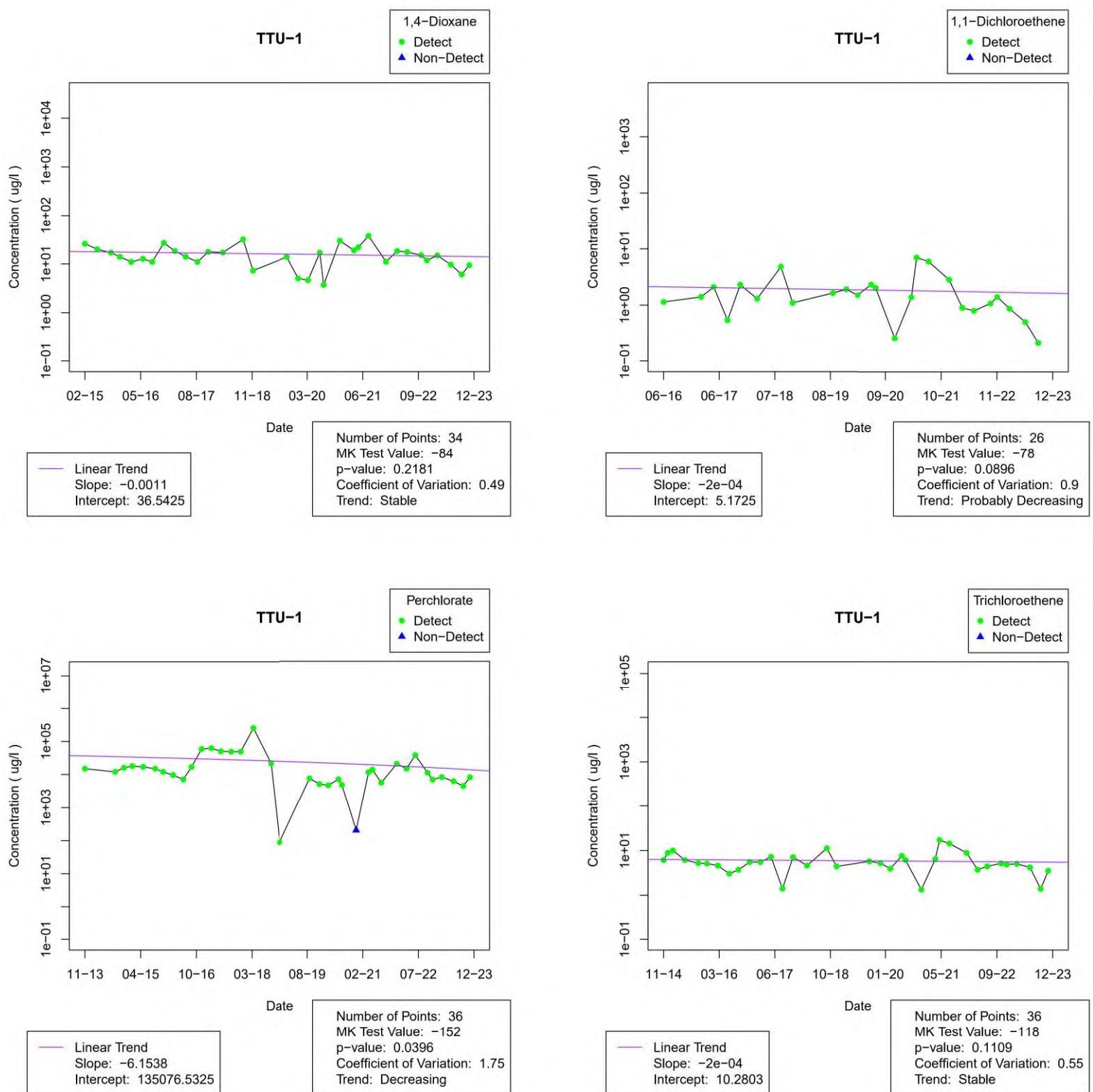
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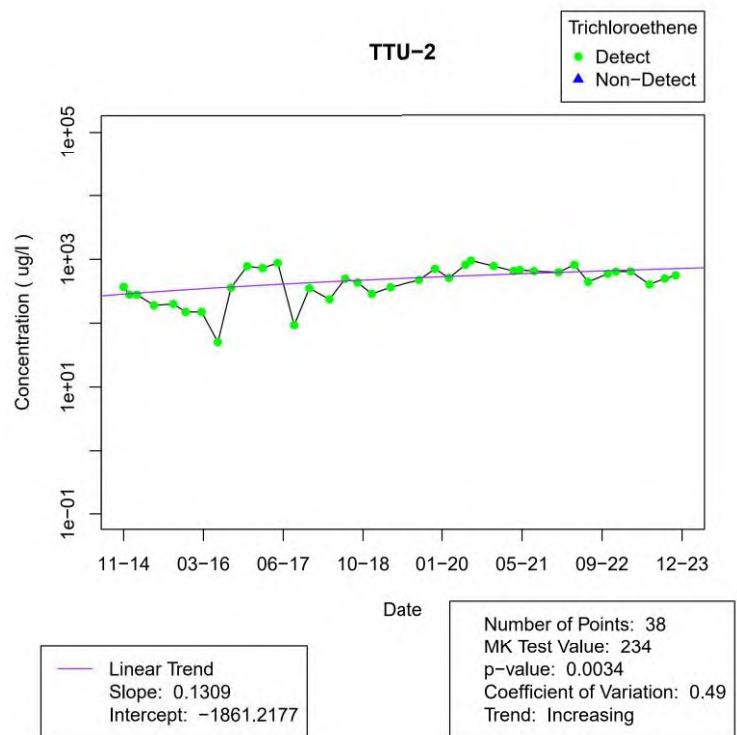
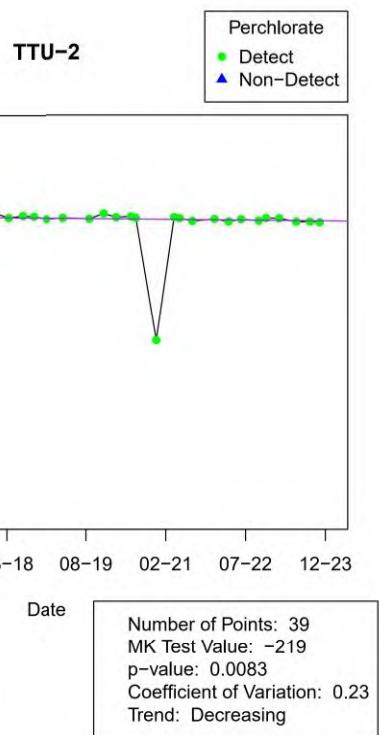
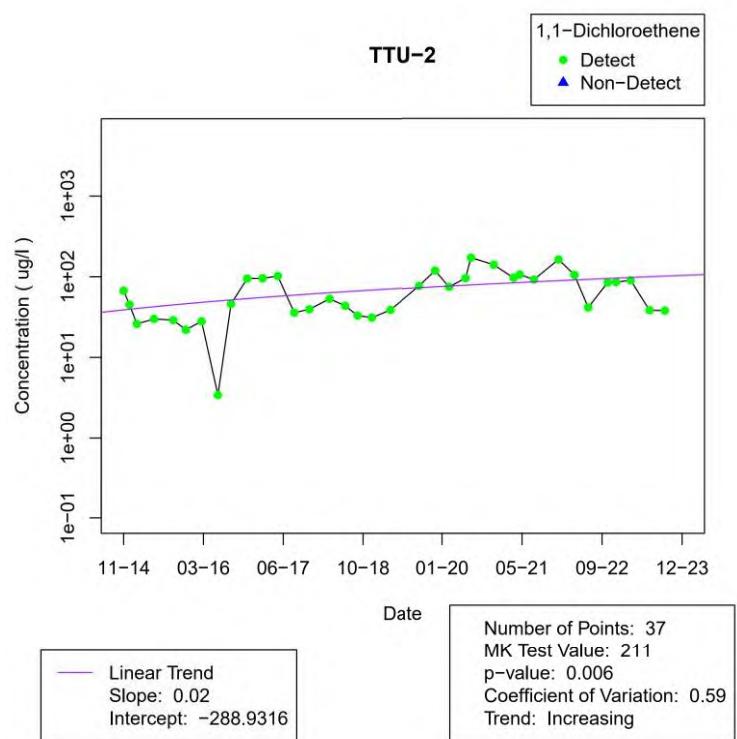
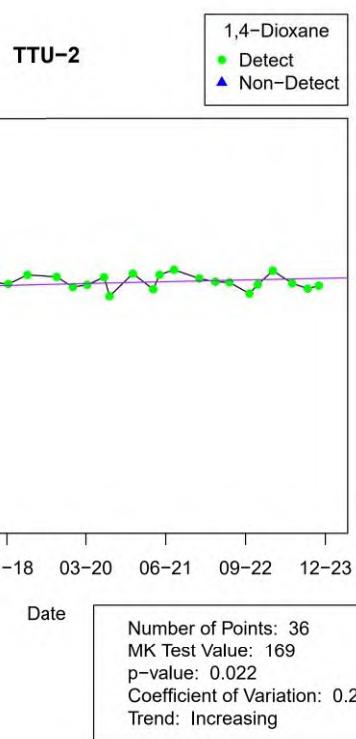
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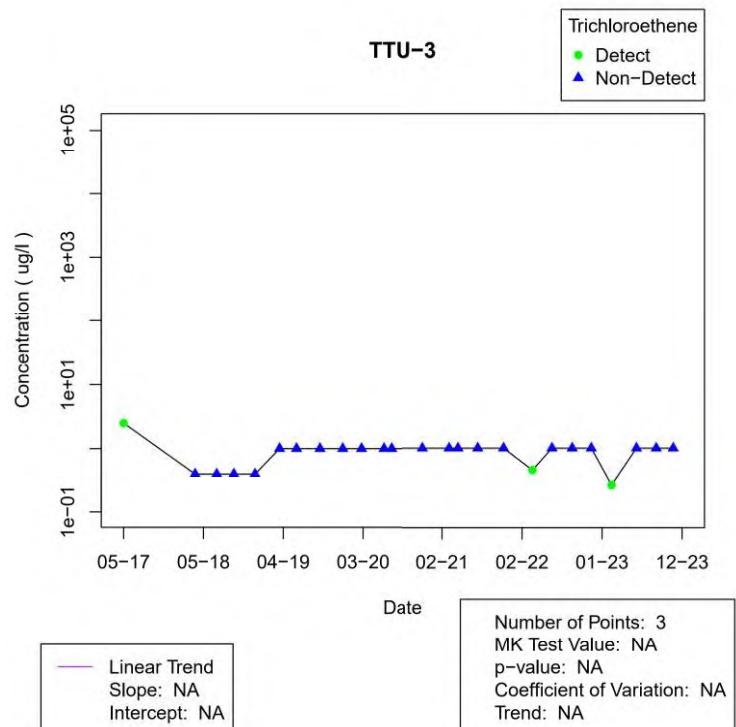
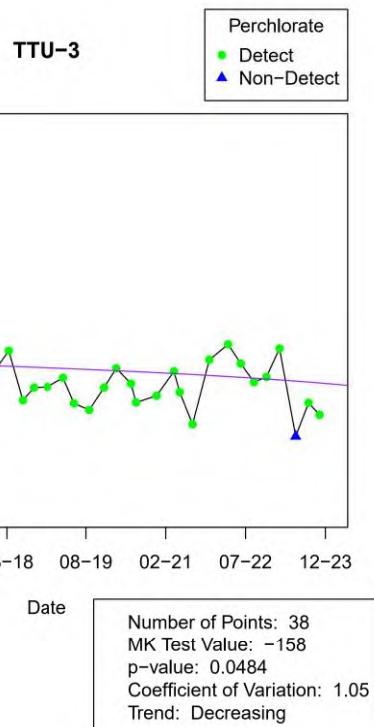
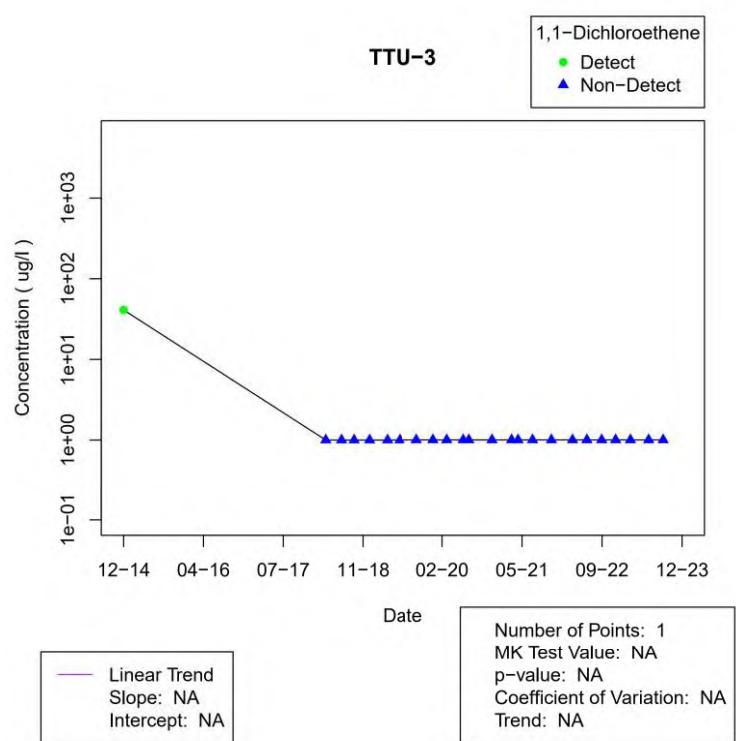
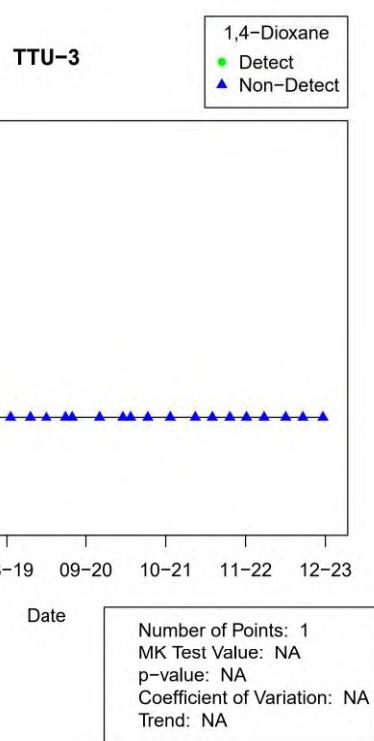
Attachment 5 - Mann-Kendall Trend Analysis

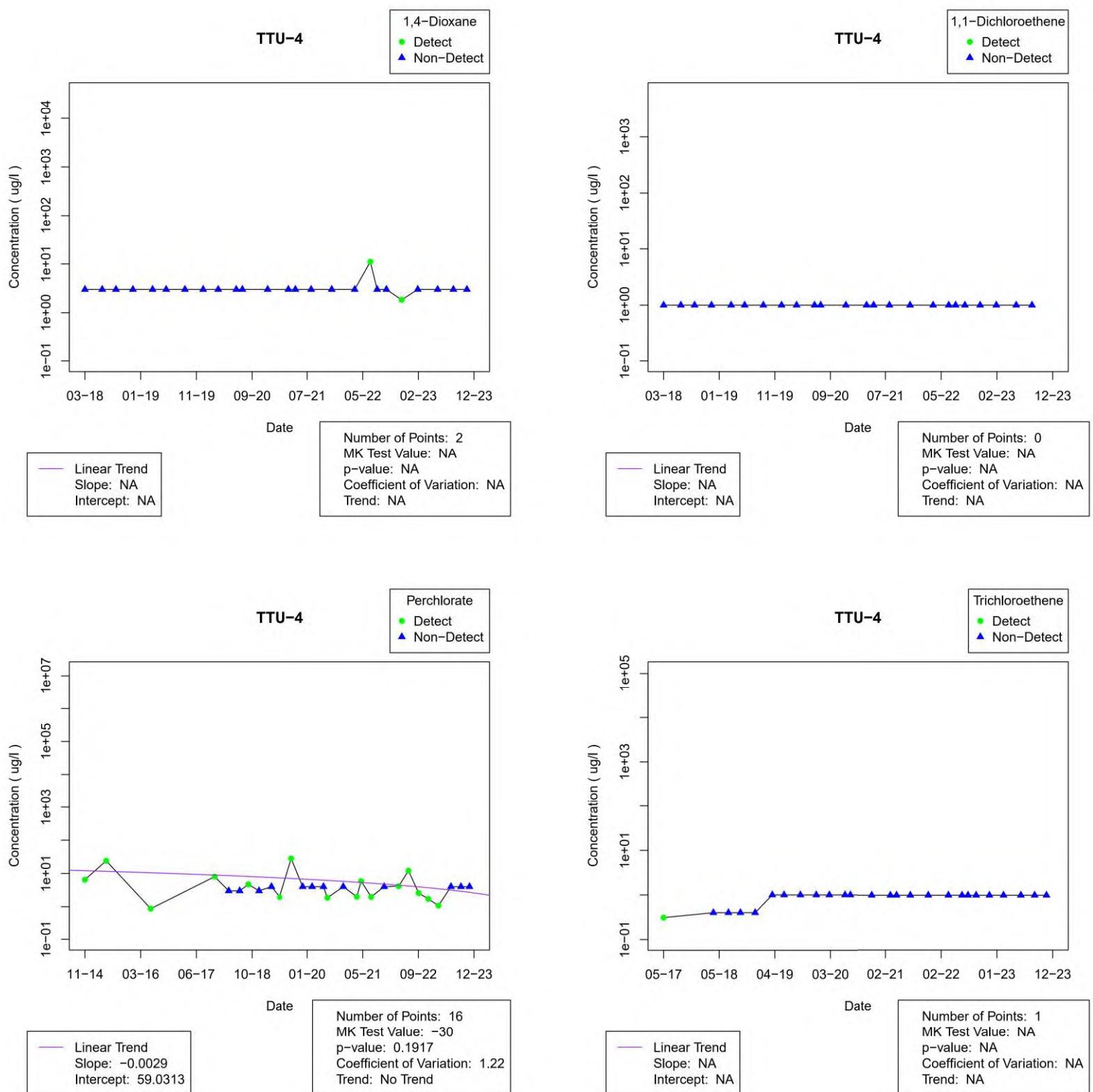
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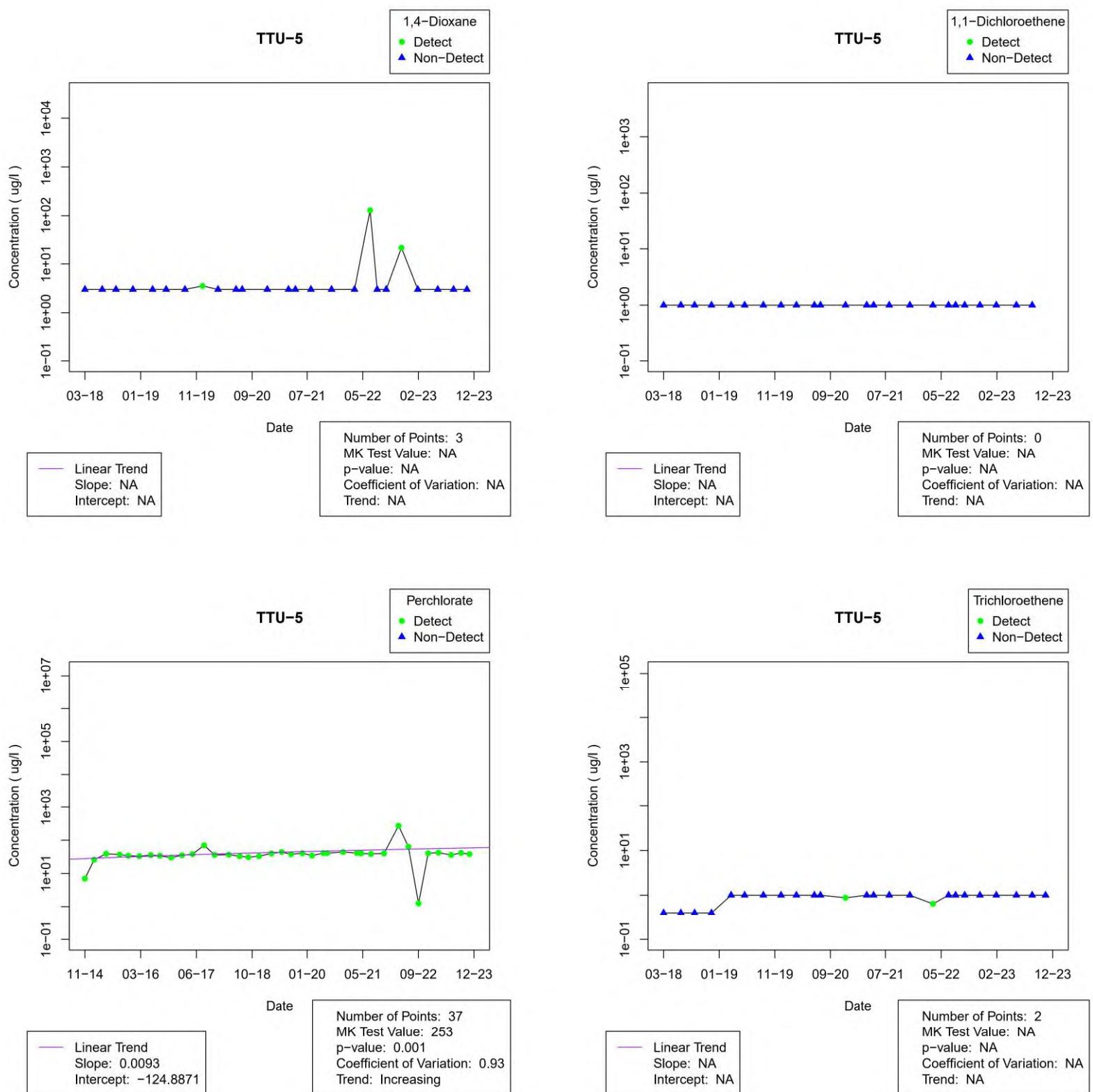


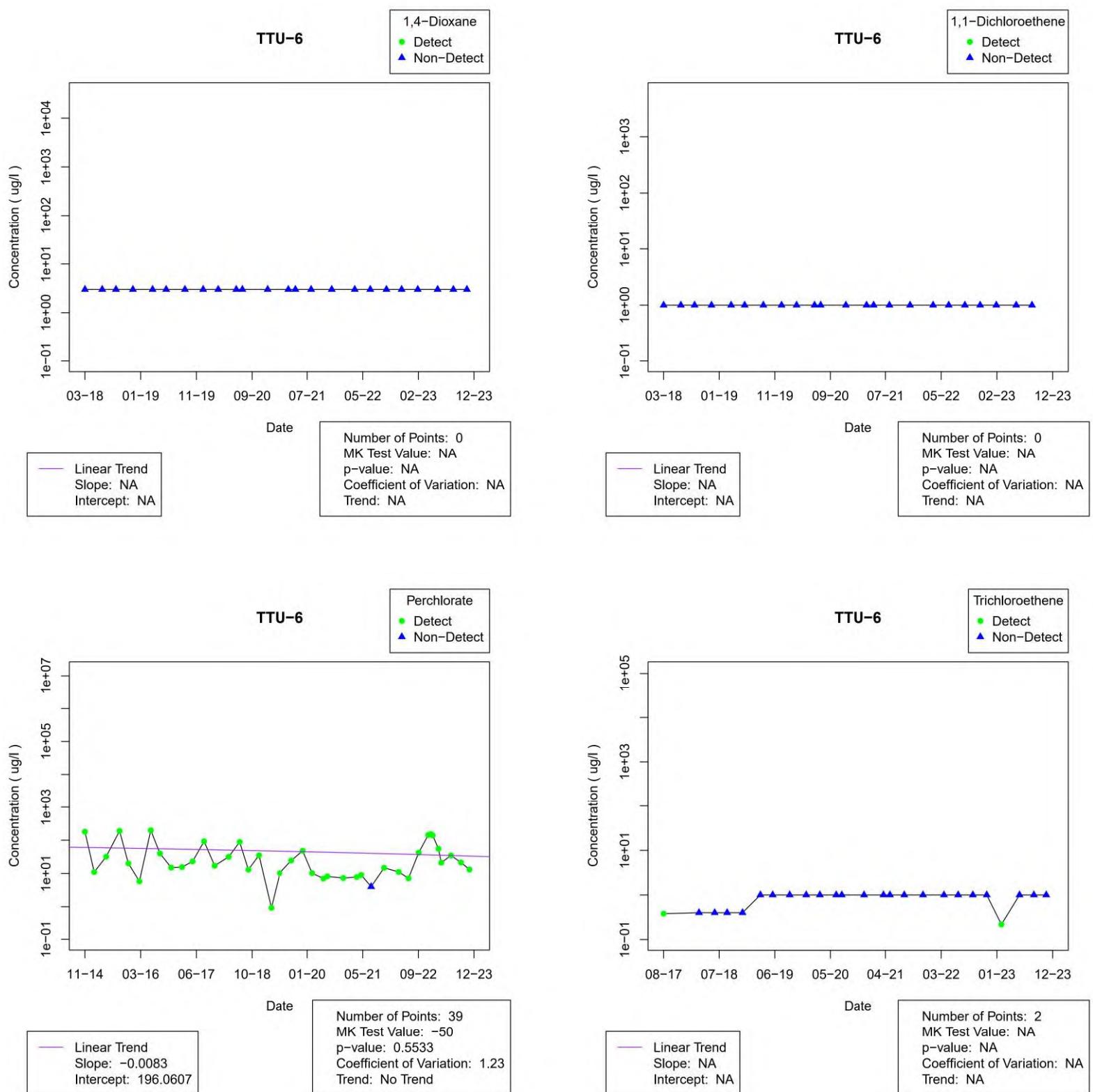


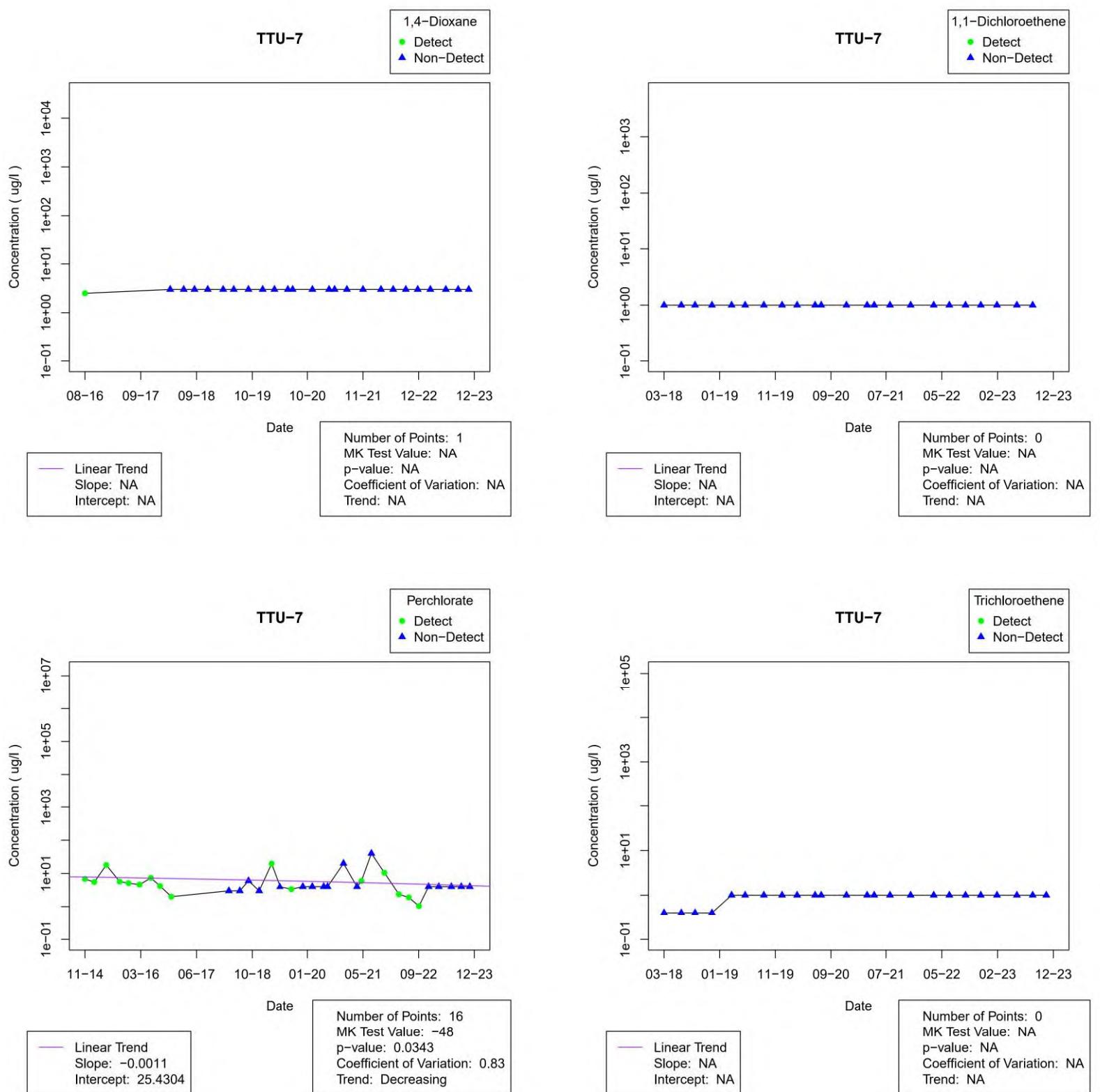


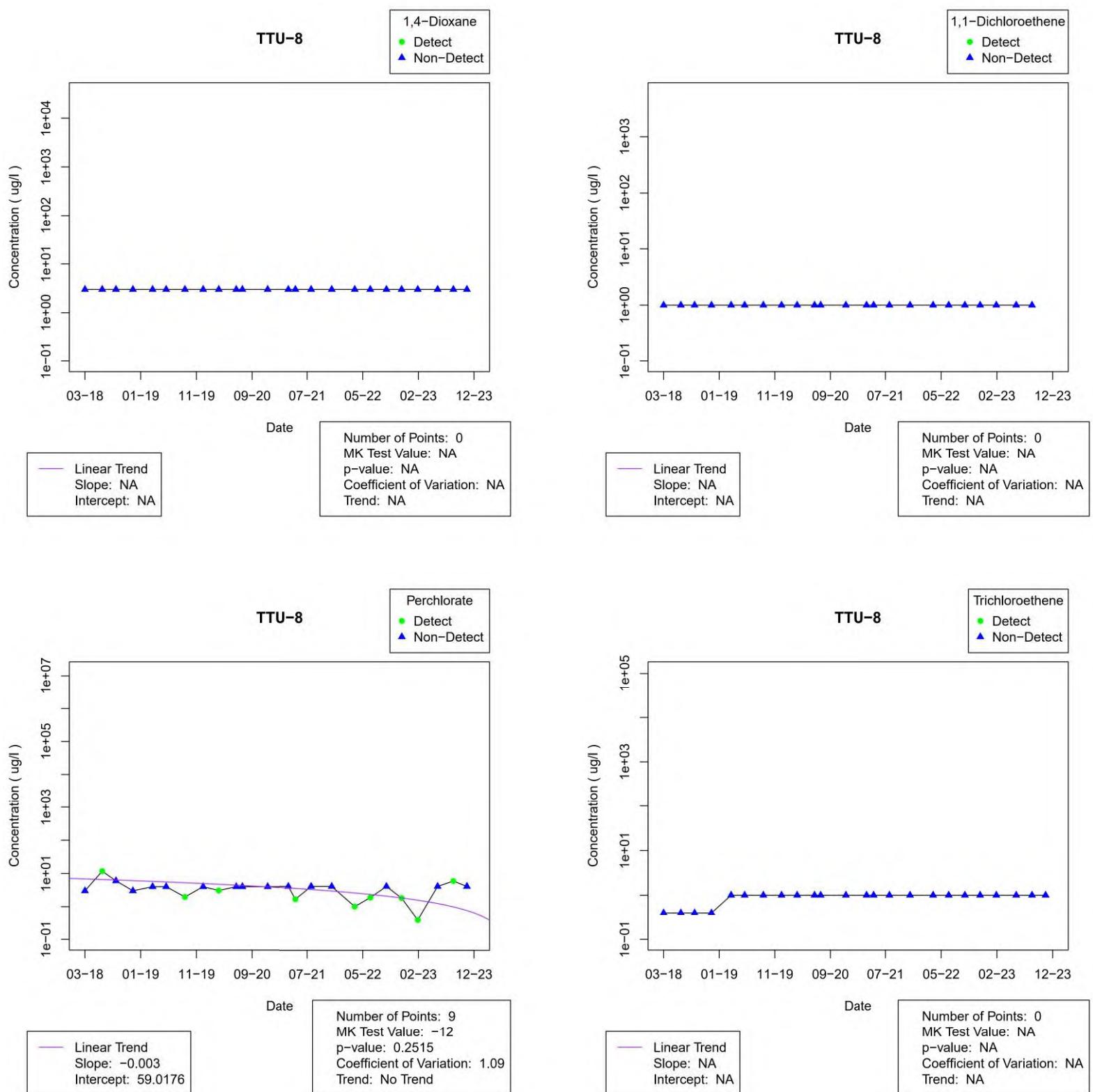


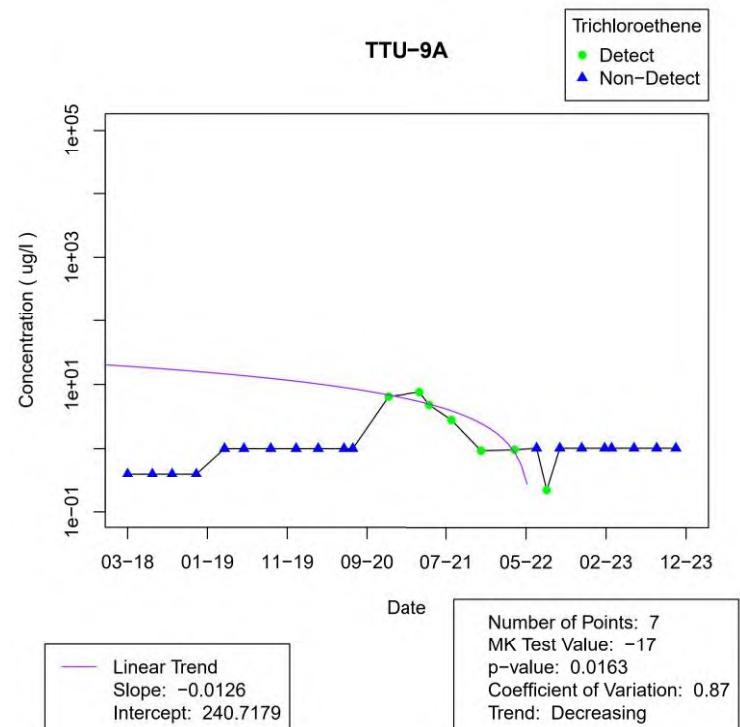
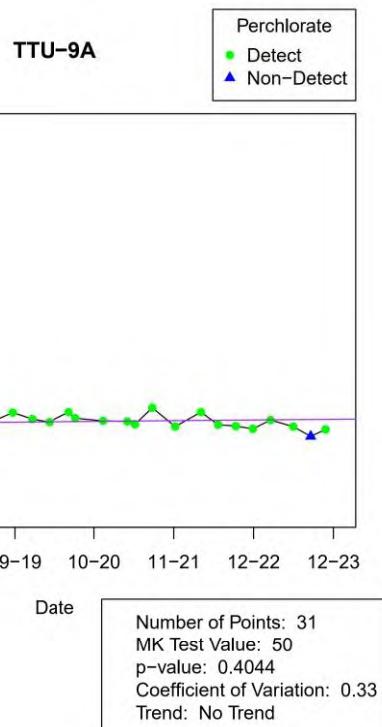
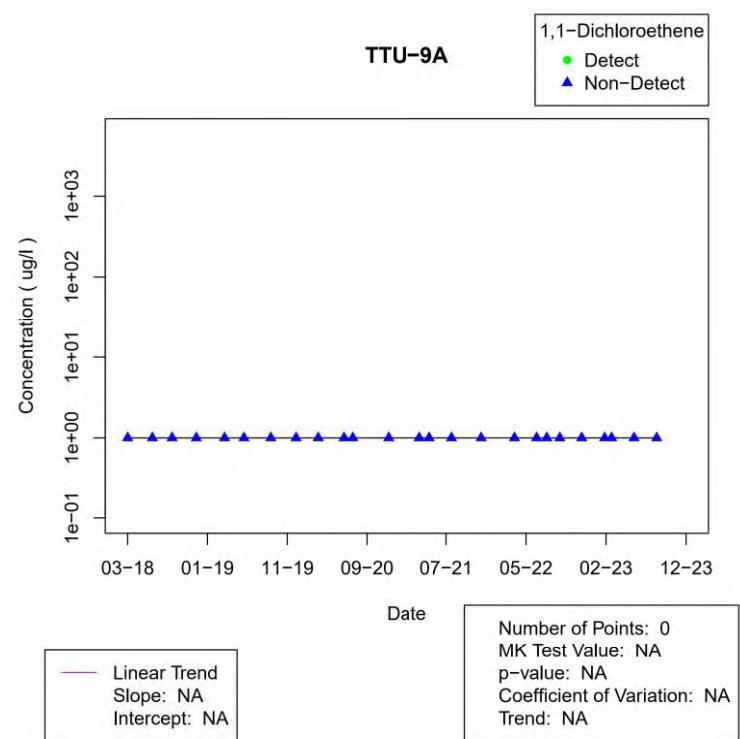
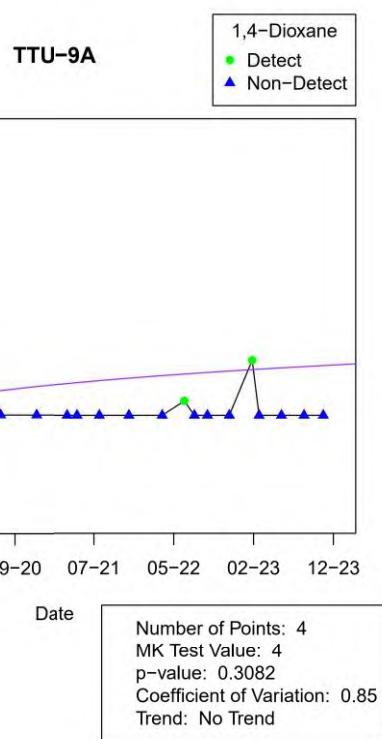


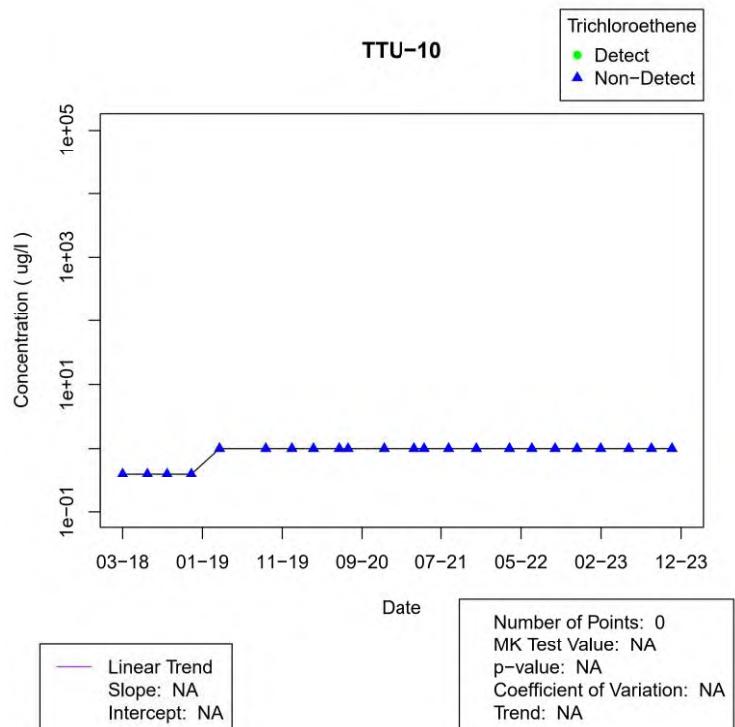
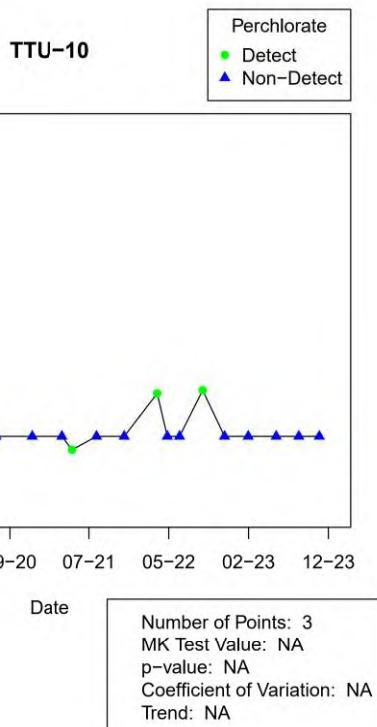
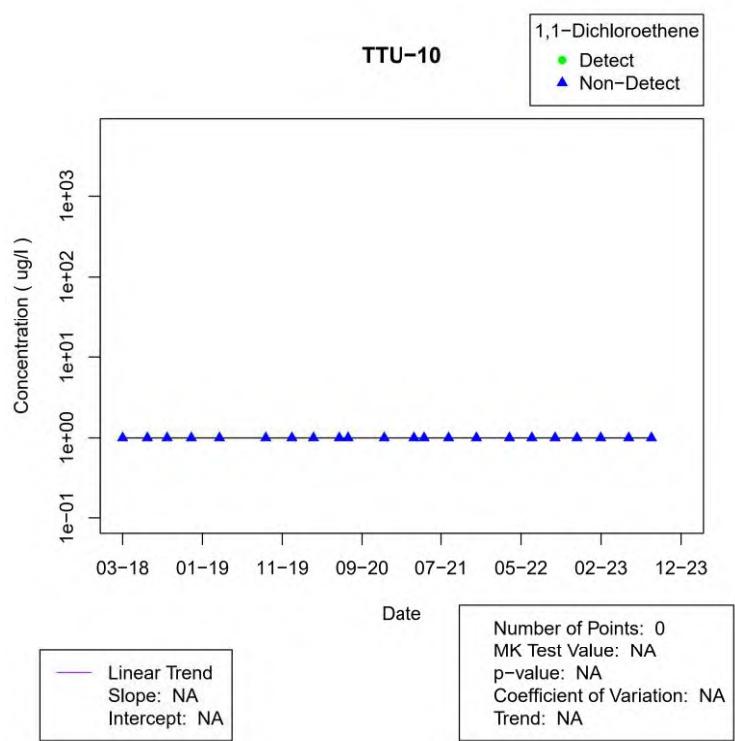
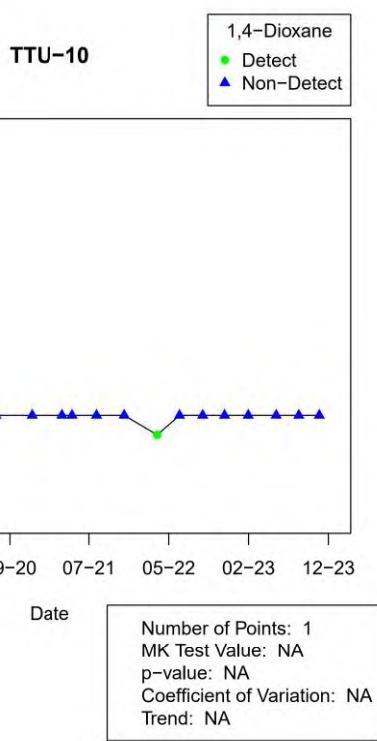


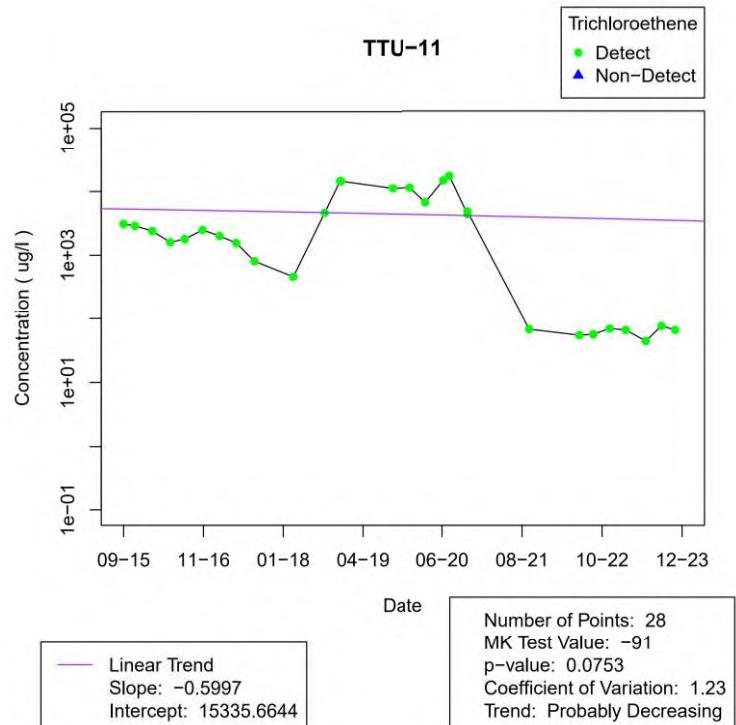
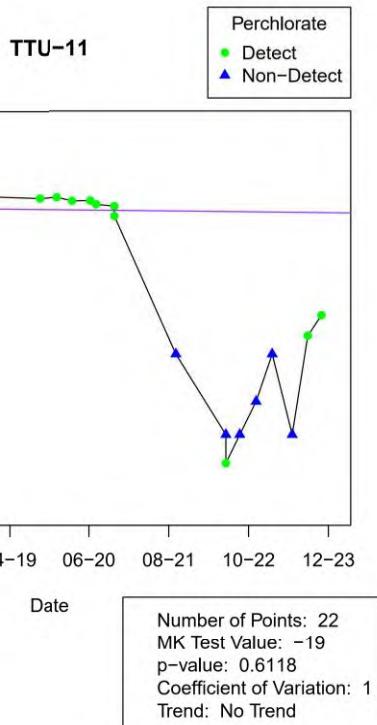
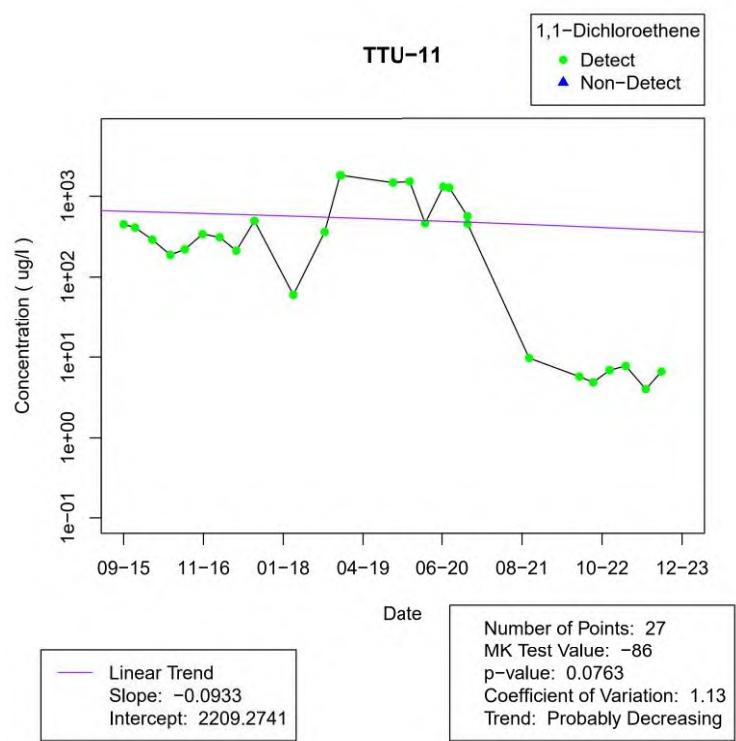
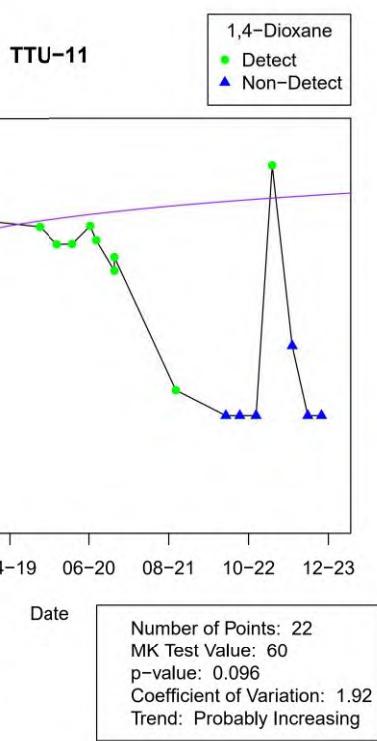


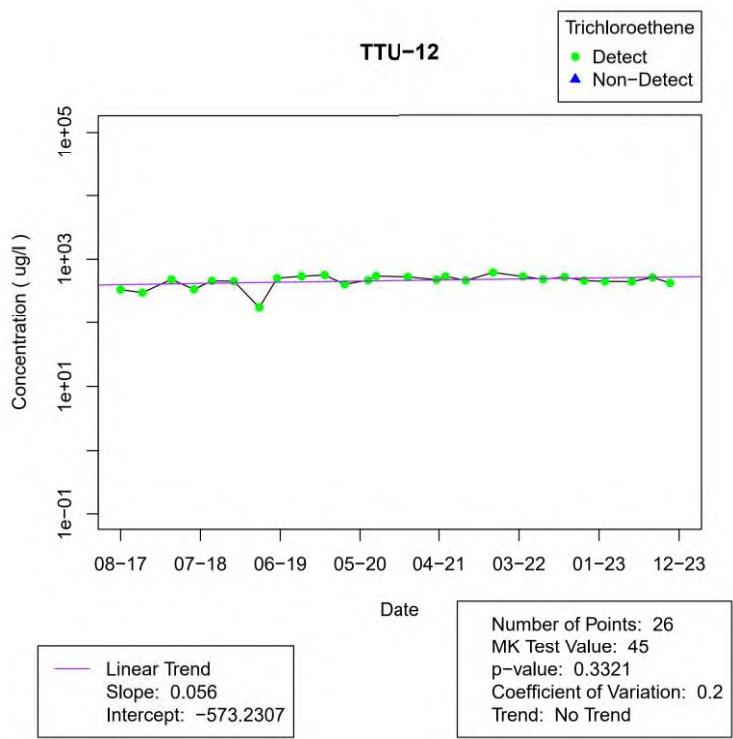
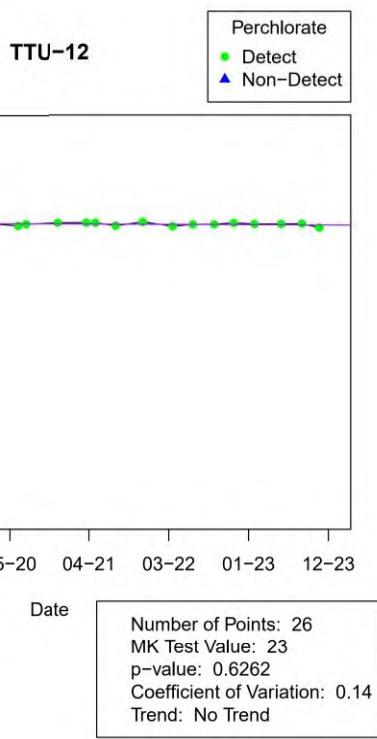
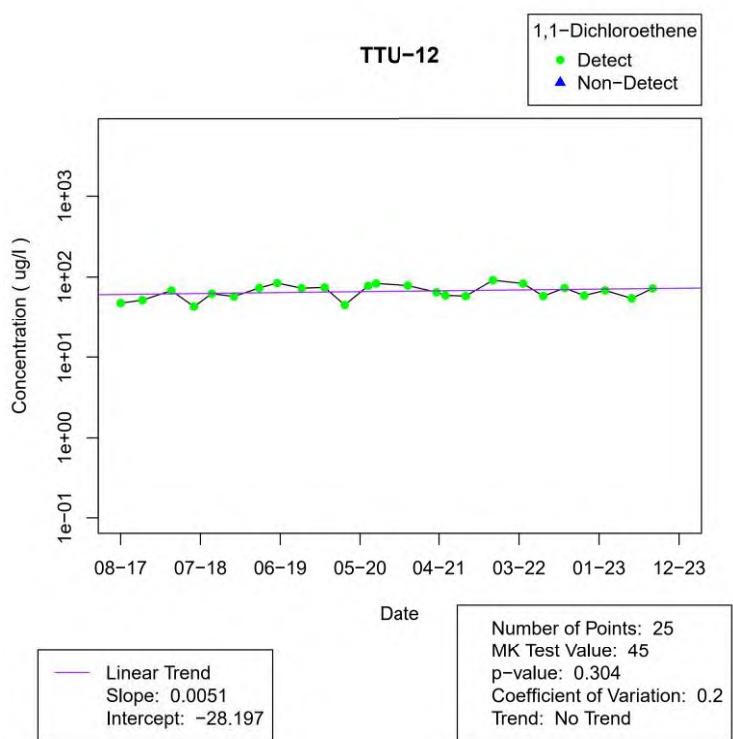
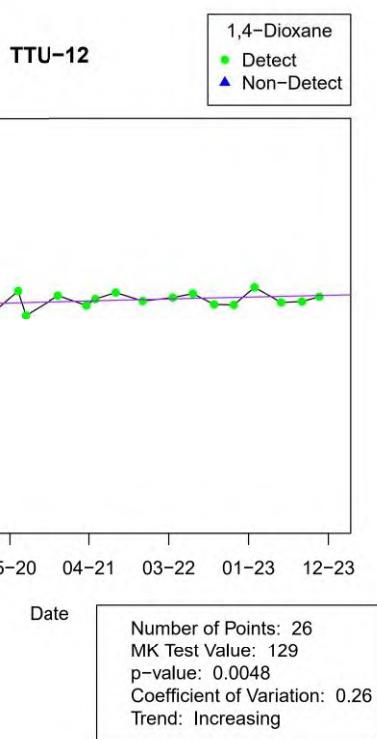


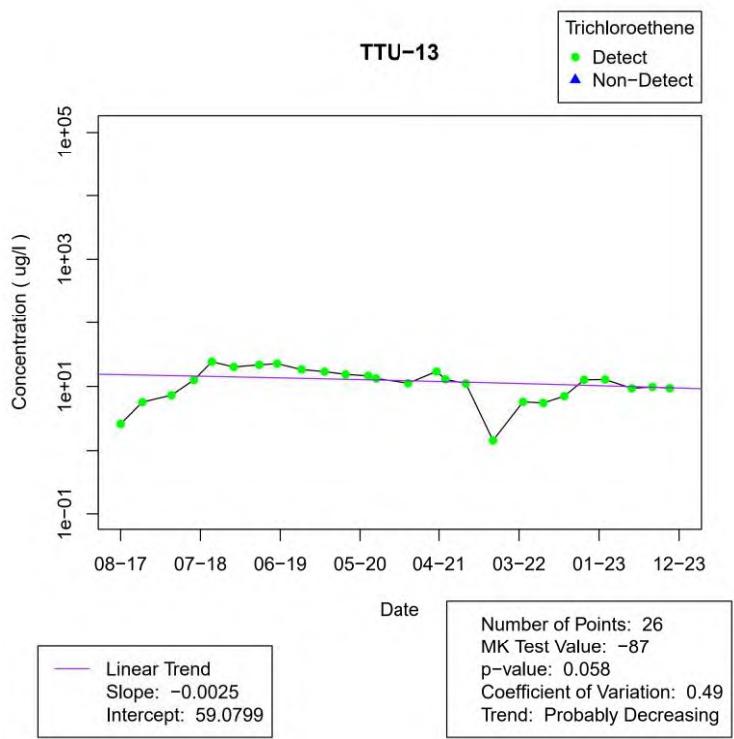
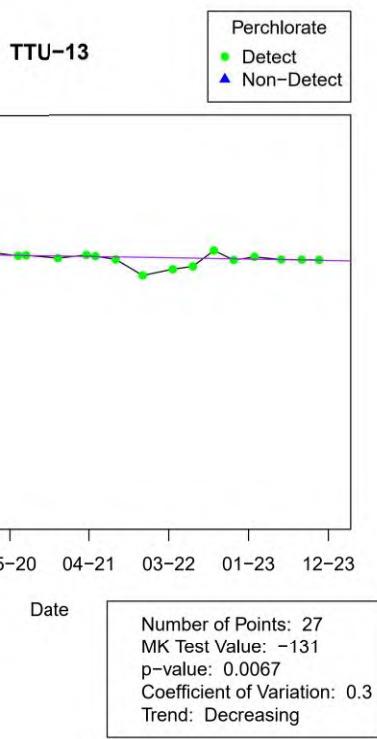
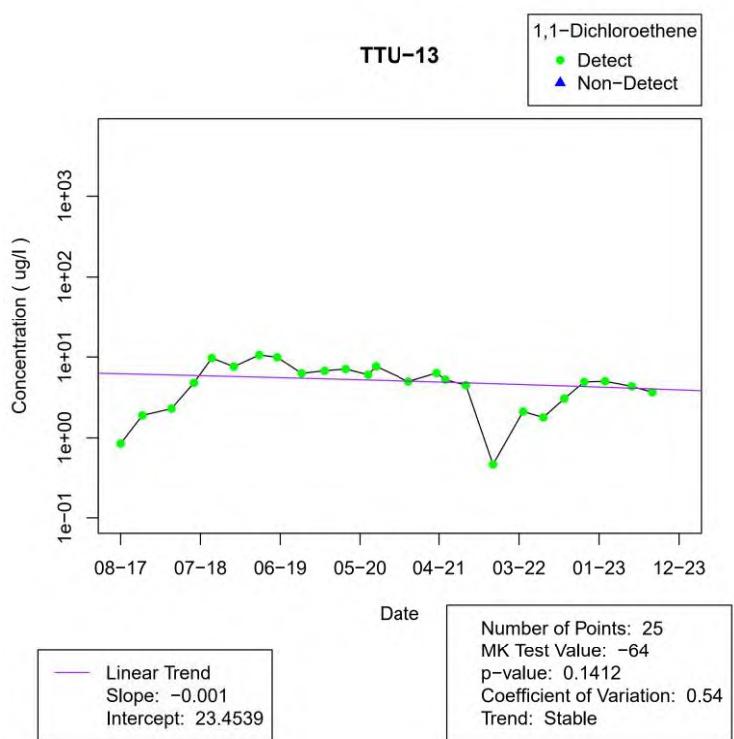
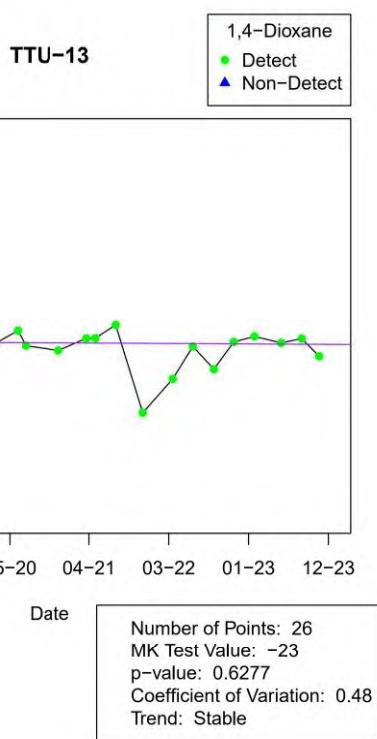


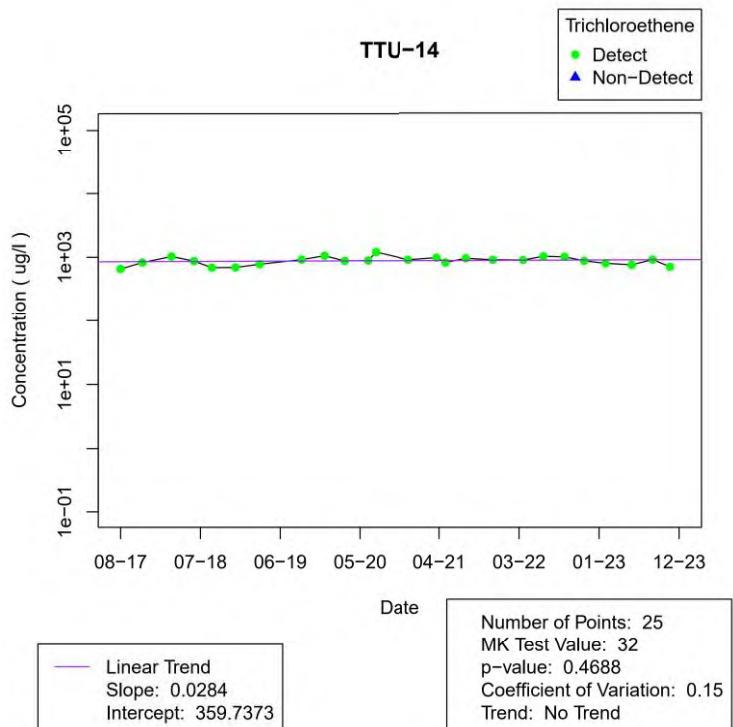
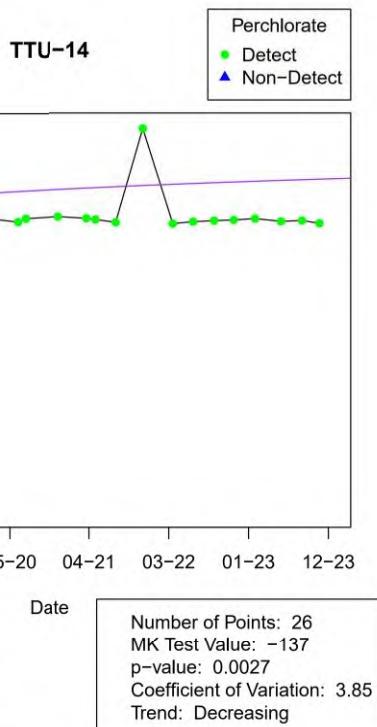
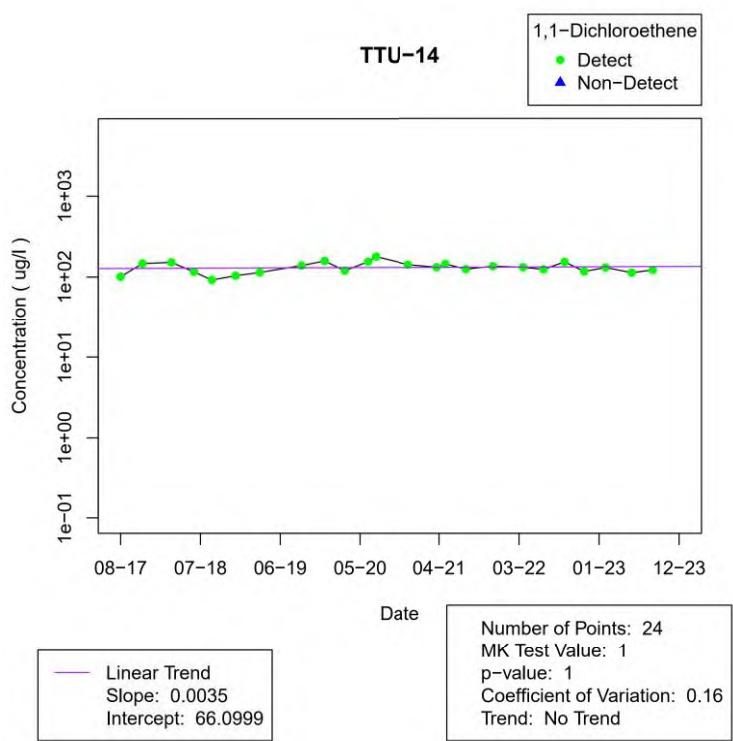
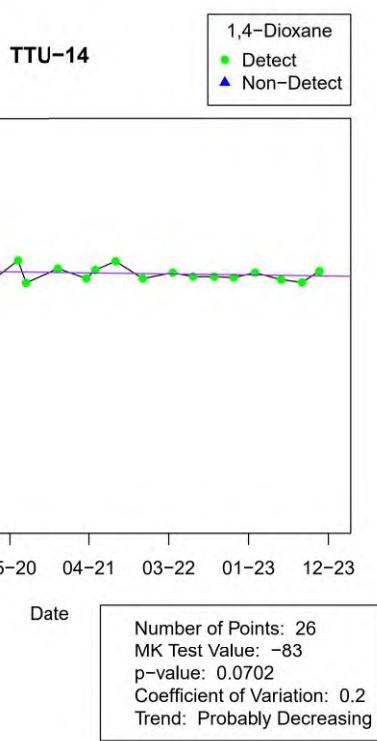


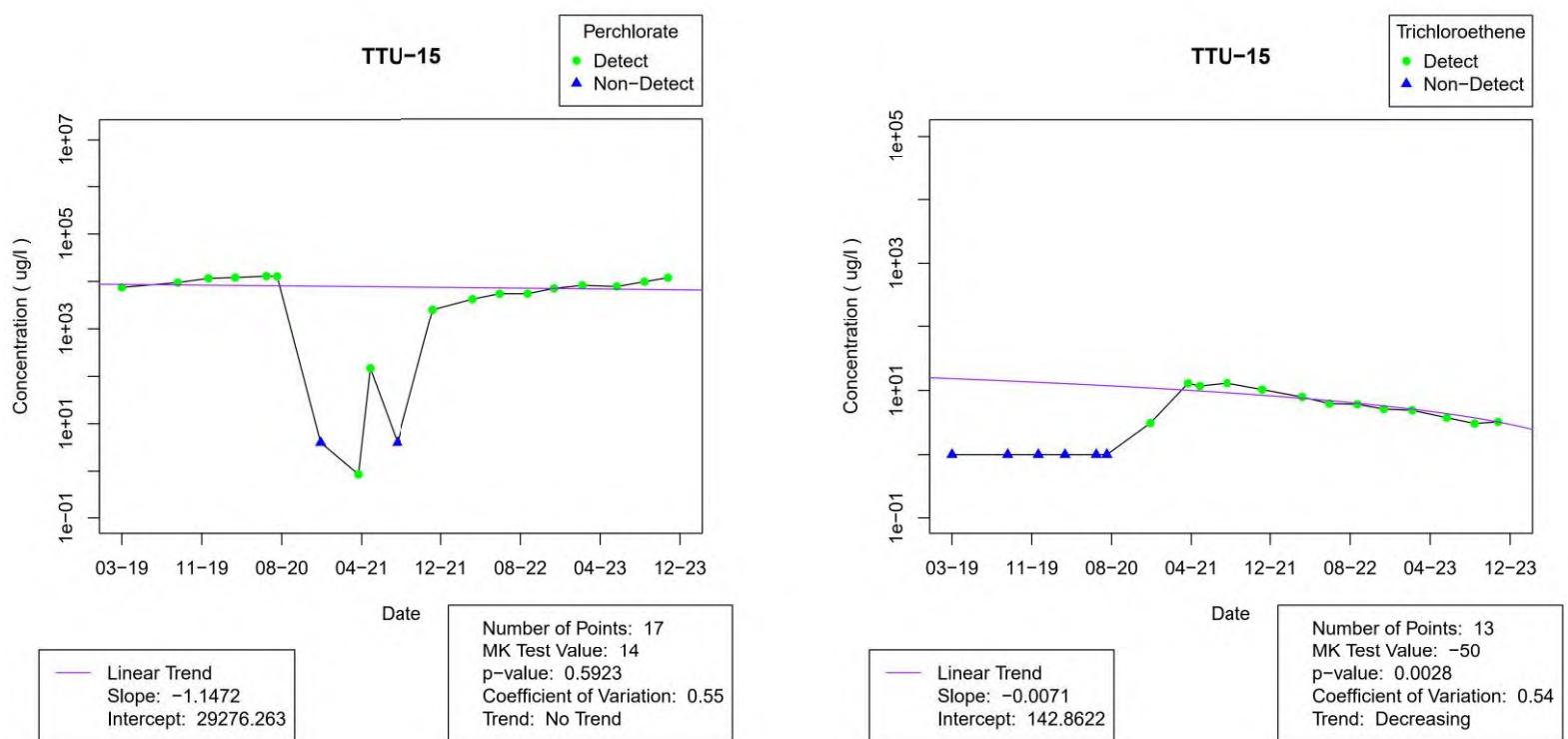
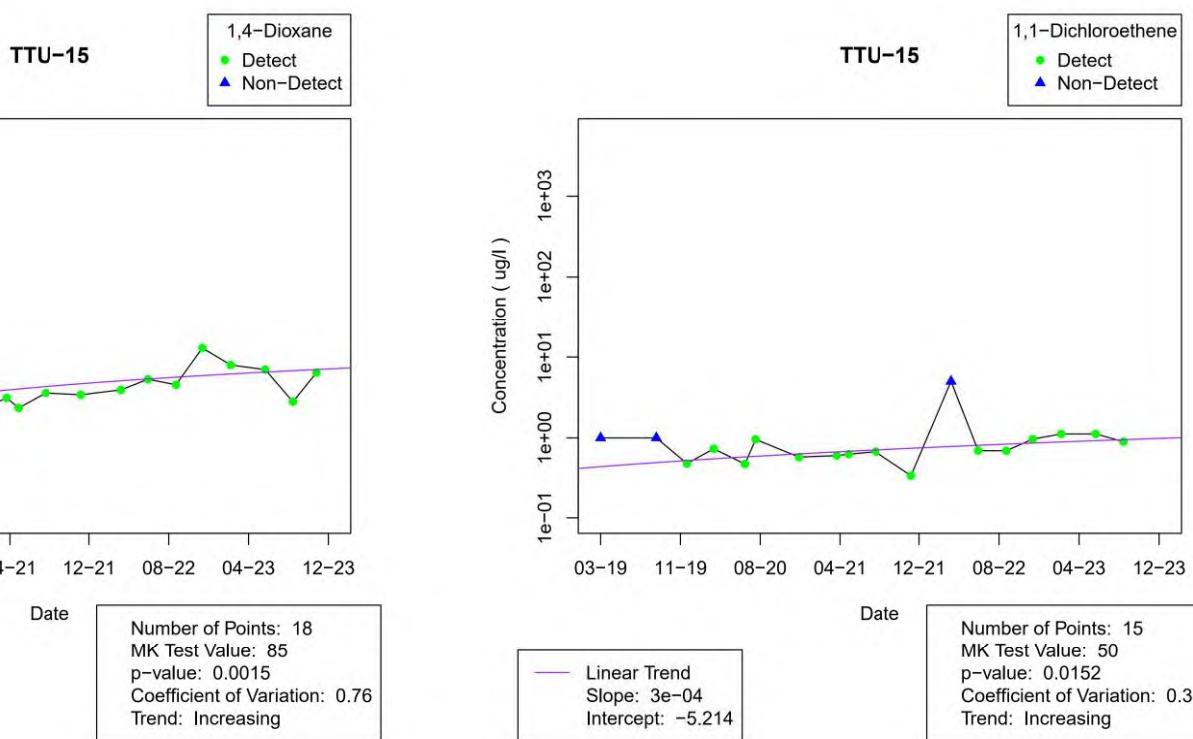


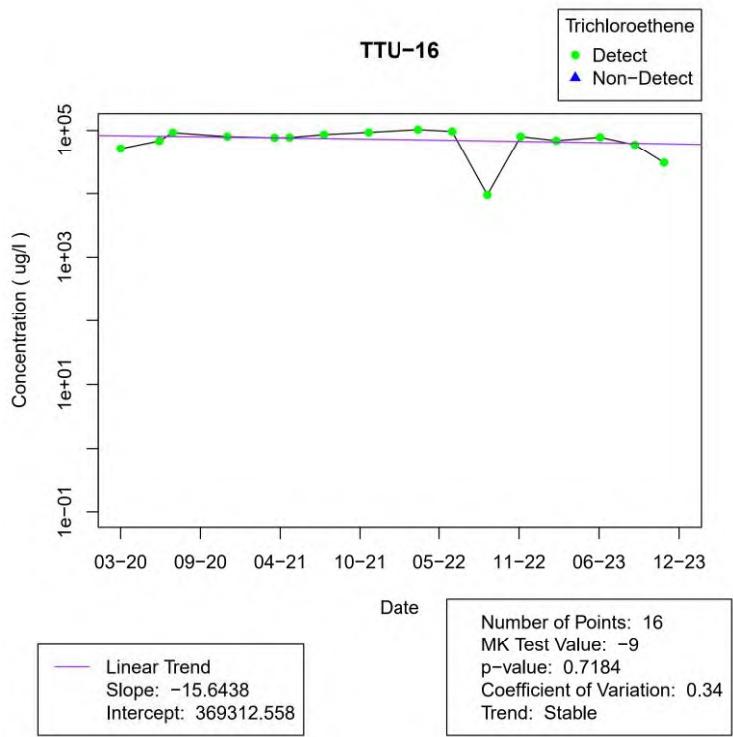
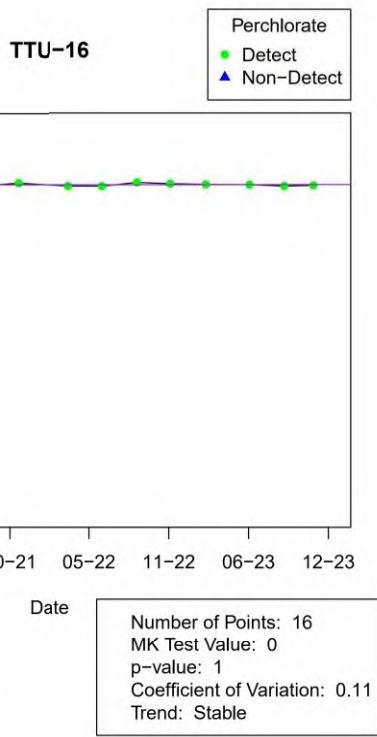
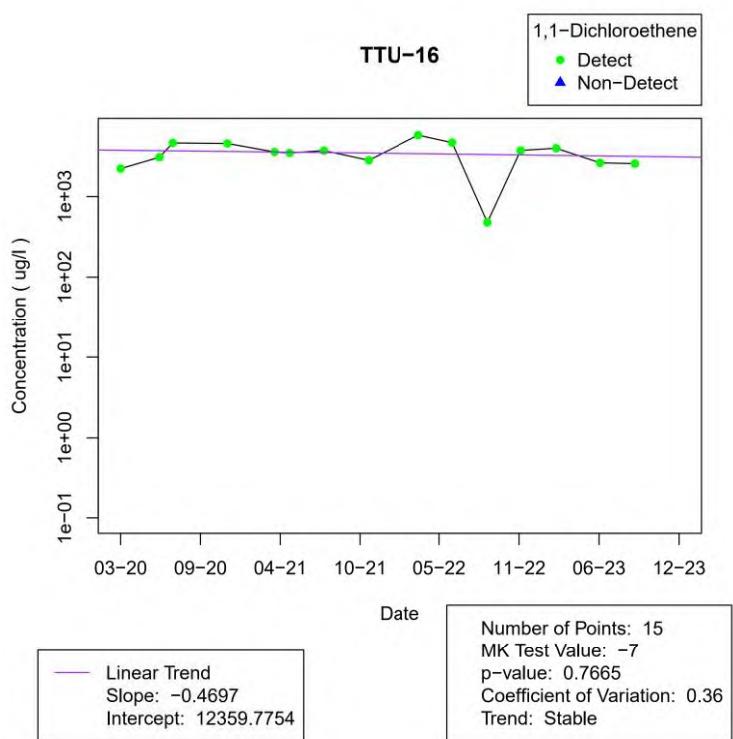
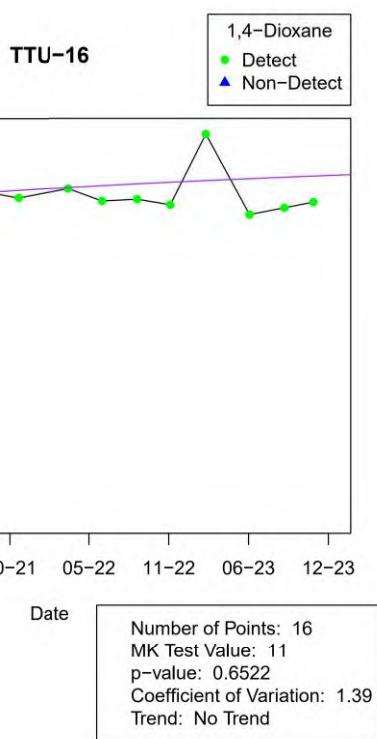


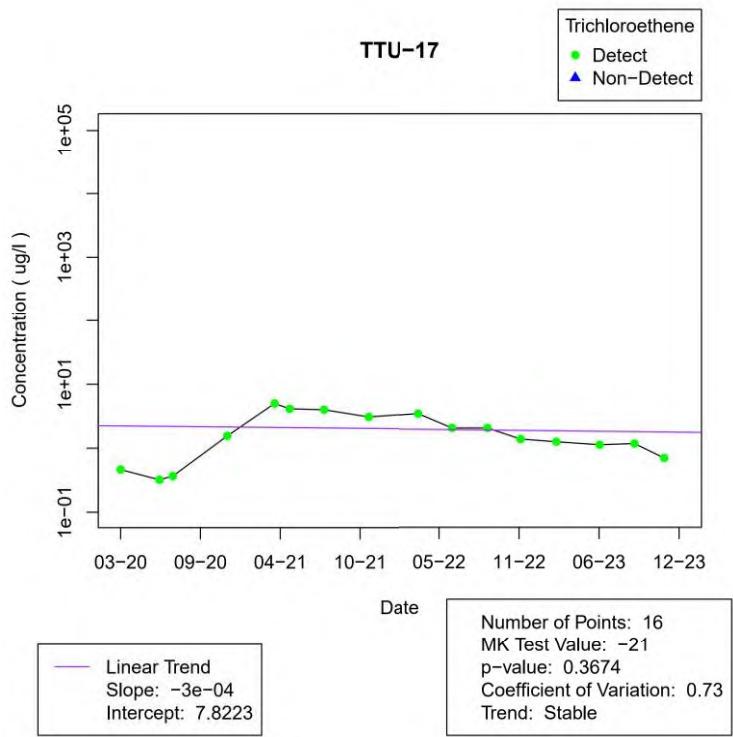
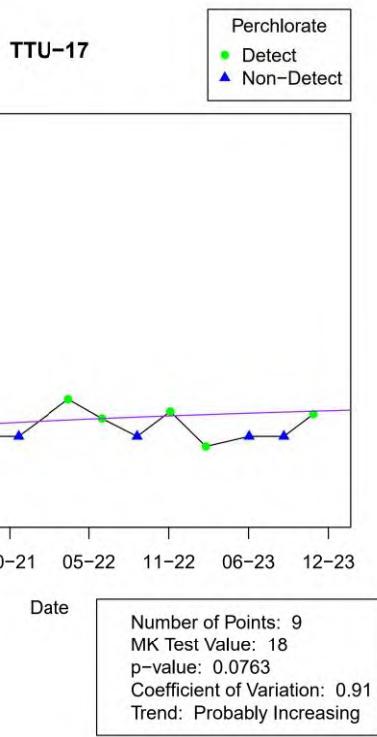
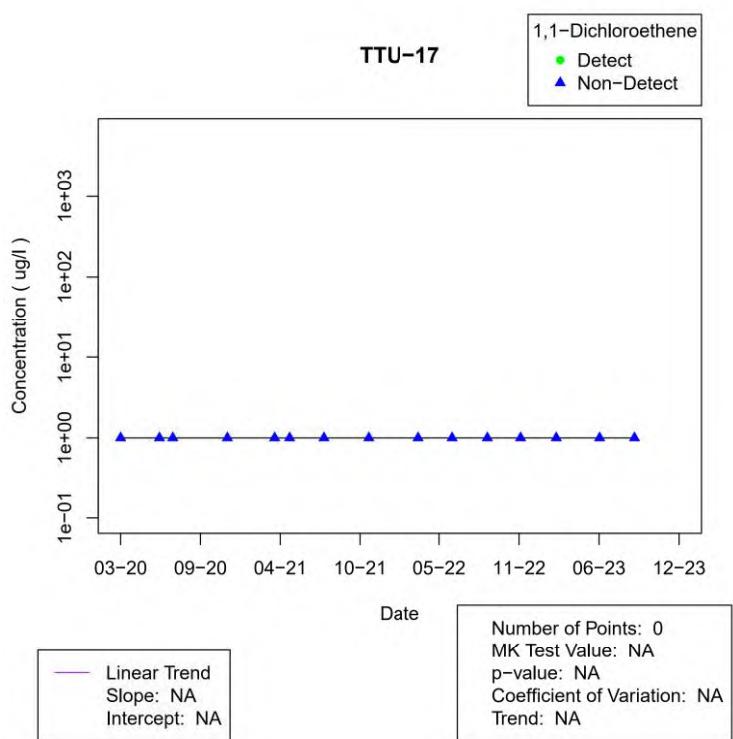
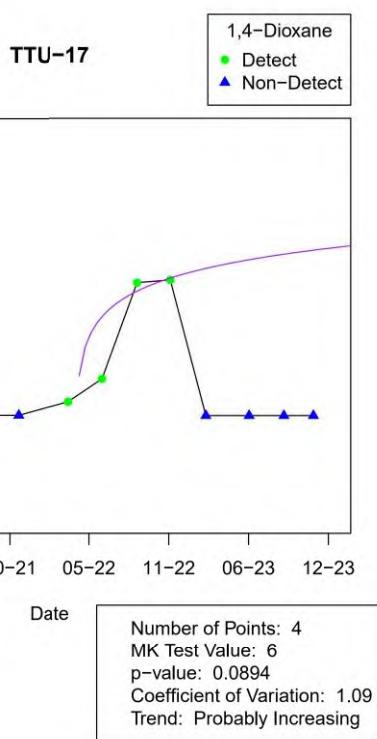


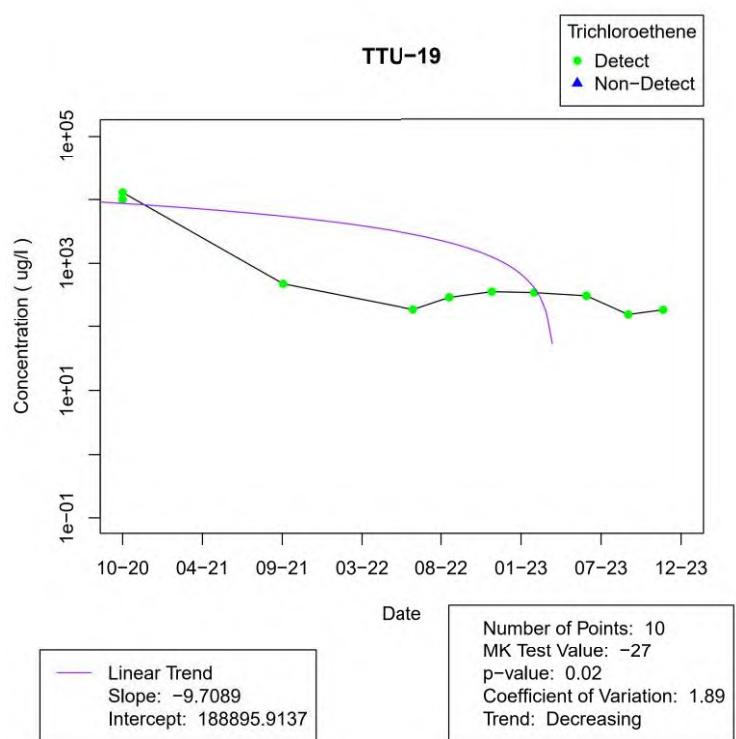
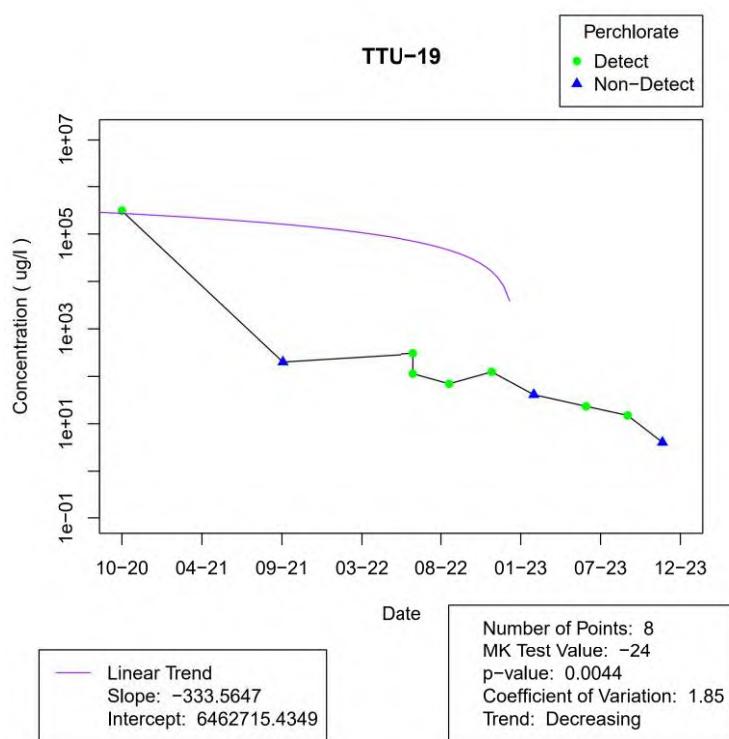
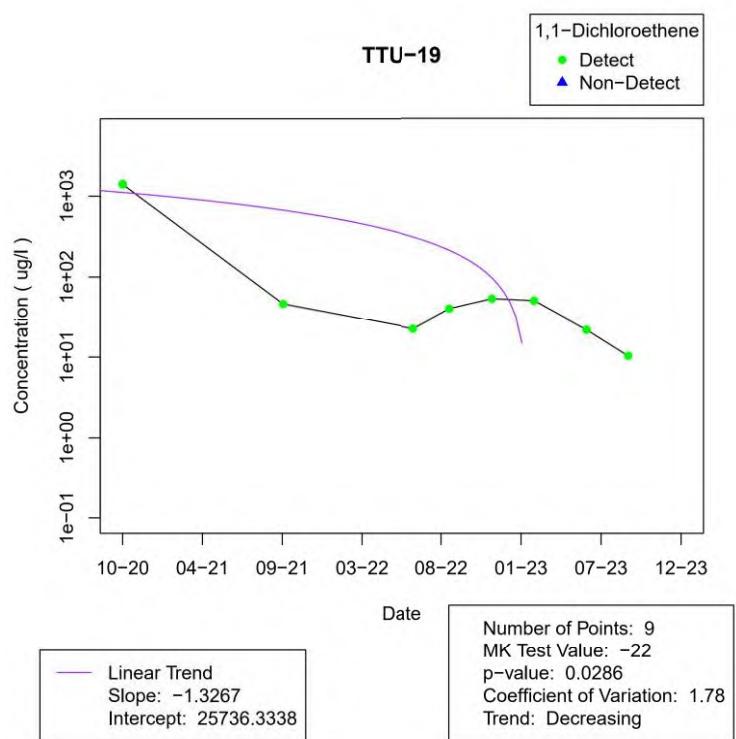
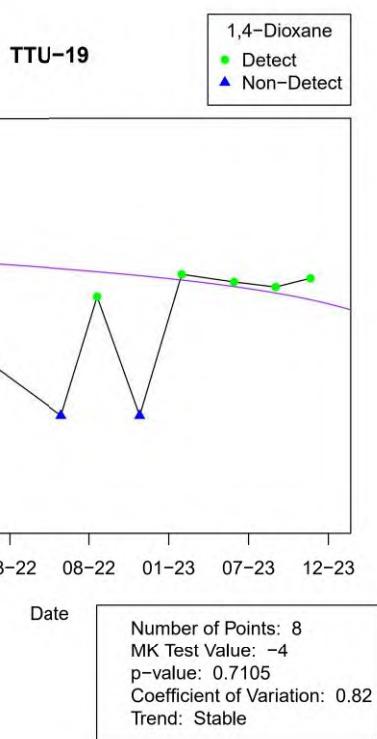


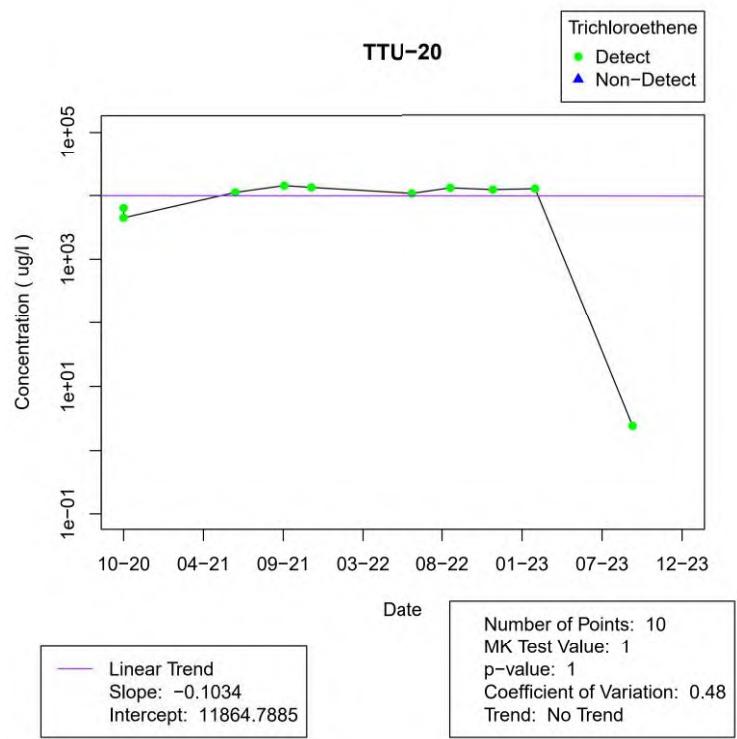
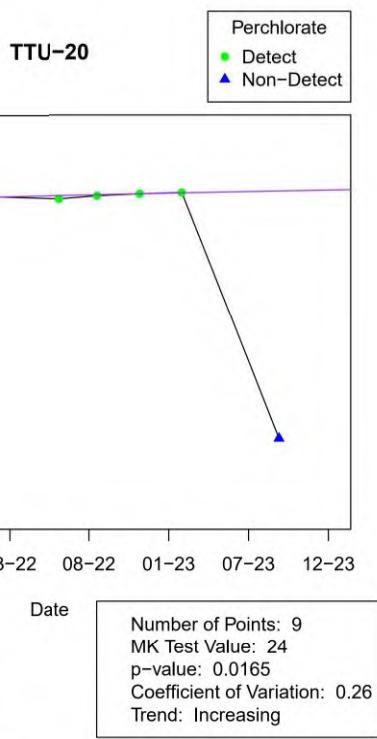
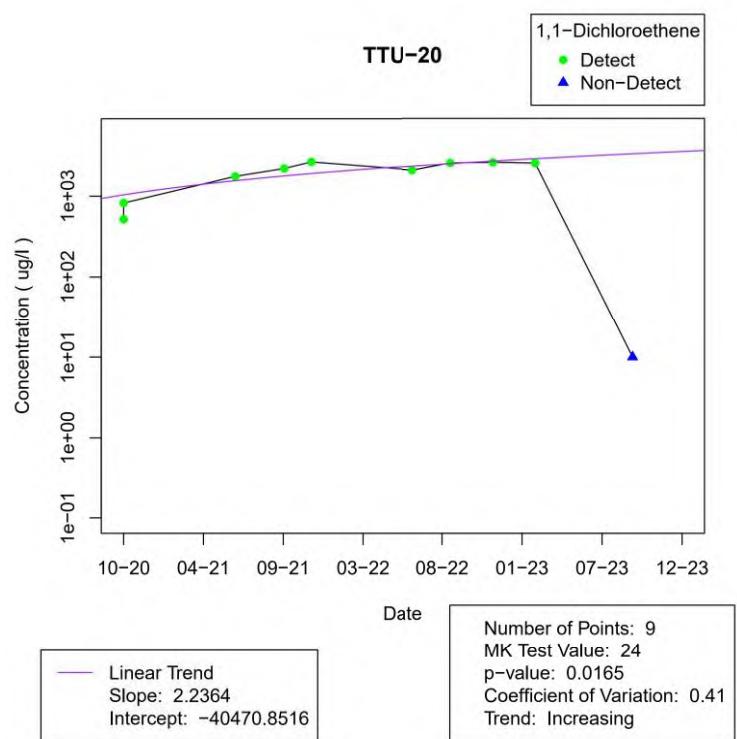
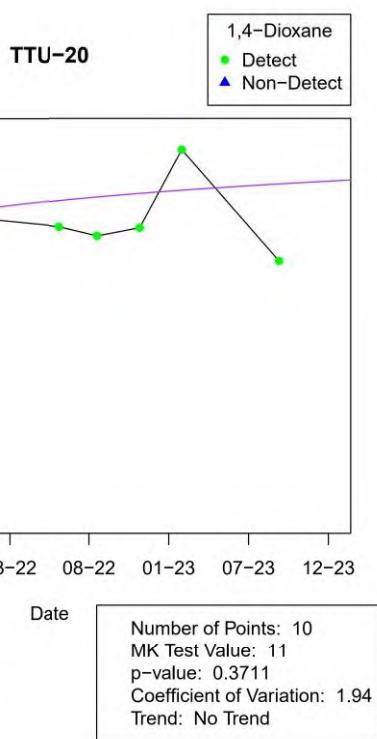


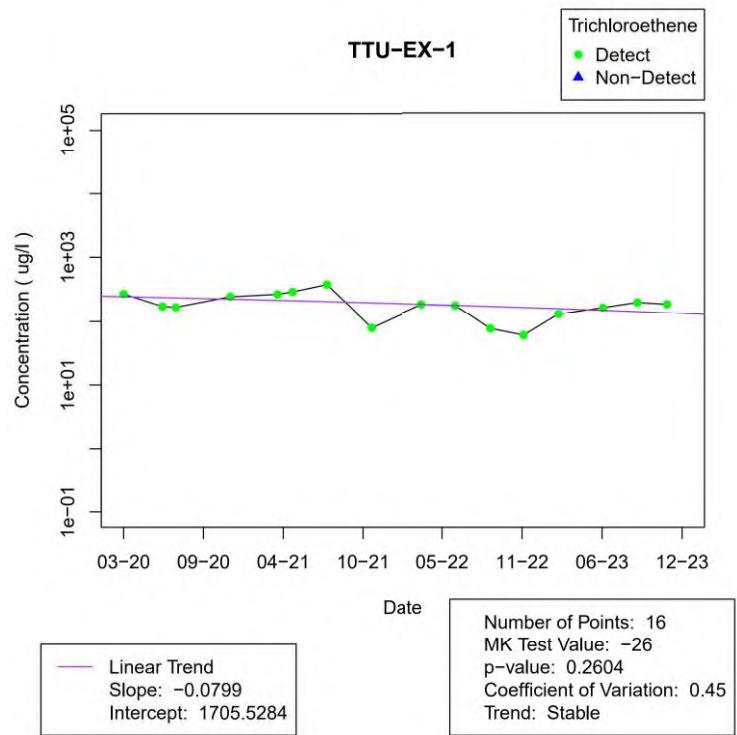
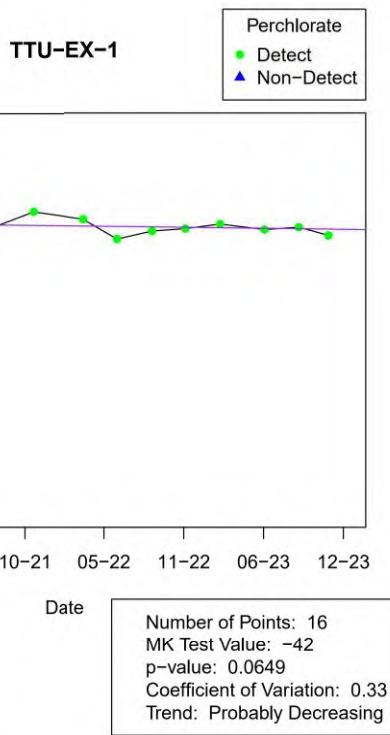
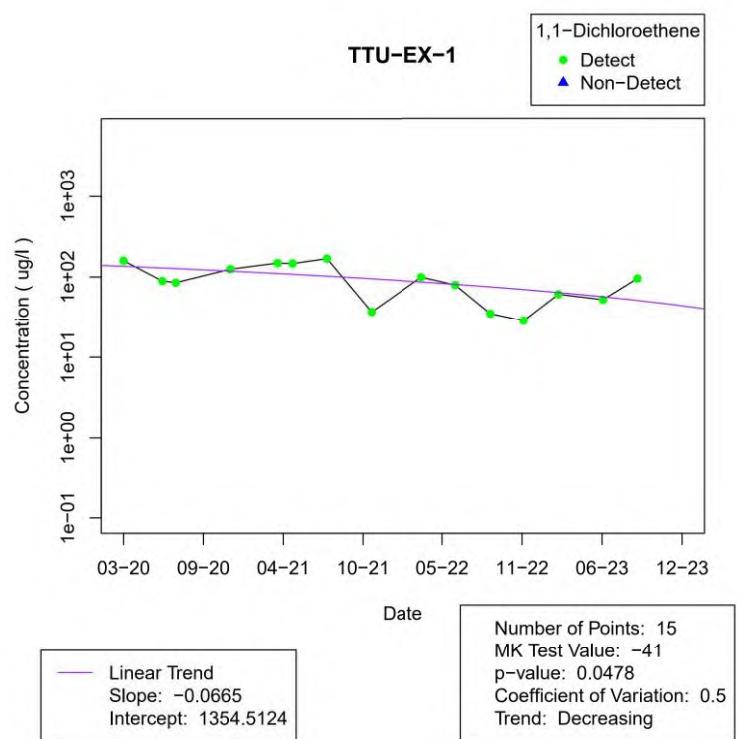
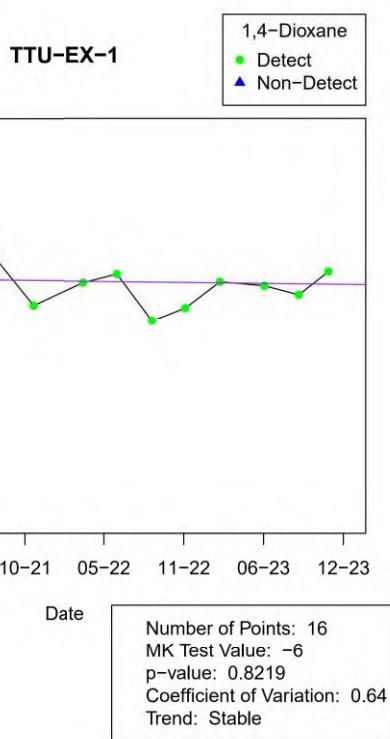


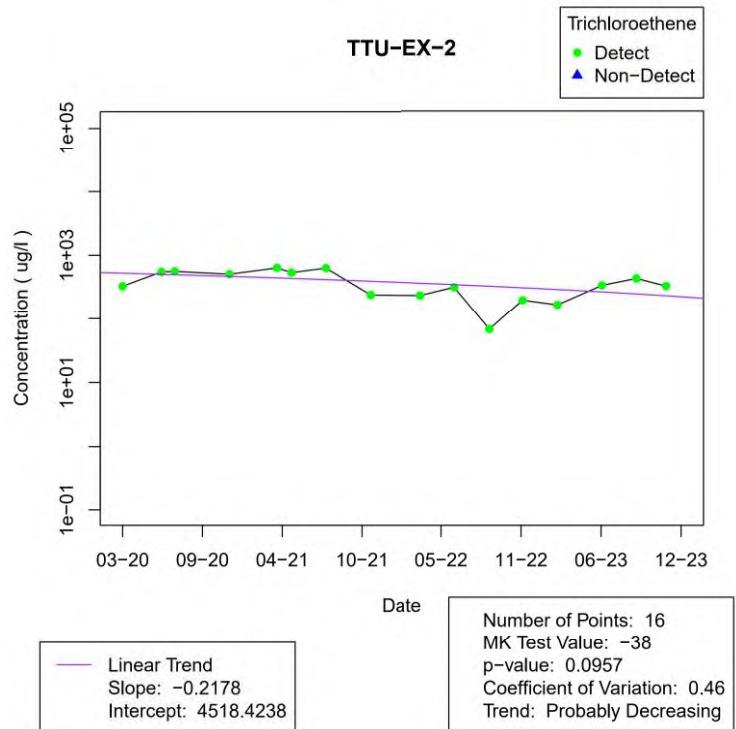
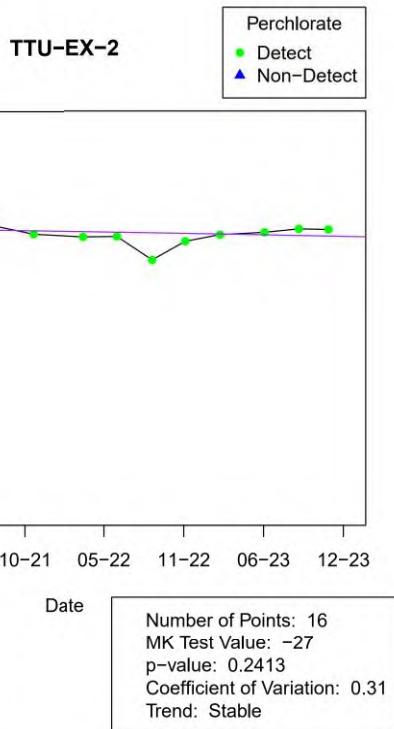
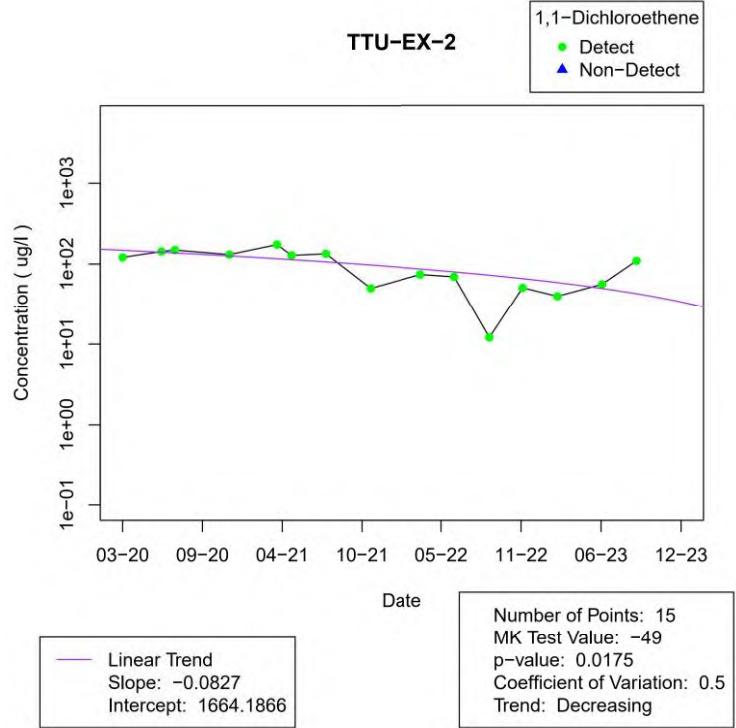
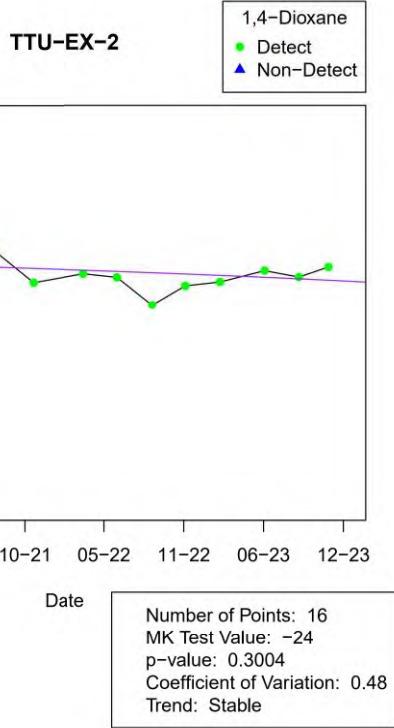


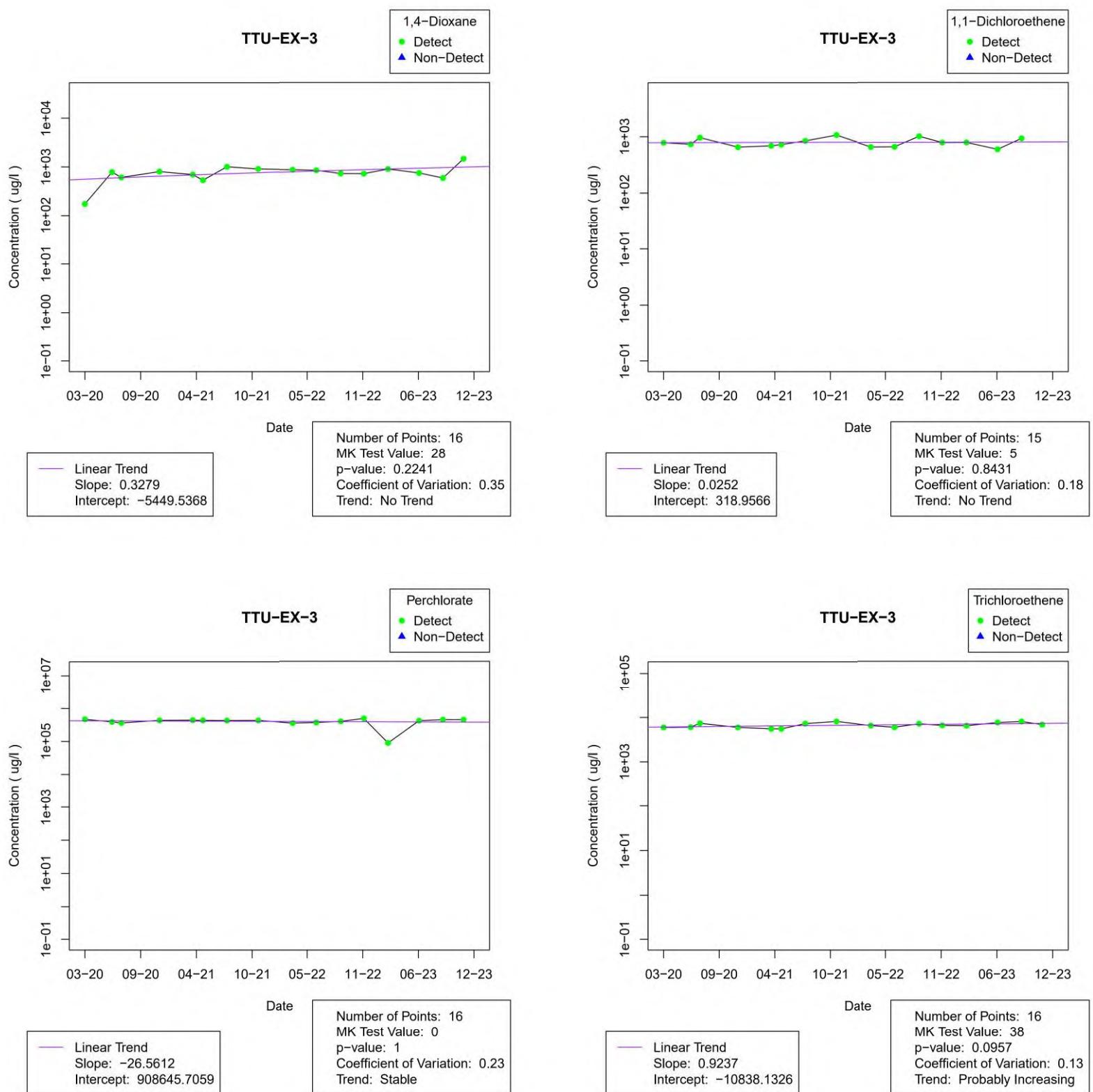


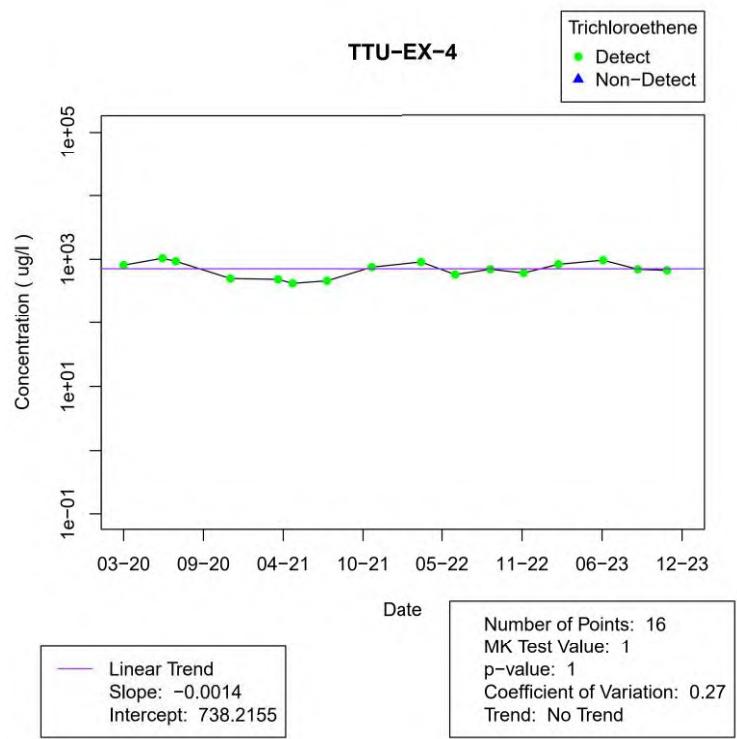
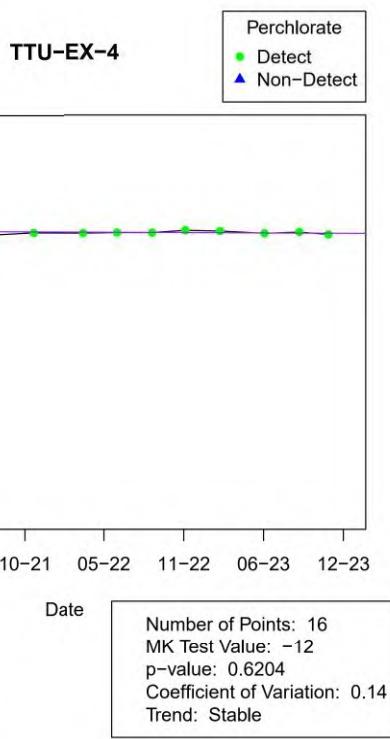
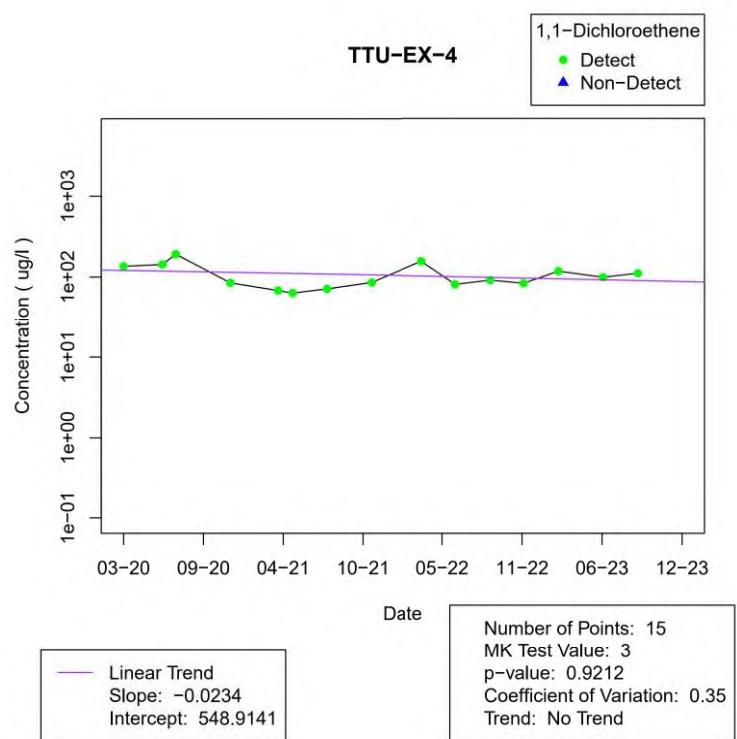
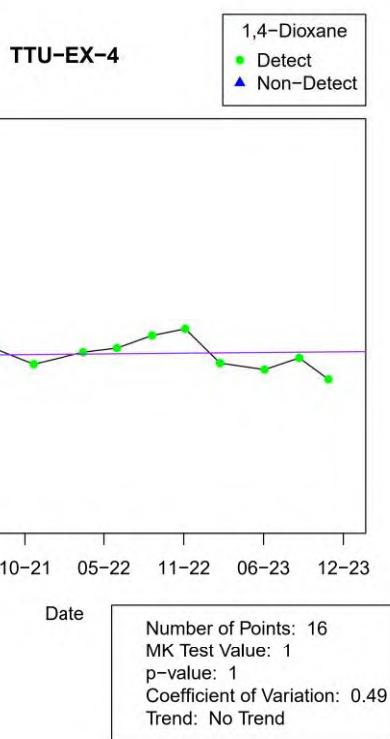


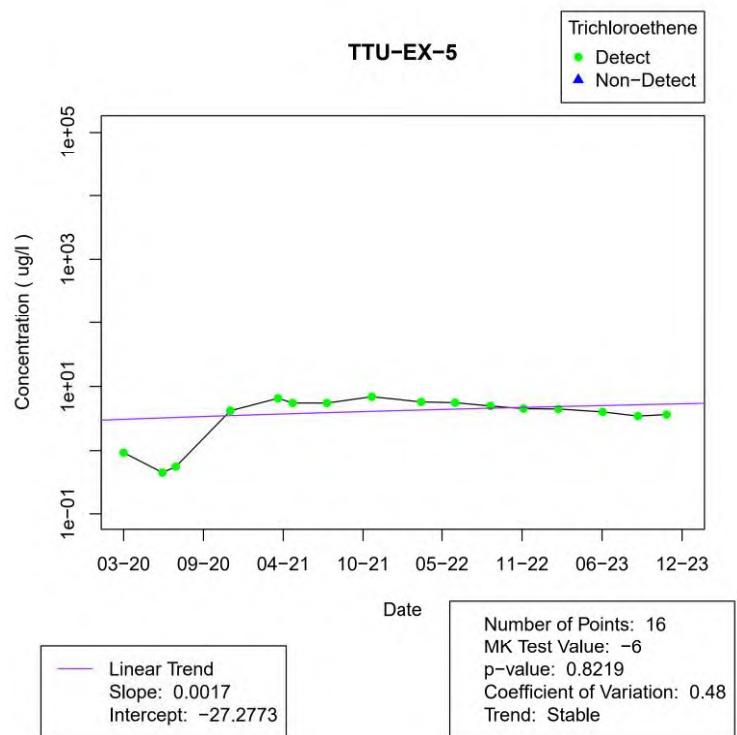
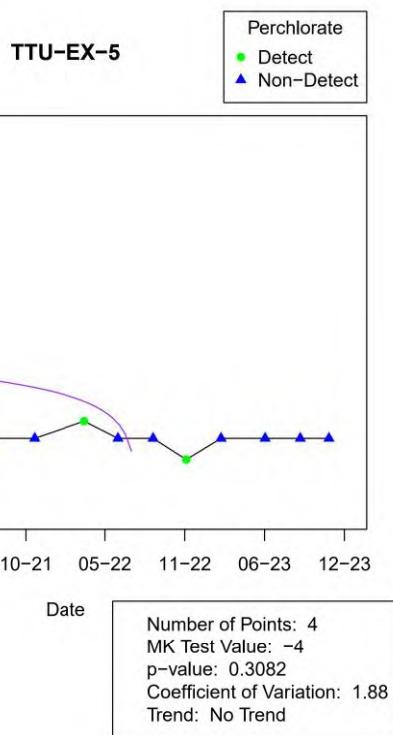
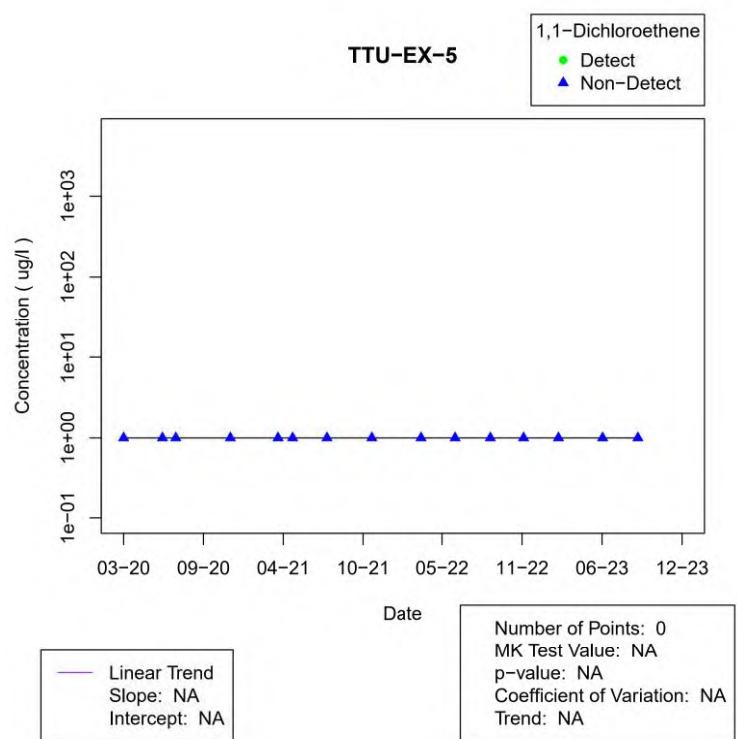
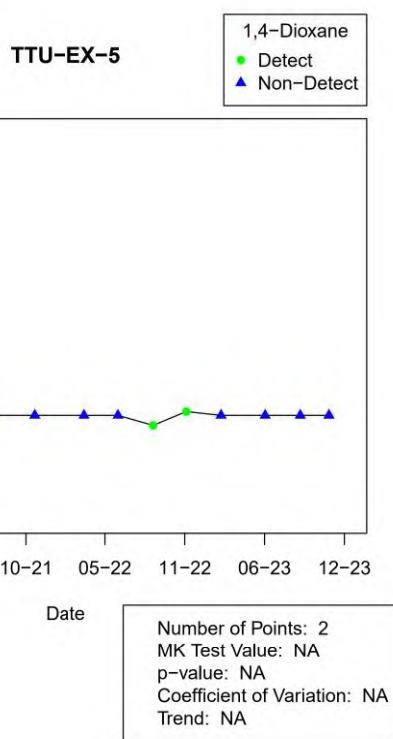












Short-term Trends

