



REVIEWED
By Mike Buchanan at 2:56 pm, Jun 13, 2024

Groundwater Monitoring Report

Brahaney Release Site
33.21341 N, -103.10996 W
Lea County, New Mexico
OCD No. 1RP-2794

Original Preparation Date: March 29, 2023

Prepared for:

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Apex Project No. CEN21-004

Review of the 2023 Brahaney Release Site Groundwater Monitoring Report: Content Satisfactory

1. An abatement completion report must be submitted to OCD as per 19.15.30 of the NMAC, if Centurion believes the incident is ready for closure.
2. In addition, a solid-matrix work plan for a one-time sampling of the vadose zone must also be prepared for approval in order to close the incident with the OCD as part of the closure, as per 19.15.30.9 paragraph D of the NMAC.
3. Submit the requested information above for closure to be reviewed by April 1, 2025, or before.



**Brahaney Gathering 8-inch Release Site
Annual Groundwater Monitoring Report**

**Brahaney Gathering
33.21341 N, -103.10996 W
Lea County, New Mexico
OCD No. 1RP-2794**



A handwritten signature in black ink that reads 'Guy McGuire'.

Guy McGuire
Environmental Scientist

A handwritten signature in black ink that reads 'Clint Ward'.

Clint Ward
Project Manager

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1.0 INTRODUCTION

1.1 Site Description & Background

Apex Companies LLC (Apex) has completed this Annual Groundwater Monitoring Report for the Brahaney Gathering 8-inch Release Site (Site) located north of Murphy Chapel Road (N 33.31364, W 103.11004), approximately seventeen miles Southwest of Tatum in Lea County, New Mexico S4, T13S, R38E. The purpose of this report is to document the groundwater sampling events conducted in April, June, August, and November of 2022. A topographic map depicting the location of the Site is included as **Figure 1** and a site vicinity map is included as **Figure 2**.

On February 11, 2011, approximately 20 barrels of sweet crude oil were released from the Centurion Pipeline, L.P. Brahaney Gathering System 8-inch steel transmission pipeline. The release was a result of internal corrosion of the pipeline. The pipeline was immediately shut in and 300-linear feet of the pipeline was replaced on February 12, 2011. No crude was recovered during the emergency response phase of operations. Initial remediation and delineation activities were conducted by B&H Environmental Services on February 16, 2011. Approximately 4,130-cubic yards of spill-impacted soil was excavated from the Site, of which; 225-cubic yards were hauled to Centurion Wasson Station for berm construction, 834-cubic yards were hauled to Gandy's Landfarm in New Mexico and 3,200-cubic yards were blended on-site with clean fresh material obtained from the Site. Additionally, fresh topsoil was purchased from the landowner to complete backfilling. The excavated area was returned to natural grade and restoration was completed on June 24, 2011. Two monitoring wells (MW-1 and MW-2) were installed subsequent to backfill activities.

On September 25, 2011, approximately 4-5 barrels of sweet crude oil were released from the Brahaney Gathering System caused by internal corrosion in the 8-inch steel transmission pipeline. The pipeline was immediately shut in and the damaged pipeline was replaced. Soil from the impacted area, measuring approximately 20-feet long by 8-feet wide, was excavated, sampled and transported to the Gandy Marly Landfill on September 28, 2011. The excavation was backfilled using soil purchased from the landowner to a depth of 5-feet below ground surface (bgs). A 20-mil liner was subsequently installed and then backfilled to surface. Periodic monitoring

and data submittal to the property owner and regulatory agency has been conducted since 2013. From January 30, 2013 through February 6, 2013 Talon LPE utilized an air rotary rig to advance several boreholes at the Site which were subsequently completed as groundwater monitoring wells MW-3 through MW-6. Periodic Monitoring and data submittal to the property owner and regulatory agency has been conducted since 2013.

1.2 Project Objective

The purpose of this report is to document groundwater monitoring activities conducted at the Brahamey Gathering 8-inch Release Site in April, June, August, and November of 2022.

2.0 SITE CHARACTERIZATION

The Brahamey Gathering 8-inch Release Site is located North of Murphy Chapel Road (N 33.31364, W 103.11004), approximately seventeen miles Southeast of Tatum in Lea County, New Mexico S4, T13S, R38E along Murphy Chapel Rd. which connects to T-141. The Site is located approximately 18 miles west of Plains, TX and about 28 miles Northeast of Lovington, NM. The Site is surrounded by rangeland that is periodically interrupted by oil and gas facilities.

The Site is located on the Northwestern Shelf of the Permian Basin between the Matador Arch and Pedernal Uplift and is underlain by the Ogallala formation which is Pliocene to Middle Miocene in age. The Ogallala formation consists of poorly consolidated silt, sand, gravel and petrocalcic soils, and ranges from zero to 500 feet thick. Its base lies unconformably on the Triassic Dockum group which is divided into the Santa Rosa sandstone and Chinle formation. Rocks of Cretaceous age were deposited in Lea County but have been almost entirely removed by erosion (Nicholson and Clebsch, 1961).

According to the New Mexico Water Resources Assessment 2001 Plate 3, the regional groundwater gradient in the area is to the southeast and shifts to the southwest towards the Pecos River when transitioning from east to west into the Lower Pecos Valley from the Southern High Plains. The depth to groundwater ranges from approximately 96 to 103 feet bgs.

3.0 REGULATORY GUIDELINES



3.1 Regulatory Information

The site is subject to regulatory oversight by the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD), otherwise known as the NMOCD; and the New Mexico Environment Department (NMED). The NMOCD focuses on remedial regulation of the vadose zone, containing soil and other related subjects, the NMED focuses on remedial regulation of water and air quality. The NMOCD defines a "Major Release" as "an unauthorized release of a volume, excluding gases, of 25 barrels or more", along with other specifications as stated in [19.15.29.7 New Mexico Administrative Code NMAC– Rp, 19.15.29.7 NMAC, 8/14/2018]. NMOCD requires remediation and a site assessment to follow. The site assessment should include a characterization [19.15.29.11 NMAC – Rp, 19.15.29.11 NMAC, 8/14/2018] and determine if an abatement plan is required. Abatement is required where total dissolved solids (TDS) concentrations exceed 10,000 mg/l. Abatement standards and requirements are listed in [19.15.30 NMAC]. Other Chemicals of Concern (COCs) and their regulatory limits are shown in Table 1 [19.15.29.12 NMAC – N, 8/14/2018]. The NMED provides standards for ground water of 10,000 mg/l TDS concentration or less in [20.6.2.3103 NMAC] concentration limits of 0.005 mg/l, 1 mg/l, 0.7 mg/l, 0.62 mg/l for benzene, toluene, ethylbenzene, and total xylenes respectively.

3.2 Site Ranking

Apex utilized the general site characteristics to determine the appropriate "ranking" for the Site in accordance with the NMOCD's Guidelines for Remediation of Leaks, Spills and Releases. The ranking criteria and associated scoring are provided in Table 1 below:

Table 1 - Risk Evaluation

Ranking Criteria		Ranking Standards	Ranking Score
Depth to groundwater	<50 feet	20	10
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area <1,000 feet from a water source, or <200 feet from private domestic water source	Yes	20	0
	No	0	
Distance to surface water body	<200 feet	20	0
	200 to 1,000 feet	10	
	>1,000 feet	0	



Total Ranking Score	10
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Based on the Site characteristics, specifically depth to groundwater, an associated ranking score of ten (10) was determined for the Site. The results of the Site ranking were previously documented in the *Soil Assessment and Remediation Work Plan* dated April 5, 2012.

The NMOCD's Remedial Action Levels RALs for sites with a total ranking score of 10-19 is 10 mg/Kg for benzene, 50 mg/Kg for total Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), 1000 mg/Kg for Total Petroleum Hydrocarbons (TPH) (Gasoline Range Organics and Diesel Range Organics) GRO/DRO and 500 mg/kg for chloride constituents.

4.0 GROUNDWATER SAMPLING METHODS

Apex's groundwater sampling program consisted of collecting one (1) groundwater sample from each monitoring well (N=6). No measurable thickness of Phase Separated Hydrocarbons PSH was noted during the 2022 sampling events.

Before sample collection, Apex gauged depth to fluids in each monitoring well using an interface probe capable of detecting the presence of PSH to the nearest hundredth of a foot. Prior to sample collection, each monitoring well was purged utilizing low-flow sampling techniques. Depths to groundwater measurements are shown in Table 1.

The groundwater samples were collected from each monitoring well after the groundwater was consistent in color and clarity. Field parameters for pH, dissolved oxygen, oxidation/reduction potential (ORP), temperature and conductivity were permitted to stabilize. Stabilization was achieved when the concentration for pH was +/- 0.1 pH units and the values for temperature, ORP and conductivity were within +/- 3% over a period of three (3) consecutive readings.

Groundwater samples were collected and placed in laboratory provided glassware, placed on ice in a cooler, and secured with a custody seal. The sample coolers and completed chain-of-custody forms were relinquished to ALS Labs in Midland, Texas for standard turn-around times. Groundwater sample analytical results are presented in **Table 2** and purging parameters are presented in **Table 3**.



5.0 LABORATORY ANALYTICAL METHODS

The groundwater samples were submitted for analysis of BTEX utilizing Environmental Protection Agency (EPA) SW-846 Method #8260D, TPH GRO/DRO utilizing EPA SW-846 Method 8015D and chlorides by EPA Method 300. Laboratory analytical results for the soil and groundwater samples are summarized in **Table 2**. The executed chain-of-custody form and laboratory data sheets are provided in **Appendix B**.

Sampling equipment was cleaned using an Liquinox® wash and rinsed with distilled water prior to the beginning of the project, and before the collection of each sample. Groundwater samples were collected and placed in laboratory provided glassware, placed on ice in a cooler to preserve temperatures at 4°C or below, and sealed with custody seal. The sample coolers and completed chain of custody forms were relinquished to Pace Analytical in Midland, Texas for analysis within the holding time required by the analytical method.

6.0 DATA EVALUATION

The NMOCD utilizes the NMWQCC Standards for groundwater assessment and corrective action standards, which apply to groundwater bearing units with TDS concentrations of 10,000 mg/L or less. Apex compared the BTEX, TPH GRO/DRO and chloride concentrations sample RLs to the NMWQCC standards. The results of the groundwater sample analysis along with the respective NMWQCC standards are provided in **Table 2**. It should be noted that the NMWQCC has not established a protection limit for TPH GRO/DRO in groundwater.

6.1 Sampling Results

Apex compared sampling results at each of the six (6) monitoring wells (MW) against standards. **Figures 1 and 2** show the location of wells and topographic features. The results are summarized by sampling event below. A summary of results can be found in **Tables 1 and 2**.

6.1.1 – April 2022

TPH GRO/DRO

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited concentrations above NMWQCC limits during the April 2022 sampling event. Samples collected from MW-1 and MW-4 through MW-6 contained GRO concentrations of 0.0395 J mg/l, 0.0360 J



mg/l, 0.0356 J mg/l, and 0.0506 J mg/l, respectively. DRO concentrations exceed laboratory reporting limits in MW-1 through MW-6 with concentrations of 0.0625 B J mg/l, 0.0685 B J mg/l, 0.0751 B J mg/l, 0.0701 B J mg/l, 0.0649 J mg/l and 0.0426 B J mg/l, respectively. Extended range DRO concentrations exceed laboratory reporting limits in MW-2 and MW-3 with concentrations of 0.0145 J mg/l and 0.0171 J mg/l, respectively.

Benzene, Toluene, Ethylbenzene and Xylenes

Samples collected from MW-3 through MW-6 contained benzene concentrations of 0.000152 J mg/l, 0.000558 J mg/l, 0.000597 J mg/l, and 0.000896 J mg/l, respectively. Samples collected from MW-4 through MW-6 contained toluene concentrations of 0.000636 J mg/l, 0.00135 mg/l, and 0.00165 mg/l, respectively. Samples collected from MW-4 through MW-6 contained ethylbenzene concentrations of 0.000186 J mg/l, 0.000266 J mg/l, and 0.00453 J mg/l, exceeding laboratory reporting limits. Samples collected from MW-1 and MW-4 through MW-6 contained xylenes concentrations of 0.000355 J mg/l, 0.00147 J mg/l, 0.00118 J mg/l, and 0.00297 J mg/l which exceeded laboratory reporting limits.

Chlorides

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited chloride concentrations above NMWQCC limits during the April 2022 sampling event.

TDS

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited TDS concentrations above NMWQCC limits during the April 2022 sampling event.

Sulfate

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited sulfate concentrations above NMWQCC limits during the April 2022 sampling event.

6.1.2 – June 2022

TPH GRO/DRO

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited concentrations above NMWQCC limits during the June 2022 sampling event. Samples collected from MW-2 and MW-4 through MW-6 contained DRO concentrations of 0.0226 J mg/l, 0.180 B J3 mg/l, 0.0112 B J3 J mg/l and 0.0888 B J J3 mg/l, respectively. Extended range DRO



concentrations exceed laboratory reporting limits in MW-1, MW-2 and MW-4 through MW-6 with concentrations of 0.0130 J mg/l, 0.0260 J mg/l, 0.448 B mg/l, 0.0975 B J mg/l and 0.174 B mg/l, respectively. Concentrations of GRO were non-detectable levels in monitoring wells MW-1 through MW-6.

Benzene, Toluene, Ethylbenzene and Xylenes

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited concentrations above NMWQCC limits during the June 2022 sampling event.

Chlorides

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited chloride concentrations above NMWQCC limits during the June 2022 sampling event.

TDS

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited TDS concentrations above NMWQCC limits during the December 2021 sampling event.

Sulfate

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited sulfate concentrations above NMWQCC limits during the December 2021 sampling event.

6.1.3 – August 2022

TPH GRO/DRO

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited concentrations above NMWQCC limits during the August 2022 sampling event. Only samples collected from MW-6 contained a detectable GRO concentration of 0.0232 J mg/l. DRO and extended range DRO concentrations were non-detect in monitoring wells MW-1 through MW-6.

Benzene, Toluene, Ethylbenzene and Xylenes

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited concentrations above NMWQCC limits during the August 2022 sampling event. Benzene concentrations above laboratory MDLs were reported in MW-4 (0.00044 J mg/l) and MW-6 (0.00069 J mg/l). Toluene concentrations above laboratory RDLs were reported in MW-1 (0.0017 mg/l), MW-4 (0.0018 mg/l), MW-5 (0.0018 mg/l) and MW-6 (0.0027 mg/l). Ethylbenzene concentrations above laboratory MDLs were reported in MW-6 (0.00032 J mg/l). Xylene



concentrations above laboratory MDLs were reported in MW-6 (0.0019 mg/l) during the August 2022 sampling event.

Chlorides

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited chloride concentrations above NMWQCC limits during the August 2022 sampling event.

6.1.4 – November 2022

TPH GRO/DRO

Samples collected from MW-1, MW-2, and MW-4 contained DRO concentrations of 0.31 mg/l, 0.23 mg/l, and 0.024 J mg/l, respectively, exceeding laboratory reported detection limits. Extended range DRO concentrations exceed laboratory reporting limits in MW-4 with a concentration of 0.022 J mg/l. Concentrations of GRO were non-detect in monitoring wells MW-1 through MW-6.

Benzene, Toluene, Ethylbenzene and Xylenes

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited concentrations above NMWQCC limits during the November 2022 sampling event. Benzene concentrations above laboratory MDLs were reported in MW-4 (0.0006 J mg/l), MW-5 (0.00077 J mg/l), and MW-6 (0.0012 mg/l). Toluene concentrations above laboratory RDLs were reported in MW-4 (0.0004 J mg/l), MW-5 (0.0015 mg/l), and MW-6 (0.0018 mg/l). Ethylbenzene concentrations above laboratory MDLs were reported in MW-5 (0.00034 J mg/l) and MW-6 (0.00055 J. mg/l). Xylene concentrations above laboratory MDLs were reported in MW-4 (0.00045 J mg/l), MW-5 (0.0015 J mg/l) and MW-6 (0.0018 mg/l) during the November 2022 sampling event.

Chlorides

None of the samples collected from monitoring wells MW-1 through MW-6 exhibited chloride concentrations above NMWQCC limits during the November 2022 sampling event.

7.0 FINDINGS AND CONCLUSIONS

Based on the results of this and previous site investigation activities, the extent of affected groundwater has been delineated at the Site. In addition, none of the groundwater samples reported BTEX, TPH or chloride concentrations exceeding the NMWQCC standards. Dissolved



phase benzene has not exceeded 0.005 mg/L since 12/12/2018.

8.0 RECOMMENDATIONS

The Site has not had any exceedances since 12/12/2018 based on laboratory results. Apex recommends considering this Site for closure.

9.0 REFERENCES

Nicholson, Alexander and Clebsch, Alfred 1961. *Geology and Ground-Water Conditions in Southern Lea County, New Mexico*. Groundwater Report 6. United States Geological Survey



TABLES



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Table 2 – Groundwater Elevations

TABLE 1 Groundwater Elevations Brahoney Release Site - Lea County, NM					
Monitoring Well ID	Measurement Date	Total Depth	Depth to PSH	Depth to Water	PSH Thickness
		(Feet)	(Feet BTOC)	(Feet BTOC)	(Feet)
MW-1	8/27/2021	105.76	-	99.52	-
MW-1	12/27/2021	105.76	-	99.73	-
MW-1	4/28/2022	105.76	-	99.94	-
MW-1	6/30/2022	105.76	-	100.03	-
MW-1	8/25/2022	105.76	-	100.16	-
MW-1	11/11/2022	105.76	-	100.34	-
MW-2	8/27/2021	122.02	-	103.11	-
MW-2	12/27/2021	122.02	-	103.35	-
MW-2	4/28/2022	122.02	-	103.56	-
MW-2	6/30/2022	122.02	-	103.66	-
MW-2	8/25/2022	122.02	-	103.81	-
MW-2	11/11/2022	122.02	-	103.98	-
MW-3	8/27/2021	107.45	-	96.96	-
MW-3	12/27/2021	107.45	-	97.25	-
MW-3	4/28/2022	107.45	-	97.46	-
MW-3	6/30/2022	107.45	-	97.56	-
MW-3	8/25/2022	107.45	-	97.70	-
MW-3	11/11/2022	107.45	-	97.73	-
MW-4	8/27/2021	104.05	-	96.98	-
MW-4	12/27/2021	104.05	-	97.60	-
MW-4	4/28/2022	104.05	-	97.84	-
MW-4	6/30/2022	104.05	-	97.93	-
MW-4	8/25/2022	104.05	-	98.06	-
MW-4	11/11/2022	104.05	-	98.25	-
MW-5	8/27/2021	102.86	-	97.35	-
MW-5	12/27/2021	102.86	-	97.22	-
MW-5	4/28/2022	102.86	-	97.44	-
MW-5	6/30/2022	102.86	-	97.54	-
MW-5	8/25/2022	102.86	-	97.68	-
MW-5	11/11/2022	102.86	-	97.80	-
MW-6	8/27/2021	101.61	-	99.22	-
MW-6	12/27/2021	101.61	-	99.48	-
MW-6	4/28/2022	101.61	-	99.70	-
MW-6	6/29/2022	101.61	-	99.80	-
MW-6	8/25/2022	101.61	-	99.96	-
MW-6	11/11/2022	101.61	-	100.00	-

BTOC - Below Top-of-Casing



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Table 3 – Groundwater Laboratory Analytical Data

Table 2 Groundwater Analytical Brahany Release Site - Lea County, New Mexico												
Well	Sample Date	Chloride	Total Dissolved Solids	Sulfates	Benzene	Ethylbenzene	Toluene	Total Xylenes	GRO	DRO	EXT DRO	
		250.0 mg/l	1000.0 mg/l	600.0 mg/l	0.005 mg/l	0.7 mg/l	1 mg/l	0.62 mg/l	NS mg/l	NS mg/l	NS mg/l	
NMAC 20.6.2.3103 Standards for Groundwater of 10,000 mg/l TDS Concentration or Less												
MW-1	8/16/2016	64	-	-	0.002	0.00007	0.0003	< 0.0001	<1.00	<1.00	<1.00	
MW-1	5/10/2017	58.8	-	-	< 0.005	0.005	0.005	-	-	-	-	
MW-1	12/28/2017	57	-	-	< 0.005	0.005	0.005	< 0.005	-	-	-	
MW-1	3/22/2018	56.8	-	-	< 0.005	0.005	0.005	< 0.005	-	-	-	
MW-1	6/27/2018	55.3	-	-	< 0.000185	0.00019	0.0005	< 0.0005	-	-	-	
MW-1	12/12/2018	57.1	-	-	< 0.000185	0.00019	0.0005	< 0.0005	-	-	-	
MW-1	4/16/2019	61	-	-	< 0.000214	0.000146	0.000146	< 0.000192	-	-	-	
MW-1	8/27/2021	55.7	544	108	< 0.001	< 0.001	< 0.001	< 0.003	<0.100	<0.100	<0.100	
MW-1	12/27/2021	59.3	538	110	< 0.001	< 0.001	< 0.001	0.000655 J	<0.100	0.102	0.306	
MW-1	4/28/2022	60.9	567	115	< 0.001	< 0.001	< 0.001	0.000355 J	0.0395 J	0.0625 BJ	<0.100	
MW-1	6/30/2022	61.2	540	110	< 0.001	< 0.001	< 0.001	0.000225 J	<0.0314	<0.0222	0.0130 J	
MW-1	8/27/2022	60.7	620	105	< 0.002	< 0.003	0.0017	< 0.003	<0.0100	<0.021	<0.021	
MW-1	11/11/2022	59.4	534	113	< 0.002	< 0.003	< 0.002	< 0.003	<0.0100	0.31	<0.021	
MW-2	8/16/2016	60	-	-	< 0.00008	0.00007	0.00006	< 0.0001	<1.00	<1.00	<1.00	
MW-2	5/10/2017	56.3	-	-	< 0.005	0.005	0.005	-	-	-	-	
MW-2	12/28/2017	92.7	-	-	< 0.005	0.005	0.005	< 0.005	-	-	-	
MW-2	3/22/2018	52.4	-	-	< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	
MW-2	6/27/2018	52.1	-	-	< 0.000185	< 0.00019	< 0.0005	< 0.0005	-	-	-	
MW-2	12/12/2018	53.4	-	-	< 0.000185	< 0.00019	< 0.0005	< 0.0005	-	-	-	
MW-2	4/16/2019	57.9	-	-	< 0.000214	< 0.000146	< 0.000146	< 0.000192	-	-	-	
MW-2	8/27/2021	53.5	477	110	< 0.001	< 0.001	< 0.001	< 0.003	<0.100	0.11	<0.100	
MW-2	12/27/2021	55.7	481	109	< 0.001	< 0.001	< 0.001	< 0.003	<0.100	0.155	0.179	
MW-2	4/28/2022	52.1	474	109	< 0.001	< 0.001	< 0.001	< 0.003	<0.0314	0.0685 BJ	0.0145 J	
MW-2	6/30/2022	54.3	477	109	< 0.001	< 0.001	< 0.001	< 0.003	<0.0314	0.0226 J	0.0260 J	
MW-2	8/27/2022	52.4	528	107	< 0.002	< 0.003	< 0.002	< 0.003	<0.0100	<0.021	<0.021	
MW-2	11/11/2022	53.8	494	113	< 0.002	< 0.003	< 0.002	< 0.003	<0.0100	0.23	<0.021	
MW-3	8/16/2016	64	-	-	0.035	0.004	0.033	0.016	<1.00	<1.00	<1.00	
MW-3	5/10/2017	56.4	-	-	0.0156	< 0.005	0.00555	-	-	-	-	
MW-3	12/28/2017	54.8	-	-	< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	
MW-3	3/22/2018	55.9	-	-	< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	
MW-3	6/27/2018	66.3	-	-	0.00408	< 0.00019	0.00108	< 0.0005	-	-	-	
MW-3	12/12/2018	57.2	-	-	0.00272	0.0028	0.00146	< 0.0005	-	-	-	
MW-3	4/16/2019	62.6	-	-	0.00041 J	0.000146	0.00038 J	< 0.000192	-	-	-	
MW-3	8/27/2021	61.2	524	111	< 0.001	< 0.001	< 0.001	< 0.003	<0.100	<0.100	<0.100	
MW-3	12/27/2021	65.3	**	119	0.000247 J	< 0.001	< 0.001	0.000362 J	<0.100	0.0749 J	0.199	
MW-3	4/28/2022	64.2	508	112	0.000152 J	< 0.001	< 0.001	< 0.003	<0.100	0.0751 BJ	0.0171 J	
MW-3	6/30/2022	62.5	492	108	0.00016 J	< 0.001	< 0.001	< 0.003	<0.0314	<0.0222	<0.0118	
MW-3	8/27/2022	60.7	564	106	< 0.002	< 0.003	< 0.002	< 0.003	<0.0100	<0.021	<0.021	
MW-3	11/11/2022	51.6	498	91.5	< 0.002	< 0.003	< 0.002	< 0.003	<0.0100	<0.02	<0.020	
MW-4	8/16/2016	64	-	-	0.005	0.0008	0.004	0.002	<1.00	<1.00	<1.00	
MW-4	5/10/2017	57.4	-	-	0.0113	< 0.005	0.00628	-	-	-	-	
MW-4	12/28/2017	55.3	-	-	< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	
MW-4	3/22/2018	54.8	-	-	< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	
MW-4	6/27/2018	54.6	-	-	0.0035	0.00034	0.00235	0.00155	-	-	-	
MW-4	12/12/2018	57.4	-	-	0.0042	0.0055	0.00297	0.00267	-	-	-	
MW-4	4/16/2019	60.7	-	-	0.00239	0.00032 J	0.00171	0.00149	-	-	-	
MW-4	8/27/2021	62.6	506	112	< 0.001	< 0.001	< 0.001	< 0.003	<0.100	<0.100	<0.100	
MW-4	12/27/2021	66.3	**	109	< 0.001	< 0.001	< 0.001	< 0.003	<0.100	0.0909 J	0.25	
MW-4	4/28/2022	67.3	525	111	0.000558 J	0.000186 J	0.000636 J	0.00147 J	0.0360 J	0.0701 BJ	<0.100	
MW-4	6/30/2022	64.8	514	109	0.000566 J	0.000172 J	0.000395 J	0.000858 J	<0.0314	0.180 B J3	0.448 B	
MW-4	8/27/2022	62.5	556	106	0.00044 J	< 0.003	0.0018	< 0.003	<0.0100	<0.021	<0.021	
MW-4	11/11/2022	62.5	532	110	0.0006 J	< 0.003	0.0004 J	0.00045 J	<0.0100	0.024 J	0.022 J	
MW-5	8/16/2016	60	-	-	0.007	0.001	0.006	0.002	<1.00	<1.00	<1.00	
MW-5	5/10/2017	58.3	-	-	0.0139	< 0.005	0.00753	-	-	-	-	
MW-5	12/28/2017	81	-	-	0.00739	< 0.005	< 0.005	< 0.005	-	-	-	
MW-5	3/22/2018	57.6	-	-	< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	
MW-5	6/27/2018	56.6	-	-	0.00408	0.00038	0.00256	0.00106	-	-	-	
MW-5	12/12/2018	60	-	-	0.002	0.0028	0.0014	< 0.0005	-	-	-	
MW-5	4/16/2019	63.2	-	-	0.00171	0.00021 J	0.00104	0.00087 J	-	-	-	
MW-5	8/27/2021	63.9	489	109	< 0.001	< 0.001	< 0.001	< 0.003	<0.100	<0.100	<0.100	
MW-5	12/27/2021	64.9	**	112	0.000444 J	0.000269 J	0.00112	0.00115 J	<0.100	0.0509 J	0.176	
MW-5	4/28/2022	65	496	110	0.000597 J	0.000266 J	0.00135	0.00118 J	0.0356 J	0.0649 J	<0.100	
MW-5	6/30/2022	63.6	491	109	0.000472 J	0.000255 J	0.00102	0.00121 J	<0.0314	0.112 B J3	0.0975 B J	



Centurion Pipeline L.P.
 Brahaney Gathering 8" Release Site

March 2023
 Page 13

Table 2
 Groundwater Analytical
 Brahaney Release Site - Lea County, New Mexico

Well	Sample Date	Chloride	Total Dissolved Solids	Sulfates	Benzene	Ethylbenzene	Toluene	Total Xylenes	GRO	DRO	EXT DRO
NMAC 20.6.2.3103 Standards for Groundwater of 10,000 mg/l TDS Concentration or Less		250.0 mg/l	1000.0 mg/l	600.0 mg/l	0.005 mg/l	0.7 mg/l	1 mg/l	0.62 mg/l	NS mg/l	NS mg/l	NS mg/l
MW-5	8/27/2022	62	528	107	< 0.002	< 0.003	0.0018	< 0.003	<0.0100	<0.021	<0.021
MW-5	11/11/2022	62.2	510	112	0.00077 J	0.00034 J	0.0015	0.0015	<0.0100	<0.02	<0.02
MW-6	8/16/2016	60	-	-	0.007	0.0009	0.005	0.002	<1.00	<1.00	<1.00
MW-6	5/10/2017	55.4	-	-	< 0.005	< 0.005	< 0.005	-	-	-	-
MW-6	12/28/2017	83.2	-	-	0.00642	< 0.005	< 0.005	< 0.005	-	-	-
MW-6	3/22/2018	53.7	-	-	< 0.005	< 0.005	< 0.005	< 0.005	-	-	-
MW-6	6/27/2018	54.1	-	-	0.00536	0.00026	0.00212	< 0.0005	-	-	-
MW-6	12/12/2018	56.4	-	-	0.00514	0.0035	0.00201	0.00176	-	-	-
MW-6	4/16/2019	60.3	-	-	0.00044 J	< 0.000146	0.00021 J	< 0.000192	-	-	-
MW-6	8/27/2021	61.2	514	113	< 0.001	< 0.001	< 0.001	< 0.003	<0.100	<0.100	<0.100
MW-6	12/27/2021	64.6	**	109	0.000977 J	0.00066 J	0.00196	0.00378	0.0341 J	0.118	0.211
MW-6	4/28/2022	63.8	491	138	0.000896 J	0.000453 J	0.00165	0.00297 J	0.0506 J	0.0426 BJ	<0.100
MW-6	6/30/2022	63.4	518	110	0.000421 J	0.00026 J	0.000779 J	0.00169 J	<0.0314	0.0888 B J J3	0.174 B
MW-6	8/27/2022	59.8	568	104	0.00069 J	0.00032 J	0.0027	0.0019	0.0232 J	<0.021	<0.021
MW-6	11/11/2022	61.6	564	111	0.0012	0.00055 J	0.0018	0.003	<0.100	<0.02	<0.0201

NS - Not Specified

** - Sample not analyzed, laboratory error.

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

J - The identification of the analyte is acceptable; the reported value is an estimate.

J3 - The Associated batch QC was outside the established quality control range for precision.



Centurion Pipeline L.P.
Brahoney Gathering 8" Release Site

March 2023
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Table 4 – Groundwater Natural Attenuation Parameters

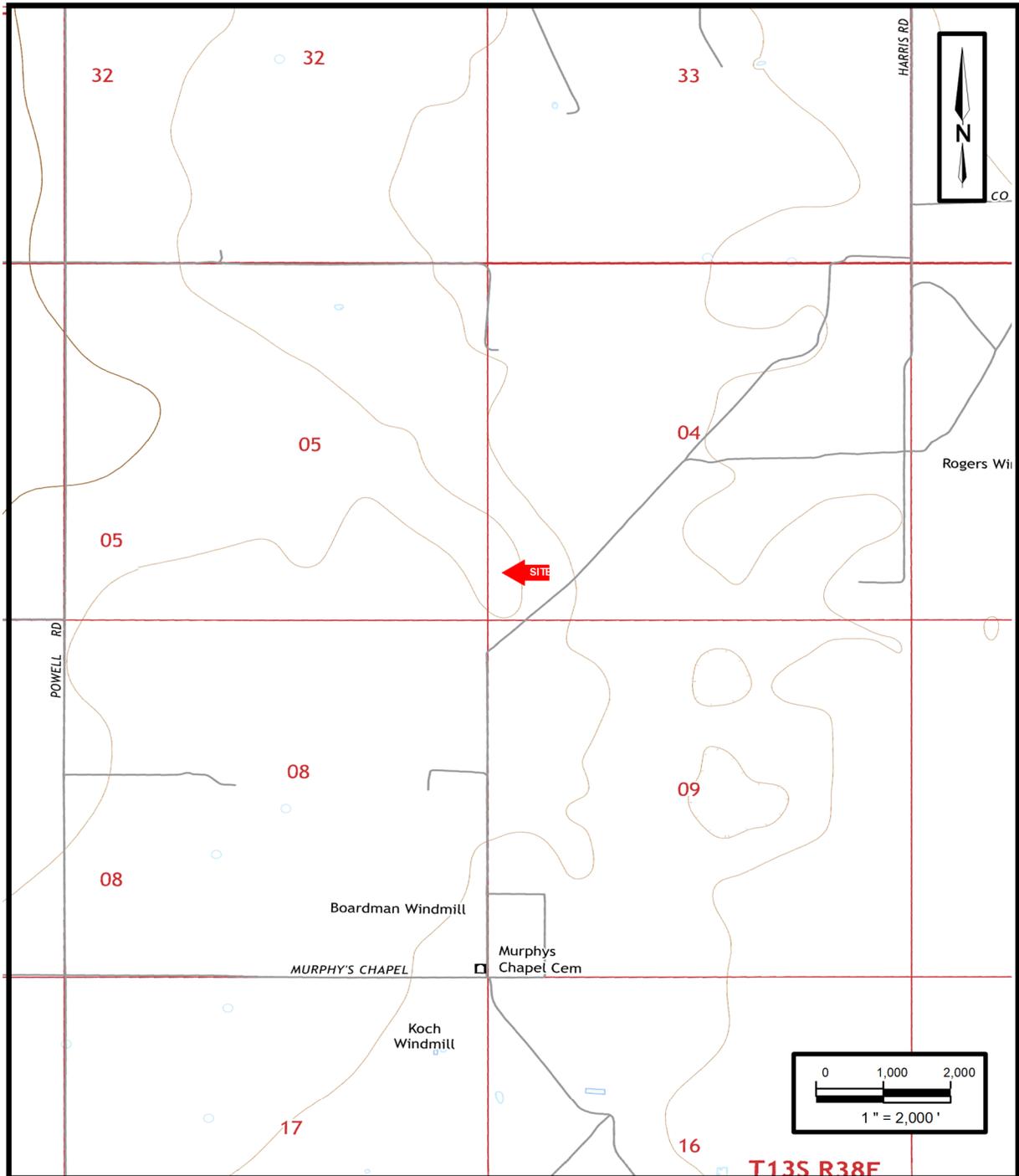
TABLE 3 Groundwater Natural Attenuation Parameters Brahoney Release Site - Lea County, NM						
Monitoring Well ID	Measurement Date	Temperature (°Celsius)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Conductivity (µS/cm)
MW-1	8/27/2021	26.99	7.15	6.65	119.0	784.0
MW-1	12/27/2021	19.20	7.48	4.17	33.8	874.0
MW-1	4/28/2022	23.31	7.42	4.55	139.0	767.0
MW-1	6/30/2022	22.05	7.31	3.37	142.0	842.0
MW-1	8/25/2022	25.45	5.32	3.26	236.0	848.0
MW-1	11/11/2022	19.75	7.43		285.0	828.0
MW-2	8/27/2021	27.54	7.47	6.27	95.0	701.0
MW-2	12/27/2021	18.40	7.73	5.38	37.2	735.0
MW-2	4/28/2022	20.49	7.70	5.90	151.0	656.0
MW-2	6/30/2022	22.69	7.60	4.59	139.0	721.0
MW-2	8/25/2022	24.14	5.13	3.89	276.0	711.0
MW-2	11/11/2022	17.67	7.46	4.15	296.0	728.0
MW-3	8/27/2021	24.05	7.40	4.97	113.0	760.0
MW-3	12/27/2021	18.60	7.73	5.26	35.0	789.0
MW-3	4/28/2022	25.55	7.65	4.81	132.0	695.0
MW-3	6/30/2022	24.81	7.57	3.73	142.0	774.0
MW-3	8/25/2022	24.26	5.08	3.73	268.0	763.0
MW-3	11/11/2022	20.95	7.96	0.68	274.0	752.0
MW-4	8/27/2021	23.80	7.46	5.90	107.0	753.0
MW-4	12/27/2021	18.40	7.73	5.24	35.9	807.0
MW-4	4/28/2022	25.76	7.61	1.88	131.0	723.0
MW-4	6/30/2022	26.63	7.54	4.03	148.0	812.0
MW-4	8/25/2022	25.67	4.99	4.06	278.0	803.0
MW-4	11/11/2022	20.20	7.44	4.38	301.0	815.0
MW-5	8/27/2021	27.53	7.50	5.73	108.0	749.0
MW-5	12/27/2021	18.90	7.78	4.90	31.6	769.0
MW-5	4/28/2022	26.68	7.54	4.73	138.0	671.0
MW-5	6/30/2022	24.28	7.62	4.09	153.0	753.0
MW-5	8/25/2022	25.27	5.16	3.87	272.0	751.0
MW-5	11/11/2022	21.12	7.56	4.15	306.0	750.0
MW-6	8/27/2021	29.50	7.43	4.82	111.0	743.0
MW-6	12/27/2021	18.10	7.70	5.34	38.0	844.0
MW-6	4/28/2022	30.35	7.21	3.61	159.0	719.0
MW-6	6/30/2022	27.88	7.58	2.39	161.0	818.0



FIGURES



Figure 1 – Topographic Map



Groundwater Monitoring Report
 Centurion Pipeline L. P.
 Brahaney Release Site
 Lea County, NM
 33.21341 N, 103.1996 W

Project No. CEN21-004



Apex Companies, LLC
 505 N Big Spring St., Suite 301A
 Midland, Texas 79701
 Phone: (432) 695-6016
www.apexcos.com

FIGURE 1
Brahaney

C:\Users\aron.sides\gis\Brahaney\Fig 1 Brahaney.mxd 3/9/2022 GCS North American 1983 Projected Coordinate System



Figure 2 – Site Vicinity Map



Groundwater Monitoring Report
Centurion Pipeline L. P.
Brahaney Release Site
 Lea County, NM
 33.21341 N, 103.1996 W

CEN21-004



Apex Companies, LLC
 505 N Big Spring St., Suite 301A
 Midland, Texas 79701
 Phone: (432) 695-6016
www.apexcoos.com

FIGURE 2
Brahaney

C:\Users\laaron.sides\gis\Brahaney\Fig 2 Brahaney.mxd 3/9/2022 GCS North American 1983 Projected Coordinate System



APPENDICES



Appendix A – Laboratory Reports and Chain of Custody Documentation





ANALYTICAL REPORT

May 13, 2022

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

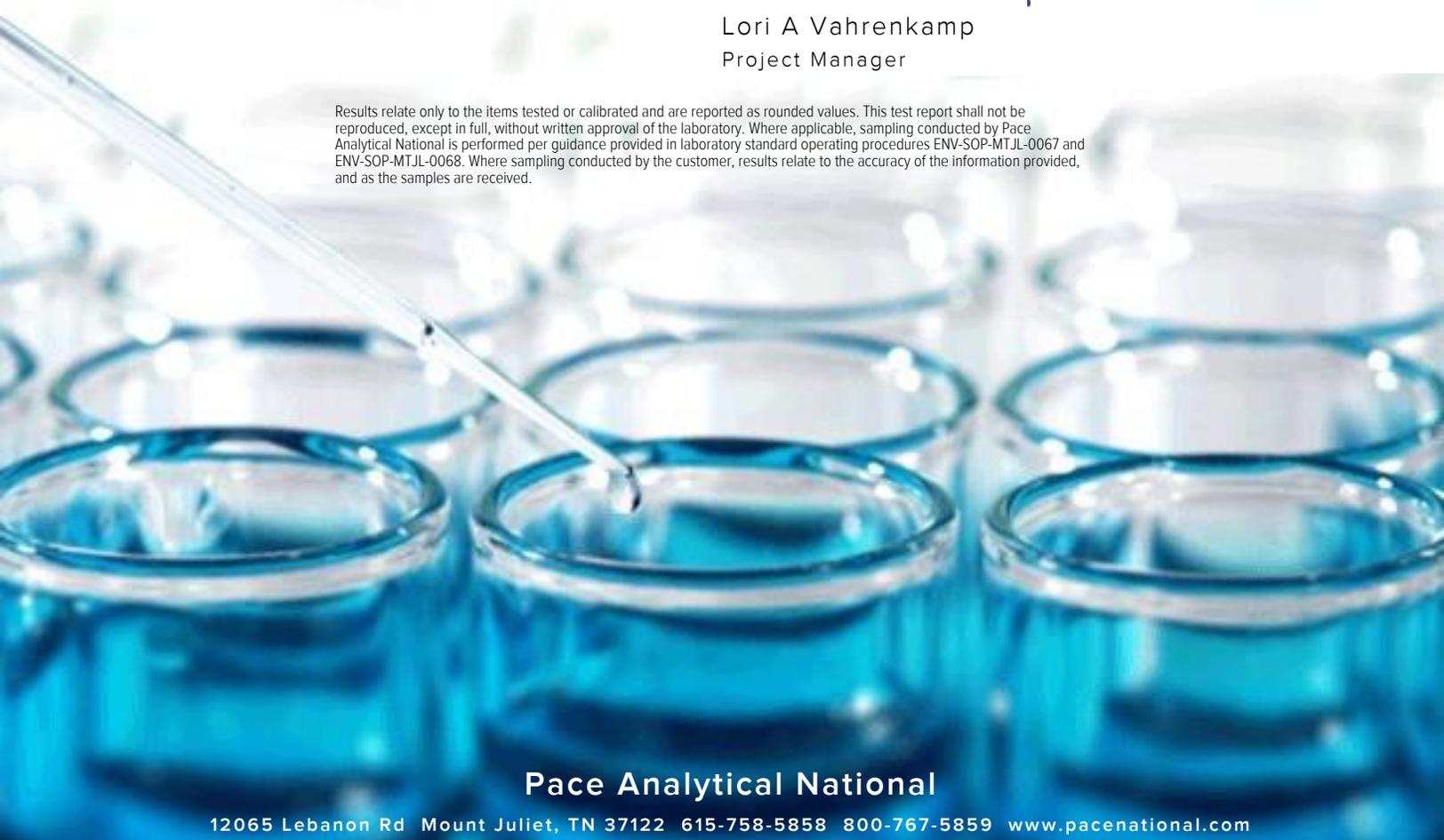
Apex - Midland, TX

Sample Delivery Group: L1488382
 Samples Received: 04/30/2022
 Project Number: 0314045-22005
 Description: Lea County, NM
 Site: BRAHANEY (SOUTH)
 Report To: Aaron Sides
 505 N. Big Spring Street
 Suite 301A
 Midland, TX 79701

Entire Report Reviewed By:

Lori A Vahrenkamp
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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Cn: Case Narrative	5	
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MW-2 L1488382-01 GW

Collected by John Faught
 Collected date/time 04/28/22 08:47
 Received date/time 04/30/22 08:00

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1858773	1	05/04/22 18:26	05/04/22 19:20	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	5	05/07/22 20:42	05/07/22 20:42	VRP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/03/22 23:09	05/03/22 23:09	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/03/22 22:21	05/03/22 22:21	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858631	1	05/05/22 00:26	05/05/22 00:26	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1859366	1	05/05/22 18:01	05/05/22 18:01	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1860509	1	05/09/22 07:08	05/09/22 19:51	TJD	Mt. Juliet, TN

MW-1 L1488382-02 GW

Collected by John Faught
 Collected date/time 04/28/22 10:15
 Received date/time 04/30/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1858773	1	05/04/22 18:26	05/04/22 19:20	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	5	05/07/22 20:56	05/07/22 20:56	VRP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/03/22 23:31	05/03/22 23:31	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/03/22 22:43	05/03/22 22:43	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858631	1	05/05/22 00:45	05/05/22 00:45	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1860509	1	05/09/22 07:08	05/09/22 20:17	TJD	Mt. Juliet, TN

MW-4 L1488382-04 GW

Collected by John Faught
 Collected date/time 04/28/22 11:55
 Received date/time 04/30/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1858503	1	05/04/22 10:58	05/04/22 14:24	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	1	05/07/22 21:09	05/07/22 21:09	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	5	05/07/22 21:23	05/07/22 21:23	VRP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/04/22 00:02	05/04/22 00:02	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/03/22 23:05	05/03/22 23:05	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1860509	1	05/09/22 07:08	05/09/22 20:43	TJD	Mt. Juliet, TN

MW-3 L1488382-05 GW

Collected by John Faught
 Collected date/time 04/28/22 13:20
 Received date/time 04/30/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1858503	1	05/04/22 10:58	05/04/22 14:24	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	1	05/07/22 21:36	05/07/22 21:36	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	5	05/07/22 21:49	05/07/22 21:49	VRP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/04/22 00:24	05/04/22 00:24	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/03/22 23:26	05/03/22 23:26	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1860509	1	05/09/22 07:08	05/09/22 21:10	TJD	Mt. Juliet, TN

MW-5 L1488382-06 GW

Collected by John Faught
 Collected date/time 04/28/22 14:45
 Received date/time 04/30/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1858503	1	05/04/22 10:58	05/04/22 14:24	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	1	05/07/22 22:03	05/07/22 22:03	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	5	05/07/22 22:16	05/07/22 22:16	VRP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/04/22 00:46	05/04/22 00:46	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/03/22 23:48	05/03/22 23:48	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1861539	1	05/10/22 15:05	05/11/22 14:37	AEG	Mt. Juliet, TN

MW-6 L1488382-07 GW

Collected by John Faught
 Collected date/time 04/28/22 16:20
 Received date/time 04/30/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1858503	1	05/04/22 10:58	05/04/22 14:24	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	1	05/07/22 22:56	05/07/22 22:56	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	5	05/08/22 23:25	05/08/22 23:25	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/04/22 01:08	05/04/22 01:08	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/04/22 00:09	05/04/22 00:09	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1860509	1	05/09/22 07:08	05/10/22 01:30	DMG	Mt. Juliet, TN

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

FB-01 L1488382-08 GW

Collected by John Faught
 Collected date/time 04/28/22 11:25
 Received date/time 04/30/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1858503	1	05/04/22 10:58	05/04/22 14:24	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	1	05/07/22 23:10	05/07/22 23:10	VRP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/03/22 19:56	05/03/22 19:56	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/03/22 20:54	05/03/22 20:54	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1860509	1	05/09/22 07:08	05/10/22 01:55	DMG	Mt. Juliet, TN

EB-01 L1488382-09 GW

Collected by John Faught
 Collected date/time 04/28/22 13:05
 Received date/time 04/30/22 08:00

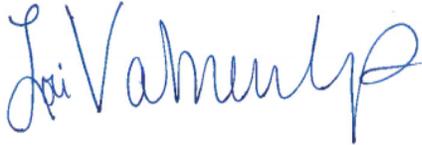
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
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Wet Chemistry by Method 9056A	WG1860156	1	05/07/22 23:50	05/07/22 23:50	VRP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/03/22 19:35	05/03/22 19:35	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/03/22 21:16	05/03/22 21:16	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1860509	1	05/09/22 07:08	05/10/22 02:21	DMG	Mt. Juliet, TN

DUP-01 L1488382-10 GW

Collected by John Faught
 Collected date/time 04/28/22 00:00
 Received date/time 04/30/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1858773	1	05/04/22 18:26	05/04/22 19:20	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	1	05/08/22 00:17	05/08/22 00:17	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1860156	5	05/08/22 00:30	05/08/22 00:30	VRP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1858207	1	05/04/22 01:29	05/04/22 01:29	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1858190	1	05/04/22 00:31	05/04/22 00:31	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1860509	1	05/09/22 07:08	05/10/22 02:46	DMG	Mt. Juliet, TN

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.



Lori A Vahrenkamp
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Collected date/time: 04/28/22 08:47

L1488382

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	474		10.0	1	05/04/2022 19:20	WG1858773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	52.1		1.90	5.00	5	05/07/2022 20:42	WG1860156
Sulfate	109		2.97	25.0	5	05/07/2022 20:42	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	05/03/2022 23:09	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	99.0			78.0-120		05/03/2022 23:09	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	05/03/2022 22:21	WG1858190
Acrolein	U		0.00254	0.0500	1	05/03/2022 22:21	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/03/2022 22:21	WG1858190
Benzene	U		0.0000941	0.00100	1	05/03/2022 22:21	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/03/2022 22:21	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/03/2022 22:21	WG1858190
Bromoform	U		0.000129	0.00100	1	05/03/2022 22:21	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/03/2022 22:21	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/03/2022 22:21	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/03/2022 22:21	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/03/2022 22:21	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/03/2022 22:21	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/03/2022 22:21	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/03/2022 22:21	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/03/2022 22:21	WG1858190
Chloroform	U		0.000111	0.00500	1	05/03/2022 22:21	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/03/2022 22:21	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/03/2022 22:21	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/03/2022 22:21	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/03/2022 22:21	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/03/2022 22:21	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/03/2022 22:21	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/03/2022 22:21	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/03/2022 22:21	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/03/2022 22:21	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/03/2022 22:21	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/03/2022 22:21	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/03/2022 22:21	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/03/2022 22:21	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/03/2022 22:21	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/03/2022 22:21	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/03/2022 22:21	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/03/2022 22:21	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/03/2022 22:21	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/03/2022 22:21	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/03/2022 22:21	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/03/2022 22:21	WG1858190

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

Collected date/time: 04/28/22 08:47

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/03/2022 22:21	WG1858190
Ethylbenzene	U		0.000137	0.00100	1	05/03/2022 22:21	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/03/2022 22:21	WG1858190
Isopropylbenzene	U		0.000105	0.00100	1	05/03/2022 22:21	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/03/2022 22:21	WG1858190
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	05/03/2022 22:21	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/03/2022 22:21	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/03/2022 22:21	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/03/2022 22:21	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/03/2022 22:21	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/03/2022 22:21	WG1858190
Styrene	U		0.000118	0.00100	1	05/03/2022 22:21	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/03/2022 22:21	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/03/2022 22:21	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/03/2022 22:21	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/03/2022 22:21	WG1858190
Toluene	U		0.000278	0.00100	1	05/05/2022 00:26	WG1858631
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/03/2022 22:21	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/03/2022 22:21	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/03/2022 22:21	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/03/2022 22:21	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/03/2022 22:21	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/03/2022 22:21	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/03/2022 22:21	WG1858190
1,2,4-Trimethylbenzene	0.000817	J	0.000322	0.00100	1	05/03/2022 22:21	WG1858190
1,2,3-Trimethylbenzene	0.000197	J	0.000104	0.00100	1	05/03/2022 22:21	WG1858190
1,3,5-Trimethylbenzene	0.000482	J	0.000104	0.00100	1	05/03/2022 22:21	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/03/2022 22:21	WG1858190
Xylenes, Total	U		0.000174	0.00300	1	05/05/2022 18:01	WG1859366
(S) Toluene-d8	110			80.0-120		05/03/2022 22:21	WG1858190
(S) Toluene-d8	139	J1		80.0-120		05/05/2022 00:26	WG1858631
(S) Toluene-d8	121	J1		80.0-120		05/05/2022 18:01	WG1859366
(S) 4-Bromofluorobenzene	106			77.0-126		05/03/2022 22:21	WG1858190
(S) 4-Bromofluorobenzene	101			77.0-126		05/05/2022 00:26	WG1858631
(S) 4-Bromofluorobenzene	109			77.0-126		05/05/2022 18:01	WG1859366
(S) 1,2-Dichloroethane-d4	104			70.0-130		05/03/2022 22:21	WG1858190
(S) 1,2-Dichloroethane-d4	98.1			70.0-130		05/05/2022 00:26	WG1858631
(S) 1,2-Dichloroethane-d4	96.7			70.0-130		05/05/2022 18:01	WG1859366

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0685	B J	0.0222	0.100	1	05/09/2022 19:51	WG1860509
C28-C40 Oil Range	0.0145	J	0.0118	0.100	1	05/09/2022 19:51	WG1860509
(S) o-Terphenyl	95.3			52.0-156		05/09/2022 19:51	WG1860509

Collected date/time: 04/28/22 10:15

L1488382

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	567		10.0	1	05/04/2022 19:20	WG1858773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	60.9		1.90	5.00	5	05/07/2022 20:56	WG1860156
Sulfate	115		2.97	25.0	5	05/07/2022 20:56	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.0395	J	0.0314	0.100	1	05/03/2022 23:31	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	98.1			78.0-120		05/03/2022 23:31	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	05/03/2022 22:43	WG1858190
Acrolein	U		0.00254	0.0500	1	05/03/2022 22:43	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/03/2022 22:43	WG1858190
Benzene	U		0.0000941	0.00100	1	05/03/2022 22:43	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/03/2022 22:43	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/03/2022 22:43	WG1858190
Bromoform	U		0.000129	0.00100	1	05/03/2022 22:43	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/03/2022 22:43	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/03/2022 22:43	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/03/2022 22:43	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/03/2022 22:43	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/03/2022 22:43	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/03/2022 22:43	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/03/2022 22:43	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/03/2022 22:43	WG1858190
Chloroform	U		0.000111	0.00500	1	05/03/2022 22:43	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/03/2022 22:43	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/03/2022 22:43	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/03/2022 22:43	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/03/2022 22:43	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/03/2022 22:43	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/03/2022 22:43	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/03/2022 22:43	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/03/2022 22:43	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/03/2022 22:43	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/03/2022 22:43	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/03/2022 22:43	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/03/2022 22:43	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/03/2022 22:43	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/03/2022 22:43	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/03/2022 22:43	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/03/2022 22:43	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/03/2022 22:43	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/03/2022 22:43	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/03/2022 22:43	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/03/2022 22:43	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/03/2022 22:43	WG1858190

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

Collected date/time: 04/28/22 10:15

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/03/2022 22:43	WG1858190
Ethylbenzene	U		0.000137	0.00100	1	05/03/2022 22:43	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/03/2022 22:43	WG1858190
Isopropylbenzene	U		0.000105	0.00100	1	05/03/2022 22:43	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/03/2022 22:43	WG1858190
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	05/03/2022 22:43	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/03/2022 22:43	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/03/2022 22:43	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/03/2022 22:43	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/03/2022 22:43	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/03/2022 22:43	WG1858190
Styrene	U		0.000118	0.00100	1	05/03/2022 22:43	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/03/2022 22:43	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/03/2022 22:43	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/03/2022 22:43	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/03/2022 22:43	WG1858190
Toluene	U		0.000278	0.00100	1	05/03/2022 22:43	WG1858190
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/03/2022 22:43	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/03/2022 22:43	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/03/2022 22:43	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/03/2022 22:43	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/03/2022 22:43	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/03/2022 22:43	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/03/2022 22:43	WG1858190
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/03/2022 22:43	WG1858190
1,2,3-Trimethylbenzene	0.000197	J	0.000104	0.00100	1	05/03/2022 22:43	WG1858190
1,3,5-Trimethylbenzene	0.000889	J	0.000104	0.00100	1	05/03/2022 22:43	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/03/2022 22:43	WG1858190
Xylenes, Total	0.000355	J	0.000174	0.00300	1	05/05/2022 00:45	WG1858631
(S) Toluene-d8	112			80.0-120		05/03/2022 22:43	WG1858190
(S) Toluene-d8	129	J1		80.0-120		05/05/2022 00:45	WG1858631
(S) 4-Bromofluorobenzene	108			77.0-126		05/03/2022 22:43	WG1858190
(S) 4-Bromofluorobenzene	90.6			77.0-126		05/05/2022 00:45	WG1858631
(S) 1,2-Dichloroethane-d4	105			70.0-130		05/03/2022 22:43	WG1858190
(S) 1,2-Dichloroethane-d4	92.4			70.0-130		05/05/2022 00:45	WG1858631

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0625	B J	0.0222	0.100	1	05/09/2022 20:17	WG1860509
C28-C40 Oil Range	U		0.0118	0.100	1	05/09/2022 20:17	WG1860509
(S) o-Terphenyl	54.7			52.0-156		05/09/2022 20:17	WG1860509

Collected date/time: 04/28/22 11:55

L1488382

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	525		10.0	1	05/04/2022 14:24	WG1858503

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	67.3		0.379	1.00	1	05/07/2022 21:09	WG1860156
Sulfate	111		2.97	25.0	5	05/07/2022 21:23	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.0360	J	0.0314	0.100	1	05/04/2022 00:02	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	98.2			78.0-120		05/04/2022 00:02	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	05/03/2022 23:05	WG1858190
Acrolein	U		0.00254	0.0500	1	05/03/2022 23:05	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/03/2022 23:05	WG1858190
Benzene	0.000558	J	0.0000941	0.00100	1	05/03/2022 23:05	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/03/2022 23:05	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/03/2022 23:05	WG1858190
Bromoform	U		0.000129	0.00100	1	05/03/2022 23:05	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/03/2022 23:05	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/03/2022 23:05	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/03/2022 23:05	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/03/2022 23:05	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/03/2022 23:05	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/03/2022 23:05	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/03/2022 23:05	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/03/2022 23:05	WG1858190
Chloroform	U		0.000111	0.00500	1	05/03/2022 23:05	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/03/2022 23:05	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/03/2022 23:05	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/03/2022 23:05	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/03/2022 23:05	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/03/2022 23:05	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/03/2022 23:05	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/03/2022 23:05	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/03/2022 23:05	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/03/2022 23:05	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/03/2022 23:05	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/03/2022 23:05	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/03/2022 23:05	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/03/2022 23:05	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/03/2022 23:05	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/03/2022 23:05	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/03/2022 23:05	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/03/2022 23:05	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/03/2022 23:05	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/03/2022 23:05	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/03/2022 23:05	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/03/2022 23:05	WG1858190

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

Collected date/time: 04/28/22 11:55

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/03/2022 23:05	WG1858190
Ethylbenzene	0.000186	U	0.000137	0.00100	1	05/03/2022 23:05	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/03/2022 23:05	WG1858190
Isopropylbenzene	U		0.000105	0.00100	1	05/03/2022 23:05	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/03/2022 23:05	WG1858190
2-Butanone (MEK)	U	U3	0.00119	0.0100	1	05/03/2022 23:05	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/03/2022 23:05	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/03/2022 23:05	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/03/2022 23:05	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/03/2022 23:05	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/03/2022 23:05	WG1858190
Styrene	U		0.000118	0.00100	1	05/03/2022 23:05	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/03/2022 23:05	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/03/2022 23:05	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/03/2022 23:05	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/03/2022 23:05	WG1858190
Toluene	0.000636	U	0.000278	0.00100	1	05/03/2022 23:05	WG1858190
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/03/2022 23:05	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/03/2022 23:05	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/03/2022 23:05	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/03/2022 23:05	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/03/2022 23:05	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/03/2022 23:05	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/03/2022 23:05	WG1858190
1,2,4-Trimethylbenzene	0.000327	U	0.000322	0.00100	1	05/03/2022 23:05	WG1858190
1,2,3-Trimethylbenzene	0.000199	U	0.000104	0.00100	1	05/03/2022 23:05	WG1858190
1,3,5-Trimethylbenzene	0.000397	U	0.000104	0.00100	1	05/03/2022 23:05	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/03/2022 23:05	WG1858190
Xylenes, Total	0.00147	U	0.000174	0.00300	1	05/03/2022 23:05	WG1858190
(S) Toluene-d8	110			80.0-120		05/03/2022 23:05	WG1858190
(S) 4-Bromofluorobenzene	106			77.0-126		05/03/2022 23:05	WG1858190
(S) 1,2-Dichloroethane-d4	103			70.0-130		05/03/2022 23:05	WG1858190

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0701	BU	0.0222	0.100	1	05/09/2022 20:43	WG1860509
C28-C40 Oil Range	U		0.0118	0.100	1	05/09/2022 20:43	WG1860509
(S) o-Terphenyl	74.7			52.0-156		05/09/2022 20:43	WG1860509

Collected date/time: 04/28/22 13:20

L1488382

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	508		10.0	1	05/04/2022 14:24	WG1858503

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	64.2		0.379	1.00	1	05/07/2022 21:36	WG1860156
Sulfate	112		2.97	25.0	5	05/07/2022 21:49	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	05/04/2022 00:24	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	98.7			78.0-120		05/04/2022 00:24	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	05/03/2022 23:26	WG1858190
Acrolein	U		0.00254	0.0500	1	05/03/2022 23:26	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/03/2022 23:26	WG1858190
Benzene	0.000152	J	0.0000941	0.00100	1	05/03/2022 23:26	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/03/2022 23:26	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/03/2022 23:26	WG1858190
Bromoform	U		0.000129	0.00100	1	05/03/2022 23:26	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/03/2022 23:26	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/03/2022 23:26	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/03/2022 23:26	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/03/2022 23:26	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/03/2022 23:26	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/03/2022 23:26	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/03/2022 23:26	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/03/2022 23:26	WG1858190
Chloroform	U		0.000111	0.00500	1	05/03/2022 23:26	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/03/2022 23:26	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/03/2022 23:26	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/03/2022 23:26	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/03/2022 23:26	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/03/2022 23:26	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/03/2022 23:26	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/03/2022 23:26	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/03/2022 23:26	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/03/2022 23:26	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/03/2022 23:26	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/03/2022 23:26	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/03/2022 23:26	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/03/2022 23:26	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/03/2022 23:26	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/03/2022 23:26	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/03/2022 23:26	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/03/2022 23:26	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/03/2022 23:26	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/03/2022 23:26	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/03/2022 23:26	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/03/2022 23:26	WG1858190

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

Collected date/time: 04/28/22 13:20

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/03/2022 23:26	WG1858190
Ethylbenzene	U		0.000137	0.00100	1	05/03/2022 23:26	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/03/2022 23:26	WG1858190
Isopropylbenzene	U		0.000105	0.00100	1	05/03/2022 23:26	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/03/2022 23:26	WG1858190
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	05/03/2022 23:26	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/03/2022 23:26	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/03/2022 23:26	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/03/2022 23:26	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/03/2022 23:26	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/03/2022 23:26	WG1858190
Styrene	U		0.000118	0.00100	1	05/03/2022 23:26	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/03/2022 23:26	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/03/2022 23:26	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/03/2022 23:26	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/03/2022 23:26	WG1858190
Toluene	U		0.000278	0.00100	1	05/03/2022 23:26	WG1858190
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/03/2022 23:26	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/03/2022 23:26	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/03/2022 23:26	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/03/2022 23:26	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/03/2022 23:26	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/03/2022 23:26	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/03/2022 23:26	WG1858190
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/03/2022 23:26	WG1858190
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	05/03/2022 23:26	WG1858190
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	05/03/2022 23:26	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/03/2022 23:26	WG1858190
Xylenes, Total	U		0.000174	0.00300	1	05/03/2022 23:26	WG1858190
(S) Toluene-d8	109			80.0-120		05/03/2022 23:26	WG1858190
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2022 23:26	WG1858190
(S) 1,2-Dichloroethane-d4	106			70.0-130		05/03/2022 23:26	WG1858190

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0751	B J	0.0222	0.100	1	05/09/2022 21:10	WG1860509
C28-C40 Oil Range	0.0171	J	0.0118	0.100	1	05/09/2022 21:10	WG1860509
(S) o-Terphenyl	109			52.0-156		05/09/2022 21:10	WG1860509

Collected date/time: 04/28/22 14:45

L1488382

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	496		10.0	1	05/04/2022 14:24	WG1858503

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	65.0		0.379	1.00	1	05/07/2022 22:03	WG1860156
Sulfate	110		2.97	25.0	5	05/07/2022 22:16	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.0356	J	0.0314	0.100	1	05/04/2022 00:46	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	98.2			78.0-120		05/04/2022 00:46	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	05/03/2022 23:48	WG1858190
Acrolein	U		0.00254	0.0500	1	05/03/2022 23:48	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/03/2022 23:48	WG1858190
Benzene	0.000597	J	0.0000941	0.00100	1	05/03/2022 23:48	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/03/2022 23:48	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/03/2022 23:48	WG1858190
Bromoform	U		0.000129	0.00100	1	05/03/2022 23:48	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/03/2022 23:48	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/03/2022 23:48	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/03/2022 23:48	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/03/2022 23:48	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/03/2022 23:48	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/03/2022 23:48	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/03/2022 23:48	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/03/2022 23:48	WG1858190
Chloroform	U		0.000111	0.00500	1	05/03/2022 23:48	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/03/2022 23:48	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/03/2022 23:48	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/03/2022 23:48	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/03/2022 23:48	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/03/2022 23:48	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/03/2022 23:48	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/03/2022 23:48	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/03/2022 23:48	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/03/2022 23:48	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/03/2022 23:48	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/03/2022 23:48	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/03/2022 23:48	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/03/2022 23:48	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/03/2022 23:48	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/03/2022 23:48	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/03/2022 23:48	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/03/2022 23:48	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/03/2022 23:48	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/03/2022 23:48	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/03/2022 23:48	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/03/2022 23:48	WG1858190

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

Collected date/time: 04/28/22 14:45

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/03/2022 23:48	WG1858190
Ethylbenzene	0.000266	J	0.000137	0.00100	1	05/03/2022 23:48	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/03/2022 23:48	WG1858190
Isopropylbenzene	U		0.000105	0.00100	1	05/03/2022 23:48	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/03/2022 23:48	WG1858190
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	05/03/2022 23:48	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/03/2022 23:48	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/03/2022 23:48	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/03/2022 23:48	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/03/2022 23:48	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/03/2022 23:48	WG1858190
Styrene	U		0.000118	0.00100	1	05/03/2022 23:48	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/03/2022 23:48	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/03/2022 23:48	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/03/2022 23:48	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/03/2022 23:48	WG1858190
Toluene	0.00135		0.000278	0.00100	1	05/03/2022 23:48	WG1858190
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/03/2022 23:48	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/03/2022 23:48	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/03/2022 23:48	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/03/2022 23:48	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/03/2022 23:48	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/03/2022 23:48	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/03/2022 23:48	WG1858190
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/03/2022 23:48	WG1858190
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	05/03/2022 23:48	WG1858190
1,3,5-Trimethylbenzene	0.000127	J	0.000104	0.00100	1	05/03/2022 23:48	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/03/2022 23:48	WG1858190
Xylenes, Total	0.00118	J	0.000174	0.00300	1	05/03/2022 23:48	WG1858190
(S) Toluene-d8	110			80.0-120		05/03/2022 23:48	WG1858190
(S) 4-Bromofluorobenzene	106			77.0-126		05/03/2022 23:48	WG1858190
(S) 1,2-Dichloroethane-d4	101			70.0-130		05/03/2022 23:48	WG1858190

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0649	J	0.0222	0.100	1	05/11/2022 14:37	WG1861539
C28-C40 Oil Range	U		0.0118	0.100	1	05/11/2022 14:37	WG1861539
(S) o-Terphenyl	100			52.0-156		05/11/2022 14:37	WG1861539

Collected date/time: 04/28/22 16:20

L1488382

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	491		10.0	1	05/04/2022 14:24	WG1858503

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	63.8		0.379	1.00	1	05/07/2022 22:56	WG1860156
Sulfate	138		2.97	25.0	5	05/08/2022 23:25	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.0506	J	0.0314	0.100	1	05/04/2022 01:08	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	98.5			78.0-120		05/04/2022 01:08	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	05/04/2022 00:09	WG1858190
Acrolein	U		0.00254	0.0500	1	05/04/2022 00:09	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/04/2022 00:09	WG1858190
Benzene	0.000896	J	0.0000941	0.00100	1	05/04/2022 00:09	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/04/2022 00:09	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/04/2022 00:09	WG1858190
Bromoform	U		0.000129	0.00100	1	05/04/2022 00:09	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/04/2022 00:09	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/04/2022 00:09	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/04/2022 00:09	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/04/2022 00:09	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/04/2022 00:09	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/04/2022 00:09	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/04/2022 00:09	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/04/2022 00:09	WG1858190
Chloroform	U		0.000111	0.00500	1	05/04/2022 00:09	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/04/2022 00:09	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/04/2022 00:09	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/04/2022 00:09	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/04/2022 00:09	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/04/2022 00:09	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/04/2022 00:09	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/04/2022 00:09	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/04/2022 00:09	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/04/2022 00:09	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/04/2022 00:09	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/04/2022 00:09	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/04/2022 00:09	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/04/2022 00:09	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/04/2022 00:09	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/04/2022 00:09	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/04/2022 00:09	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/04/2022 00:09	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/04/2022 00:09	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/04/2022 00:09	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/04/2022 00:09	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/04/2022 00:09	WG1858190

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

Collected date/time: 04/28/22 16:20

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/04/2022 00:09	WG1858190
Ethylbenzene	0.000453	U	0.000137	0.00100	1	05/04/2022 00:09	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/04/2022 00:09	WG1858190
Isopropylbenzene	0.000152	U	0.000105	0.00100	1	05/04/2022 00:09	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/04/2022 00:09	WG1858190
2-Butanone (MEK)	U	U3	0.00119	0.0100	1	05/04/2022 00:09	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/04/2022 00:09	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/04/2022 00:09	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/04/2022 00:09	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/04/2022 00:09	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/04/2022 00:09	WG1858190
Styrene	U		0.000118	0.00100	1	05/04/2022 00:09	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/04/2022 00:09	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/04/2022 00:09	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/04/2022 00:09	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/04/2022 00:09	WG1858190
Toluene	0.00165		0.000278	0.00100	1	05/04/2022 00:09	WG1858190
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/04/2022 00:09	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/04/2022 00:09	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/04/2022 00:09	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/04/2022 00:09	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/04/2022 00:09	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/04/2022 00:09	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/04/2022 00:09	WG1858190
1,2,4-Trimethylbenzene	0.000609	U	0.000322	0.00100	1	05/04/2022 00:09	WG1858190
1,2,3-Trimethylbenzene	0.000445	U	0.000104	0.00100	1	05/04/2022 00:09	WG1858190
1,3,5-Trimethylbenzene	0.000535	U	0.000104	0.00100	1	05/04/2022 00:09	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/04/2022 00:09	WG1858190
Xylenes, Total	0.00297	U	0.000174	0.00300	1	05/04/2022 00:09	WG1858190
(S) Toluene-d8	109			80.0-120		05/04/2022 00:09	WG1858190
(S) 4-Bromofluorobenzene	108			77.0-126		05/04/2022 00:09	WG1858190
(S) 1,2-Dichloroethane-d4	103			70.0-130		05/04/2022 00:09	WG1858190

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0426	BU	0.0222	0.100	1	05/10/2022 01:30	WG1860509
C28-C40 Oil Range	U		0.0118	0.100	1	05/10/2022 01:30	WG1860509
(S) o-Terphenyl	121			52.0-156		05/10/2022 01:30	WG1860509

Collected date/time: 04/28/22 11:25

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Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	ND		10.0	1	05/04/2022 14:24	WG1858503

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	U		0.379	1.00	1	05/07/2022 23:10	WG1860156
Sulfate	U		0.594	5.00	1	05/07/2022 23:10	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	05/03/2022 19:56	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	100			78.0-120		05/03/2022 19:56	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	05/03/2022 20:54	WG1858190
Acrolein	U		0.00254	0.0500	1	05/03/2022 20:54	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/03/2022 20:54	WG1858190
Benzene	U		0.0000941	0.00100	1	05/03/2022 20:54	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/03/2022 20:54	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/03/2022 20:54	WG1858190
Bromoform	U		0.000129	0.00100	1	05/03/2022 20:54	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/03/2022 20:54	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/03/2022 20:54	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/03/2022 20:54	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/03/2022 20:54	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/03/2022 20:54	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/03/2022 20:54	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/03/2022 20:54	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/03/2022 20:54	WG1858190
Chloroform	U		0.000111	0.00500	1	05/03/2022 20:54	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/03/2022 20:54	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/03/2022 20:54	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/03/2022 20:54	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/03/2022 20:54	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/03/2022 20:54	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/03/2022 20:54	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/03/2022 20:54	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/03/2022 20:54	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/03/2022 20:54	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/03/2022 20:54	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/03/2022 20:54	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/03/2022 20:54	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/03/2022 20:54	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/03/2022 20:54	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/03/2022 20:54	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/03/2022 20:54	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/03/2022 20:54	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/03/2022 20:54	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/03/2022 20:54	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/03/2022 20:54	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/03/2022 20:54	WG1858190

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

Collected date/time: 04/28/22 11:25

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/03/2022 20:54	WG1858190
Ethylbenzene	U		0.000137	0.00100	1	05/03/2022 20:54	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/03/2022 20:54	WG1858190
Isopropylbenzene	U		0.000105	0.00100	1	05/03/2022 20:54	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/03/2022 20:54	WG1858190
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	05/03/2022 20:54	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/03/2022 20:54	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/03/2022 20:54	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/03/2022 20:54	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/03/2022 20:54	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/03/2022 20:54	WG1858190
Styrene	U		0.000118	0.00100	1	05/03/2022 20:54	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/03/2022 20:54	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/03/2022 20:54	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/03/2022 20:54	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/03/2022 20:54	WG1858190
Toluene	U		0.000278	0.00100	1	05/03/2022 20:54	WG1858190
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/03/2022 20:54	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/03/2022 20:54	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/03/2022 20:54	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/03/2022 20:54	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/03/2022 20:54	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/03/2022 20:54	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/03/2022 20:54	WG1858190
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/03/2022 20:54	WG1858190
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	05/03/2022 20:54	WG1858190
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	05/03/2022 20:54	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/03/2022 20:54	WG1858190
Xylenes, Total	U		0.000174	0.00300	1	05/03/2022 20:54	WG1858190
(S) Toluene-d8	110			80.0-120		05/03/2022 20:54	WG1858190
(S) 4-Bromofluorobenzene	107			77.0-126		05/03/2022 20:54	WG1858190
(S) 1,2-Dichloroethane-d4	106			70.0-130		05/03/2022 20:54	WG1858190

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0478	B J	0.0222	0.100	1	05/10/2022 01:55	WG1860509
C28-C40 Oil Range	U		0.0118	0.100	1	05/10/2022 01:55	WG1860509
(S) o-Terphenyl	108			52.0-156		05/10/2022 01:55	WG1860509

Collected date/time: 04/28/22 13:05

L1488382

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	ND		10.0	1	05/04/2022 14:24	WG1858503

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	U		0.379	1.00	1	05/07/2022 23:50	WG1860156
Sulfate	U		0.594	5.00	1	05/07/2022 23:50	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	05/03/2022 19:35	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	101			78.0-120		05/03/2022 19:35	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	05/03/2022 21:16	WG1858190
Acrolein	U		0.00254	0.0500	1	05/03/2022 21:16	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/03/2022 21:16	WG1858190
Benzene	U		0.0000941	0.00100	1	05/03/2022 21:16	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/03/2022 21:16	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/03/2022 21:16	WG1858190
Bromoform	U		0.000129	0.00100	1	05/03/2022 21:16	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/03/2022 21:16	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/03/2022 21:16	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/03/2022 21:16	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/03/2022 21:16	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/03/2022 21:16	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/03/2022 21:16	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/03/2022 21:16	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/03/2022 21:16	WG1858190
Chloroform	U		0.000111	0.00500	1	05/03/2022 21:16	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/03/2022 21:16	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/03/2022 21:16	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/03/2022 21:16	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/03/2022 21:16	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/03/2022 21:16	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/03/2022 21:16	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/03/2022 21:16	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/03/2022 21:16	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/03/2022 21:16	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/03/2022 21:16	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/03/2022 21:16	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/03/2022 21:16	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/03/2022 21:16	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/03/2022 21:16	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/03/2022 21:16	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/03/2022 21:16	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/03/2022 21:16	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/03/2022 21:16	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/03/2022 21:16	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/03/2022 21:16	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/03/2022 21:16	WG1858190

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

Collected date/time: 04/28/22 13:05

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/03/2022 21:16	WG1858190
Ethylbenzene	U		0.000137	0.00100	1	05/03/2022 21:16	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/03/2022 21:16	WG1858190
Isopropylbenzene	U		0.000105	0.00100	1	05/03/2022 21:16	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/03/2022 21:16	WG1858190
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	05/03/2022 21:16	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/03/2022 21:16	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/03/2022 21:16	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/03/2022 21:16	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/03/2022 21:16	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/03/2022 21:16	WG1858190
Styrene	U		0.000118	0.00100	1	05/03/2022 21:16	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/03/2022 21:16	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/03/2022 21:16	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/03/2022 21:16	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/03/2022 21:16	WG1858190
Toluene	U		0.000278	0.00100	1	05/03/2022 21:16	WG1858190
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/03/2022 21:16	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/03/2022 21:16	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/03/2022 21:16	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/03/2022 21:16	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/03/2022 21:16	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/03/2022 21:16	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/03/2022 21:16	WG1858190
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/03/2022 21:16	WG1858190
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	05/03/2022 21:16	WG1858190
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	05/03/2022 21:16	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/03/2022 21:16	WG1858190
Xylenes, Total	U		0.000174	0.00300	1	05/03/2022 21:16	WG1858190
(S) Toluene-d8	108			80.0-120		05/03/2022 21:16	WG1858190
(S) 4-Bromofluorobenzene	105			77.0-126		05/03/2022 21:16	WG1858190
(S) 1,2-Dichloroethane-d4	106			70.0-130		05/03/2022 21:16	WG1858190

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0551	B J	0.0222	0.100	1	05/10/2022 02:21	WG1860509
C28-C40 Oil Range	U		0.0118	0.100	1	05/10/2022 02:21	WG1860509
(S) o-Terphenyl	113			52.0-156		05/10/2022 02:21	WG1860509

Collected date/time: 04/28/22 00:00

L1488382

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	477		10.0	1	05/04/2022 19:20	WG1858773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	64.4		0.379	1.00	1	05/08/2022 00:17	WG1860156
Sulfate	110		2.97	25.0	5	05/08/2022 00:30	WG1860156

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0356	J	0.0314	0.100	1	05/04/2022 01:29	WG1858207
(S) a,a,a-Trifluorotoluene(FID)	98.4			78.0-120		05/04/2022 01:29	WG1858207

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	05/04/2022 00:31	WG1858190
Acrolein	U		0.00254	0.0500	1	05/04/2022 00:31	WG1858190
Acrylonitrile	U		0.000671	0.0100	1	05/04/2022 00:31	WG1858190
Benzene	0.000404	J	0.0000941	0.00100	1	05/04/2022 00:31	WG1858190
Bromobenzene	U		0.000118	0.00100	1	05/04/2022 00:31	WG1858190
Bromodichloromethane	U		0.000136	0.00100	1	05/04/2022 00:31	WG1858190
Bromoform	U		0.000129	0.00100	1	05/04/2022 00:31	WG1858190
Bromomethane	U		0.000605	0.00500	1	05/04/2022 00:31	WG1858190
n-Butylbenzene	U		0.000157	0.00100	1	05/04/2022 00:31	WG1858190
sec-Butylbenzene	U		0.000125	0.00100	1	05/04/2022 00:31	WG1858190
tert-Butylbenzene	U		0.000127	0.00100	1	05/04/2022 00:31	WG1858190
Carbon tetrachloride	U		0.000128	0.00100	1	05/04/2022 00:31	WG1858190
Chlorobenzene	U		0.000116	0.00100	1	05/04/2022 00:31	WG1858190
Chlorodibromomethane	U		0.000140	0.00100	1	05/04/2022 00:31	WG1858190
Chloroethane	U		0.000192	0.00500	1	05/04/2022 00:31	WG1858190
Chloroform	U		0.000111	0.00500	1	05/04/2022 00:31	WG1858190
Chloromethane	U		0.000960	0.00250	1	05/04/2022 00:31	WG1858190
2-Chlorotoluene	U		0.000106	0.00100	1	05/04/2022 00:31	WG1858190
4-Chlorotoluene	U		0.000114	0.00100	1	05/04/2022 00:31	WG1858190
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	05/04/2022 00:31	WG1858190
1,2-Dibromoethane	U		0.000126	0.00100	1	05/04/2022 00:31	WG1858190
Dibromomethane	U		0.000122	0.00100	1	05/04/2022 00:31	WG1858190
1,2-Dichlorobenzene	U		0.000107	0.00100	1	05/04/2022 00:31	WG1858190
1,3-Dichlorobenzene	U		0.000110	0.00100	1	05/04/2022 00:31	WG1858190
1,4-Dichlorobenzene	U		0.000120	0.00100	1	05/04/2022 00:31	WG1858190
Dichlorodifluoromethane	U		0.000374	0.00500	1	05/04/2022 00:31	WG1858190
1,1-Dichloroethane	U		0.000100	0.00100	1	05/04/2022 00:31	WG1858190
1,2-Dichloroethane	U		0.0000819	0.00100	1	05/04/2022 00:31	WG1858190
1,1-Dichloroethene	U		0.000188	0.00100	1	05/04/2022 00:31	WG1858190
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	05/04/2022 00:31	WG1858190
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	05/04/2022 00:31	WG1858190
1,2-Dichloropropane	U		0.000149	0.00100	1	05/04/2022 00:31	WG1858190
1,1-Dichloropropene	U		0.000142	0.00100	1	05/04/2022 00:31	WG1858190
1,3-Dichloropropane	U		0.000110	0.00100	1	05/04/2022 00:31	WG1858190
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	05/04/2022 00:31	WG1858190
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	05/04/2022 00:31	WG1858190
2,2-Dichloropropane	U		0.000161	0.00100	1	05/04/2022 00:31	WG1858190

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

Collected date/time: 04/28/22 00:00

L1488382

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	05/04/2022 00:31	WG1858190
Ethylbenzene	0.000195	J	0.000137	0.00100	1	05/04/2022 00:31	WG1858190
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	05/04/2022 00:31	WG1858190
Isopropylbenzene	U		0.000105	0.00100	1	05/04/2022 00:31	WG1858190
p-Isopropyltoluene	U		0.000120	0.00100	1	05/04/2022 00:31	WG1858190
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	05/04/2022 00:31	WG1858190
Methylene Chloride	U		0.000430	0.00500	1	05/04/2022 00:31	WG1858190
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	05/04/2022 00:31	WG1858190
Methyl tert-butyl ether	U		0.000101	0.00100	1	05/04/2022 00:31	WG1858190
Naphthalene	U		0.00100	0.00500	1	05/04/2022 00:31	WG1858190
n-Propylbenzene	U		0.0000993	0.00100	1	05/04/2022 00:31	WG1858190
Styrene	U		0.000118	0.00100	1	05/04/2022 00:31	WG1858190
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	05/04/2022 00:31	WG1858190
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	05/04/2022 00:31	WG1858190
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	05/04/2022 00:31	WG1858190
Tetrachloroethene	U		0.000300	0.00100	1	05/04/2022 00:31	WG1858190
Toluene	0.000888	J	0.000278	0.00100	1	05/04/2022 00:31	WG1858190
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	05/04/2022 00:31	WG1858190
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	05/04/2022 00:31	WG1858190
1,1,1-Trichloroethane	U		0.000149	0.00100	1	05/04/2022 00:31	WG1858190
1,1,2-Trichloroethane	U		0.000158	0.00100	1	05/04/2022 00:31	WG1858190
Trichloroethene	U		0.000190	0.00100	1	05/04/2022 00:31	WG1858190
Trichlorofluoromethane	U		0.000160	0.00500	1	05/04/2022 00:31	WG1858190
1,2,3-Trichloropropane	U		0.000237	0.00250	1	05/04/2022 00:31	WG1858190
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/04/2022 00:31	WG1858190
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	05/04/2022 00:31	WG1858190
1,3,5-Trimethylbenzene	0.000147	J	0.000104	0.00100	1	05/04/2022 00:31	WG1858190
Vinyl chloride	U		0.000234	0.00100	1	05/04/2022 00:31	WG1858190
Xylenes, Total	0.000938	J	0.000174	0.00300	1	05/04/2022 00:31	WG1858190
(S) Toluene-d8	108			80.0-120		05/04/2022 00:31	WG1858190
(S) 4-Bromofluorobenzene	104			77.0-126		05/04/2022 00:31	WG1858190
(S) 1,2-Dichloroethane-d4	106			70.0-130		05/04/2022 00:31	WG1858190

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		0.0222	0.100	1	05/10/2022 02:46	WG1860509
C28-C40 Oil Range	U		0.0118	0.100	1	05/10/2022 02:46	WG1860509
(S) o-Terphenyl	59.5			52.0-156		05/10/2022 02:46	WG1860509

Gravimetric Analysis by Method 2540 C-2011

[L1488382-04.05.06.07.08.09](#)

Method Blank (MB)

(MB) R3789057-1 05/04/22 14:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10.0	10.0

1 Cp

2 Tc

3 Ss

L1487928-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1487928-11 05/04/22 14:24 • (DUP) R3789057-3 05/04/22 14:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	724	732	1	1.10		5

4 Cn

5 Sr

6 Qc

L1487928-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1487928-17 05/04/22 14:24 • (DUP) R3789057-4 05/04/22 14:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	585	597	1	2.03		5

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3789057-2 05/04/22 14:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	2460	2560	104	81.7-118	

Gravimetric Analysis by Method 2540 C-2011

[L1488382-01,02,10](#)

Method Blank (MB)

(MB) R3789052-1 05/04/22 19:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10.0	10.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1487604-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1487604-01 05/04/22 19:20 • (DUP) R3789052-3 05/04/22 19:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	300	308	1	2.63		5

L1487659-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1487659-01 05/04/22 19:20 • (DUP) R3789052-4 05/04/22 19:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	673	697	1	3.50		5

Laboratory Control Sample (LCS)

(LCS) R3789052-2 05/04/22 19:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	2460	2500	102	81.7-118	

Wet Chemistry by Method 9056A

[L1488382-01,02,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3789440-1 05/07/22 10:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		0.379	1.00
Sulfate	U		0.594	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1488342-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1488342-01 05/07/22 19:09 • (DUP) R3789440-3 05/07/22 19:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	9.18	9.29	1	1.23		15
Sulfate	10.2	10.2	1	0.0679		15

L1488382-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1488382-08 05/07/22 23:10 • (DUP) R3789440-6 05/07/22 23:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	U	U	1	0.000		15
Sulfate	U	U	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3789440-2 05/07/22 10:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40.0	39.3	98.2	80.0-120	
Sulfate	40.0	40.0	100	80.0-120	

L1488342-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1488342-01 05/07/22 19:09 • (MS) R3789440-4 05/07/22 19:36 • (MSD) R3789440-5 05/07/22 20:16

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	50.0	9.18	60.6	60.6	103	103	1	80.0-120			0.000660	15
Sulfate	50.0	10.2	62.6	62.4	105	104	1	80.0-120			0.315	15

Wet Chemistry by Method 9056A

[L1488382-01,02,04,05,06,07,08,09,10](#)

L1488382-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1488382-08 05/07/22 23:10 • (MS) R3789440-7 05/07/22 23:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Chloride	50.0	U	50.9	102	1	80.0-120	
Sulfate	50.0	U	51.8	104	1	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

[L1488382-01,02,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3788529-2 05/03/22 18:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
^(S) a,a,a-Trifluorotoluene(FID)	100			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3788529-1 05/03/22 17:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.66	103	72.0-127	
^(S) a,a,a-Trifluorotoluene(FID)			109	78.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

[L1488382-01,02,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3787958-3 05/03/22 16:48

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Di-isopropyl ether	U		0.000105	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

[L1488382-01,02,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3787958-3 05/03/22 16:48

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,2,3-Trimethylbenzene	U		0.000104	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	109			80.0-120
(S) 4-Bromofluorobenzene	108			77.0-126
(S) 1,2-Dichloroethane-d4	103			70.0-130

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

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

(LCS) R3787958-1 05/03/22 15:42 • (LCSD) R3787958-2 05/03/22 16:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0201	0.0249	80.4	99.6	19.0-160			21.3	27
Acrolein	0.0250	0.0195	0.0231	78.0	92.4	10.0-160			16.9	26
Acrylonitrile	0.0250	0.0218	0.0246	87.2	98.4	55.0-149			12.1	20
Benzene	0.00500	0.00474	0.00521	94.8	104	70.0-123			9.45	20

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

[L1488382-01.02.04.05.06.07.08.09.10](#)

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

(LCS) R3787958-1 05/03/22 15:42 • (LCSD) R3787958-2 05/03/22 16:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	0.00500	0.00472	0.00531	94.4	106	73.0-121			11.8	20
Bromodichloromethane	0.00500	0.00459	0.00478	91.8	95.6	75.0-120			4.06	20
Bromoform	0.00500	0.00399	0.00453	79.8	90.6	68.0-132			12.7	20
Bromomethane	0.00500	0.00617	0.00627	123	125	10.0-160			1.61	25
n-Butylbenzene	0.00500	0.00478	0.00511	95.6	102	73.0-125			6.67	20
sec-Butylbenzene	0.00500	0.00482	0.00517	96.4	103	75.0-125			7.01	20
tert-Butylbenzene	0.00500	0.00469	0.00505	93.8	101	76.0-124			7.39	20
Carbon tetrachloride	0.00500	0.00452	0.00447	90.4	89.4	68.0-126			1.11	20
Chlorobenzene	0.00500	0.00469	0.00539	93.8	108	80.0-121			13.9	20
Chlorodibromomethane	0.00500	0.00427	0.00475	85.4	95.0	77.0-125			10.6	20
Chloroethane	0.00500	0.00421	0.00466	84.2	93.2	47.0-150			10.1	20
Chloroform	0.00500	0.00507	0.00565	101	113	73.0-120			10.8	20
Chloromethane	0.00500	0.00410	0.00444	82.0	88.8	41.0-142			7.96	20
2-Chlorotoluene	0.00500	0.00490	0.00554	98.0	111	76.0-123			12.3	20
4-Chlorotoluene	0.00500	0.00471	0.00533	94.2	107	75.0-122			12.4	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00353	0.00401	70.6	80.2	58.0-134			12.7	20
1,2-Dibromoethane	0.00500	0.00459	0.00530	91.8	106	80.0-122			14.4	20
Dibromomethane	0.00500	0.00482	0.00521	96.4	104	80.0-120			7.78	20
1,2-Dichlorobenzene	0.00500	0.00499	0.00552	99.8	110	79.0-121			10.1	20
1,3-Dichlorobenzene	0.00500	0.00499	0.00538	99.8	108	79.0-120			7.52	20
1,4-Dichlorobenzene	0.00500	0.00443	0.00520	88.6	104	79.0-120			16.0	20
Dichlorodifluoromethane	0.00500	0.00423	0.00419	84.6	83.8	51.0-149			0.950	20
1,1-Dichloroethane	0.00500	0.00454	0.00490	90.8	98.0	70.0-126			7.63	20
1,2-Dichloroethane	0.00500	0.00467	0.00511	93.4	102	70.0-128			9.00	20
1,1-Dichloroethene	0.00500	0.00434	0.00458	86.8	91.6	71.0-124			5.38	20
cis-1,2-Dichloroethene	0.00500	0.00447	0.00505	89.4	101	73.0-120			12.2	20
trans-1,2-Dichloroethene	0.00500	0.00411	0.00459	82.2	91.8	73.0-120			11.0	20
1,2-Dichloropropane	0.00500	0.00443	0.00511	88.6	102	77.0-125			14.3	20
1,1-Dichloropropene	0.00500	0.00467	0.00516	93.4	103	74.0-126			9.97	20
1,3-Dichloropropane	0.00500	0.00469	0.00515	93.8	103	80.0-120			9.35	20
cis-1,3-Dichloropropene	0.00500	0.00466	0.00501	93.2	100	80.0-123			7.24	20
trans-1,3-Dichloropropene	0.00500	0.00435	0.00505	87.0	101	78.0-124			14.9	20
2,2-Dichloropropane	0.00500	0.00414	0.00453	82.8	90.6	58.0-130			9.00	20
Di-isopropyl ether	0.00500	0.00423	0.00468	84.6	93.6	58.0-138			10.1	20
Ethylbenzene	0.00500	0.00473	0.00517	94.6	103	79.0-123			8.89	20
Hexachloro-1,3-butadiene	0.00500	0.00481	0.00546	96.2	109	54.0-138			12.7	20
Isopropylbenzene	0.00500	0.00488	0.00531	97.6	106	76.0-127			8.44	20
p-Isopropyltoluene	0.00500	0.00478	0.00524	95.6	105	76.0-125			9.18	20
2-Butanone (MEK)	0.0250	0.0189	0.0234	75.6	93.6	44.0-160		J3	21.3	20
Methylene Chloride	0.00500	0.00443	0.00484	88.6	96.8	67.0-120			8.85	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1488382-01,02,04,05,06,07,08,09,10](#)

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

(LCS) R3787958-1 05/03/22 15:42 • (LCSD) R3787958-2 05/03/22 16:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	0.0250	0.0237	0.0268	94.8	107	68.0-142			12.3	20
Methyl tert-butyl ether	0.00500	0.00465	0.00502	93.0	100	68.0-125			7.65	20
Naphthalene	0.00500	0.00438	0.00497	87.6	99.4	54.0-135			12.6	20
n-Propylbenzene	0.00500	0.00485	0.00539	97.0	108	77.0-124			10.5	20
Styrene	0.00500	0.00469	0.00504	93.8	101	73.0-130			7.19	20
1,1,1,2-Tetrachloroethane	0.00500	0.00438	0.00486	87.6	97.2	75.0-125			10.4	20
1,1,2,2-Tetrachloroethane	0.00500	0.00428	0.00506	85.6	101	65.0-130			16.7	20
1,1,2-Trichlorotrifluoroethane	0.00500	0.00506	0.00511	101	102	69.0-132			0.983	20
Tetrachloroethene	0.00500	0.00496	0.00543	99.2	109	72.0-132			9.05	20
Toluene	0.00500	0.00495	0.00562	99.0	112	79.0-120			12.7	20
1,2,3-Trichlorobenzene	0.00500	0.00433	0.00522	86.6	104	50.0-138			18.6	20
1,2,4-Trichlorobenzene	0.00500	0.00452	0.00517	90.4	103	57.0-137			13.4	20
1,1,1-Trichloroethane	0.00500	0.00455	0.00488	91.0	97.6	73.0-124			7.00	20
1,1,2-Trichloroethane	0.00500	0.00445	0.00476	89.0	95.2	80.0-120			6.73	20
Trichloroethene	0.00500	0.00500	0.00500	100	100	78.0-124			0.000	20
Trichlorofluoromethane	0.00500	0.00494	0.00509	98.8	102	59.0-147			2.99	20
1,2,3-Trichloropropane	0.00500	0.00435	0.00506	87.0	101	73.0-130			15.1	20
1,2,4-Trimethylbenzene	0.00500	0.00475	0.00524	95.0	105	76.0-121			9.81	20
1,2,3-Trimethylbenzene	0.00500	0.00460	0.00515	92.0	103	77.0-120			11.3	20
1,3,5-Trimethylbenzene	0.00500	0.00481	0.00528	96.2	106	76.0-122			9.32	20
Vinyl chloride	0.00500	0.00444	0.00469	88.8	93.8	67.0-131			5.48	20
Xylenes, Total	0.0150	0.0145	0.0158	96.7	105	79.0-123			8.58	20
(S) Toluene-d8				107	105	80.0-120				
(S) 4-Bromofluorobenzene				108	106	77.0-126				
(S) 1,2-Dichloroethane-d4				104	106	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

L1488382-01,02

Method Blank (MB)

(MB) R3788457-3 05/04/22 16:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	103			80.0-120
(S) 4-Bromofluorobenzene	101			77.0-126
(S) 1,2-Dichloroethane-d4	91.6			70.0-130

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

(LCS) R3788457-1 05/04/22 15:30 • (LCSD) R3788457-2 05/04/22 15:49

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Toluene	0.00500	0.00485	0.00498	97.0	99.6	79.0-120			2.64	20
Xylenes, Total	0.0150	0.0154	0.0157	103	105	79.0-123			1.93	20
(S) Toluene-d8				102	102	80.0-120				
(S) 4-Bromofluorobenzene				104	101	77.0-126				
(S) 1,2-Dichloroethane-d4				100	95.8	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1488382-01](#)

Method Blank (MB)

(MB) R3789016-3 05/05/22 15:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	119			80.0-120
(S) 4-Bromofluorobenzene	111			77.0-126
(S) 1,2-Dichloroethane-d4	99.9			70.0-130

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

(LCS) R3789016-1 05/05/22 14:53 • (LCSD) R3789016-2 05/05/22 15:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Xylenes, Total	0.0150	0.0154	0.0147	103	98.0	79.0-123			4.65	20
(S) Toluene-d8				103	101	80.0-120				
(S) 4-Bromofluorobenzene				94.6	91.0	77.0-126				
(S) 1,2-Dichloroethane-d4				94.6	93.6	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1488382-01,02,04,05,07,08,09,10](#)

Method Blank (MB)

(MB) R3789907-1 05/09/22 18:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
C10-C28 Diesel Range	0.0296	↓	0.0222	0.100
C28-C40 Oil Range	U		0.0118	0.100
(S) o-Terphenyl	67.0			52.0-156

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

(LCS) R3789907-2 05/09/22 18:58 • (LCSD) R3789907-3 05/09/22 19:25

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
C10-C28 Diesel Range	1.50	1.65	1.66	110	111	50.0-150			0.604	20
(S) o-Terphenyl				106	96.5	52.0-156				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

L1488382-06

Method Blank (MB)

(MB) R3790792-1 05/11/22 11:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
C10-C28 Diesel Range	U		0.0222	0.100
C28-C40 Oil Range	U		0.0118	0.100
(S) o-Terphenyl	126			52.0-156

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

(LCS) R3790792-2 05/11/22 12:03 • (LCSD) R3790792-3 05/11/22 12:29

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
C10-C28 Diesel Range	1.50	1.72	1.54	115	103	50.0-150			11.0	20
(S) o-Terphenyl				134	119	52.0-156				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
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.
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.
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.

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.

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.



Company Name/Address: Apex - Midland, TX 505 N. Big Spring Street Suite 301A Midland, TX 79701			Billing Information: Hank McConnell 505 N. Big Spring Street Suite 301A Midland, TX 79701			Pres Chk	Analysis / Container / Preservative										Chain of Custody Page 1 of 2	
Report to: Aaron Sides			Email To: aaron.sides@apexcos.com;john.faight@apexco														 MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf	
Project Description: Lea County, NM		City/State Collected: <i>Bronco, NM</i>		Please Circle: PT <input checked="" type="radio"/> MT <input type="radio"/> CT <input type="radio"/> ET													SDG # <i>1488382</i> D113	
Phone: 432-695-6016		Client Project # 0314045-22005		Lab Project # APEXMTX-CEN050													Acctnum: APEXMTX Template: T207982 Prelogin: P919736 PM: 3587 - Lori A Vahrenkamp PB:	
Collected by (print): <i>John Faight</i>		Site/Facility ID # <i>Brahamay (South)</i>		P.O. #													Shipped Via:	
Collected by (signature): <i>John Faight</i>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #													Remarks Sample # (lab only)	
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				Date Results Needed		No. of Cntrs												
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time		CHLORIDE 125mlHDPE-NoPres	DROOROLVI 40mlAmb-HCl-BT	GRO 40mlAmb HCl	V8260 40mlAmb-HCl								
<i>Mw-2</i>	<i>G</i>	<i>GW</i>	<i>/</i>	<i>4/28/22</i>	<i>0847</i>	<i>9</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>							<i>-01</i>
<i>Mw-1</i>	<i>G</i>	<i>GW</i>	<i>/</i>	<i>4/28/22</i>	<i>1015</i>	<i>9</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>							<i>-02</i>
<i>Trip Blank</i>	<i>G (JP)</i>	<i>GW</i>	<i>/</i>							<i>X</i>								<i>-03</i>
		<i>GW</i>																
		<i>GW</i>																
		<i>GW</i>																
		<i>GW</i>																
		<i>GW</i>																
		<i>GW</i>																

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks: <i>Times listed are Mountain Standard Time</i>		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 checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
Relinquished by: (Signature) <i>John Faight</i>		Date: <i>4/29/22</i>	Time: <i>0955</i>	Received by: (Signature) <i>AS</i>		Trip Blank Received: Yes / No <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No			
Relinquished by: (Signature) <i>AS</i>		Date: <i>4/29/22</i>	Time: <i>10:00</i>	Received by: (Signature) <i>AS</i>		Temp: <i>3.2 ± 0 = 3.2</i> °C Bottles Received: <i>81</i>	If preservation required by Login: Date/Time		
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature)		Date: <i>05/130/22</i>	Time: <i>0800</i>	Hold:	Condition: NCF / <i>AS</i>

Company Name/Address: Apex - Midland, TX 505 N. Big Spring Street Suite 301A Midland, TX 79701		Billing Information: Hank McConnell 505 N. Big Spring Street Suite 301A Midland, TX 79701		Pres Chk		Analysis / Container / Preservative										Chain of Custody Page 7 of 8	
Report to: Aaron Sides		Email To: aaron.sides@apexcos.com;john.fought@apexco														 MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf	
Project Description: Lea County, NM		City/State Collected: Brenco, NM		Please Circle: PT <input checked="" type="radio"/> MT <input type="radio"/> CT <input type="radio"/> ET												SDG # 1488382	
Phone: 432-695-6016		Client Project # 0314045-22005		Lab Project # APEXMTX-CEN050												Table #	
Collected by (print): John Fought		Site/Facility ID # Brahoney IRI-2794 (North)		P.O. #												Acctnum: APEXMTX	
Collected by (signature): <i>John Fought</i>		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 #												Template: T207982	
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				Date Results Needed												Prelogin: P919736	
																PM: 3587 - Lori A Vahrenkamp	
																PB:	
																Shipped Via:	
																Remarks	
																Sample # (lab only)	

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks:		pH _____ Temp _____		Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
Samples returned via: UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>		Tracking #													
Relinquished by: (Signature) <i>John Fought</i>		Date: 4/29/22		Time: 0955		Received by: (Signature) <i>AS</i>		Trip Blank Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		HCL / MeOH TBR					
Relinquished by: (Signature) <i>AS</i>		Date: 4/29/22		Time: 10:00		Received by: (Signature) <i>AS</i>		Temp: DRATC 32.0-3.2		Bottles Received: 81		If preservation required by Login: Date/Time			
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature)		Date:		Time:		Hold:		Condition: NCF / OK	



ANALYTICAL REPORT

July 20, 2022

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

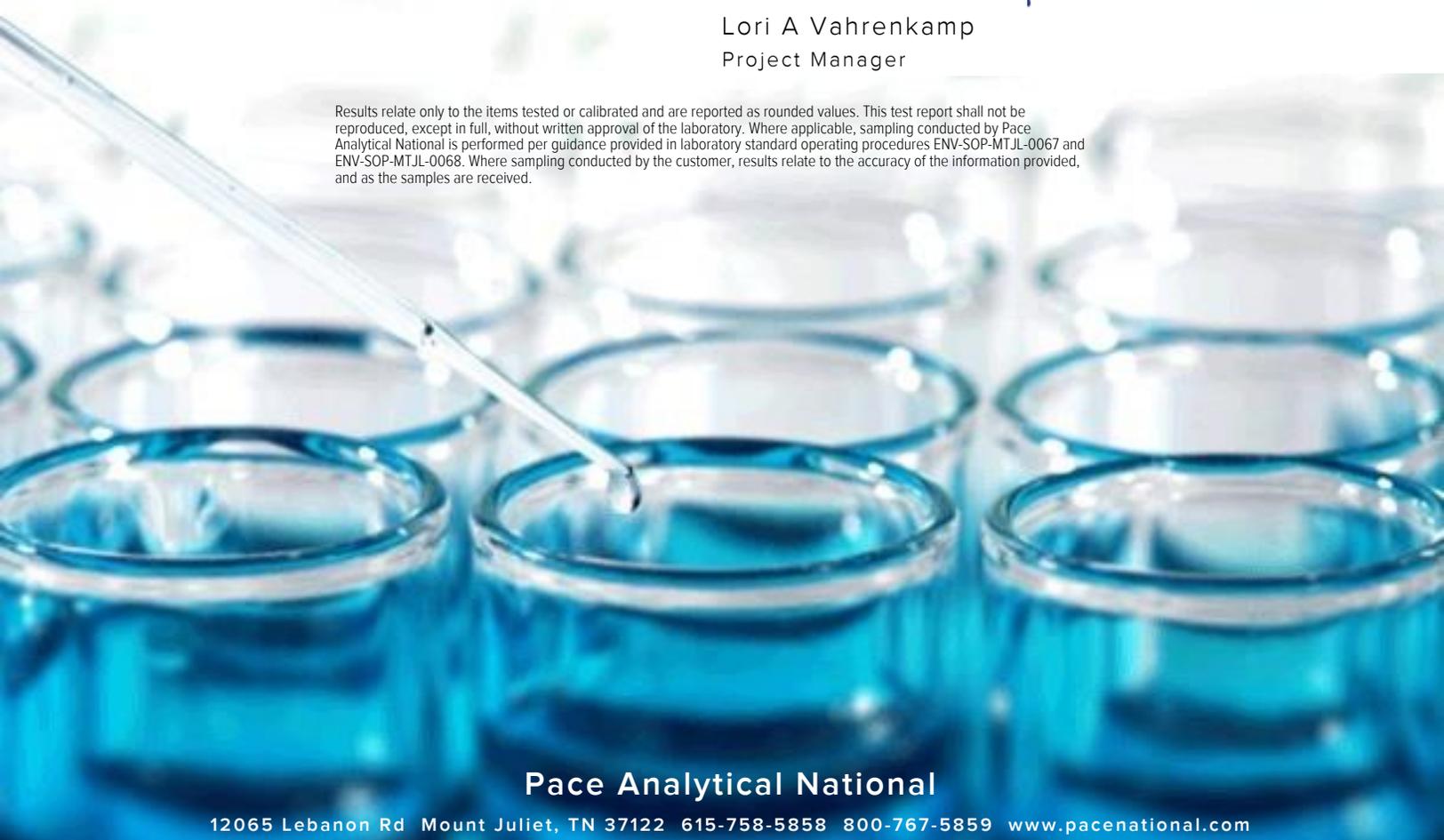
Apex - Midland, TX

Sample Delivery Group: L1511253
 Samples Received: 07/02/2022
 Project Number: CEN050-0314045
 Description: CEN050-0314045-22005648
 Site: LEA COUNTY, NM
 Report To: John Faight
 505 N. Big Spring Street
 Suite 301A
 Midland, TX 79701

Entire Report Reviewed By:

Lori A Vahrenkamp
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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MW-1 L1511253-01 GW

Collected by John Faught
 Collected date/time 06/30/22 08:50
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891417	1	07/07/22 15:20	07/07/22 16:17	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	10	07/16/22 05:30	07/16/22 05:30	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1893877	1	07/14/22 09:36	07/14/22 09:36	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892475	1	07/09/22 22:29	07/09/22 22:29	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1890442	1	07/06/22 03:40	07/06/22 18:29	CLG	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

MW-2 L1511253-02 GW

Collected by John Faught
 Collected date/time 06/30/22 10:10
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891417	1	07/07/22 15:20	07/07/22 16:17	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	5	07/16/22 05:42	07/16/22 05:42	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1892838	1	07/11/22 13:20	07/11/22 13:20	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892475	1	07/09/22 22:50	07/09/22 22:50	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1890442	1	07/06/22 03:40	07/06/22 18:55	CLG	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

MW-3 L1511253-03 GW

Collected by John Faught
 Collected date/time 06/30/22 11:25
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891417	1	07/07/22 15:20	07/07/22 16:17	VRP	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	5	07/16/22 05:55	07/16/22 05:55	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1892838	1	07/11/22 13:41	07/11/22 13:41	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892475	1	07/09/22 23:11	07/09/22 23:11	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1890442	1	07/06/22 03:40	07/06/22 19:21	CLG	Mt. Juliet, TN

9 Sc

MW-4 L1511253-04 GW

Collected by John Faught
 Collected date/time 06/30/22 12:40
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891417	1	07/07/22 15:20	07/07/22 16:17	VRP	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	5	07/16/22 06:07	07/16/22 06:07	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1893415	1	07/12/22 10:05	07/12/22 10:05	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892475	1	07/09/22 23:32	07/09/22 23:32	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1892825	1	07/11/22 04:53	07/12/22 17:48	CLG	Mt. Juliet, TN

MW-5 L1511253-05 GW

Collected by John Faught
 Collected date/time 06/30/22 13:55
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891199	1	07/07/22 17:13	07/07/22 17:51	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	5	07/16/22 06:20	07/16/22 06:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1893415	1	07/12/22 10:27	07/12/22 10:27	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892475	1	07/09/22 23:53	07/09/22 23:53	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1892825	1	07/11/22 04:53	07/15/22 00:01	CLG	Mt. Juliet, TN

MW-6 L1511253-06 GW

Collected by John Faught
 Collected date/time 06/30/22 15:35
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891199	1	07/07/22 17:13	07/07/22 17:51	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	5	07/16/22 06:32	07/16/22 06:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1893415	1	07/12/22 10:48	07/12/22 10:48	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892475	1	07/10/22 00:14	07/10/22 00:14	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1892825	1	07/11/22 04:53	07/12/22 18:29	CLG	Mt. Juliet, TN

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

FB-01 L1511253-07 GW

Collected by John Faught
 Collected date/time 06/30/22 12:25
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891199	1	07/07/22 17:13	07/07/22 17:51	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	1	07/16/22 06:44	07/16/22 06:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1893415	1	07/12/22 11:10	07/12/22 11:10	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892475	1	07/09/22 19:40	07/09/22 19:40	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1892825	1	07/11/22 04:53	07/15/22 00:21	CLG	Mt. Juliet, TN

EB-01 L1511253-08 GW

Collected by John Faught
 Collected date/time 06/30/22 13:47
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891199	1	07/07/22 17:13	07/07/22 17:51	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	1	07/16/22 06:57	07/16/22 06:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1893415	1	07/12/22 11:32	07/12/22 11:32	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892475	1	07/09/22 19:19	07/09/22 19:19	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1892825	1	07/11/22 04:53	07/12/22 19:09	CLG	Mt. Juliet, TN

DUP-01 L1511253-09 GW

Collected by John Faught
 Collected date/time 06/30/22 00:00
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1891199	1	07/07/22 17:13	07/07/22 17:51	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1895925	10	07/16/22 07:09	07/16/22 07:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1893415	1	07/12/22 11:53	07/12/22 11:53	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892480	1	07/10/22 03:22	07/10/22 03:22	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1892825	1	07/11/22 04:53	07/12/22 19:29	CLG	Mt. Juliet, TN

TRIP BLANK-1 L1511253-10 GW

Collected by John Faught
 Collected date/time 06/30/22 00:00
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892480	1	07/10/22 02:40	07/10/22 02:40	ACG	Mt. Juliet, TN

TRIP BLANK-2 L1511253-11 GW

Collected by John Faught
 Collected date/time 06/30/22 00:00
 Received date/time 07/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1892480	1	07/10/22 03:02	07/10/22 03:02	ACG	Mt. Juliet, TN

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.



Lori A Vahrenkamp
Project Manager

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

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1511253-04	MW-4	8015
L1511253-05	MW-5	8015
L1511253-06	MW-6	8015
L1511253-07	FB-01	8015
L1511253-08	EB-01	8015
L1511253-09	DUP-01	8015

An aliquot for analysis was taken from the original container received due to volume requirements of the laboratory's procedure. Rinsing of the original sample container for inclusion in the sample extraction was not performed.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1511253-01	MW-1	8015
L1511253-02	MW-2	8015
L1511253-03	MW-3	8015
L1511253-04	MW-4	8015
L1511253-05	MW-5	8015
L1511253-06	MW-6	8015
L1511253-07	FB-01	8015
L1511253-08	EB-01	8015
L1511253-09	DUP-01	8015

Collected date/time: 06/30/22 08:50

L1511253

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	540		10.0	1	07/07/2022 16:17	WG1891417

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	61.2		3.79	10.0	10	07/16/2022 05:30	WG1895925
Sulfate	110		5.94	50.0	10	07/16/2022 05:30	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/14/2022 09:36	WG1893877
(S) a,a,a-Trifluorotoluene(FID)	94.7			78.0-120		07/14/2022 09:36	WG1893877

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	07/09/2022 22:29	WG1892475
Acrolein	U		0.00254	0.0500	1	07/09/2022 22:29	WG1892475
Acrylonitrile	U		0.000671	0.0100	1	07/09/2022 22:29	WG1892475
Benzene	U		0.0000941	0.00100	1	07/09/2022 22:29	WG1892475
Bromobenzene	U		0.000118	0.00100	1	07/09/2022 22:29	WG1892475
Bromodichloromethane	U		0.000136	0.00100	1	07/09/2022 22:29	WG1892475
Bromoform	U		0.000129	0.00100	1	07/09/2022 22:29	WG1892475
Bromomethane	U		0.000605	0.00500	1	07/09/2022 22:29	WG1892475
n-Butylbenzene	U		0.000157	0.00100	1	07/09/2022 22:29	WG1892475
sec-Butylbenzene	U		0.000125	0.00100	1	07/09/2022 22:29	WG1892475
tert-Butylbenzene	U		0.000127	0.00100	1	07/09/2022 22:29	WG1892475
Carbon tetrachloride	U		0.000128	0.00100	1	07/09/2022 22:29	WG1892475
Chlorobenzene	U		0.000116	0.00100	1	07/09/2022 22:29	WG1892475
Chlorodibromomethane	U		0.000140	0.00100	1	07/09/2022 22:29	WG1892475
Chloroethane	U		0.000192	0.00500	1	07/09/2022 22:29	WG1892475
Chloroform	U		0.000111	0.00500	1	07/09/2022 22:29	WG1892475
Chloromethane	U		0.000960	0.00250	1	07/09/2022 22:29	WG1892475
2-Chlorotoluene	U		0.000106	0.00100	1	07/09/2022 22:29	WG1892475
4-Chlorotoluene	U		0.000114	0.00100	1	07/09/2022 22:29	WG1892475
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/09/2022 22:29	WG1892475
1,2-Dibromoethane	U		0.000126	0.00100	1	07/09/2022 22:29	WG1892475
Dibromomethane	U		0.000122	0.00100	1	07/09/2022 22:29	WG1892475
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/09/2022 22:29	WG1892475
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/09/2022 22:29	WG1892475
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/09/2022 22:29	WG1892475
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/09/2022 22:29	WG1892475
1,1-Dichloroethane	U		0.000100	0.00100	1	07/09/2022 22:29	WG1892475
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/09/2022 22:29	WG1892475
1,1-Dichloroethene	U		0.000188	0.00100	1	07/09/2022 22:29	WG1892475
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/09/2022 22:29	WG1892475
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/09/2022 22:29	WG1892475
1,2-Dichloropropane	U		0.000149	0.00100	1	07/09/2022 22:29	WG1892475
1,1-Dichloropropene	U		0.000142	0.00100	1	07/09/2022 22:29	WG1892475
1,3-Dichloropropane	U		0.000110	0.00100	1	07/09/2022 22:29	WG1892475
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/09/2022 22:29	WG1892475
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/09/2022 22:29	WG1892475
2,2-Dichloropropane	U		0.000161	0.00100	1	07/09/2022 22:29	WG1892475

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

Collected date/time: 06/30/22 08:50

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/09/2022 22:29	WG1892475
Ethylbenzene	U		0.000137	0.00100	1	07/09/2022 22:29	WG1892475
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/09/2022 22:29	WG1892475
Isopropylbenzene	U		0.000105	0.00100	1	07/09/2022 22:29	WG1892475
p-Isopropyltoluene	U		0.000120	0.00100	1	07/09/2022 22:29	WG1892475
2-Butanone (MEK)	U		0.00119	0.0100	1	07/09/2022 22:29	WG1892475
Methylene Chloride	U		0.000430	0.00500	1	07/09/2022 22:29	WG1892475
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/09/2022 22:29	WG1892475
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/09/2022 22:29	WG1892475
Naphthalene	U		0.00100	0.00500	1	07/09/2022 22:29	WG1892475
n-Propylbenzene	U		0.0000993	0.00100	1	07/09/2022 22:29	WG1892475
Styrene	U		0.000118	0.00100	1	07/09/2022 22:29	WG1892475
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/09/2022 22:29	WG1892475
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/09/2022 22:29	WG1892475
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/09/2022 22:29	WG1892475
Tetrachloroethene	U		0.000300	0.00100	1	07/09/2022 22:29	WG1892475
Toluene	U		0.000278	0.00100	1	07/09/2022 22:29	WG1892475
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	07/09/2022 22:29	WG1892475
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/09/2022 22:29	WG1892475
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/09/2022 22:29	WG1892475
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/09/2022 22:29	WG1892475
Trichloroethene	U		0.000190	0.00100	1	07/09/2022 22:29	WG1892475
Trichlorofluoromethane	U		0.000160	0.00500	1	07/09/2022 22:29	WG1892475
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/09/2022 22:29	WG1892475
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/09/2022 22:29	WG1892475
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 22:29	WG1892475
1,3,5-Trimethylbenzene	0.000344	U	0.000104	0.00100	1	07/09/2022 22:29	WG1892475
Vinyl chloride	U		0.000234	0.00100	1	07/09/2022 22:29	WG1892475
Xylenes, Total	0.000225	U	0.000174	0.00300	1	07/09/2022 22:29	WG1892475
(S) Toluene-d8	106			80.0-120		07/09/2022 22:29	WG1892475
(S) 4-Bromofluorobenzene	96.9			77.0-126		07/09/2022 22:29	WG1892475
(S) 1,2-Dichloroethane-d4	95.4			70.0-130		07/09/2022 22:29	WG1892475

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		0.0222	0.100	1	07/06/2022 18:29	WG1890442
C28-C40 Oil Range	0.0130	U	0.0118	0.100	1	07/06/2022 18:29	WG1890442
(S) o-Terphenyl	94.0			31.0-160		07/06/2022 18:29	WG1890442

Collected date/time: 06/30/22 10:10

L1511253

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	477		10.0	1	07/07/2022 16:17	WG1891417

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

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	54.3		1.90	5.00	5	07/16/2022 05:42	WG1895925
Sulfate	109		2.97	25.0	5	07/16/2022 05:42	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/11/2022 13:20	WG1892838
(S) a,a,a-Trifluorotoluene(FID)	95.3			78.0-120		07/11/2022 13:20	WG1892838

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	07/09/2022 22:50	WG1892475
Acrolein	U		0.00254	0.0500	1	07/09/2022 22:50	WG1892475
Acrylonitrile	U		0.000671	0.0100	1	07/09/2022 22:50	WG1892475
Benzene	U		0.0000941	0.00100	1	07/09/2022 22:50	WG1892475
Bromobenzene	U		0.000118	0.00100	1	07/09/2022 22:50	WG1892475
Bromodichloromethane	U		0.000136	0.00100	1	07/09/2022 22:50	WG1892475
Bromoform	U		0.000129	0.00100	1	07/09/2022 22:50	WG1892475
Bromomethane	U		0.000605	0.00500	1	07/09/2022 22:50	WG1892475
n-Butylbenzene	U		0.000157	0.00100	1	07/09/2022 22:50	WG1892475
sec-Butylbenzene	U		0.000125	0.00100	1	07/09/2022 22:50	WG1892475
tert-Butylbenzene	U		0.000127	0.00100	1	07/09/2022 22:50	WG1892475
Carbon tetrachloride	U		0.000128	0.00100	1	07/09/2022 22:50	WG1892475
Chlorobenzene	U		0.000116	0.00100	1	07/09/2022 22:50	WG1892475
Chlorodibromomethane	U		0.000140	0.00100	1	07/09/2022 22:50	WG1892475
Chloroethane	U		0.000192	0.00500	1	07/09/2022 22:50	WG1892475
Chloroform	U		0.000111	0.00500	1	07/09/2022 22:50	WG1892475
Chloromethane	U		0.000960	0.00250	1	07/09/2022 22:50	WG1892475
2-Chlorotoluene	U		0.000106	0.00100	1	07/09/2022 22:50	WG1892475
4-Chlorotoluene	U		0.000114	0.00100	1	07/09/2022 22:50	WG1892475
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/09/2022 22:50	WG1892475
1,2-Dibromoethane	U		0.000126	0.00100	1	07/09/2022 22:50	WG1892475
Dibromomethane	U		0.000122	0.00100	1	07/09/2022 22:50	WG1892475
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/09/2022 22:50	WG1892475
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/09/2022 22:50	WG1892475
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/09/2022 22:50	WG1892475
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/09/2022 22:50	WG1892475
1,1-Dichloroethane	U		0.000100	0.00100	1	07/09/2022 22:50	WG1892475
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/09/2022 22:50	WG1892475
1,1-Dichloroethene	U		0.000188	0.00100	1	07/09/2022 22:50	WG1892475
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/09/2022 22:50	WG1892475
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/09/2022 22:50	WG1892475
1,2-Dichloropropane	U		0.000149	0.00100	1	07/09/2022 22:50	WG1892475
1,1-Dichloropropene	U		0.000142	0.00100	1	07/09/2022 22:50	WG1892475
1,3-Dichloropropane	U		0.000110	0.00100	1	07/09/2022 22:50	WG1892475
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/09/2022 22:50	WG1892475
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/09/2022 22:50	WG1892475
2,2-Dichloropropane	U		0.000161	0.00100	1	07/09/2022 22:50	WG1892475

Collected date/time: 06/30/22 10:10

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/09/2022 22:50	WG1892475
Ethylbenzene	U		0.000137	0.00100	1	07/09/2022 22:50	WG1892475
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/09/2022 22:50	WG1892475
Isopropylbenzene	U		0.000105	0.00100	1	07/09/2022 22:50	WG1892475
p-Isopropyltoluene	U		0.000120	0.00100	1	07/09/2022 22:50	WG1892475
2-Butanone (MEK)	U		0.00119	0.0100	1	07/09/2022 22:50	WG1892475
Methylene Chloride	U		0.000430	0.00500	1	07/09/2022 22:50	WG1892475
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/09/2022 22:50	WG1892475
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/09/2022 22:50	WG1892475
Naphthalene	U		0.00100	0.00500	1	07/09/2022 22:50	WG1892475
n-Propylbenzene	U		0.0000993	0.00100	1	07/09/2022 22:50	WG1892475
Styrene	U		0.000118	0.00100	1	07/09/2022 22:50	WG1892475
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/09/2022 22:50	WG1892475
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/09/2022 22:50	WG1892475
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/09/2022 22:50	WG1892475
Tetrachloroethene	U		0.000300	0.00100	1	07/09/2022 22:50	WG1892475
Toluene	U		0.000278	0.00100	1	07/09/2022 22:50	WG1892475
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	07/09/2022 22:50	WG1892475
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/09/2022 22:50	WG1892475
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/09/2022 22:50	WG1892475
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/09/2022 22:50	WG1892475
Trichloroethene	U		0.000190	0.00100	1	07/09/2022 22:50	WG1892475
Trichlorofluoromethane	U		0.000160	0.00500	1	07/09/2022 22:50	WG1892475
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/09/2022 22:50	WG1892475
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/09/2022 22:50	WG1892475
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 22:50	WG1892475
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 22:50	WG1892475
Vinyl chloride	U		0.000234	0.00100	1	07/09/2022 22:50	WG1892475
Xylenes, Total	U		0.000174	0.00300	1	07/09/2022 22:50	WG1892475
(S) Toluene-d8	107			80.0-120		07/09/2022 22:50	WG1892475
(S) 4-Bromofluorobenzene	96.6			77.0-126		07/09/2022 22:50	WG1892475
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		07/09/2022 22:50	WG1892475

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0226	U	0.0222	0.100	1	07/06/2022 18:55	WG1890442
C28-C40 Oil Range	0.0260	U	0.0118	0.100	1	07/06/2022 18:55	WG1890442
(S) o-Terphenyl	87.0			31.0-160		07/06/2022 18:55	WG1890442

Collected date/time: 06/30/22 11:25

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Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	492		10.0	1	07/07/2022 16:17	WG1891417

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

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	62.5		1.90	5.00	5	07/16/2022 05:55	WG1895925
Sulfate	108		2.97	25.0	5	07/16/2022 05:55	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/11/2022 13:41	WG1892838
(S) a,a,a-Trifluorotoluene(FID)	93.5			78.0-120		07/11/2022 13:41	WG1892838

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	07/09/2022 23:11	WG1892475
Acrolein	U		0.00254	0.0500	1	07/09/2022 23:11	WG1892475
Acrylonitrile	U		0.000671	0.0100	1	07/09/2022 23:11	WG1892475
Benzene	0.000160	J	0.0000941	0.00100	1	07/09/2022 23:11	WG1892475
Bromobenzene	U		0.000118	0.00100	1	07/09/2022 23:11	WG1892475
Bromodichloromethane	U		0.000136	0.00100	1	07/09/2022 23:11	WG1892475
Bromoform	U		0.000129	0.00100	1	07/09/2022 23:11	WG1892475
Bromomethane	U		0.000605	0.00500	1	07/09/2022 23:11	WG1892475
n-Butylbenzene	U		0.000157	0.00100	1	07/09/2022 23:11	WG1892475
sec-Butylbenzene	U		0.000125	0.00100	1	07/09/2022 23:11	WG1892475
tert-Butylbenzene	U		0.000127	0.00100	1	07/09/2022 23:11	WG1892475
Carbon tetrachloride	U		0.000128	0.00100	1	07/09/2022 23:11	WG1892475
Chlorobenzene	U		0.000116	0.00100	1	07/09/2022 23:11	WG1892475
Chlorodibromomethane	U		0.000140	0.00100	1	07/09/2022 23:11	WG1892475
Chloroethane	U		0.000192	0.00500	1	07/09/2022 23:11	WG1892475
Chloroform	U		0.000111	0.00500	1	07/09/2022 23:11	WG1892475
Chloromethane	U		0.000960	0.00250	1	07/09/2022 23:11	WG1892475
2-Chlorotoluene	U		0.000106	0.00100	1	07/09/2022 23:11	WG1892475
4-Chlorotoluene	U		0.000114	0.00100	1	07/09/2022 23:11	WG1892475
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/09/2022 23:11	WG1892475
1,2-Dibromoethane	U		0.000126	0.00100	1	07/09/2022 23:11	WG1892475
Dibromomethane	U		0.000122	0.00100	1	07/09/2022 23:11	WG1892475
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/09/2022 23:11	WG1892475
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/09/2022 23:11	WG1892475
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/09/2022 23:11	WG1892475
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/09/2022 23:11	WG1892475
1,1-Dichloroethane	U		0.000100	0.00100	1	07/09/2022 23:11	WG1892475
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/09/2022 23:11	WG1892475
1,1-Dichloroethene	U		0.000188	0.00100	1	07/09/2022 23:11	WG1892475
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/09/2022 23:11	WG1892475
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/09/2022 23:11	WG1892475
1,2-Dichloropropane	U		0.000149	0.00100	1	07/09/2022 23:11	WG1892475
1,1-Dichloropropene	U		0.000142	0.00100	1	07/09/2022 23:11	WG1892475
1,3-Dichloropropane	U		0.000110	0.00100	1	07/09/2022 23:11	WG1892475
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/09/2022 23:11	WG1892475
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/09/2022 23:11	WG1892475
2,2-Dichloropropane	U		0.000161	0.00100	1	07/09/2022 23:11	WG1892475

Collected date/time: 06/30/22 11:25

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/09/2022 23:11	WG1892475
Ethylbenzene	U		0.000137	0.00100	1	07/09/2022 23:11	WG1892475
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/09/2022 23:11	WG1892475
Isopropylbenzene	U		0.000105	0.00100	1	07/09/2022 23:11	WG1892475
p-Isopropyltoluene	U		0.000120	0.00100	1	07/09/2022 23:11	WG1892475
2-Butanone (MEK)	U		0.00119	0.0100	1	07/09/2022 23:11	WG1892475
Methylene Chloride	U		0.000430	0.00500	1	07/09/2022 23:11	WG1892475
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/09/2022 23:11	WG1892475
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/09/2022 23:11	WG1892475
Naphthalene	U		0.00100	0.00500	1	07/09/2022 23:11	WG1892475
n-Propylbenzene	U		0.0000993	0.00100	1	07/09/2022 23:11	WG1892475
Styrene	U		0.000118	0.00100	1	07/09/2022 23:11	WG1892475
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/09/2022 23:11	WG1892475
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/09/2022 23:11	WG1892475
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/09/2022 23:11	WG1892475
Tetrachloroethene	U		0.000300	0.00100	1	07/09/2022 23:11	WG1892475
Toluene	U		0.000278	0.00100	1	07/09/2022 23:11	WG1892475
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	07/09/2022 23:11	WG1892475
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/09/2022 23:11	WG1892475
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/09/2022 23:11	WG1892475
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/09/2022 23:11	WG1892475
Trichloroethene	U		0.000190	0.00100	1	07/09/2022 23:11	WG1892475
Trichlorofluoromethane	U		0.000160	0.00500	1	07/09/2022 23:11	WG1892475
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/09/2022 23:11	WG1892475
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/09/2022 23:11	WG1892475
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 23:11	WG1892475
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 23:11	WG1892475
Vinyl chloride	U		0.000234	0.00100	1	07/09/2022 23:11	WG1892475
Xylenes, Total	U		0.000174	0.00300	1	07/09/2022 23:11	WG1892475
(S) Toluene-d8	106			80.0-120		07/09/2022 23:11	WG1892475
(S) 4-Bromofluorobenzene	96.8			77.0-126		07/09/2022 23:11	WG1892475
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		07/09/2022 23:11	WG1892475

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		0.0222	0.100	1	07/06/2022 19:21	WG1890442
C28-C40 Oil Range	U		0.0118	0.100	1	07/06/2022 19:21	WG1890442
(S) o-Terphenyl	80.5			31.0-160		07/06/2022 19:21	WG1890442

Collected date/time: 06/30/22 12:40

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Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	514		10.0	1	07/07/2022 16:17	WG1891417

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	64.8		1.90	5.00	5	07/16/2022 06:07	WG1895925
Sulfate	109		2.97	25.0	5	07/16/2022 06:07	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/12/2022 10:05	WG1893415
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	111			78.0-120		07/12/2022 10:05	WG1893415

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	07/09/2022 23:32	WG1892475
Acrolein	U		0.00254	0.0500	1	07/09/2022 23:32	WG1892475
Acrylonitrile	U		0.000671	0.0100	1	07/09/2022 23:32	WG1892475
Benzene	0.000566	J	0.0000941	0.00100	1	07/09/2022 23:32	WG1892475
Bromobenzene	U		0.000118	0.00100	1	07/09/2022 23:32	WG1892475
Bromodichloromethane	U		0.000136	0.00100	1	07/09/2022 23:32	WG1892475
Bromoform	U		0.000129	0.00100	1	07/09/2022 23:32	WG1892475
Bromomethane	U		0.000605	0.00500	1	07/09/2022 23:32	WG1892475
n-Butylbenzene	U		0.000157	0.00100	1	07/09/2022 23:32	WG1892475
sec-Butylbenzene	U		0.000125	0.00100	1	07/09/2022 23:32	WG1892475
tert-Butylbenzene	U		0.000127	0.00100	1	07/09/2022 23:32	WG1892475
Carbon tetrachloride	U		0.000128	0.00100	1	07/09/2022 23:32	WG1892475
Chlorobenzene	U		0.000116	0.00100	1	07/09/2022 23:32	WG1892475
Chlorodibromomethane	U		0.000140	0.00100	1	07/09/2022 23:32	WG1892475
Chloroethane	U		0.000192	0.00500	1	07/09/2022 23:32	WG1892475
Chloroform	U		0.000111	0.00500	1	07/09/2022 23:32	WG1892475
Chloromethane	U		0.000960	0.00250	1	07/09/2022 23:32	WG1892475
2-Chlorotoluene	U		0.000106	0.00100	1	07/09/2022 23:32	WG1892475
4-Chlorotoluene	U		0.000114	0.00100	1	07/09/2022 23:32	WG1892475
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/09/2022 23:32	WG1892475
1,2-Dibromoethane	U		0.000126	0.00100	1	07/09/2022 23:32	WG1892475
Dibromomethane	U		0.000122	0.00100	1	07/09/2022 23:32	WG1892475
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/09/2022 23:32	WG1892475
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/09/2022 23:32	WG1892475
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/09/2022 23:32	WG1892475
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/09/2022 23:32	WG1892475
1,1-Dichloroethane	U		0.000100	0.00100	1	07/09/2022 23:32	WG1892475
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/09/2022 23:32	WG1892475
1,1-Dichloroethene	U		0.000188	0.00100	1	07/09/2022 23:32	WG1892475
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/09/2022 23:32	WG1892475
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/09/2022 23:32	WG1892475
1,2-Dichloropropane	U		0.000149	0.00100	1	07/09/2022 23:32	WG1892475
1,1-Dichloropropene	U		0.000142	0.00100	1	07/09/2022 23:32	WG1892475
1,3-Dichloropropane	U		0.000110	0.00100	1	07/09/2022 23:32	WG1892475
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/09/2022 23:32	WG1892475
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/09/2022 23:32	WG1892475
2,2-Dichloropropane	U		0.000161	0.00100	1	07/09/2022 23:32	WG1892475

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

Collected date/time: 06/30/22 12:40

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/09/2022 23:32	WG1892475
Ethylbenzene	0.000172	U	0.000137	0.00100	1	07/09/2022 23:32	WG1892475
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/09/2022 23:32	WG1892475
Isopropylbenzene	U		0.000105	0.00100	1	07/09/2022 23:32	WG1892475
p-Isopropyltoluene	U		0.000120	0.00100	1	07/09/2022 23:32	WG1892475
2-Butanone (MEK)	U		0.00119	0.0100	1	07/09/2022 23:32	WG1892475
Methylene Chloride	U		0.000430	0.00500	1	07/09/2022 23:32	WG1892475
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/09/2022 23:32	WG1892475
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/09/2022 23:32	WG1892475
Naphthalene	U		0.00100	0.00500	1	07/09/2022 23:32	WG1892475
n-Propylbenzene	U		0.0000993	0.00100	1	07/09/2022 23:32	WG1892475
Styrene	U		0.000118	0.00100	1	07/09/2022 23:32	WG1892475
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/09/2022 23:32	WG1892475
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/09/2022 23:32	WG1892475
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/09/2022 23:32	WG1892475
Tetrachloroethene	U		0.000300	0.00100	1	07/09/2022 23:32	WG1892475
Toluene	0.000395	U	0.000278	0.00100	1	07/09/2022 23:32	WG1892475
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	07/09/2022 23:32	WG1892475
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/09/2022 23:32	WG1892475
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/09/2022 23:32	WG1892475
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/09/2022 23:32	WG1892475
Trichloroethene	U		0.000190	0.00100	1	07/09/2022 23:32	WG1892475
Trichlorofluoromethane	U		0.000160	0.00500	1	07/09/2022 23:32	WG1892475
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/09/2022 23:32	WG1892475
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/09/2022 23:32	WG1892475
1,2,3-Trimethylbenzene	0.000125	U	0.000104	0.00100	1	07/09/2022 23:32	WG1892475
1,3,5-Trimethylbenzene	0.000236	U	0.000104	0.00100	1	07/09/2022 23:32	WG1892475
Vinyl chloride	U		0.000234	0.00100	1	07/09/2022 23:32	WG1892475
Xylenes, Total	0.000858	U	0.000174	0.00300	1	07/09/2022 23:32	WG1892475
(S) Toluene-d8	105			80.0-120		07/09/2022 23:32	WG1892475
(S) 4-Bromofluorobenzene	104			77.0-126		07/09/2022 23:32	WG1892475
(S) 1,2-Dichloroethane-d4	95.4			70.0-130		07/09/2022 23:32	WG1892475

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.180	B J3	0.0222	0.100	1	07/12/2022 17:48	WG1892825
C28-C40 Oil Range	0.448	B	0.0118	0.100	1	07/12/2022 17:48	WG1892825
(S) o-Terphenyl	60.0			31.0-160		07/12/2022 17:48	WG1892825

Collected date/time: 06/30/22 13:55

L1511253

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	491		10.0	1	07/07/2022 17:51	WG1891199

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	63.6		1.90	5.00	5	07/16/2022 06:20	WG1895925
Sulfate	109		2.97	25.0	5	07/16/2022 06:20	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/12/2022 10:27	WG1893415
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	111			78.0-120		07/12/2022 10:27	WG1893415

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	07/09/2022 23:53	WG1892475
Acrolein	U		0.00254	0.0500	1	07/09/2022 23:53	WG1892475
Acrylonitrile	U		0.000671	0.0100	1	07/09/2022 23:53	WG1892475
Benzene	0.000472	J	0.0000941	0.00100	1	07/09/2022 23:53	WG1892475
Bromobenzene	U		0.000118	0.00100	1	07/09/2022 23:53	WG1892475
Bromodichloromethane	U		0.000136	0.00100	1	07/09/2022 23:53	WG1892475
Bromoform	U		0.000129	0.00100	1	07/09/2022 23:53	WG1892475
Bromomethane	U		0.000605	0.00500	1	07/09/2022 23:53	WG1892475
n-Butylbenzene	U		0.000157	0.00100	1	07/09/2022 23:53	WG1892475
sec-Butylbenzene	U		0.000125	0.00100	1	07/09/2022 23:53	WG1892475
tert-Butylbenzene	U		0.000127	0.00100	1	07/09/2022 23:53	WG1892475
Carbon tetrachloride	U		0.000128	0.00100	1	07/09/2022 23:53	WG1892475
Chlorobenzene	U		0.000116	0.00100	1	07/09/2022 23:53	WG1892475
Chlorodibromomethane	U		0.000140	0.00100	1	07/09/2022 23:53	WG1892475
Chloroethane	U		0.000192	0.00500	1	07/09/2022 23:53	WG1892475
Chloroform	U		0.000111	0.00500	1	07/09/2022 23:53	WG1892475
Chloromethane	U		0.000960	0.00250	1	07/09/2022 23:53	WG1892475
2-Chlorotoluene	U		0.000106	0.00100	1	07/09/2022 23:53	WG1892475
4-Chlorotoluene	U		0.000114	0.00100	1	07/09/2022 23:53	WG1892475
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/09/2022 23:53	WG1892475
1,2-Dibromoethane	U		0.000126	0.00100	1	07/09/2022 23:53	WG1892475
Dibromomethane	U		0.000122	0.00100	1	07/09/2022 23:53	WG1892475
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/09/2022 23:53	WG1892475
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/09/2022 23:53	WG1892475
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/09/2022 23:53	WG1892475
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/09/2022 23:53	WG1892475
1,1-Dichloroethane	U		0.000100	0.00100	1	07/09/2022 23:53	WG1892475
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/09/2022 23:53	WG1892475
1,1-Dichloroethene	U		0.000188	0.00100	1	07/09/2022 23:53	WG1892475
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/09/2022 23:53	WG1892475
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/09/2022 23:53	WG1892475
1,2-Dichloropropane	U		0.000149	0.00100	1	07/09/2022 23:53	WG1892475
1,1-Dichloropropene	U		0.000142	0.00100	1	07/09/2022 23:53	WG1892475
1,3-Dichloropropane	U		0.000110	0.00100	1	07/09/2022 23:53	WG1892475
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/09/2022 23:53	WG1892475
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/09/2022 23:53	WG1892475
2,2-Dichloropropane	U		0.000161	0.00100	1	07/09/2022 23:53	WG1892475

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

Collected date/time: 06/30/22 13:55

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/09/2022 23:53	WG1892475
Ethylbenzene	0.000255	J	0.000137	0.00100	1	07/09/2022 23:53	WG1892475
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/09/2022 23:53	WG1892475
Isopropylbenzene	U		0.000105	0.00100	1	07/09/2022 23:53	WG1892475
p-Isopropyltoluene	U		0.000120	0.00100	1	07/09/2022 23:53	WG1892475
2-Butanone (MEK)	U		0.00119	0.0100	1	07/09/2022 23:53	WG1892475
Methylene Chloride	U		0.000430	0.00500	1	07/09/2022 23:53	WG1892475
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/09/2022 23:53	WG1892475
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/09/2022 23:53	WG1892475
Naphthalene	U		0.00100	0.00500	1	07/09/2022 23:53	WG1892475
n-Propylbenzene	U		0.0000993	0.00100	1	07/09/2022 23:53	WG1892475
Styrene	U		0.000118	0.00100	1	07/09/2022 23:53	WG1892475
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/09/2022 23:53	WG1892475
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/09/2022 23:53	WG1892475
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/09/2022 23:53	WG1892475
Tetrachloroethene	U		0.000300	0.00100	1	07/09/2022 23:53	WG1892475
Toluene	0.00102		0.000278	0.00100	1	07/09/2022 23:53	WG1892475
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	07/09/2022 23:53	WG1892475
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/09/2022 23:53	WG1892475
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/09/2022 23:53	WG1892475
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/09/2022 23:53	WG1892475
Trichloroethene	U		0.000190	0.00100	1	07/09/2022 23:53	WG1892475
Trichlorofluoromethane	U		0.000160	0.00500	1	07/09/2022 23:53	WG1892475
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/09/2022 23:53	WG1892475
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/09/2022 23:53	WG1892475
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 23:53	WG1892475
1,3,5-Trimethylbenzene	0.000157	J	0.000104	0.00100	1	07/09/2022 23:53	WG1892475
Vinyl chloride	U		0.000234	0.00100	1	07/09/2022 23:53	WG1892475
Xylenes, Total	0.00121	J	0.000174	0.00300	1	07/09/2022 23:53	WG1892475
(S) Toluene-d8	105			80.0-120		07/09/2022 23:53	WG1892475
(S) 4-Bromofluorobenzene	104			77.0-126		07/09/2022 23:53	WG1892475
(S) 1,2-Dichloroethane-d4	96.9			70.0-130		07/09/2022 23:53	WG1892475

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.112	B J3	0.0222	0.100	1	07/15/2022 00:01	WG1892825
C28-C40 Oil Range	0.0975	B J	0.0118	0.100	1	07/15/2022 00:01	WG1892825
(S) o-Terphenyl	75.5			31.0-160		07/15/2022 00:01	WG1892825

Collected date/time: 06/30/22 15:35

L1511253

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	518		10.0	1	07/07/2022 17:51	WG1891199

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

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	63.4		1.90	5.00	5	07/16/2022 06:32	WG1895925
Sulfate	110		2.97	25.0	5	07/16/2022 06:32	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/12/2022 10:48	WG1893415
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	111			78.0-120		07/12/2022 10:48	WG1893415

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	07/10/2022 00:14	WG1892475
Acrolein	U		0.00254	0.0500	1	07/10/2022 00:14	WG1892475
Acrylonitrile	U		0.000671	0.0100	1	07/10/2022 00:14	WG1892475
Benzene	0.000421	J	0.0000941	0.00100	1	07/10/2022 00:14	WG1892475
Bromobenzene	U		0.000118	0.00100	1	07/10/2022 00:14	WG1892475
Bromodichloromethane	U		0.000136	0.00100	1	07/10/2022 00:14	WG1892475
Bromoform	U		0.000129	0.00100	1	07/10/2022 00:14	WG1892475
Bromomethane	U		0.000605	0.00500	1	07/10/2022 00:14	WG1892475
n-Butylbenzene	U		0.000157	0.00100	1	07/10/2022 00:14	WG1892475
sec-Butylbenzene	U		0.000125	0.00100	1	07/10/2022 00:14	WG1892475
tert-Butylbenzene	U		0.000127	0.00100	1	07/10/2022 00:14	WG1892475
Carbon tetrachloride	U		0.000128	0.00100	1	07/10/2022 00:14	WG1892475
Chlorobenzene	U		0.000116	0.00100	1	07/10/2022 00:14	WG1892475
Chlorodibromomethane	U		0.000140	0.00100	1	07/10/2022 00:14	WG1892475
Chloroethane	U		0.000192	0.00500	1	07/10/2022 00:14	WG1892475
Chloroform	U		0.000111	0.00500	1	07/10/2022 00:14	WG1892475
Chloromethane	U		0.000960	0.00250	1	07/10/2022 00:14	WG1892475
2-Chlorotoluene	U		0.000106	0.00100	1	07/10/2022 00:14	WG1892475
4-Chlorotoluene	U		0.000114	0.00100	1	07/10/2022 00:14	WG1892475
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/10/2022 00:14	WG1892475
1,2-Dibromoethane	U		0.000126	0.00100	1	07/10/2022 00:14	WG1892475
Dibromomethane	U		0.000122	0.00100	1	07/10/2022 00:14	WG1892475
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/10/2022 00:14	WG1892475
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/10/2022 00:14	WG1892475
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/10/2022 00:14	WG1892475
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/10/2022 00:14	WG1892475
1,1-Dichloroethane	U		0.000100	0.00100	1	07/10/2022 00:14	WG1892475
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/10/2022 00:14	WG1892475
1,1-Dichloroethene	U		0.000188	0.00100	1	07/10/2022 00:14	WG1892475
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/10/2022 00:14	WG1892475
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/10/2022 00:14	WG1892475
1,2-Dichloropropane	U		0.000149	0.00100	1	07/10/2022 00:14	WG1892475
1,1-Dichloropropene	U		0.000142	0.00100	1	07/10/2022 00:14	WG1892475
1,3-Dichloropropane	U		0.000110	0.00100	1	07/10/2022 00:14	WG1892475
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/10/2022 00:14	WG1892475
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/10/2022 00:14	WG1892475
2,2-Dichloropropane	U		0.000161	0.00100	1	07/10/2022 00:14	WG1892475

Collected date/time: 06/30/22 15:35

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/10/2022 00:14	WG1892475
Ethylbenzene	0.000260	U	0.000137	0.00100	1	07/10/2022 00:14	WG1892475
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/10/2022 00:14	WG1892475
Isopropylbenzene	U		0.000105	0.00100	1	07/10/2022 00:14	WG1892475
p-Isopropyltoluene	U		0.000120	0.00100	1	07/10/2022 00:14	WG1892475
2-Butanone (MEK)	U		0.00119	0.0100	1	07/10/2022 00:14	WG1892475
Methylene Chloride	U		0.000430	0.00500	1	07/10/2022 00:14	WG1892475
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/10/2022 00:14	WG1892475
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/10/2022 00:14	WG1892475
Naphthalene	U		0.00100	0.00500	1	07/10/2022 00:14	WG1892475
n-Propylbenzene	U		0.0000993	0.00100	1	07/10/2022 00:14	WG1892475
Styrene	U		0.000118	0.00100	1	07/10/2022 00:14	WG1892475
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/10/2022 00:14	WG1892475
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/10/2022 00:14	WG1892475
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/10/2022 00:14	WG1892475
Tetrachloroethene	U		0.000300	0.00100	1	07/10/2022 00:14	WG1892475
Toluene	0.000779	U	0.000278	0.00100	1	07/10/2022 00:14	WG1892475
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	07/10/2022 00:14	WG1892475
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/10/2022 00:14	WG1892475
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/10/2022 00:14	WG1892475
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/10/2022 00:14	WG1892475
Trichloroethene	U		0.000190	0.00100	1	07/10/2022 00:14	WG1892475
Trichlorofluoromethane	U		0.000160	0.00500	1	07/10/2022 00:14	WG1892475
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/10/2022 00:14	WG1892475
1,2,4-Trimethylbenzene	0.000386	U	0.000322	0.00100	1	07/10/2022 00:14	WG1892475
1,2,3-Trimethylbenzene	0.000278	U	0.000104	0.00100	1	07/10/2022 00:14	WG1892475
1,3,5-Trimethylbenzene	0.000474	U	0.000104	0.00100	1	07/10/2022 00:14	WG1892475
Vinyl chloride	U		0.000234	0.00100	1	07/10/2022 00:14	WG1892475
Xylenes, Total	0.00169	U	0.000174	0.00300	1	07/10/2022 00:14	WG1892475
(S) Toluene-d8	108			80.0-120		07/10/2022 00:14	WG1892475
(S) 4-Bromofluorobenzene	99.1			77.0-126		07/10/2022 00:14	WG1892475
(S) 1,2-Dichloroethane-d4	94.5			70.0-130		07/10/2022 00:14	WG1892475

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0888	B J J3	0.0222	0.100	1	07/12/2022 18:29	WG1892825
C28-C40 Oil Range	0.174	B	0.0118	0.100	1	07/12/2022 18:29	WG1892825
(S) o-Terphenyl	83.5			31.0-160		07/12/2022 18:29	WG1892825

Collected date/time: 06/30/22 12:25

L1511253

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	12.0	B	10.0	1	07/07/2022 17:51	WG1891199

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	U		0.379	1.00	1	07/16/2022 06:44	WG1895925
Sulfate	U		0.594	5.00	1	07/16/2022 06:44	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/12/2022 11:10	WG1893415
(S) a,a,a-Trifluorotoluene(FID)	113			78.0-120		07/12/2022 11:10	WG1893415

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	07/09/2022 19:40	WG1892475
Acrolein	U		0.00254	0.0500	1	07/09/2022 19:40	WG1892475
Acrylonitrile	U		0.000671	0.0100	1	07/09/2022 19:40	WG1892475
Benzene	U		0.0000941	0.00100	1	07/09/2022 19:40	WG1892475
Bromobenzene	U		0.000118	0.00100	1	07/09/2022 19:40	WG1892475
Bromodichloromethane	U		0.000136	0.00100	1	07/09/2022 19:40	WG1892475
Bromoform	U		0.000129	0.00100	1	07/09/2022 19:40	WG1892475
Bromomethane	U		0.000605	0.00500	1	07/09/2022 19:40	WG1892475
n-Butylbenzene	U		0.000157	0.00100	1	07/09/2022 19:40	WG1892475
sec-Butylbenzene	U		0.000125	0.00100	1	07/09/2022 19:40	WG1892475
tert-Butylbenzene	U		0.000127	0.00100	1	07/09/2022 19:40	WG1892475
Carbon tetrachloride	U		0.000128	0.00100	1	07/09/2022 19:40	WG1892475
Chlorobenzene	U		0.000116	0.00100	1	07/09/2022 19:40	WG1892475
Chlorodibromomethane	U		0.000140	0.00100	1	07/09/2022 19:40	WG1892475
Chloroethane	U		0.000192	0.00500	1	07/09/2022 19:40	WG1892475
Chloroform	U		0.000111	0.00500	1	07/09/2022 19:40	WG1892475
Chloromethane	U		0.000960	0.00250	1	07/09/2022 19:40	WG1892475
2-Chlorotoluene	U		0.000106	0.00100	1	07/09/2022 19:40	WG1892475
4-Chlorotoluene	U		0.000114	0.00100	1	07/09/2022 19:40	WG1892475
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/09/2022 19:40	WG1892475
1,2-Dibromoethane	U		0.000126	0.00100	1	07/09/2022 19:40	WG1892475
Dibromomethane	U		0.000122	0.00100	1	07/09/2022 19:40	WG1892475
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/09/2022 19:40	WG1892475
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/09/2022 19:40	WG1892475
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/09/2022 19:40	WG1892475
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/09/2022 19:40	WG1892475
1,1-Dichloroethane	U		0.000100	0.00100	1	07/09/2022 19:40	WG1892475
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/09/2022 19:40	WG1892475
1,1-Dichloroethene	U		0.000188	0.00100	1	07/09/2022 19:40	WG1892475
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/09/2022 19:40	WG1892475
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/09/2022 19:40	WG1892475
1,2-Dichloropropane	U		0.000149	0.00100	1	07/09/2022 19:40	WG1892475
1,1-Dichloropropene	U		0.000142	0.00100	1	07/09/2022 19:40	WG1892475
1,3-Dichloropropane	U		0.000110	0.00100	1	07/09/2022 19:40	WG1892475
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/09/2022 19:40	WG1892475
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/09/2022 19:40	WG1892475
2,2-Dichloropropane	U		0.000161	0.00100	1	07/09/2022 19:40	WG1892475

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

Collected date/time: 06/30/22 12:25

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/09/2022 19:40	WG1892475
Ethylbenzene	U		0.000137	0.00100	1	07/09/2022 19:40	WG1892475
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/09/2022 19:40	WG1892475
Isopropylbenzene	U		0.000105	0.00100	1	07/09/2022 19:40	WG1892475
p-Isopropyltoluene	U		0.000120	0.00100	1	07/09/2022 19:40	WG1892475
2-Butanone (MEK)	U		0.00119	0.0100	1	07/09/2022 19:40	WG1892475
Methylene Chloride	U		0.000430	0.00500	1	07/09/2022 19:40	WG1892475
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/09/2022 19:40	WG1892475
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/09/2022 19:40	WG1892475
Naphthalene	U		0.00100	0.00500	1	07/09/2022 19:40	WG1892475
n-Propylbenzene	U		0.0000993	0.00100	1	07/09/2022 19:40	WG1892475
Styrene	U		0.000118	0.00100	1	07/09/2022 19:40	WG1892475
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/09/2022 19:40	WG1892475
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/09/2022 19:40	WG1892475
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/09/2022 19:40	WG1892475
Tetrachloroethene	U		0.000300	0.00100	1	07/09/2022 19:40	WG1892475
Toluene	U		0.000278	0.00100	1	07/09/2022 19:40	WG1892475
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	07/09/2022 19:40	WG1892475
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/09/2022 19:40	WG1892475
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/09/2022 19:40	WG1892475
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/09/2022 19:40	WG1892475
Trichloroethene	U		0.000190	0.00100	1	07/09/2022 19:40	WG1892475
Trichlorofluoromethane	U		0.000160	0.00500	1	07/09/2022 19:40	WG1892475
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/09/2022 19:40	WG1892475
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/09/2022 19:40	WG1892475
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 19:40	WG1892475
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 19:40	WG1892475
Vinyl chloride	U		0.000234	0.00100	1	07/09/2022 19:40	WG1892475
Xylenes, Total	U		0.000174	0.00300	1	07/09/2022 19:40	WG1892475
(S) Toluene-d8	109			80.0-120		07/09/2022 19:40	WG1892475
(S) 4-Bromofluorobenzene	99.3			77.0-126		07/09/2022 19:40	WG1892475
(S) 1,2-Dichloroethane-d4	94.5			70.0-130		07/09/2022 19:40	WG1892475

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.103	B J3	0.0222	0.100	1	07/15/2022 00:21	WG1892825
C28-C40 Oil Range	0.118	B	0.0118	0.100	1	07/15/2022 00:21	WG1892825
(S) o-Terphenyl	80.5			31.0-160		07/15/2022 00:21	WG1892825

Collected date/time: 06/30/22 13:47

L1511253

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	15.0	B	10.0	1	07/07/2022 17:51	WG1891199

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	U		0.379	1.00	1	07/16/2022 06:57	WG1895925
Sulfate	U		0.594	5.00	1	07/16/2022 06:57	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/12/2022 11:32	WG1893415
(S) a,a,a-Trifluorotoluene(FID)	114			78.0-120		07/12/2022 11:32	WG1893415

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	07/09/2022 19:19	WG1892475
Acrolein	U		0.00254	0.0500	1	07/09/2022 19:19	WG1892475
Acrylonitrile	U		0.000671	0.0100	1	07/09/2022 19:19	WG1892475
Benzene	U		0.0000941	0.00100	1	07/09/2022 19:19	WG1892475
Bromobenzene	U		0.000118	0.00100	1	07/09/2022 19:19	WG1892475
Bromodichloromethane	U		0.000136	0.00100	1	07/09/2022 19:19	WG1892475
Bromoform	U		0.000129	0.00100	1	07/09/2022 19:19	WG1892475
Bromomethane	U		0.000605	0.00500	1	07/09/2022 19:19	WG1892475
n-Butylbenzene	U		0.000157	0.00100	1	07/09/2022 19:19	WG1892475
sec-Butylbenzene	U		0.000125	0.00100	1	07/09/2022 19:19	WG1892475
tert-Butylbenzene	U		0.000127	0.00100	1	07/09/2022 19:19	WG1892475
Carbon tetrachloride	U		0.000128	0.00100	1	07/09/2022 19:19	WG1892475
Chlorobenzene	U		0.000116	0.00100	1	07/09/2022 19:19	WG1892475
Chlorodibromomethane	U		0.000140	0.00100	1	07/09/2022 19:19	WG1892475
Chloroethane	U		0.000192	0.00500	1	07/09/2022 19:19	WG1892475
Chloroform	U		0.000111	0.00500	1	07/09/2022 19:19	WG1892475
Chloromethane	U		0.000960	0.00250	1	07/09/2022 19:19	WG1892475
2-Chlorotoluene	U		0.000106	0.00100	1	07/09/2022 19:19	WG1892475
4-Chlorotoluene	U		0.000114	0.00100	1	07/09/2022 19:19	WG1892475
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/09/2022 19:19	WG1892475
1,2-Dibromoethane	U		0.000126	0.00100	1	07/09/2022 19:19	WG1892475
Dibromomethane	U		0.000122	0.00100	1	07/09/2022 19:19	WG1892475
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/09/2022 19:19	WG1892475
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/09/2022 19:19	WG1892475
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/09/2022 19:19	WG1892475
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/09/2022 19:19	WG1892475
1,1-Dichloroethane	U		0.000100	0.00100	1	07/09/2022 19:19	WG1892475
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/09/2022 19:19	WG1892475
1,1-Dichloroethene	U		0.000188	0.00100	1	07/09/2022 19:19	WG1892475
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/09/2022 19:19	WG1892475
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/09/2022 19:19	WG1892475
1,2-Dichloropropane	U		0.000149	0.00100	1	07/09/2022 19:19	WG1892475
1,1-Dichloropropene	U		0.000142	0.00100	1	07/09/2022 19:19	WG1892475
1,3-Dichloropropane	U		0.000110	0.00100	1	07/09/2022 19:19	WG1892475
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/09/2022 19:19	WG1892475
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/09/2022 19:19	WG1892475
2,2-Dichloropropane	U		0.000161	0.00100	1	07/09/2022 19:19	WG1892475

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

Collected date/time: 06/30/22 13:47

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/09/2022 19:19	WG1892475
Ethylbenzene	U		0.000137	0.00100	1	07/09/2022 19:19	WG1892475
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/09/2022 19:19	WG1892475
Isopropylbenzene	U		0.000105	0.00100	1	07/09/2022 19:19	WG1892475
p-Isopropyltoluene	U		0.000120	0.00100	1	07/09/2022 19:19	WG1892475
2-Butanone (MEK)	0.00155	J	0.00119	0.0100	1	07/09/2022 19:19	WG1892475
Methylene Chloride	U		0.000430	0.00500	1	07/09/2022 19:19	WG1892475
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/09/2022 19:19	WG1892475
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/09/2022 19:19	WG1892475
Naphthalene	U		0.00100	0.00500	1	07/09/2022 19:19	WG1892475
n-Propylbenzene	U		0.0000993	0.00100	1	07/09/2022 19:19	WG1892475
Styrene	U		0.000118	0.00100	1	07/09/2022 19:19	WG1892475
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/09/2022 19:19	WG1892475
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/09/2022 19:19	WG1892475
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/09/2022 19:19	WG1892475
Tetrachloroethene	U		0.000300	0.00100	1	07/09/2022 19:19	WG1892475
Toluene	U		0.000278	0.00100	1	07/09/2022 19:19	WG1892475
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	07/09/2022 19:19	WG1892475
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/09/2022 19:19	WG1892475
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/09/2022 19:19	WG1892475
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/09/2022 19:19	WG1892475
Trichloroethene	U		0.000190	0.00100	1	07/09/2022 19:19	WG1892475
Trichlorofluoromethane	U		0.000160	0.00500	1	07/09/2022 19:19	WG1892475
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/09/2022 19:19	WG1892475
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/09/2022 19:19	WG1892475
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 19:19	WG1892475
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/09/2022 19:19	WG1892475
Vinyl chloride	U		0.000234	0.00100	1	07/09/2022 19:19	WG1892475
Xylenes, Total	U		0.000174	0.00300	1	07/09/2022 19:19	WG1892475
(S) Toluene-d8	105			80.0-120		07/09/2022 19:19	WG1892475
(S) 4-Bromofluorobenzene	108			77.0-126		07/09/2022 19:19	WG1892475
(S) 1,2-Dichloroethane-d4	95.0			70.0-130		07/09/2022 19:19	WG1892475

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.0411	B J J3	0.0222	0.100	1	07/12/2022 19:09	WG1892825
C28-C40 Oil Range	0.0805	B J	0.0118	0.100	1	07/12/2022 19:09	WG1892825
(S) o-Terphenyl	63.5			31.0-160		07/12/2022 19:09	WG1892825

Collected date/time: 06/30/22 00:00

L1511253

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	484		10.0	1	07/07/2022 17:51	WG1891199

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	62.6		3.79	10.0	10	07/16/2022 07:09	WG1895925
Sulfate	107		5.94	50.0	10	07/16/2022 07:09	WG1895925

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	1	07/12/2022 11:53	WG1893415
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/12/2022 11:53	WG1893415

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J3	0.0113	0.0500	1	07/10/2022 03:22	WG1892480
Acrolein	U	J3	0.00254	0.0500	1	07/10/2022 03:22	WG1892480
Acrylonitrile	U	J3	0.000671	0.0100	1	07/10/2022 03:22	WG1892480
Benzene	0.000460	J	0.0000941	0.00100	1	07/10/2022 03:22	WG1892480
Bromobenzene	U		0.000118	0.00100	1	07/10/2022 03:22	WG1892480
Bromodichloromethane	U		0.000136	0.00100	1	07/10/2022 03:22	WG1892480
Bromoform	U	J4	0.000129	0.00100	1	07/10/2022 03:22	WG1892480
Bromomethane	U		0.000605	0.00500	1	07/10/2022 03:22	WG1892480
n-Butylbenzene	U		0.000157	0.00100	1	07/10/2022 03:22	WG1892480
sec-Butylbenzene	U		0.000125	0.00100	1	07/10/2022 03:22	WG1892480
tert-Butylbenzene	U		0.000127	0.00100	1	07/10/2022 03:22	WG1892480
Carbon tetrachloride	U		0.000128	0.00100	1	07/10/2022 03:22	WG1892480
Chlorobenzene	U		0.000116	0.00100	1	07/10/2022 03:22	WG1892480
Chlorodibromomethane	U		0.000140	0.00100	1	07/10/2022 03:22	WG1892480
Chloroethane	U		0.000192	0.00500	1	07/10/2022 03:22	WG1892480
Chloroform	U		0.000111	0.00500	1	07/10/2022 03:22	WG1892480
Chloromethane	U		0.000960	0.00250	1	07/10/2022 03:22	WG1892480
2-Chlorotoluene	U		0.000106	0.00100	1	07/10/2022 03:22	WG1892480
4-Chlorotoluene	U		0.000114	0.00100	1	07/10/2022 03:22	WG1892480
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/10/2022 03:22	WG1892480
1,2-Dibromoethane	U		0.000126	0.00100	1	07/10/2022 03:22	WG1892480
Dibromomethane	U		0.000122	0.00100	1	07/10/2022 03:22	WG1892480
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/10/2022 03:22	WG1892480
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/10/2022 03:22	WG1892480
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/10/2022 03:22	WG1892480
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/10/2022 03:22	WG1892480
1,1-Dichloroethane	U		0.000100	0.00100	1	07/10/2022 03:22	WG1892480
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/10/2022 03:22	WG1892480
1,1-Dichloroethene	U		0.000188	0.00100	1	07/10/2022 03:22	WG1892480
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/10/2022 03:22	WG1892480
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/10/2022 03:22	WG1892480
1,2-Dichloropropane	U		0.000149	0.00100	1	07/10/2022 03:22	WG1892480
1,1-Dichloropropene	U		0.000142	0.00100	1	07/10/2022 03:22	WG1892480
1,3-Dichloropropane	U		0.000110	0.00100	1	07/10/2022 03:22	WG1892480
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/10/2022 03:22	WG1892480
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/10/2022 03:22	WG1892480
2,2-Dichloropropane	U		0.000161	0.00100	1	07/10/2022 03:22	WG1892480

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

Collected date/time: 06/30/22 00:00

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Di-isopropyl ether	U		0.000105	0.00100	1	07/10/2022 03:22	WG1892480
Ethylbenzene	0.000233	J	0.000137	0.00100	1	07/10/2022 03:22	WG1892480
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/10/2022 03:22	WG1892480
Isopropylbenzene	U		0.000105	0.00100	1	07/10/2022 03:22	WG1892480
p-Isopropyltoluene	U		0.000120	0.00100	1	07/10/2022 03:22	WG1892480
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	07/10/2022 03:22	WG1892480
Methylene Chloride	U		0.000430	0.00500	1	07/10/2022 03:22	WG1892480
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/10/2022 03:22	WG1892480
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/10/2022 03:22	WG1892480
Naphthalene	U		0.00100	0.00500	1	07/10/2022 03:22	WG1892480
n-Propylbenzene	U		0.0000993	0.00100	1	07/10/2022 03:22	WG1892480
Styrene	U		0.000118	0.00100	1	07/10/2022 03:22	WG1892480
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/10/2022 03:22	WG1892480
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/10/2022 03:22	WG1892480
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/10/2022 03:22	WG1892480
Tetrachloroethene	U		0.000300	0.00100	1	07/10/2022 03:22	WG1892480
Toluene	0.000936	J	0.000278	0.00100	1	07/10/2022 03:22	WG1892480
1,2,3-Trichlorobenzene	U	J3	0.000230	0.00100	1	07/10/2022 03:22	WG1892480
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/10/2022 03:22	WG1892480
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/10/2022 03:22	WG1892480
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/10/2022 03:22	WG1892480
Trichloroethene	U		0.000190	0.00100	1	07/10/2022 03:22	WG1892480
Trichlorofluoromethane	U		0.000160	0.00500	1	07/10/2022 03:22	WG1892480
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/10/2022 03:22	WG1892480
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/10/2022 03:22	WG1892480
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/10/2022 03:22	WG1892480
1,3,5-Trimethylbenzene	0.000132	J	0.000104	0.00100	1	07/10/2022 03:22	WG1892480
Vinyl chloride	U		0.000234	0.00100	1	07/10/2022 03:22	WG1892480
Xylenes, Total	0.00111	J	0.000174	0.00300	1	07/10/2022 03:22	WG1892480
(S) Toluene-d8	106			80.0-120		07/10/2022 03:22	WG1892480
(S) 4-Bromofluorobenzene	102			77.0-126		07/10/2022 03:22	WG1892480
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		07/10/2022 03:22	WG1892480

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.123	B J3	0.0222	0.100	1	07/12/2022 19:29	WG1892825
C28-C40 Oil Range	0.308	B	0.0118	0.100	1	07/12/2022 19:29	WG1892825
(S) o-Terphenyl	81.0			31.0-160		07/12/2022 19:29	WG1892825

Collected date/time: 06/30/22 00:00

L1511253

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J3	0.0113	0.0500	1	07/10/2022 02:40	WG1892480
Acrolein	U	J3	0.00254	0.0500	1	07/10/2022 02:40	WG1892480
Acrylonitrile	U	J3	0.000671	0.0100	1	07/10/2022 02:40	WG1892480
Benzene	U		0.0000941	0.00100	1	07/10/2022 02:40	WG1892480
Bromobenzene	U		0.000118	0.00100	1	07/10/2022 02:40	WG1892480
Bromodichloromethane	U		0.000136	0.00100	1	07/10/2022 02:40	WG1892480
Bromoform	U	J4	0.000129	0.00100	1	07/10/2022 02:40	WG1892480
Bromomethane	U		0.000605	0.00500	1	07/10/2022 02:40	WG1892480
n-Butylbenzene	U		0.000157	0.00100	1	07/10/2022 02:40	WG1892480
sec-Butylbenzene	U		0.000125	0.00100	1	07/10/2022 02:40	WG1892480
tert-Butylbenzene	U		0.000127	0.00100	1	07/10/2022 02:40	WG1892480
Carbon tetrachloride	U		0.000128	0.00100	1	07/10/2022 02:40	WG1892480
Chlorobenzene	U		0.000116	0.00100	1	07/10/2022 02:40	WG1892480
Chlorodibromomethane	U		0.000140	0.00100	1	07/10/2022 02:40	WG1892480
Chloroethane	U		0.000192	0.00500	1	07/10/2022 02:40	WG1892480
Chloroform	U		0.000111	0.00500	1	07/10/2022 02:40	WG1892480
Chloromethane	U		0.000960	0.00250	1	07/10/2022 02:40	WG1892480
2-Chlorotoluene	U		0.000106	0.00100	1	07/10/2022 02:40	WG1892480
4-Chlorotoluene	U		0.000114	0.00100	1	07/10/2022 02:40	WG1892480
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/10/2022 02:40	WG1892480
1,2-Dibromoethane	U		0.000126	0.00100	1	07/10/2022 02:40	WG1892480
Dibromomethane	U		0.000122	0.00100	1	07/10/2022 02:40	WG1892480
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/10/2022 02:40	WG1892480
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/10/2022 02:40	WG1892480
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/10/2022 02:40	WG1892480
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/10/2022 02:40	WG1892480
1,1-Dichloroethane	U		0.000100	0.00100	1	07/10/2022 02:40	WG1892480
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/10/2022 02:40	WG1892480
1,1-Dichloroethene	U		0.000188	0.00100	1	07/10/2022 02:40	WG1892480
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/10/2022 02:40	WG1892480
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/10/2022 02:40	WG1892480
1,2-Dichloropropane	U		0.000149	0.00100	1	07/10/2022 02:40	WG1892480
1,1-Dichloropropene	U		0.000142	0.00100	1	07/10/2022 02:40	WG1892480
1,3-Dichloropropane	U		0.000110	0.00100	1	07/10/2022 02:40	WG1892480
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/10/2022 02:40	WG1892480
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/10/2022 02:40	WG1892480
2,2-Dichloropropane	U		0.000161	0.00100	1	07/10/2022 02:40	WG1892480
Di-isopropyl ether	U		0.000105	0.00100	1	07/10/2022 02:40	WG1892480
Ethylbenzene	U		0.000137	0.00100	1	07/10/2022 02:40	WG1892480
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/10/2022 02:40	WG1892480
Isopropylbenzene	U		0.000105	0.00100	1	07/10/2022 02:40	WG1892480
p-Isopropyltoluene	U		0.000120	0.00100	1	07/10/2022 02:40	WG1892480
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	07/10/2022 02:40	WG1892480
Methylene Chloride	U		0.000430	0.00500	1	07/10/2022 02:40	WG1892480
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/10/2022 02:40	WG1892480
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/10/2022 02:40	WG1892480
Naphthalene	U		0.00100	0.00500	1	07/10/2022 02:40	WG1892480
n-Propylbenzene	U		0.0000993	0.00100	1	07/10/2022 02:40	WG1892480
Styrene	U		0.000118	0.00100	1	07/10/2022 02:40	WG1892480
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/10/2022 02:40	WG1892480
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/10/2022 02:40	WG1892480
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/10/2022 02:40	WG1892480
Tetrachloroethene	U		0.000300	0.00100	1	07/10/2022 02:40	WG1892480
Toluene	U		0.000278	0.00100	1	07/10/2022 02:40	WG1892480
1,2,3-Trichlorobenzene	U	J3	0.000230	0.00100	1	07/10/2022 02:40	WG1892480
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/10/2022 02:40	WG1892480

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

Collected date/time: 06/30/22 00:00

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/10/2022 02:40	WG1892480
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/10/2022 02:40	WG1892480
Trichloroethene	U		0.000190	0.00100	1	07/10/2022 02:40	WG1892480
Trichlorofluoromethane	U		0.000160	0.00500	1	07/10/2022 02:40	WG1892480
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/10/2022 02:40	WG1892480
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/10/2022 02:40	WG1892480
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/10/2022 02:40	WG1892480
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/10/2022 02:40	WG1892480
Vinyl chloride	U		0.000234	0.00100	1	07/10/2022 02:40	WG1892480
Xylenes, Total	U		0.000174	0.00300	1	07/10/2022 02:40	WG1892480
(S) Toluene-d8	108			80.0-120		07/10/2022 02:40	WG1892480
(S) 4-Bromofluorobenzene	97.3			77.0-126		07/10/2022 02:40	WG1892480
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		07/10/2022 02:40	WG1892480

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

Collected date/time: 06/30/22 00:00

L1511253

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J3	0.0113	0.0500	1	07/10/2022 03:02	WG1892480
Acrolein	U	J3	0.00254	0.0500	1	07/10/2022 03:02	WG1892480
Acrylonitrile	U	J3	0.000671	0.0100	1	07/10/2022 03:02	WG1892480
Benzene	U		0.0000941	0.00100	1	07/10/2022 03:02	WG1892480
Bromobenzene	U		0.000118	0.00100	1	07/10/2022 03:02	WG1892480
Bromodichloromethane	U		0.000136	0.00100	1	07/10/2022 03:02	WG1892480
Bromoform	U	J4	0.000129	0.00100	1	07/10/2022 03:02	WG1892480
Bromomethane	U		0.000605	0.00500	1	07/10/2022 03:02	WG1892480
n-Butylbenzene	U		0.000157	0.00100	1	07/10/2022 03:02	WG1892480
sec-Butylbenzene	U		0.000125	0.00100	1	07/10/2022 03:02	WG1892480
tert-Butylbenzene	U		0.000127	0.00100	1	07/10/2022 03:02	WG1892480
Carbon tetrachloride	U		0.000128	0.00100	1	07/10/2022 03:02	WG1892480
Chlorobenzene	U		0.000116	0.00100	1	07/10/2022 03:02	WG1892480
Chlorodibromomethane	U		0.000140	0.00100	1	07/10/2022 03:02	WG1892480
Chloroethane	U		0.000192	0.00500	1	07/10/2022 03:02	WG1892480
Chloroform	U		0.000111	0.00500	1	07/10/2022 03:02	WG1892480
Chloromethane	U		0.000960	0.00250	1	07/10/2022 03:02	WG1892480
2-Chlorotoluene	U		0.000106	0.00100	1	07/10/2022 03:02	WG1892480
4-Chlorotoluene	U		0.000114	0.00100	1	07/10/2022 03:02	WG1892480
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	07/10/2022 03:02	WG1892480
1,2-Dibromoethane	U		0.000126	0.00100	1	07/10/2022 03:02	WG1892480
Dibromomethane	U		0.000122	0.00100	1	07/10/2022 03:02	WG1892480
1,2-Dichlorobenzene	U		0.000107	0.00100	1	07/10/2022 03:02	WG1892480
1,3-Dichlorobenzene	U		0.000110	0.00100	1	07/10/2022 03:02	WG1892480
1,4-Dichlorobenzene	U		0.000120	0.00100	1	07/10/2022 03:02	WG1892480
Dichlorodifluoromethane	U		0.000374	0.00500	1	07/10/2022 03:02	WG1892480
1,1-Dichloroethane	U		0.000100	0.00100	1	07/10/2022 03:02	WG1892480
1,2-Dichloroethane	U		0.0000819	0.00100	1	07/10/2022 03:02	WG1892480
1,1-Dichloroethene	U		0.000188	0.00100	1	07/10/2022 03:02	WG1892480
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	07/10/2022 03:02	WG1892480
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	07/10/2022 03:02	WG1892480
1,2-Dichloropropane	U		0.000149	0.00100	1	07/10/2022 03:02	WG1892480
1,1-Dichloropropene	U		0.000142	0.00100	1	07/10/2022 03:02	WG1892480
1,3-Dichloropropane	U		0.000110	0.00100	1	07/10/2022 03:02	WG1892480
cis-1,3-Dichloropropene	U	J4	0.000111	0.00100	1	07/10/2022 03:02	WG1892480
trans-1,3-Dichloropropene	U	J4	0.000118	0.00100	1	07/10/2022 03:02	WG1892480
2,2-Dichloropropane	U		0.000161	0.00100	1	07/10/2022 03:02	WG1892480
Di-isopropyl ether	U		0.000105	0.00100	1	07/10/2022 03:02	WG1892480
Ethylbenzene	U		0.000137	0.00100	1	07/10/2022 03:02	WG1892480
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	07/10/2022 03:02	WG1892480
Isopropylbenzene	U		0.000105	0.00100	1	07/10/2022 03:02	WG1892480
p-Isopropyltoluene	U		0.000120	0.00100	1	07/10/2022 03:02	WG1892480
2-Butanone (MEK)	U	J3	0.00119	0.0100	1	07/10/2022 03:02	WG1892480
Methylene Chloride	U		0.000430	0.00500	1	07/10/2022 03:02	WG1892480
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	07/10/2022 03:02	WG1892480
Methyl tert-butyl ether	U		0.000101	0.00100	1	07/10/2022 03:02	WG1892480
Naphthalene	U		0.00100	0.00500	1	07/10/2022 03:02	WG1892480
n-Propylbenzene	U		0.0000993	0.00100	1	07/10/2022 03:02	WG1892480
Styrene	U		0.000118	0.00100	1	07/10/2022 03:02	WG1892480
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	07/10/2022 03:02	WG1892480
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	07/10/2022 03:02	WG1892480
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	07/10/2022 03:02	WG1892480
Tetrachloroethene	U		0.000300	0.00100	1	07/10/2022 03:02	WG1892480
Toluene	U		0.000278	0.00100	1	07/10/2022 03:02	WG1892480
1,2,3-Trichlorobenzene	U	J3	0.000230	0.00100	1	07/10/2022 03:02	WG1892480
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	07/10/2022 03:02	WG1892480

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

Collected date/time: 06/30/22 00:00

L1511253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	U		0.000149	0.00100	1	07/10/2022 03:02	WG1892480
1,1,2-Trichloroethane	U		0.000158	0.00100	1	07/10/2022 03:02	WG1892480
Trichloroethene	U		0.000190	0.00100	1	07/10/2022 03:02	WG1892480
Trichlorofluoromethane	U		0.000160	0.00500	1	07/10/2022 03:02	WG1892480
1,2,3-Trichloropropane	U		0.000237	0.00250	1	07/10/2022 03:02	WG1892480
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	07/10/2022 03:02	WG1892480
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	07/10/2022 03:02	WG1892480
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	07/10/2022 03:02	WG1892480
Vinyl chloride	U		0.000234	0.00100	1	07/10/2022 03:02	WG1892480
Xylenes, Total	U		0.000174	0.00300	1	07/10/2022 03:02	WG1892480
(S) Toluene-d8	110			80.0-120		07/10/2022 03:02	WG1892480
(S) 4-Bromofluorobenzene	97.6			77.0-126		07/10/2022 03:02	WG1892480
(S) 1,2-Dichloroethane-d4	96.0			70.0-130		07/10/2022 03:02	WG1892480

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

Gravimetric Analysis by Method 2540 C-2011

[L1511253-05,06,07,08,09](#)

Method Blank (MB)

(MB) R3813935-1 07/07/22 17:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	32.0		10.0	10.0

¹Cp

²Tc

³Ss

L1510937-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1510937-02 07/07/22 17:51 • (DUP) R3813935-3 07/07/22 17:51

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	809	804	1	0.661		5

⁴Cn

⁵Sr

L1511243-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1511243-02 07/07/22 17:51 • (DUP) R3813935-4 07/07/22 17:51

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1080	1040	1	4.34		5

⁶Qc

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3813935-2 07/07/22 17:51

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	2440	2330	95.5	81.5-118	

⁹Sc

Gravimetric Analysis by Method 2540 C-2011

[L1511253-01,02,03,04](#)

Method Blank (MB)

(MB) R3813878-1 07/07/22 16:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10.0	10.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1511243-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1511243-15 07/07/22 16:17 • (DUP) R3813878-3 07/07/22 16:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	ND	ND	1	200	P1	5

L1511781-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1511781-01 07/07/22 16:17 • (DUP) R3813878-4 07/07/22 16:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1090	1110	1	1.64		5

Laboratory Control Sample (LCS)

(LCS) R3813878-2 07/07/22 16:17

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	2440	2300	94.3	81.5-118	

Wet Chemistry by Method 300.0

[L1511253-01,02,03,04,05,06,07,08,09](#)

Method Blank (MB)

(MB) R3816061-1 07/16/22 03:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		0.379	1.00
Sulfate	U		0.594	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1515508-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1515508-01 07/16/22 03:25 • (DUP) R3816061-3 07/16/22 03:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	131	132	1	0.349		20

L1512304-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1512304-01 07/16/22 08:37 • (DUP) R3816061-6 07/16/22 08:49

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	33.0	33.1	1	0.332		20
Sulfate	202	203	1	0.641	E	20

L1515508-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1515508-01 07/18/22 12:14 • (DUP) R3816137-1 07/18/22 12:29

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Sulfate	218	220	5	1.08		20

Laboratory Control Sample (LCS)

(LCS) R3816061-2 07/16/22 03:13

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40.0	40.6	101	90.0-110	
Sulfate	40.0	41.0	103	90.0-110	

Wet Chemistry by Method 300.0

[L1511253-01,02,03,04,05,06,07,08,09](#)

L1515508-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1515508-01 07/16/22 03:25 • (MS) R3816061-4 07/16/22 03:50 • (MSD) R3816061-5 07/16/22 04:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	131	178	178	92.5	92.5	1	80.0-120			0.00113	20
Sulfate	50.0	216	260	259	87.8	85.3	1	80.0-120	E	E	0.482	20

L1512304-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1512304-01 07/16/22 08:37 • (MS) R3816061-7 07/16/22 09:01

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	33.0	83.3	101	1	80.0-120	
Sulfate	50.0	202	244	84.1	1	80.0-120	E

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

[L1511253-02.03](#)

Method Blank (MB)

(MB) R3813837-2 07/11/22 06:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.4			78.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3813837-1 07/11/22 05:44

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.89	107	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			111	78.0-120	

5 Sr

6 Qc

7 Gl

L1510643-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1510643-05 07/11/22 07:32 • (MS) R3813837-3 07/11/22 14:01 • (MSD) R3813837-4 07/11/22 14:22

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	5.50	0.630	5.88	5.95	95.5	96.7	1	10.0-160			1.18	22
(S) a,a,a-Trifluorotoluene(FID)					109	108		78.0-120				

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

[L1511253-04,05,06,07,08,09](#)

Method Blank (MB)

(MB) R3813764-2 07/12/22 04:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	114			78.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3813764-1 07/12/22 04:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.51	100	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			101	78.0-120	

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

[L1511253-01](#)

Method Blank (MB)

(MB) R3815817-3 07/14/22 08:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
^(S) a,a,a-Trifluorotoluene(FID)	96.0			78.0-120

¹Cp

²Tc

³Ss

⁴Cn

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

(LCS) R3815817-1 07/14/22 07:25 • (LCSD) R3815817-2 07/14/22 07:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.41	6.43	117	117	72.0-127			0.312	20
^(S) a,a,a-Trifluorotoluene(FID)				113	113	78.0-120				

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

[L1511253-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3813392-2 07/09/22 17:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Di-isopropyl ether	U		0.000105	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

[L1511253-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3813392-2 07/09/22 17:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,2,3-Trimethylbenzene	U		0.000104	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	107			80.0-120
(S) 4-Bromofluorobenzene	98.1			77.0-126
(S) 1,2-Dichloroethane-d4	96.9			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3813392-1 07/09/22 16:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Acetone	0.0250	0.0199	79.6	19.0-160	
Acrolein	0.0250	0.0139	55.6	10.0-160	
Acrylonitrile	0.0250	0.0177	70.8	55.0-149	
Benzene	0.00500	0.00448	89.6	70.0-123	

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

[L1511253-01,02,03,04,05,06,07,08](#)

Laboratory Control Sample (LCS)

(LCS) R3813392-1 07/09/22 16:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromobenzene	0.00500	0.00429	85.8	73.0-121	
Bromodichloromethane	0.00500	0.00405	81.0	75.0-120	
Bromoform	0.00500	0.00370	74.0	68.0-132	
Bromomethane	0.00500	0.00537	107	10.0-160	
n-Butylbenzene	0.00500	0.00420	84.0	73.0-125	
sec-Butylbenzene	0.00500	0.00411	82.2	75.0-125	
tert-Butylbenzene	0.00500	0.00426	85.2	76.0-124	
Carbon tetrachloride	0.00500	0.00378	75.6	68.0-126	
Chlorobenzene	0.00500	0.00448	89.6	80.0-121	
Chlorodibromomethane	0.00500	0.00406	81.2	77.0-125	
Chloroethane	0.00500	0.00482	96.4	47.0-150	
Chloroform	0.00500	0.00436	87.2	73.0-120	
Chloromethane	0.00500	0.00460	92.0	41.0-142	
2-Chlorotoluene	0.00500	0.00436	87.2	76.0-123	
4-Chlorotoluene	0.00500	0.00404	80.8	75.0-122	
1,2-Dibromo-3-Chloropropane	0.00500	0.00349	69.8	58.0-134	
1,2-Dibromoethane	0.00500	0.00438	87.6	80.0-122	
Dibromomethane	0.00500	0.00472	94.4	80.0-120	
1,2-Dichlorobenzene	0.00500	0.00427	85.4	79.0-121	
1,3-Dichlorobenzene	0.00500	0.00430	86.0	79.0-120	
1,4-Dichlorobenzene	0.00500	0.00435	87.0	79.0-120	
Dichlorodifluoromethane	0.00500	0.00506	101	51.0-149	
1,1-Dichloroethane	0.00500	0.00443	88.6	70.0-126	
1,2-Dichloroethane	0.00500	0.00441	88.2	70.0-128	
1,1-Dichloroethene	0.00500	0.00434	86.8	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00442	88.4	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00418	83.6	73.0-120	
1,2-Dichloropropane	0.00500	0.00436	87.2	77.0-125	
1,1-Dichloropropene	0.00500	0.00457	91.4	74.0-126	
1,3-Dichloropropane	0.00500	0.00439	87.8	80.0-120	
cis-1,3-Dichloropropene	0.00500	0.00394	78.8	80.0-123	J4
trans-1,3-Dichloropropene	0.00500	0.00384	76.8	78.0-124	J4
2,2-Dichloropropane	0.00500	0.00377	75.4	58.0-130	
Di-isopropyl ether	0.00500	0.00421	84.2	58.0-138	
Ethylbenzene	0.00500	0.00437	87.4	79.0-123	
Hexachloro-1,3-butadiene	0.00500	0.00509	102	54.0-138	
Isopropylbenzene	0.00500	0.00440	88.0	76.0-127	
p-Isopropyltoluene	0.00500	0.00439	87.8	76.0-125	
2-Butanone (MEK)	0.0250	0.0198	79.2	44.0-160	
Methylene Chloride	0.00500	0.00438	87.6	67.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1511253-01,02,03,04,05,06,07,08](#)

Laboratory Control Sample (LCS)

(LCS) R3813392-1 07/09/22 16:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Methyl-2-pentanone (MIBK)	0.0250	0.0219	87.6	68.0-142	
Methyl tert-butyl ether	0.00500	0.00397	79.4	68.0-125	
Naphthalene	0.00500	0.00384	76.8	54.0-135	
n-Propylbenzene	0.00500	0.00422	84.4	77.0-124	
Styrene	0.00500	0.00410	82.0	73.0-130	
1,1,1,2-Tetrachloroethane	0.00500	0.00416	83.2	75.0-125	
1,1,2,2-Tetrachloroethane	0.00500	0.00414	82.8	65.0-130	
1,1,2-Trichlorotrifluoroethane	0.00500	0.00457	91.4	69.0-132	
Tetrachloroethene	0.00500	0.00422	84.4	72.0-132	
Toluene	0.00500	0.00432	86.4	79.0-120	
1,2,3-Trichlorobenzene	0.00500	0.00384	76.8	50.0-138	
1,2,4-Trichlorobenzene	0.00500	0.00420	84.0	57.0-137	
1,1,1-Trichloroethane	0.00500	0.00428	85.6	73.0-124	
1,1,2-Trichloroethane	0.00500	0.00460	92.0	80.0-120	
Trichloroethene	0.00500	0.00497	99.4	78.0-124	
Trichlorofluoromethane	0.00500	0.00492	98.4	59.0-147	
1,2,3-Trichloropropane	0.00500	0.00398	79.6	73.0-130	
1,2,4-Trimethylbenzene	0.00500	0.00420	84.0	76.0-121	
1,2,3-Trimethylbenzene	0.00500	0.00426	85.2	77.0-120	
1,3,5-Trimethylbenzene	0.00500	0.00434	86.8	76.0-122	
Vinyl chloride	0.00500	0.00482	96.4	67.0-131	
Xylenes, Total	0.0150	0.0133	88.7	79.0-123	
(S) Toluene-d8			103	80.0-120	
(S) 4-Bromofluorobenzene			103	77.0-126	
(S) 1,2-Dichloroethane-d4			98.9	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1511253-09,10,11](#)

Method Blank (MB)

(MB) R3814229-3 07/10/22 02:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Di-isopropyl ether	U		0.000105	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

[L1511253-09,10,11](#)

Method Blank (MB)

(MB) R3814229-3 07/10/22 02:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,2,3-Trimethylbenzene	U		0.000104	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	109			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	86.8			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3814229-1 07/10/22 01:16 • (LCSD) R3814229-2 07/10/22 01:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0196	0.0301	78.4	120	19.0-160		J3	42.3	27
Acrolein	0.0250	0.0144	0.0204	57.6	81.6	10.0-160		J3	34.5	26
Acrylonitrile	0.0250	0.0206	0.0252	82.4	101	55.0-149		J3	20.1	20
Benzene	0.00500	0.00441	0.00460	88.2	92.0	70.0-123			4.22	20

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

L1511253-09,10,11

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

(LCS) R3814229-1 07/10/22 01:16 • (LCSD) R3814229-2 07/10/22 01:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	0.00500	0.00449	0.00463	89.8	92.6	73.0-121			3.07	20
Bromodichloromethane	0.00500	0.00422	0.00425	84.4	85.0	75.0-120			0.708	20
Bromoform	0.00500	0.00334	0.00370	66.8	74.0	68.0-132	J4		10.2	20
Bromomethane	0.00500	0.00556	0.00565	111	113	10.0-160			1.61	25
n-Butylbenzene	0.00500	0.00420	0.00439	84.0	87.8	73.0-125			4.42	20
sec-Butylbenzene	0.00500	0.00433	0.00438	86.6	87.6	75.0-125			1.15	20
tert-Butylbenzene	0.00500	0.00430	0.00445	86.0	89.0	76.0-124			3.43	20
Carbon tetrachloride	0.00500	0.00381	0.00403	76.2	80.6	68.0-126			5.61	20
Chlorobenzene	0.00500	0.00473	0.00453	94.6	90.6	80.0-121			4.32	20
Chlorodibromomethane	0.00500	0.00387	0.00391	77.4	78.2	77.0-125			1.03	20
Chloroethane	0.00500	0.00492	0.00507	98.4	101	47.0-150			3.00	20
Chloroform	0.00500	0.00453	0.00459	90.6	91.8	73.0-120			1.32	20
Chloromethane	0.00500	0.00467	0.00491	93.4	98.2	41.0-142			5.01	20
2-Chlorotoluene	0.00500	0.00465	0.00466	93.0	93.2	76.0-123			0.215	20
4-Chlorotoluene	0.00500	0.00428	0.00448	85.6	89.6	75.0-122			4.57	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00363	0.00375	72.6	75.0	58.0-134			3.25	20
1,2-Dibromoethane	0.00500	0.00457	0.00444	91.4	88.8	80.0-122			2.89	20
Dibromomethane	0.00500	0.00470	0.00468	94.0	93.6	80.0-120			0.426	20
1,2-Dichlorobenzene	0.00500	0.00435	0.00445	87.0	89.0	79.0-121			2.27	20
1,3-Dichlorobenzene	0.00500	0.00426	0.00455	85.2	91.0	79.0-120			6.58	20
1,4-Dichlorobenzene	0.00500	0.00457	0.00448	91.4	89.6	79.0-120			1.99	20
Dichlorodifluoromethane	0.00500	0.00467	0.00525	93.4	105	51.0-149			11.7	20
1,1-Dichloroethane	0.00500	0.00449	0.00451	89.8	90.2	70.0-126			0.444	20
1,2-Dichloroethane	0.00500	0.00430	0.00474	86.0	94.8	70.0-128			9.73	20
1,1-Dichloroethene	0.00500	0.00423	0.00459	84.6	91.8	71.0-124			8.16	20
cis-1,2-Dichloroethene	0.00500	0.00451	0.00473	90.2	94.6	73.0-120			4.76	20
trans-1,2-Dichloroethene	0.00500	0.00430	0.00450	86.0	90.0	73.0-120			4.55	20
1,2-Dichloropropane	0.00500	0.00438	0.00480	87.6	96.0	77.0-125			9.15	20
1,1-Dichloropropene	0.00500	0.00436	0.00445	87.2	89.0	74.0-126			2.04	20
1,3-Dichloropropane	0.00500	0.00449	0.00464	89.8	92.8	80.0-120			3.29	20
cis-1,3-Dichloropropene	0.00500	0.00385	0.00407	77.0	81.4	80.0-123	J4		5.56	20
trans-1,3-Dichloropropene	0.00500	0.00386	0.00373	77.2	74.6	78.0-124	J4	J4	3.43	20
2,2-Dichloropropane	0.00500	0.00424	0.00427	84.8	85.4	58.0-130			0.705	20
Di-isopropyl ether	0.00500	0.00433	0.00458	86.6	91.6	58.0-138			5.61	20
Ethylbenzene	0.00500	0.00446	0.00423	89.2	84.6	79.0-123			5.29	20
Hexachloro-1,3-butadiene	0.00500	0.00408	0.00393	81.6	78.6	54.0-138			3.75	20
Isopropylbenzene	0.00500	0.00438	0.00453	87.6	90.6	76.0-127			3.37	20
p-Isopropyltoluene	0.00500	0.00425	0.00443	85.0	88.6	76.0-125			4.15	20
2-Butanone (MEK)	0.0250	0.0201	0.0264	80.4	106	44.0-160		J3	27.1	20
Methylene Chloride	0.00500	0.00475	0.00472	95.0	94.4	67.0-120			0.634	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1511253-09,10,11](#)

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

(LCS) R3814229-1 07/10/22 01:16 • (LCSD) R3814229-2 07/10/22 01:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	0.0250	0.0221	0.0237	88.4	94.8	68.0-142			6.99	20
Methyl tert-butyl ether	0.00500	0.00427	0.00466	85.4	93.2	68.0-125			8.73	20
Naphthalene	0.00500	0.00366	0.00336	73.2	67.2	54.0-135			8.55	20
n-Propylbenzene	0.00500	0.00446	0.00451	89.2	90.2	77.0-124			1.11	20
Styrene	0.00500	0.00403	0.00427	80.6	85.4	73.0-130			5.78	20
1,1,1,2-Tetrachloroethane	0.00500	0.00423	0.00442	84.6	88.4	75.0-125			4.39	20
1,1,2,2-Tetrachloroethane	0.00500	0.00433	0.00451	86.6	90.2	65.0-130			4.07	20
1,1,2-Trichlorotrifluoroethane	0.00500	0.00439	0.00460	87.8	92.0	69.0-132			4.67	20
Tetrachloroethene	0.00500	0.00455	0.00424	91.0	84.8	72.0-132			7.05	20
Toluene	0.00500	0.00447	0.00437	89.4	87.4	79.0-120			2.26	20
1,2,3-Trichlorobenzene	0.00500	0.00408	0.00315	81.6	63.0	50.0-138		J3	25.7	20
1,2,4-Trichlorobenzene	0.00500	0.00390	0.00355	78.0	71.0	57.0-137			9.40	20
1,1,1-Trichloroethane	0.00500	0.00439	0.00446	87.8	89.2	73.0-124			1.58	20
1,1,2-Trichloroethane	0.00500	0.00465	0.00444	93.0	88.8	80.0-120			4.62	20
Trichloroethene	0.00500	0.00462	0.00465	92.4	93.0	78.0-124			0.647	20
Trichlorofluoromethane	0.00500	0.00489	0.00521	97.8	104	59.0-147			6.34	20
1,2,3-Trichloropropane	0.00500	0.00436	0.00455	87.2	91.0	73.0-130			4.26	20
1,2,4-Trimethylbenzene	0.00500	0.00418	0.00437	83.6	87.4	76.0-121			4.44	20
1,2,3-Trimethylbenzene	0.00500	0.00427	0.00439	85.4	87.8	77.0-120			2.77	20
1,3,5-Trimethylbenzene	0.00500	0.00449	0.00452	89.8	90.4	76.0-122			0.666	20
Vinyl chloride	0.00500	0.00477	0.00504	95.4	101	67.0-131			5.50	20
Xylenes, Total	0.0150	0.0130	0.0137	86.7	91.3	79.0-123			5.24	20
(S) Toluene-d8				105	99.4	80.0-120				
(S) 4-Bromofluorobenzene				98.4	102	77.0-126				
(S) 1,2-Dichloroethane-d4				96.4	97.3	70.0-130				

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

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1511253-01,02,03](#)

Method Blank (MB)

(MB) R3811897-1 07/06/22 16:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
C10-C28 Diesel Range	U		0.0222	0.100
C28-C40 Oil Range	U		0.0118	0.100
(S) o-Terphenyl	93.0			31.0-160

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

(LCS) R3811897-2 07/06/22 16:44 • (LCSD) R3811897-3 07/06/22 17:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
C10-C28 Diesel Range	1.50	1.36	1.29	90.7	86.0	50.0-150			5.28	20
(S) o-Terphenyl				113	103	31.0-160				

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

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1511253-04,05,06,07,08,09](#)

Method Blank (MB)

(MB) R3813901-1 07/12/22 06:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
C10-C28 Diesel Range	0.0677	J	0.0222	0.100
C28-C40 Oil Range	0.0753	J	0.0118	0.100
(S) o-Terphenyl	80.0			31.0-160

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

(LCS) R3813901-2 07/12/22 07:02 • (LCSD) R3813901-3 07/12/22 07:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	1.50	1.31	1.07	87.3	71.3	50.0-150		J3	20.2	20
(S) o-Terphenyl				86.5	79.0	31.0-160				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

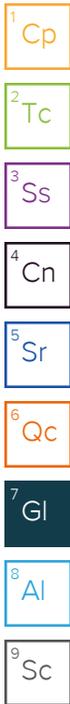
Guide to Reading and Understanding Your Laboratory Report

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
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.
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.
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
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

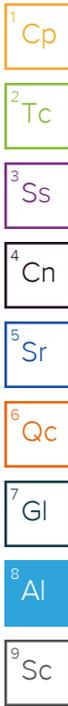
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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.



Company Name/Address: Apex - Midland, TX 505 N. Big Spring Street Suite 301A Midland, TX 79701				Billing Information: Hank McConnell 505 N. Big Spring Street Suite 301A Midland, TX 79701				Analysis / Container / Preservative				Chain of Custody Page 1 of 2		
Report to: John Faught				Email To: John.Faught@apexcos.com				<div style="text-align: center;">  MT JULIET, TN <small>12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf</small> </div>				SDG # 1811253		
Project Description: CEN050-0314045-22005648		City/State Collected: SE of Tatum, NM		Please Circle: PT <input checked="" type="radio"/> MT <input type="radio"/> CT <input type="radio"/> ET		Table #								
Phone: 432-695-6016		Client Project # CEN050-0314045		Lab Project # APEXMTX-FAUGHT		Acctnum: APEXMTX		Template: T211946						
Collected by (print): <i>John Faught</i>		Site/Facility ID # LEA COUNTY, NM		P.O. #		Prelogin: P934059		PM: 3587 - Lori A Vahrenkamp						
Collected by (signature): <i>John Faught</i>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #		Date Results Needed		PB:						
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>								Shipped Via: FedEX Ground						
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Remarks		Sample # (lab only)				
MW-1		G	GW		6/30/22	0850	9	X	X	X	X	X		-01
MW-2			GW			1010	9	X	X	X	X	X		-02
MW-3			GW			1125	9	X	X	X	X	X		-03
MW-4			GW			1240	9	X	X	X	X	X		-04
MW-5			GW			1355	9	X	X	X	X	X		-05
MW-6			GW			1535	9	X	X	X	X	X		-06
FB-01			GW			1225	9	X	X	X	X	X		-07
EB-01			GW			1347	9	X	X	X	X	X		-08
Dup-01			GW				9	X	X	X	X	X		-09
Trip Blank-1			GW				1	X	X	X	X	X		-10
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks: 572 JP				pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Correct bottles used: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N If Applicable VOA Zero Headpace: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N RAD Screen <0.5 mR/hr: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N						
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking #												
Relinquished by: (Signature) <i>John Faught</i>		Date: 7/1/22	Time: 0930	Received by: (Signature) <i>[Signature]</i>		Trip Blank Received: 2 Yes/No <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes AC/MeoH <input type="checkbox"/> IBR <input type="checkbox"/>								
Relinquished by: (Signature) <i>[Signature]</i>		Date: 7/1/22	Time: 1700	Received by: (Signature) SWA		Temp: _____ °C 0.9 to 0.9 81		Bottles Received: _____ If preservation required by Login: Date/Time						
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) <i>William [Signature]</i>		Date: 7-2	Time: 9:00	Hold:		Condition: NCF / <input checked="" type="radio"/> OK				

Company Name/Address: Apex - Midland, TX 505 N. Big Spring Street Suite 301A Midland, TX 79701			Billing Information: Hank McConnell 505 N. Big Spring Street Suite 301A Midland, TX 79701			Pres Chk		Analysis / Container / Preservative						Chain of Custody Page 2 of 2	
Report to: John Faught			Email To: John.Faught@apexc.com											 MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf	
Project Description: CEN050-0314045-22005648		City/State Collected:		Please Circle: PT MT CT ET										SDG # 1511253	
Phone: 432-695-6016		Client Project # CEN050-0314045		Lab Project # APEXMTX-FAUGHT										Table #	
Collected by (print):		Site/Facility ID # LEA COUNTY, NM		P.O. #										Acctnum: APEXMTX	
Collected by (signature):		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #		Date Results Needed								Template: T211946	
Immediately Packed on Ice N <input type="checkbox"/> Y <input type="checkbox"/>														Prelogin: P934059	
														PM: 3587 - Lori A Vahrenkamp	
														PB:	
														Shipped Via: FedEX Ground	
														Remarks Sample # (lab only)	
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 40mlAmb HCl	ORO 100ml Amb-HCl	SO4, Chloride-300 125mlHDPE-NoPres	TDS 1L-HDPE NoPres	V8260 40ml/Amb-HCl			
Trip Blank - 2			GW				1	X	X	X	X	X			-11
			GW				9	X	X	X	X	X			

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:		pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP Y N COC Signed/Accurate: <input checked="" type="checkbox"/> Y N Bottles arrive intact: <input checked="" type="checkbox"/> Y N Correct bottles used: <input checked="" type="checkbox"/> Y N Sufficient volume sent: <input checked="" type="checkbox"/> Y N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y N							
Samples returned via: UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier _____		Tracking #											
Relinquished by: (Signature) <i>John Faught</i>		Date: 7/1/22	Time: 0930	Received by: (Signature) <i>[Signature]</i>		Trip Blank Received: Yes/No 2 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No HCL/MeOH TBR							
Relinquished by: (Signature) <i>[Signature]</i>		Date: 7/1/22	Time: 1700	Received by: (Signature) <i>SWA</i>		Temp: °C 0.9 to 0.9 81		Bottles Received: If preservation required by Login: Date/Time					
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>		Date: 7-2		Time: 9:00		Hold:		Condition: NCF / <input checked="" type="checkbox"/> OK	



10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

September 06, 2022

John Faught
Apex Titan
505 N. Big Spring Street, Suite 301A
Midland, TX 79701

Work Order: **HS22081572**

Laboratory Results for: **Centurion Pipeline - Brahaney NM**

Dear John Faught,

ALS Environmental received 13 sample(s) on Aug 27, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
Dane J. Wacasey

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
Work Order: HS22081572

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22081572-01	Trip Blank-CG-080922-83	Water		25-Aug-2022 00:00	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-02	Trip Blank-CG-080922-84	Water		25-Aug-2022 00:00	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-03	Trip Blank-CG-080922-95	Water		25-Aug-2022 00:00	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-04	Trip Blank-CG-080922-98	Water		25-Aug-2022 00:00	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-05	MW-1	Groundwater		25-Aug-2022 09:05	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-06	MW-2	Groundwater		25-Aug-2022 10:20	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-07	MW-3	Groundwater		25-Aug-2022 11:30	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-08	MW-4	Groundwater		25-Aug-2022 12:40	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-09	MW-5	Groundwater		25-Aug-2022 13:50	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-10	MW-6	Groundwater		25-Aug-2022 15:15	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-11	EB-01	Water		25-Aug-2022 12:25	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-12	FB-01	Water		25-Aug-2022 11:20	27-Aug-2022 08:40	<input type="checkbox"/>
HS22081572-13	DUP-01	Groundwater		25-Aug-2022 00:00	27-Aug-2022 08:40	<input type="checkbox"/>

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
Work Order: HS22081572

CASE NARRATIVE

GC Semivolatiles by Method SW8015M

Batch ID: 183075

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GC Volatile Organics by Method SW8015

Batch ID: R416184

Sample ID: LCSD-220830

- The RPD between the LCS and LCSD was outside of the control limit.

GC Volatiles by Method SW8015

Batch ID: R416438

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GCMS Volatiles by Method SW8260

Batch ID: R416145

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Batch ID: R416252

Sample ID: HS22081519-19MS

- MS and MSD are for an unrelated sample

Batch ID: R416348

Sample ID: VSTD050

- 1,1,2,2-Tetrachloroethane and 4-Methyl-2-pentanone exceeded %D limits for CCV. Associated samples are ND for these analytes.

Sample ID: HS22081670-01MS

- MS and MSD are for an unrelated sample

WetChemistry by Method SW9056

Batch ID: R416481

Sample ID: MW-1 (HS22081572-05MS)

- The MS and/or MSD recovery was outside of the control limits; however, the result in the parent sample is greater than 4x the spike amount. (Sulfate)

Batch ID: R416507

Sample ID: HS22090156-01MS

- MS and MSD are for an unrelated sample (Sulfate)

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
Work Order: HS22081572

CASE NARRATIVE

WetChemistry by Method M2540C

Batch ID: R416391,R416467

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: Trip Blank-CG-080922-83
 Collection Date: 25-Aug-2022 00:00

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-01
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	30-Aug-2022 14:32
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	30-Aug-2022 14:32
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	30-Aug-2022 14:32
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	30-Aug-2022 14:32
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	30-Aug-2022 14:32
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	30-Aug-2022 14:32
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	30-Aug-2022 14:32
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	30-Aug-2022 14:32
2-Butanone	U		0.50	2.0	ug/L	1	30-Aug-2022 14:32
2-Hexanone	U		1.0	2.0	ug/L	1	30-Aug-2022 14:32
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	30-Aug-2022 14:32
Acetone	U		2.0	2.0	ug/L	1	30-Aug-2022 14:32
Benzene	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
Bromodichloromethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
Bromoform	U		0.40	1.0	ug/L	1	30-Aug-2022 14:32
Bromomethane	U		0.40	1.0	ug/L	1	30-Aug-2022 14:32
Carbon disulfide	U		0.60	2.0	ug/L	1	30-Aug-2022 14:32
Carbon tetrachloride	U		0.50	1.0	ug/L	1	30-Aug-2022 14:32
Chlorobenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32
Chloroethane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32
Chloroform	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
Chloromethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	30-Aug-2022 14:32
Cyclohexane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32
Dibromochloromethane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32
Ethylbenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32
Isopropylbenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32
m,p-Xylene	U		0.50	2.0	ug/L	1	30-Aug-2022 14:32
Methyl acetate	U		1.0	1.0	ug/L	1	30-Aug-2022 14:32
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	30-Aug-2022 14:32
Methylcyclohexane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:32

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: Trip Blank-CG-080922-83
 Collection Date: 25-Aug-2022 00:00

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-01
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
Methylene chloride		U	1.0	2.0	ug/L	1	30-Aug-2022 14:32
o-Xylene		U	0.30	1.0	ug/L	1	30-Aug-2022 14:32
Styrene		U	0.30	1.0	ug/L	1	30-Aug-2022 14:32
Tetrachloroethene		U	0.30	1.0	ug/L	1	30-Aug-2022 14:32
Toluene		U	0.20	1.0	ug/L	1	30-Aug-2022 14:32
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	30-Aug-2022 14:32
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	30-Aug-2022 14:32
Trichloroethene		U	0.20	1.0	ug/L	1	30-Aug-2022 14:32
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	30-Aug-2022 14:32
Vinyl chloride		U	0.20	1.0	ug/L	1	30-Aug-2022 14:32
Xylenes, Total		U	0.30	1.0	ug/L	1	30-Aug-2022 14:32
Surr: 1,2-Dichloroethane-d4	95.0			70-126	%REC	1	30-Aug-2022 14:32
Surr: 4-Bromofluorobenzene	98.0			77-113	%REC	1	30-Aug-2022 14:32
Surr: Dibromofluoromethane	90.2			77-123	%REC	1	30-Aug-2022 14:32
Surr: Toluene-d8	102			82-127	%REC	1	30-Aug-2022 14:32

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: Trip Blank-CG-080922-84
 Collection Date: 25-Aug-2022 00:00

ANALYTICAL REPORT
 WorkOrder:HS22081572
 Lab ID:HS22081572-02
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015					Analyst: FT
Gasoline Range Organics	U		0.0100	0.0500	mg/L	1	30-Aug-2022 16:23
Surr: 4-Bromofluorobenzene	96.4			70-123	%REC	1	30-Aug-2022 16:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: Trip Blank-CG-080922-95
 Collection Date: 25-Aug-2022 00:00

ANALYTICAL REPORT
 WorkOrder:HS22081572
 Lab ID:HS22081572-03
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	30-Aug-2022 14:54
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	30-Aug-2022 14:54
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	30-Aug-2022 14:54
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	30-Aug-2022 14:54
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	30-Aug-2022 14:54
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	30-Aug-2022 14:54
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	30-Aug-2022 14:54
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	30-Aug-2022 14:54
2-Butanone	U		0.50	2.0	ug/L	1	30-Aug-2022 14:54
2-Hexanone	U		1.0	2.0	ug/L	1	30-Aug-2022 14:54
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	30-Aug-2022 14:54
Acetone	U		2.0	2.0	ug/L	1	30-Aug-2022 14:54
Benzene	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
Bromodichloromethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
Bromoform	U		0.40	1.0	ug/L	1	30-Aug-2022 14:54
Bromomethane	U		0.40	1.0	ug/L	1	30-Aug-2022 14:54
Carbon disulfide	U		0.60	2.0	ug/L	1	30-Aug-2022 14:54
Carbon tetrachloride	U		0.50	1.0	ug/L	1	30-Aug-2022 14:54
Chlorobenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54
Chloroethane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54
Chloroform	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
Chloromethane	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	30-Aug-2022 14:54
Cyclohexane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54
Dibromochloromethane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54
Ethylbenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54
Isopropylbenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54
m,p-Xylene	U		0.50	2.0	ug/L	1	30-Aug-2022 14:54
Methyl acetate	U		1.0	1.0	ug/L	1	30-Aug-2022 14:54
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	30-Aug-2022 14:54
Methylcyclohexane	U		0.30	1.0	ug/L	1	30-Aug-2022 14:54

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: Trip Blank-CG-080922-95
 Collection Date: 25-Aug-2022 00:00

ANALYTICAL REPORT
 WorkOrder:HS22081572
 Lab ID:HS22081572-03
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
Methylene chloride		U	1.0	2.0	ug/L	1	30-Aug-2022 14:54
o-Xylene		U	0.30	1.0	ug/L	1	30-Aug-2022 14:54
Styrene		U	0.30	1.0	ug/L	1	30-Aug-2022 14:54
Tetrachloroethene		U	0.30	1.0	ug/L	1	30-Aug-2022 14:54
Toluene		U	0.20	1.0	ug/L	1	30-Aug-2022 14:54
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	30-Aug-2022 14:54
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	30-Aug-2022 14:54
Trichloroethene		U	0.20	1.0	ug/L	1	30-Aug-2022 14:54
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	30-Aug-2022 14:54
Vinyl chloride		U	0.20	1.0	ug/L	1	30-Aug-2022 14:54
Xylenes, Total		U	0.30	1.0	ug/L	1	30-Aug-2022 14:54
Surr: 1,2-Dichloroethane-d4	93.3			70-126	%REC	1	30-Aug-2022 14:54
Surr: 4-Bromofluorobenzene	97.4			77-113	%REC	1	30-Aug-2022 14:54
Surr: Dibromofluoromethane	89.5			77-123	%REC	1	30-Aug-2022 14:54
Surr: Toluene-d8	102			82-127	%REC	1	30-Aug-2022 14:54

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: Trip Blank-CG-080922-98
 Collection Date: 25-Aug-2022 00:00

ANALYTICAL REPORT
 WorkOrder:HS22081572
 Lab ID:HS22081572-04
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015					Analyst: FT
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	30-Aug-2022 16:39
Surr: 4-Bromofluorobenzene	92.3			70-123	%REC	1	30-Aug-2022 16:39

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-1
 Collection Date: 25-Aug-2022 09:05

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-05
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:11
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:11
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 14:11
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	31-Aug-2022 14:11
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 14:11
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:11
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 14:11
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 14:11
2-Butanone	U		0.50	2.0	ug/L	1	31-Aug-2022 14:11
2-Hexanone	U		1.0	2.0	ug/L	1	31-Aug-2022 14:11
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	31-Aug-2022 14:11
Acetone	U		2.0	2.0	ug/L	1	31-Aug-2022 14:11
Benzene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
Bromodichloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
Bromoform	U		0.40	1.0	ug/L	1	31-Aug-2022 14:11
Bromomethane	U		0.40	1.0	ug/L	1	31-Aug-2022 14:11
Carbon disulfide	U		0.60	2.0	ug/L	1	31-Aug-2022 14:11
Carbon tetrachloride	U		0.50	1.0	ug/L	1	31-Aug-2022 14:11
Chlorobenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11
Chloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11
Chloroform	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
Chloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	31-Aug-2022 14:11
Cyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11
Dibromochloromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11
Ethylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11
Isopropylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11
m,p-Xylene	U		0.50	2.0	ug/L	1	31-Aug-2022 14:11
Methyl acetate	U		1.0	1.0	ug/L	1	31-Aug-2022 14:11
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	31-Aug-2022 14:11
Methylcyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:11

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-1
 Collection Date: 25-Aug-2022 09:05

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-05
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride		U	1.0	2.0	ug/L	1	31-Aug-2022 14:11
o-Xylene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:11
Styrene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:11
Tetrachloroethene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:11
Toluene	1.7		0.20	1.0	ug/L	1	31-Aug-2022 14:11
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:11
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:11
Trichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:11
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	31-Aug-2022 14:11
Vinyl chloride		U	0.20	1.0	ug/L	1	31-Aug-2022 14:11
Xylenes, Total		U	0.30	1.0	ug/L	1	31-Aug-2022 14:11
Surr: 1,2-Dichloroethane-d4	94.0			70-126	%REC	1	31-Aug-2022 14:11
Surr: 4-Bromofluorobenzene	100			77-113	%REC	1	31-Aug-2022 14:11
Surr: Dibromofluoromethane	89.2			77-123	%REC	1	31-Aug-2022 14:11
Surr: Toluene-d8	102			82-127	%REC	1	31-Aug-2022 14:11
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	30-Aug-2022 16:54
Surr: 4-Bromofluorobenzene	97.1			70-123	%REC	1	30-Aug-2022 16:54
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)		U	0.021	0.053	mg/L	1	02-Sep-2022 19:19
TPH (Oil Range)		U	0.021	0.11	mg/L	1	02-Sep-2022 19:19
Surr: 2-Fluorobiphenyl	65.3			60-135	%REC	1	02-Sep-2022 19:19
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	620		5.00	10.0	mg/L	1	31-Aug-2022 16:36
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	60.7		0.200	0.500	mg/L	1	02-Sep-2022 19:25
Sulfate	105		0.400	1.00	mg/L	2	03-Sep-2022 16:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-2
 Collection Date: 25-Aug-2022 10:20

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-06
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:34
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:34
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 14:34
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	31-Aug-2022 14:34
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 14:34
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:34
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 14:34
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 14:34
2-Butanone	U		0.50	2.0	ug/L	1	31-Aug-2022 14:34
2-Hexanone	U		1.0	2.0	ug/L	1	31-Aug-2022 14:34
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	31-Aug-2022 14:34
Acetone	U		2.0	2.0	ug/L	1	31-Aug-2022 14:34
Benzene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
Bromodichloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
Bromoform	U		0.40	1.0	ug/L	1	31-Aug-2022 14:34
Bromomethane	U		0.40	1.0	ug/L	1	31-Aug-2022 14:34
Carbon disulfide	U		0.60	2.0	ug/L	1	31-Aug-2022 14:34
Carbon tetrachloride	U		0.50	1.0	ug/L	1	31-Aug-2022 14:34
Chlorobenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34
Chloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34
Chloroform	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
Chloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	31-Aug-2022 14:34
Cyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34
Dibromochloromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34
Ethylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34
Isopropylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34
m,p-Xylene	U		0.50	2.0	ug/L	1	31-Aug-2022 14:34
Methyl acetate	U		1.0	1.0	ug/L	1	31-Aug-2022 14:34
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	31-Aug-2022 14:34
Methylcyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-2
 Collection Date: 25-Aug-2022 10:20

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-06
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride		U	1.0	2.0	ug/L	1	31-Aug-2022 14:34
o-Xylene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:34
Styrene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:34
Tetrachloroethene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:34
Toluene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:34
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:34
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:34
Trichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:34
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	31-Aug-2022 14:34
Vinyl chloride		U	0.20	1.0	ug/L	1	31-Aug-2022 14:34
Xylenes, Total		U	0.30	1.0	ug/L	1	31-Aug-2022 14:34
Surr: 1,2-Dichloroethane-d4	95.6			70-126	%REC	1	31-Aug-2022 14:34
Surr: 4-Bromofluorobenzene	99.5			77-113	%REC	1	31-Aug-2022 14:34
Surr: Dibromofluoromethane	90.0			77-123	%REC	1	31-Aug-2022 14:34
Surr: Toluene-d8	96.1			82-127	%REC	1	31-Aug-2022 14:34
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	30-Aug-2022 17:10
Surr: 4-Bromofluorobenzene	97.5			70-123	%REC	1	30-Aug-2022 17:10
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)		U	0.021	0.052	mg/L	1	02-Sep-2022 19:49
TPH (Oil Range)		U	0.021	0.10	mg/L	1	02-Sep-2022 19:49
Surr: 2-Fluorobiphenyl	67.4			60-135	%REC	1	02-Sep-2022 19:49
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	528		5.00	10.0	mg/L	1	31-Aug-2022 16:36
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	52.4		0.400	1.00	mg/L	2	02-Sep-2022 19:41
Sulfate	107		0.400	1.00	mg/L	2	02-Sep-2022 19:41

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-3
 Collection Date: 25-Aug-2022 11:30

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-07
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:56
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:56
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 14:56
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	31-Aug-2022 14:56
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 14:56
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	31-Aug-2022 14:56
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 14:56
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 14:56
2-Butanone	U		0.50	2.0	ug/L	1	31-Aug-2022 14:56
2-Hexanone	U		1.0	2.0	ug/L	1	31-Aug-2022 14:56
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	31-Aug-2022 14:56
Acetone	U		2.0	2.0	ug/L	1	31-Aug-2022 14:56
Benzene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
Bromodichloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
Bromoform	U		0.40	1.0	ug/L	1	31-Aug-2022 14:56
Bromomethane	U		0.40	1.0	ug/L	1	31-Aug-2022 14:56
Carbon disulfide	U		0.60	2.0	ug/L	1	31-Aug-2022 14:56
Carbon tetrachloride	U		0.50	1.0	ug/L	1	31-Aug-2022 14:56
Chlorobenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56
Chloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56
Chloroform	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
Chloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	31-Aug-2022 14:56
Cyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56
Dibromochloromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56
Ethylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56
Isopropylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56
m,p-Xylene	U		0.50	2.0	ug/L	1	31-Aug-2022 14:56
Methyl acetate	U		1.0	1.0	ug/L	1	31-Aug-2022 14:56
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	31-Aug-2022 14:56
Methylcyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 14:56

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-3
 Collection Date: 25-Aug-2022 11:30

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-07
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride		U	1.0	2.0	ug/L	1	31-Aug-2022 14:56
o-Xylene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:56
Styrene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:56
Tetrachloroethene		U	0.30	1.0	ug/L	1	31-Aug-2022 14:56
Toluene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:56
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:56
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:56
Trichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 14:56
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	31-Aug-2022 14:56
Vinyl chloride		U	0.20	1.0	ug/L	1	31-Aug-2022 14:56
Xylenes, Total		U	0.30	1.0	ug/L	1	31-Aug-2022 14:56
Surr: 1,2-Dichloroethane-d4	84.9			70-126	%REC	1	31-Aug-2022 14:56
Surr: 4-Bromofluorobenzene	100			77-113	%REC	1	31-Aug-2022 14:56
Surr: Dibromofluoromethane	86.8			77-123	%REC	1	31-Aug-2022 14:56
Surr: Toluene-d8	110			82-127	%REC	1	31-Aug-2022 14:56
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	30-Aug-2022 17:26
Surr: 4-Bromofluorobenzene	94.2			70-123	%REC	1	30-Aug-2022 17:26
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)		U	0.021	0.052	mg/L	1	02-Sep-2022 20:18
TPH (Oil Range)		U	0.021	0.10	mg/L	1	02-Sep-2022 20:18
Surr: 2-Fluorobiphenyl	71.0			60-135	%REC	1	02-Sep-2022 20:18
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	564		5.00	10.0	mg/L	1	31-Aug-2022 16:36
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	60.7		0.400	1.00	mg/L	2	02-Sep-2022 20:45
Sulfate	106		0.400	1.00	mg/L	2	02-Sep-2022 20:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-4
 Collection Date: 25-Aug-2022 12:40

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-08
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 15:19
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 15:19
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 15:19
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	31-Aug-2022 15:19
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 15:19
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	31-Aug-2022 15:19
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 15:19
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 15:19
2-Butanone	U		0.50	2.0	ug/L	1	31-Aug-2022 15:19
2-Hexanone	U		1.0	2.0	ug/L	1	31-Aug-2022 15:19
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	31-Aug-2022 15:19
Acetone	U		2.0	2.0	ug/L	1	31-Aug-2022 15:19
Benzene	0.44	J	0.20	1.0	ug/L	1	31-Aug-2022 15:19
Bromodichloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
Bromoform	U		0.40	1.0	ug/L	1	31-Aug-2022 15:19
Bromomethane	U		0.40	1.0	ug/L	1	31-Aug-2022 15:19
Carbon disulfide	U		0.60	2.0	ug/L	1	31-Aug-2022 15:19
Carbon tetrachloride	U		0.50	1.0	ug/L	1	31-Aug-2022 15:19
Chlorobenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19
Chloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19
Chloroform	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
Chloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	31-Aug-2022 15:19
Cyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19
Dibromochloromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19
Ethylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19
Isopropylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19
m,p-Xylene	U		0.50	2.0	ug/L	1	31-Aug-2022 15:19
Methyl acetate	U		1.0	1.0	ug/L	1	31-Aug-2022 15:19
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	31-Aug-2022 15:19
Methylcyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:19

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-4
 Collection Date: 25-Aug-2022 12:40

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-08
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride		U	1.0	2.0	ug/L	1	31-Aug-2022 15:19
o-Xylene		U	0.30	1.0	ug/L	1	31-Aug-2022 15:19
Styrene		U	0.30	1.0	ug/L	1	31-Aug-2022 15:19
Tetrachloroethene		U	0.30	1.0	ug/L	1	31-Aug-2022 15:19
Toluene	1.8		0.20	1.0	ug/L	1	31-Aug-2022 15:19
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 15:19
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	31-Aug-2022 15:19
Trichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 15:19
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	31-Aug-2022 15:19
Vinyl chloride		U	0.20	1.0	ug/L	1	31-Aug-2022 15:19
Xylenes, Total		U	0.30	1.0	ug/L	1	31-Aug-2022 15:19
Surr: 1,2-Dichloroethane-d4	94.4			70-126	%REC	1	31-Aug-2022 15:19
Surr: 4-Bromofluorobenzene	99.2			77-113	%REC	1	31-Aug-2022 15:19
Surr: Dibromofluoromethane	90.0			77-123	%REC	1	31-Aug-2022 15:19
Surr: Toluene-d8	93.2			82-127	%REC	1	31-Aug-2022 15:19
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	30-Aug-2022 17:42
Surr: 4-Bromofluorobenzene	96.2			70-123	%REC	1	30-Aug-2022 17:42
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)		U	0.021	0.053	mg/L	1	02-Sep-2022 20:47
TPH (Oil Range)		U	0.021	0.11	mg/L	1	02-Sep-2022 20:47
Surr: 2-Fluorobiphenyl	67.2			60-135	%REC	1	02-Sep-2022 20:47
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	556		5.00	10.0	mg/L	1	01-Sep-2022 17:09
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	62.5		0.400	1.00	mg/L	2	02-Sep-2022 20:50
Sulfate	106		0.400	1.00	mg/L	2	02-Sep-2022 20:50

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-5
 Collection Date: 25-Aug-2022 13:50

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-09
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 15:41
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 15:41
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 15:41
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	31-Aug-2022 15:41
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 15:41
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	31-Aug-2022 15:41
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 15:41
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 15:41
2-Butanone	U		0.50	2.0	ug/L	1	31-Aug-2022 15:41
2-Hexanone	U		1.0	2.0	ug/L	1	31-Aug-2022 15:41
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	31-Aug-2022 15:41
Acetone	U		2.0	2.0	ug/L	1	31-Aug-2022 15:41
Benzene	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
Bromodichloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
Bromoform	U		0.40	1.0	ug/L	1	31-Aug-2022 15:41
Bromomethane	U		0.40	1.0	ug/L	1	31-Aug-2022 15:41
Carbon disulfide	U		0.60	2.0	ug/L	1	31-Aug-2022 15:41
Carbon tetrachloride	U		0.50	1.0	ug/L	1	31-Aug-2022 15:41
Chlorobenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Chloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Chloroform	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
Chloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	31-Aug-2022 15:41
Cyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Dibromochloromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Ethylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Isopropylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
m,p-Xylene	U		0.50	2.0	ug/L	1	31-Aug-2022 15:41
Methyl acetate	U		1.0	1.0	ug/L	1	31-Aug-2022 15:41
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
Methylcyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-5
 Collection Date: 25-Aug-2022 13:50

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-09
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride	U		1.0	2.0	ug/L	1	31-Aug-2022 15:41
o-Xylene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Styrene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Tetrachloroethene	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Toluene	1.8		0.20	1.0	ug/L	1	31-Aug-2022 15:41
trans-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
trans-1,3-Dichloropropene	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
Trichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
Trichlorofluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Vinyl chloride	U		0.20	1.0	ug/L	1	31-Aug-2022 15:41
Xylenes, Total	U		0.30	1.0	ug/L	1	31-Aug-2022 15:41
Surr: 1,2-Dichloroethane-d4	94.8			70-126	%REC	1	31-Aug-2022 15:41
Surr: 4-Bromofluorobenzene	105			77-113	%REC	1	31-Aug-2022 15:41
Surr: Dibromofluoromethane	89.6			77-123	%REC	1	31-Aug-2022 15:41
Surr: Toluene-d8	109			82-127	%REC	1	31-Aug-2022 15:41
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics	U		0.0100	0.0500	mg/L	1	30-Aug-2022 17:58
Surr: 4-Bromofluorobenzene	97.0			70-123	%REC	1	30-Aug-2022 17:58
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)	U		0.021	0.053	mg/L	1	02-Sep-2022 21:17
TPH (Oil Range)	U		0.021	0.11	mg/L	1	02-Sep-2022 21:17
Surr: 2-Fluorobiphenyl	74.1			60-135	%REC	1	02-Sep-2022 21:17
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	528		5.00	10.0	mg/L	1	01-Sep-2022 17:09
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	62.0		0.400	1.00	mg/L	2	02-Sep-2022 21:11
Sulfate	107		0.400	1.00	mg/L	2	02-Sep-2022 21:11

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-6
 Collection Date: 25-Aug-2022 15:15

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-10
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 16:04
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 16:04
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 16:04
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	31-Aug-2022 16:04
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 16:04
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	31-Aug-2022 16:04
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 16:04
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 16:04
2-Butanone	U		0.50	2.0	ug/L	1	31-Aug-2022 16:04
2-Hexanone	U		1.0	2.0	ug/L	1	31-Aug-2022 16:04
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	31-Aug-2022 16:04
Acetone	U		2.0	2.0	ug/L	1	31-Aug-2022 16:04
Benzene	0.69	J	0.20	1.0	ug/L	1	31-Aug-2022 16:04
Bromodichloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
Bromoform	U		0.40	1.0	ug/L	1	31-Aug-2022 16:04
Bromomethane	U		0.40	1.0	ug/L	1	31-Aug-2022 16:04
Carbon disulfide	U		0.60	2.0	ug/L	1	31-Aug-2022 16:04
Carbon tetrachloride	U		0.50	1.0	ug/L	1	31-Aug-2022 16:04
Chlorobenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Chloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Chloroform	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
Chloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	31-Aug-2022 16:04
Cyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Dibromochloromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Ethylbenzene	0.32	J	0.30	1.0	ug/L	1	31-Aug-2022 16:04
Isopropylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
m,p-Xylene	1.1	J	0.50	2.0	ug/L	1	31-Aug-2022 16:04
Methyl acetate	U		1.0	1.0	ug/L	1	31-Aug-2022 16:04
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
Methylcyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: MW-6
 Collection Date: 25-Aug-2022 15:15

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-10
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride	U		1.0	2.0	ug/L	1	31-Aug-2022 16:04
o-Xylene	0.78	J	0.30	1.0	ug/L	1	31-Aug-2022 16:04
Styrene	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Tetrachloroethene	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Toluene	2.7		0.20	1.0	ug/L	1	31-Aug-2022 16:04
trans-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
trans-1,3-Dichloropropene	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
Trichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
Trichlorofluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Vinyl chloride	U		0.20	1.0	ug/L	1	31-Aug-2022 16:04
Xylenes, Total	1.9		0.30	1.0	ug/L	1	31-Aug-2022 16:04
Surr: 1,2-Dichloroethane-d4	94.4			70-126	%REC	1	31-Aug-2022 16:04
Surr: 4-Bromofluorobenzene	96.4			77-113	%REC	1	31-Aug-2022 16:04
Surr: Dibromofluoromethane	89.7			77-123	%REC	1	31-Aug-2022 16:04
Surr: Toluene-d8	97.0			82-127	%REC	1	31-Aug-2022 16:04
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics	0.0232	J	0.0100	0.0500	mg/L	1	30-Aug-2022 18:13
Surr: 4-Bromofluorobenzene	97.9			70-123	%REC	1	30-Aug-2022 18:13
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)	U		0.021	0.053	mg/L	1	02-Sep-2022 21:46
TPH (Oil Range)	U		0.021	0.11	mg/L	1	02-Sep-2022 21:46
Surr: 2-Fluorobiphenyl	73.3			60-135	%REC	1	02-Sep-2022 21:46
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	568		5.00	10.0	mg/L	1	01-Sep-2022 17:09
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	59.8		0.400	1.00	mg/L	2	02-Sep-2022 21:17
Sulfate	104		0.400	1.00	mg/L	2	02-Sep-2022 21:17

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: EB-01
 Collection Date: 25-Aug-2022 12:25

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-11
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	30-Aug-2022 15:17
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	30-Aug-2022 15:17
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	30-Aug-2022 15:17
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	30-Aug-2022 15:17
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	30-Aug-2022 15:17
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	30-Aug-2022 15:17
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	30-Aug-2022 15:17
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	30-Aug-2022 15:17
2-Butanone	3.3		0.50	2.0	ug/L	1	30-Aug-2022 15:17
2-Hexanone	U		1.0	2.0	ug/L	1	30-Aug-2022 15:17
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	30-Aug-2022 15:17
Acetone	U		2.0	2.0	ug/L	1	30-Aug-2022 15:17
Benzene	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
Bromodichloromethane	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
Bromoform	U		0.40	1.0	ug/L	1	30-Aug-2022 15:17
Bromomethane	U		0.40	1.0	ug/L	1	30-Aug-2022 15:17
Carbon disulfide	U		0.60	2.0	ug/L	1	30-Aug-2022 15:17
Carbon tetrachloride	U		0.50	1.0	ug/L	1	30-Aug-2022 15:17
Chlorobenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17
Chloroethane	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17
Chloroform	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
Chloromethane	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	30-Aug-2022 15:17
Cyclohexane	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17
Dibromochloromethane	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17
Ethylbenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17
Isopropylbenzene	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17
m,p-Xylene	U		0.50	2.0	ug/L	1	30-Aug-2022 15:17
Methyl acetate	U		1.0	1.0	ug/L	1	30-Aug-2022 15:17
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	30-Aug-2022 15:17
Methylcyclohexane	U		0.30	1.0	ug/L	1	30-Aug-2022 15:17

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: EB-01
 Collection Date: 25-Aug-2022 12:25

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-11
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride		U	1.0	2.0	ug/L	1	30-Aug-2022 15:17
o-Xylene		U	0.30	1.0	ug/L	1	30-Aug-2022 15:17
Styrene		U	0.30	1.0	ug/L	1	30-Aug-2022 15:17
Tetrachloroethene		U	0.30	1.0	ug/L	1	30-Aug-2022 15:17
Toluene		U	0.20	1.0	ug/L	1	30-Aug-2022 15:17
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	30-Aug-2022 15:17
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	30-Aug-2022 15:17
Trichloroethene		U	0.20	1.0	ug/L	1	30-Aug-2022 15:17
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	30-Aug-2022 15:17
Vinyl chloride		U	0.20	1.0	ug/L	1	30-Aug-2022 15:17
Xylenes, Total		U	0.30	1.0	ug/L	1	30-Aug-2022 15:17
Surr: 1,2-Dichloroethane-d4	93.2			70-126	%REC	1	30-Aug-2022 15:17
Surr: 4-Bromofluorobenzene	98.2			77-113	%REC	1	30-Aug-2022 15:17
Surr: Dibromofluoromethane	89.7			77-123	%REC	1	30-Aug-2022 15:17
Surr: Toluene-d8	102			82-127	%REC	1	30-Aug-2022 15:17
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	30-Aug-2022 18:29
Surr: 4-Bromofluorobenzene	92.1			70-123	%REC	1	30-Aug-2022 18:29
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)		U	0.022	0.055	mg/L	1	02-Sep-2022 22:16
TPH (Oil Range)		U	0.022	0.11	mg/L	1	02-Sep-2022 22:16
Surr: 2-Fluorobiphenyl	68.1			60-135	%REC	1	02-Sep-2022 22:16
TOTAL DISSOLVED SOLIDS BY SM2540C-2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)		U	5.00	10.0	mg/L	1	01-Sep-2022 17:09
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride		U	0.200	0.500	mg/L	1	02-Sep-2022 21:22
Sulfate	0.256	J	0.200	0.500	mg/L	1	02-Sep-2022 21:22

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: FB-01
 Collection Date: 25-Aug-2022 11:20

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-12
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: AKP
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	01-Sep-2022 12:23
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	01-Sep-2022 12:23
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	01-Sep-2022 12:23
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	01-Sep-2022 12:23
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	01-Sep-2022 12:23
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	01-Sep-2022 12:23
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	01-Sep-2022 12:23
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	01-Sep-2022 12:23
2-Butanone	U		0.50	2.0	ug/L	1	01-Sep-2022 12:23
2-Hexanone	U		1.0	2.0	ug/L	1	01-Sep-2022 12:23
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	01-Sep-2022 12:23
Acetone	U		2.0	2.0	ug/L	1	01-Sep-2022 12:23
Benzene	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
Bromodichloromethane	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
Bromoform	U		0.40	1.0	ug/L	1	01-Sep-2022 12:23
Bromomethane	U		0.40	1.0	ug/L	1	01-Sep-2022 12:23
Carbon disulfide	U		0.60	2.0	ug/L	1	01-Sep-2022 12:23
Carbon tetrachloride	U		0.50	1.0	ug/L	1	01-Sep-2022 12:23
Chlorobenzene	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23
Chloroethane	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23
Chloroform	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
Chloromethane	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	01-Sep-2022 12:23
Cyclohexane	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23
Dibromochloromethane	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23
Ethylbenzene	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23
Isopropylbenzene	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23
m,p-Xylene	U		0.50	2.0	ug/L	1	01-Sep-2022 12:23
Methyl acetate	U		1.0	1.0	ug/L	1	01-Sep-2022 12:23
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	01-Sep-2022 12:23
Methylcyclohexane	U		0.30	1.0	ug/L	1	01-Sep-2022 12:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: FB-01
 Collection Date: 25-Aug-2022 11:20

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-12
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP			
Methylene chloride		U	1.0	2.0	ug/L	1	01-Sep-2022 12:23
o-Xylene		U	0.30	1.0	ug/L	1	01-Sep-2022 12:23
Styrene		U	0.30	1.0	ug/L	1	01-Sep-2022 12:23
Tetrachloroethene		U	0.30	1.0	ug/L	1	01-Sep-2022 12:23
Toluene		U	0.20	1.0	ug/L	1	01-Sep-2022 12:23
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	01-Sep-2022 12:23
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	01-Sep-2022 12:23
Trichloroethene		U	0.20	1.0	ug/L	1	01-Sep-2022 12:23
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	01-Sep-2022 12:23
Vinyl chloride		U	0.20	1.0	ug/L	1	01-Sep-2022 12:23
Xylenes, Total		U	0.30	1.0	ug/L	1	01-Sep-2022 12:23
Surr: 1,2-Dichloroethane-d4	90.9			70-126	%REC	1	01-Sep-2022 12:23
Surr: 4-Bromofluorobenzene	93.5			77-113	%REC	1	01-Sep-2022 12:23
Surr: Dibromofluoromethane	87.5			77-123	%REC	1	01-Sep-2022 12:23
Surr: Toluene-d8	101			82-127	%REC	1	01-Sep-2022 12:23
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	30-Aug-2022 18:45
Surr: 4-Bromofluorobenzene	94.2			70-123	%REC	1	30-Aug-2022 18:45
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)		U	0.021	0.052	mg/L	1	02-Sep-2022 22:45
TPH (Oil Range)		U	0.021	0.10	mg/L	1	02-Sep-2022 22:45
Surr: 2-Fluorobiphenyl	68.8			60-135	%REC	1	02-Sep-2022 22:45
TOTAL DISSOLVED SOLIDS BY SM2540C-2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)		U	5.00	10.0	mg/L	1	01-Sep-2022 17:09
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride		U	0.200	0.500	mg/L	1	02-Sep-2022 21:27
Sulfate		U	0.200	0.500	mg/L	1	02-Sep-2022 21:27

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: DUP-01
 Collection Date: 25-Aug-2022 00:00

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-13
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 16:26
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	31-Aug-2022 16:26
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 16:26
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	31-Aug-2022 16:26
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	31-Aug-2022 16:26
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	31-Aug-2022 16:26
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 16:26
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	31-Aug-2022 16:26
2-Butanone	U		0.50	2.0	ug/L	1	31-Aug-2022 16:26
2-Hexanone	U		1.0	2.0	ug/L	1	31-Aug-2022 16:26
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	31-Aug-2022 16:26
Acetone	U		2.0	2.0	ug/L	1	31-Aug-2022 16:26
Benzene	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
Bromodichloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
Bromoform	U		0.40	1.0	ug/L	1	31-Aug-2022 16:26
Bromomethane	U		0.40	1.0	ug/L	1	31-Aug-2022 16:26
Carbon disulfide	U		0.60	2.0	ug/L	1	31-Aug-2022 16:26
Carbon tetrachloride	U		0.50	1.0	ug/L	1	31-Aug-2022 16:26
Chlorobenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26
Chloroethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26
Chloroform	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
Chloromethane	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	31-Aug-2022 16:26
Cyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26
Dibromochloromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26
Ethylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26
Isopropylbenzene	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26
m,p-Xylene	U		0.50	2.0	ug/L	1	31-Aug-2022 16:26
Methyl acetate	U		1.0	1.0	ug/L	1	31-Aug-2022 16:26
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	31-Aug-2022 16:26
Methylcyclohexane	U		0.30	1.0	ug/L	1	31-Aug-2022 16:26

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney NM
 Sample ID: DUP-01
 Collection Date: 25-Aug-2022 00:00

ANALYTICAL REPORT

WorkOrder:HS22081572
 Lab ID:HS22081572-13
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride		U	1.0	2.0	ug/L	1	31-Aug-2022 16:26
o-Xylene		U	0.30	1.0	ug/L	1	31-Aug-2022 16:26
Styrene		U	0.30	1.0	ug/L	1	31-Aug-2022 16:26
Tetrachloroethene		U	0.30	1.0	ug/L	1	31-Aug-2022 16:26
Toluene	1.8		0.20	1.0	ug/L	1	31-Aug-2022 16:26
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 16:26
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	31-Aug-2022 16:26
Trichloroethene		U	0.20	1.0	ug/L	1	31-Aug-2022 16:26
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	31-Aug-2022 16:26
Vinyl chloride		U	0.20	1.0	ug/L	1	31-Aug-2022 16:26
Xylenes, Total		U	0.30	1.0	ug/L	1	31-Aug-2022 16:26
Surr: 1,2-Dichloroethane-d4	95.2			70-126	%REC	1	31-Aug-2022 16:26
Surr: 4-Bromofluorobenzene	99.7			77-113	%REC	1	31-Aug-2022 16:26
Surr: Dibromofluoromethane	89.5			77-123	%REC	1	31-Aug-2022 16:26
Surr: Toluene-d8	96.0			82-127	%REC	1	31-Aug-2022 16:26
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	02-Sep-2022 10:25
Surr: 4-Bromofluorobenzene	106			70-123	%REC	1	02-Sep-2022 10:25
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 31-Aug-2022		Analyst: PPM	
TPH (Diesel Range)		U	0.021	0.052	mg/L	1	02-Sep-2022 23:14
TPH (Oil Range)		U	0.021	0.10	mg/L	1	02-Sep-2022 23:14
Surr: 2-Fluorobiphenyl	69.6			60-135	%REC	1	02-Sep-2022 23:14
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	536		5.00	10.0	mg/L	1	01-Sep-2022 17:09
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	62.1		0.400	1.00	mg/L	2	02-Sep-2022 21:32
Sulfate	107		0.400	1.00	mg/L	2	02-Sep-2022 21:32

Note: See Qualifiers Page for a list of qualifiers and their explanation.

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Date: 06-Sep-22

Weight / Prep Log

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

Batch ID: 183075 Start Date: 31 Aug 2022 09:13 End Date: 01 Sep 2022 16:00
Method: SW3511 Prep Code: 3511_DRO

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22081572-05		31.07 (mL)	2 (mL)	0.06437	40 mL Amber
HS22081572-06		31.78 (mL)	2 (mL)	0.06293	40 mL Amber
HS22081572-07		31.72 (mL)	2 (mL)	0.06305	40 mL Amber
HS22081572-08		31.13 (mL)	2 (mL)	0.06425	40 mL Amber
HS22081572-09		31.33 (mL)	2 (mL)	0.06384	40 mL Amber
HS22081572-10		31.15 (mL)	2 (mL)	0.06421	40 mL Amber
HS22081572-11		30.18 (mL)	2 (mL)	0.06627	40 mL Amber
HS22081572-12		31.62 (mL)	2 (mL)	0.06325	40 mL Amber
HS22081572-13		31.81 (mL)	2 (mL)	0.06287	40 mL Amber

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Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 183075 (0)		Test Name : TPH DRO/ORO BY SW8015C			Matrix: Water	
HS22081572-11	EB-01	25 Aug 2022 12:25		31 Aug 2022 09:13	02 Sep 2022 22:16	1
HS22081572-12	FB-01	25 Aug 2022 11:20		31 Aug 2022 09:13	02 Sep 2022 22:45	1
Batch ID: 183075 (0)		Test Name : TPH DRO/ORO BY SW8015C			Matrix: Groundwater	
HS22081572-05	MW-1	25 Aug 2022 09:05		31 Aug 2022 09:13	02 Sep 2022 19:19	1
HS22081572-06	MW-2	25 Aug 2022 10:20		31 Aug 2022 09:13	02 Sep 2022 19:49	1
HS22081572-07	MW-3	25 Aug 2022 11:30		31 Aug 2022 09:13	02 Sep 2022 20:18	1
HS22081572-08	MW-4	25 Aug 2022 12:40		31 Aug 2022 09:13	02 Sep 2022 20:47	1
HS22081572-09	MW-5	25 Aug 2022 13:50		31 Aug 2022 09:13	02 Sep 2022 21:17	1
HS22081572-10	MW-6	25 Aug 2022 15:15		31 Aug 2022 09:13	02 Sep 2022 21:46	1
HS22081572-13	DUP-01	25 Aug 2022 00:00		31 Aug 2022 09:13	02 Sep 2022 23:14	1
Batch ID: R416145 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Water	
HS22081572-01	Trip Blank-CG-080922-83	25 Aug 2022 00:00			30 Aug 2022 14:32	1
HS22081572-03	Trip Blank-CG-080922-95	25 Aug 2022 00:00			30 Aug 2022 14:54	1
HS22081572-11	EB-01	25 Aug 2022 12:25			30 Aug 2022 15:17	1
Batch ID: R416184 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS22081572-05	MW-1	25 Aug 2022 09:05			30 Aug 2022 16:54	1
HS22081572-06	MW-2	25 Aug 2022 10:20			30 Aug 2022 17:10	1
HS22081572-07	MW-3	25 Aug 2022 11:30			30 Aug 2022 17:26	1
HS22081572-08	MW-4	25 Aug 2022 12:40			30 Aug 2022 17:42	1
HS22081572-09	MW-5	25 Aug 2022 13:50			30 Aug 2022 17:58	1
HS22081572-10	MW-6	25 Aug 2022 15:15			30 Aug 2022 18:13	1
Batch ID: R416184 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Water	
HS22081572-02	Trip Blank-CG-080922-84	25 Aug 2022 00:00			30 Aug 2022 16:23	1
HS22081572-04	Trip Blank-CG-080922-98	25 Aug 2022 00:00			30 Aug 2022 16:39	1
HS22081572-11	EB-01	25 Aug 2022 12:25			30 Aug 2022 18:29	1
HS22081572-12	FB-01	25 Aug 2022 11:20			30 Aug 2022 18:45	1
Batch ID: R416252 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Groundwater	
HS22081572-05	MW-1	25 Aug 2022 09:05			31 Aug 2022 14:11	1
HS22081572-06	MW-2	25 Aug 2022 10:20			31 Aug 2022 14:34	1
HS22081572-07	MW-3	25 Aug 2022 11:30			31 Aug 2022 14:56	1
HS22081572-08	MW-4	25 Aug 2022 12:40			31 Aug 2022 15:19	1
HS22081572-09	MW-5	25 Aug 2022 13:50			31 Aug 2022 15:41	1
HS22081572-10	MW-6	25 Aug 2022 15:15			31 Aug 2022 16:04	1
HS22081572-13	DUP-01	25 Aug 2022 00:00			31 Aug 2022 16:26	1
Batch ID: R416348 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Water	
HS22081572-12	FB-01	25 Aug 2022 11:20			01 Sep 2022 12:23	1

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Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R416391 (0)		Test Name : TOTAL DISSOLVED SOLIDS BY SM2540C-2011			Matrix: Groundwater	
HS22081572-05	MW-1	25 Aug 2022 09:05			31 Aug 2022 16:36	1
HS22081572-06	MW-2	25 Aug 2022 10:20			31 Aug 2022 16:36	1
HS22081572-07	MW-3	25 Aug 2022 11:30			31 Aug 2022 16:36	1
Batch ID: R416438 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS22081572-13	DUP-01	25 Aug 2022 00:00			02 Sep 2022 10:25	1
Batch ID: R416467 (0)		Test Name : TOTAL DISSOLVED SOLIDS BY SM2540C-2011			Matrix: Water	
HS22081572-11	EB-01	25 Aug 2022 12:25			01 Sep 2022 17:09	1
HS22081572-12	FB-01	25 Aug 2022 11:20			01 Sep 2022 17:09	1
Batch ID: R416467 (0)		Test Name : TOTAL DISSOLVED SOLIDS BY SM2540C-2011			Matrix: Groundwater	
HS22081572-08	MW-4	25 Aug 2022 12:40			01 Sep 2022 17:09	1
HS22081572-09	MW-5	25 Aug 2022 13:50			01 Sep 2022 17:09	1
HS22081572-10	MW-6	25 Aug 2022 15:15			01 Sep 2022 17:09	1
HS22081572-13	DUP-01	25 Aug 2022 00:00			01 Sep 2022 17:09	1
Batch ID: R416481 (0)		Test Name : ANIONS BY SW9056A			Matrix: Water	
HS22081572-11	EB-01	25 Aug 2022 12:25			02 Sep 2022 21:22	1
HS22081572-12	FB-01	25 Aug 2022 11:20			02 Sep 2022 21:27	1
Batch ID: R416481 (0)		Test Name : ANIONS BY SW9056A			Matrix: Groundwater	
HS22081572-05	MW-1	25 Aug 2022 09:05			02 Sep 2022 19:25	1
HS22081572-06	MW-2	25 Aug 2022 10:20			02 Sep 2022 19:41	2
HS22081572-07	MW-3	25 Aug 2022 11:30			02 Sep 2022 20:45	2
HS22081572-08	MW-4	25 Aug 2022 12:40			02 Sep 2022 20:50	2
HS22081572-09	MW-5	25 Aug 2022 13:50			02 Sep 2022 21:11	2
HS22081572-10	MW-6	25 Aug 2022 15:15			02 Sep 2022 21:17	2
HS22081572-13	DUP-01	25 Aug 2022 00:00			02 Sep 2022 21:32	2
Batch ID: R416507 (0)		Test Name : ANIONS BY SW9056A			Matrix: Groundwater	
HS22081572-05	MW-1	25 Aug 2022 09:05			03 Sep 2022 16:03	2

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Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: 183075 (0)	Instrument: FID-16	Method: TPH DRO/ORO BY SW8015C
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MBLK	Sample ID: MBLK-183075	Units: mg/L	Analysis Date: 01-Sep-2022 19:30							
Client ID:	Run ID: FID-16_416524	SeqNo: 6834866	PrepDate: 31-Aug-2022 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	U	0.050								
TPH (Oil Range)	U	0.10								
Surr: 2-Fluorobiphenyl	0.03792	0.0050	0.06	0	63.2	60 - 135				

LCS	Sample ID: LCS-183075	Units: mg/L	Analysis Date: 01-Sep-2022 19:59							
Client ID:	Run ID: FID-16_416524	SeqNo: 6834867	PrepDate: 31-Aug-2022 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	0.5197	0.050	0.6	0	86.6	70 - 130				
TPH (Oil Range)	0.7283	0.10	0.6	0	121	70 - 130				
Surr: 2-Fluorobiphenyl	0.03699	0.0050	0.06	0	61.6	60 - 135				

LCSD	Sample ID: LCSD-183075	Units: mg/L	Analysis Date: 01-Sep-2022 20:29							
Client ID:	Run ID: FID-16_416524	SeqNo: 6834868	PrepDate: 31-Aug-2022 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	0.4574	0.050	0.6	0	76.2	70 - 130	0.5197	12.8	20	
TPH (Oil Range)	0.6821	0.10	0.6	0	114	70 - 130	0.7283	6.55	20	
Surr: 2-Fluorobiphenyl	0.03652	0.0050	0.06	0	60.9	60 - 135	0.03699	1.27	20	

The following samples were analyzed in this batch:

HS22081572-05	HS22081572-06	HS22081572-07	HS22081572-08
HS22081572-09	HS22081572-10	HS22081572-11	HS22081572-12
HS22081572-13			

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Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416184 (0)	Instrument: FID-20	Method: GASOLINE RANGE ORGANICS BY SW8015C
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MBLK	Sample ID: MBLK-220830	Units: mg/L	Analysis Date: 30-Aug-2022 13:45							
Client ID:	Run ID: FID-20_416184	SeqNo: 6827211	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Gasoline Range Organics	U	0.0500								
Surr: 4-Bromofluorobenzene	0.09389	0.00500	0.1	0	93.9	70 - 121				

LCS	Sample ID: LCS-220830	Units: mg/L	Analysis Date: 30-Aug-2022 13:14							
Client ID:	Run ID: FID-20_416184	SeqNo: 6827209	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Gasoline Range Organics	1.031	0.0500	1	0	103	76 - 124				
Surr: 4-Bromofluorobenzene	0.1121	0.00500	0.1	0	112	52 - 138				

LCSD	Sample ID: LCSD-220830	Units: mg/L	Analysis Date: 30-Aug-2022 13:29							
Client ID:	Run ID: FID-20_416184	SeqNo: 6827210	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Gasoline Range Organics	0.8414	0.0500	1	0	84.1	76 - 124	1.031	20.2	20	R
Surr: 4-Bromofluorobenzene	0.09035	0.00500	0.1	0	90.3	52 - 138	0.1121	21.5	20	R

The following samples were analyzed in this batch:

HS22081572-02	HS22081572-04	HS22081572-05	HS22081572-06
HS22081572-07	HS22081572-08	HS22081572-09	HS22081572-10
HS22081572-11	HS22081572-12		

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Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416438 (0)	Instrument: FID-20	Method: GASOLINE RANGE ORGANICS BY SW8015C
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MBLK	Sample ID: MBLK-2200902	Units: mg/L	Analysis Date: 02-Sep-2022 09:48							
Client ID:	Run ID: FID-20_416438	SeqNo: 6832490	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Gasoline Range Organics	U	0.0500								
Surr: 4-Bromofluorobenzene	0.1074	0.00500	0.1	0	107	70 - 121				

LCS	Sample ID: LCS-220902	Units: mg/L	Analysis Date: 02-Sep-2022 09:16							
Client ID:	Run ID: FID-20_416438	SeqNo: 6832488	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Gasoline Range Organics	0.8371	0.0500	1	0	83.7	76 - 124				
Surr: 4-Bromofluorobenzene	0.09048	0.00500	0.1	0	90.5	52 - 138				

LCSD	Sample ID: LCSD-220902	Units: mg/L	Analysis Date: 02-Sep-2022 09:32							
Client ID:	Run ID: FID-20_416438	SeqNo: 6832489	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Gasoline Range Organics	0.7874	0.0500	1	0	78.7	76 - 124	0.8371	6.12	20	
Surr: 4-Bromofluorobenzene	0.0808	0.00500	0.1	0	80.8	52 - 138	0.09048	11.3	20	

The following samples were analyzed in this batch: HS22081572-13

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Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416145 (0) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

MBLK Sample ID: **VBLKW-220830** Units: **ug/L** Analysis Date: **30-Aug-2022 10:58**
 Client ID: Run ID: **VOA11_416145** SeqNo: **6826451** PrepDate: DF: **1**
Analyte **Result** **PQL** **SPK Val** **SPK Ref Value** **%REC** **Control Limit** **RPD Ref Value** **%RPD** **RPD Limit** **Qual**

1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
2-Hexanone	U	2.0								
4-Methyl-2-pentanone	U	2.0								
Acetone	U	2.0								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	1.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								

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Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416145 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MBLK	Sample ID: VBLKW-220830	Units: ug/L			Analysis Date: 30-Aug-2022 10:58					
Client ID:	Run ID: VOA11_416145	SeqNo: 6826451	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Isopropylbenzene	U	1.0								
m,p-Xylene	U	2.0								
Methyl acetate	U	1.0								
Methyl tert-butyl ether	U	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	2.0								
o-Xylene	U	1.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								
trans-1,2-Dichloroethene	U	1.0								
trans-1,3-Dichloropropene	U	1.0								
Trichloroethene	U	1.0								
Trichlorofluoromethane	U	1.0								
Vinyl chloride	U	1.0								
Xylenes, Total	U	1.0								
Surr: 1,2-Dichloroethane-d4	46.5	1.0	50	0	93.0	70 - 123				
Surr: 4-Bromofluorobenzene	48.34	1.0	50	0	96.7	77 - 113				
Surr: Dibromofluoromethane	45.2	1.0	50	0	90.4	73 - 126				
Surr: Toluene-d8	51.31	1.0	50	0	103	81 - 120				

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Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416145 (0) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

LCS Sample ID: **VLCSW-220830** Units: **ug/L** Analysis Date: **30-Aug-2022 10:13**
 Client ID: Run ID: **VOA11_416145** SeqNo: **6826450** PrepDate: DF: **1**
Analyte **Result** **PQL** **SPK Val** **SPK Ref Value** **%REC** **Control Limit** **RPD Ref Value** **%RPD** **RPD Limit Qual**

1,1,1-Trichloroethane	18.41	1.0	20	0	92.1	70 - 130			
1,1,2,2-Tetrachloroethane	19.45	1.0	20	0	97.3	70 - 120			
1,1,2-Trichlor-1,2,2-trifluoroethane	17.49	1.0	20	0	87.4	70 - 130			
1,1,2-Trichloroethane	19.95	1.0	20	0	99.8	77 - 113			
1,1-Dichloroethane	17.47	1.0	20	0	87.4	71 - 122			
1,1-Dichloroethene	17.96	1.0	20	0	89.8	70 - 130			
1,2,4-Trichlorobenzene	21.56	1.0	20	0	108	77 - 126			
1,2-Dibromo-3-chloropropane	18.67	1.0	20	0	93.3	70 - 130			
1,2-Dibromoethane	19.11	1.0	20	0	95.6	76 - 123			
1,2-Dichlorobenzene	20.7	1.0	20	0	103	77 - 113			
1,2-Dichloroethane	19.43	1.0	20	0	97.1	70 - 124			
1,2-Dichloropropane	19.38	1.0	20	0	96.9	72 - 119			
1,3-Dichlorobenzene	19.71	1.0	20	0	98.5	78 - 118			
1,4-Dichlorobenzene	19.37	1.0	20	0	96.8	79 - 113			
2-Butanone	36	2.0	40	0	90.0	70 - 130			
2-Hexanone	35.04	2.0	40	0	87.6	70 - 130			
4-Methyl-2-pentanone	35.45	2.0	40	0	88.6	70 - 130			
Acetone	35.64	2.0	40	0	89.1	70 - 130			
Benzene	18.19	1.0	20	0	91.0	74 - 120			
Bromodichloromethane	18.43	1.0	20	0	92.1	74 - 122			
Bromoform	19.15	1.0	20	0	95.7	73 - 128			
Bromomethane	17.29	1.0	20	0	86.5	70 - 130			
Carbon disulfide	37.23	2.0	40	0	93.1	70 - 130			
Carbon tetrachloride	18.67	1.0	20	0	93.4	71 - 125			
Chlorobenzene	20.2	1.0	20	0	101	76 - 113			
Chloroethane	18.18	1.0	20	0	90.9	70 - 130			
Chloroform	17.55	1.0	20	0	87.7	71 - 121			
Chloromethane	18.11	1.0	20	0	90.5	70 - 129			
cis-1,2-Dichloroethene	18.21	1.0	20	0	91.1	75 - 122			
cis-1,3-Dichloropropene	19.67	1.0	20	0	98.4	73 - 127			
Cyclohexane	19.28	1.0	20	0	96.4	70 - 130			
Dibromochloromethane	19.2	1.0	20	0	96.0	77 - 122			
Dichlorodifluoromethane	16.4	1.0	20	0	82.0	70 - 130			
Ethylbenzene	19.12	1.0	20	0	95.6	77 - 117			

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416145 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
LCS	Sample ID: VLCSW-220830	Units: ug/L			Analysis Date: 30-Aug-2022 10:13					
Client ID:	Run ID: VOA11_416145	SeqNo: 6826450	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	19.68	1.0	20	0	98.4	73 - 127				
m,p-Xylene	37.15	2.0	40	0	92.9	77 - 122				
Methyl acetate	18.26	1.0	20	0	91.3	76 - 122				
Methyl tert-butyl ether	17.78	1.0	20	0	88.9	70 - 130				
Methylcyclohexane	19.35	1.0	20	0	96.7	61 - 157				
Methylene chloride	20.58	2.0	20	0	103	70 - 127				
o-Xylene	18.78	1.0	20	0	93.9	75 - 119				
Styrene	19.33	1.0	20	0	96.7	72 - 126				
Tetrachloroethene	21.66	1.0	20	0	108	76 - 119				
Toluene	20.27	1.0	20	0	101	77 - 118				
trans-1,2-Dichloroethene	17.91	1.0	20	0	89.5	72 - 127				
trans-1,3-Dichloropropene	18.97	1.0	20	0	94.9	77 - 119				
Trichloroethene	19.14	1.0	20	0	95.7	77 - 121				
Trichlorofluoromethane	18.29	1.0	20	0	91.5	70 - 130				
Vinyl chloride	17.88	1.0	20	0	89.4	70 - 130				
Xylenes, Total	55.94	1.0	60	0	93.2	75 - 122				
Surr: 1,2-Dichloroethane-d4	45.63	1.0	50	0	91.3	70 - 123				
Surr: 4-Bromofluorobenzene	49.81	1.0	50	0	99.6	77 - 113				
Surr: Dibromofluoromethane	47.69	1.0	50	0	95.4	73 - 126				
Surr: Toluene-d8	49.2	1.0	50	0	98.4	81 - 120				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416145 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MS	Sample ID: HS22081520-03MS	Units: ug/L			Analysis Date: 30-Aug-2022 12:17					
Client ID:	Run ID: VOA11_416145	SeqNo: 6826453	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.58	1.0	20	0	92.9	70 - 130				
1,1,2,2-Tetrachloroethane	17.84	1.0	20	0	89.2	70 - 123				
1,1,2-Trichlor-1,2,2-trifluoroethane	19.75	1.0	20	0	98.8	70 - 130				
1,1,2-Trichloroethane	19.37	1.0	20	0	96.8	70 - 117				
1,1-Dichloroethane	17.64	1.0	20	0	88.2	70 - 127				
1,1-Dichloroethene	18.6	1.0	20	0	93.0	70 - 130				
1,2,4-Trichlorobenzene	19.2	1.0	20	0	96.0	70 - 125				
1,2-Dibromo-3-chloropropane	18	1.0	20	0	90.0	70 - 130				
1,2-Dibromoethane	18.4	1.0	20	0	92.0	70 - 124				
1,2-Dichlorobenzene	19.24	1.0	20	0	96.2	70 - 115				
1,2-Dichloroethane	19.29	1.0	20	0	96.4	70 - 127				
1,2-Dichloropropane	19.33	1.0	20	0	96.7	70 - 122				
1,3-Dichlorobenzene	17.64	1.0	20	0	88.2	70 - 119				
1,4-Dichlorobenzene	17.51	1.0	20	0	87.5	70 - 114				
2-Butanone	37.16	2.0	40	0	92.9	70 - 130				
2-Hexanone	34.85	2.0	40	0	87.1	70 - 130				
4-Methyl-2-pentanone	34.74	2.0	40	0	86.8	70 - 130				
Acetone	35.61	2.0	40	0	89.0	70 - 130				
Benzene	18.18	1.0	20	0	90.9	70 - 127				
Bromodichloromethane	17.5	1.0	20	0	87.5	70 - 124				
Bromoform	17.24	1.0	20	0	86.2	70 - 129				
Bromomethane	18.82	1.0	20	0	94.1	70 - 130				
Carbon disulfide	38	2.0	40	0	95.0	70 - 130				
Carbon tetrachloride	19.08	1.0	20	0	95.4	70 - 130				
Chlorobenzene	19.68	1.0	20	0	98.4	70 - 114				
Chloroethane	20.54	1.0	20	0	103	70 - 130				
Chloroform	17.98	1.0	20	0	89.9	70 - 125				
Chloromethane	20.45	1.0	20	0	102	70 - 130				
cis-1,2-Dichloroethene	18.17	1.0	20	0	90.8	70 - 128				
cis-1,3-Dichloropropene	18.72	1.0	20	0	93.6	70 - 125				
Cyclohexane	20.22	1.0	20	0	101	70 - 130				
Dibromochloromethane	17.87	1.0	20	0	89.4	70 - 124				
Dichlorodifluoromethane	19.24	1.0	20	0	96.2	70 - 130				
Ethylbenzene	18.6	1.0	20	0	93.0	70 - 124				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416145 (0)	Instrument: VOA11	Method: LOW LEVEL VOLATILES BY SW8260C
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MS	Sample ID: HS22081520-03MS	Units: ug/L	Analysis Date: 30-Aug-2022 12:17							
Client ID:	Run ID: VOA11_416145	SeqNo: 6826453	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Isopropylbenzene	19.32	1.0	20	0	96.6	70 - 130				
m,p-Xylene	36.28	2.0	40	0	90.7	70 - 130				
Methyl acetate	18.49	1.0	20	0	92.5	76 - 122				
Methyl tert-butyl ether	17.97	1.0	20	0	89.8	70 - 130				
Methylcyclohexane	19.8	1.0	20	0	99.0	61 - 158				
Methylene chloride	19.99	2.0	20	0	100.0	70 - 128				
o-Xylene	18.07	1.0	20	0	90.4	70 - 124				
Styrene	17.12	1.0	20	0	85.6	70 - 130				
Tetrachloroethene	21.08	1.0	20	0	105	70 - 130				
Toluene	20.17	1.0	20	1.848	91.6	70 - 123				
trans-1,2-Dichloroethene	18.88	1.0	20	0	94.4	70 - 130				
trans-1,3-Dichloropropene	17.98	1.0	20	0	89.9	70 - 121				
Trichloroethene	18.4	1.0	20	0	92.0	70 - 129				
Trichlorofluoromethane	20.94	1.0	20	0	105	70 - 130				
Vinyl chloride	20.44	1.0	20	0	102	70 - 130				
Xylenes, Total	54.35	1.0	60	0	90.6	70 - 130				
Surr: 1,2-Dichloroethane-d4	47.38	1.0	50	0	94.8	70 - 126				
Surr: 4-Bromofluorobenzene	51.16	1.0	50	0	102	77 - 113				
Surr: Dibromofluoromethane	48.9	1.0	50	0	97.8	77 - 123				
Surr: Toluene-d8	49.65	1.0	50	0	99.3	82 - 127				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416145 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MSD	Sample ID: HS22081520-03MSD	Units: ug/L			Analysis Date: 30-Aug-2022 12:39					
Client ID:	Run ID: VOA11_416145	SeqNo: 6826454	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.33	1.0	20	0	91.6	70 - 130	18.58	1.36	20	
1,1,2,2-Tetrachloroethane	17.85	1.0	20	0	89.2	70 - 123	17.84	0.0389	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	19.5	1.0	20	0	97.5	70 - 130	19.75	1.3	20	
1,1,2-Trichloroethane	18.86	1.0	20	0	94.3	70 - 117	19.37	2.63	20	
1,1-Dichloroethane	17.06	1.0	20	0	85.3	70 - 127	17.64	3.38	20	
1,1-Dichloroethene	18.49	1.0	20	0	92.4	70 - 130	18.6	0.608	20	
1,2,4-Trichlorobenzene	19.02	1.0	20	0	95.1	70 - 125	19.2	0.922	20	
1,2-Dibromo-3-chloropropane	17.79	1.0	20	0	89.0	70 - 130	18	1.17	20	
1,2-Dibromoethane	17.6	1.0	20	0	88.0	70 - 124	18.4	4.44	20	
1,2-Dichlorobenzene	19.14	1.0	20	0	95.7	70 - 115	19.24	0.495	20	
1,2-Dichloroethane	18.58	1.0	20	0	92.9	70 - 127	19.29	3.74	20	
1,2-Dichloropropane	18.65	1.0	20	0	93.2	70 - 122	19.33	3.61	20	
1,3-Dichlorobenzene	17.51	1.0	20	0	87.5	70 - 119	17.64	0.782	20	
1,4-Dichlorobenzene	17.36	1.0	20	0	86.8	70 - 114	17.51	0.861	20	
2-Butanone	37.27	2.0	40	0	93.2	70 - 130	37.16	0.293	20	
2-Hexanone	33.72	2.0	40	0	84.3	70 - 130	34.85	3.31	20	
4-Methyl-2-pentanone	33.86	2.0	40	0	84.7	70 - 130	34.74	2.56	20	
Acetone	35.63	2.0	40	0	89.1	70 - 130	35.61	0.0609	20	
Benzene	17.27	1.0	20	0	86.4	70 - 127	18.18	5.12	20	
Bromodichloromethane	17.31	1.0	20	0	86.6	70 - 124	17.5	1.08	20	
Bromoform	16.96	1.0	20	0	84.8	70 - 129	17.24	1.65	20	
Bromomethane	18.73	1.0	20	0	93.6	70 - 130	18.82	0.478	20	
Carbon disulfide	37.35	2.0	40	0	93.4	70 - 130	38	1.72	20	
Carbon tetrachloride	17.85	1.0	20	0	89.3	70 - 130	19.08	6.67	20	
Chlorobenzene	18.83	1.0	20	0	94.2	70 - 114	19.68	4.42	20	
Chloroethane	19.81	1.0	20	0	99.1	70 - 130	20.54	3.62	20	
Chloroform	17.21	1.0	20	0	86.0	70 - 125	17.98	4.36	20	
Chloromethane	19.81	1.0	20	0	99.1	70 - 130	20.45	3.15	20	
cis-1,2-Dichloroethene	17.92	1.0	20	0	89.6	70 - 128	18.17	1.36	20	
cis-1,3-Dichloropropene	18.15	1.0	20	0	90.7	70 - 125	18.72	3.13	20	
Cyclohexane	19.26	1.0	20	0	96.3	70 - 130	20.22	4.88	20	
Dibromochloromethane	17.5	1.0	20	0	87.5	70 - 124	17.87	2.14	20	
Dichlorodifluoromethane	18.81	1.0	20	0	94.0	70 - 130	19.24	2.25	20	
Ethylbenzene	17.71	1.0	20	0	88.6	70 - 124	18.6	4.89	20	

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416145 (0) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

MSD	Sample ID: HS22081520-03MSD	Units: ug/L			Analysis Date: 30-Aug-2022 12:39					
Client ID:	Run ID: VOA11_416145	SeqNo: 6826454	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	18.5	1.0	20	0	92.5	70 - 130	19.32	4.31	20	
m,p-Xylene	34.18	2.0	40	0	85.5	70 - 130	36.28	5.95	20	
Methyl acetate	18.46	1.0	20	0	92.3	76 - 122	18.49	0.186	20	
Methyl tert-butyl ether	17.75	1.0	20	0	88.7	70 - 130	17.97	1.23	20	
Methylcyclohexane	18.84	1.0	20	0	94.2	61 - 158	19.8	4.96	20	
Methylene chloride	19.33	2.0	20	0	96.6	70 - 128	19.99	3.38	20	
o-Xylene	17.49	1.0	20	0	87.4	70 - 124	18.07	3.31	20	
Styrene	15.98	1.0	20	0	79.9	70 - 130	17.12	6.89	20	
Tetrachloroethene	20.52	1.0	20	0	103	70 - 130	21.08	2.72	20	
Toluene	19.17	1.0	20	1.848	86.6	70 - 123	20.17	5.09	20	
trans-1,2-Dichloroethene	18.02	1.0	20	0	90.1	70 - 130	18.88	4.68	20	
trans-1,3-Dichloropropene	17.61	1.0	20	0	88.0	70 - 121	17.98	2.1	20	
Trichloroethene	17.72	1.0	20	0	88.6	70 - 129	18.4	3.77	20	
Trichlorofluoromethane	20.17	1.0	20	0	101	70 - 130	20.94	3.74	20	
Vinyl chloride	19.69	1.0	20	0	98.4	70 - 130	20.44	3.76	20	
Xylenes, Total	51.67	1.0	60	0	86.1	70 - 130	54.35	5.06	20	
Surr: 1,2-Dichloroethane-d4	47.1	1.0	50	0	94.2	70 - 126	47.38	0.599	20	
Surr: 4-Bromofluorobenzene	50.32	1.0	50	0	101	77 - 113	51.16	1.67	20	
Surr: Dibromofluoromethane	48.76	1.0	50	0	97.5	77 - 123	48.9	0.296	20	
Surr: Toluene-d8	49.31	1.0	50	0	98.6	82 - 127	49.65	0.684	20	

The following samples were analyzed in this batch: HS22081572-01 HS22081572-03 HS22081572-11

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416252 (0) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

MBLK Sample ID: **VBLKW-220831** Units: **ug/L** Analysis Date: **31-Aug-2022 10:42**
 Client ID: Run ID: **VOA11_416252** SeqNo: **6828707** PrepDate: DF: **1**
Analyte **Result** **PQL** **SPK Val** **SPK Ref Value** **%REC** **Control Limit** **RPD Ref Value** **%RPD** **RPD Limit** **Qual**

1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
2-Hexanone	U	2.0								
4-Methyl-2-pentanone	U	2.0								
Acetone	U	2.0								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	1.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416252 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MBLK	Sample ID: VBLKW-220831	Units: ug/L			Analysis Date: 31-Aug-2022 10:42					
Client ID:	Run ID: VOA11_416252	SeqNo: 6828707	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Isopropylbenzene	U	1.0								
m,p-Xylene	U	2.0								
Methyl acetate	U	1.0								
Methyl tert-butyl ether	U	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	2.0								
o-Xylene	U	1.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								
trans-1,2-Dichloroethene	U	1.0								
trans-1,3-Dichloropropene	U	1.0								
Trichloroethene	U	1.0								
Trichlorofluoromethane	U	1.0								
Vinyl chloride	U	1.0								
Xylenes, Total	U	1.0								
Surr: 1,2-Dichloroethane-d4	46.01	1.0	50	0	92.0	70 - 123				
Surr: 4-Bromofluorobenzene	48.99	1.0	50	0	98.0	77 - 113				
Surr: Dibromofluoromethane	44.44	1.0	50	0	88.9	73 - 126				
Surr: Toluene-d8	50.2	1.0	50	0	100	81 - 120				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416252 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
LCS	Sample ID: VLCSW-220831	Units: ug/L			Analysis Date: 31-Aug-2022 09:57					
Client ID:	Run ID: VOA11_416252	SeqNo: 6828706	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	17.02	1.0	20	0	85.1	70 - 130				
1,1,2,2-Tetrachloroethane	17.4	1.0	20	0	87.0	70 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	19.27	1.0	20	0	96.3	70 - 130				
1,1,2-Trichloroethane	19.95	1.0	20	0	99.8	77 - 113				
1,1-Dichloroethane	15.74	1.0	20	0	78.7	71 - 122				
1,1-Dichloroethene	16.44	1.0	20	0	82.2	70 - 130				
1,2,4-Trichlorobenzene	19.86	1.0	20	0	99.3	77 - 126				
1,2-Dibromo-3-chloropropane	15.57	1.0	20	0	77.8	70 - 130				
1,2-Dibromoethane	18.98	1.0	20	0	94.9	76 - 123				
1,2-Dichlorobenzene	17.93	1.0	20	0	89.6	77 - 113				
1,2-Dichloroethane	17.68	1.0	20	0	88.4	70 - 124				
1,2-Dichloropropane	18.16	1.0	20	0	90.8	72 - 119				
1,3-Dichlorobenzene	17.11	1.0	20	0	85.6	78 - 118				
1,4-Dichlorobenzene	17.6	1.0	20	0	88.0	79 - 113				
2-Butanone	33.25	2.0	40	0	83.1	70 - 130				
2-Hexanone	34.31	2.0	40	0	85.8	70 - 130				
4-Methyl-2-pentanone	33.41	2.0	40	0	83.5	70 - 130				
Acetone	30.6	2.0	40	0	76.5	70 - 130				
Benzene	15.9	1.0	20	0	79.5	74 - 120				
Bromodichloromethane	15.47	1.0	20	0	77.3	74 - 122				
Bromoform	17.32	1.0	20	0	86.6	73 - 128				
Bromomethane	18	1.0	20	0	90.0	70 - 130				
Carbon disulfide	31.42	2.0	40	0	78.6	70 - 130				
Carbon tetrachloride	16.23	1.0	20	0	81.2	71 - 125				
Chlorobenzene	19.03	1.0	20	0	95.2	76 - 113				
Chloroethane	20.79	1.0	20	0	104	70 - 130				
Chloroform	16.8	1.0	20	0	84.0	71 - 121				
Chloromethane	20.27	1.0	20	0	101	70 - 129				
cis-1,2-Dichloroethene	16.62	1.0	20	0	83.1	75 - 122				
cis-1,3-Dichloropropene	17.69	1.0	20	0	88.4	73 - 127				
Cyclohexane	17.65	1.0	20	0	88.3	70 - 130				
Dibromochloromethane	17.96	1.0	20	0	89.8	77 - 122				
Dichlorodifluoromethane	19.55	1.0	20	0	97.7	70 - 130				
Ethylbenzene	17.75	1.0	20	0	88.7	77 - 117				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416252 (0) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

LCS Sample ID: **VLCSW-220831** Units: **ug/L** Analysis Date: **31-Aug-2022 09:57**
 Client ID: Run ID: **VOA11_416252** SeqNo: **6828706** PrepDate: DF: **1**
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD RPD Limit Qual

Isopropylbenzene	19.98	1.0	20	0	99.9	73 - 127			
m,p-Xylene	35.46	2.0	40	0	88.7	77 - 122			
Methyl acetate	17.05	1.0	20	0	85.3	76 - 122			
Methyl tert-butyl ether	16.32	1.0	20	0	81.6	70 - 130			
Methylcyclohexane	17.5	1.0	20	0	87.5	61 - 157			
Methylene chloride	18	2.0	20	0	90.0	70 - 127			
o-Xylene	17.98	1.0	20	0	89.9	75 - 119			
Styrene	18.2	1.0	20	0	91.0	72 - 126			
Tetrachloroethene	21.38	1.0	20	0	107	76 - 119			
Toluene	19.73	1.0	20	0	98.6	77 - 118			
trans-1,2-Dichloroethene	16.31	1.0	20	0	81.5	72 - 127			
trans-1,3-Dichloropropene	17.51	1.0	20	0	87.5	77 - 119			
Trichloroethene	17.74	1.0	20	0	88.7	77 - 121			
Trichlorofluoromethane	20.51	1.0	20	0	103	70 - 130			
Vinyl chloride	19.87	1.0	20	0	99.3	70 - 130			
Xylenes, Total	53.44	1.0	60	0	89.1	75 - 122			
Surr: 1,2-Dichloroethane-d4	46.04	1.0	50	0	92.1	70 - 123			
Surr: 4-Bromofluorobenzene	55.32	1.0	50	0	111	77 - 113			
Surr: Dibromofluoromethane	47.68	1.0	50	0	95.4	73 - 126			
Surr: Toluene-d8	52.71	1.0	50	0	105	81 - 120			

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416252 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MS	Sample ID: HS22081519-19MS	Units: ug/L			Analysis Date: 31-Aug-2022 12:41					
Client ID:	Run ID: VOA11_416252	SeqNo: 6828712	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	19.16	1.0	20	0	95.8	70 - 130				
1,1,2,2-Tetrachloroethane	17.53	1.0	20	0	87.7	70 - 123				
1,1,2-Trichlor-1,2,2-trifluoroethane	19.08	1.0	20	0	95.4	70 - 130				
1,1,2-Trichloroethane	18.96	1.0	20	0	94.8	70 - 117				
1,1-Dichloroethane	16.58	1.0	20	0	82.9	70 - 127				
1,1-Dichloroethene	17.75	1.0	20	0	88.7	70 - 130				
1,2,4-Trichlorobenzene	19.91	1.0	20	0	99.6	70 - 125				
1,2-Dibromo-3-chloropropane	16.97	1.0	20	0	84.8	70 - 130				
1,2-Dibromoethane	18.13	1.0	20	0	90.7	70 - 124				
1,2-Dichlorobenzene	19.24	1.0	20	0	96.2	70 - 115				
1,2-Dichloroethane	19.05	1.0	20	0	95.3	70 - 127				
1,2-Dichloropropane	19.39	1.0	20	0	97.0	70 - 122				
1,3-Dichlorobenzene	18.12	1.0	20	0	90.6	70 - 119				
1,4-Dichlorobenzene	17.92	1.0	20	0	89.6	70 - 114				
2-Butanone	36.55	2.0	40	0	91.4	70 - 130				
2-Hexanone	31.84	2.0	40	0	79.6	70 - 130				
4-Methyl-2-pentanone	32.71	2.0	40	0	81.8	70 - 130				
Acetone	31.19	2.0	40	0	78.0	70 - 130				
Benzene	18.03	1.0	20	0	90.2	70 - 127				
Bromodichloromethane	17.97	1.0	20	0	89.9	70 - 124				
Bromoform	16.82	1.0	20	0	84.1	70 - 129				
Bromomethane	18.52	1.0	20	0	92.6	70 - 130				
Carbon disulfide	34.5	2.0	40	0	86.2	70 - 130				
Carbon tetrachloride	32.45	1.0	20	0	162	70 - 130				S
Chlorobenzene	19.94	1.0	20	0	99.7	70 - 114				
Chloroethane	21.64	1.0	20	0	108	70 - 130				
Chloroform	20.67	1.0	20	2.005	93.3	70 - 125				
Chloromethane	20.14	1.0	20	0	101	70 - 130				
cis-1,2-Dichloroethene	19.28	1.0	20	0	96.4	70 - 128				
cis-1,3-Dichloropropene	18.87	1.0	20	0	94.4	70 - 125				
Cyclohexane	19.47	1.0	20	0	97.3	70 - 130				
Dibromochloromethane	17.2	1.0	20	0	86.0	70 - 124				
Dichlorodifluoromethane	19.18	1.0	20	0	95.9	70 - 130				
Ethylbenzene	18.71	1.0	20	0	93.6	70 - 124				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416252 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MS	Sample ID: HS22081519-19MS	Units: ug/L			Analysis Date: 31-Aug-2022 12:41					
Client ID:	Run ID: VOA11_416252	SeqNo: 6828712	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	19.46	1.0	20	0	97.3	70 - 130				
m,p-Xylene	36.74	2.0	40	0	91.8	70 - 130				
Methyl acetate	17.37	1.0	20	0	86.8	76 - 122				
Methyl tert-butyl ether	16.49	1.0	20	0	82.4	70 - 130				
Methylcyclohexane	19.61	1.0	20	0	98.1	61 - 158				
Methylene chloride	19.04	2.0	20	0	95.2	70 - 128				
o-Xylene	17.15	1.0	20	0	85.8	70 - 124				
Styrene	17.52	1.0	20	0	87.6	70 - 130				
Tetrachloroethene	20.98	1.0	20	0	105	70 - 130				
Toluene	19.64	1.0	20	0	98.2	70 - 123				
trans-1,2-Dichloroethene	17.65	1.0	20	0	88.3	70 - 130				
trans-1,3-Dichloropropene	18.17	1.0	20	0	90.9	70 - 121				
Trichloroethene	19.6	1.0	20	0	98.0	70 - 129				
Trichlorofluoromethane	21.61	1.0	20	0	108	70 - 130				
Vinyl chloride	21.09	1.0	20	0	105	70 - 130				
Xylenes, Total	53.89	1.0	60	0	89.8	70 - 130				
Surr: 1,2-Dichloroethane-d4	44.78	1.0	50	0	89.6	70 - 126				
Surr: 4-Bromofluorobenzene	49.96	1.0	50	0	99.9	77 - 113				
Surr: Dibromofluoromethane	49.68	1.0	50	0	99.4	77 - 123				
Surr: Toluene-d8	47.38	1.0	50	0	94.8	82 - 127				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416252 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MSD	Sample ID: HS22081519-19MSD	Units: ug/L			Analysis Date: 31-Aug-2022 13:04					
Client ID:	Run ID: VOA11_416252	SeqNo: 6828713	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	17.43	1.0	20	0	87.1	70 - 130	19.16	9.47	20	
1,1,2,2-Tetrachloroethane	17.7	1.0	20	0	88.5	70 - 123	17.53	0.953	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	18.19	1.0	20	0	90.9	70 - 130	19.08	4.78	20	
1,1,2-Trichloroethane	17.89	1.0	20	0	89.4	70 - 117	18.96	5.84	20	
1,1-Dichloroethane	16.08	1.0	20	0	80.4	70 - 127	16.58	3.1	20	
1,1-Dichloroethene	17.35	1.0	20	0	86.8	70 - 130	17.75	2.26	20	
1,2,4-Trichlorobenzene	18.39	1.0	20	0	91.9	70 - 125	19.91	7.97	20	
1,2-Dibromo-3-chloropropane	17.67	1.0	20	0	88.4	70 - 130	16.97	4.09	20	
1,2-Dibromoethane	17.62	1.0	20	0	88.1	70 - 124	18.13	2.85	20	
1,2-Dichlorobenzene	19.37	1.0	20	0	96.8	70 - 115	19.24	0.659	20	
1,2-Dichloroethane	18.43	1.0	20	0	92.1	70 - 127	19.05	3.33	20	
1,2-Dichloropropane	18.15	1.0	20	0	90.7	70 - 122	19.39	6.65	20	
1,3-Dichlorobenzene	17.56	1.0	20	0	87.8	70 - 119	18.12	3.13	20	
1,4-Dichlorobenzene	17.28	1.0	20	0	86.4	70 - 114	17.92	3.68	20	
2-Butanone	35.45	2.0	40	0	88.6	70 - 130	36.55	3.07	20	
2-Hexanone	33.43	2.0	40	0	83.6	70 - 130	31.84	4.88	20	
4-Methyl-2-pentanone	33.03	2.0	40	0	82.6	70 - 130	32.71	0.984	20	
Acetone	32.88	2.0	40	0	82.2	70 - 130	31.19	5.31	20	
Benzene	17	1.0	20	0	85.0	70 - 127	18.03	5.9	20	
Bromodichloromethane	17.19	1.0	20	0	86.0	70 - 124	17.97	4.42	20	
Bromoform	16.86	1.0	20	0	84.3	70 - 129	16.82	0.193	20	
Bromomethane	18.35	1.0	20	0	91.8	70 - 130	18.52	0.905	20	
Carbon disulfide	33.88	2.0	40	0	84.7	70 - 130	34.5	1.8	20	
Carbon tetrachloride	31.04	1.0	20	0	155	70 - 130	32.45	4.44	20	S
Chlorobenzene	19.03	1.0	20	0	95.1	70 - 114	19.94	4.65	20	
Chloroethane	20.19	1.0	20	0	101	70 - 130	21.64	6.92	20	
Chloroform	18.71	1.0	20	2.005	83.5	70 - 125	20.67	9.94	20	
Chloromethane	19.19	1.0	20	0	95.9	70 - 130	20.14	4.87	20	
cis-1,2-Dichloroethene	16.75	1.0	20	0	83.8	70 - 128	19.28	14	20	
cis-1,3-Dichloropropene	18.83	1.0	20	0	94.1	70 - 125	18.87	0.242	20	
Cyclohexane	18.01	1.0	20	0	90.1	70 - 130	19.47	7.76	20	
Dibromochloromethane	17.59	1.0	20	0	87.9	70 - 124	17.2	2.25	20	
Dichlorodifluoromethane	18.41	1.0	20	0	92.1	70 - 130	19.18	4.05	20	
Ethylbenzene	18.22	1.0	20	0	91.1	70 - 124	18.71	2.66	20	

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416252 (0) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

MSD		Sample ID: HS22081519-19MSD		Units: ug/L		Analysis Date: 31-Aug-2022 13:04				
Client ID:		Run ID: VOA11_416252		SeqNo: 6828713		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	18.54	1.0	20	0	92.7	70 - 130	19.46	4.83	20	
m,p-Xylene	35.24	2.0	40	0	88.1	70 - 130	36.74	4.15	20	
Methyl acetate	17.09	1.0	20	0	85.5	76 - 122	17.37	1.58	20	
Methyl tert-butyl ether	16.45	1.0	20	0	82.2	70 - 130	16.49	0.224	20	
Methylcyclohexane	18.6	1.0	20	0	93.0	61 - 158	19.61	5.28	20	
Methylene chloride	18.4	2.0	20	0	92.0	70 - 128	19.04	3.43	20	
o-Xylene	17.47	1.0	20	0	87.4	70 - 124	17.15	1.84	20	
Styrene	17.46	1.0	20	0	87.3	70 - 130	17.52	0.319	20	
Tetrachloroethene	20.16	1.0	20	0	101	70 - 130	20.98	3.99	20	
Toluene	18.97	1.0	20	0	94.9	70 - 123	19.64	3.44	20	
trans-1,2-Dichloroethene	16.74	1.0	20	0	83.7	70 - 130	17.65	5.33	20	
trans-1,3-Dichloropropene	18.55	1.0	20	0	92.8	70 - 121	18.17	2.08	20	
Trichloroethene	18.22	1.0	20	0	91.1	70 - 129	19.6	7.28	20	
Trichlorofluoromethane	20.09	1.0	20	0	100	70 - 130	21.61	7.29	20	
Vinyl chloride	19.93	1.0	20	0	99.6	70 - 130	21.09	5.68	20	
Xylenes, Total	52.72	1.0	60	0	87.9	70 - 130	53.89	2.2	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>45.89</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>91.8</i>	<i>70 - 126</i>	<i>44.78</i>	<i>2.44</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.56</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>99.1</i>	<i>77 - 113</i>	<i>49.96</i>	<i>0.809</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>47.76</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>95.5</i>	<i>77 - 123</i>	<i>49.68</i>	<i>3.95</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>49.67</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>99.3</i>	<i>82 - 127</i>	<i>47.38</i>	<i>4.72</i>	<i>20</i>	

The following samples were analyzed in this batch:

HS22081572-05	HS22081572-06	HS22081572-07	HS22081572-08
HS22081572-09	HS22081572-10	HS22081572-13	

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416348 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C						
MBLK	Sample ID: VBLKW-220901	Units: ug/L			Analysis Date: 01-Sep-2022 10:14					
Client ID:	Run ID: VOA4_416348	SeqNo: 6830663	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
2-Hexanone	U	2.0								
4-Methyl-2-pentanone	U	2.0								
Acetone	U	2.0								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	1.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416348 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C						
MBLK	Sample ID: VBLKW-220901	Units: ug/L			Analysis Date: 01-Sep-2022 10:14					
Client ID:	Run ID: VOA4_416348	SeqNo: 6830663	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	U	1.0								
m,p-Xylene	U	2.0								
Methyl acetate	U	1.0								
Methyl tert-butyl ether	U	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	2.0								
o-Xylene	U	1.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								
trans-1,2-Dichloroethene	U	1.0								
trans-1,3-Dichloropropene	U	1.0								
Trichloroethene	U	1.0								
Trichlorofluoromethane	U	1.0								
Vinyl chloride	U	1.0								
Xylenes, Total	U	1.0								
Surr: 1,2-Dichloroethane-d4	47.41	1.0	50	0	94.8	70 - 123				
Surr: 4-Bromofluorobenzene	48.59	1.0	50	0	97.2	77 - 113				
Surr: Dibromofluoromethane	46.25	1.0	50	0	92.5	73 - 126				
Surr: Toluene-d8	50.11	1.0	50	0	100	81 - 120				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416348 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C						
LCS	Sample ID: VLCSW-220901	Units: ug/L			Analysis Date: 01-Sep-2022 09:31					
Client ID:	Run ID: VOA4_416348	SeqNo: 6830662	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.23	1.0	20	0	91.1	70 - 130				
1,1,2,2-Tetrachloroethane	23.29	1.0	20	0	116	70 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	20.96	1.0	20	0	105	70 - 130				
1,1,2-Trichloroethane	22.27	1.0	20	0	111	77 - 113				
1,1-Dichloroethane	20.39	1.0	20	0	102	71 - 122				
1,1-Dichloroethene	19.33	1.0	20	0	96.7	70 - 130				
1,2,4-Trichlorobenzene	19.8	1.0	20	0	99.0	77 - 126				
1,2-Dibromo-3-chloropropane	21.81	1.0	20	0	109	70 - 130				
1,2-Dibromoethane	20.46	1.0	20	0	102	76 - 123				
1,2-Dichlorobenzene	20.96	1.0	20	0	105	77 - 113				
1,2-Dichloroethane	19.91	1.0	20	0	99.6	70 - 124				
1,2-Dichloropropane	21	1.0	20	0	105	72 - 119				
1,3-Dichlorobenzene	20.62	1.0	20	0	103	78 - 118				
1,4-Dichlorobenzene	19.93	1.0	20	0	99.6	79 - 113				
2-Butanone	34.51	2.0	40	0	86.3	70 - 130				
2-Hexanone	47.49	2.0	40	0	119	70 - 130				
4-Methyl-2-pentanone	47.62	2.0	40	0	119	70 - 130				
Acetone	36.74	2.0	40	0	91.8	70 - 130				
Benzene	20.31	1.0	20	0	102	74 - 120				
Bromodichloromethane	19.28	1.0	20	0	96.4	74 - 122				
Bromoform	18.43	1.0	20	0	92.2	73 - 128				
Bromomethane	15.32	1.0	20	0	76.6	70 - 130				
Carbon disulfide	39.94	2.0	40	0	99.8	70 - 130				
Carbon tetrachloride	19.17	1.0	20	0	95.8	71 - 125				
Chlorobenzene	19.68	1.0	20	0	98.4	76 - 113				
Chloroethane	20.52	1.0	20	0	103	70 - 130				
Chloroform	19.46	1.0	20	0	97.3	71 - 121				
Chloromethane	17.38	1.0	20	0	86.9	70 - 129				
cis-1,2-Dichloroethene	20.74	1.0	20	0	104	75 - 122				
cis-1,3-Dichloropropene	20.71	1.0	20	0	104	73 - 127				
Cyclohexane	22.01	1.0	20	0	110	70 - 130				
Dibromochloromethane	19.19	1.0	20	0	96.0	77 - 122				
Dichlorodifluoromethane	19.43	1.0	20	0	97.1	70 - 130				
Ethylbenzene	20.36	1.0	20	0	102	77 - 117				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416348 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C						
LCS	Sample ID: VLCSW-220901	Units: ug/L			Analysis Date: 01-Sep-2022 09:31					
Client ID:	Run ID: VOA4_416348	SeqNo: 6830662	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	21.19	1.0	20	0	106	73 - 127				
m,p-Xylene	42.28	2.0	40	0	106	77 - 122				
Methyl acetate	22.26	1.0	20	0	111	76 - 122				
Methyl tert-butyl ether	19.69	1.0	20	0	98.4	70 - 130				
Methylcyclohexane	22.2	1.0	20	0	111	61 - 157				
Methylene chloride	20.03	2.0	20	0	100	70 - 127				
o-Xylene	20.49	1.0	20	0	102	75 - 119				
Styrene	20.66	1.0	20	0	103	72 - 126				
Tetrachloroethene	19.75	1.0	20	0	98.8	76 - 119				
Toluene	19.91	1.0	20	0	99.5	77 - 118				
trans-1,2-Dichloroethene	18.89	1.0	20	0	94.4	72 - 127				
trans-1,3-Dichloropropene	20.38	1.0	20	0	102	77 - 119				
Trichloroethene	20.73	1.0	20	0	104	77 - 121				
Trichlorofluoromethane	19.75	1.0	20	0	98.8	70 - 130				
Vinyl chloride	20.47	1.0	20	0	102	70 - 130				
Xylenes, Total	62.77	1.0	60	0	105	75 - 122				
Surr: 1,2-Dichloroethane-d4	46.9	1.0	50	0	93.8	70 - 123				
Surr: 4-Bromofluorobenzene	50.9	1.0	50	0	102	77 - 113				
Surr: Dibromofluoromethane	46.4	1.0	50	0	92.8	73 - 126				
Surr: Toluene-d8	50.53	1.0	50	0	101	81 - 120				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416348 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C						
MS	Sample ID: HS22081670-01MS	Units: ug/L			Analysis Date: 01-Sep-2022 11:19					
Client ID:	Run ID: VOA4_416348	SeqNo: 6830666	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.86	1.0	20	0	104	70 - 130				
1,1,2,2-Tetrachloroethane	24.98	1.0	20	0	125	70 - 123				S
1,1,2-Trichlor-1,2,2-trifluoroethane	24.11	1.0	20	0	121	70 - 130				
1,1,2-Trichloroethane	22.68	1.0	20	0	113	70 - 117				
1,1-Dichloroethane	22.58	1.0	20	0	113	70 - 127				
1,1-Dichloroethene	22.04	1.0	20	0	110	70 - 130				
1,2,4-Trichlorobenzene	21.63	1.0	20	0	108	70 - 125				
1,2-Dibromo-3-chloropropane	23.12	1.0	20	0	116	70 - 130				
1,2-Dibromoethane	21.88	1.0	20	0	109	70 - 124				
1,2-Dichlorobenzene	22.35	1.0	20	0	112	70 - 115				
1,2-Dichloroethane	21.81	1.0	20	0	109	70 - 127				
1,2-Dichloropropane	23.44	1.0	20	0	117	70 - 122				
1,3-Dichlorobenzene	21.71	1.0	20	0	109	70 - 119				
1,4-Dichlorobenzene	21.29	1.0	20	0	106	70 - 114				
2-Butanone	38.49	2.0	40	0	96.2	70 - 130				
2-Hexanone	52.83	2.0	40	0	132	70 - 130				S
4-Methyl-2-pentanone	52.75	2.0	40	0	132	70 - 130				S
Acetone	36.36	2.0	40	0	90.9	70 - 130				
Benzene	22.77	1.0	20	0	114	70 - 127				
Bromodichloromethane	21.08	1.0	20	0	105	70 - 124				
Bromoform	19.59	1.0	20	0	97.9	70 - 129				
Bromomethane	16.26	1.0	20	0	81.3	70 - 130				
Carbon disulfide	46.13	2.0	40	0	115	70 - 130				
Carbon tetrachloride	21.6	1.0	20	0	108	70 - 130				
Chlorobenzene	22.46	1.0	20	0	112	70 - 114				
Chloroethane	23.87	1.0	20	0	119	70 - 130				
Chloroform	21.58	1.0	20	0	108	70 - 125				
Chloromethane	18.36	1.0	20	0	91.8	70 - 130				
cis-1,2-Dichloroethene	22.93	1.0	20	0	115	70 - 128				
cis-1,3-Dichloropropene	23.27	1.0	20	0	116	70 - 125				
Cyclohexane	25.99	1.0	20	0	130	70 - 130				
Dibromochloromethane	20.1	1.0	20	0	100	70 - 124				
Dichlorodifluoromethane	22.91	1.0	20	0	115	70 - 130				
Ethylbenzene	23.01	1.0	20	0	115	70 - 124				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416348 (0) **Instrument:** VOA4 **Method:** LOW LEVEL VOLATILES BY SW8260C

MS Sample ID: **HS22081670-01MS** Units: **ug/L** Analysis Date: **01-Sep-2022 11:19**
 Client ID: Run ID: **VOA4_416348** SeqNo: **6830666** PrepDate: DF: **1**
 Analyte Result PQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD RPD Limit Qual

Isopropylbenzene	24.21	1.0	20	0	121	70 - 130				
m,p-Xylene	47.82	2.0	40	0	120	70 - 130				
Methyl acetate	19.73	1.0	20	0	98.7	76 - 122				
Methyl tert-butyl ether	20.58	1.0	20	0	103	70 - 130				
Methylcyclohexane	26.75	1.0	20	0	134	61 - 158				
Methylene chloride	21.95	2.0	20	0	110	70 - 128				
o-Xylene	23.13	1.0	20	0	116	70 - 124				
Styrene	1.721	1.0	20	0	8.61	70 - 130				S
Tetrachloroethene	23.43	1.0	20	0	117	70 - 130				
Toluene	22.58	1.0	20	0	113	70 - 123				
trans-1,2-Dichloroethene	21.82	1.0	20	0	109	70 - 130				
trans-1,3-Dichloropropene	20.69	1.0	20	0	103	70 - 121				
Trichloroethene	23.13	1.0	20	0	116	70 - 129				
Trichlorofluoromethane	22.84	1.0	20	0	114	70 - 130				
Vinyl chloride	24.25	1.0	20	0	121	70 - 130				
Xylenes, Total	70.94	1.0	60	0	118	70 - 130				
Surr: 1,2-Dichloroethane-d4	47.54	1.0	50	0	95.1	70 - 126				
Surr: 4-Bromofluorobenzene	50.79	1.0	50	0	102	77 - 113				
Surr: Dibromofluoromethane	47.23	1.0	50	0	94.5	77 - 123				
Surr: Toluene-d8	50.65	1.0	50	0	101	82 - 127				

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416348 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C						
MSD	Sample ID: HS22081670-01MSD	Units: ug/L			Analysis Date: 01-Sep-2022 11:40					
Client ID:	Run ID: VOA4_416348	SeqNo: 6830667	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.52	1.0	20	0	108	70 - 130	20.86	3.11	20	
1,1,2,2-Tetrachloroethane	26.24	1.0	20	0	131	70 - 123	24.98	4.91	20	S
1,1,2-Trichlor-1,2,2-trifluoroethane	25.1	1.0	20	0	126	70 - 130	24.11	4.02	20	
1,1,2-Trichloroethane	23.55	1.0	20	0	118	70 - 117	22.68	3.78	20	S
1,1-Dichloroethane	22.84	1.0	20	0	114	70 - 127	22.58	1.16	20	
1,1-Dichloroethene	22.76	1.0	20	0	114	70 - 130	22.04	3.23	20	
1,2,4-Trichlorobenzene	22.55	1.0	20	0	113	70 - 125	21.63	4.15	20	
1,2-Dibromo-3-chloropropane	25.61	1.0	20	0	128	70 - 130	23.12	10.2	20	
1,2-Dibromoethane	22.66	1.0	20	0	113	70 - 124	21.88	3.47	20	
1,2-Dichlorobenzene	23.76	1.0	20	0	119	70 - 115	22.35	6.12	20	S
1,2-Dichloroethane	22.07	1.0	20	0	110	70 - 127	21.81	1.18	20	
1,2-Dichloropropane	24.04	1.0	20	0	120	70 - 122	23.44	2.54	20	
1,3-Dichlorobenzene	23.69	1.0	20	0	118	70 - 119	21.71	8.73	20	
1,4-Dichlorobenzene	22.95	1.0	20	0	115	70 - 114	21.29	7.53	20	S
2-Butanone	38.59	2.0	40	0	96.5	70 - 130	38.49	0.257	20	
2-Hexanone	54.71	2.0	40	0	137	70 - 130	52.83	3.51	20	S
4-Methyl-2-pentanone	55.74	2.0	40	0	139	70 - 130	52.75	5.51	20	S
Acetone	42.35	2.0	40	0	106	70 - 130	36.36	15.2	20	
Benzene	23.25	1.0	20	0	116	70 - 127	22.77	2.08	20	
Bromodichloromethane	22	1.0	20	0	110	70 - 124	21.08	4.28	20	
Bromoform	20.11	1.0	20	0	101	70 - 129	19.59	2.6	20	
Bromomethane	16.19	1.0	20	0	81.0	70 - 130	16.26	0.432	20	
Carbon disulfide	47.57	2.0	40	0	119	70 - 130	46.13	3.08	20	
Carbon tetrachloride	23.46	1.0	20	0	117	70 - 130	21.6	8.27	20	
Chlorobenzene	22.63	1.0	20	0	113	70 - 114	22.46	0.78	20	
Chloroethane	24.89	1.0	20	0	124	70 - 130	23.87	4.18	20	
Chloroform	21.19	1.0	20	0	106	70 - 125	21.58	1.84	20	
Chloromethane	17.26	1.0	20	0	86.3	70 - 130	18.36	6.14	20	
cis-1,2-Dichloroethene	22.42	1.0	20	0	112	70 - 128	22.93	2.24	20	
cis-1,3-Dichloropropene	23.25	1.0	20	0	116	70 - 125	23.27	0.0545	20	
Cyclohexane	26.68	1.0	20	0	133	70 - 130	25.99	2.63	20	S
Dibromochloromethane	21.15	1.0	20	0	106	70 - 124	20.1	5.12	20	
Dichlorodifluoromethane	22.52	1.0	20	0	113	70 - 130	22.91	1.74	20	
Ethylbenzene	23.42	1.0	20	0	117	70 - 124	23.01	1.79	20	

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416348 (0)		Instrument: VOA4		Method: LOW LEVEL VOLATILES BY SW8260C						
MSD	Sample ID: HS22081670-01MSD	Units: ug/L			Analysis Date: 01-Sep-2022 11:40					
Client ID:	Run ID: VOA4_416348	SeqNo: 6830667	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	24.82	1.0	20	0	124	70 - 130	24.21	2.49	20	
m,p-Xylene	49.45	2.0	40	0	124	70 - 130	47.82	3.35	20	
Methyl acetate	21.6	1.0	20	0	108	76 - 122	19.73	9.02	20	
Methyl tert-butyl ether	20.92	1.0	20	0	105	70 - 130	20.58	1.67	20	
Methylcyclohexane	27.02	1.0	20	0	135	61 - 158	26.75	1.02	20	
Methylene chloride	22.65	2.0	20	0	113	70 - 128	21.95	3.11	20	
o-Xylene	23.41	1.0	20	0	117	70 - 124	23.13	1.21	20	
Styrene	0.8581	1.0	20	0	4.29	70 - 130	1.721	0	20	JS
Tetrachloroethene	24.6	1.0	20	0	123	70 - 130	23.43	4.87	20	
Toluene	23.32	1.0	20	0	117	70 - 123	22.58	3.22	20	
trans-1,2-Dichloroethene	22.26	1.0	20	0	111	70 - 130	21.82	1.99	20	
trans-1,3-Dichloropropene	20.85	1.0	20	0	104	70 - 121	20.69	0.751	20	
Trichloroethene	24.14	1.0	20	0	121	70 - 129	23.13	4.28	20	
Trichlorofluoromethane	22.59	1.0	20	0	113	70 - 130	22.84	1.14	20	
Vinyl chloride	24.2	1.0	20	0	121	70 - 130	24.25	0.204	20	
Xylenes, Total	72.86	1.0	60	0	121	70 - 130	70.94	2.66	20	
Surr: 1,2-Dichloroethane-d4	46.03	1.0	50	0	92.1	70 - 126	47.54	3.23	20	
Surr: 4-Bromofluorobenzene	50.04	1.0	50	0	100	77 - 113	50.79	1.47	20	
Surr: Dibromofluoromethane	45.08	1.0	50	0	90.2	77 - 123	47.23	4.67	20	
Surr: Toluene-d8	50.24	1.0	50	0	100	82 - 127	50.65	0.82	20	

The following samples were analyzed in this batch: HS22081572-12

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416391 (0)	Instrument: Balance1	Method: TOTAL DISSOLVED SOLIDS BY SM2540C-2011
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MBLK	Sample ID: WBLK-083122	Units: mg/L	Analysis Date: 31-Aug-2022 16:36							
Client ID:	Run ID: Balance1_416391	SeqNo: 6831408	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) U 10.0

LCS	Sample ID: WLCS-083122	Units: mg/L	Analysis Date: 31-Aug-2022 16:36							
Client ID:	Run ID: Balance1_416391	SeqNo: 6831409	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 1070 10.0 1000 0 107 85 - 115

DUP	Sample ID: HS22081439-03DUP	Units: mg/L	Analysis Date: 31-Aug-2022 16:36							
Client ID:	Run ID: Balance1_416391	SeqNo: 6831402	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 1512 10.0 1508 0.265 5

DUP	Sample ID: HS22081394-01DUP	Units: mg/L	Analysis Date: 31-Aug-2022 16:36							
Client ID:	Run ID: Balance1_416391	SeqNo: 6831397	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 794 10.0 798 0.503 5

The following samples were analyzed in this batch: HS22081572-05 HS22081572-06 HS22081572-07

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416467 (0)	Instrument: Balance1	Method: TOTAL DISSOLVED SOLIDS BY SM2540C-2011
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MBLK	Sample ID: WBLK-090122	Units: mg/L	Analysis Date: 01-Sep-2022 17:09							
Client ID:	Run ID: Balance1_416467	SeqNo: 6833205	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) U 10.0

LCS	Sample ID: WLCS-090122	Units: mg/L	Analysis Date: 01-Sep-2022 17:09							
Client ID:	Run ID: Balance1_416467	SeqNo: 6833206	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 1084 10.0 1000 0 108 85 - 115

DUP	Sample ID: HS22081584-04DUP	Units: mg/L	Analysis Date: 01-Sep-2022 17:09							
Client ID:	Run ID: Balance1_416467	SeqNo: 6833202	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 1370 10.0 1366 0.292 5

DUP	Sample ID: HS22081572-08DUP	Units: mg/L	Analysis Date: 01-Sep-2022 17:09							
Client ID: MW-4	Run ID: Balance1_416467	SeqNo: 6833192	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 554 10.0 556 0.36 5

The following samples were analyzed in this batch:	HS22081572-08	HS22081572-09	HS22081572-10	HS22081572-11
	HS22081572-12	HS22081572-13		

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416481 (0)	Instrument: ICS-Integrion	Method: ANIONS BY SW9056A
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MBLK	Sample ID: MBLK	Units: mg/L	Analysis Date: 02-Sep-2022 19:15							
Client ID:	Run ID: ICS-Integrion_416481	SeqNo: 6833640	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Chloride	U	0.500								
Sulfate	U	0.500								

LCS	Sample ID: LCS	Units: mg/L	Analysis Date: 02-Sep-2022 19:20							
Client ID:	Run ID: ICS-Integrion_416481	SeqNo: 6833641	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Chloride	19.38	0.500	20	0	96.9	80 - 120				
Sulfate	19.78	0.500	20	0	98.9	80 - 120				

MS	Sample ID: HS22081572-05MS	Units: mg/L	Analysis Date: 02-Sep-2022 19:31							
Client ID: MW-1	Run ID: ICS-Integrion_416481	SeqNo: 6833643	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Chloride	69.7	0.500	10	60.74	89.6	80 - 120				O
Sulfate	114.6	0.500	10	106.8	78.3	80 - 120				SEO

MSD	Sample ID: HS22081572-05MSD	Units: mg/L	Analysis Date: 02-Sep-2022 19:36							
Client ID: MW-1	Run ID: ICS-Integrion_416481	SeqNo: 6833644	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Chloride	69.32	0.500	10	60.74	85.8	80 - 120	69.7	0.547	20	O
Sulfate	114.1	0.500	10	106.8	73.2	80 - 120	114.6	0.448	20	SEO

The following samples were analyzed in this batch:

HS22081572-05	HS22081572-06	HS22081572-07	HS22081572-08
HS22081572-09	HS22081572-10	HS22081572-11	HS22081572-12
HS22081572-13			

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

QC BATCH REPORT

Batch ID: R416507 (0)	Instrument: ICS-Integrion	Method: ANIONS BY SW9056A
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MBLK	Sample ID: MBLK	Units: mg/L	Analysis Date: 03-Sep-2022 11:06							
Client ID:	Run ID: ICS-Integrion_416507	SeqNo: 6834252	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Sulfate U 0.500

LCS	Sample ID: LCS	Units: mg/L	Analysis Date: 03-Sep-2022 11:11							
Client ID:	Run ID: ICS-Integrion_416507	SeqNo: 6834253	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Sulfate 19.54 0.500 20 0 97.7 80 - 120

MS	Sample ID: HS22090156-01MS	Units: mg/L	Analysis Date: 03-Sep-2022 11:22							
Client ID:	Run ID: ICS-Integrion_416507	SeqNo: 6834255	PrepDate: DF: 5							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Sulfate 3089 2.50 50 3282 -387 80 - 120 SEO

MSD	Sample ID: HS22090156-01MSD	Units: mg/L	Analysis Date: 03-Sep-2022 11:27							
Client ID:	Run ID: ICS-Integrion_416507	SeqNo: 6834256	PrepDate: DF: 5							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Sulfate 3084 2.50 50 3282 -398 80 - 120 3089 0.171 20 SEO

The following samples were analyzed in this batch: HS22081572-05

ALS Houston, US

Date: 06-Sep-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney NM
WorkOrder: HS22081572

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
µg/L	Micrograms per Liter

ALS Houston, US

Date: 06-Sep-22

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

ALS Houston, US

Date: 06-Sep-22

Sample Receipt Checklist

Work Order ID: HS22081572

Date/Time Received: 27-Aug-2022 08:40

Client Name: Apex Titan-Midland

Received by: Paresh M. Giga

Completed By: /S/ Nilesh D. Ranchod	29-Aug-2022 18:11	Reviewed by: /S/ Dane J. Wacasey	06-Sep-2022 09:10
eSignature	Date/Time	eSignature	Date/Time

Matrices: **Water**

Carrier name: **FedEx Priority Overnight**

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- VOA/TX1005/TX1006 Solids in hermetically sealed vials? Yes No Not Present
- Chain of custody present? Yes No 1 Page(s)
- Chain of custody signed when relinquished and received? Yes No COC IDs:276989
- Samplers name present on COC? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container/Temp Blank temperature in compliance? Yes No

Temperature(s)/Thermometer(s):	1.7C/1.5C , 1.3C/1.1C UC/C	IR #31
Cooler(s)/Kit(s):	49483/49558	
Date/Time sample(s) sent to storage:	08/27/2022 13:00	
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/> No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:		

Login Notes: 2 X Coolers with Volatiles received 2 X TBs in each logged with analysis

Client Contacted:	Date Contacted:	Person Contacted:
Contacted By:	Regarding:	
Comments:		
Corrective Action:		

Cincinnati, OH
+1 513 733 5336
Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511
Holland, MI
+1 616 399 6070



Chain of Custody Form

HS22081572

, WV

Page 1 of 1

COC ID: 276989

Apex Titan
Centurion Pipeline - Brahaney



Customer Information		Project Information		ALS Project Manager:	
Purchase Order		Project Name	Centurion Pipeline - Brahaney	A	8260_LL_W (8260 VOC TCL 4.3) [3xVOAHCI]
Work Order		Project Number	New Mecico	B	8015_GRO_W (8015 TPH-GRO) [3xVOAHCI]
Company Name	Apex Titan	Bill To Company	Apex Titan	C	8015_DRO_LVI (8015 TPH-DRO/ORO) [3xVOA Am Neat]
Send Report To	John Faught	Invoice Attn	John Faught	D	9056_anions_W (9056 Cl, SO4) [250ml Pl Neat-shared]
Address	505 N. Big Spring Street, Suite 3	Address	505 N. Big Spring Street, Suite 3	E	TDS_W 2540C (2540C TDS) [250ml Pl Neat-shared]
				F	
City/State/Zip	Midland, TX 79701	City/State/Zip	Midland TX 79701	G	
Phone	(432) 695-6016	Phone	(432) 695-6016	H	
Fax		Fax		I	
e-Mail Address	John.Faught@apexcos.com	e-Mail Address	John.Faught@apexcos.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Trip Blank			Water	1,8	4	X	X									
2	MW-1	8/25/22	0905	GW	1,8	10	X	X	X	X	X						
3	MW-2		1020	GW	1,8	10	X	X	X	X	X						
4	MW-3		1130	GW	1,8	10	X	X	X	X	X						
5	MW-4		1240	GW	1,8	10	X	X	X	X	X						
6	MW-5		1350	GW	1,8	10	X	X	X	X	X						
7	MW-6		1515	GW	1,8	10	X	X	X	X	X						
8	FB-01		1225	GW	1,8	10	X	X	X	X	X						
9	FB-01		1120	GW	1,8	10	X	X	X	X	X						
10	Dup 01			GW	1,8	10	X	X	X	X	X						

Sampler(s) Please Print & Sign: *John Faught* *John Faught*

Shipment Method: FedEx Required Turnaround Time: (Check Box) STD 10 Wk Days 5 Wk Days Other 2 Wk Days 24 Hour

Results Due Date: _____

Relinquished by: *John Faught* Date: 8/26/22 Time: 1700

Received by (Laboratory): *[Signature]* Date: 8/27/22 Time: 08:40

QC Package: (Check One Box Below) Level II Std QC TRRP Checklist
 Level III Std QC/Raw Data TRRP Level IV
 Level IV SW646/CLP
 Other

Logged by (Laboratory): _____ Cooler ID: 49483 Cooler Temp: 1.70
49558 1.30

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-4°C 9-5035

1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

Copyright 2011 by ALS Environmental.

 ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By:
	Date: 8/27/22 Time: 1700 Name: [Signature] Company: [Signature] 49483		SM Date: 08/27/22

49483 AUG 27 2022

 ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By:
	Date: 8/27/22 Time: 1700 Name: [Signature] Company: [Signature] 49483		SM Date: 08/27/22



49483

Part # 15849-434 (NTM) EXP 08/23

ORIGIN ID: SGRA (432) 695-6016
 JOHN RAUGHT
 APEX TITAN
 505 N. BIG SPRING STREET
 SUITE 3018
 MIDLAND, TX 79701
 UNITED STATES US

SHIP DATE: 19AUG22
 ACT WT: 1.00 LB MAX
 CAD: 0221247, CAFESS12
 DIMS: 26x14x14 IN

TO SHIPPING DEPT
 ALS LABORATORY GROUP
 10450 STANCLIFF RD
 SUITE 210
 HOUSTON TX 77099
 (281) 530-5656
 REF: CENTURION - BO 87279 - DW

RMA: [Barcode]

808 1 12:00

FedEx Express

E

SATURDAY 12:00P
 PRIORITY OVERNIGHT

TX - US IAH

77099

TI
 FedEx
 FRK# 5789 1996 9928
 0221

XO SGRA

[Barcode]

 ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77009 Tel. +1 281 530 5656 Fax. +1 281 530 5687	CUSTODY SEAL		Seal Broken By:
	Date: 8/24/22	Time: 1700	GW
	Name: John Faught	Company: ALS	Date: 08/27/22

 ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By:
	Date: 8/24/22	Time: 1700	GW
	Name: John Faught	Company: ALS	Date: 08/27/22

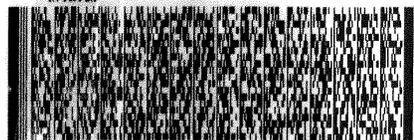


ORIGIN ID:SGRA (432) 695-6016
 JOHN FAUGHT
 APEX TITAN
 505 N. BIG SPRING STREET
 SUITE 301A
 MIDLAND, TX 79701
 UNITED STATES US

SHIP DATE: 19AUG22
 ACTWGT: 1.00 LB HAN
 CAD: 0221247/DAF3512
 DIMS: 26x14x14 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
 (281) 530-5666
REF: CENTURION - BO 87279 - DW

RMA: 01111111



FedEx
 TRK# 5789 1996 9939
 0221

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO SGRA

77099
 TX-US IAH





10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

December 05, 2022

Josh Pickett
Apex Titan
505 N. Big Spring Street, Suite 301A
Midland, TX 79701

Work Order: **HS22110835**

Laboratory Results for: **Centurion Pipeline - Brahaney**

Dear Josh Pickett,

ALS Environmental received 6 sample(s) on Nov 14, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: DAYNA.FISHER

Dane J. Wacasey

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
Work Order: HS22110835

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22110835-01	Trip Blank - CG-102122-128	Water		11-Nov-2022 00:00	14-Nov-2022 09:45	<input type="checkbox"/>
HS22110835-02	Trip Blank - CG-102122-125	Water		11-Nov-2022 00:00	14-Nov-2022 09:45	<input type="checkbox"/>
HS22110835-03	MW-1	Groundwater		11-Nov-2022 09:45	14-Nov-2022 09:45	<input type="checkbox"/>
HS22110835-04	MW-2	Groundwater		11-Nov-2022 11:40	14-Nov-2022 09:45	<input type="checkbox"/>
HS22110835-05	MW-3	Groundwater		11-Nov-2022 13:45	14-Nov-2022 09:45	<input type="checkbox"/>
HS22110835-06	DUP-01	Groundwater		11-Nov-2022 00:00	14-Nov-2022 09:45	<input type="checkbox"/>

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
Work Order: HS22110835

CASE NARRATIVE

GC Semivolatiles by Method SW8015M

Batch ID: 186236

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GC Volatiles by Method SW8015

Batch ID: R421838

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GCMS Volatiles by Method SW8260

Batch ID: R422064

Sample ID: HS22110738-01MS

- MS and MSD are for an unrelated sample

WetChemistry by Method SW9056

Batch ID: R423122

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Batch ID: R423096

Sample ID: HS22110585-01MS

- MS and MSD are for an unrelated sample (Sulfate)

Sample ID: HS22111617-02MS

- MS and MSD are for an unrelated sample (Sulfate)

WetChemistry by Method M2540C

Batch ID: R422320

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: Trip Blank - CG-102122-128
 Collection Date: 11-Nov-2022 00:00

ANALYTICAL REPORT

WorkOrder:HS22110835
 Lab ID:HS22110835-01
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 14:41
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 14:41
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 14:41
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	17-Nov-2022 14:41
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 14:41
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	17-Nov-2022 14:41
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 14:41
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 14:41
2-Butanone	U		0.50	2.0	ug/L	1	17-Nov-2022 14:41
2-Hexanone	U		1.0	2.0	ug/L	1	17-Nov-2022 14:41
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	17-Nov-2022 14:41
Acetone	U		2.0	2.0	ug/L	1	17-Nov-2022 14:41
Benzene	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
Bromodichloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
Bromoform	U		0.40	1.0	ug/L	1	17-Nov-2022 14:41
Bromomethane	U		0.40	1.0	ug/L	1	17-Nov-2022 14:41
Carbon disulfide	U		0.60	2.0	ug/L	1	17-Nov-2022 14:41
Carbon tetrachloride	U		0.50	1.0	ug/L	1	17-Nov-2022 14:41
Chlorobenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Chloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Chloroform	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
Chloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	17-Nov-2022 14:41
Cyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Dibromochloromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Ethylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Isopropylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
m,p-Xylene	U		0.50	2.0	ug/L	1	17-Nov-2022 14:41
Methyl acetate	U		1.0	1.0	ug/L	1	17-Nov-2022 14:41
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
Methylcyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: Trip Blank - CG-102122-128
 Collection Date: 11-Nov-2022 00:00

ANALYTICAL REPORT
 WorkOrder:HS22110835
 Lab ID:HS22110835-01
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
Methylene chloride	U		1.0	2.0	ug/L	1	17-Nov-2022 14:41
o-Xylene	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Styrene	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Tetrachloroethene	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Toluene	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
trans-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
trans-1,3-Dichloropropene	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
Trichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
Trichlorofluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Vinyl chloride	U		0.20	1.0	ug/L	1	17-Nov-2022 14:41
Xylenes, Total	U		0.30	1.0	ug/L	1	17-Nov-2022 14:41
Surr: 1,2-Dichloroethane-d4	87.6			70-126	%REC	1	17-Nov-2022 14:41
Surr: 4-Bromofluorobenzene	103			77-113	%REC	1	17-Nov-2022 14:41
Surr: Dibromofluoromethane	94.4			77-123	%REC	1	17-Nov-2022 14:41
Surr: Toluene-d8	99.5			82-127	%REC	1	17-Nov-2022 14:41

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: Trip Blank - CG-102122-125
 Collection Date: 11-Nov-2022 00:00

ANALYTICAL REPORT
 WorkOrder:HS22110835
 Lab ID:HS22110835-02
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015					Analyst: FT
Gasoline Range Organics	U		0.0100	0.0500	mg/L	1	15-Nov-2022 10:54
Surr: 4-Bromofluorobenzene	108			70-123	%REC	1	15-Nov-2022 10:54

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: MW-1
 Collection Date: 11-Nov-2022 09:45

ANALYTICAL REPORT

WorkOrder:HS22110835
 Lab ID:HS22110835-03
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 17:18
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 17:18
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 17:18
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	17-Nov-2022 17:18
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 17:18
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	17-Nov-2022 17:18
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 17:18
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 17:18
2-Butanone	U		0.50	2.0	ug/L	1	17-Nov-2022 17:18
2-Hexanone	U		1.0	2.0	ug/L	1	17-Nov-2022 17:18
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	17-Nov-2022 17:18
Acetone	U		2.0	2.0	ug/L	1	17-Nov-2022 17:18
Benzene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
Bromodichloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
Bromoform	U		0.40	1.0	ug/L	1	17-Nov-2022 17:18
Bromomethane	U		0.40	1.0	ug/L	1	17-Nov-2022 17:18
Carbon disulfide	U		0.60	2.0	ug/L	1	17-Nov-2022 17:18
Carbon tetrachloride	U		0.50	1.0	ug/L	1	17-Nov-2022 17:18
Chlorobenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Chloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Chloroform	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
Chloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	17-Nov-2022 17:18
Cyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Dibromochloromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Ethylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Isopropylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
m,p-Xylene	U		0.50	2.0	ug/L	1	17-Nov-2022 17:18
Methyl acetate	U		1.0	1.0	ug/L	1	17-Nov-2022 17:18
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
Methylcyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: MW-1
 Collection Date: 11-Nov-2022 09:45

ANALYTICAL REPORT

WorkOrder:HS22110835
 Lab ID:HS22110835-03
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride	U		1.0	2.0	ug/L	1	17-Nov-2022 17:18
o-Xylene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Styrene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Tetrachloroethene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Toluene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
trans-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
trans-1,3-Dichloropropene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
Trichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
Trichlorofluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Vinyl chloride	U		0.20	1.0	ug/L	1	17-Nov-2022 17:18
Xylenes, Total	U		0.30	1.0	ug/L	1	17-Nov-2022 17:18
Surr: 1,2-Dichloroethane-d4	87.1			70-126	%REC	1	17-Nov-2022 17:18
Surr: 4-Bromofluorobenzene	102			77-113	%REC	1	17-Nov-2022 17:18
Surr: Dibromofluoromethane	97.9			77-123	%REC	1	17-Nov-2022 17:18
Surr: Toluene-d8	98.7			82-127	%REC	1	17-Nov-2022 17:18
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics	U		0.0100	0.0500	mg/L	1	15-Nov-2022 14:00
Surr: 4-Bromofluorobenzene	99.7			70-123	%REC	1	15-Nov-2022 14:00
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 15-Nov-2022		Analyst: PPM	
TPH (Diesel Range)	0.31		0.021	0.052	mg/L	1	16-Nov-2022 02:39
TPH (Oil Range)	U		0.021	0.10	mg/L	1	16-Nov-2022 02:39
Surr: 2-Fluorobiphenyl	85.2			60-135	%REC	1	16-Nov-2022 02:39
TOTAL DISSOLVED SOLIDS BY SM2540C-2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	534		5.00	10.0	mg/L	1	18-Nov-2022 15:04
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	59.4		0.200	0.500	mg/L	1	02-Dec-2022 16:39
Sulfate	113		0.400	1.00	mg/L	2	03-Dec-2022 12:57

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: MW-2
 Collection Date: 11-Nov-2022 11:40

ANALYTICAL REPORT

WorkOrder:HS22110835
 Lab ID:HS22110835-04
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 17:41
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 17:41
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 17:41
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	17-Nov-2022 17:41
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 17:41
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	17-Nov-2022 17:41
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 17:41
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 17:41
2-Butanone	U		0.50	2.0	ug/L	1	17-Nov-2022 17:41
2-Hexanone	U		1.0	2.0	ug/L	1	17-Nov-2022 17:41
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	17-Nov-2022 17:41
Acetone	U		2.0	2.0	ug/L	1	17-Nov-2022 17:41
Benzene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
Bromodichloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
Bromoform	U		0.40	1.0	ug/L	1	17-Nov-2022 17:41
Bromomethane	U		0.40	1.0	ug/L	1	17-Nov-2022 17:41
Carbon disulfide	U		0.60	2.0	ug/L	1	17-Nov-2022 17:41
Carbon tetrachloride	U		0.50	1.0	ug/L	1	17-Nov-2022 17:41
Chlorobenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41
Chloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41
Chloroform	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
Chloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	17-Nov-2022 17:41
Cyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41
Dibromochloromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41
Ethylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41
Isopropylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41
m,p-Xylene	U		0.50	2.0	ug/L	1	17-Nov-2022 17:41
Methyl acetate	U		1.0	1.0	ug/L	1	17-Nov-2022 17:41
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	17-Nov-2022 17:41
Methylcyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 17:41

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: MW-2
 Collection Date: 11-Nov-2022 11:40

ANALYTICAL REPORT
 WorkOrder:HS22110835
 Lab ID:HS22110835-04
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride		U	1.0	2.0	ug/L	1	17-Nov-2022 17:41
o-Xylene		U	0.30	1.0	ug/L	1	17-Nov-2022 17:41
Styrene		U	0.30	1.0	ug/L	1	17-Nov-2022 17:41
Tetrachloroethene		U	0.30	1.0	ug/L	1	17-Nov-2022 17:41
Toluene		U	0.20	1.0	ug/L	1	17-Nov-2022 17:41
trans-1,2-Dichloroethene		U	0.20	1.0	ug/L	1	17-Nov-2022 17:41
trans-1,3-Dichloropropene		U	0.20	1.0	ug/L	1	17-Nov-2022 17:41
Trichloroethene		U	0.20	1.0	ug/L	1	17-Nov-2022 17:41
Trichlorofluoromethane		U	0.30	1.0	ug/L	1	17-Nov-2022 17:41
Vinyl chloride		U	0.20	1.0	ug/L	1	17-Nov-2022 17:41
Xylenes, Total		U	0.30	1.0	ug/L	1	17-Nov-2022 17:41
Surr: 1,2-Dichloroethane-d4	88.8			70-126	%REC	1	17-Nov-2022 17:41
Surr: 4-Bromofluorobenzene	103			77-113	%REC	1	17-Nov-2022 17:41
Surr: Dibromofluoromethane	95.6			77-123	%REC	1	17-Nov-2022 17:41
Surr: Toluene-d8	95.1			82-127	%REC	1	17-Nov-2022 17:41
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics		U	0.0100	0.0500	mg/L	1	15-Nov-2022 14:16
Surr: 4-Bromofluorobenzene	105			70-123	%REC	1	15-Nov-2022 14:16
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 15-Nov-2022		Analyst: PPM	
TPH (Diesel Range)	0.23		0.021	0.053	mg/L	1	16-Nov-2022 03:08
TPH (Oil Range)		U	0.021	0.11	mg/L	1	16-Nov-2022 03:08
Surr: 2-Fluorobiphenyl	90.5			60-135	%REC	1	16-Nov-2022 03:08
TOTAL DISSOLVED SOLIDS BY SM2540C-2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	494		5.00	10.0	mg/L	1	18-Nov-2022 15:04
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	53.8		0.200	0.500	mg/L	1	02-Dec-2022 16:45
Sulfate	113		0.400	1.00	mg/L	2	03-Dec-2022 13:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: MW-3
 Collection Date: 11-Nov-2022 13:45

ANALYTICAL REPORT

WorkOrder:HS22110835
 Lab ID:HS22110835-05
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 18:03
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 18:03
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 18:03
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	17-Nov-2022 18:03
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 18:03
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	17-Nov-2022 18:03
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 18:03
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 18:03
2-Butanone	U		0.50	2.0	ug/L	1	17-Nov-2022 18:03
2-Hexanone	U		1.0	2.0	ug/L	1	17-Nov-2022 18:03
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	17-Nov-2022 18:03
Acetone	U		2.0	2.0	ug/L	1	17-Nov-2022 18:03
Benzene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
Bromodichloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
Bromoform	U		0.40	1.0	ug/L	1	17-Nov-2022 18:03
Bromomethane	U		0.40	1.0	ug/L	1	17-Nov-2022 18:03
Carbon disulfide	U		0.60	2.0	ug/L	1	17-Nov-2022 18:03
Carbon tetrachloride	U		0.50	1.0	ug/L	1	17-Nov-2022 18:03
Chlorobenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Chloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Chloroform	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
Chloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	17-Nov-2022 18:03
Cyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Dibromochloromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Ethylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Isopropylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
m,p-Xylene	U		0.50	2.0	ug/L	1	17-Nov-2022 18:03
Methyl acetate	U		1.0	1.0	ug/L	1	17-Nov-2022 18:03
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
Methylcyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: MW-3
 Collection Date: 11-Nov-2022 13:45

ANALYTICAL REPORT

WorkOrder:HS22110835
 Lab ID:HS22110835-05
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride	U		1.0	2.0	ug/L	1	17-Nov-2022 18:03
o-Xylene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Styrene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Tetrachloroethene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Toluene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
trans-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
trans-1,3-Dichloropropene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
Trichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
Trichlorofluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Vinyl chloride	U		0.20	1.0	ug/L	1	17-Nov-2022 18:03
Xylenes, Total	U		0.30	1.0	ug/L	1	17-Nov-2022 18:03
Surr: 1,2-Dichloroethane-d4	90.0			70-126	%REC	1	17-Nov-2022 18:03
Surr: 4-Bromofluorobenzene	103			77-113	%REC	1	17-Nov-2022 18:03
Surr: Dibromofluoromethane	99.5			77-123	%REC	1	17-Nov-2022 18:03
Surr: Toluene-d8	96.6			82-127	%REC	1	17-Nov-2022 18:03
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics	U		0.0100	0.0500	mg/L	1	15-Nov-2022 14:31
Surr: 4-Bromofluorobenzene	102			70-123	%REC	1	15-Nov-2022 14:31
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 15-Nov-2022		Analyst: PPM	
TPH (Diesel Range)	U		0.020	0.051	mg/L	1	16-Nov-2022 03:37
TPH (Oil Range)	U		0.020	0.10	mg/L	1	16-Nov-2022 03:37
Surr: 2-Fluorobiphenyl	82.5			60-135	%REC	1	16-Nov-2022 03:37
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	498		5.00	10.0	mg/L	1	18-Nov-2022 15:04
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	51.6		0.200	0.500	mg/L	1	02-Dec-2022 16:50
Sulfate	91.5		0.200	0.500	mg/L	1	02-Dec-2022 16:50

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: DUP-01
 Collection Date: 11-Nov-2022 00:00

ANALYTICAL REPORT

WorkOrder:HS22110835
 Lab ID:HS22110835-06
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260					Analyst: FT
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 18:26
1,1,2-Trichlor-1,2,2-trifluoroethane	U		0.50	1.0	ug/L	1	17-Nov-2022 18:26
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 18:26
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	17-Nov-2022 18:26
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	17-Nov-2022 18:26
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	17-Nov-2022 18:26
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 18:26
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	17-Nov-2022 18:26
2-Butanone	U		0.50	2.0	ug/L	1	17-Nov-2022 18:26
2-Hexanone	U		1.0	2.0	ug/L	1	17-Nov-2022 18:26
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	17-Nov-2022 18:26
Acetone	U		2.0	2.0	ug/L	1	17-Nov-2022 18:26
Benzene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
Bromodichloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
Bromoform	U		0.40	1.0	ug/L	1	17-Nov-2022 18:26
Bromomethane	U		0.40	1.0	ug/L	1	17-Nov-2022 18:26
Carbon disulfide	U		0.60	2.0	ug/L	1	17-Nov-2022 18:26
Carbon tetrachloride	U		0.50	1.0	ug/L	1	17-Nov-2022 18:26
Chlorobenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Chloroethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Chloroform	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
Chloromethane	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	17-Nov-2022 18:26
Cyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Dibromochloromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Ethylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Isopropylbenzene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
m,p-Xylene	U		0.50	2.0	ug/L	1	17-Nov-2022 18:26
Methyl acetate	U		1.0	1.0	ug/L	1	17-Nov-2022 18:26
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
Methylcyclohexane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
 Project: Centurion Pipeline - Brahaney
 Sample ID: DUP-01
 Collection Date: 11-Nov-2022 00:00

ANALYTICAL REPORT

WorkOrder:HS22110835
 Lab ID:HS22110835-06
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: FT			
Methylene chloride	U		1.0	2.0	ug/L	1	17-Nov-2022 18:26
o-Xylene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Styrene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Tetrachloroethene	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Toluene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
trans-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
trans-1,3-Dichloropropene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
Trichloroethene	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
Trichlorofluoromethane	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Vinyl chloride	U		0.20	1.0	ug/L	1	17-Nov-2022 18:26
Xylenes, Total	U		0.30	1.0	ug/L	1	17-Nov-2022 18:26
Surr: 1,2-Dichloroethane-d4	90.2			70-126	%REC	1	17-Nov-2022 18:26
Surr: 4-Bromofluorobenzene	105			77-113	%REC	1	17-Nov-2022 18:26
Surr: Dibromofluoromethane	102			77-123	%REC	1	17-Nov-2022 18:26
Surr: Toluene-d8	93.0			82-127	%REC	1	17-Nov-2022 18:26
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics	U		0.0100	0.0500	mg/L	1	15-Nov-2022 14:47
Surr: 4-Bromofluorobenzene	106			70-123	%REC	1	15-Nov-2022 14:47
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 15-Nov-2022		Analyst: PPM	
TPH (Diesel Range)	0.051	J	0.021	0.054	mg/L	1	16-Nov-2022 04:06
TPH (Oil Range)	0.033	J	0.021	0.11	mg/L	1	16-Nov-2022 04:06
Surr: 2-Fluorobiphenyl	85.2			60-135	%REC	1	16-Nov-2022 04:06
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: CWG			
Total Dissolved Solids (Residue, Filterable)	532		5.00	10.0	mg/L	1	18-Nov-2022 15:04
ANIONS BY SW9056A		Method:SW9056		Analyst: TH			
Chloride	57.3		0.200	0.500	mg/L	1	02-Dec-2022 16:55
Sulfate	112		0.400	1.00	mg/L	2	03-Dec-2022 13:08

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 05-Dec-22

Weight / Prep Log

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

Batch ID: 186236 Start Date: 15 Nov 2022 17:10 End Date: 15 Nov 2022 18:30
Method: SW3511 Prep Code: 3511_DRO

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22110835-03		31.72 (mL)	2 (mL)	0.06305	40 mL Amber
HS22110835-04		31.35 (mL)	2 (mL)	0.0638	40 mL Amber
HS22110835-05		32.37 (mL)	2 (mL)	0.06179	40 mL Amber
HS22110835-06		30.76 (mL)	2 (mL)	0.06502	40 mL Amber

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 186236 (1)		Test Name : TPH DRO/ORO BY SW8015C			Matrix: Groundwater	
HS22110835-03	MW-1	11 Nov 2022 09:45		15 Nov 2022 17:10	16 Nov 2022 02:39	1
HS22110835-04	MW-2	11 Nov 2022 11:40		15 Nov 2022 17:10	16 Nov 2022 03:08	1
HS22110835-05	MW-3	11 Nov 2022 13:45		15 Nov 2022 17:10	16 Nov 2022 03:37	1
HS22110835-06	DUP-01	11 Nov 2022 00:00		15 Nov 2022 17:10	16 Nov 2022 04:06	1
Batch ID: R421838 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Groundwater	
HS22110835-03	MW-1	11 Nov 2022 09:45			15 Nov 2022 14:00	1
HS22110835-04	MW-2	11 Nov 2022 11:40			15 Nov 2022 14:16	1
HS22110835-05	MW-3	11 Nov 2022 13:45			15 Nov 2022 14:31	1
HS22110835-06	DUP-01	11 Nov 2022 00:00			15 Nov 2022 14:47	1
Batch ID: R421838 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Water	
HS22110835-02	Trip Blank - CG-102122-125	11 Nov 2022 00:00			15 Nov 2022 10:54	1
Batch ID: R422064 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Groundwater	
HS22110835-03	MW-1	11 Nov 2022 09:45			17 Nov 2022 17:18	1
HS22110835-04	MW-2	11 Nov 2022 11:40			17 Nov 2022 17:41	1
HS22110835-05	MW-3	11 Nov 2022 13:45			17 Nov 2022 18:03	1
HS22110835-06	DUP-01	11 Nov 2022 00:00			17 Nov 2022 18:26	1
Batch ID: R422064 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Water	
HS22110835-01	Trip Blank - CG-102122-128	11 Nov 2022 00:00			17 Nov 2022 14:41	1
Batch ID: R422320 (0)		Test Name : TOTAL DISSOLVED SOLIDS BY SM2540C-2011			Matrix: Groundwater	
HS22110835-03	MW-1	11 Nov 2022 09:45			18 Nov 2022 15:04	1
HS22110835-04	MW-2	11 Nov 2022 11:40			18 Nov 2022 15:04	1
HS22110835-05	MW-3	11 Nov 2022 13:45			18 Nov 2022 15:04	1
HS22110835-06	DUP-01	11 Nov 2022 00:00			18 Nov 2022 15:04	1
Batch ID: R423096 (0)		Test Name : ANIONS BY SW9056A			Matrix: Groundwater	
HS22110835-03	MW-1	11 Nov 2022 09:45			02 Dec 2022 16:39	1
HS22110835-04	MW-2	11 Nov 2022 11:40			02 Dec 2022 16:45	1
HS22110835-05	MW-3	11 Nov 2022 13:45			02 Dec 2022 16:50	1
HS22110835-06	DUP-01	11 Nov 2022 00:00			02 Dec 2022 16:55	1
Batch ID: R423122 (0)		Test Name : ANIONS BY SW9056A			Matrix: Groundwater	
HS22110835-03	MW-1	11 Nov 2022 09:45			03 Dec 2022 12:57	2
HS22110835-04	MW-2	11 Nov 2022 11:40			03 Dec 2022 13:03	2
HS22110835-06	DUP-01	11 Nov 2022 00:00			03 Dec 2022 13:08	2

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: 186236 (1)	Instrument: FID-16	Method: TPH DRO/ORO BY SW8015C
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MBLK	Sample ID: MBLK-186236	Units: mg/L	Analysis Date: 15-Nov-2022 21:17						
Client ID:	Run ID: FID-16_422179	SeqNo: 6989685	PrepDate: 15-Nov-2022 DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
TPH (Diesel Range)	U	0.050							
TPH (Oil Range)	U	0.10							
Surr: 2-Fluorobiphenyl	0.03737	0.0050	0.06	0	62.3	60 - 135			

LCS	Sample ID: LCS-186236	Units: mg/L	Analysis Date: 15-Nov-2022 21:46						
Client ID:	Run ID: FID-16_422179	SeqNo: 6989686	PrepDate: 15-Nov-2022 DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
TPH (Diesel Range)	0.5448	0.050	0.6	0	90.8	70 - 130			
TPH (Oil Range)	0.6997	0.10	0.6	0	117	70 - 130			
Surr: 2-Fluorobiphenyl	0.04607	0.0050	0.06	0	76.8	60 - 135			

LCSD	Sample ID: LCSD-186236	Units: mg/L	Analysis Date: 15-Nov-2022 22:15						
Client ID:	Run ID: FID-16_422179	SeqNo: 6989687	PrepDate: 15-Nov-2022 DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
TPH (Diesel Range)	0.4776	0.050	0.6	0	79.6	70 - 130	0.5448	13.1	20
TPH (Oil Range)	0.6333	0.10	0.6	0	106	70 - 130	0.6997	9.96	20
Surr: 2-Fluorobiphenyl	0.04257	0.0050	0.06	0	70.9	60 - 135	0.04607	7.91	20

The following samples were analyzed in this batch: HS22110835-03 HS22110835-04 HS22110835-05 HS22110835-06

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R421838 (0)	Instrument: FID-20	Method: GASOLINE RANGE ORGANICS BY SW8015C
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MBLK	Sample ID: MBLK-221115	Units: mg/L	Analysis Date: 15-Nov-2022 10:22							
Client ID:	Run ID: FID-20_421838	SeqNo: 6981778	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Gasoline Range Organics	U	0.0500								
Surr: 4-Bromofluorobenzene	0.1091	0.00500	0.1	0	109	70 - 121				

LCS	Sample ID: LCS-221115	Units: mg/L	Analysis Date: 15-Nov-2022 09:36							
Client ID:	Run ID: FID-20_421838	SeqNo: 6981776	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Gasoline Range Organics	0.8313	0.0500	1	0	83.1	76 - 124				
Surr: 4-Bromofluorobenzene	0.09195	0.00500	0.1	0	92.0	52 - 138				

LCSD	Sample ID: LCSD-221115	Units: mg/L	Analysis Date: 15-Nov-2022 09:52							
Client ID:	Run ID: FID-20_421838	SeqNo: 6981777	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Gasoline Range Organics	0.8815	0.0500	1	0	88.2	76 - 124	0.8313	5.87	20	
Surr: 4-Bromofluorobenzene	0.09001	0.00500	0.1	0	90.0	52 - 138	0.09195	2.14	20	

The following samples were analyzed in this batch:

HS22110835-02	HS22110835-03	HS22110835-04	HS22110835-05
HS22110835-06			

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422064 (0) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

MBLK Sample ID: **VBLKW-221117** Units: **ug/L** Analysis Date: **17-Nov-2022 09:37**
 Client ID: Run ID: **VOA11_422064** SeqNo: **6986948** PrepDate: DF: **1**
Analyte **Result** **PQL** **SPK Val** **SPK Ref Value** **%REC** **Control Limit** **RPD Ref Value** **%RPD** **RPD Limit** **Qual**

1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
2-Hexanone	U	2.0								
4-Methyl-2-pentanone	U	2.0								
Acetone	U	2.0								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	1.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422064 (0)	Instrument: VOA11	Method: LOW LEVEL VOLATILES BY SW8260C
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MBLK	Sample ID: VBLKW-221117	Units: ug/L	Analysis Date: 17-Nov-2022 09:37							
Client ID:	Run ID: VOA11_422064	SeqNo: 6986948	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Isopropylbenzene	U	1.0								
m,p-Xylene	U	2.0								
Methyl acetate	U	1.0								
Methyl tert-butyl ether	U	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	2.0								
o-Xylene	U	1.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								
trans-1,2-Dichloroethene	U	1.0								
trans-1,3-Dichloropropene	U	1.0								
Trichloroethene	U	1.0								
Trichlorofluoromethane	U	1.0								
Vinyl chloride	U	1.0								
Xylenes, Total	U	1.0								
Surr: 1,2-Dichloroethane-d4	45.43	1.0	50	0	90.9	70 - 123				
Surr: 4-Bromofluorobenzene	52.76	1.0	50	0	106	77 - 113				
Surr: Dibromofluoromethane	50.95	1.0	50	0	102	73 - 126				
Surr: Toluene-d8	47.02	1.0	50	0	94.0	81 - 120				

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422064 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
LCS	Sample ID: VLCSW-221117	Units: ug/L			Analysis Date: 17-Nov-2022 08:52					
Client ID:	Run ID: VOA11_422064	SeqNo: 6986947	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	19.78	1.0	20	0	98.9	70 - 130				
1,1,2,2-Tetrachloroethane	15.01	1.0	20	0	75.0	70 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	19.13	1.0	20	0	95.6	70 - 130				
1,1,2-Trichloroethane	16.38	1.0	20	0	81.9	77 - 113				
1,1-Dichloroethane	17.82	1.0	20	0	89.1	71 - 122				
1,1-Dichloroethene	20.07	1.0	20	0	100	70 - 130				
1,2,4-Trichlorobenzene	21.52	1.0	20	0	108	77 - 126				
1,2-Dibromo-3-chloropropane	15.05	1.0	20	0	75.3	70 - 130				
1,2-Dibromoethane	17.68	1.0	20	0	88.4	76 - 123				
1,2-Dichlorobenzene	18.03	1.0	20	0	90.2	77 - 113				
1,2-Dichloroethane	16.88	1.0	20	0	84.4	70 - 124				
1,2-Dichloropropane	17.41	1.0	20	0	87.0	72 - 119				
1,3-Dichlorobenzene	19.34	1.0	20	0	96.7	78 - 118				
1,4-Dichlorobenzene	18.89	1.0	20	0	94.5	79 - 113				
2-Butanone	34.68	2.0	40	0	86.7	70 - 130				
2-Hexanone	29.08	2.0	40	0	72.7	70 - 130				
4-Methyl-2-pentanone	29.5	2.0	40	0	73.8	70 - 130				
Acetone	33.11	2.0	40	0	82.8	70 - 130				
Benzene	18.27	1.0	20	0	91.3	74 - 120				
Bromodichloromethane	18.2	1.0	20	0	91.0	74 - 122				
Bromoform	16.9	1.0	20	0	84.5	73 - 128				
Bromomethane	20.59	1.0	20	0	103	70 - 130				
Carbon disulfide	37.99	2.0	40	0	95.0	70 - 130				
Carbon tetrachloride	20.11	1.0	20	0	101	71 - 125				
Chlorobenzene	17.7	1.0	20	0	88.5	76 - 113				
Chloroethane	20.36	1.0	20	0	102	70 - 130				
Chloroform	17.37	1.0	20	0	86.9	71 - 121				
Chloromethane	19.56	1.0	20	0	97.8	70 - 129				
cis-1,2-Dichloroethene	18.5	1.0	20	0	92.5	75 - 122				
cis-1,3-Dichloropropene	18.13	1.0	20	0	90.6	73 - 127				
Cyclohexane	18.88	1.0	20	0	94.4	70 - 130				
Dibromochloromethane	17.69	1.0	20	0	88.5	77 - 122				
Dichlorodifluoromethane	23.08	1.0	20	0	115	70 - 130				
Ethylbenzene	19.17	1.0	20	0	95.8	77 - 117				

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422064 (0)	Instrument: VOA11	Method: LOW LEVEL VOLATILES BY SW8260C
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LCS	Sample ID: VLCSW-221117	Units: ug/L	Analysis Date: 17-Nov-2022 08:52							
Client ID:	Run ID: VOA11_422064	SeqNo: 6986947	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Isopropylbenzene	20.55	1.0	20	0	103	73 - 127				
m,p-Xylene	38.76	2.0	40	0	96.9	77 - 122				
Methyl acetate	17.11	1.0	20	0	85.5	76 - 122				
Methyl tert-butyl ether	17.33	1.0	20	0	86.6	70 - 130				
Methylcyclohexane	14.62	1.0	20	0	73.1	61 - 157				
Methylene chloride	20.39	2.0	20	0	102	70 - 127				
o-Xylene	18.92	1.0	20	0	94.6	75 - 119				
Styrene	19.04	1.0	20	0	95.2	72 - 126				
Tetrachloroethene	19.54	1.0	20	0	97.7	76 - 119				
Toluene	17.85	1.0	20	0	89.3	77 - 118				
trans-1,2-Dichloroethene	19.76	1.0	20	0	98.8	72 - 127				
trans-1,3-Dichloropropene	16.87	1.0	20	0	84.3	77 - 119				
Trichloroethene	18.26	1.0	20	0	91.3	77 - 121				
Trichlorofluoromethane	21.82	1.0	20	0	109	70 - 130				
Vinyl chloride	21.02	1.0	20	0	105	70 - 130				
Xylenes, Total	57.69	1.0	60	0	96.1	75 - 122				
Surr: 1,2-Dichloroethane-d4	44.99	1.0	50	0	90.0	70 - 123				
Surr: 4-Bromofluorobenzene	49.26	1.0	50	0	98.5	77 - 113				
Surr: Dibromofluoromethane	50.57	1.0	50	0	101	73 - 126				
Surr: Toluene-d8	48.99	1.0	50	0	98.0	81 - 120				

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422064 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MS	Sample ID: HS22110738-01MS	Units: ug/L			Analysis Date: 17-Nov-2022 11:52					
Client ID:	Run ID: VOA11_422064	SeqNo: 6986950	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	9.242	1.0	20	0	46.2	70 - 130				S
1,1,2,2-Tetrachloroethane	9.929	1.0	20	0	49.6	70 - 123				S
1,1,2-Trichlor-1,2,2-trifluoroethane	21.78	1.0	20	0	109	70 - 130				
1,1,2-Trichloroethane	9.113	1.0	20	0	45.6	70 - 117				S
1,1-Dichloroethane	8.713	1.0	20	0	43.6	70 - 127				S
1,1-Dichloroethene	9.772	1.0	20	0	48.9	70 - 130				S
1,2,4-Trichlorobenzene	11.86	1.0	20	0	59.3	70 - 125				S
1,2-Dibromo-3-chloropropane	12.32	1.0	20	0	61.6	70 - 130				S
1,2-Dibromoethane	9.423	1.0	20	0	47.1	70 - 124				S
1,2-Dichlorobenzene	9.452	1.0	20	0	47.3	70 - 115				S
1,2-Dichloroethane	9.364	1.0	20	0	46.8	70 - 127				S
1,2-Dichloropropane	8.626	1.0	20	0	43.1	70 - 122				S
1,3-Dichlorobenzene	10.08	1.0	20	0	50.4	70 - 119				S
1,4-Dichlorobenzene	10.04	1.0	20	0	50.2	70 - 114				S
2-Butanone	18.09	2.0	40	0	45.2	70 - 130				S
2-Hexanone	18.91	2.0	40	0	47.3	70 - 130				S
4-Methyl-2-pentanone	20.52	2.0	40	0	51.3	70 - 130				S
Acetone	23.7	2.0	40	1.273	56.1	70 - 130				S
Benzene	9.111	1.0	20	0	45.6	70 - 127				S
Bromodichloromethane	7.186	1.0	20	0	35.9	70 - 124				S
Bromoform	5.678	1.0	20	0	28.4	70 - 129				S
Bromomethane	15.06	1.0	20	0	75.3	70 - 130				
Carbon disulfide	10.69	2.0	40	0	26.7	70 - 130				S
Carbon tetrachloride	8.234	1.0	20	0	41.2	70 - 130				S
Chlorobenzene	9.509	1.0	20	0	47.5	70 - 114				S
Chloroethane	16.29	1.0	20	0	81.5	70 - 130				
Chloroform	8.639	1.0	20	0	43.2	70 - 125				S
Chloromethane	13.95	1.0	20	0	69.8	70 - 130				S
cis-1,2-Dichloroethene	8.553	1.0	20	0	42.8	70 - 128				S
cis-1,3-Dichloropropene	8.101	1.0	20	0	40.5	70 - 125				S
Cyclohexane	13.79	1.0	20	0	68.9	70 - 130				S
Dibromochloromethane	6.289	1.0	20	0	31.4	70 - 124				S
Dichlorodifluoromethane	14.59	1.0	20	0	73.0	70 - 130				
Ethylbenzene	10.75	1.0	20	0	53.8	70 - 124				S

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422064 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C						
MS	Sample ID: HS22110738-01MS	Units: ug/L			Analysis Date: 17-Nov-2022 11:52					
Client ID:	Run ID: VOA11_422064	SeqNo: 6986950	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	11.81	1.0	20	0	59.0	70 - 130				S
m,p-Xylene	22.86	2.0	40	0.9811	54.7	70 - 130				S
Methyl acetate	9.407	1.0	20	0	47.0	76 - 122				S
Methyl tert-butyl ether	9.492	1.0	20	0	47.5	70 - 130				S
Methylcyclohexane	7.04	1.0	20	0	35.2	61 - 158				S
Methylene chloride	9.078	2.0	20	0	45.4	70 - 128				S
o-Xylene	11.27	1.0	20	0	56.3	70 - 124				S
Styrene	10.14	1.0	20	0	50.7	70 - 130				S
Tetrachloroethene	11.03	1.0	20	0	55.1	70 - 130				S
Toluene	10.35	1.0	20	0	51.8	70 - 123				S
trans-1,2-Dichloroethene	9.271	1.0	20	0	46.4	70 - 130				S
trans-1,3-Dichloropropene	7.483	1.0	20	0	37.4	70 - 121				S
Trichloroethene	9.052	1.0	20	0	45.3	70 - 129				S
Trichlorofluoromethane	17.57	1.0	20	0	87.9	70 - 130				S
Vinyl chloride	15.65	1.0	20	0	78.2	70 - 130				S
Xylenes, Total	34.13	1.0	60	0.9811	55.3	70 - 130				S
Surr: 1,2-Dichloroethane-d4	45.06	1.0	50	0	90.1	70 - 126				
Surr: 4-Bromofluorobenzene	50.73	1.0	50	0	101	77 - 113				
Surr: Dibromofluoromethane	45.76	1.0	50	0	91.5	77 - 123				
Surr: Toluene-d8	50.67	1.0	50	0	101	82 - 127				

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422064 (0)		Instrument: VOA11		Method: LOW LEVEL VOLATILES BY SW8260C							
MSD	Sample ID: HS22110738-01MSD	Units: ug/L			Analysis Date: 17-Nov-2022 12:14						
Client ID:	Run ID: VOA11_422064	SeqNo: 6986951	PrepDate:	DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,1,1-Trichloroethane	9.432	1.0	20	0	47.2	70 - 130	9.242	2.04	20	S	
1,1,2,2-Tetrachloroethane	9.634	1.0	20	0	48.2	70 - 123	9.929	3.01	20	S	
1,1,2-Trichlor-1,2,2-trifluoroethane	22.6	1.0	20	0	113	70 - 130	21.78	3.67	20		
1,1,2-Trichloroethane	9.503	1.0	20	0	47.5	70 - 117	9.113	4.18	20	S	
1,1-Dichloroethane	9.018	1.0	20	0	45.1	70 - 127	8.713	3.44	20	S	
1,1-Dichloroethene	9.513	1.0	20	0	47.6	70 - 130	9.772	2.69	20	S	
1,2,4-Trichlorobenzene	12.85	1.0	20	0	64.2	70 - 125	11.86	8.02	20	S	
1,2-Dibromo-3-chloropropane	14.49	1.0	20	0	72.4	70 - 130	12.32	16.2	20		
1,2-Dibromoethane	9.694	1.0	20	0	48.5	70 - 124	9.423	2.84	20	S	
1,2-Dichlorobenzene	10.12	1.0	20	0	50.6	70 - 115	9.452	6.85	20	S	
1,2-Dichloroethane	9.334	1.0	20	0	46.7	70 - 127	9.364	0.322	20	S	
1,2-Dichloropropane	8.812	1.0	20	0	44.1	70 - 122	8.626	2.13	20	S	
1,3-Dichlorobenzene	10.72	1.0	20	0	53.6	70 - 119	10.08	6.12	20	S	
1,4-Dichlorobenzene	10.7	1.0	20	0	53.5	70 - 114	10.04	6.35	20	S	
2-Butanone	18.51	2.0	40	0	46.3	70 - 130	18.09	2.3	20	S	
2-Hexanone	18.74	2.0	40	0	46.9	70 - 130	18.91	0.855	20	S	
4-Methyl-2-pentanone	20.26	2.0	40	0	50.6	70 - 130	20.52	1.31	20	S	
Acetone	25.75	2.0	40	1.273	61.2	70 - 130	23.7	8.3	20	S	
Benzene	9.348	1.0	20	0	46.7	70 - 127	9.111	2.57	20	S	
Bromodichloromethane	7.906	1.0	20	0	39.5	70 - 124	7.186	9.54	20	S	
Bromoform	6.496	1.0	20	0	32.5	70 - 129	5.678	13.4	20	S	
Bromomethane	16.12	1.0	20	0	80.6	70 - 130	15.06	6.75	20		
Carbon disulfide	12.65	2.0	40	0	31.6	70 - 130	10.69	16.8	20	S	
Carbon tetrachloride	9.145	1.0	20	0	45.7	70 - 130	8.234	10.5	20	S	
Chlorobenzene	9.646	1.0	20	0	48.2	70 - 114	9.509	1.42	20	S	
Chloroethane	18.2	1.0	20	0	91.0	70 - 130	16.29	11.1	20		
Chloroform	9.192	1.0	20	0	46.0	70 - 125	8.639	6.21	20	S	
Chloromethane	14.47	1.0	20	0	72.4	70 - 130	13.95	3.65	20		
cis-1,2-Dichloroethene	9.312	1.0	20	0	46.6	70 - 128	8.553	8.49	20	S	
cis-1,3-Dichloropropene	8.521	1.0	20	0	42.6	70 - 125	8.101	5.05	20	S	
Cyclohexane	11.03	1.0	20	0	55.2	70 - 130	13.79	22.2	20	SR	
Dibromochloromethane	7.456	1.0	20	0	37.3	70 - 124	6.289	17	20	S	
Dichlorodifluoromethane	15.49	1.0	20	0	77.5	70 - 130	14.59	5.98	20		
Ethylbenzene	10.15	1.0	20	0	50.7	70 - 124	10.75	5.78	20	S	

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422064 (0) **Instrument:** VOA11 **Method:** LOW LEVEL VOLATILES BY SW8260C

MSD		Sample ID: HS22110738-01MSD			Units: ug/L		Analysis Date: 17-Nov-2022 12:14				
Client ID:		Run ID: VOA11_422064			SeqNo: 6986951		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Isopropylbenzene	11.61	1.0	20	0	58.1	70 - 130	11.81	1.66	20	S	
m,p-Xylene	23.06	2.0	40	0.9811	55.2	70 - 130	22.86	0.873	20	S	
Methyl acetate	11	1.0	20	0	55.0	76 - 122	9.407	15.6	20	S	
Methyl tert-butyl ether	9.741	1.0	20	0	48.7	70 - 130	9.492	2.59	20	S	
Methylcyclohexane	8.648	1.0	20	0	43.2	61 - 158	7.04	20.5	20	SR	
Methylene chloride	9.445	2.0	20	0	47.2	70 - 128	9.078	3.96	20	S	
o-Xylene	10.82	1.0	20	0	54.1	70 - 124	11.27	4.09	20	S	
Styrene	10.32	1.0	20	0	51.6	70 - 130	10.14	1.73	20	S	
Tetrachloroethene	11.07	1.0	20	0	55.4	70 - 130	11.03	0.399	20	S	
Toluene	10.04	1.0	20	0	50.2	70 - 123	10.35	3.06	20	S	
trans-1,2-Dichloroethene	9.335	1.0	20	0	46.7	70 - 130	9.271	0.684	20	S	
trans-1,3-Dichloropropene	8.097	1.0	20	0	40.5	70 - 121	7.483	7.87	20	S	
Trichloroethene	9.152	1.0	20	0	45.8	70 - 129	9.052	1.1	20	S	
Trichlorofluoromethane	19.37	1.0	20	0	96.8	70 - 130	17.57	9.72	20		
Vinyl chloride	16.88	1.0	20	0	84.4	70 - 130	15.65	7.57	20		
Xylenes, Total	33.88	1.0	60	0.9811	54.8	70 - 130	34.13	0.737	20	S	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>45.51</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>91.0</i>	<i>70 - 126</i>	<i>45.06</i>	<i>1</i>	<i>20</i>		
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.38</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>77 - 113</i>	<i>50.73</i>	<i>0.701</i>	<i>20</i>		
<i>Surr: Dibromofluoromethane</i>	<i>47.76</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>95.5</i>	<i>77 - 123</i>	<i>45.76</i>	<i>4.28</i>	<i>20</i>		
<i>Surr: Toluene-d8</i>	<i>50.68</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>82 - 127</i>	<i>50.67</i>	<i>0.0233</i>	<i>20</i>		

The following samples were analyzed in this batch: HS22110835-01 HS22110835-03 HS22110835-04 HS22110835-05
HS22110835-06

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Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R422320 (0)	Instrument: Balance1	Method: TOTAL DISSOLVED SOLIDS BY SM2540C-2011
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MBLK	Sample ID: WBLK-111822	Units: mg/L	Analysis Date: 18-Nov-2022 15:04							
Client ID:	Run ID: Balance1_422320	SeqNo: 6993304	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) U 10.0

LCS	Sample ID: WLCS-111822	Units: mg/L	Analysis Date: 18-Nov-2022 15:04							
Client ID:	Run ID: Balance1_422320	SeqNo: 6993305	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 1084 10.0 1000 0 108 85 - 115

DUP	Sample ID: HS22110778-04DUP	Units: mg/L	Analysis Date: 18-Nov-2022 15:04							
Client ID:	Run ID: Balance1_422320	SeqNo: 6993296	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 250 10.0 250 0 5

DUP	Sample ID: HS22110777-02DUP	Units: mg/L	Analysis Date: 18-Nov-2022 15:04							
Client ID:	Run ID: Balance1_422320	SeqNo: 6993289	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids (Residue, Filterable) 272 10.0 270 0.738 5

The following samples were analyzed in this batch: HS22110835-03 HS22110835-04 HS22110835-05 HS22110835-06

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R423096 (0)		Instrument: ICS-Integrion		Method: ANIONS BY SW9056A					
MBLK	Sample ID: MBLK	Units: mg/L			Analysis Date: 02-Dec-2022 15:26				
Client ID:		Run ID: ICS-Integrion_423096	SeqNo: 7012000	PrepDate:	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Chloride	U	0.500							
Sulfate	U	0.500							

LCS	Sample ID: LCS	Units: mg/L			Analysis Date: 02-Dec-2022 15:31				
Client ID:		Run ID: ICS-Integrion_423096	SeqNo: 7012001	PrepDate:	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Chloride	19.92	0.500	20	0	99.6	80 - 120			
Sulfate	20.44	0.500	20	0	102	80 - 120			

MS	Sample ID: HS22111617-02MS	Units: mg/L			Analysis Date: 02-Dec-2022 17:47				
Client ID:		Run ID: ICS-Integrion_423096	SeqNo: 7012023	PrepDate:	DF: 50				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Chloride	565	25.0	500	66.05	99.8	80 - 120			
Sulfate	3247	25.0	500	2888	71.9	80 - 120			SO

MS	Sample ID: HS22110585-01MS	Units: mg/L			Analysis Date: 02-Dec-2022 15:42				
Client ID:		Run ID: ICS-Integrion_423096	SeqNo: 7012003	PrepDate:	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Chloride	18.19	0.500	10	8.066	101	80 - 120			
Sulfate	120.9	0.500	10	114.8	60.9	80 - 120			SEO

MSD	Sample ID: HS22111617-02MSD	Units: mg/L			Analysis Date: 02-Dec-2022 17:53				
Client ID:		Run ID: ICS-Integrion_423096	SeqNo: 7012024	PrepDate:	DF: 50				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Chloride	562.2	25.0	500	66.05	99.2	80 - 120	565	0.506	20
Sulfate	3213	25.0	500	2888	64.9	80 - 120	3247	1.08	20 SO

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R423096 (0)		Instrument: ICS-Integrion		Method: ANIONS BY SW9056A										
MSD	Sample ID: HS22110585-01MSD	Units: mg/L			Analysis Date: 02-Dec-2022 15:47									
Client ID:	Run ID: ICS-Integrion_423096	SeqNo: 7012004		PrepDate:			DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Chloride	18.17	0.500	10	8.066	101	80 - 120	18.19	0.116	20					
Sulfate	121	0.500	10	114.8	62.5	80 - 120	120.9	0.134	20	SEO				
The following samples were analyzed in this batch: <table border="1" style="display: inline-table; margin-left: 10px;"> <tr> <td>HS22110835-03</td> <td>HS22110835-04</td> <td>HS22110835-05</td> <td>HS22110835-06</td> </tr> </table>											HS22110835-03	HS22110835-04	HS22110835-05	HS22110835-06
HS22110835-03	HS22110835-04	HS22110835-05	HS22110835-06											

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Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

QC BATCH REPORT

Batch ID: R423122 (0)	Instrument: ICS-Integrion	Method: ANIONS BY SW9056A
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MBLK	Sample ID: MBLK	Units: mg/L	Analysis Date: 03-Dec-2022 11:02							
Client ID:	Run ID: ICS-Integrion_423122	SeqNo: 7012518	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Sulfate U 0.500

LCS	Sample ID: LCS	Units: mg/L	Analysis Date: 03-Dec-2022 11:08							
Client ID:	Run ID: ICS-Integrion_423122	SeqNo: 7012519	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Sulfate 20.44 0.500 20 0 102 80 - 120

MS	Sample ID: HS22110630-04MS	Units: mg/L	Analysis Date: 03-Dec-2022 11:18							
Client ID:	Run ID: ICS-Integrion_423122	SeqNo: 7012521	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Sulfate 10.05 0.500 10 0 100 80 - 120

MSD	Sample ID: HS22110630-04MSD	Units: mg/L	Analysis Date: 03-Dec-2022 11:23							
Client ID:	Run ID: ICS-Integrion_423122	SeqNo: 7012522	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Sulfate 10.03 0.500 10 0 100 80 - 120 10.05 0.131 20

The following samples were analyzed in this batch: HS22110835-03 HS22110835-04 HS22110835-06

ALS Houston, US

Date: 05-Dec-22

Client: Apex Titan
Project: Centurion Pipeline - Brahaney
WorkOrder: HS22110835

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
µg/L	Micrograms per Liter

ALS Houston, US

Date: 05-Dec-22

CERTIFICATIONS, ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

ALS Houston, US

Date: 05-Dec-22

Sample Receipt Checklist

Work Order ID: HS22110835

Date/Time Received: 14-Nov-2022 09:45

Client Name: Apex Titan-Midland

Received by: Corey Grandits

Completed By: /S/ Nilesch D. Ranchod	14-Nov-2022 14:01	Reviewed by: /S/ Ragen Giga	21-Nov-2022 18:03
eSignature	Date/Time	eSignature	Date/Time

Matrices: **Water**

Carrier name: **FedEx Priority Overnight**

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- VOA/TX1005/TX1006 Solids in hermetically sealed vials? Yes No Not Present
- Chain of custody present? Yes No 1 Page(s)
- Chain of custody signed when relinquished and received? Yes No COC IDs:281880
- Samplers name present on COC? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container/Temp Blank temperature in compliance? Yes No

Temperature(s)/Thermometer(s):	2.2C/1.7C UC/C	IR #31
Cooler(s)/Kit(s):	49856	
Date/Time sample(s) sent to storage:	11/14/2022 14:10	
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/> No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:		

Login Notes: MW-2 8015 GRO Vial 3 Of 3 received empty.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:



Cincinnati, OH
+1 513 733 5336

Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

HS22110835

Page ____ of ____

COC ID: 281880

Apex Titan
Centurion Pipeline - Brahaney



ALS Project Manager:

Customer Information		Project Information		
Purchase Order		Project Name	Centurion Pipeline - Brahaney	A 8260_LL_W (8260 VOC TCL 4.3) [3xVOAHC]
Work Order		Project Number	New Mecico	B 8015_GRO_W (8015 TPH-GRO) [3xVOAHC]
Company Name	Apex Titan	Bill To Company	Apex Titan	C 8015_DRO_LVI (8015 TPH-DRO/ORO) [3xVOA Am Neat]
Send Report To	Josh Pickett	Invoice Attn	Josh Pickett	D 9056_anions_W (9056 Cl, SO4) [250ml PI Neat-shared]
Address	505 N. Big Spring Street, Suite 3	Address	505 N. Big Spring Street, Suite 3	E TDS_W 2540C (2540C TDS) [250ml PI Neat-shared]
				F
City/State/Zip	Midland, TX 79701	City/State/Zip	Midland TX 79701	G
Phone	(432) 695-6016	Phone	(432) 695-6016	H
Fax		Fax		I
e-Mail Address	joshua.pickett@apexcos.com	e-Mail Address	joshua.pickett@apexcos.com	J

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Trip Blank			Water	1.8	4	X	X									
2				GW	1.8	10	X	X	X	X	X						
3	MW-1	11/11/22	9:45	GW		10	X	X	X	X	X						
4	MW-2	11/11/22	11:40	GW		10	X	X	X	X	X						
5	MW-3	11/11/22	13:45	GW		10	X	X	X	X	X						
6	DUP-01	11/11/22		GW		10	X	X	X	X	X						
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign Josh Pickett <i>Joshua Pickett</i>		Shipment Method FedEx		Required Turnaround Time: (Check Box) <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> STD 10 Wk Days <input checked="" type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour				Results Due Date:		
Relinquished by: <i>Joshua Pickett</i>		Date: 11-12-22 Time: 10:00		Received by: Fed Ex		Notes: Centurion Brahaney				
Relinquished by:		Date:		Time:		Received by (Laboratory): CORBETA 11/14/22 0945		QC Package: (Check One Box Below)		
Logged by (Laboratory):		Date:		Time:		Checked by (Laboratory):		<input checked="" type="checkbox"/> Level II Std QC <input type="checkbox"/> Level III Std QC/Raw Data <input type="checkbox"/> Level IV SW848/CLP <input type="checkbox"/> Other:		
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035							Cooler ID: 49856 Cooler Temp: 2.2°		<input type="checkbox"/> TRRP Checklist <input type="checkbox"/> TRRP Level IV	

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

Copyright 2011 by ALS Environmental.

 ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By:
	Date: 11-12-22 Time: 10:00 Name: Josh Pickett Company: Apex Companies LLC		Date: 11/14/22

49856 NOV 14 2022 NOV 14 2022



49856

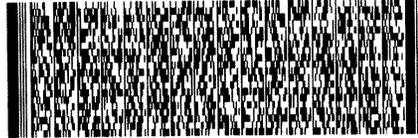
0020 035A N11: 09081 # JRG

ORIGIN ID:SGRA (432) 425-7396
 JOSH PICKETT
 APEX TITAN
 505 N. BIG SPRING STREET
 SUITE 301A
 MIDLAND, TX 79701
 UNITED STATES US

SHIP DATE: 02NOV22
 ACTWGT: 1.00 LB MAN
 CAD: 0221247/CAFE3616
 DIMS: 26x14x14 IN

TO SHIPPING DEPT
 ALS LABORATORY GROUP
 10450 STANCLIFF RD
 SUITE 210
 HOUSTON TX 77099
 (281) 530-5656
 REF: CENTURION BRAHANEY - BO 88911 - DW

RMA: ||| ||| |||



FedEx Express

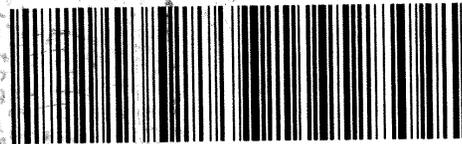


FedEx
 TRK# 5789 2000 3588
 0221

MON - 14 NOV 10:30A
 PRIORITY OVERNIGHT

XA SGRA

77099
 TX-US IAH



04919689 11/12 581J6/E488/FE2D

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720
District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 203520

CONDITIONS

Operator: CENTURION PIPELINE L.P. 516 Veterans Airpark Lane Midland, TX 79705	OGRID: 237722
	Action Number: 203520
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Brahaney Release Site Groundwater Monitoring Report: Content Satisfactory 1. An abatement completion report must be submitted to OCD as per 19.15.30 of the NMAC, if Centurion believes the incident is ready for closure. 2. In addition, a solid-matrix work plan for a one-time sampling of the vadose zone must also be prepared for approval in order to close the incident with the OCD as part of the closure, as per 19.15.30.9 paragraph D of the NMAC. 3. Submit the requested information above for closure to be reviewed by April 1, 2025, or before.	6/13/2024